

## Census of India, 1931

## VOLUME XXVIII

## TRAVANCORE

## PART I-REPORT

$\Rightarrow$ By

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## INTRODUCTION

Census-taking is a very ancient institution. About 4,000 years before Christ the Introductory. Babylonians had instituted a system of revenue returns which was developed in course of time into an efficient machinery for the estimation of the country's wealth. The Egyptians had started the collection of statistics of labour about $3,000 \mathrm{~B}$. C. in connection with the construction of the pyramids, and the Chinese also had collected statistics of agriculture, industry and commerce from about that time. The Hebrews took regular censuses to ascertain the man-power available for military purposes. The ancient Greeks and Romans bad undertaken the census periodically for the purpose of registering the rights of citizen'ship. With the expansion of the Roman Empire census-taking became a world-wide institution, but it disappeared with the disintegration of that Empire. In India too censustaking was a well-established practice in ancient times. The Edicts of Asozka, the great Mauryan Emperor of the third century B. C., refer to the census as a permanent institution: It "included not only the total number of all the four castes in each village, but an account of the exact number of cultivators, cowherds, merchants, artizans, labourers and slaves as well as an account of biped and quadruped animals." (J. N. Saaddar, The Glories of Magadha, pp. 88-89.)

As regards Travancore, the first census about which detailed information is available is the one taken by Ward and Conner in the years 1816-1820 A. D. But there are grounds to believe that frequent attempts were made by the earlier rulers of the State to collect statistics of the population and the resources of the country. Bartolomeo mentions one such instance which took place in 1787 when the king of Travancore was about to impose a poll-tax on the Christians of St . Thomas on the coast of Malabar. The State records show that a regular census was taken in Travancore in 1836 and another in. 1854. Very little reliance could be placed on the results of these earlier censuses. The first systematic census which might claim a certain degree of accuracy was the one conducted in 1875. The next census was taken in 1881 and since then there was one regularly at the end of every ten years. The census of 1931 is, therefore, the seventh systematic census and the sixth in the series of decennial censuses taken in this State.
2. The first step in connection with the taling of the census is the appointment of Appointment of the officer to be in charge of the operations. I was appointed Census Commissioner in Commisasione November 1929 which gave me one year and three months to make the necessary arrangements and get through the preliminary stages.
3. The final census was taken in Travancore on the morning of the 27th February Date and time 1931. In British India it took place on the previous night. Owing to peculiar physical of the cennus. features of the country and the scattered distribution of houses a night enumeration is impracticable in this State, and it has, therefore, always been the practice to make the final count during daytime. At all the censuses previous to 1921 the final census was taken in this State eynchronously with that in Cochin State and British Malabar on the day following the night on which the British Indian census took place. In 1921 a deviation was made by Travancore alone taling the census on the morning of the day on which it was taken in British India, while Cochin State and British Malabar continued the previous practice of having it on the following morning. I changed the procedure with the permission of the Census Commissioner for India and the sanction of the Government of Travancore and, following suit with Cochin and Malabar, took the final census between 7 A. M. and 9 A. M. on the 27th February 1931.
4. The Administrative Volume of the Census Report gives a detailed description Prellminary of the machinery employed for taking the census and of the procedure followed in tabulating operations. the results. That volume is intended for the guidance of the future Census Commissioners and other officers who will have to collaborate with him. A brief sketch of the procedure adopted in the various stages of the operations is given here for the information of the general reader who may not have access to the Administrative Volume and who may not .be interested, even if it be accessible, in the detailed account contained therein. For purposes of the census the State was divided into urban and rural areas. The municipal towns, together with certain other places which were treated as topns under the Police Regulation and were provided:with conservancy arrangements, constituted the urban area
and the rest of the country was treated as rural. The number of municipal towns was 19 as in 1921, but the number of other towns was increased from 19 to 27. The ordinary revenue village (pakuthi) being too large for statistical comparisons the residential village known as kara or muri was adopted as the' territorial unit in rural area as in the previous censuses. In municipal towns the ward was taken as the unit.
5. Regulation III of 1105 legalising all proceedings connected with the census was passed in May 1930. A general plan of the census operations, together with a calendar showing the dates of commencement and termination of the different stages, was published in June 1930. The Census Code, Part I, dealing with the procedure in enumeration and containing instructions to various census officers, was published in September 1930. Part II of the Code which described the methods of tabulation and compilation was published by the end of January 1931. Immediately after I assumed charge of my appointment the Tahsildars and Municipal Presidents were requested to prepare lists of karas in taluks and of wards in towns. The lists received from them were consolidated into a kata register for the whole State. The buildings in each kara or ward were listed in prescribed forms and were afterwards numbered serially for each kara in taluks and for each ward in the municipal towns. The kara register was ready by the 15th June 1930. The preparation of the house lists which was the next operation was commenced on the 30th June and completed by the 15th August and the numbering of houses was finished in September. Both these works were attended to by the village staff in rural areas, by the municipal subordinates in municipal towns and by the conservancy staff in census towns. The agencies employed were not paid any remuneration except in a few places where suitable hands were not available otherwise. The abstracts of house lists received from all the taluks and municipal towns were verified to make sure that there was no omission of karas on the one hand or overlapping on the other. The next item of work, viz., the formation of census divisions and the appointment of census officers, was then taken up. The katas and wards were divided into blocks, each consisting of about 30 houses on an average in rural parts and 50 in the towns, the size of the block being fixed with reference to the number of houses that could conveniently be visited by an enumerator on the census morning. The blocks were grouped into circles each containing about 10 blocks. The circles in a taluk including those in the census towns constituted a charge, while those in a municipal town were grouped into a separate charge. On the whole, there were 49 charges consisting of 30 taluks and 19 municipal towns. The Tahsildars were the Charge Superintendents for their respective taluks and the Municipal Presidents for the towns. The Divisional Forest Officers were appointed as Charge Superintendents for the forest areas within their jurisdictions and were instructed to communicate the total figures of the preliminary and final enumerations to the Tahsildars concerned for incorporation in the taluk figures. Similarly, the Sanitary Circle Officers were appointed as Charge Superintendents for the census towns in their districts for purposes. of inspection only, all administrative control being vested in the Tahsildars of the taluks in which those towns were situated. The heads of certain departments, the employés of which had to be engaged for census work, were appointed as District Census Officers to supervise the work of their subordinates.

The British Indian schedule was adopted in its entirety in this State, together with six additional columns to record particulars of emigrants from the State.
6. By the end of October 1930 the charge and circle registers were prepared and the agency for the preliminary enumeration was selected. The experiment of employing the teachers in vernacular schools as enumerators and supervisors for the preliminary enumeration, which was first tried in 1921 and was found to be successful, was repeated this time also. In a few charges the revenue and municipal subordinates were also engaged for this purpose. As the enumerators had to collect on separate schedules additional information for the purpose of the special economic enquiry ordered by the Government, the period of the preliminary enumeration was fixed at two months from the 15th November 1930, and in order to enable the Tahsildars to cope with the additional work of supervision involved, particularly on account of the economic enquiry, each Tahsildar Charge Superintendent was given an assistant selected from among competent undergraduate teachers in departmental English schools for the whole period of the preliminary enumeration. Weekly reports on the progress of the preliminary enumeration were received from the Charge Superintendents, and as soon as the operations were completed summaries of the results were sent to the Census Office, where they were scrutinized and abnormal variations, if any, were duly corrected in consultation with the Charge Superintendents. Altogether 3,588 enumerators and 793 supervisors were employed for the preliminary enumeration. For
the final counting on the census day each enumerator had to do only one block and eack supervisor had about 10 blocks under him. But for the preliminary enumeration which was conducted in the course of two months about 9 to 10 blocks were assigned to each enumerator and 40 to 45 blocks to each supervisor.
7. In pursuance of a circular issued by the Government the: heads of departments. Final and offices had furnished to the Division Peishkars and the Commissioner, Devikulam, by enumaration. the 15th December 1930, lists of employés under them drawing Rs. 100 and below per mensem for recruitment as enumerators and supervisors for the finat census. Persons available for the different charges were selected from these lists and their names communicated to the Charge Superintendents by the lat January 1931. In places where the requisite numbers of Government employés were not available, the Charge Superintendents indented upon the services of private persons. The final enumeration in the forest areas was conducted by the employés of the Forest Department, and that of the inmates of jails, police lock-ups, reformatories, hospitals and asylums by the officers. in charge of those insti-, tutions. With the co-operation of the railway authorities suitable arrangements were made: for platform and train enumeration.
8. Every precaution was taken to ensure a correct enumeration of the floating: population. Printed instructions for the purpose were distributed among the enumerators and supervisors. By means of a notification the public were requested to be: in their houses on the census morning and to abstain as far as possible from celebrating? marriages and other ceremonies on that forenoon. All shops, bazaars and markets were: closed and motor traffic was stopped for a few hours on the morning of the census:. Special enumerators were appointed for landing ghats in rivers and backwaters, frontier: chowkeys, convenient road stations and places where crowds of people were lizely' to congregate in connection with fairs and social on religious, festivals:

9: 3,618 supervisors and 35,981 enumerators were engaged for the final census; of' whom only 17,994 or $45 \cdot 4$ per cent. were Government servants. In most of the taluks. the services of private gentlemen, such as vakils, landlords, merchants and even grown-upstudents, had to be utilized, the total number af private persons thus employed being $21 ; 605$. as against 15,679 in 1921 . The instructions issued by the Government were faithfully observed everywhere and the public willingly and heartily conoperated with the Government officers in making the census a complete success.
10. As soon as the final enumeration was over, the Charge Superintendents preparedi the totals for their charges and communicated the same by telegram to the Census Office. Proper arrangements had been made by the Charge Superintendents to obtain the figures from the outlying parts of their charges in time to be able to despatch the telegram on the: same evening. The first telegram was received from the Kulithura Municipal Town at 2.8 P. M. on the 27th February and that was soon followed by others which continued to arrive till 10-33 P : M: on the same night: The figures received from the different charges. were immediately consolidated in the Census Office. The provisional totals for the State could have been communicated to the Census Commissioner for India on the same night but for the much regretted delay in getting the figures for the Ampalapula and Minachil taluks, The express telegrams despatched by the Tahsildars of these two. taluks.on the evening of' the 27th February were unfortunately delayed in transmission owing to some disorder im , the telegraph line. These two telegrams were received at about 7 A : M. on the 28 th. February and the provisional totals were communicated to Government by messenger and: to the Census Commissioner for India by telegram at 8-30 A. M. The-difference between the provisional totals telegraped and the actual figures obtained after slip-copying was only. 0.2 per cent.
11. In the meantime, the Tabulation Office with the requisite copying and controlling:Tabulation. staff was organized'at the central office. It was divided into four sections; one for each: of the Southern, Central, and Northern administrative divisions of the State and another fors the High Range Division and the municipal towns together. As the enumeration books, arrived from each charge they were checked with the charge and circle summaries to make; sure that-there was a book for every block enumerated. Slip-copying, i. e., copying the; entries in the schedules on slips, which was the first process in the chain of post-census operations, was started on the 14th March 1931 and completed by the 6th June.. Slips of different colours with the prescribed conventional symbols to denote sex and, civil condition) were used for this purpose. Sorting for the different tables which was taken up next wass begun on the 23rd June 193! and finished by the 16th September. The establishment in the
sorting stage consisted of four sections, of which three were engaged in sorting and one in compilation. - By the time sorting was finished nine out of 20 Imperial Tables had been compiled and printed, and the compitation of two other tables had been completed. Compilation for the remaining tables continued for about three months more and the whole work was finished by the 12th January 1932. The compilation of the Provincial Tables and the preparation of the Subsidiary Tables for the Report were done in the Census. Office.

A special circumstance deserving mention in this census is that a number of qualified women were employed in copying, sorting and compilation. The work turned out by them compared very favourably, both in quality and quantity, with that of some of the ablest of men workers.

Special enquiries.
12. A unique feature of the 1931 census is the large number of special enquiries conducted along with it. The State Government ordered that certain statistics relating to the economic condition of the people should be collected along with the population census. It was decided to utilize the services of the enumerators employed for the preliminary enumeration to collect this additional information. A special schedule was printed for the purpose. As it was apprehended that, on account of the novelty of the enquiry and the variety of information that was proposed to be collected, the people might naturally hesitate to furnish correct returns, regular propaganda was undertaken trough the Press and by the publication of leafets, explaining the object and utility of the enquiry. The filled-up schedules were returned to the Census Office where the results were tabulated by a special staff. As per orders of the Government a census of the wages of agricultural and industrial labourers was also undertaken. A census of unemployment among literates in English as suggested by the Census Commissioner for India was taken on a special schedule. Thisopportunity was also availed of to collect similar information regarding literates in the vernaculars of the State. The schedules were distributed and collected by the enumerators employed for the preliminary enumeration and the results are embodied in Imperial Table XII, Parts I and II. A somewhat detailed enquiry was conducted about the Primitive Tribes, with special reference to the effect on their condition and customs of their contact with civilization, and also about some of the chief declining industries of the State. Another enquiry that was undertaken in this State was the one regarding fertility and mortality. Particulars of more than 100,000 married women were recorded on a schedule specially prepared for the purpose. The results were tabulated and certain interesting inferences deduced therefrom have been incorporated in the chapter on Sex in the Report. As was done in the last two censuses, a census of agricultural live-stock and implementswas taken this time also. The work was done by the agencies employed for housenumbering.
13. The drating of the Report was taken in hand as soon as the Imperial Tables were compiled and the Subsidiary Tables for the first few chapters were prepared. The Report which forms Volume XXVIII of the series of Reports on the Census of India consists, as usual, of four parts. Part I is the Report proper and contains twelve chapters as prescribed by the Census Commissioner for India and five appendices. Appendix I deals with the Primitive Tribes, Appendix II with the Depressed and the Backward Classes, Appendix III with the declining industries, Appendix IV with the economic condition of the people and Appendix $V$ with the cattle census. In preparing the Report 1 have followed as closely as possible the instrucions issued by the Census Commissioner for India and modelled it mainly on the lines of the India Report of 1921. I have attempted, as best as I could, to explain the significance of the statistics presented. To elucidate the figures I have included a large number of maps and diagrams, much more than were used in the previous census reports of Travancore, and this may be regarded as a characteristic feature of the present Report. Part II of the Report contains all the Imperial Tables ( 20 in number) and seven State Tables. In the Imperial Tables figures are given for the State as a whole and for the different administrative and natural divisions. Part III which is mainly intended for local use contains the Provincial Tables giving Ggures by taluk corresponding to the figures by division contained in Imperial Tables, as well as the Pakuthi Register showing the population of the pakuthis by religion and literacy, and the Kata Register giving the number of occupied houses and population by kara. Part IV is the Administrative Volume which describes fully the methods followed in the taking of the census and in the tabulation of the results, the defects discovered in these methods and thesuggestions to avoid them in future censuses.
-. It may be noted that in regard to the spelling of local names used in the Report and Tables I have made a deviation from the ordinary method and tried to secure uniformity by making the transliteration conform to the sounds intended to be conveyed. I give below The key to the pronunciation of certain vowels and consonants for which I haye used :special symbols.

14. The total cost of the present census is estimated to stand at about Rs. $1,50,800$ cost of the including the sum of Rs. 11,000 put down for the printing of schedules, forms, the Report censur. and the Tables, for which actual fgures have not yet been received, as well as the probable expenditure that may have to be incurred hereatter. From the total expenditure ra sum of Rs. 1,000 has to be deducted, being the amount which has been realised and which may hereafter be realised by the sale of waste paper and furniture; so that the net expenditure may be taken to be Rs. $1,49,800$. This includes a sum of Rs. 28,440 incurred on account of the economic census specially taken in this State alone. For comparison with the cost of census in other parts of India the latter should be excluded from the total expenditure. If this is done, the net expenditure on account of the population census and the special enquiries conducted as per the instructions of the Census Commissioner for India will be Rs. 1,21,360, which will work out to Rs. 23-1:2 annas per 1,000 of the population. The corresponding cost of the present census in Baroda, AjmerMerwara, and Rajputana States, for which alone figures have been received so far, is Rs. 43-11-0, Rs. 35-6-11, and Rs. 25-2-10 respectively. To institute a comparison between the cost of the present and the previous census in Travancore certain deductions have to be made from the net expenditure of Rs. 1,21,360 mentioned above. The pay of the Census Commissioner is a variableitem depending upon the status of the officer selected for the appointment. There is an excess of Rs. 3,948 under this head for the present census over that of the previous. At the last census a Government building was available to hold the Census Office; but now a private building had to be hired for which a sum of Rs. 2,460 had to be paid towards rent. The special enquiries conducted at the instance of the Census Commissioner for India, which necessitated the appointment of an Ethnographist for a period of nine months and of an officer of the Department of Industries. on special duty for six months, had cost Rs. 5,730 . There was no such expenditure at the last census. Deducting these three items from the total, the expenditure for the present census which could be compared with that of the previous one in this State would amount to Rs. $1,09,222$ as against Rs. 89,459 for the 1921 census. The cost per mille of the population on the basis of the above figures works out to Rs. 21-7 amnas for the present. census and Rs. 22-5 annas for the last.
15. My first duty is to express my deep indebtedness to the Government of His IcknomiedfHighness the Maha Rajah for the confidence they placed in me and for the generous ments support they extended to me throughout my work. To Dr. J. H. Hutton, C. If e., Census Commissioner for India, I tender my warmest thanks for his valuable advice and many useful suggestions which made my task lighter than it would otherwise have been. He paid a visit to Travancore in September 1.931 and inspected the local Census Office, which no previous India Commissioner did. My personal discussion with him on that occasion and my participation in the Conference of Census Officers convened by him at Delhi in January 1931 enabled me to avoid many pitalls common in census operations.

No Census Commissioner would be able to bring his work to a successful close without the hearty co-operation of his brother officers and the general public. I am glad to ackowledge with gratitude that I received such co-operation in abundance. Foremost among the officers who helped me in one form or other are the Commandant, Nāyar Brigade, the Land Revenue and Income-Tax Commissioner, the Chief Engineer, the Director of Public Instruction, the Commissioner of Police, the Inspecting Medical Officer, the Conservator of Forests, the Excise Commissioner, the Sanitary Commissioner, the Dewan Peishkars, the Commissioner, Devikulam, and the Principal Port Offcer. To all of them I offer my best thanks. My thanks are also due to the Presidents of Municipal Councils, the Tahsildars, the Divisional Forest Officers, and the Sanitary Circle Officers
who, as Charge Superintendents, had to bear the brunt of the work in connection with the preliminary arrangements and the supervision of the actual enumeration. The schoolmasters and other Government and municipal employes who carried out the difficult task of preliminary enumeration, and the official and non-official gentlemen who acted as enumerators and supervisors for the final census are entitled to my special thanks.

Among the gentlemen who assisted me with material for the preparation of the Report, I must mention Mr. K. Padmanabhan Tampi, B. A., B. L., retired District Superintendent of Police, whose valuable contribution on "Hinduism in Travancore" is printed as an appendix to the Chapter on Religion. Mr. K. R. Krishna Pillai, b. A., b. Lar retired Assistant Secretary to Government, furnished some interesting matter for the Chapter on Language. From Mr. T. Lakshmanan Pillai, B. A., retired Divisional Treasury Officer, and Dr. L. A. Ravi Varma, Deputy Surgeon, I received useful hints on the origin of castein Kerala. I am greatly indebted to all these gentlemen for the services they have ungrudgingly rendered. The Appendix on Primitive Tribes is based mainly on the notes supplied by Mr. L. A. Krishna Iyer, w. A., whom at my request the Government placed on special duty for a period of nine months to enquire into the condition and customs of these tribes. The material for the Appendix on Declining Industries was collected by Mr. M. P. G. Nair, Textile Expert in the Department of Industries, who was also specially deputed for the purpose by the Government. I am much obliged to both these officers for the valuable work they have done.

Coming to my own staff, I have great pleasure in recording my genuine appreciation of the highly satisfactory manner in which every one of them discharged his duties. Mr. R. Sankara Iyer, B: A., b. L., my Personal Assistant, was in ,charge of the office from start to finish. His faithful devotion to duty, immense capacity for work, and scrupulous. attention to details enabled me to leave the entire management of the office safely in his hands. He is nut only an indefatigable worker himself, but knows the art of making others work like himself. I am highly grateful to him for his loyal co-operation and valuable assistance. Next to him I must acknowledge the services of Mr. N. Parameswaran Pillai, m. A., Statistical Superintendent. His proficiency in statistical methods and his clear grasp of complicated mathematical problems were of great help to me in explaining the large increase of population in the last decade. He was in sole charge of the tabulation of the results of the enquiry regarding fertility and mortality and of the economic census. Mr. R. Govinda Pillai, b. A., the head clerk, was an able lieutenant to the Personal Assistant, and he spared no pains in the efficient discharge of his duties. The other members of the staff also (Messrs. S. Thandaveswara Iyer, P. K. Subramonia lyer, N. Subbiah Chettiar and M. Thanu Pillai, B. A.,) did their part equally well. The work of the draftsman, Mr. K. Rama Iyengar, deserves special mention. The maps and diagrams included in the Report are all his productions, and they bear ample testimony to his ability and taste in drawing. I am grateful to Mr . A. Padmanabha Iyer for the assistance he has rendered in the preparation of the index which; I hope, is a useful addition to the Report.

The maps were printed at the Trivandrum Art Printing Works whose excellence in lithography is seen in every one of them. The half-tone blocks reproduced in the appendices were made at the Bangalore Press, and they testify to the excellent workmanship. of this leading press in Bangalore.

I have reserved to the last my acknowledgments to the "Travancore Government Press, where all the printing in connection with the census in this State was done. It iscreditable that this institution was able to cope with the tremendous work it had to do at the early stages in printing the schedules, forms and slips, of which there were several series, each running into many thousands. The printing of the Report and the Tableswas a more difficult task; but the Government Press proved equal to the occasion. Mr. T. Nilakanta Pillai, the Superintendent, took special interest in the printing of these volumes, and-to his close supervision as much as to the efficiency of his staff is due their excellent finish, for which I express my deep personal obligations to the Superintendent.

## N. KUNJAN PILLAI

## CORRIGENDA

Page 11, marginal table, column 6. line 2, read 1,087 for 1,087 .
. 22, first marginal table, column heading. read Year for Decade.
., 24, line 14, read 11,40,76,495 for 11,40,76,496.

- 30 , line 47 , read 39,857 for 39,880 .
. 59, marginal table, combined heading of columns 4 and 5, read Variation for Inc̀rease.
". 62, marginal table, column 4, line 2, read 35.5 for $35 \cdot 6$.
" 127, line 42, read 3,783 for 4,783.
.. 132. against Krishnanvaka in column 2 of the table, read 969 for 889.
. 185. line 40. read 1,163 for 1,152.
, 140, line 39, read 1,131 for 1,132.
., 147, first table, column 2, line 1, read 18,456 for 18,476,
" 147, last table, column 5, line 5, read 47 for 74.
" 154, Note to Subsidiary Table I, line 1, read at for for.
-, 160, calumn 18, line 2, read 789 for 879.
, 168, line 38, read II of 1100 for I of 1088.
.. 181, column 6 of table, line 8, read 413 for 449.
, 188, second table, column 13, line 6, read 186 for 138.
, 187, first table, column 2 , line 4 , read 30 for 80.
,. 194, column 3, against Hindu males of 5-10 years, read 999 for 997 .
217, line 20, read III for II.
237, line 1, read over thrice for nearly twice.
289, line 17, read 49 for 48.
, 251, marginal table, column 3, line 5, read 14,426 for 14,428.
. 252, line 4, read 46 for 48.
.. 252, marginal heading of paragraph 338, read Sub-class for Sub-clause.
- 265, column 4. against group 98, read 9.532 for 9.932.
, 269, column 3 against Domestic service under Brahman, read 402 for 202.
387, line 45, read 257 for 227.
898, foot-note, read 28 for 28.
.4 426, para 116, sub-para, 1, line 1. read areas for are as.
" 488, last column against Central Division in table, read 1,260 for 1.206.
, 504, line 21, read 10 for 5.



## REPORT

## ON THE

## CENSUS OF TRAVANCORE, 1931

## CHAPTER I

## distribution and movement of popứation

## Section I-Distribution of the Population

Situated at the south-western extremity of the Indian Peninsula, and protected on Introdnotory one side by the Arabian Sea and on the other by the Western Ghats, Travancore, along remarks. with the Cochin State and the Malabar District of the Madras Presidency, constituted the ancient kingdom of Kerala. From very early times till about the 5th century A. D., the Chêta, Chöla and Pândyan kings ruled over Kerala and the other two great kingdoms in Southern India. They were at times in friendly relations with one another and there is evidence of even intermarriages having taken place between them. At other times they. fought between themselves, each trying to establish his overlordship over the others. They and their subjects were thus constantly in touch with one another either as friends or as foes. Later on Keralala came under the rule of the Perumāls, and after the death of the last Perumal somewhere about the middle of the ninth century A. D., the country was divided into a number of independent States, of which Vennäd, Desinganaãd, Elayadath Swatapam, Attingal and Nedumangad formed parts of the then Travancore. Vennàd was the most important of them and was the nucleus round which modern Travancore was built up. In 1729 A. D., when Märtānda Varma became the king of Vēnād, his territory extended only from Nagercoil to Attingal, Internal rebellion was rampant and inter-Statal wars were common at that time. Märtända Varma soon started to set the house in order. With the help of an army lent by the Nawab of Carnatic and, subsequently another army sent by the Pāndyan king, Martānda Varma quelled the rebellion in his State, defeated the neighbouring princes and annexed their territories. His successor, Rama Varma, who died in 1798 ^. D., made further annexations and completed the expansion and consolidation of Travancore into its present size and form. Nānjanād, the southernmost part of Travancore, and the taluk of Shenkotta, which once belonged to the Pändyan 女ings, were also conquered by the Travancore Maha Rajahs and annexed to their territory. Besides these political relations; Travancore has also had social and commercial intercourse with the adjoining Tamil country from very early times. The kings of Travancore have always been renowned for their charities, and Tamil Brahmans migrated to this land of charity in large numbers at different times to enjoy the Royal benevolence. The richness of the soil and the facilities which the country has afforded for trade, banking and other business ${ }_{2}$ coupled with the means of communication available through the passes at Ärienkāvu, Arämboly and other places in the otherwise impassable Western Ghats, have also attracted large numbers of Tamilians from the East Coast. Thus, in diverse ways the Malayalis who form the bulk of the population of Travancore have come into close contact with the Tamilians, the result of which is perceptible in the
extent to which each section has influenced the language, customs and culture of the other.

|  | Number per mille of the foptlation speaking Tamil |  |
| :---: | :---: | :---: |
|  | As mothertongue | $\begin{array}{\|c} \text { As subsidiary } \\ \text { language } \end{array}$ |
| Malabar | 33 | 3 |
| Cochin | 55 | 6 |
| Travancore | 165 | 8 | In this respect Cochin and Malabar differ from Travancore in that they have not come under the influence of the Tamilians so largely as the latter. We see it clearly in the composition of the population, and in the extent to which Tamil language is used in the three territories as is shown by the marginal figures. This difference between Travancore on the one hand and Cochin and Malabar on the other must be borne in mind whenever we have occasion to compare them in the course of this Report.

The ares dealt with.

Administra.
tiye divisions.
2. There has been no change in the area of the State since the last census. Its total length from north to south is 174 miles, its width from east to west is 75 miles near the northern boundary and 30 miles at the southern extremity, and it has an area of 7,625 square miles. It is larger than the largest district in the Madras Presidency and has more than five times the size of the neighbouring State of Cochin. Wales is almost of the same size, and Belgium is about one and a half times and Holland nearly two and a half times as large as Travancore.

Two small tracts which are under British administration lie in Travancore. They are the Anjengo district consisting of Anjengo in Chirayinkil taluk and Tangasisery in Quilon taluk, and the Sherthala pattom lands in Sherthala taluk. The former has an area of one square mile and a population of 6,766, and the latter is but 13 acres in extent and contains 105 persons only. Similarly, there are four isolated tracts belonging to the Cochin State in the northern frontier taluks of Parur and Kunnathunad, the total area of which is $4 \cdot 18$ square miles, containing a population of 33,318 . The statistics of these foreign possessions are not included in this Report.
on 3. The State is divided into four administrative divisions and thirty taluks. The only change that has been made in the divisions since the last census is that the area of the Central Division has been increased by two square miles, with a corresponding reduction in the High Range Division. The population of these divisions has not been

| Division | Number of <br> talaks | Area in square <br> miles |
| :--- | :---: | :---: |
| Southern | 8 | 1,490 |
| Central | 11 | 2,50 |
| Northern | 9 | 2,422 |
| High Range | 2 | 1,118 | materially affected by this change. The area of the divisions and the number of taluks comprised in each of them are given in the margin. The Southern Division is almost of the same size as the Cochin State, the Central Division has a little over half the size of Madura or Ramnad District of the Madras Presidencey, the Northern Division is nearly twice as large as Pudukottai and the High Range is somewhat larger than the Nilgiris District, the corresponding hill district of the Madras Presidency.

The Southern Division consists of eight taluks, of which six touch the sea and the other two are situated inland. Of the former, three taluks extend right up to the foot of the mountains. The rainfall on the sea-coast ranges from 35 inches at the southern extremity to 75 inches at the northern limit and increases gradually from the west to the east reaching a maximum of 100 inches. On the plains of the three southernmost taluks where the rainfall is below 45 inches, paddy, the staple food crop, is cultivated under irrigation. The Ködayär Irrigation System, which is the only large irrigation work in the State and which has consumed a capital outlay of over Rs. 86 lakhs, ifrigates nearly 55,000 acres of paddy lands in this district. In the other taluks of this division also paddy is the most widely cultivated crop, but it is generally raised with the help of rain, supplemented occasionally by irrigation from tanks. The dry crops of this division are the palmyrah palm in the south and the coconut palm and tapioca in the other parts. Besides agriculture, the manufacture of jaggery in the southern taluks and cotton weaving in almost all the taluks are the chief occupations of the people. There is a higher proportion of Tamilians in the population of this division than in that of the other divisions, and their influence on the manners and customs of the Malayalis is seen more markedly here than elsewhere.

## MAP OF TRAVANCORE

## Showiog the Normal Rainfall

Scale 1 luch $=16$ Miles

$=$

The Central Division contains eleven taluks, of which four lie at the sea-coast and the other seven are in the interior. The rainfall varies from 75 to 100 inches near the coast, rises to about 150 inches at the foot of the hills and goes up to 180 inches in the mountainous regions. A number of large rivers with a perennial supply of water traverse this division. Paddy is again the chief crop, but it requires hardly any artificial irrigation, and where necessary tank irrigation is resorted to on a limited scale. Of the dry crops, the coconut palm is the most common on the coastal region, and tapioca, pepper and rubber in the submontane tract. The industries connected with the produce of the coconut palm, such as the retting of the coconut husk, the spinning of coir yarn and the weaving of coir mats and matting, form the main occupations of a large section of the people in. the coastal taluks.

Of the nine taluks comprised in the Northern Division, two alone are situated at the sea-coast. The rainfall varies from 100 to 150 inches on the plains and from 150 to 180 inches on the hills. This region is well served by rivers. The western part of it is covered by luxuriant groves of the coconut palm, rich paddy flats and a chain of lagoons, portions of which have been reclaimed for paddy cultivation. In the interior parts pepper, ginger, rubber and other dry crops are largely cultivated. The coir industry supports a large section of the coastal population of this division also.

The High Range Division, as the name itself indicates, is the mountainous region. It is covered by a chain of peaks, ranges of hills of lower elevation and fever-haunted forests intersected by deep valleys and traversed by large rivers. It consists of two taluks, Pirmede and Devikulam. Munnar and Pirmede, two hill stations $5,000 \mathrm{ft}$ and $3,500 \mathrm{ft}$. respectively above the sea-level, are situated in this division. It has an average rainfall of 150 to 200 inches and is the seat of tea and cardamom cultivation. About fifty years ago these highlands of Travancore were practically unexplored country. They were.covered by thick impenetrable forests, the abode of elephants, tigers, bisons and leopards, and had no means of communication with the plains. Butto-day, thanks to the enterprise of the European planters, they abound in smiling hills and valleys neatly clothed with tea bushes. The past decade witnessed remarkable progress in the development of this region. New roads were opened, motor traffic was established, and the area under cultivation extended, giving employment to more than 100,000 persons. In spite of all this development, the High Range is still the most sparsely inhabited part of Travancore and affords the greatest scope for the absorption of the surplus population of the plains.

The pakuthi is the unit of administration in this State. There are at present 433 pakuthies distributed over 30 taluks as against 432 in 1921. An additional pakuthi was formed in Quilon taluk in 1930. The average area of a pakuthi is 176 square miles. Some are small, the smallest being a little over one square mile, but there are several which run into 50 square miles and even more. The pakuthi is, therefore, too unwieldy for the purpose of the census, and the kara or muri, which is a sub-division of the pakuthi and which was the unit of ancient village organisation, has been adopted as the census unit. The total number of karas in the State is 3,936, and the average area of a kara is a little less than 2 square miles. - The kara corresponds to the village in British India, but differs from it in that the British Indian villages are compact units, having the houses clustered together in streets, whereas the kara in Travancore contains scattered houses situated in isolated compounds.
4. The physical features of Travancore are such that it can be divided into three distinct belts, each having its own characteristic soil, rainfail, vegetation and cultivation. In general appearance the country consists of undulating plains and irregular hill ranges, intersected by fertile valleys and traversed by. navigable rivers. "Broad stretches of alluvial rice lands fringe the coast strip and run up into the interior, gradually thinning out as they approach the highlands through which the great rivers have forced their way." This description gives a clear indication of the manner in which the State can be divided into three natural divisions, namely, the flat coast strip or the lowlands, the mountainous region on the east or the highlands, and the intervening belt of undulating hills and valleys or the midlands. It is fis tripartite division, based on the natural conditions, that has been adopted at his census. For the 1921 census also the State was divided into three natural divisions, called the Sea-coast, Inland, and Mountainous Divisions, but sufficient

Natural $V$ dixisiont.
care was not taken to make the boundaries of the divisions conterminous with the variations in the natural conditions. Some portions which should have been included in the Inland Division were added to the Mountainous Division. Nedumangad taluk which should have been divided between the Inland and Mountainous Divisions was placed entirely in the former, and
 Vilavancode and Neyyattinkara taluks which extend from the sea to the Western Ghats were included completely in the Sea-coast Division. Owing to these mistakes it was found necessary to re-arrange the natural divisions and call them the Lowland, the Midland and the Highland Divisions, the names themselves indicating roughly the position and nature of each division. The changes made in the boundaries of the divisions have considerably altered the area of each, as can be seen from the figures given in the margin.

The composition and area of each of the three divisions adopted for the present

Comptaition and area of the Natural Dirisions
 census are shown in the marginal statement. The Lowland Division consists of flat stretches of low lands lying along the coast at sca-level, and composed mainly of recent deposits of sand and alluvium. It is broken up into two narrow strips by a continuous chain of lagoons and canals running parallel to the sea from Trivandrum right up to the northern boundary. The soil in this region is white sand or sandy loam and is best suited to the cultivation of the coconut palm and paddy. The rainfall varies from 35 inches in the extreme south to 110 inches in the extreme north. Water communication, which is the cheapest means of transport, serves practically the whole length of this narrow belt. The coastal region is the most thickly populated portion of Travancore. Practically the whole , available arca has becn brought under cultivation. $87 \cdot 38$ per cent. of the total area is cultivable and the cultivated portion forms as much as 79.72 per cent. Most of the industries are also carried on in this region.

The Midland Division is higher in elevation than the Lowland and is dotted over with lou hills of varying sizes and shapes, interspersed with long narrow stretches of valleys. The valleys are generally cultivated with paddy and the hill slopes and hills with the coconut palm, tapioca, pepper, ginger, rubber and other dry crops. The rainfall ranges from 55 tol 40 inches. It has a well-developed and wide-spread road system, with an excellcnt motor service connecting all the important towns and villages. The soil generally is fertile, except on the slopes of some barren hills, and practically all lands which could profitably be cultivated under the crude methods now followed have been brought under cultivation. About 86 per cent. of the total area is classed as cultivable and nearly 68.5 per cent. is cultivated.

The Highland Division, which is the easternmost part of the State, contains a long range of mountains with rich fertile lands at the foot, covered mostly by thick virgin
forests. Most of the reserved forest is situated in this division, and the portions which have been thrown out for cultivation are occupied by rubber, tea and cardamom. The rainfall is generally high, ranging between 100 inches in the south and more than 200 inches in the north, one particular locality having a maximum of about 290inches. Roads are few and far between and most parts are, therefore, inaccessible. Owing to the existence of reserved forests the lands available for cultivation form only 34.6 per cent. of the total area and the cultivated portion is but $13-9$ per cent. This is the most sparsely populated region in the State. The soil is very fertile, and, if means of commumication are developed, it will accommodate a very much larger population than what it now contains.

6. The population enumerated in Travancore, as in other parts of India, is the Definition of population actually present within the boumdaries of the State at the census time. It population. includes both permanent and temporary residents, casual visitors, inmates of hospitals, jails, asylums and other institutions, persons on board the ships which were in ports on the census day, or which arrived from elsewhere within fifteen days after the census without the persons thereon having been previously enumerated, travellers by trains and by boats. plying in inland waters and others found on the roads, persons who assembled at fairs and religious assemblages on the census day, as well as pilgrims, vagrants. and wandering tribes. The population enumerated in Travancore on the moraing of the 27th February 1931 is, herefore, the de facto population. The de jure population, which consists of all persons habitually residing in the country, including those who were temporarily absent at the census time, but excluding those who were present as casual visitors from elsewhere, has not been enumerated. There is no column for this purpose in the schedule that has been prescribed and, even if there had been a separate column, the practical diffculties in making a correct enumeration of the de jure population would have been insurmountable. It is not easy to give an unambiguous definition of "habitual and temporary residence." Even if an attempt had been made to define this expression, the enumerators would have undoubtedly committed mistakes and chus rendered the figures collected almost worthess. It must, however, be mentioned that special precautions were taken in this State to see that the de facto population enumerated corresponded as far as possible with the de jure population. A notification was published under the Census Regulation, requiring people not to be absent from their homes and not to arrange for marriages and other social or religioas functions if possible on the census morning. Markets, shops and bazaars, factories and other institutions where labour was employed were cosed, and public motor service was stopped at census time so that as few people as possible might move out of their homes. Persons who lived in a particular house at the preliminary enumeration were regarded as being present there at the final census if they happened to sleep in that house on the night of the 26th February and left it on the 27 th morning. Similarly, persons who were out on the 26H night on official duty or for watching crops in the fields, and Gishermen who went to the sea and who did not relurn till the census time, weere treated as being present in the houses in which they were enumerated at the preliminary counting. Persons who came into Travancore from Cochin or British territories on the morning of the 27世 February were enumerated only if they had not been already enumerated in their own territories on the previous night or on that morning. To the other travellers the question was put, whether on the 26th night they slept in the house in which they resided at the time of the preliminary enumeration, and only in case of a negative answer were they separately enumerated on the census morning. These were some of the measures taken to minimise the difference between the de facto and the de jure
population. Even otherwise this difference may not be great in a country like Travancore where the scope for temporary migration is very much limited. In the European countries where such migration exists on a large scale, the population count on de jure basis may be necessary and is certaialy of considerable value. Even there this method of enumeration is beset with practical difficulties, and Great Britain has therefore not yet adopted it.

Accuracy of the enumeration.

The normal population.

The actual
population of the State and its divisions.
7. All possible precautions were taken to ensure accuracy at every stage of the census operations. Mistakes committed at the earlier stages were subsequently discovered and rectifed. Buildings left out at the time of house-listing were discovered during house-numbering and those that escaped detection then were found out during the preliminary enumeration. Special care was taken in the selection of proper agencies for the various census operations. Preliminary enumeration is the most imporlant of these and it is here that fudging is likely to happen most. Enumerators for the preliminary counting, were selected from among the teachers in the vernacular schools. Being educated and intelligent men, they did their work conscientiously and satisfactorily. Clear instructions for filling up the columns in the schedule were printed in Malayalam and copies were supplied to the enumerators in advance. Supplementary instructions, clearing the doubts and difficulties experienced by them at the initial stage, were printed and distributed promptly. To exercise proper check and efficient supervision over the work of the enumerators and supervisors, a separate full-time officer was appointed as Assistant to the Charge Superintendent for each taluk for a period of three months. These Assistants, who were constantly on the move throughout the period of preliminary enumeration, contributed greatly to the success of this operation. Between house-listing and the final census 1 toured the State five times, visiting every taluk and town on all those occasions, giving instructions to the census officers, clearing their doubts and watching the progress made. 1 also paid surprise visits to some out-of-the-way places and personally checked the work done. With the facilities now available for quick travels in motor car I had the convenience to make extensive and repeated tours, which my predecessors had not. In spite of all these precautions, errors might have been made, especially at the final counting. But they were certainly much fewer than those committed at previous censuses. Accidental omissions, if any, must have been counterbalanced by similar overcountings. Complaints of omissions and overcountings which usually crop up after the census were not heard of this time. On the other hand, there was a general feeling of satisfaction among the public at the thoroughness with which the census was taken. Everything possible was done to ensure accuracy and, as far as practicable, accuracy was attained.
8. By "normal population" is meant the de jure population. As has already been explained there is not the likelihood of much variation between the de jure and the de facto population in this State. The census was synchronous throughout the State and was completed in about a couple of hours. There could not have been any appreciable movement of the population from one place to another during this short period. The movement was also restricted as far as possible by the adoption of precautionary measures, as a result of which the floating population enumerated decreased from 18,438 in 1921 to 15,504 at this census, a decrease of 12 per 10,000 of the total population. Temporary visitors from outside the State would only be found among the floating population enumerated on trains, railway platforms and on board the ships in ports. They numbered only 583. Of these again, the majority must have been the permanent residents of this State and only a few, if at all, would have come from elsewhere. It may, therefore, be safely assumed that the de jure or normal population of Travancore is more or less the same as the de facto or actual population counted on the census day.
9. According to the census taken on the morning of the 27th February 1931, the population of Travancore is $5,095,973$ persons. They were distributed in the four admi-

|  | Population |
| :---: | :---: |
| gTATE | 6,095,973 |
| Administrative Division |  |
| Snuthern Division | 1,438.95\% |
| Central | 1,861.472 |
| Nurthern " | 1,69, 321 |
| High Kange " | 1005,224 |
| Natural Division |  |
| Inwland Division | 2.384.549 |
| Midland | 2,415,4!4 |
| Higbland | 2500,930 | nistrative and the three natural divisions as shown in the margin. Of the adminiatrative divisions, the Southern Division contains 28.1 per cent., the Central 36.5 per cent., the Northera $33 \cdot 3$ per cent., and the High Range $2 \cdot 1$ per cent. of the population. Among the natural divisions the population is distributed in the proportions of 46.9 per cent. in the Lowland, 47.4 per cent. in the Midland and 5.7 per cent. in the Highland. The High Range is only slightly less than the Southern Division and yet contains only about one-fourteenth of its population. The Highland is the largest of all the natural divisions, but its population is only about oneninth of that of the smallest (Lowland) division.

10. The area and population of the taluks are given in State Table I at the end Distribation by of Part II of the Report (Imperial Tables). The diagram below shows graphically the ${ }^{\text {taluk. }}$ population of the taluks arranged in the descending order.


Thiruvella, with a population of 337,553 , stands first and Thovala which contains only 40,129 persons comes last. As many as eleven taluks have each a population of more than 200,000. These are Thiruvella, Neyyattinkara, Quilon, Kottayam, Trivandrum, Kunnathunad, Changanachery, Ampalapula, Kalkulam, Sherthala and Minachil. Fourteen taluks have each a population of 100,000 to 200,000 and five less than 100,000 each. As compared with the census of 1921 the position of some taluks has changed. Kunnathu: nad which was fourth in 1921. now occupies the sixth place, Kottayam and Trivandrum having gone over it. Kottayam which was below Trivandrum in 1921 has now beaten it. Changanachery, which was thirteenth in 1921 with a population of 156,640 , has pushed behind six other taluks and now occupies the seventh place with a population of 221,478. Muvattupula which was behind Vilavancode has overtaken it. Similarly, Vaikom has been beaten by Nedumangad, Shenkota by Devikulam, and Thovala by Pirmede.
11. A statement showing the area and population of the more important Indian States .and the rank which Travancore holds among them is given in the margin. Travan-

| Name of the State | Area in square miles | Population | Rank in area | Rank in population |
| :---: | :---: | :---: | :---: | :---: |
| Jammu and Kashmir | 84,516 | 3,646,243 | 1 | 4 |
| Hyderabad | 82,698 | 14,436,148 | 2 | 1 |
| Kalat | 73,278 | 342.101 | 3 | 21 |
| Marwar (Jodhpur) | 35.016 | 2,125.982 | 4 | 8 |
| ${ }^{3} \mathrm{yswore}$ | 39.926 | 6,55i,302 | 5 | 2 |
| Givalior | 26,367 | 3,523,070 | 6 | 5 |
| Bikanir | 23,317 | 936,218 | 7 | 15 |
| Makran | 23269 | 68.462 | 8 | 25 |
| Jhalwan | 20.795 | 83,978 | 9 | 23 |
| Kharan | 18,565 | 23,358 | 10 | 26 |
| Jnipur | 16.682 | 2,631.750 | 11 | 6 |
| Jrisisimer | 16,062 | 76,205 | 12 | 24 |
| Bahawalpur | 15,000 | 984,612 | 13 | 14 |
| Pewa | 13,000 | 1,887,445 | 14 | 10 |
| Mewar (Cdaipur) | 12,694 | 1,566,910 | 15 | 11 |
| Indore | 9,518 | 1,318,237 | 16 | 12 |
| Manipur Bamda | 8,620 8,164 | +445,606 | 17 | 20 |
| Travancore | 8,164 7,628 | $2,443,007$ $8,095,973$ | 18 | 7 |
| Bhopal | 7,628 6,902 | 8,095,978 | 19 | 8 |
| Khaippar | 6,050 | 227,183 | 21 | 29 |
| Paciala | 5,932 | 1,625, 6,2 | 22 | 9 |
| Kotab | 5,684 | 685,804 | 23 | 18 |
| Alwar | 3.217 | 719,751 | 24 | 16 |
| Bharnagar | 2.961 | 601,274 | 20 | 19 |
| Cuchin | 1,480 | 1,205,016 | 26 | 13 | core, which occupies

Comparison
yith other Indian States and Proyincea.

States which approach Travancore in size are Manipur, Baroda, Bhopal and Khairpur, but
these occupy the twentieth, seventh, seventeenth and twenty-second places respectively in population. The adjoining State of Cochin is twenty-sixth in size and thirteenth in population.

Of the Brilish Indian Provinces, Burma which is the largest in size is more than thirty times as large as Travancore, but has a population hardly three times as numerous as the latter. Madras is nineteen times as large as Travancore but has only a little over nine times its population. It is hardly worth while to pursue the comparison with other Provinces, all of which are very much larger in size than this State. It is more appropriate to compare Travancore with some districts in British India. The marginal table gives the figures for Travancore and a few typical districts in Madras and Bombay Presidencies. Vizagapatam, the largest district in Madras, is about two and a half times as large as Travancore but has only a little over half its population. Nellore and Kurnool which are almost of the same size as Travancore have a much smaller population. Malabar and South Kanara which have a greater affinity to Travancore in climatic and other conditions are somewhat smaller in size but have a much smaller population. In Bombay Presidency, Kanara and Ratnagiri which more or less resemble Travancore in natural conditions have only about one-twelfth and one-fourth of its population though their size is about half of that of the latter.

To compare the districts of Madras with those of Travancore some figures are given in the margin. Nilgiris and High Range are both hill districts resembling each other in physical features, climate and cultivation. Ootacamond, the summer seat of the Madras Government, is situated in the Nilgiris and hence the latter has a larger population, though it is smaller in size, than the High Range in Travancore. The plains divisions in Travancore which. have almost the same population as the Madras districts are all smaller than the latter.

Comparison with foreign countries.

| Distriet | Area in square miles | Population |
| :---: | :---: | :---: |
| Mad ras |  |  |
| Vizagupatam | 17,196; | 3,607,938 |
| Nellore | 7,949 | 1,486,222 |
| Kurnool | 7,5×1 | 1,024.971 |
| Mashabar | 5,794 | 3,43:3, 1 +4 |
| South Kanara | 4,021 | 1,372,241 |
| Bombay |  |  |
| Ratnagiri | 3,989 | 1,302,627 |
| Kamara | 3,446 | 417,835 |
| Travancore | 7.625 | 5,095,973 |

the same population as Travancore is about three and a half times as large. Sweden whose population is more than that of Travancore by only one-fifth is twenty-three times as large as the latter, and Scotland whose size is about four times that of Travancore has a slightly smaller population. The disparity in area and population between other countries and Travancore is even more striking.
13. Density is obtained by dividing the population by the area. It is Densitt of only a hypothetical figure showing the average number of persons that would be found on popalation a square mile of land if the population were uniformly distributed over the whole country. All regions, whether thickly or sparsely populated, including crowded towns and uninhabited forests, are clubbed together in calculaing this mean density as
 it is called. It gives no indication of the real density existing in any part of the country. For this purpose the density in smaller units must be considered. Let us, however, examine the mean density of Travancore and compare it with the densities at the previous censuses and of other States, Provinces and countries. The present density of this State is 668 persons per square mile taking the country as a whole. If it is calculated on the land available for cultivation, it rises to 1,072 per square mile, and on the land actually cultivated it goes up to 1,482 per square mile. The density at the first regular census taken in this State in 1875 was 303 . Since then it has increased steadily from census to census until it has reached the present figure as could be seen from the diagram given in the margin. From 1875 to 1881 the density rose only by 12 . persons per square mile. From 1881 to 1891 it increased by 20, from 1891 to 1901 by 52 , from 1901 to 1911 by 63, from 1911 to 1921 by 75 , and from 1921 to 1931 by 143 . The causes of such wide variations in different decades will become clear when we discuss the actual increase in population in the next section of this chapter. Here it is enough to note that the density of population in Travancore has more than doubled itself in the course of the past half a century.

Comparison Fith other
glates,
Proyinces
countries.
14. Three diagrams are given below to compare the density in Travancore with the densities (1) in other Indian States, (2) in British Indian Provinces; and (3) in India as a densities (1) in other lndian States, (2)
whole and in some Foreign Countries.


Where the latest census statistics are not known the Ggures given in "The World Almanac and Book of Facts for 1932" have been used. Among the Indian States, Cochin stands frst in density and Travancore comes next. The next in order is Baroda, but it is not even half so populous as Travancore. Hyderabad and Mysore, which are the only two States larger in size and population than Travancore, have only a density of 175 and 223 respectively, as against 668 in Travancore. When compared with British Indian Provinces Travancore has a higher density than any of them. The only one that approaches it is Bengal. The neighbouring Madras Province is not even half so densely populated as Travancore, while Burma, which is allied to it in paddy being the most important crop in both territories, has only less than one-tenth of its density. Among the foreign countries for which statistics have been given, Java and Madura tops the list, then comes Belgium,
closely followed by England and Wales, and Travancore takes the fourth place. Denmark and lrish Free State, which are mainly agricultural countries of small land-holders like Travancore, have only a density of 207 and 112 respectively. Thus we see that Travancore is one of the most thickly populated resions in the whole world. In India, Cochin alone, and outside India, as far as we know, only Java and Madura, England and Wales and Belgium have higher densities than Travancore.
15. The absolute figures shoving the density at the last six censuses and the propor- Density by tional variations from census to census for the administrative and natural divisions are set and ndentratire forth in Subsidiary Table III at the end of this chapter. It will be seen therefrom that divisioniz of the administrative divisions the Southern Division is the densest and next to it come the Central, the Northern and the High Range in order. The densities of the four divisions, according to the present census, are $963,717,700$ and 94 respectively. Of the natural divisions the Lowland is easily the first with a mean density of 1,743 persons per equare mile. The Midland has only about a half and the Highland a little less than onotwentieth of this density. All the divisions continue to hold the same relative ranks which they held at the previous censuses, but the proportions of variations differ considerably in different divisions from one census to another. In the Southern Division the density has increased by 24.1 per cent. during the last decade, in the Central by $25 \cdot 1$ per cent., in the Northern by 29.9 per cent. and in the High Range by 84.3 per cent. The corresponding increases in the Lowland, Midland and Highland Divisions are 24.2, $27 \cdot 4$ and 54.7 per cent respectively. During the decade 1911-1921 the Northern Division showed a smaller increase than the Central, and during the previous decade the increase in the Northern as well as in the Central Division was less than that in the Southern. There were similar fluctuating variations in the earlier decades also. One striking similarity, howevar, is that the increase in density in the High Range Division has been very much higher than in any other administrative division in all the past five decades. This is due to the steady development that has been going on in that region by the disafforestation of forest lands and the cultivation of tea and cardamom. Coming to the natural divisions, we find that the order of variation in densities has been more or less the same at all the censuses, the Lowland Division always showing the smallest increase, the Midland the next higher and the Highland the bighest. Here again the increase in the Highland Division, due to the opening of tea, rubber and cardamom plantations, has been considerably more than that in the other divisions.

We have already seen that the highest mean density is in the Lowland Division and that it is 1,743 persons per square mile. The mean density is calculated on the total area including forests, lakes, rivers, roads and other lands not available for cultivation. A correct idea of the number of persons a particular tract of the country can support and is now supporting can only be had by a study of the densities on the cultivable and cultivated lands:

| Fitural <br> Divinion | Total area in equare miles | Coltivable area in square miles | Oaltivated area in equare mile | Density on total aren | Density ox caltinble ares | Density on cultiveted - area |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowland | 1,371 | 1.198 | 1,093 | 1,743 | 1,994 | 2,186 |
| Midiand | 2,707 | 2.329 | 1,854 | 898 | 1,087 | 1,303 |
| Highland | 3,547 | 1,287 | 492 | 88 | 237 | 591 | From the table given in the margin it will be seen how widely the three natural divisions differ in this respect. In the Lowland Division 91 per cent. of the cultivable land is being cultivated, while in the Midland only 79 per cent. and in the Highland 40 per cent. of the lands that could be cultivated have been brought under cultivation. One square mile of cultivated land in the Lowland Division supports as many as 2,186 persons, but the same unit in the Midand and the Highland Divisions maintains only a population of 1,303 and 591 respectively. Owing to the difference in the capacity of the soils, in the accessibility of the regions, and in other factors, the number of persons that will be able to live on the produce of the same unit of land is the three divisions naturally varies. The figures, however, show that the population in the Lowland Division has reached the saturation point or even gone beyond it. If the standard of living which is now very low should improve, a portion of the surplus population must move out of this tract. There seems to be some scope for the absorption. of this population in the Midand Division where 21 per cent. of the cultivable land is still available for cultivation, and there is decidedly much greater scope for the accommodation of a larger population in the Highland Division where the density on cultivated land is only. 591 per square mile and where 60 per cent. of the land available for cultivation still remains

## Dennity by taluk.

uncultivated. This is, however, the most inaccessible part of the country, and the absence of proper means of communication seriously obstructs the rapid movement of the population to this region.
16. The variations in the densities of taluks are even more marked than those of the divisions. The diagram below shows the densities of taluks.


It will be seen from the above diagram that nine out of thirty taluks have a density ranging from 80 to 500 , thirteen from 600 to 1,500 and eight from 1,500 to 2,000 or more. This wide range of densities shows how irregularly the population is distributed in the State. The densities shown in the diagram are inclusive of the municipal towns. In considering the distribution of the population in the taluks which are mostly rural in character, the population of towns should be excluded. The densities of taluks excluding the municipal towns are given in the map opposite. By comparing this map with the above diagram some striking differences will be noticed. When towns are not excluded, Trivandrum, with its population of 2,336 persons per square mile, is the most densely populated taluk, but when towns are excluded Karunagapally, having a density of 2,161, leads off, with Karthikapally, Sherthala and Parur following, and Trivandrum with its density of 1,526 going down to the fifth place. At the other end of the scale stand Devikulam and Pirmede, which contain no municipal town, with a density of 89 and 102 respectively. It will be noticed from the map that the taluks along the sea-coast have much higher densities than those inland.

In another map are shown the variations in the densities of taluks excluding municipal towns in 1921 and 1931. One noteworthy feature of the figures given in this map is that the actual increase-not the proportional variation on the basis of 1921 figures-is highest in the taluk which has the highest density, namely, Karunagapally. Of the other taluks also those which have higher densities show as a rule larger increases in absolute figurcs than those with lower densities. The increase in Devikulam and Pirmede is only 40 and 49 respectively as against 388 in Karunagapally, 387 in Sherthala and so on. The proportional increase, on the other hand, tells a different tale. In scantily populated taluks like Devikulam and Pirmede the density has almost doubled itsell between 1921 and 1931, whereas in densely populated taluks like Karunagapally, Karthikapally and Sherthala the increase has only been 20 to 22 per cent. and in intermediate taluks like Minachil, Kottryam and Changanachery it has ranged from 30 to 45 per cent.

We have already seen the great irregularities in the densitics of natural divisions brought about by the peculiarities of the climatic and other conditions obtaining in them.

MAP OF TRAVANCORE
Showing by Taluks In Administrative Divisions the Density of Popalation per Sq. Mile. Excluding Municipal Towns


## MAP OF TRAVANCORE

Showlos by Tajuks Variation in Density of Population per Sq. Hile, between 1921 a 1931 Excieding Municipal Towns

Senle 1 Inch $=16$ Miles


MAP OF TRAVANCORE
Showing by Taluks in Natural Divisions the Density of Population per Sq. Mile,
Excluding Muntelpal Towns
Scale 1 Juch $=16$ Miles



The inequalities become more marked in the taluks, if they are arranged by natural division. The factors contributing to these inequalities can be better studied by a comparison of the taluk figures. The map opposite this page shows the densities of taluks by natural division. Agasthiswaram which is the southernmost taluk in the State lies partly in the Lowland and partly in the Midland Division. Its lowland portion has a density of 1,374 and the midland 619 only. Thovala which lies to the east of Agasthiswaram has a density of 612 in the midlands and 147 only in the highlands. Kalkulam, Vilavancode and Neyyattinkara are spread over all the three divisions. In the lowland areas of these taluks the densities range from 1,998 to 2,184 , in the midlands from 908 to 1,401 and in the highlands from 53 to 124 only. Trivandrum, Quilon, Karunagapally., Karthikapally, Ampalapula, Sherthala and Parur are situated entirely in the Lowland Division and their densities are naturally high. In Chirayinkil taluk which is partly in the Lowland and partly in the Midland Division, the density in the lowland portion is nearly three times as large as that in the midland. In Nedumangad the midlands are eight times as dense as the highlands. The midlands of Pathanapuram have a density five times as large as the highlands. In Pathanamthitta there is only one person per square mile in the highlands as against 751 in the midlands. It is unnecessary to pursue this comparison further. The point to be noted is that the taluks or portions of taluks lying in the Highland Division have the lowest densities, these are very much lower than those of the taluks or portions of taluks in the Midland Division, and these latter are lower again than the densities of the taluks or portions of taluks in the Lowland Division. The factors which contribute to such wide inequalities will be examined presently.
17. In the meanwhile, let us see how the population is distributed in the taluks if they are classified according to their densities. The absolute and the proportional figures and are given in Subsidiary Table II at accorring to the end of this chapter. The state-- density.

| Density group in administrative divisions | Peroentage of total population in |  | Difference |
| :---: | :---: | :---: | :---: |
|  | 1931 | 1921 |  |
| Under 150 | 207 | 5.04 | - 297 |
| 150-300 | 7.35 | $2 \cdot 69$ | + 466 |
| $300-450$ | 7.58 | $10-88$ | - 3.30 |
| 450-600 | - | 11.42 | -11.42 |
| 600-750 | 11.09 | 273 | +836 |
| 750-900 | 6.64 | 8.70 11.57 | -2.06 |
| $900-1,050$ <br> $1,050 ~ a n d ~ o v e r ~$ | 4.15 61.22 | 11.57 46.99 | - 7.52 +14.23 |

ment in the margin shows the percentage variations of the total population in the several density groups in 1921 and 1931 by taluks in administrative divisions. During the last decade there has been a movement of the population from some of the lower to the higher density groups, the largest movement being from 900-1,050 group to the highest group, 1,050 and over. Nearly two-thirds of the
population now live in places having the highest dénsity.
The distribution in the natural divisions is slighly different from that in the

\begin{tabular}{|c|c|c|c|}
\hline Natural Division \& Density group \& Percentage of the total area \& Percentage of the total population <br>
\hline Lowland \& $$
\left.\begin{array}{rr}
\text { Under } & 150 \\
150- & 300 \\
300- & \$ 50 \\
450- & 800 \\
600- & 750 \\
75 n- & 900 \\
900-1,050 \\
1,050 \text { and ove }
\end{array}\right\}
$$ \& Nil
180 \& NiI
$46-9$ <br>
\hline Midland \& $$
\left.\begin{array}{rr}
\text { Under } & 150 \\
150- & 800 \\
340- & 450 \\
850- & 600 \\
600- & 750 \\
750- & 900 \\
900-1,050 \\
1,050 \text { and over }
\end{array}\right\}
$$ \&  \& Nil

$13-7$
156
$2-9$
$15-2$ <br>
\hline Hiphland \& $\left.\begin{array}{cc}\text { Under } & 150 \\ 150- & 300 \\ 300- & 450 \\ 450- & 600 \\ 600 & 750 \\ 750- & 900 \\ 900-1,050 \\ 1,050 & \text { and over }\end{array}\right\}$ \& $44 \cdot 1$
$2 \cdot 4$

Nil \& 4.8
09

sil <br>
\hline
\end{tabular} administrative divisions as can be seen from the marginal table. According to this table $25 \cdot 1$ per cent of the total area, containing 62.1 per cent. of the population of the State, has a density of 1,050 and over, and this area is situated mostly in the Lowland Division and to a small extent in the Midland also. The portions having a density of 900-1,050, 750-900 and $600-750$ form 20 , $13 \cdot 1$, and $13 \cdot 3$ per cent. of the total area, with 29 , 15.6 and 13.7 per cent. of the population respectively, and lie entirely in the Midland Division. As much as 46.5 per cent. of the area which contains only 5.7 per cent. of the population'has a density below 300, and this is situated wholly in the Highland Division.

The relative densities of the different taluks may be expressed in another way also. For census purposes areas are generally classified according to the degree of density as follows:-
"Dense" indicating a density of over 500 persons per square mile.

| "Fairly dense" | $\cdots$ | $300-500$ | $"$ |
| :--- | :--- | ---: | :--- |
| "Average" | $\ldots$ | $200-300$ | $"$ |
| "Thin" | $\ldots$ | $100-200$ | $"$ |
| "Sparse" | $\ldots$ | below 100 | $"$ |

Densities of taluks are given in Subsidiary Table I B. It will be seen therefrom that ${ }_{r}$ six out of eight taluks in the Southern Division, namely, Agasthiswaram, K alkulam Vilavancode, Neyyattinkara, Trivandrum and Chirayinkil are dense, Nedumangad is fairly dense and Thovala has average density only. In the Central Division the density of Pathanamthitta alone is thin and of Pathanapuram and Shenkotta average, and the other eight taluks are dense. Similarly, in the Northern Division Muvattupula is fairly dense, Thodupula thin and all the remaining seven taluks dense. When the densities are calculated on the extent of cultivable or cultivated lands, all the taluks in these three divisions become dense. In the High Range Division the density of Pirmede is thin, whether it is calculated on the total or cultivable area while Devikulam is sparse when density is calculated on the total area and fairly dense when it is calculated on the cultivated area. By the application of the same principle of classification to the taluks or portions thereof constituting the natural divisions, it will be seen that, as regards the mean density of the total area, the whole of the Lowland and Midland Divisions is dense, while in the Highland Division which consists of Pirmede and Devikulam and varying portions of other taluks, Minachil has average density, that of Thovala, Neyyattinkara, Pathanapuram, Shenkotta, Thodupula and Pirmede is thin, and that of Kalkulam, Vilavancode, Nedumangad, Pathanamthitta, Kunnathunad, Muvattupula and Devikulam is sparse. If, however, the density is calculated on the cultivated area, the whole of this division becomes dense, the number of persons per square mile being 591.

Factors affect
ing denaity.
18. In an agricultural country like Travancore the factors that govern the density of population are chiefy those concerned with the cultivation of crops and the distribution of the produce. Rainfall, soil, means of communication and the kind of crops cultivated are the most important of these tactors. It is not possible to isolate any one of them from the rest and study its influence on density independently of the others. All of them operate jointly and it is their combined effect that influences the distribution of the population.

Rainfall.
19. Rainfall is one of the prime factors in cultivation. The varieties of crops cultivated and their yield per acre depend to a very large extent on the volume and distribution of the rain. |Practically the whole of Travancore, except three taluks in the extreme south and Shenkotta, has a sufficient rainfall, and some parts have even more than what is necessary. In the three southern taluks the deficiency is made up by artificial irrigation from the Köthayarr Project, and in Shenkotta by tank irrigation. In most other taluks the only defect in the rainfall is its uneven distribution, and in some taluks excess rather than deficiency damages cultivation.! As far as Travancore is concerned rainfall seems to have very little influence on density. Even in the same natural division, regions with a higher rainfall have a lower density. Compare the maps showing the normal rainfall and the density by taluk in natural divisions opposite pages 3 and 13. Ampalapula which has a rainfall of 105 inches has only a density of 1,238 , whereas Karunagapally with a rainfall of 89 inches has a density of 2,161 . Such variations exist even more markedly in the Midland and Highland Divisions. crops cultivated. In the Lowland Division the soil is best suited to the cultivation of paddy and the coconut palm, the Midland is more adapted to the cultivation of dry crops

MAP OF TRAVANCORE
Showing Means of Communications and Markets
Secte 1 luch $=16 \mathrm{~J}$ (iles

like tapioca, and the Highland to that of rubber, tea and cardamom. Paddy is the chief

| Dirisioa | Percentake of grose cultirated area under paddy | Mean density of total arch |
| :---: | :---: | :---: |
| Lowland | 47.0 | 1,748 |
| Midiand | $34 \cdot 8$ | 892 |
| Highland | 158 | 82 | food crop, and the marginal figures show that density varies directly as the extent of its cultivation. The variation in densisy is not quite proportional to the variation in the area under paddy. This is due to other causes which will be explained later on. Anyhow, the fact remains that where the land is more suitable for paddy cultivation there the density is higher.

21. Means of communication are essential to the development of cultivation. It is Means of those regions which are easily accessible and which contain the cheapest means of trans-communiestion. port that attract people first for settlement. The Lowland Division is the best in these respects, because it is the most accessible portion of the country and is well served by water communications which provide the cheapest form of transport; and it is here that we have the highest density. The Midland Division has a much better and wider road system than the Highland. It has 2,190 miles of good motor roads as compared with 496 miles in the Highand Division, and it has a density eleven times as large as that of the latter.
22. A close connection seems to exist between density, the proportions of cultiva-Cultivation. ble and cultivated lands, and the lind of crops cultivated. The figures in the marginal table bear out this inference. ln considering these
(1) DEASITY AND PROPORTION OF CULTIVATIO to tutal aiga

| Dirisiom | Proportion of cultivated to total arem, per cent. | Density of total area |
| :---: | :---: | :---: |
| Towland | 79.7 |  |
| Midisad | 68.5 | 892 |
| Highland | 18.9 | 82 |

(2) Dinaity aid promortion of colitiatid TO CELTIFABLE AREA

| Diviein | Proportion of cultivated to cultimable area, per cont | Density of cultirable arem |
| :---: | :---: | :---: |
| Lowland | 91-2 | 1,994 |
| Midtand | $79 \cdot 6$ | 1,037 |
| Eighland | 40-1 | 237 | the density of both the total and the cullivable area in the former is about twice as much as that of the latter. Besides rice, tapioca is olso a staple food, especially of the poorer classes. It supplements but does not supplant rice. Tapioca is most extensively cultivated in the Midland Division. This tract produces less rice and coconut, but more pepper, another money crop though not so extensively cultivated as coconut, than the Lowland Division, but distinctly more of rice and coconut than the Highland. Hence, the density in the midlands is lower than in the lowlands and higher than in the highlands. The Highland Division contains the least proportion of the above-mentioned food and money crops, but the major portion of rubber and practically all the tea produced in this State are cultivated there. These crops are mostly in the hands of the European planters and consequently though the opening of rubber and tea estates has increased the proportion of cultivated land to the total or the cultivable area mo the highlands, it has not correspondingly increased the number of persons supported by land. From the marginal table

given above it will be seen that, though the proportion of cultivated land to the total arca in the Highland Division is only 55 per cent. and that of the cultivated to the cultivable about 40 per cent. less than those in the midlands, the density of the total area in the former is about one-eleventh and that of the cultivable area between one-fourth and one-fifth of the corresponding densities in the Midland Division.

The correlation between density and cultivation will be made clear by the figures in the marginal table. Rubber and tea have been excluded from this table so as to eliminate the disturbing factor in the calculation of density. The proportion of the area under food and money crops to the gross cultivated area is only slightly higher in the Lowland Division than in the Midland. but the density of the cultivated area in the former is more than one and a half times that of the latter. The reasons for this anomalous variation, as have already been stated, are the presence of the coir industry and the large supply of fish food available in the lowlands. Between the Midland and the Highland Divisions, on the other hand, the variation in density corresponds almost exactly with the variation in the proportion of the area under food and money crops (excluding tea and rubber) to the gross cultivated area. The variations of both in the highlands are about half of what they are in the midlands. The conclusion that emerges out of the above discussion is that the number of persons a square mile of cultivated land in any tract can support varies directly as the proportion which the land cultivated with ordinary food and money crops bears to the gross cultivated area, provided there are no disturbing factors, such as the existence of industries, the availability of other sources of food supply like fish, and the cultivation of crops like tea and rubber which benefit the foreign investors more than the local people.

Density in terms of acreage per person and proximity in yards.
23. The average acreage available per head of the population obtained by dividing the total area by the total population, and the distance in yards between any two nearest persons if the population were distributed uniformly over the whole area, are two

| Year of <br> census | Acres per <br> pergon |
| :---: | :---: |
|  |  |
| 1881 | 2.0 |
| 1891 | 1.9 |
| 1901 | 1.7 |
| 1911 | 1.4 |
| 19121 | 1.2 |
| 1931 | 0.46 | additional ways of expressing the density of population in a country. The marginal table gives the acreage per person at the different censuses in Travancore. The acreage per person has steadily decreased from census to census. It has fallen from 2 acres in 1881 to less than one acre at present. A more correct idea of the intensive density in Travancore may be obtained from the acreage of cultivable or cultivated land available to each person. Subsidiary Table IA shows that out of the total area of the State ( 7,625 square miles) only $45 \cdot 1$ per cent. is actually cultivated. The number of persons per square mile of the cultivable area is 1,072 and of the cultivated area 1,482 . In other words, each person has only three-fifths of an acre of cultivable, or two-fifths of an acre of cultivated land.

The proximity can be calculated by the formula $d^{2}=\frac{200}{n \sqrt{ } 3}$ in which $d$ denotes proximity and $n$ the number of persons per 100 square miles. For the application of this formula the area of the State is supposed to be divided into a number of equilateral triangles and the individuals are assumed to be occupying the corners of the triangles. The figures showing the proximity in yards at the different censuses, given in the table on page 4 of the Census Report of Travancore for 1921, appear to have been calculated on the basis of squares instead of equilateral triangles. The method now adopted is, however, more correct since the distance between any two adjacent persons in this case will be the same, but in the other case it is not so because the diagonal of a square is always greater than any of its sides. The diagrams facing this page illustrate the proximity in yards of persons enumerated at each census from 1875 to 1931 and the statement below shows in

concrete fgures the proximity for the State and its administrative and natural divisions at the successive decemial censuses from 1881 to 1931.

24. The "median point of population" is the point of intersection of a line drawn The median north to south, dividing the country into two parts containing equal, population, with a point and the line drawn east to west likewise dividing the population equally. The "median point of leantron of and area" is the point of intersection of similar lines dividing the country into parts of equal area. area. The "centre of population" may be described as the "centre of gravity" of the population and can be ascertained in the following manner. "If the surface of a country be considered as a rigid plane without weights, capable of sustaining the population distributed thereon, individuais being assumed to be of equal weight and each, therefore, to exert a pressure on any supporting pivotal point directly proportionate to its distance from the point, the pivotal point on which the plane balances would be its centre of gravity, and this point is referred to by the term "centre of population." *The "centre of area," similarly, is the pivotal point on which the plane, representing the surface of the country without the population, would balance. The method of determining the centre of population is described in the foot-note. $\dagger$ The median point, and the centre, of population and area have been determined for Travancore and are marked in the map placed at the beginning of his Report.

## - Inastructions for the preparatiod of Chapter I of the Census Report, 1931.

+ Method of delerniving the centre of population.
Taking a convenieat point (in this case the median point of popalation of 1931) as origin two axes of 80 -ordinates are first drawn, one vertical and the other horizontal. Straight lines are then drawn, 12 miles apart and parallel to the axes, dividing the State into squares, esoh having so aren of 144 square miles. At the houndsries of the State only portions of such equares will be covered by its area. The popalation in these squares is determined by adding up the population of tho pakuthien inoluded in theun. When a pakuthi extends over two or more uquares, the ares of the portion included in each square is determived approximately and the population of that portion is then worked out from the deasity of the pakuthi.
The oentre of popalation of esob qquare is assumed to be the centre of the square itself except at the boundaries or where a square inelades a lake or other traots of unoccupied area, in which esase its position is determined approximately. The distadees of the centre of population of each equare from the axes of co-ordinates are then determined.
Lnet P1, PI PI ...be the population of the equares and xiyl, wrys, etc., the co-ordinates of their oestres of popalation. Then the $x 00$-ardinate of the centre of popalstion of the State is

$$
\begin{aligned}
\bar{x} & =\frac{p_{1} x_{1}+p_{2} x_{2}+\ldots \ldots \ldots}{p_{1}+p_{2} \ldots \ldots \ldots \ldots} \\
\text { Similarly, } \bar{z} & =\frac{p_{1} y_{1}+p_{2} y_{2}+\ldots \ldots \ldots}{p_{1}+p_{2} \ldots \ldots \ldots 00}
\end{aligned}
$$

The position of the median point of population in 1901, 1911 and 1921 is described in the Census Report for 1921. In 1901 the point was at $9^{\circ} 14^{\prime} 10^{\prime \prime}$ North Latitude and $76^{\circ} 41^{\prime} 10^{\prime \prime}$ East Longitude.- It was situated on the northern side of the Achankoil' river in Mavelikara taluk, one and five-eighths miles to the west of the main central road and seven and three-eighths miles to the east of Mavelikara town. - In 1911 the point shifted a little towards the south-west occupying a position on the southern side of the Achankoil river. In 1921 it moved slightly towards the east and in 1931 in a northeasterly direction over a distance of 2.1 miles. It is now situated on the northern side of the Achankoil river in Mavelikara taluk, 3 furlongs to the west of the main central road and 8 miles and 3 furlongs to the south-east of Mavelikara town. The rate of increase of population at this census is much higher in the north-eastern parts of the State, particularly, in the taluks of Pirmede, Devikulam and Thodupula than elsewhere, and hence the median point of population has shifted further in that direction.

The median point of area is at the south-eastern corner of Changanachery taluk and is about $21 \frac{1}{2}$ miles from the median point of population in the north-easterly direction. The population is congregated more on the southern half of the western parts of the State than elsewhere, and consequently the median point of population lies to the south-west of the median point of area.

The centre of population is situated at the south-eastern corner of Mavelikara taluk, almost at the point where it meets Kunnathur and Pathanamehitta taluks and is 14 miles and 2 furlongs to the south-east of Mavelikara town. The centre of area is in Pathanamthitta taluk and is 8 miles and 1 furlong to the south-east of Ranni. If the distribution of the population had been uniform throughout the State, the centre of population would have coincided with the centre of area; but actually the former is 9.5 miles to the west and $11 \cdot 2$ miles to the south of the latter, which again shows the greater congregation of the population in the south-western parts of the State.

## Section II-Movement of Population

Definition.

Early
account of
the popula-
tion.
25. By "movement of population" is meant the variation in the numbers of the population from one census to another due to births and deaths, and immigration and emigration. It is different from the physical movement of the people from place to place which will be dealt with in Chapter III.
26. In $A$ Voyage to the East Indies Bartolomeo gives an estimate of the population of the St. Thomas Christians in Travancore in 1787. He says, "In the year 1787, when a poll-tax was about to be imposed on them (the Christians of St. Thomas) by the king of Travancore they estimated their number themselves at 100,000 persons. ". It may be noted that the present population of Syrian Christians in Travancore who correspond to the St. Thomas Christians mentioned by Bartolomeo is 948,514 . Bartolomeo gives no information about the total population of Travancore, but he says that "Malayala (Malabar Coast) contairs above two millions of inhabitants." These consisted of 90,000 Romo-Syrians, 50,000 Jacobites, 100,000 Roman Catholics, 15,000 to 20,000 Jews, 100,000 Arabs, 30,000 Banians, Chettis and Komattis, 15,000 Europeans and Anglo-Indians and $1,600,000$ original inhabitants of the country. It is not known how this population was distributed in the different territories of the Malabar coast. Tho earliest available record giving the population of Travancore separately is The Memoir of the Survey of Travancore and Cochin States by Ward and Conner. This survey was conducted during the years 1816-1820. It was a comprehensive survey of the two States, taluk by taluk, and from the mass of details given it appears to have been conducted elaborately and carefully. Its defect, as far as the population is concerned, is that the counting was spread over a period of four years and that there was no final checking on a single day as is now being done at the census. In spite of this defect the figures given arointeresting. Travancore, whose area then was 6,730 square miles, had a population of 906,587 and its density was, therefore, 135 persons per square mile. Its present density is 668. In the course of a century and a quarter the density has increased five times. Between 1816 and 1875 in which year the first systematic census was taken, the population was counted twice, once in 1836 and again in 1854. Very little reliance can be placed on the accuracy of the figures obtained at these early censuses. The Report of.

## 1875 Census referring to "their gross inaccuracy" observes, "The entire absence of system, the utter want of appreciation in the utility of a census

| Year | Population |
| :---: | :---: |
| 1816 | 9106.687 <br> $1 \times 36$ <br> 1854 <br> 1875 | even now partially felt, and, if tradition may be believed, the haphazard 'way in which the village servants enumerated the people on former occasions, all naturally point to the conclusion that inaccuracy must have been a main feature of our former censuses." Regarding the census of 1875 the Report says that its results "may safely be relied upon." The populations recorded at the different censuses up to 1875 are given in the margin. According to these figures the population increased by about $155^{\circ}$ per cent. in the course of sixty years.

27. The first systematic census of Travancore was taken in 1875 and it revealed a yariation of population of $2,311,379$. The second census in 1881 which was the first of the series poppalation of decennial censuses showed a population of $2,401,158$. The increase was 3.9 per cent aetrices 1881 . during a period of five years and the annual rate of increase 6 per mille. Since statistics of birthplace were not collected either in 1875 or 1881 , it is not possible to estimate the influence of migration on the growth of population during the intercensal period.
28. The population in 1881 stood at $2,401,158$ and by 1931 it increased to ${ }_{\text {Morement }}$ of 5,095,973. In other words, during this period of fifty years the population more than popenation doubled isself. The circumstances which contributed to the increase during the four daring the int decades preceding the year 1921 have been described as normal in the previous census 1881 -1932. reports. Famines and epidemics being rare occurrences in Travancore, their effect on the growth of population has invariably been negligible. On the other hand, all the factors which favour a steady increase have been operating freely. The volume of migration has not been large enough to affect the population materially. Any abnormal variation from the usual rate of growth from census to census has, herefore, to be attributed mainly to the changes in the rates of births and deaths. Before proceeding to examine the movement of population during the last decade it is necessary to compare the variations in the earlier decades so as to present a connected account of the movement during the past fifty years. fecades so as to present a connected account of the movement during the past nifty years. adjusted to allow for changes in the areas of natural divisions made at this census.
29. The population returned in 1891 was $2,557,736$, the decennial and the annual rates of increase being 6.5 per cent. and 6 per mille respectively. The latter rate was thus the same as that for the five years preceding 1881. The rates of increase for the

| Division | Percentape of itotrase |
| :---: | :---: |
| Southern Divisiva | $3 \cdot 1$ |
| Central $n$ | $9 \cdot 7$ |
| Fincthers | 5-0 |
| High Rapre, | 136.2 |
| lawhand | $5 \cdot 2$ |
| Midined | 7.8 |
| Hugelind $n$ | 13.2 | decade in the different administrative and natural divisions are given in the marginal statement. The difference in the rates in the several divisions has to be attributed to internal migration. The low rates in the Southern and Northern Divisions suggest that people might have migrated from there to the Central and High Range Divisions. But the majority of the immigrants in the High Range Division were not Travancoreans and it is, therefore, possible that there was under-enumeration in the Southern and the Northern Divisions, particularly in the later, where the low rate, notwithstanding its comparatively low density, is notably anomalous. Taking the natural divisions, it is seen that the Lowland Division, which had the highest density, had the lowest rate of increase, and the Highland Division, which had the lowest density, showed the highest increase.

30. The population in 1901 was $2,952,157$ and the rate of increase for the State in the decade was $15-4$ por cent. The sudden rise in the rate could not be explained by 189-190t, a rise in the birth-rate or a fall in the death-rate. The rates of increase for the differeat divisions are shown in the margin and an examination of the figures shows that contrary

| Dirision | Perwentree of increste |
| :---: | :---: |
| Rombly Divibion | 150 |
| Cextil | 12-8 |
| Mratbers | 1:-6 |
| Hige Remge | 16.8 |
| Louing | 14-3 |
| Mriaed | 15-9 |
| Hepabed | 24-4 | to the experience of the previons decade both the Southern and Northern Divisions showed comparatively high rates of increase. One should have expected the Soothern Division to show the lowest rate of increase its density being the highest. Migration would maturally take place only from lighly dense areas to places of lower density. Of the natural divisions, the Lowiand had the lowest rate of increase and the Highland the highest as in the preceding decade. The high rates of increase in the Southern and Northen Divisions in this decade, when compared with their low rates in the preceating decads could only be explained by

under-enumeration in these two divisions in 1891. The Census Commissioner for 1901 examined the figures in detail and established beyond doubt that there was underenumeration in the previous census.* He compared the population at one census with the population over 10 years at the next and noted the rates of decrease for successive decades. In this manner he established that the actual population in 1891 should have been $2,640,522$ instead of the recorded figure of $2,557,736$. This would raise the rate of increase in the decade $1881-1891$ to 10.0 per cent. and reduce that in 1891-1901 to 11.8 per cent.

1901-1911.
31. The population in the census of 1911 was $3,428,975$ and the rate of increase $16 \cdot 2$ per cent. The rates for the different divisions are given in the margin. The differences between the rates of increase in the first three administrative divisions were not very large and might probably be due to internal migration. The natural divisions held the same relative positions' as in the previous census.

| Division |  | Percentage of increase |
| :---: | :---: | :---: |
| Southern Division |  | 17.5 |
| Central |  | 15.2 |
| Northern |  | 14.5 |
| High Radge | - | $85 \cdot 7$ |
| Lowland | - | 13.2 |
| Midland | . | $18 \cdot 2$ |
| Highland " | - | 30•2 |

32. The population according to the census of 1921 was $4,006,062$. The rate of increase for the State as a whole was 16.8 per cent. The marginal statement
 shows the rates in the different divisions. Of the administrative divisions, the rate in the Northern Division was the lowest, being $15 \cdot 5$ per cent., while in the High Range Division it was 42 per cent. which was only half of what it was at the previous census. Taking the natural divisions, it is seen that there was a fall in the rate of increase in the Midand Division. Hitherto the rates of increase were steadily increasing from decade to decade in all the natural divisions. The increase in the Lowland and the Highland Divisions in this decade was not large enough to be explained by emigration from the Midland Division. It will be shown later that the low rates of increase in the Midland Division in this decade could only be explained by under-enumeration in 1921.
33. The 1931 census revealed a population of $5,095,973$. The rate of increase in the State in this decade is 27.2 per cent. The figures in the marginal table show

| Division |  | Densits | Perrentage of increase |
| :---: | :---: | :---: | :---: |
| Southern Division |  | 963 | 24-0 |
| Central | , | 717 | $25 \cdot 2$ |
| Northerd | " | 700 | $29 \cdot 9$ |
| High Range | , | 94 | $84 \cdot 9$ |
| Inwland | " | 1.743 | $24 \cdot 2$ |
| Midland | " | 892 | 27.5 |
| Highland | " | 82 | 54.8 | that in the administrative as well as in the natural divisions the rate of growth of the population has varied inversely as the density. Of the administrative divisions the Southern Division has the lowest rate and the High Range Division the highest. There is nothing to show that the sudden rise in the ; rate of increase in the Northern Division could be due to immigration from the other divisions. Any change in the rates of births and deaths would have been general and would have affected the increase in all the divisions. The rate of increase in the High Range Division need not be taken seriously since only two per cent. of the total population reside in this region, and most of them are immigrants from outside the. State. If, therefore, the rate for the State shows an abnormal rise, the abnormality must exist in all the other three administrative divisions and in the Lowland and Midland natural divisions. Subsidiary Table III shows that in all these divisions, the rates have increased from decade to decade with certain exceptions. Further, the rate of increase has been the least in the Lowland and the highest in the Highland Division in all the decades with some exceptions. The exceptions may be due to inaccuracies in enumeration.

[^0]The recorded rates of increase for the various decades, the annual rates calculated on

| Decade | $\begin{gathered} \text { Deceennial } \\ \text { rate per } \\ \text { canto } \end{gathered}$ | Annasal rate per cent. | Number of jears required for the popalation to double iteel? |
| :---: | :---: | :---: | :---: |
| 1881-1891 | - 6.5 | 0.6 | 109.7 |
| 1891-1901 | 15.4 | 1.44 | 48.3 |
| 1901-1911 | $16 \cdot 2$ | 1.51 | 46.3 |
| 1911-1921 | 16.8 | 1.57 | 44.5 |
| 1921-1931 | 27.2 | $2 \cdot 44$ | 28.5 | the assumption of an increase in geometrical progression, and the number of years required for the population

to double itself at the corresponding annual rates, are given in the marginal table.
The diagrams below will make clear the points which have been dealt with above.


The statement given in the margin shows that the population has more than doubled
 itself during the last 50 years. The average annual rate of increase during the past four decades has been $1 \cdot 74$ per cent. During the last decade the rate of increase has been $2 \cdot 44$ per cent. per annum, and if this rate continues the population will be double of what it is now in another three décades.
That there was under-enumeration in 1891 was established in the Census Report of 1901. If the necessary correction is made in the fgure for 1891, the rates of increase

| Decade | Hate of increase per cent. |
| :---: | :---: |
| 1881-1891 | 10.0 |
| 1891-1901 | 11.8 |
| 1901-1911. | $16 \cdot 2$ |
| -1911-1921. | 16.8 |
| 1921-1931 | $27 \cdot 2$ |
| - |  | for the State in the various decades will be as given in the margin. Judging from the general tendency, one might think that the rate of increase in-1911-1921 is rather low and that in 1921-1431 rather high. The movement of population in the last decade will be examined in detail and the cause of this abnormal variation explained presently. In the - meanwhile the conditions of the decade may be described briefly.

The conditions of the decade. of the decade.

Rainfall.
34. The success of cultivation in Travancore depends to a large extent on the rainfall and its even distribution during the agricultural seasons. The State has seldom witnessed the complete cessation of rain in any season. The total failure of crops creating famine conditions has, therefore, been a very rare occurrence. In fact, it may be said that famine, in the acute form in which it used to visit other parts of India, has never crossed the borders of this State. . Owing to the late arrival of the monsoons or the unequal distribution of the rain during the cultivation periods, crops in some parts of the country may sometimes meet with a partial failure, but the damages caused are generally not so great or widespread as is often the case elsewhere in India. During the decade 1921-1931 only once did the country suffer damages of great magnitude, and that was during the south-west monsoon of 1924 when an unusually heavy rainfall was recorded and practically the whole of the lowland and midland regions was swept over by very high foods, the like of which was not seen for over half a century. The rain that fell during July and August of that year was as much as 50 to 75 inches at some places, and at the hill stations there was a maximum fall of about 20 inches on a single day. Floods of somewhat less magnitude occurred again in the middle of 1929, but they were confined to the central and northern parts of the State and the loss that was caused was not so great as that in 1924. During the other years of the decade there was no serious abnormality either in the quantity or in the distribution of the rains. In some years there was a small shortage and in some others a slight excess of rainfall, but the loss sustained by the cultivators was comparatively small. It may, therefore, be said that on the whole the rainfall during the past decade was more favourable than detrimental to agriculture.
Cultiration.
35. From the table given in the margin it will be seen that between 1921 and 1931 the net area sown increased only by 9.6 per cent. while the increase in the population was 27.2 per cent. One

|  | 1920-21 | 1930-31 | Increaso |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actual | Dercentage |
|  | Acres | Acres | Acres |  |
| Net area sown | 2,008,960 | 2,201,295 | 192,935 | 9.6 |
| Paddy | 648,609 | 665,087 | 16,478 | - 2.5 |
| Tapioca | 404,092 | 480,589 | 76,497 | 18.9 |
| Coconut | 465,970 | 563,048 | 107,078 | $23 \cdot 5$ |
| Rubber | 51,018 | 61,986 | 10,988 | 21.5 |
| Tea | 47,105 | 74,616 | 27,511 | 58\% | would expect that as popu.lation increases a proportionately larger area would be brought under the cultivation of food crops. But the figures in the margin show that the increase in the area under paddy and tapioca which are the chief food crops of the country has been much smaller than that of other crops. The coconut palm is the chief money crop of the ordinary people and with the income they get from its produce they buy paddy from Burma. The area cultivated

with the coconut palm has increased more than the area underfood crops, and the trade returns show that the quantity of paddy imported from Burma has also increased more or less proportionately. T. The increasing deficiency in, the tocal production of foodstuffs is being made good by a larger import of paddy from Burma for- which the produce of the coconut palmi pays. There has been a phenomenal increase in the area under rubber and tea during the past,decade., It must, however, be remembered that only about one-thitd of the former and about one eighteenth of the latter belong to.Travancoreans, the rest being owred by the European planters.
36. The prosperity of the agriculturist depends upon the yield he gets from his land oatturn of and the price he obtains for his produce. The outturn of paddy, tapioca and coconut shown cropa
 in the margin has been calculated from the area under cultivation and the average yield per acre. .In the case of pepper, rubber and tea; the figures. given are the quantities exported. The. local con-
sumption of rubber and tea is negligible. A small proportion of pepper is consumed locally, but it is not possible to estimate this quantity; nor are the actual area under this crop and the average yield per acre known. The increase in the production of pepper may, therefore, be taken to be the same as the increase in the quantity exported. From the above figures it is seen that the increase in the production of tapigca and coconut is about the same as the increase in the area cultivated. The outturn of paddy has increased by 11.0 per cent., while the area has increased only by 2.5 per cent. The quantity of pepper exported shows an increase of 11.4 per cent. The increase in tea is slightly less than that of the areei, but rubber output has increased by nearly 245 per cent. as against an increase of only 21.5 per cent. in area.. This is -due-to several young plantations started in the previous decade having reached the tapping stage in the last.
37. The price of paddy did not vary'much except in the last year of the decade Prices of agriwhen the prices of all cormmodities declined owing to the world-wide economic depression. During the first nine years of the decade the price of paddy fluctuated from $\mathrm{Re} .-1$ to Re. 1-4 annas per para ( 20 lbs .) and in the last year it dropped to about 12 annas per para. . Tapioca fetched good prices until the price of paddy showed an appreciable fall towards the end of the decade. The price:of coconut varied from Rs. 90 to Rs. 98 per 1,000 nuts during the first four years of the decade. It rose to Rs. 122 in 1925 -26, but came down to Rs. 95 in the next year, rose again to Rs. 122 in 1927-28 and receded to Rs. 88 in the next year and to Rs. 60 in the last year of the decade. Pepper: price ranged between Rs. 120 and Rs. 175 per candy, in the first four years of the decade. Since then it rose gradually until the peak price of Rs. 648 was reached in 1928. From 1929 onward the price began to fall and in the last year of the decade it was somewhere abòut Rs. 200 to Rs. 250 . Rubber prices were, at the beginning of the decade, ranging from. 7 pence to 10 pence per Ib. At the' end of 1922 the Stevenson Restriction Scheme was introduced and the price began to rise steadily. In 1925 it reached 2 sh. -114 d per 1 lb ; but came down to 1 sh. -64 d in 1927. At the end of 1928 the Restriction Scheme was cancelled and from then the price had fallen rapidly untit it came to about 5 pence per lb . in 1930. By the end of March 1932 the price of rubber had reached the level of two pence per pound. Till 1927 the price of tea was exceptionally good. The average South Indian teas fetched 1 sh.- 7 d . in 1927. From the next year onward there had been a steady fall and in. 1930 the average price realised was I sh. -2.75 d . After 1930 the fall in the prices of rubber and tea has been cataclysmic, but we are not concerned with it here because it has occurred after the census. From the figures given above it is clear that the past decade, except the last year, has been, generally speaking, one of prosperity for Travancore agriculture.
38. The most important industries in Travancore are those connected with the pro. Industry. duce of the coconut palm, such as the manufacture of coconut oil, the retting of coconut husk, the spinning of coir yarn, and the weaving of coir mats and matting. In 1921 these industries gave employment to $103,4!1$ and in 1931 their number increased to 137,633 or
by nearly 33 per cent. Other cottage industries like cotton weaving, basket and mat weaving, paddy hulling etci, -also showed appreciable progress during the decade. The preparation and export of cashew kernels is a new cottage industry developed in this decade which provides employment to more than 7,000 persons. Several new coir yarn weaving mills, tile factories and one match factory in addition to the one that already existed, were also started during the decade. The total number of persons employed in industries increased from 328,000 in 1921 to 378,000 in 1931. The increase is only about 15 per cent., but it shows that there has been progress in industrial development. The prices of industrial articles, like those of agricultural products, were quite good till the economic depression set in. The price of coconut oil, tor example, fluctuated between Rs. 150 and Rs. 180 per candy till about the end of 1929 and only in 1930 it fell to Rs.115. Since then there has been a much sharper fall.
39. The volume of external trade of Travancore almost doubled itself during the past decade. The total value of exports and imports which was Rs. $11,40,76,496$ in 1920-21 rose to Rs. 20,65,49,787 in 1929-30. The figures for each year, for exports and imports separately, are given below :-

|  |  | Exports | Imports |
| :---: | :---: | :---: | :---: |
|  |  | Rs. | Rs. |
| 1920-21 | ..' | 6,64,05,104 | 4,76,71,391 |
| 1921-22 | ... | 7,40,89,586 | 4,98,75,571 |
| 1922-23 | ... | 8,26,77,709 | 5,06,59,647 |
| 1925-24 | .-. | 8,40,71,581 | 5,37,00,434 |
| 1924-25 | ... | 9,70,96,181 | 5,70,98,244 |
| 1925 -26 | ... | 10,26,54,128 | 5,98,79,863 |
| 1926-27 | ... | 11,40,65,138 | 6,16,43,268 |
| 1927-28 | ... | 11,84,08,817 | 8,23,81,910 |
| 1928-29 | ... | 11,80,42,935 | 9,32,90,681 |
| 1929-30 | .-. | 11,29,39,089 | $\cdot 9,96,10,748$ |

It will be seen from the above statement that, while the exports increased by 70.1 per cent. the imports increased by 96.4 per cent. during the decade. Till 1927-28 there was a steady rise in exports, but the next year witnessed a small decline and the

| Year | Exports | Imports |
| :---: | :---: | :---: |
| 1920-21 | 100 | 100 |
| 1921-22 | 114 | 103 |
| 1922-23 | 107 | 106 |
| 1923-24 | 109 | 112 |
| 1924-25 | 142 | 119 |
| 1925-26 | 152 | 124 |
| 1926-27 | 166 | 129 |
| 1927-28 | 168 | 172 |
| 1928-29 | 170 | 198 |
| 1929-80 | 166 | 196 | following year a still further decline, while the imports increased continuously throughout the period. The exports include rubber, tea and coir mats and matting, of which a very large portion is in the hands of foreign capitalists. If the net receipts which lall to their share are deducted from the gross exports, the balance will show the amount actually coming into the country by the export of local products. These figures, when placed alongside the imports, will reveal the true position of the trade. The marginal table gives the index numbers worked out on the above basis, taking 1920-21 as the base year. These figures show that the export trade of the Travancoreans increased by 66 per cent., while their import trade increased by 96 per cent. between the beginning and the end of the decade. If the imported articles are divided into necessities and luxuries and their index numbers calculated, taking the figures for 1920-21 as 100 , it will be seen from the table given in the margin that the import of luxuries is increasing much more rapidly than that of necessities. The consumption of increasing quantities of luxuries should be regarded as a sign of growing prosperity.

A clear index of the progress of external trade is the increase in the volume of shipping. The number of steamers and country crafts that called at the ports in Travancore increased from 96 and 187 in .1920-21 to 525 and 337 in 1929.30 and the tonnage from 233,872 to $1,280,288$.

Correct statistics of the internal trade of the cointry are not available. Thiere is no doubt, however, that the large increase in the number of markets and the rapid development of the means of communication have contributed greatly to the expansion of internal trade. The information collected, though not quite accurate, shows that there are over 500 markets in the State which gives one market for every 7 square miles of cultivated area. Of these, 193 are public markets, 168 are private markets and 150 are evening markets. 261 of them are held daily, 197 bi-weekly, 14 tri-weekly, another 14 on four days in the week and 25 once a week. The total value of the articles that change hands in these markets is on an average more than six crores of rupees annually. Besides these, there are also 68 . cattle markets which transact business for over Rs. 34 lakhs in a year.

The joint-stock banks, most of which directly finance trade, showed a marked development both in their number and in the volume of their transactions during the decade In 1920-21 there were only 42 such banks with a paid-up capital of Rs. 14,76,861 and in 1928-29 the number increased to 195 and the paid-up capital to Rs.42,50,933. In 1926 the Government of Travancore opened a State-aided Bank. During the short period of its existence it has made such progress that its working capital now stands at Rs. 27 lakhs. Both external and internal trade was in a flourishing condition till towards the close of the decade when business began to slacken on account of the stringency of the money market caused by the general economic depression.
40. Agricultural wages had steadily risen during the decade. At the beginning it wagen was about 4 to 5 annas for an adult male and at the end it stood at 7 to 8 annas. The wages of other labourers and workmen reached their maximum in 1922 and since then it : remained fairly steady throughout the decade. Until the economic depression began to affect the rates of wages, the labourers, with the falling prices of food stuffs, were in specially favourable circumstances.
41. In the foregoing paragraphs we have seen the progress Travancore has made in The economic its material development during the past decade, and we shall now consider how it has shendition of of affected the economic condition of the people and their standard of life. Large additions were made to the area under cultivation of the staple food crops. Commercial crops like rubber, tea and cardamom showed a phenomenal increase. Trade flourished except in the last year of the decade when the effect of the present world-wide economic depression began to be felt. The coir yarn industry, the principal cottage industry in the State, expanded. considerably, which naturally led to a corresponding increase in the manufacture and export of coir mats and mattings. Rice mills and oil mills grew in number as well as in the volume of their output. The number of joint-stock companies rose from 190 at the beginning of the decade to 372 at its close. As a result of special social legislation enacted, the marumakkathayam joint family system which obtained among Nayars, Ilavas and: Nanjanàd Vellajas, who together constitute nearly a third of the entire population of the State, has been broken up, placing at the disposal of the junior members of the families. facilities and means to take to independent occupations. The co-operative movement; which was initiated under State control during the decade preceding the last, made rapid progress, the number of co-operative societies having risen from 225 to 1,784 , the number of members from 17,318 to 213,027 , and the working capital from Rs. $3,37,321$ to' Rs. 63,74,961 between 1921 and 1931. The co-operative movement, besides rendering financial help to agriculturists, industrialists and traders; taught the people prudence, thrift and. the habit of making savings for future use. The deposits in the State Anchal Savings Banks during the decade increased from Rs. $18,60,000$ to over Rs. $37 \frac{1}{2}$ lakhs. Large sums of money have also been deposited by the people in various other banks, including the Postal Savings Bank, and in loans; debentures and other Government securities. The income-tax collected by the Government increased from Rs. $4,17,983$ in 1921-22 to Rs.6,56,109 in the last year of the decade-a sure index of the increasing prosperity of the businessmen. The sums assured by various insurance companies till the end of 1930 and the amount of premia collected from Travancorean policy-holders in that year amounted to Rs. $85,42,200$ and Rs. $2,24,862$ respectively. These facts go to show that the material prosperity of the average Travancorean has been such as to conduce to a rapid growth of the population.
42. A rise in the standard of living is a necessary corollary to the improvement of the The standard economic condition of the people. How far the standard of life of the people of of Irving Travancore has altered during the past decade can be gauged from a few facts given below. In towns as well as in rural parts one finds a large number of new buildings, constructed on sanitary principles, making due provisions for light, ventilation, and drainage. The rapid
development of communications-and mootor traffic is taken full advantage of by all classes of people. The old canoes and bullock carts in which people undertook long journeys are seldom resorted to now, and irrespective of the high cost of travelling, journeys are made even by the poorer classes in motor buses and launches. The unwieldy and often dangerous coconut leaftorches, which were used by the people even in towns to lighi their paths in dark nights, have been supplanted by hurricane lanterns and electric torches. Restaurants and hotels, dramatic performances and cinema shows are on the increase and are largely patronised by the rich and the poor alike. Tea, coffee and cocoa have become indispensable beverages to even the poor folk. These indications of the rise in the standard of life of the people are fully supported by the statistics of the import of

Falwe of motor cars, car accensorier and petrol imported

| - | 1920-21 | 1929-30 |
| :---: | :---: | :---: |
| - | Rs. | Rs. |
| Motor carsaind accessories . | 91,456 | 10,99,097 |
| Petrol | 2,16,997 | 20,88,667 |
| Total | 8,08,483 | 31,82,763 | necessaries and luxuries which have been already referred to. How far the import of some luxuries is growing can be seen from the marginal higures showing the value of the motor cars, car accessories and petrol imported in $1920-21$ and 1929-30. The value of these imports in the last year of the decade was ten times as much as that in the first year. On the other hand, the import of piece goods, cotton goods, twists and cotton threads, which may be regarded as necessaries, increased only from Rs. $1,15,44,964$ in 1920-21 to Ris. $1,62,71,002$ in 1929-30, or by 41 per cent. A higher rate of increase in the import of luxuries than that of necessaries has been the position of the import trade of Travancore during the past decade. Whether it will prove to be an economically sound position or not in the long run, it is for the present a visible sign of prosperity rather than of adversity.

Efrect of the
present econo. mic depression
43. The rosy picture painted above of the material prosperity of Travancore in the last decade is now being blurred by the economic depression which is sweeping over the whole world. Though it commenced towards the close of 1929, it became acute only from about the latter part of 1930 and could not, therefore, have had any influence on the population enumerated at the present census. But it has already lasted for nearly three years and there is no sign yet of any abatement in its severity. The depression which is affecting the economic condition and the standard of life of the people, if it continues longer, will undoubtedly tell upon the growth of population in the present decade, and it is well to give here a brief description of it for the information of the next Census Commissioner. In the words of Sir George Schuster, "The downward trend of the trade movement started in October 1929 after the Wall Street Collapse in America, and from there the movement spread to other countries all the world over. The depression deepened at an accelerated rate in 1930 and conditions became progressively worse as the year advanced."* The depression seems to have almost reached its climax in the early part of 1931. The prices of all commodities have slumped heavily. The fall has been much heavier in the prices of raw products which form the bulk of the exports from Travancore than in those of imported manufactured goods. The prices of paddy, coconut products, pepper, ginger and other articles produced by the ordinary cultivators have dropped by 40 per cent. or even more. The rubber industry has practically been paralysed and tea is struggling hard to keep itself alive. Wages have gone down and unemployment has increased. Trade has diminished in volume and value. Money has become scarce and

- banks have reached the rock-bottom of their resources. The people are abandoning the luxuries and are finding it difficult to provide even for necessities. The rich, the poor and the middle classes alike have been engulfed in this whirlpool of economic depression. The distress is becoming worse day by day and everybody is praying and hoping for its early removal by international co-operation and action.
Public Health.

44. The protection of the health of the people has al ways been the anxious concern of the Government of Travancore. "The European system of medical aid was frst introduced in the State during the reign of Her Highness Gouri Lakshmy Bhayi in 986 M. E. (I811 A. D.) , The first hospital was opened about six years later and the appointment of a Durbar Physician also dates back to this period. The department was gradually developed and in 1036 M . E. ( 1860 A . D.) there were seven medical institutions in the State. In 1060 M. E. ( 1885 A. D.) the number of institutions rose to $31.1 \dagger$ In 1930 there were 84 Covernment and 19 grant-in-aid institutions in which were treated 1,975,328 patients. A Sanitary Department was organised in 1895 and was in course of

[^1]time developed into a major department of the State. At present there are agencies in all the towns and in most of the villages to attend to sanitation and vaccination. Early in 1929 the Government launched a big scheme of pablic health improvement in collaboration with the Roctfeller Foumdation. A comprehensive programme has been drawn up and its execution commenced. It imcludes, among other things, propaganda to educate the masses in health matters, the collection of accurate vital statistics, the opening of a laboratory

Diagram 11-showing the reported birth and. death rutez by ses drrins the deende 1921-1980.
 for research work and for the analysis. of water, milk and other foodstuffs, the control and prevention of infectious diseases, the medical imspection of school children, the organisation of Healh Units to carry on intensive and comprehensive work for the improvement of public health, the investigation of the incidence of hookworm, yaws, leprosy, elephantiasis and other dire diseases and the starting of regular campaigns for their suppression. As a preliminary to. the carrying out of this programme. two officers of the Medical Department were deputed to the United States to undergo special training in public hcalth, and on their return a Health Unit was formed in Neyyattinkara and an Epidemiological Office was started in Vilavancode. Both hese sections first turned their attention to the collection of correct vital statistics The officers of the Health Unit commenced this work about the middle of 1931 and by house to house visits ascertained. the number of births and deaths in each house. In Vilavancode the Epidemiological Officers toured the taluk and discovered the omissions in births and deaths reported by the normal agency. In both the places the usual reporting by the Registrars of Biths and Deaths continued. The disparity between the figures collected by these two agencies will. be discussed in another place. The number of reported births and deaths, though inaccurate, may be used for a comparison of the condition of public health in different years during the decade under review. Subsidiary . Tables VII and VIII at the end of Chapter IV contain the birth and death rates for each sear of the decade. According to those tables both the birth and death rates of females have always been slightly lower than those of males. The oaly. marked variation in the decade is the appreciable fall in both the rates in 1924-25 and since then there has been a gradual rise, the birth-rate reaching the maximum in 1929-30. These variations are shown in the diagram given above Except during the cholera epidemic in 1928-29 the deaths due to epidemic. diseases were comparatively few and their effect on the growth of population was, therefore, negligible.

Moyement of the popalation in the decade 1921-1932.
45. The population which was $4,006,062$ in 1921 rose to $5,095,973$ in 1931, showing an increase of $1,089,911$ persons or $27 \cdot 2$ per cent. during the decade as against an increase of 16.8 per cent. in the previous. The difference in the rates of variation between the two decades requires explanation. Population can increase only by births or by immigration and similarly diminish only by deaths or by emigration. The net variation will be the sum total of the excess of births over deaths and the balance of migration. We shall first consider the question of migration and ascertain its contribution to the variation in the last decade.

The balance of
46. From Imperial Table VI it will be seen that the number of persons born outside migrration in the
decande. the immigrants who were here in 1921, if it be assumed that none of them left the State during the past decade, some must have died, and their number should be estimated in order to calculate the actual number of immigrants during the decade. Longstaf's method has been used for this purpose. The average number of immigrants during the decade is taken as the mean of the numbers returned at the beginning and at the end of the decade, i. e., $\frac{73,591}{}+\frac{135,103}{}$ or 104,347 . The number of deaths, calculated on the basis of a mortality rate of 20 per mille, which is the normal death-rate for Travancore, in a population of 104,347 would be 20,869 . The difference between the number of immigrants in 1921 and the number of deaths, viz., 52,722, would represent the number of survivors among the immigrants of the previous census. When this number is deducted from the number of immigrants enunierated in 1931, the actual number of immigrants during the decade will be found to be 82,381 .

The number of emigrants returned in 1921 was 30,260 . Complete information regarding the Travancore-born persons enumerated outside India at the present census has not been received, but from the Ggures so far received and the particulars of emigrants contained in the enumeration schedules in which special columns have been provided for the purpose in this State, the total number of emigrants from Travancore, according to the 1931 census, is 58,466 . Applying the method used in the case of immigrants to emigrants also, i. e., calculating the average number of emigrants in the decade and the number that must have died in the intercensal period, deducting the number of deaths from the number of emigrants in 1921, and then deducting this difference from the number of emigrants in 1931, we arrive at the figure 37,079 as the actual number of emigrants during the decade. The balance of migration, which is the difference between the actual number of immigrants and emigrants, is, therefore, 45,302 in favour of Travancore, which is $1 \cdot 1$ per cent. of the population in 1921. The increase in the population due to natural causes, when the influence of migration is eliminated, is thus reduced from $1,089,911$ to $1,044,609$ and the rate of increase in the decade from 27.2 per cent. to 26.1 per cent. which is equal to an annual increase of $23 \cdot 4$ per mille. This would be the same as the difference between the average rates of births and deaths for the decade, if the enumerations in 1921 and 1931 were correct. But we will see later on that the enumeration in 1921 was not correct.
47. If the death-rate among the immigrants and emigrants be taken to be the same $\underset{\substack{\text { migration in } \\ \text { the previous }}}{ }$ for the previous three decades also, viz., 20 per mille, the balance of migration for these the prexious
decades.

| Docade | Bninnce of <br> migration | Per cent. of the populntion at the <br> begringing of the decade. |
| :---: | :---: | :---: |
| $1891-1901$ | $+80,567$ | +1.2 |
| $1901-1911$ | $+11,75$ | +0.4 |
| $1911-1921$ | $+16,127$ | +0.4 |
| $1621-1931$ | $+45,302$ | +101 | decades in favour of Travancore will be as shown in the margin. The increase in the baiance of migration between the last decade and the two previous ones is due to the development of tea and rubber cultivation which has attracted large numbers of labourers from the adjoining British districts.

Accarayy of the 48. If the enumerations and the recorded vital statistics had been correct, the vital statistics increase in the population due to natural causes from one censis to another would have been the same as the excess of births over deaths during the intercensal period. The natural increase in the population between 1921 and 1931 is, as we have already seen, $1,044,609$. The total number of births recorded during the decade, according to Subsidiary Table V given at the end of this chapter, is 819,173 and the total number of reported deaths is 446,319 . The excess of births over deaths is, therefore, 372,854 which
is only 36 per cent. of the natural increase in the population. Such a large difference camot possibly be due entirely to mistakes in enumeration. The inaccuracy of the vital statistics is responsible for it to a very large extent. In 192I the recorded excess of births over deaths during the previous decade was only "a quarter of the increase shown in the census." This time the percentage has increased from 25 to 36 , which is certainly an improvement, but it is still so far below the mark as to render the vital statistics collected in the State practically useless for the purpose of estimating the increase in the population. Defects in registering vital statistics are not peculiar to Travancore; it is quite a common phenomenon all over India. At the 1921 census Bengal recorded an increase of 1,440,248 in the natural population against an increase of 758,590 according to the vital statistics. The United Provinces showed an increase of 957,259 . by the vital statistics, while actually there was a decrease of $1,350,510$ in the natural population according to the census.

The accuracy of the vital statistics registered in Travancore has recently been tested by the Public Health Department of the State. I have already referred to the collection of vital statistics by the Health Unit in Neyyattinkara and by the Epidemiological staff in Vilavancode. The officers of the Health Unit confined their work to two pakuthies and two towns in Neyyattinkara taluk. They went from house to house and recorded the number of biths and deaths that occurred in each house, independently of the Registrar of Births and Deaths. The population dealt with by the Health Unit was 39,857 according to the present census and 32,702 according to the last. The Epidemiological Officers included the whole taluk of Vilavancode in their operation, the population dealt with being 176,220 in 1931 and 147,109 in 1921. They did not make an exhaustive house to house visit as was done by the Health Unit Offcers, but only went round the taluk and tried to detect as far as possible the omissions made by the ordinary reporting agency. The figures collected by the Registrars of Births and Deaths and by the officers of the Public Health Department are given below :-

| Locality | Birthe |  | Deaths |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Namber reconded by |  | Number recorded by |  |
|  | the Begistrar | the Health Unit | the Registrar | the Health Onit |
| Keyyatinkara Monicipal town <br> Balaramapuram Town Athiyannar Paknthi Neyyatinksa Pakatbi | 126 | 374 | 73 | 112 |
|  | 159 | 190 | 101 | 117 |
|  | 1125 120 | 495 418 | 78 67 | 1186 <br> 201 |
| Total. | 600 | 1,477 | 809 | 616 |
| Pakuth | Births |  | Deaths |  |
|  | Number recorded by |  | Eumber reconded by |  |
|  | the Begistrar | the Epidemiological stali | the Registrar | the Epidemiological staff |
| Arumana | 91 | 311 | 66 | 157 |
| Idakode | 78 | 224 | 55 | 112 |
| Kahial | 57 | - 79 | 47 | 64 |
| Pakode | 77 | 191 | 42 | 71 |
| Pajukal | 114 | 214 | 54 | 76 |
| Vilarabeode | 70 | 332 | 49 | 97 |
| Killiyur | 114 | 390 | 78 | - 148 |
| Kilumidalam | 86 | 215 | 60 | 125 |
| Midakam - | 56 196 | 373 335 | 83 | 130 160 |
| Eollancode - | 104 | 297 | 41 | 137 |
| Methokumal | 190 | 403 | 75 | 145 |
| Ejudesam - | 111 | 475 | $81{ }^{\text { }}$ | 147 |
| Khaknlam | 86 | 271 | 76 , | 117 |
| Painkalam | 108 | 231 | 98 | 144 |
| Enonathrir | 132 | 253 | 83 88 | 154 |
| Fiaterans | 104 | 279 | 80 | -158 |
| Total. | 1,91플 | 5,181 | 1,188 | 2,288 |

The above table discloses very wide disparities between the statistics collected by the Registrars and the Public Health Department. In the Health Unit area the omissionsby the Registrar are 59 per cent. of the number recorded by the Health Unit staf in the case of births and 50 per cent. in the case of deaths, while in Vilavancode taluk the corresponding omissions are 63 per cent. and 48 per cent. respectively. The differences are still greater in some of the iddividual pakuthies. For example, in Arumana pakuthi the omissions in births are a little over 70 per cent. and those in deaths about 58 per cent. Even the results obtaincd by the officers of the Public Health Department may not probably be entirely free from error, but they are far nearer the truth than the statistics. recorded by the Registrars of Births and Deaths. By better organisation and with greater experience it will certainly be possible to eliminate all sources of error from the vital statistics.

From Subsidiary Table $V$ at the end of this chapter it will be seen that the birth-rate in the State during the past decade, calculated on the reported number of deaths, was 20.4 per cent. and the death-rate $11 \cdot 1$ per cent. of the population of 1921. In view of the maccuracies in the reported births and deaths it is necessary to explore other ways of estimating the average birth and death rates. We shall first consider the birth-rate and for this purpose the total number of births during the decade has to be estimated.

Number of births in the decade estlmated.
49. If conditions are normal the birth-rate in a country will not vary widely from year to year. We have seen that in Travancore the conditions of the past decade have been normal, and the birth-rate during the decade must have, therefore, been more or less constant. On this assumption the birth-rate can be estimated from the figures of infant mortality. The proportion of deaths among infants under one year to the total number of births in a year will practically be the same as the number of infants who die. before completing the first year out of 1,000 babies born. Of the infants who die before completing the first year, the largest number, namely, about 60 per cent., dies in the first quarter, 20 per cent in the next quarter, 12 per cent. in the third quarter and 8 per cent. in the last quarter. These proportions generally hold good for all countries. Researches in other countries have established the fact that a definite proportion of the infants. under one year who die in a particular year will have been born in the same year. The statistics of infant mortality collected in the city of Hamburg are quoted at page 396 of Whipple's Vital Statistics. They show that out of 2,755 infants under one year who died in Hamburg in the year 1912, 2,006 or 73 per cent. were born in that year. From the calculations given in the Baroda Census Report of 1921 it is seen that out of 1,000 babiesborn in a year in Baroda 213 die in the same year. The infant mortality in that State is300 per 1,000 births, and 213 is about 70 per cent. of 300 . We may, therefore, assume that this proportion holds good for Travancore also. That is to say, out of 1,000 babies. under one year dying in a year 700 must have been born in the same year.

Next, the rate of infant mortality in Travancore has to be ascertained. The figures. collected by the Public Health Department in Neyyattinkara and Vilavancode may be utilised for this purpose. Infant mortality is expressed in terms of births in n year. Omissions in registering deaths will ordinarily be counterbalanced by omissions in registering births. The infant mortality recorded by the Health Unit in Neyyattinkara is 100 . per 1,000 births and the rate recorded by the Epidemiological staft in Vilavancode is 120. Since the Health Unit was established after the middle of the year and the birtho and deaths in the first half of the year were ascertained subsequently, omissions were quite probable. Moreover, the Health Unit dealt only with a population of 39,880 , while the Epidemiological staff brought under its purview a population of 176,220. The rate obtained by the latter for Vilavancode taluk, namely, 120 per 1,000 births, may, therefore, be taken as the more probable rate of infant mortality in Travancore as a whole. The rate of infant mortality in Baroda is 300 and a much lower rate than this is what one would expect in Travancore. Here the crude death-rate is lower and the proportion. of children in the population higher than in Baroda. These two conditions are naturally associated with a low infant mortality. Compared with other parts of India extreme poverty is rare in this country. Though the density of population here is much higher, there is no overcrowding in the strict sense, because the village system of habitation prevalent elsewhere in India is absent in this State. The environments, the social status and the occupations of the parents affect infant mortality. The majority of the people in Travancore are agriculturists, leading more or less an open-air life and the opportunities for human organic poisoning are much less. Owing to these circumstances it is not surprising that Travancore has a far lower rate of infant mortality than Baroda or other parts of India. It may also be noted in this connection that any slight error in the rate of infant mortality will not affect our calculations to any appreciable extent.

We have already seen that of the babies below one year of age dying in a year 70 per cent. would have been born in the same year. If 120 is taken as the rate of infant mortality in Travancore, 70 per cent. of 120, or 84 babies out of 1,000 born in a year die in the same year, and 916 survive at the end of the year. On this basis the number of births during the decade could be estimated from the mean population below one year. For the estimation of the mean population the numbers in the age-groups of 1921 were adjusted so as to correct the minor mis-statements of age and the figure for 0-1 group was obtained graphically. Similarly, any possible mistake in the age-groups of the 1931 population was removed by graduation and the correct population in the age-group $0-1$ ascertained. From the figures of the population thus obtained for 0-1 age-group in 1921 and 1931 the mean population in this group for the decade was calculated by the method shown in the foot note. * The mean population in 0-1 age-group for the decade 1921-1931 has been found to be 165,300 . As has been already stated, out of 1,000 babies born in a year 916 will survive at the end of the year and hence for a mean population of 165,300 in the age-group $0-1$ there must have been 180,500 births in a year. The total births in the whole dacade must, therefore, have been ten times the above number or $1,805,000$ : It may be noted that any under-enumeration in $0-5$ age-group in 1921 or over-enumeration in the same age-group in 1931 will affect the mean population below one year; and consequenty lessen the number of births estimated.
50. The mean number of births during the decade has been estimated as 180,500 Birth.-rate in per annum. The mean population in the decade calculated on the numbers recorded in 1921 caloulatede. and 1931 is $4,518,000$. The mean number of births during the decade, therefore, works out to $39^{\prime 9}$ per mille per annum. This rate, we will see presently, is too low.

The birth-rate in the year immediately preceding the census in 1931 could beestimated fairly accurately in the following manner.

The population returned in the age-group $0-1$ in 1931 we have already seen, out of every 1,000 babies $=$
If, as we have already seen, out of every 1,000 babies
born in a year 84 die and 916 survive, the number of births in the year preceding the census must have been
The population six months before the census, estimated
$\frac{211,940 \times 1010}{916}$ or 231,400 from the total numbers returned at the census 5,035,200
The birth-rate in the year before the census must. therefore, have been

211,940

-
$\frac{231,400 \times 1000}{5,035,200}$

- or nearly $46^{\circ}$ per mille.

Ordinarily, large variations in birth-rate do not take place suddenly, because fertility is more or less a constant factor. The only circumstance under which such variations may occur is when there is a sudden rise in the population of married women in the childbearing ages of $15-45$. The rise in the birth-rate from 39.9 to 46 per mille at the end of the decade would only have been possible if there had been a large increase in the proportion of married women towards the closing period of the decade. As a matter of fact, the increase in this proportion is so small as to be negligible. In 1921 the proportion of married women between 15 and 45 to the total population was 16.5 per cent. and in 1931 it increased only to 16.9 per cent. This small increase is not sufficient to justify an increase in birth-rate from $39-9$ to 46 per mille. It should, therefore, be inferred that the calculated birth-rate of 39.9 for the decade is too low. If this inference is correct, our estimate of the mean population in the age-group $0-1$ in 1921 is also too low. As this estimate was based on the population in 0-5 age-group, it follows that there might have been under-enumeration in that age-group in 1921. If there had been no such umder-enumeration, the population of married women in the age-group 15-45 to the total population would have been less than 16.5 per cent, and in that case the increase in the birth-rate at the close of the decade would have been justified by a corresponding increase in the population of married women of child-bearing ages. The possibility of underenumeration in the age-group $0-5$ in 1921, suggested by the above figures, necessitates a detailed examination of the population in various age-groups at different censuses.

| * Corrected popalation in 0-1 groap in |  | $\begin{aligned} & 1921 \\ & 1931 \end{aligned}$ | = | $\begin{array}{r} 124,958 \\ 218,714 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| If $B$ it the sanual ratio of increase, |  | 124,958 $8^{10}$ | $\underline{ }$ | 218,714 |
| From this equation the value of $\boldsymbol{R}$ is worked ont. |  |  |  |  |
| The mean popalation |  |  | $=$ | 124,958 ${ }^{5}$ |
|  |  |  | or | 165,300 |

Under-enumeration in 0-5 age-group in 1921.

Over-enumera tion in 1931 improbable.
51. The recorded figures were first adjusted for minor mis-statements of age, (The method followed is'described in Chapter IV) and the two sets of figures, when compared, disclosed certain discrepancies of which those given in the margin are examples.

| Age-group | Recorded figures | Smoothed tigures | Dernease (-) or increase ( + ) between the smowthed figures in $0-5$ group in one census and in 10.15 group in tho next Per cent. |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 0-5 \text { in } 1901 \\ 10-10 \text { in } 1911 \end{gathered}$ | $\begin{aligned} & 389,607 \\ & 417,368 \end{aligned}$ | $\begin{array}{r} 435,298 \\ 412,761 \end{array}$ | -5.6 |
| $\begin{gathered} 0-5 \text { in } 1911 \\ 10-15 \text { in } 1921 \end{gathered}$ | $\begin{aligned} & 465,811 \\ & 511,280 \end{aligned}$ | $\begin{aligned} & 622,608 \\ & 494,714 \end{aligned}$ | - $5 \cdot 6$ |
| $\begin{gathered} 0-5 \text { in } 1921 \\ 10-15 \text { in } 1931 \end{gathered}$ | $\begin{array}{r} 632,189 \\ 617,939 \end{array}$ | $\begin{aligned} & 596,984 \\ & 610,277^{\circ} \end{aligned}$ | +2.2 | The population in 10-15 group in one census should be less than that in $0-5$ group at the previous. This was so in 1911 and 1921; but in 1931 the older group has a larger population than the younger one in 1921. This increase could not have been caused by a change in the rate of mortality because there has been no abnormal condition to raise the mortality rate, nor by immigration because there are very few immigrants of the ages 10 to 15. It could not also have been due to systematic 'mis-statements of age, because such tendencies would have been present at the previous census also. If it is assumed that the same rate of decrease should have been found at the last census as at the earlier ones, the smoothed figure in 0-5 group in 1921 could not have been less than 644,000 . The possible under-enumeration in that group is, therefore, not less than 47,000. In 1921 the recorded population in $0-1$ group was 111,547, in 1-2 group 73,458 and in 2-3 group 114,715. Such a heavy drop from the first to the second group, followed by an abnormal rise from the latter to the next group, which is at variance with the results of the previous two censuses and the subsequent one in 1931, supports the inference about under-enumeration in 0-5 group in 1921.

52. On graduating the figures in different age-groups in the 1931 population by the method described in the Actuarial Report of India for 1921, it has been found that the differences between the recorded and graduated figures do not exceed the discrepancies usually present in all censuses due to the minor mis-statements of age. It follows, therefore, that there could not possibly have been any over-enumeration in $0-5$ age-group in 1931. If the census figures had been padded its result would naturally have been seen most among children, because the least particulars have to be returned about them. On graduating the figures of 1931 it is seen that the number of children below one ycar ought to have been a little more and not less than the number actually returned at the census. Evidently, if there had been an over-statement of children in any community or locality, it must have been counteracted by omissions in other communities or localities, so that the net result of the enumeration for the State as a whole is approximately correct. Only on this assumption is it possible to explain the smallness of the difference between the graduated figures and the actual numbers returned. Further, the fact that the graduated figures are slighty in excess of the actual numbers returned shows that there could not have been any over-enumeration in 1931.

Birth-rate
recalculated.
53. Assuming that there was under-enumeration in 0-5 age-group in 1921 to the extent of 47,000 , the birth-rate may be recalculated by the method described in paragraph 50 above after making the necessary correction for under-enumeration. The corrected mean population in $0-1$ group in 1921 will then be 172,800 , the corrected mean population for the decade $4,545,000$ and the mean number of births per year 188,600 . The annual birth-rate for the decade will, therefore, be $\frac{184}{1,06,5 \times 1,50} \times 1,000$ or 41.5 per mille.

Birth-rate cal. calated from calated from
54. The fertility of women, especially according to age-groups, is more or less constant. From the results of the ferility enquiry, described in Part II of Chapter V , it will be seen that in Travancore a married woman will have, on an average, 7 children born to her during the child-bearing period of 15-45 years. If it is assumed that fertility at different ages during the last 30 years was constant-there has been no abnormal variation in the conditions to cause a sudden change in the fertility - the number of children born to 1,000 women who pass through the full child-bearing period would be 7000 . If the average fertility rate

[^2]an the age-group 15-20 be taken to be the same as that at the age of 17.5 yearss, that in the -age-group 20-25 the same as that at $22 \cdot 5$ years, and so on, the sum of the ferility rates for 1,000 women in the age-groups $15-20,20-25$, etc., up to $40-45$ will be 1,400 .* According to Professor Tait's Law of Fertility, "the fertility at the age of birth of progeny -varies directly as the difference between the age and $50 . "+$ The fertility rates for women in Travancore, when worked out on the above hypotheses, are as follows :-


If these rates are applied to the married women in Travancore between the ages of 15 and 45 , the average fertility rate, i.e., the number of children that would be born to 1,000 married women aged 15-45 in one year, will be found to be 250 in 1921 and 252 in 1931. The proportion of married women in the age-group 15-45, as enumerated in 1921, was 16.5 per cent. of the total population. As it has been shown that there was underenumeration to the extent of 47,000 persons in $0-5$ age-group in 1921, the proportion of married women must have been slightly less than the above figure. In 1931 this proportion was $16^{\circ} 9$ per cent. The mean proportion for the whole decade may, therefore, be taken to be 16.6 per cent. The average fertility rate being taken as 250 , the average annual birth-rate in the decade 1921-1931 will work out to $\frac{85 \times x i 100}{100}$ or 41.5 per mille. This is the same as the birth-rate obtained by calculations based on the infant mortality rate and the corrected populations in age-group $0-5$ in 1921 and 1931 (vide, paragraph 53 above). 41.5 per mille may, therefore, be taken as the normal annual birth-rate for the past decade.

In paragraph 27 of the Travancore Census Report for 1921 it is stated:- "If the death-rate be 20, as determined above, to give an increase of 15.7 per mille, the birthrate must be about 35." The author of the Report then proceeds to estimate the birth-rate by the method described in paragraph 762 of the India Census Report for 1901 and arrives at a rate of 43 per mille for Travancore. But his conclusion is, "As, however, during the decade the number of marriages in the early ages has decreased, the fecundity rate also must have gone down. The birth-rate can, therefore, be safely put at 35 ." It has not been shown by what proportion marriages in the early ages had decreased and whether the decrease was large enough to warrant the assumption of a fall in the birth-rate from 43 to 35 per mille. Whatever might have been the conditions in the previous decade, the calculations given in the foregoing paragraphs go to show that the birth-rate in the past decade was somewhere about 41.5 per mille.
55. The death-rate ciannot be calculated on Hardy's method because of under-Death-rate in enumeration in 1921. The crude death-rate can, however, be determined from the age the decade distribution of the population. This method is described in Chapter IV, and for our purpose here it is sufficient to note that the death-rate in the past decade has been found to be 20 per mille, the same as the rate calculated by my predecessor for the previous decade.
56. The average annual birth-rate being 41.5 per mille and the death-rate 20 per correct rata of mille, the annual rate of natural increase in the population, after eliminating the influence of natural increase migration, would be 21.5 per mille, which would be equal to a natural increase of $23 \cdot 7$ in the populaper cent. for the decade. In these circumstances the population in 1921 could not have been less than $4,083,000$. If this is taken as the correct population in 1921, the enumerated population in 1931 which is inclusive of the immigrants will show an actual increase of 24.8 per cent., as against the recorded increase of $27 \cdot 2$ per cent.

[^3]Deduced popu-
intion and rate intion and rate diferent censuses.
57. In the Census Report of Travancore for 1901 it has been shown that there was.

| Year of census | Enumerated popalation | Deduced population |
| :---: | :---: | :---: |
| 1881 | 2,401,158 | 2,401,158 |
| 1801 | 2,557,736 | 2,640,622 |
| 1901 | 2,952,157 | 2,952,167 |
| 1911 | 3,428,975 | 8,428,975 |
| $192!$ | 4,000,062 | 4,083,000 |
| 1931 | 5,095,973 | 5,095,973 |

 under-enumeration in the 1891 census, and we have seen that in 1921 also therewas some under-enumeration. The actual populations, as enumerated and deduced at different censuses, are shown in the margin. The diagram in the margin shows graphically the difference in the variations between the enumerated and deduced population at the last six censuses. Since the population has grown under more or less normal conditions, one would naturally expect to get a smooth curve, The dotted line representing the deduced population satisfies this condition, while the thick line representing the enumerated population shows a drop in 1891 inand 1921, which presumably indicates under-enumeration. in those years.

Fariation in the rate of rate of
increase.
58. From the last two columns in the marginal table it will be seen that the rate of growth of the population in Travancore has been rising from decade to decade. If the birth and death rates had been constant, the rate of increase would also have been constant. Evidently, either the birth-rate has been increasing or the death"rate declining, or both the "phenomena have been taking place simultaneously. been no increase in the proportion of married women in child-bearing ages to the total population except in. the last decade. If there had been an increase ins the bith-rate from decadeto decade, it could not have therefore been due to a
rise in the proportion of married women of child-bearing ages.

The proportion of children under 10 years per 100 married women in child-bearing period has risen from census to census as can be seen from the figures giver in the margin. Evidently fertility has been rising or infant mortality declining. The increasing proportion of children: has always been a remarkable feature of the growth of the population in Travancore.

The fertility rates worked out in paragraph 54 supra show that the fertility of married women is higher in age-groups $15-20$ and $20-25$ than in the older groups. Consequently, a change in the age constitution of married women will naturally affect the total fertility. The marginal table shows that the proportion of married women in the agegroup 15-25 to the total married women in the child-bearing period 15-45 has been steadily increasing from 1901 onward, except during the decade 1911-1921 which might be due to the

| Year | Number of martied wrmen aged 15-25 per millo of marriod women aged $10-45$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Age groups |  |  |
|  | 15-20 | 20-25 | 15-25 |
| 1901 | 148 | 215 | 363 |
| 1911 | 158 | 219 | 378 |
| 1921 | 146 | 226 | 372 |
| 1981 | 172 | 223 | 395 | inaccuracy in the enumeration in 1921. The rise in fertility caused by the change in the age constitution of married women in the childbearing period may be counteracted by the fall in the proportion of the married women in the same age-group from decade to decade which has been the case except to a small extent in the last decade. It may, therefore, be inferred that the birth-rate was more or less constant during the past three decades except in the latter part of the last decade. But slight variations in fertility might have been brought about by natural causes, biological or economic, which it is not possible to determine.

The increase in the proportion of children may, therefore, be due to the decline in infant mortality. Infant mortality is the least for mothers aged 20-25.* The increasing proportion of married women in this age-group from census to census in Travancore has already been pointed out. The majority of women in this State marry at the ages of 15-20 and it is probable that the first child is generally born when the mother is below 20. At this age of the mother there is the least mortality among the first-born children. Educated women will take better care of their babies than their illiterate sisters, and the very high standard of literacy prevalent among the women of Travancore will, therefore, materially contribute to a decline in infant mortality. Other factors, such as the social status and the economic condition of the father, the facilities available for proper medical attendance, and the household duties and occupations of the mother, will also affect infant mortality. In the absence of reliable data bearing on all these points it is not possible to say whether rising fertility or falling mortality is responsible for the variation in the rate of growth of the population. It has been noticed elsewhere that fertility generally. rises when a nation begins to decline and that a rising fertility is usually accompanied by a declining survival rate. The fertility enquiry conducted in Travancore has shown that here at any rate the survival rate increases, instead of declining, with increasing fertility. It is, therefore, possible that in Travancore fertility is rising and mortality is declining at the same time. Such a state of affairs cannot, however, continue for long. A rising birth-rate may be accompanied by a falling death-rate for a time, because the children will, in a few years, reach the ages at which mortality is low. If at the same time infant mortality is also low, the crude death-rate will fall still further. This will go on till the proportion of old people becomes comparatively large, when the death-rate will naturally begin to rise. It is certain, therefore, that sooner or later the present rising rate of growth of population will reach a point at which it will remain stationary for some time and thereafter begin to decline.

[^4]The normal rate of natural increase.
59. In paragraph 46 above the rate of natural increase of the population during the past decade has been worked out from the recorded figures and found to be 23.4 per mille per annum. But, if the population in 1921 is corrected for under-enumeration and the natural increase in the decade then worked out, it declines to 21.5 per mille per annum. If similar calculations are made for the population figures of the last four or five censuses, the normal rate of natural increase can be estimated. This is only a theoretical concept because the rate of growth of population in Travancore has not been constant during the different decades, but has, as we have already seen, progressively increased from decade to decade. However, the theoretical normal rate of natural increase may be calculated on the populations of 1901 and 1931. The earlier enumerations have been excluded from the calculation because of their inaccuracies. The method of calculation is shown in the foot-note.* The normal rate of natural increase during the last 30 years was $1 \cdot 78$ per cent. per annum. If this rate continues for the next 40 years, the present population of the State will double itself at the end of that period.

Yariation in the natural and actual population compared.
60. The natural population means the total number of Travancore-born persons enumerated anywhere. It is equal to the population enumerated in the State plus emigrants minus immi-

| Year | Enumerated |  | Dedaced |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Ircrease per cent. in ten years | Number | Increase per cent. in ten years |
| 1891 | 2,554,526 |  | 2,637,312 |  |
| 1901 | 2,921,744 | $14 \cdot 4$ | 2,921,744 | $10 \cdot 8$ |
| 1911 | 3,393,933 | $16 \cdot 8$ | 3,393,933 | $16 \cdot 2$ |
| 1921 | 3,962,731 | $16 \cdot 8$ | 4,039,669 | $19 \cdot 0$ |
| 1931 | 5,019,336 | 26.7 | 4,019,336 | $24 \cdot 8$ | grants. The natural population and the rate of increase thereof, according to the enumerated and deduced figures for the last five censuses, are given in the margin.

## The deduced

 Ggures are those obtained after making allowance for under-enumeration in 1891 and 1921. The rates of increase calculated on the deduced population show a progressive growth of the natural population since 1891. The increase| Decade | Incrense per cent. of deduced population during the decade |  |
| :---: | :---: | :---: |
|  | Actual | Natural |
| 1891--1901 | 11.8 | 10.8 |
| 1901-1911 | 16.2 | 16.2 |
| 19111921 | $19 \cdot 1$ | 19-0 |
| 1921-1931 | $24 \cdot 8$ | 24.3 | which was 10.8 per cent. in the first decade rose to 16.2 per cent. in the next, to 19.0 per cent. in the third and to 24.3 per cent. in the last decade. These rates are compared with the corresponding rates of increase in the actual population in the marginal table.

During the decade 1891-1901 the population of the State gained by I per cent. through migration, during the next two decades there was practically no gain, and during the last decade there was again a gain of 0.5 per cent. The gain

\footnotetext{

- For the purpose of this calculation the desth-rate among emigrants and immigrants throughont the period is taken to be the same as that estimated for the last deoade, vit., 20 por mille. The number of deathe is calculated by the sppliogation of the formula, $a x \frac{\mathrm{~K}^{\mathrm{n}}-1}{\mathrm{R}-1}$ in which $a$ is tho doathrate, $a$ the number of emigranta or immigrants at the beginuing of the period, $R$ the annual ratio of incresse par unit migraus and $n$ the number of years. The number of emigrants in 1901 was 24,490 and in 1931 it was 58,466 . The value of $R$ oan be found out from the following equation:-

$$
\begin{aligned}
24,490 \times n 30 & =58,466 \\
\bullet \quad A & =1 \cdot 029 \\
\text { The number of deathe among大t emigrants } & =\frac{20}{1000} \times 24,490 \times \frac{(1 \cdot 029)^{30-1}}{1 \cdot 029-1}
\end{aligned}
$$

Adding the above figure to the census increase in emigrants during the period (33,976), we got the volume of enigration as 57,388 during the period.

Simitarly the volume of immigration can be osloulated. The number of immigranta in 1001 was 54,903, and in 1931 it inoreased to 135,103 . The value of $R$ in this osse is 1.030 . The namber of denthe a zongst immigrants is 53,475 and the volume of immigration 133,675 . The balance of migration during the period in favour of the State is, therefore, 133,675 minus 57,988 or $\mathbf{7 6 , 2 8 7}$.

through migration shown above is only approximate. The correct gain has been worked

| Year | Actusl population | Natural population |
| :---: | :---: | :---: |
| 1891 | 100-0 | $100 \cdot 0$ |
| 1901 | 111.8 | $110 \cdot 8$ |
| 1911 | $129 \cdot 9$ | 128.7 . |
| 1921 | $154 \cdot 6$ | $153 \cdot 2$ |
| '1981 | - $193 \cdot 0$ | $190 \cdot 8$ | out on Longstaffs method and shown in paragraph 46 supra. The total gain through migration sincé 1891 can be seen from the proportional variations shown in the margin, taking the figures for 189 ! as 100. The actual population has increased by 2.7 per cent. more than the natural population between 1891 and 1931: This is the total gain through migration during the last forty years.

61. During the past decade the enumerated population of Travancore has increased by 27.2 per cent. and the ideduced population by 24.8 per cent. During the previous
 decade the enumerated population showed an increase of 16.8 per cent. and the deduced population 19.1

Gromth of poppulation in Traxancore compared mith other states and Proyincea per cent. The rise in the corrected rate of increase from 19.1 in 1911-1921 to $24 \cdot 8$ in 1921-1931 may appear to be somewhat large. But from the figures given in the margin it will be seen that there has been a similar or even a greater rise in the rate of growth of the population elsewhere in India also. A much larger .. increase in the population in the last, decade than in the previous has been a common feature of all the Provinces and States in India. In Travancore the decennial growth of population has always been greater than in India as a whole and in most Provinces and States.
62. The physical and economic conditions of Travancore are more favourable to the growth of population than those obtaining in other parts of India. Except in portions of a few large towns there is no over-crowding of houses in this State: In rural areas and in many parts of most towns the houses are scattered. The cleanliness of the people of Malabar is proverbial. Even the poorest have a daily bath and keep themselves, their houses and premises as clean as possible. Living under such conditions it is not surprising that there is no serious or wide-spread outbreak of epidemics amongst them as elsewhere in India. The soil here is fertile and nature bountiful. . Rain is generally plentiful, and though there may be some shortage or irregular distribution at times, it never keeps of entirely. The country gets the benefit of both the monsoons and cultivation seldom meets with total failure. The economic condition of the average Travancorean is, therefore, better than that of the average Indian. Such conditions naturally favour a high birth-rate and a low death-rate. We have already seen that the birth-rate in Travancore is over 41 per mille, while the death-rate is only 20 per mille. In other parts of India the birth-rate is not higher, but the death-rate goes up to 35 or even more per mille.

Child marriage is extremely rare in Travancore. Out of a total of 1,027,297 married women, only 2,484 are below the age of 10 , and 26,198 below the age of 15 . Child marriage is detrimental to health and will, therefore, reduce fertility. Carr-Saunders observes, "It is also known that when of two races, both living a similar kind of life under similar conditions, one practises early marriage and the other does not, as for example the Hindus and Mohammedans in India, fertility is higher among the latter than among the former."* On the other hand, any extended delay in marriage tends to reduce the possible number of children. "Young women," says H. G. Duncan, "are more fecund. than older 'women still in reproductive period." $\dagger$ Carr-Saunders also supports this view. "The earliest years are the most fecund years, and therefore postponement of marriage reduces the fecundity, other things being equal, by more than the fraction of the

[^5]mature period which is passed in celibacy. ${ }^{\text {'* }}$. In Travancore, though thore are very few child marriages, the majority of women marry between the ages of 15 and 20 and their fertility is, therefore, high.

It is generally admitted that fertility increases as nervous energy decreases. N. S. Phadke says, "Greater nervous energy makes for less fertility", and vice versa. In other words, there is an inverse relation between nervous energy and fertility." ${ }_{i}$ A labourer who does manual work will have less nervous energy than an intellectual worker, and hence the former has ordinarily more children than the latter. According to Mr . Phadke, food, water and climate also affect a man's nervous energy, and of the three ingredients which form human food, namely, proteids, fat, and carbo-hydrates, the first alone provides nervous energy. People who live on food deficient in proteids and rich in fat and carbo-hydrates have low nervous energy and high fertility. The staple foods of an ordinary Travancorean are rice and tapioca, both of which contain plenty of starch and very little of proteids. Again Phadke says, "A cool and moist climate is averse to the growth of nervous energy ; and a climate which is at once hot and moist is most unfavourable." $\ddagger$ The climate of Travancore is admittedly hot and moist. Both the food the Travancorean eats and the climate under which he lives cause a diminution of his nervous energy and consequently an increase in his fertility.

That the fertility of the people of this State is high, and is in fact much higher than that of the inhabitants of other parts of India, has been proved by the fertility enquiry, the results of which are described in Part II of Chapter V of this Report. The average number of children born to 10 families in Travancore is 65 as against 57 in Baroda. The highest average of 70 children per 10 families is seen among the Indian Christians who form nearly one-third of the population of the State. Not only are the number of children born to each family greater than in Baroda, the survival rate also is higher in Travancore than in that State, 49 children surviving in every, 10 families here as against 34 there. -These figures prove beyond doubt the higher ferility and the lower mortality in Travancore than in Baroda. It is not, therefore, surprising that while the population in Baroda increased only by 14.9 per cent. during the last decade, that of Travancore increased in the same period by 24.8 per cent. (the deduced rate). As a rule the rate of growth of population decreases as density increases. On this ground one would have expected the increase in Travancore to be less than that in Baroda. But in the neighbouring State of Cochin which has a higher density than even Travancore the rate of increase is also higher than that in Baroda and very nearly approaches the rate in Travancore. Evidently, in the fertile soil of Ketala the population grows in defiance of the laws of nature.

Movement of.
the population 63. So far, we have considered the movement of the population in the State as a the population
by administra. whole. We shall now examine the movement in smaller units, namely, the administrative and tive division.

| Adminiatrative | Actual popalution |  | Pcreentage of increase is actual population |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1921 | 1931 | 1911-1921 | 1921-1981 |
| Snuthern | 1,156,373 | 1,433,9к6 | $17 \cdot 0$ | 24.0 |
| Central | 1,+87,178 | 1,861,472 | 170 | $25^{2}$ |
| Northern | 1,305,590 | 1,695,321 | 15.5 | 20.9 |
| High Range | 56,921 | 105,224 | 42.0 | 84.9 | natural divisions, and the taluks. The table in the margin gives the population of the administrative divisions in 1921 and 1931 and the percentages of increase during the last two decades. In all the divisions the rate of increase in 1921-1931 is higher than. that in the previous decade and varies inversely as the density. The percentage of increase in the population of the whole State during the last decade according to the recorded figures, it will be remembered, is 27.2. It will be seen, therefore, that the rates of increase in the Southern and Central Divisions are somewhat lower, the rate in the Northern Division is somewhat higher and that in the High Range is very much higher than the average rate of increase in the State. Such wide variations must be due to the influence of migration and to a small extent also to the difference in the rates of births and deaths in the different divisions. The main cause, however, is migration, both internal and external, which will be dealt with in detail

[^6]in Chapter III: - It. is necessary, however, for the present discussion to ascertain in af general way how far the growth of population in each division has been affected by migration. The rate of increase in the population of each division will be higher or lower in proportion to the loss or gain through migration. Since information is not available regarding the birthplace of the emigrants by the divisions of the State, the natural population of each division may be regarded, for the purpose of the present discussion, as the same as the number of persons born in the division and remaining in the State. The rates of

| Administrative Division | Percentage of variation in natural population in 1911-1921 | Percentage of variation in natural population in 1921-1931 |
| :---: | :---: | :---: |
| Soathorn | $+18.0$ | $+24^{\circ} 0$ |
| Central | +17.1 | + 25.0 |
| Northern | $+15 \cdot 9$ | + 29.5 |
| Eligh Bange | -220 | + $18: 4$ | increase of the correct natural population may, therefore, be slightly higher than those given in the margin. Like the accual population, the natural population also shows an increase in all the divisions during the past decade, the highest percentage being in the Northern, the next highest in the Central, the next in the Southern and the lowest in the High Range Division. There was no special reason for a decrease of 22 per cent. in the natural population of the High Range in the decade 1911-1921. The Census Report of 1921 is silent on this point.

We may now compare the rate of increase in the actual population of each division with that of the natural population during the decade 1921-1931. The two sets of

| Administrative Division. | Pementage of increase in atataral population in 1921-1981. | Percentage of ibcrease in actual popalation in 1921-1931 |
| :---: | :---: | :---: |
| Southern | 24.0 | 24.0 |
| Oentral | 250 | $25 \cdot 2$ |
| Northern | 29.5 | 29.9 |
| High Range | $18 \%$ | 849 | figures are given in the margin. There is no difference between the two . rates . in the Southern Division, the difference is very small in the Central and Northern Divisions and is very large in the High Range. . The inference to be drawn from these figures is that the Southern Division has gained as many immigrants as the emigrants it has lost, and that the Central and Northern Divisions have gained slighly and the High Range immensely through migration. This is only natural, because the High Range, on account of extensive development of tea cultivation, has attracted large numbers of labourers from the adjoining British districts. The land cultivated with tea in this division has increased from 47,105 acres in 1921 to 74,616 acres in 1930. There could not possibly be much immigration from outside the State to the Southern, Central and Northern Divisions. If there is any, particularly in the frontier taluks of Thovala, Shenkotta, Parur and Kunnathunad, it will be counterbalanced by emigration from those taluks to the adjoining British and Cochin territories. It may, therefore, appear that the differences in the rates of increase in the actual as well as the natural population between the above three divisions are due to the differences in the rates of births and deaths. The correct rate of increase in the whole population of the State arrived at after making allowance for the probable under-enumeration in 1921 is, as we have already seen, 24.8 per cent. This agrees practically with the rates of increase in the population of the. Southern and Central Divisions. The difference between the State average and the division rate is seen markedly only in the Northern Division. The conditions in that division are more or less similar to those obtaining in the Central Division and there could not, therefore, be any appreciable variation in the birth and death rates between these two divisions. The bigher rate of increase in the Northern Division than the State average could, therefore, be explained only by under-enumeration in that division in 1921. A comparatively low increase in 1911-1921 and a proportionately high increase in 1921-1931. in the Northern Division leads to the inference that the under-enumeration in 1921 must have occurred in that division. If the necessary correction is made in the population of the Northern Division in 1921, the rate of increase in this division, as in the Southern and Central Divisions, will nearly be the same as the average State increase. The High Range differs from

the other divisions in having a cooler climate and a higher rainfall, and in other natural as well as economic conditions. The birth and death rates there may, therefore, be different from those in the plains divisions which may account for the lower rate of increase in the natural population of this division; and the much higher rate of increase in its actual population is, as we have already seen, due to immigration from outside the State.

Movement of the population by natural division. information regarding birth-place recorded in 1921 is insufficient to decide the birth-places, according to the present natural divisions, of the population enumerated at that census. It is not, therefore, possible to ascertain the variation in the volume of internal migration by natural divisions between 1921 and 1931. The actual population of the previous census has, however, been adjusted for the changes made in the boundaries of the natural divisions and the variations in the growth of the actual population of these divisions between 1921 and 1931 can, therefore, be compared. This, in fact, is more important than the variation in the natural population from the standpoint of the pressure of population on land. The rates of increase in all

| Natural <br> Division | Aotual population |  | Hate of increase per cent. in actual population |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1921 | 1931 | 1911.1921 | 1921-1931 |
| Lowland | 1,923,497 | 2,389,549 | $15 \cdot 0$ | 24.2 |
| Midland | 1,894,618 | 2,415,494 | $17 \cdot 4$ | $27 \cdot 5$ |
| Highland | 187,947 | 290,930 | $32 \cdot 2$ | $54 \cdot 8$ | natural divisions are higher in the last decade than in the previous. In the Lowland the rate for the past decade is almost the same as the deduced rate of increase for the State ( $24 \cdot 8$ ) and in the Midland it is higher. There could hardly be any difference in the birth and death rates between these two divisions and the variation in the rates of increase may not, therefore, be due to this cause. Nor could it be due to the influence of migration because the Lowland Division has gained 10,807 persons and the Midland 9,039 persons due to the balance of migration, both external and internal (See Imperial Table VI). The only possible explanation for the rate of increase in the Midland Division being higher than the average State increase is the possibility of under-enumeration in that division in 1921. We have seen in the previous paragraph that among the administrative divisions the underenumeration was probably in the Northern Division. When the administrative and natural divisions are considered togelher, the under-enumeration is found to have been in the midland portion of the Northern Division, comprising chiefly the eastern parts of the taluks of Changanachery, Minachil, Thodupula and Muvattupula where, on account of the hilly nature of the country and the widely scattered situation of houses, the omission of houses in enumeration is quite possible.

In the Highland Division the rate of growth of the population during the decade is considerably higher than the average rate for the State and is certainly due to immigration. It is here that the greatest development of cultivation has taken place during the decade. All tea and rubber plantations are situated in this division and their total area has increased from 98,123 acres in 1921 to 136,602 acres in 1931, an increase of more than 39 per cent. If the extension of the area under other crops could have also been included in this calculation-unfortunately information on this point is not available-the total increase in the cultivated area in the Highland would have more or less corresponded with the increase in the population of that division, which is 54.8 per cent. It may be noted that out of a total number of 120,369 immigrants in this division as many as 79,433 have come from outside the State.

Movement of
the populaton
by taluk.
65. Two maps are placed opposite this page, one showing the increase per cent. of the population in each taluk between 1921 and 1931 and the other showing the density of population on the cultivated area of the taluks in 1931. One would naturally expect the growth of population to vary inversely as the density of the cultivated area. We will see presently that this is true except in the case of a few taluks, especially if the taluks are divided into broad groups according to their density as shown

MAP OF TRAVANCORE
Ghoving by Taituks in Administrative Divisions the Percentuge of Increase of Popalation during the decade $1921 \& 1931$.

Scale 1 Inoh $=16$ Ifiles


## MAP OF TRAVANCORE

Showing by Taluk in Administrative Divisions the Density of Population per Aq. Mile of Cultivated Area in 1831.

Bale 1 Inch = 16 Miles



MAURA DISTRICT


REFERENCE


Administredire Division Boundary Tales Bomulary

Coder 850 persons per 8 Sq . Mile

## 850 to 1,500 Do.

1,500 102.000 Da
2,000 \& Ores
.
N. B. The figure given in each taluk Indicates the actual density
per Sq. Mile of culuyated area.
4
in the marginal table. The taluks in the first group have the highest densities ranging from 2,039 to 2,842 persons
 per square mile of cultivated area, the average. density being 2,359 . The rate of growth of the population varies from 21.2 per cent. to 29.5 per cent. in the different taluks in this group, but the average for the group, oiz., $25 \cdot 4$ per cent. is the lowest of all the groups excepting Group 1II. The taluks in Group II have lower densities than those in Group I and the average rate of increase in the population is the same as that of the latter. Group III is an exception. The three taluks in this group, namely, Thovala; Agasthiswaram and Shenkotta, show the least increase in population in spite of their average density of the cultivated area being less than that of the two previous groups. These taluks are more or less like the adjoining British territories. As has been pointed out in the introductory remarks to this chapter, they' originally formed part of the Tamil country. They have a rainfall about the same as that of Tinnevelly district. The people are mostly Tamilians and live in congested villages as in British India and unlike in other parts of Travancore. In these circumstances it is but -natural that the rate of growth of the: population follows the trend in British India and is much less than that of Travancore proper. A noteworthy' feature of the rate of growth. of the population in Travancore is the large increase in the taluks included in the last two groups. The inverse ratio between density of the cultivated area and the rate of increase is seen very clearly in these groups. The densities of the taluks in Group IV range from 896 to 1191 and the rates of increase from 25.8 per cent. to 40.3 per cent., the averages for the whole group being 974 and 32.3 per cent. respectively. In the last group the densities are the lowest, 431 to 847 , and the rates of increase are the highest, $58^{\circ} 4$ per cent. to 91.6 per cent. The large increase in the population of

| Taluk |  |
| :---: | :---: |
| Pathasmmthitt | 14.8 |
| ${ }_{\text {Pathenmanjomam }}$ | 18.6 <br> 23.8 |
| Thedupula | ${ }_{25}{ }^{\circ} 6$ |
| Derikulam | ${ }_{84} 8.7$ |
| Prmedo | 86.8 | the taluks in the last two groups is due to the extension of cultivation and the consequent influx of immigrants from other parts of the State as well as from outside, This fact will be evident from the proportion of the immigrants shown in the marginal table. Agriculture is the main occupation of the people of these taluks: and the facilities which they contain for the extension of cultivation have attracted large numbers of immigrants from elsewhere in Travancore and from outside the State. Unfortunately, correct statistics showing the cultivated area in different taluks in 1921 are: not available. Otherwise, this inference could have been proved by facts and figures.

The pressure of population.
66. In the foregoing paragraphs we have seen that the population in less densely inhabited areas ordinarily grows more rapidly than that in more thickly populated regions. This is the general rule, but there are exceptions to it. In localities where the houses are huddled together in compact villages as in the taluks of Thovala, Agasthiswaram and Shenkotta, the rate of growth, in spite of their comparatively low density, is also low. In taluks like Karunagapally and Sherthala where the density is very high, the rate of growth of the population is also high. Owing to the scattered situation of houses there is no overcrowding in those taluks and the limit set by the means of subsistence on the growth of population has evidently not yet begun to operate. Consequently, the population in these taluks is still growing rapidly, notwithstanding their very high densities. Limitation in space and limitation in food supply are the two main factors directly influencing the pressure of population. The question of space limitation will be considered in the next chapter and here we are concerned mainly with the food limitation. The pressure of population in relation to the food supply is, it must be noted, "a relative term, depending on various factors, namely, on the one hand on density and rate of increase of the population and their standard of living, and on the other on the resources available to them for raising wealth and converting that wealth into the necessities of life required by that standard of living. "" Owing to the differences in the resources and the facilities available for converting the wealth that is produced into the necessities of life, it sometimes happens that sparsely inhabited regions have an "excess" of population and areas of greatest density are underpopulated. In considering the question of the pressure of population on the means of subsistence we have, therefore, to take into account not only the production of foodstuffs in the country but also the production of other forms of wealth with which foodstuffs can be purchased from other countries. In Travancore, agriculture is the main source of wealth at present and the growth of population, therefore, primarily depends upon the extent of land available for cultivation and the condition of its agriculture.

Population is outgrowing the means of subsistence.
67. Malthus laid down the proposition that population tends to increase in geometrical and the means of subsistence in arithmetical ratio. This is not an absolutely correct statement and neo-Malthusians have accordingly altered it into a simpler formula, that population tonds to out-run subsistence. The world taken as a whole has probably not yet reached the stage when the population may be said to be out-growing the means of subsistence. Joseph. Tenenbaum observes, "Science may stretch the earth's crust to undreamed-of capacities. That the alarmists have often overstated their point can be gathered from many expert opmions on the development of agriculture. For instance, Professor John M. Coulter, to cite one authority, in his essay, "The Meaning of Population," assures us that the revolution in agriculture is slowly solving the problem of drought and disease as a result of which food production is now beginning to over-take population." $\dagger$ But if the different countries are considered separately, there may be some in which the population has begun to out-run the means of subsistence. Travancore, it will be seen presently, has already reached or is nearing this stage.

In an agricultural country like Travancore the extent of land cultivated per head of population and the outturn per acre are the main factors which determine the standard of living. Edward M. East says, "By the returnis of the International Institute just before the war, Germany was tilling $1 \cdot 15$ acres, France 1.5 acres, Italy 0.98 acre, and Belgium 0.57 acre per capila. The fact is, however, that these countries are not self-supporting. Huge quantities of food are imported annually..................It is difficult, even on the basis of pre-war figures, to find out with absolute accuracy just what" proportion of their people these countries then supported ; but from the most trustworthy data obtainable the maximum figures are:-Germany, 72 per cent.; France, 70 per cent.; Italy, 64 per cent.; and Belgium, 37 per cent. After making certain slight corrections due to non-comparable data having been reported and for forest products cultivated, it follows that Germany really cultivated about 2.0 acres for each man supported by her agriculture, France 2.3 acrea, Italy 2.4 acres, and Belgium $1 \cdot 7$ acres. This gives a weighted average production for these countries of $2 \cdot 2$ acres per capita, an amount which taken by itself is not very far from the figure of 2.5 acres per capila estimated as the maximum possibility for the world as a whole." $\ddagger$ ln Japan the area cultivated was only 0.32 acre per head of population or 0.45 acre per person supported by her agriculture in 1920. In Travancore the total cultivated land in

[^7]1930 was $2,201,295$ acres and the per capita share was, therefore, 0.43 acre. The total number of persons supported by agriculture was $2,768,330$ and each of them had thus 0.80 acre of cultivated land. The above figures show that Travancore is much worse off than the European countries and is slightly better off than Japan in regard to the average area of cultivated land per head of the total or the agricultural population. It must, however, be remembered that the outturn of crops per acre in Japan is about 4.5 tons, while in Travancore it is not even one-fourth of it. Under such conditions the fact that each individual of the agricultural population in Travancore is able to live upon the produce of 80 cents of land only shows that the standard of living here is lower than in Europe or in Japan. Further, the cultivated area in Travancore does not increase pari passiu with the growth of the population. In 1921 the net area under cultivation was 2,008,960 acres and it increased only to $2,201,295$ acres in 1930 or by 9.6 per cent. as against an increase of 24.8 per cent. in the population. The figures given in the margin show clearly by how much the cultivated area per head, both of the total and of the agricultural population, decreased from 1921 to 1930 . When the land under cultivation does not increase in the same proportion as the population, the standard of living must necessarily deteriorate unless the deficiency were made upby a corresponding increase in the acre-yield of crops. In paragraph 36 above the outturn of the principal crops in Travancore has been given. The producion of paddy, tapioca and pepper has increased from 894,700 tons in 1921 to $1,024,700$ tons 1931, i. e., by 14.5 per cent. and in the case of coconuts the total number produced has increased from $528,410,000$ to $654,758,000$ or by 23.9 per cent. Thus it is seen that though the outturn of crops has increased somewhat more than the cultivated area, it has not kept pace with the increase in the population. It is evident, therefore, that the population is out-growing the means of subsistence.
68. The standard of living is defined as follows in a recent publication of the International Labour Office, An International Enquiry into Costs of Lioing. "The term 'standard of living' or, as it has sometimes been called, 'standard of comfort', is intended to cover the sum of the economic satisfactions or utilities which an individual (or a family) derives from the consumption of the goods and services which he is able to obtain with his income available during a certain period of time.................. It follows. from the above definition of the standard of living as a sum of satisfactions that different individuals, living in different countries, under different climates and with different customs and traditions will be able to obtain the same amount of satisfaction (i. e., the same standard of living) by distributing their expenditure differenty over various commodities and services." In a sub-tropical country like Travancore where the cost of living is low, a man will be able to obtain the same standard of living with a comparatively smaller income as one with a higher income in a cold country. But every nation should maintain a minimum standard of living suited to its environments and the average income of a man should be such that he can obtain at least this minimum standard. In Appendix IV to this Report which contains the results of the economic census taken along with the present population census, the per capita income in Travancore is estimated at about Rs. 51. The prices of commodities have falien by not less than 40 per cent. on account of the present economic depression and the income per head, if normal prices had been ruling, would have therefore stood at about Rs. 85. The Travancore Banking Enquiry Committee has estimated the expenditure of a family of six living in comfort at Rs. 678 which is equal to Rs. 113 per head.* The average income thus falls short of the amount required for a man to live in comfort and his standard of living is, therefore, necessarily low. That it is lower than the standard of living in Western countries can be seen from a comparison of the quantity of food consumed per head here and there. "Food," says V. G. Kale, "is the essential consideration in determining the economic condition of a nation." In Mankind at the Cross roads E. M. East points out that Pitkin has recently calculated that an average adult in America requires a thousand poumds of dry

[^8]foodstuffs per year. From the figures given below it will be seen that a Travancorean does not consume even half this quantity. The staple articles of food in Travancore are rice and tapioca. The poorer classes subsist more on tapioca than on rice. Fish also forms, an essential ingredient of the diet of a large majority of the population. About 64 per cent. of the rice consumed is produced in the country itself and the balance is imported from Burra. Tapioca and fish are both local products. The quantity of paddy produced in Travancore in 1930 was 535,000 tons. This, when converted into its equivalent in husked rice, would be equal to 356,000 tons. The quantity of rice imported in the same year was 204,000 tons (Paddy imported has been converted into its equivalent in rice). The quantity of tapioca produced and consumed is roughly 480,000 tons of dry roots. The quantity of fish consumed has been estimated at about 60,000 tons. The total quantity of dry foodstuffs consumed thus amounts to $1,100,000$ tons. In other words, the average consumption per head per year is about 480 pounds.

Remedies for over-population.

Extension of cultiration.
69. When the population of a country grows more rapidly than the means of subsistence, food and other necessities of life fall short of the requirements of the people. and those generally affected by this deficiency are the poorer classes. Their lot becomes worse and they have to struggle harder for their existence. It is a law of nature that when difficulties of self-preservation increase the rate of multiplication also increases. Thomas Doubleday says in The True Law of Population, "There is in all societies a constant increase going on amongst that portion of it which is the worst supplied with food,-in short amongst the poorest." Increase in population diminishes the food supply available to the poor ; this reacts on their rate of multiplication and leads to a further increase in the population. The increase in population in its turn enhances poverty and consequently the rate of mortality rises. This process of action and reaction will naturally go on until an equilibrium has been established between the rate of growth of the population and the food supply. Nowhere in the world has this point of equilibrium yet been reached. In Travancore there is no indication so far of the scales moving towards the position of equilibrium. The population here is growing laster than elsewhere in India and the State is naturally getting over-populated. There are certain methods by which the evils of over-population can be mitigated. We shall now consider what these are and see whether they are operating, or could be made to operate, in this State.
70. Emigration is one of the possible means of preventing over-population. It may be either internal or external. Internal migration from thickly populated regions to sparsely inhabited areas within the country, as we have already seen in dealing with density and movernent of population, is taking place, but not to such an extent as to afford substantial relief to congested localities and bring about a uniform distribution of the population. The scope for external migration is limited and the recent experiences of Indian emigrants in Ceylon, Burma, the Federated Malay States, East Africa, and South Africa, show that there are insurmountable obstacles to the migration, on any large scale, of Indians to those countries. As far as the available statistics show, the total number of Travancoreans now living in countries outside India is only about 8,500 . This is like a drop in the ocean when compared with the population of the State. Any appreciable increase in this number cannot be hoped for in the near future. The remedy for over-population must, therefore, be sought in measures other than emigration to foreign countries.
71. The development of local agriculture by extending the area under cultivation and by improving the methods of farming will increase the means of subsistence and enable the country to maintain a larger population at a better standard of life. Travancore has still some room for the extension of cultivation. Out of a total cultivable area of about $3,043,000$ acres, nearly 842,000 acres, including current fallows and cultivablo wastes, still remain uncultivated. Much of this land may be so poor in quality or so situated that by the operation of the law of diminishing returns it may not respond to the .application of labour and capital as liberally as the land already brought under cultivation. The defects could, and will, in course of time, be removed by developing the means of communication and by improving the methods of cultivation. It may, therefore, be assumed that sooner or later all the available land will be taken up for cultivation and that it may be able to support the same number of persons as the land now under cultivation in the Highland Division of the State, which is 591 or in round figures, let us say, 600 per squart mile. On this basis the land still available for cultivation could support a population of about 789,000 or say 800,000 roughly. If the present rate of growth of the population continues during the present decade, more than this number will have been added to the population of the country before the next census.

The only other way of increasing the area available for cultivation is to encroach upon the reserved forests. Travancore has nearly a third of its area under reserved forests. This is more than the proportion in most of the Provinces and States in India as.

| Province or State | aroa of Province or State <br> Sq. miles | Area of reserved: forests and lands Sq. miles | Percentage of colums 8 to colomn 2 |
| :---: | :---: | :---: | :---: |
| Assam | 51,825 | 20,771 | 40.1 |
| Bengal | 76,755 | 10,529 | $13 \cdot 7$ |
| Blhar and Orimat - | 82.936 | 2,780 | $3 \cdot 4$ |
| Bombay | 123.125 | 12,292 | $10 \cdot 1$ |
| Burma | 243,207 | 123,746 | $50 \cdot 9$ |
| Central Provinces | 99,927 | 19,677 | 19. |
| Madras - | 143,200 | 19,340 | 13.5 1.9 |
| North-weat Frontier Province | 13,099 | 245 | 1.9 6.9 |
| Punjab - | $\stackrel{97,281}{ }$ | 6,695 5 5,298 | 6.9 4.9 |
| United Provinces . | 106,720 61,720 | 5,228 $\mathbf{3 , 6 3 7}$ | 4.9 5.9 |
| Tolal British India | 1,099,888 | 224,941 | $20 \cdot 5$ |
| Mymore | 20,528 | 4,210 | $14 \cdot 3$ |
| Travancore | 7,62; | 2,486 | $32 \cdot 6$ | can be seen from the table given in the margin. It is a common notion of the man in the street that a large portion of the forests in Travancore is eminently fit for agriculture and could, or rather should, be thrown open for cultivation. The views of experts on the advisability or otherwise of disafforestation are conflicting; but the balance of opinion seems to be predominantly against it. On this important question I cannot do better than give a few extracts from a letter which I have received from the State Conservator of Forests in response to my request.

"There is no doubt a general impression in the minds of the people that our forestes. contain extensive tracts of land fit for paddy cultivation and other crops, and it is equally true that people often clamour for such supposed lands being thrown open to them for cultivation .......................As a matter of tact, these 2,486 square miles of Reserved Forests and Lands do not give us an equal extent of cultivable land - much of these are giddy bill alopes of rugged rocks, while a great portion is only mere grass land where nothing else perhaps will thrive.......................So far as my knowledge. goes I do not think that there remains any appreciable extent fit to be yet thrown open tor this purpose."

On the vexed question of the inter-relationship between forests and rainfall, the Conservator, referring to a Note an "The Influence of Forests on the Storage and Regulation of Water Supply" by S. Eardley Willmot of the Indian Forest Service, says:-
"It will be seen therefrom that not only is the maintenance of forest areas essential in the interests of rainfall and consequently of agriculture, but that more important perhaps than these - the destruction and denudation of timber-clad hill slopes would give rise to floods, avalanches, silting up of rivers and streams, and even the disappearance of several sources of water supply. .........................I may. add that, despite controversial opinion on this subject matter, there can be no doubt,
(i) that forests exert an influence on the regulation of rainfall.
(ii) that destruction of forests would eventually lead to floods, silting up of rivers, and the drying up or disappearance of streems, etc.,
(iii) that many foreat-clad countries have suffered immensely owing to denudation of hill slopes and that several countries that have been so affected are spending large sums of money to repair the damages and the results of past neglect. and last but not least,
(iv) that agriculture mainly depends on the preservation tof forest areas and the protection and safety of ita waterways, etc."

In the face of such pronounced views of the Conservator of Forests, whose words in the matter of forest conservancy must carry weight, the possibility of the reserved forests yielding any appreciable extent of cultivable land has to be ruled out. About 4,400 acres have been already thrown out of the Reserves for cultivation and in the opinion of the Conservator there may not be more than another 500 or 600 acres which could yet be made available.

Intensire coltivation,
72. The average yield of an acre of land in Travancore is small compared with what is being obtained in Western countries and Japan. For example, the average outturn of paddy per acre is about 5,000 pounds in Spain, 3,000 pounds in Italy, 2,500 pounds in Japan and 1,250 pounds in Travancore. By the adoption of scientific methods of cultivation the yield can certainly be increased. The yield of wheat in England, which was only about 10 bushels per acre in the middle of the eighteenth century, increased to 30 bushels by the middle of the nineteenth century. If the yield of paddy in Travancore could at least be doubled, not only could the import from Burma be discontinued, but there would even be a surplus after meeting the requirements of the present population. The question is, Could the yield be doubled? If the example of foreign countries is followed, there is no reason why it could not be. But there are certain serious obstacles to the general adoption of scientific methods of cultivation in Travancore. The foremost of these is the minute size to which holdings have been reduced by sub-division and fragmentation. From the statistics collected in connection with the economic census it is seen that about 10 per cent. of the holdings in Travancore are below 50 cents, 38 per cent. below one acre, 87 per cent. below 5 acres, $95 \cdot 5$ per cent. below 10 acres, and only $4 \cdot 5$ per cent. of the total holdings are of 10 acres or more. The size of an economic holding varies according to the conditions obtaining in different countries. It should ordinarily be such as will provide the means of subsistence to a family according to the standard of living current in the country. If a family consists of five members, the holding should at least be 10 acres in extent in Travancore, and if there are two workers in the family each worker will have 5 acres. If 10 acres is considered to be the size of an economic holding, more than 95 per cent. of the holdings in Travancore are uneconomic. The introduction of scientific methods of cultivation, however much the Department of Agriculture may try, cannot make much headway under such conditions. The chronic indebtedness of the cultivator is another handicap to agriculture. The Travancore Banking Enquiry Committee has estimated the total indebtedness of the rural population at Rs. 25 crores. It is not less than 20 crores according to the figures collected in the economic census. When there is such a heavy load of debt hanging round the cultivator's neck, it is next to impossible for him to find the money to invest in improved implements and chemical manures. He is, therefore, obliged to carry on cultivation in his old primitive way and rest content with what litte he is able to get out of his land. The Government of Travancore is doing all that is possible to help him financially. Taccavi loans are being granted, the co-operative movement has been started and is being developed rapidly, and a Land Mortgage Bank has recently been established. In spite of these measures of relief the financial position of the agriculturists has not improved materially. On the other hand, it has now become really embarrassing on account of the terrible economic depression. Under such circumstances the progress in revolutionising the methods of agriculture is bound to be slow, and any increase that may be brought about in the outturn of crops from the present cultivated area by this slow process of agricultural improvement is not likely to keep pace with the growth of the population.

Development of induatry and commerce.
73. In countries where agriculture fails to supply the requirements of the people, industry and commerce make up the deficiency. This is what one finds in Western countries where, since the Industrial Revolution, there has been a large exodus of the people from the rural parts to the towns, abandoning agriculture and seeking employment in industries. In Travancore the development of industries has so far not been very appreciable, and consequently agriculture has had to absorb a large majority of the numbers that are being added to the population year after year. We see this from the Increasing proportion of the population that is being supported by agriculture from census to census. The proportion was 47.4 per cent. of the total population in 1901, 53.6 per cent. in $1911,51.7$ per cent. in 1921 and 54.3 per cent. in 1931. 1921 was an exception probably due to the inaccuracies in enumeration. In this respect Travancore is only following the lead of India. The population supported by agriculture in India was $61^{\cdot 1}$ per cent. in 1891, 66.5 per cent. in 1901, 72.7 per cent. in 1911 and 72.98 per cent. in 1921. The resources of agriculture are already over-taxed. It is eupporting more population than it could, naturally at a reduced standard of life. What is really necessary is to draw away a portion of the population from agriculture instead of adding to its numbers from year to year. We have seen that in an economic holding every agricultural worker should have at least five acres of arable land. At present there are over 900,000 agricultural workers in Travancore and each of them has hardly $2 \frac{1}{2}$ acres of land under cultivation. To double this area half the number of workers, i. e., 450,000 of them, should be drawn away from agriculture. To provide employment to this surplus agricultural population and to the numbers that are being added to
the general population year after year, industry and commerce have to be developed. At present these employ only about 545,000 persons as against 517,000 employed in 1921. In -other words, the development of industry and commerce has been so small during the last decade that the number engaged on these occupations has increased only by about $5 \cdot 4$ per cent. Industrialization at a more rapid pace will alone enable the country to provide the means of subsistence to the growing population, which could not possibly be absorbed by agriculture, developing, as it does, rather slowly under many limitations and handicaps:
74. In spite of the best efforts that may be made for the development of the natural Checks on the resources of the country, its industries and commerce, it is doubful whether the problem gromith of popuof the increasing numbers of the population could be solved by such development alone, unaided by some method of checking the enormous growth that is now taking place. There are only two ways of doing it. Either the birth-rate must decrease or the death-rate must increase. The latter is inhuman. All civilized Governments have set their foot on it and have taken strong measures to stamp out such brutal practices as infanticide and abortion They have not only prevented the deliberate taking away of lives but have gorte further and adopted effective measures to reduce the incidence of death caused by disease, famine; and other natural causes. The result is that the death-rate in all countries is steadily declining. In England, for example, the death-rate per mille decreased from 23 in 1853 to 13 in 1916, in Germany from 27 in 1876 to 17 in 1911, and in France from 37 in 1781 to 19 in 1910. In Travancore, owing to the absence of correct vital statistics it is not possible to say in what proportion the death-rate is decreasing, if at all. As a result of the liberal medical aid that has been provided and the steps taken to improve sanitation and public health the death-rate must undoubtedly be moving downward. Thus, the operation of the "positive or life-destroying" checks on the growth of the population is being eliminated, and righly too. But unless the corresponding "prudential or birth-preventing" checks are made to operate freely at the same time, the combined effect of a falling death-rate and a rising birth-rate will lead to an increasingly larger population than the country could support.

The question of birth-control is a thomy field. A heated controversy has ranged Tound it during the past half a century and public opinion is still sharply divided on it. The Unemployment Enquiry Committee in Travancore recorded some evidence on the desirability of introducing birth-control methods in this State, but their conclusion, after weighing both sides of the question, was this: "Though we admit considerable force in the argument indicated above and though we agree that Travancore is over-populated under existing economic circumstances, it appears to us that public opinion in Travancore is not prepared to view with approval proposals of this nature. But we agree that public opinion should be more fully awakened to the facts than it appears to be at present."* Birth-prevention by artificial methods is revolting to the religious sentiments of the people, but it must be remembered that prevention of birth is more humane than to bring children into existence and allow them to suffer and die of agony. If the religious sentiment dictates against artificial birth-control, the humanitarian sentiment ought to counsel selfcontrol. Travancore, however, shows no sign yet of limiting the size of the family either by contraceptive methods or by a regulated married life.

## Section III-Houses and Families

75. The definition of house' in Travancore has not varied at different censuses. pefnition or It has always been defined as the dwelling place of one or more families with their bouse. resident servants, having a separate entrance from the commoa way. The common way does not necessarily mean a public way. It may be any common way or even a yard from which there is a separate entrance to the house. Servants' quarters or other separate
residential buildings situated in a compound, which may have no separate entrances from the public way but have such entrances from a common way or yard, have been treated as separate houses. A building in which two families having separate kitchens live in different rooms, has been taken as one house. Two or more distinct but contiguous buildings belonging to the same owner but let out to different families have been regarded as different houses. In the coolie lines in estates each tenement has been treated as a separate house. A house as defined above invariably corresponds with the dwelling place of a commensal family except when two or more commensal families live in different rooms of the same building. This practice of families with separate cooking arrangements, occupying different portions of the same house, has been prevalent, though on a small scale, amongst the matriarchal families in Travancore till recently, but with the break-up of the matriarchal system by the enactment of the Nayar, Ilava, and Nanjanàd Vellata Regulations about six years ago, the practice is fast disappearing. With the partition of the common properties under these Regulations the larwad houses have also come under division. Ordinarily, the whole house is allotted to one family or different buildings constituting the house are given to different families, in which case each family's share is partitioned of by an enclosure with a separate entrance from the common way. Clear instructions were issued on these points to the enumerators; and being mostly inhabitants of the localities to which they were posted, they were generally acquainted with the people and could not have, therefore, made mistakes in deciding whether a dwelling place should be treated as a separate house or not, as per the definition given.

76. The number of occupied houses returned at the present census is 929,930 as compared with 761,827 at the last census. The percentage of increase in houses and population during the last four decades are given in the marginal table. The difference between the two percentages was 3 in the first decade, 2 in the second, 1.9 in the third and $5 \cdot 1$ in the last decade. The variation in this difference is mainly due to variation in the proportion of children under 10 years as can be seen from the marginal figures. From 1921 to 1931 the proportion of children under 10 increased from 26.8 per cent. of the total population to 30.4 per cent. It this increase be discounted from the increase in the total population, the difference between the rates of growth in the population and houses during the last decade would drop from $5 \cdot 1$ to 1.5 per cent.

The increase in the number of occupied houses has been shared by all the divisions in the State and has been more or

| Disision | $\begin{aligned} & \text { Numpxr of of } \\ & \text { ocucuriet } \\ & \text { hususis in } \\ & 1931 \end{aligned}$ | Percentage of variation during 1921-1931 |  |
| :---: | :---: | :---: | :---: |
|  |  | Occupied houkes | Pupulation |
| Ādministrative |  |  |  |
| Sturtierr |  | 18.7 20.2 | - 24.0 |
| ${ }_{\text {Central }}^{\text {Corthery }}$ |  | 22.22 | $\xrightarrow{25 \cdot 2} \times$ |
| High Mange | 21, | ${ }_{77}$ | $\underset{x+9}{ }$ |
| $\underset{\substack{\text { Natural Division } \\ \text { Lowland }}}{\text { didel }}$ |  |  |  |
| Lowlanu | $\underset{4}{4}$ | (18.8 | ${ }_{27}^{27} \cdot{ }^{2}$ |
| Highlanid | ${ }_{58,462}$ | $4 \cdot 4$ | $5+\cdot 8$ | less uniform with the increase in the population. The distribution of the houses and the variations in houses and population by administrative and natural divisions are shown in the marginal table. One striking fact which the figures reveal is that though the rate of increase in houses is the same in the Central and the Northern Divisions, the rate of growth of population is higher in the latter than in the former. This may probably be due, at least partly, to the inaccuracies in the enumeration in 1921.

77. When more than one commensal family lived in the same house, the name of the Number of head of each family was entered in the house list and the block list. The number of such additional families, abstracted from the block lists, was found to be only 2,382 in the whole State, of which 1,767 were in municipal towns and the remaining 615 only in all the taluks together. The practice of separate families living in the same house is not so common in this country at present. Even on a limited scale it is seen more in towns than in rural parts. The total number of families found in the State at the time of the census is 932,312 . This gives on an average $5 \cdot 46$ persons per family, while the average number of persons per house is $5 \cdot 48$.
78. The number of persons per house at the last four censuses is shown in Sub-Honse-room. sidiary Table VII at the end of this chapter. The figures for 1921 and 1931 are given in

| State or Division | Number of persons per house |  |
| :---: | :---: | :---: |
|  | 1931 | 1921 |
| BTATE | $5 \cdot 48$ | 6.88 |
| Administrative Divicion. |  |  |
| Southern Division | $5 \cdot 61$ | 5:37 |
| - Oentral ${ }^{\text {, }}$ | 8.41 | 5.28 |
| Northern | $5 \cdot 48$ | $5 \cdot 16$ |
| High Range" | 5.01 | 481 |
| Natural Divicion |  |  |
| Lowlsid , | 5.59 | 5.84 |
| Midland " | b. 45 | $5 \cdot 25$ |
| Highland ${ }^{\text {n }}$ | 49 | 481 | the margin. The average number of persons per house has steadily risenfrom census to census. It was $5 \cdot 08$ in 1901, $5 \cdot 17$ in 1911, $5 \cdot 26$ in 1921 and $5 \cdot 48$ in 1931. These figures show that the rate of construction of new houses is not keeping pace with the growth of the population, and consequently the, house-room available to each person is gradually diminishing. In 1931 every 100 houses have had to accommodate 40 persons more than. in 1901. Takïng the different administrative divisions it is seen that the Southern Division has the highest number of persons per house, and the High Range the lowest, The Northern Division has a slightly higher average than the Central, though it has a lower density than the latter. In the natural divisions the variation in the number of persons per house varies directly as the density.

79. Subsidiary Table VII gives the number of houses per square mile at each of the Hoiso-density.

| State or Uivision | Number of houses per squapremilie |  |  |
| :---: | :---: | :---: | :---: |
|  | 1931 | 1921 | - |
| BTATE | 122 | 100 |  |
| Mdministrative Divisiong |  |  |  |
| Southern Divislon | 172 | 145 |  |
| Central ${ }^{\text {a }}$ | 133 | 109 |  |
| Northern ; | 128 | 104 |  |
| High Range ; | 19 | 11 |  |
| Katural Difision |  |  | - |
| Lowland : | 813 | 263 |  |
| Midiand : | 164 | 183 |  |
| Highland * | 17 | 11 |  |

there are in the latter. But the difference becomes less
 last four censuses. - The figures for 1921 and 1934 are extracted in the margin. As is to be expected the number of houses per square mile has risen during the last decade in all the administrative and natural divisions, corresponding to the increase in the population and in the density. The Lowland Division which is the most densely populated region has naturally the highest number of houses per square mile and the Highland with its least density has the smallest number. In the former there are 18 times as many houses per square mile as striking when the number per square mile of cultivable or cultivated area is considered as can be seen from the marginal igures. The houses in the Lowland Division are getting so crowded that there is only a little over an acre and a half of cultivated land for each house in that division, while in the Highland each house gets nearly $5 \frac{1}{2}$ acres and in the Midland about $2 \frac{3}{4}$ acres.

Proximity of housea.

Tondenoy
for the breakup of joint famillea.
80. The tendency for the over-crowding of houses in thickly populated areas can be seen more clearly from the marginal table showing the approximate distance in yards from

| Stato or Division | Proximity of houses in yairds |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1921 | 1911 | 1001 |
| STATE Administrative Division | 171.2 | $189 \cdot 1$ | 208.8 | 216.8 |
| Southern Divition | $144 \cdot 2$ | 157.1 | 167.8 | $178 \cdot 5$ |
| Central ${ }^{\text {n }}$ | $164 \cdot 0$ 167.2 | 1818 | $195 \cdot 1$ 197.2 | 2068 |
| Northern ", | $167 \cdot 2$ 438.9 | $185 \%$ $570 \%$ | 197-2 | 211.4 $945 \cdot 6$ |
| High Range ", | 438.9 | 570\% | 7148 | 9456 |
| Nataral Division | . |  |  |  |
| Lowland " | $107 \cdot 1$ | 116.6 | 123.2 | 129.9 |
| Midland ", | $147 \cdot 7$ | 1640 | $176 \cdot 1$ | $190 \cdot 1$ |
| Highinnd ", | $\pm 38.7$ | 570.2 | $668 \cdot 7$ | 772.1 | house to house in the State and in the different divisions at each of the last four censuses, on the assumption of a uniform distribution of - the houses. The figures speak for themselves. The average distance from house to house has fallen from 216.9 yards in 1901 to $171 \cdot 2$ yards in 1931 for the State as a whole. In the administrative divisicns the houses in the Southern Division are three times as near to one another as those in the High Range, while in the natural divisions the distance from one house to another in the Lowland is less than one-fourth of what it is in the Highland.

81. The discussion in the foregoing paragraphs gives no clue whatsoever as to whether there is any tendency for the breaking-up of joint families in Travancore. The enactment of social legislation, permitting the partition of the common properties of matriarchal tarwads, already referred to, should naturally lead to the break-up of these joint families into smaller units. But the fact that the number of persons per house has increased from $5 \cdot 26$ in 1921 to $5 \cdot 48$ in 1931 does not appear to point to the existence of such a tendency. These figures do not, however, disclose, the real position. For, as has already been pointed out, the increase in the number of persons per house has been contributed by a larger proportion of children under 10 years in 1931 than in 1921. This proportion was 26.8 per cent. of the total population in 1921 and 30.4 per cent. in 1931. In considering the question, whether large families are breaking up into smaller ones, these children should naturally be excluded. Again, the calculation should more appropriately be made on the natural than on the actual population. If children under 10 years are excluded from the natural population and the average number of persons per house then calculated, it will be found that the number per house was 3.79 in 1921 and 3.73 in 1931. Or, expressing it in another way, there were 26 houses in 1921 and 27 in 1931 for every 100 persons of the natural population excluding children under 10 years. The increase, though slight, certainly shows that joint families have been broken up in the last decade; and this, as has already been observed, is mainly the result of the partition of the matriarchal tarwads of Nāyars, Ilavas and Nānjanād Vel!̣ā!as.

Buildings other than houses-
82. All buildings, irrespective of the purpose for which they were used, were entered in the house list and the block list. The number of occupied houses has been abstracted for the purpose of the various tables. The statistics regarding the other buildings are not usually compiled, but I have had these figures. separately compiled this time, and they are given below:-

| State or Division | Shops | Schools and Colleges | Public offles and other Government buildinga | Temples | Charches | Mosques | Mis. celianooun buildinge | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| grate | 35,889 | 4,040 | 2,048 | 9,250 | 2,427 | 756 | 13,489 | 69,698 |
| Southara Division. |  | 1,209 2,213 |  |  | 1,027 778 | 322 237 | 5,831 4,693 | 23,967 23,386 |
| Oentral Northers | 12,962 $18,5.59$ | 2,213 $1, t^{\prime}, 6$ | 886 500 | 1,917 1,673 | 778 806 | 237 193 | - 4,693 | 23,386 21,1888 |
| High Range - | ${ }^{16}$ | ${ }^{1} 22$ | 58 | 48 | 16 | 4 | 609 | 768 |

It is interesting to compare the State figures under some of the above items with the corresponding figures given in The Memoir of the Survey of the Travancore and Cochin States embodying the results of the survey conducted by Ward and Conner in 1816-1820. The two sets of figures are given below:-

|  | 1818-1820 |  | 1831 |
| :---: | :---: | :---: | :---: |
| Public institutions for education | . | 264 | 4,940 |
| Public Offices of various descriptions | - | 1,026 | 2,048 |
| Principal templee dedicated to the superior divinities | -** | 3,362 |  |
| Temples and groves dedicated to several minor divinities | :•• | 15,862 | 9,250 |
| Places of worship belonging to the inferior castes | ... | 2,434 |  |
| Churche日 -.. | $\because$ | 301 | 2,627 |
| Mosques -... | ** | 254 | 758 |

SUBSIDIARY TABLE I (A)
Density, Water-supply and Crops

| Division | Mean density per square mile |  | Percentage of total area which is |  | Percentage of cultivable area which is |  | Percentage. of grisu cultivatal area which is irrignted | Normal rainfall in inches |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Of total area | of net cultivated arce | Caltivahle | Net caltivated | $\underset{\text { oultivated }}{\text { Net }}$ | Double сторped |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 8TATE | 668 | 1,482 | 68-38 | 45.10 | $78 \cdot 38$ | 7-94 | $18 \cdot 68$ | 09.19 |
| Administrative Division |  |  |  |  |  |  |  |  |
| Southern | 968 | 1,757 | C3.98 | $54 \cdot 76$ | $85 \cdot 62$ | $19 \cdot 18$ | 94.87 | 89.44 |
| Central | 717 | 1,629 | 52.18 | 44.04 | $84 \cdot 47$ | 11.61 | 877 | 100.43 |
| Northern | 700 | 1,561 | $60 \cdot 18$ | 61.44 | 77.78 | $2 \cdot 38$ | $12 \cdot 69$ | 128-20 |
| High Range | 94 | 450 | 75.88 | 20.93 | 27.69 | 007 | $4 \cdot 47$ | $146 \cdot 83$ |
| Natural Dixiaton |  |  |  |  |  |  |  |  |
| Lowland | 1,743 | 2,186 | $87 \cdot 38$ | 79.72 | 91-20 | $12 \cdot 63$ | 23.94 | 78.00 |
| Midland | 892 | 1,303 | 86.03 | $68 \cdot 48$ | 7960 | 8.42 | 14.68 | 109.00 |
| Highland | 82 | 591 | 34-50 | $13 \cdot 87$ | 40.09 | $8 \cdot 46$ | 6.98 | 128.00 |



1. The grows cultivated area is the net cultivated ares plus the double-crojped area.
2. The proportions given In colurnns 2 to 17 were calculated from the figures eapplied by the Land Rovenue Departmont and those coctained in The Statistics of Tramencore.
3. The boundaries of the natural divisions have been altered at this census and hence the figaren given for these civisiona in this table cunnot be compared with the correaponding figurea for the last cconus.

## SUBSIDIARY TABLE I (B) <br> Density by taluk



[^9]2. In the case of those taluks in which municipal towns are situsted the density of the talaks exciuding the towns is
given in ifalics in colomn 5 . given in itatices in colomn 5.

SUBSIDIARY TABLE II
Distribution of the population olassifled according to density



Nots:-The proportions per cent, which the ares and popalation of each group bear to the total are givon in ualica below the absolute figares for the State and the divisions.

## SUBSIDIARY TABLE III

Yariation in relation to density since 1881


## SUBSIDIARY TABLE IV

## Yariation in natural population

| Dirision | Popalation in 1931 |  |  |  | Population in 1921 |  |  |  | Varistion percent. (1921-1931) innaturalpopulationIncrease ( 4 )Decrease ( |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actal Popalation | Inmigranta | Emi. grants | Nistaral Population | Actual Popalation | Immigrants | Eni. grants | Natural Popalation |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8TATE | 5,085.978 | 135,108 | E8,488 | 5,019,838 | 4,003,062 | 73,691 | 80,280 | 3,982,781 | +88.7 |
| Administrative Divicion |  |  |  |  |  |  |  |  |  |
| Southern | 1,433,936 | 28,744 | 20,004 | 1,425,916 | 1,156,373 | 18,096 | 11,784 | 1,150,061 | +24:0 |
| Central - | 1,861,472 | 33,408 | 37,995 | 1.845359 | 1.485,178 | 33,354 | 23,048 | 1,476,872 | +25.0 |
| Socthers | 1,693,321 | 84,157 | 30,337 | 1,673,701 | 1,305,590 | 29,593 | 16,116 | 1,292,113 | +29.5 |
| High Range | 105,24 | 89,831 | 501 | 15,894 | 56,921 | 43,889 | 395 | 13,425 | +18.4 |
| $\begin{aligned} & \text { Iaturel } \\ & \text { Divicion } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| Lowiad | 2,309,548 | 88.128 | 74.321 | 2,378,742 | 1,923,492 |  |  |  |  |
| Midilad | 2,415,494 | 89.714 | 80,675 | 2,406,465 | 1,894,618 |  | - |  |  |
| Highand | 290.930 | 120,363 | 5,112 | 175,673 | 187,947 |  |  |  |  |

[^10] of there division for the previon censas are not arailabia.

## SUBSIDIARY TABLE $\bar{T}$ <br> Comparison with vital statistios

| Fivision | 1921-1931 Total number of |  | Number per cent, of population of 1921 |  | $\begin{aligned} & \text { Exsean }(+) \text { or } \\ & \text { deficienery }(-) \\ & \text { of birthe over } \\ & \text { deaths } \end{aligned}$ | $\begin{aligned} & \text { Incruase ( }+ \text { ) or Decreense( }- \text { ) } \\ & \text { of populntion of } 1991 \\ & \text { compared with } 1921 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Births | Deatha | Births | Deaths |  | Natural Population | Actual Popalation |
| 1 |  | 3 | 4 | 5 | 6 | 7 | 8 |
| STATE | 819,178 | 446,818 | 20-4 | 11-1 | +372,854 | +1,056,605 | +1,089,811 |
| Administrative Division |  |  |  | - |  |  |  |
| Southern | 207,277 | 133,573 | 17•9 | 11-6 | + 78,704 | +975,853 | +877,883 |
| Central | 298,896 | 163,930 | $20 \cdot 1$ | 10.4 | +144,966 | +308, 487 | +374,294 |
| Northern | 206,992 | 148,066 | $22 \cdot 7$ | 11.3 | +148,926 | +981,888 | +380,731 |
| High Range | 16,008 | 10,750 | $28 \cdot 1$ | $18 \cdot 9$ | + 3,258 | + 8,460 | + 48,303 |
| Natural Division |  |  |  |  |  |  |  |
| Lowland | 368,080 | 209,135 | $19 \cdot 1$ | 10.9 | +188,808 |  | + $\mathbf{4 6 0 , 0 5 2}$ |
| Midland | 400,866 | 206,278 | 21.2 | 10.9 | +194,888 |  | +520,878 |
| Highland | 50,277 | 30,906 | 26-8 | 16.4 | + 19,371 |  | +102,988 |

biotz:-The varintions in column 7 for natural divisions cannot te worked out as figures showing the antural population of these divisions for the previous cenaus are not available.

SUBSIDIARY TABLE VI
Yariation by taluks classified according to density (A)-Actual figures

| Nntural <br> Division | Decrde | Variation in taluks with a population per square mile, at commenceraent of deosile, of |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 150 | 150 to 3003 | 300 to 400 , | 450 to 600 | 600 to 750 | 750 to 900 | 100 to 1,080 | $\begin{aligned} & 1,050 \text { and } \\ & \text { ovar } \end{aligned}$ |
| STATE | 2 | 3 |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  | 1891-1901 | + 32.388 | + $62.282+$ | + $42.186+$ | + 77,105 | + 80.247 | 54,467 | + 58,210 | 48,649 |
|  | 1901-1911 | + 45.417 | + 30,945 | + 78.990 + | + 44,755 | + 67.040 | + 57,194 | + 78.619 | + 78,958 |
|  | 1911-1821 | + 80.299 | + 51.628 | + 58,376 + | + 80,807 | + 80.838 | + 62.982 | + 48,441 | + 189.716 |
|  | 1921-1931 | + 120,378 | + 31,131 | +82,058 + | + 178,636 | 23,647 | + 155,355 | +57,009 | + 483,700 |
| Lowland | 1891-1901 |  |  |  | $+\quad 10,262$ | 18,252 | + 10,072 | + 43,101 |  |
|  | 1901-1911 | - |  |  | .. ${ }^{\text {a }}$ | 1,490 | + 11,574 | + 40,657 | + 141,528 |
|  | 1911-1921 | $\cdots$ | . | - | .. | 12,605 | + 18,921 | + 21,176 | + 209,408 |
|  | 1921-1931 |  | - | . | - | - | 43,068 | , | +22,043 |
| Nidland | 1891-1901 | .. | + 42,635 | + $57,518+$ |  |  | + 84,880 | + 12,022 | - |
|  | 1901-1911 | $\cdots$ | + 23,998 | + 71,154 + | + 83,045 | $+\quad 6,231$ | + 6,867 | + 68,797 |  |
|  | 1911-1921 | $\cdots$ | $\cdots+$ | $+134,956+$ | + 64,522 | $+\quad 34,074$ |  | + 7,089 | + 85,601 |
|  | 1921-1931 |  | $\cdots$ | $\cdots+$ | + 2339367 | 123,046 | 48,040 | . | $+114,038$ |
| Highland | 1891-1901+ | $+\quad 17,654$ | + .3,738 |  |  | - | . | - | . |
|  | $\begin{aligned} & 1901-1911 \\ & 1911-1921\end{aligned}+$ | $+\quad 35,710$ | 2,733 |  | . | $\cdots$ | - |  | $\cdots$ |
|  | $\stackrel{1911-1921}{1921-1931+}$ | $+\quad 41,401$ $+\quad 93,348$ | $+\quad 3,739$ $+\quad 9,635$ | $\cdots$ | $\because$ | - | $\because$ | $\cdots$ | - |
|  |  |  | $+\quad$ +,630 |  |  |  | - | . |  |

## SUBSIDIARY TABLE YI (B)

Proportional figures


## SUBSIDIARY TABLE XII

Persons per houise and houses per squariè mile

| Division | Average number of persons per house |  |  |  | Average namber of houses per square mile |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1631 | 1921 | 1917 | 1901 | 1981 | 192 i | 1911 | 1901 |
| 1 | - 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| - 8TETE | $5 \cdot 48$ | $5 \cdot 26$ | -6.17 | 5.08 | 128 | 100 | 87 | 76 |
| Idministrative Division |  |  |  |  |  |  |  |  |
| Soatbern | 5-61 | $5 \cdot 37$ | $5 \cdot 22$ | $5 \cdot 07$ | 172 | 145 | 127 | 111 |
| Central - | 8.41 | 5.28 | $5 \cdot 21$ | $5 \cdot 06$ | 133 | 109 | 94 | 84 |
| Northern | 5-48 | 5. 16 | 5.09 | 5-12 | 128 | 104 | 92 | 80 |
| - High Range | 5.01 | 4.81 | 5-19 | $5 \cdot 23$ | 19 | 11 | 7 | 4 |
| ITatural Divicion |  |  |  |  |  |  |  |  |
| Lowland | $8 \cdot 89$ | $5 \cdot 34$ | - $5 \cdot 18$ | 5-08 | 812 | 263 | 235 | 818 |
| Midland | 5.45 | 8-25 | $5 \cdot 20$ | 5-11 | 164 | 133 | 115 | 99 |
| Bighland | 4.94 | 4.61 | $4 \cdot 75$ | 4.79 | 17 | 11 | 8 | 6 |
|  |  |  |  | 19 |  |  |  |  |

## CHAPTER II

## THE POPULATION OF TOWNS AND VILLAGES

Definition of town.

Reference to atatistics
83. A towe with a population of 100,000 or more is a city. Travancore does not yet possess a city. Trivandrum, its capital, containing 96,010 inhabitants, has come very near the border line and will easily get into the category long before the next census. According to the definition laid down in the Imperial Census Code, a town includes ( 1 ) every municipality, (2) all civil lines not included within municipal limits, (3) every cantonment, and (4) every other continuous collection of houses inhabited by not less than 5,000 persons, which the Provincial Superintendent may decide to treat as a town for census purposes. In Indian States, where there are no municipalities, this definition will have to be extensively applied. In dealing with questions arising under head (4) the Provincial Superintendent is required to have regard to the character of the population, the relative density of the dwellings, the importance of the place as a centre of trade, and its historic dssociations. There are 19 municipalities in Travancore, and according to the definition given above all of them are towns. These 19 municipalities existed in 1921 also. There are no cantonments or civil lines which may be included under towns. There are other places which partake of an urban character and 27 such places have been declared as towns for the present census. In 1921 there were only 19 of them. The population basis has not been followed in determining whether a place should be treated as a town or not. In England all sanitary districts with 2,000 or more inhabitants are included under towns, and in the United States all "incorporated" places with a population of 2,500 or more are brought under this category. There are several villages in Travancore with a population of less than 5,000 which are more or less urban in character. They possess the usual amenities associated with town life, such as markets, shops, better classes of schools and other public institutions, and some of them are even more populous than a few of the municipalities. But all of them have not been treated as towns. The places which have been included in the category of towns for census purposes in 1921 and 1931 are those which have been declared as towns under the Police Regulation and have been provided with the conservancy staff. Of the 27 towns of the above category as many as 15 have a population of 5,000 or more, and some of them have densities ranging from 8,000 to 27,000 persons per square mile, while among the municipalities Kulithura has only less than 5,000 inhabitants, and Attingal and Neyyatinkara have densities below 1,000 per square mile. Among the villages which have not been included in the category of towns there are more than 200, each having a density of more than 2,500 persons per square mile. Villages in the lowland regions of the State have grown considerably in recent years, not only in the density of population but also in respect of other urban characteristics. The development of communications, the phenomenal growth of motor traffic, the changed mode of life of the people which has brought into existence hotels and restaurants, shops and bazaars, the opening of a large number of schools, and the rapid spread of English education have all contributed to the disintegration of the old village system and the conversion of many rural villages into areas of urban character.
84. The statistics dealt with in this chapter are contained in the following tables :-
(i) Imperial Table I showing the area, houses and population of towns and villages.
(2) Imperial Table III showing the towns and villages classified by population.
(3) Imperial Table IV showing the towns classified by populalion with variations since 1881.
(4) Imperial Table $V$ showing the towns arranged territorially with population by religion.
(5) State Table I at the end of Part II (Imperial Tables) showing the area, population and density of each taluk and town, together with the population in 1921 and the percentages of variation in population during the past two decades.
(6) Subsidiary Table I showing the distribution of population between towns and villages.
(7) Subsidiary Table II showing the number per mille of the population of each maia religion who live in towns.
(8) Subsidiary Table III showing the towns classified by population.
85. Each ward in a municipal town was taken as the unit for the purpose of the Provedure in census and all the wards in a town were constituted into a charge with the President of teensung of the municipality as the Charge Superintendent. In the other towns the kara formed the towna. unit, each town was treated as a circle, and all the towns in a Sanitary Circle formed a charge with the Sanitary Circle Officer as the Charge Superintendent for purposes of inspection, the administrative control being vested in the Tahsildar of the taluk in which the towns were situated. Special arrangements were made for taking , the census, of the floating population in towns on the census day. The census of the inmates of jails, lock-ups, hospitals, asylums, and other public institutions in towns was taken under the supervision of the officers in charge of them.
86. The limits of some towns have been altered since the last census. The present Yariation in population of these towns has to be adjusted for these changes in order to ${ }^{\text {'a assess }}$. the :correct ${ }_{1931}^{\text {the area ainco }}$

| Tomu | Ares added or deductedSquare miles -qual |  | Increase per cent. of popnlation daring the decade1921-1931 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Recorded | ${ }^{\text {Adjusted }}$ |
| Trivandrum | ${ }_{+1}+23$ | 2.112 | ${ }^{+31.9}$ | +29.0 |
| Nagercoil | + +1.43 | 602 206 | $++126+248$ | +23.0 +10.4 |
| Attional | +3.0 | 2,440 | $\pm{ }^{+12}$ | ${ }_{+18.1}^{+1}$ |
| $\xrightarrow{\text { Quilch }}$ | +0.0.29 | $\underset{\substack{1,687 \\ 166}}{ }$ | $\stackrel{+34.2}{+27.0}$ | +27.6 +25.6 |
|  |  |  |  |  | rate of increase during' the past decade. The statement in the margin shows the changes made in the area of some towns, the adjustments made in the population, and the recorded and adjusted rates of increase during the decade. The area of all the towns mentioned in the statement except Attingal has been extended, and consequently the adjusted rates of increase of the population of these towns between 1921 and 1931 are lower than the recorded rates:. In the case of Attingal alone there has been a decrease of 3 square miles in the area, and if the area had remained the same as in 1921 its population would have shown an increase of 18.1 per cent. instead of the recorded decrease of 3.9 per cent.

87. We have already seen that the urban area in Travancore can be divided into Number zud municipal and non-municipal towns. There are 19 of the former-and 27 of the latter as types of townt against 19 of each at the last census. The towns can also be classified according to the chief occupations of their population, their historical associations and other factors of importance. By this method of classification 23 towns may be treated as agricultural and distributive, 9 as industrial and commercial, and 2 as market towns. Of the remaining 12 towns, Trivandrum which is the capital of the State stands by itself. Similarly, Alwaye, which on account of the Periyär river that flows through it has been growing in importance as a health resort during the summer, may be placed in a separate category. Padmanabhix puram and Attingal constitute another group in virtue of their historical importance. The former was the capital of the State and the headquarters of the Royal House until about two centuries ago, while the latter, besides being the headquarters of the Ranis of Attingal
whose sons are the reigning sovereigns of Trevancore, has risen into importance on account of the customary annual visits paid to it even to this day by the sovereign and the senior female member of the Royal House. Eight other towns owe their importance to the existence of rich and renowned temples which have attracted pilgrims from far and wide from very early times. The towns classified on the above basis are shown below:-

TYPES OF TOWNS
(M)-Municipality

Ompital of the staitd

(T)-Census Town

- Balaramaparam (I)

20. Qullon (M)

Kayankulam (M)
22. Alleppey (M)

Adrionituxhl and distributire tomen
24. Aramboly (i)
. Bhuthapandy (I
Kulthurs (M)
88. Neyyattinlises (1)

29، Nedumangad (T)
80. Karunagapally (I)

1. Mavelikart (*)
2. Punalut (T)
3. Shenkotta (M)
4. Achanputhur (N)
5. 
6. 

- Thiravels (

41 Manday (I)
42. Parur (M)
s. Perumpavar (I)
45.
46. Minachil (T)

Twenty-five of the above towna are taluk headquarters now, while five others were headquarters of taluiks at the time of the last census. Trivandrum, Varkala, Quilon, Kottarakkara; Punalur, Shenkotta and Alwaye are situated on the railway line.
88. The aggregate population of the towns according to the present census is 551,788 as against 404,654 in 1921. The population enumerated may be taken to be more or less the normal urban population of the State. As has been pointed out in paragraph 8 in Chapter I , owing to the special measures taken in this census the floating population enumerated was much less than that in the previous censuses. The possibility of the people ordinarily residing outside the towns moving into them on the census day was greatly minimised by closing all the factories and other institutions which drew workmen from the suburbs of towns, by stopping the motor bus service and by closing the markets, shops and bazaars on the census morning. As a result of these measures the floating population enumerated in Travancore was only three per mille. Moreover, more than 95 per cent of the aggregate population of the State were enumerated in the districts in which they were born. It may, therefore, be assumed that the de jure population of the towns does not differ materially from the de facto population enumerated at the census.
89. Of the total urban population of 551,788 , about 74 per cent. $(408,462)$ live in municipalities and 26 per cent. ( 143,326 ) in other towns, the corresponding, proportions in 1921 being 80 per cent. and 20 per cent. respectively.. The following diagrams show

The distribu:: tion of the 1 arban popalation in different types of torms. the population of the various municipal and other towns in .1931. . Trivandrum leads off

with a population of 96,016 . The next largest town, Alleppey, has not got even half the population of Trivandrum. In 1921 it occupied the third place, the second place being held by Nagercoil, but at the present census it has pushed Nagercoil behind. Similarly, Kottayam which was behind Changanachery in 1921 has now gone over it, and Kayankulam which was next to Attingal in 1921 has overtaken it. The distribution and proportion of the urban population living in towns, classified according to their importance, are shown in the marginal statement. The capital of the State contains 17.4 per cent. and the nine industrial and commercial towns 32.7 per cent. of the - aggregate urban population Half the urban population live in these ten towns and the other half in the remaining 36. •These figures show how irregularly the popula; tion is distributed in the various towns. The wide disparities in the distribution will be brought out prominently by the average population of the different types of towns.

The arepage poprfation of theprifileront types of tomins
90. Taking all the towns:together, it is seen that the average population of a town stood at 11,995 in 1931 as against 10,648 in 1921, showing an increase of $12 \cdot 6$ per cent. The average population of the municipal towns has increased from 17,098 in 1921 to 21,498 in 1931 or by $25 \cdot 7$ per cent. and that of the other towns by 26.4 per cent. from 4,200 to 5,308 . If the municipal towns are divided into major and minor, according as they contain more or less than 20,000 inhabitants in 1931, it will be seen that the average population of the six major municipalities has increased from 33,698 to 44,329 , i.e, by 31.5 per cent. and that of the 13 minor municipalities from 9,437 to 10,961 or by 16.1 per cent. only. The nineteen other towns censused in 1921 and 1931 show an increase of 22.5 per cent. in the average population, being 4,200 in 1921 and 5,145 in 1931, while the eight new towns censused in 1931 have an average population of 5,697 .

The industrial and commercial towns have the largest average population of 20,030 if the capital of the State is left out of account. The next in order are the market towns whose average population is 15,857 , then come the old urbanised areas with an average population of 10,462 , next the agricultural and distributive towns and finally the temple towns which have an average population of 6,954 and 6,912 respectively. The average population is clearly an index of the size and importance of the different types of towns.

Distribution of.the urban popuiation in administrati dixisiong.
91. Among the administrative divisions the Southern Division has 19, the Central 15 and the Northern 12 tawns, while there is none in the High Range. Among the natural divisions 24 towns are in the Lowland, 19 in the Midland and 3 in the Highland. The three towns in the Highland Division are Bhuthapandy, Punalur and Shenkotta. Strictly speaking, these towns are not in the highlands, but they happen to be included in the Highland Division on account of certain fortuitous circumstances. Shenkotta is situated at the eastern boundary and Punalur and Bhuthapandy at the western boundary of the Highland Division. The pakuthies in which these towns are situated are included in this division and as they could not be divided between two natural divisions the towns also have had to be included in the same division.

The statement in the margin shows the distribution of the urban population in the various divisions. The Southern Division which contains the capital of the State has the highest proportion of the urban population and the Central Division which contains the industrial and commercial towns of Quilon and Alleppey comes next, followed by the Northern Division. In the natural divisions the Lowland Division which contains the capital and most of the industrial and commercial towns holds as much as 73 per cent. of the urban population, while the remaining 27 per cent. should strictly be regarded as belonging to the Midland Division, but for the reason already stated 5 per cent. have gone into the Highland Division. The above figures show that there is a fair distribution of the ürban population among the three administrative divisions of the plains, and that among the natural divisions the urban population is congregated mostly in the Lowland Division wherein are situated all the important industrial and commercial centres. 1

| Administrative or Natural division | Number of towns | Urban population | Proportion por cent. to the total urban population |
| :---: | :---: | :---: | :---: |
| Sonthern | 19 | 234,132 | 42.4 |
| Central | 15 | 195,686 | $35 \cdot 6$ |
| Northern | 12 | 121,970 | 22.1 |
| Lowland | 24 | 403,816 | 78.1 |
| Midlaml | 10 | 122,808 | 22.2 |
| Highland | 8 | 25,066 | 4.7 |

The eroportion of urban to rurqi populaflon.
cent. which is the highest. The proportion in the Highland is higher than in the Midland, but this, as has already been explained, is due to the presence of three towns which really ought to go with the Midland-Division.


The proportions of the urban to total population in Travancore, a few other Indian States, Madras Presidency, and some of the districts thereof are shown in the margin. All the States, the Madras Presidency and all districts in Madras ercept South Kanara and Malabar, for which statistics are given, have a higher proportion of urban population than Travancore. South Kanara and Malabar, the only districts which resemble Travancore in natural conditions, have a lower proportion than this State. Evidently, there is a more rapid growth of towns in Travancore than in the allied districts in the Madras Presidency. The growth of towns depends more or less on the development of industries. In agricultural combries towns grow far more slowly than in industrial ones In England and Wales, for example, the growth of towns has been phenomenal as can be seen from the statement
below. Out of every 1,000 persons .in England and Wales 502 lived in cities and towns in 1851, the proporion increased to 793 in 1921, and at the recent census it

| Proportion per cent. of urban to total population in England and Wales |  |  |
| :---: | :---: | :---: |
| Year | England and Wales | Travancore |
| 1851 | 50.2 | - |
| 1861 | 54.6 | -* |
| 1871 | 61.8 | $\cdots$ |
| 1881 | 67.9 | $4 \cdot 8$ |
| 1891 | $72 \cdot 0$. | $3 \cdot 6$ |
| 1901 | $77 \cdot 0$ | $6 \cdot 2$ |
| 1911 | $78 \cdot 1$ | $6 \cdot 2$ |
| 1921 | $79 \cdot 3$ | $10 \cdot 1$ |
| 1931 | -• | $10 \cdot 8$ | must have risen still further. At - present probably more than four-fifths of the entire population there are residents of cities and towns. The United States of America, on the other hand, in spite of the great development of her industries, still remains largely an agricultural country, and consequently she has a proportionately less urban population than Great Britain. In 1900 her urban population was only 40 per cent. of the total and in 1920 it rose to 51.4 per cent. It is not surprising, therefore, that in a country like Travancore which is mainly agricultural the urban population does not exceed 10.8 per cent. of the aggregate population. A more rapid urbanization of Travancore will only follow in the wake of an equally rapid industrialisation of the country.

The growth of : 93. The growth of the urban population in Travancore during the [last 50 years is the urban population. shown in the following statement:-

| Year | Number of lowns | Urban population | Actual increase or decrease in the decade | Incresse or docreace per cent. | Percentage of the urban to the total population |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1881 | 6 | 116,224 | $\cdots$ | -• | $4 \cdot 8$ |
| 1891 | 6 | 93,034 | - 23,190 | -19.9 | $3 \cdot 6$ |
| 1901 | 9 | 183,835 | + 90,801 | +97.6 | B.2 |
| 1911 | 11 | 212,000 | + 28,255 | +15.8 | 6.2 |
| 1921 | 38 | 404,654 | +192,584 | + 00.8 | 10.1 |
| 1931 | 46 | 551,788 | +147,184 | $+86.8$ | 10.8 |

The urban population has increased by 375 per cent. since 1881, but a large proportion of the increase is due to the addition of new towns at different censuses. In 1881 there were only six towns and in 1931 the number increased to 46. In the course of development of the country, places which were once rural villages get transformed into urban areas. When urbanization and growth of. population of a place are sufficiently advanced, it is treated as a town for Police and sanitary purposes, and when its importance has grown to the extent of deserving a municipal council lor its administration, it is converted into a municipality. In this manner several new municipalities and new towns have been added from time to time. 'The natural growth of the urban population during the last half a century could, however, be seen from the increase in the population of the towns which existed as such at the first census. The population of such towns increased from 116,224 in 1881 to 253,999 in 1931 or by $118 \cdot 5$ per cent. The real growth of the urban population during the different decades is revealed by the figures given in the margin showing the increase in the population, at the beginning and end of each decade, of the towns which existed as such at the beginning of it. The variation in the urban population has not followed the order of variation in the aggregate population. This is due partly to the alterations made in the limits of the towns in intercensal periods and partly also to inaccuracies in enumeration at some censuses. During the last decade the increase in the population of the towns which existed as such in 1921 was $25^{\circ} \mathrm{I}$ per cent, as against the recorded increase of 27.2 per cent, in the total population.
:- . The statement' given in the margin which has been prepared from Subsidiary: Table III at the endof this chapter shows. the proportion of the population of each class of towns to the total urban population in 1921 and 1931 and the: increase in the population of each. class during the last two decades. Tri: vandrum, the largest town in the State falls in the second class. Its population has increased faster than the population of the State. Of the different classes of towns it has had the largest increase during the last decade and the rate of increase has been more than twice as large as that in the previous decade. The number of towns with a population of 20,000 to 50,000 has increased from 3 to 5 , the proportion of their population to the total urban population from 22.6 per cent. to 30.8 per cent. and the rate of increase from 19.7 per cent to 31.6 per cent. In the next class which contains towns having a population of 10,000 to 20,000 , there has been a similar all-round increase in their number, in the proportion of their population to the total and in the rate of growth of the population. In the next two classes, taken together, the number has increased from 26 to 29 , but the ratio of their population to the total and the rate of growth have decreased.

It will be seen from the statement given above that a large majority of the urban population of Travancore live in towns with a population of 10,000 or over and that their proportion has been increasing from decade to decade. In 1921 these towns had 67.2 per cent. of the total urban population, and in 1931 it has risen to 72.3 per cent. This category includes the capital of the State and all the important industrial and commercial towns, and these towns are naturally growing faster than the smaller and less important ones. This inference is also supported by the variations in the population of different types of towns. Leaving the capital of the State out of account and taking into consideration only those towns which were censused in 1921 and 1931, the percentages of increase in the population of different types are shown in the margin. The

| Type of towns | $\begin{array}{\|c\|} \text { Number of } \\ \text { towne censused } \\ \text { in } 1921 \text { and } \\ 1931 \end{array}$ | Increase per cent of population during the decade 1921-1931 |
| :---: | :---: | :---: |
| Industrial and commercial towns | 8 | 30.9 |
| Marter towns | 2 | $29 \cdot 5$ |
| Agricultural and distribarive nowns | 16 | $19 \cdot 6$ |
| Temple towns | 8 | 18.2 |
| Health resort | 1 | $12 \cdot 5$ |
| Oid urtanised areas - | 2 | 3-6 | increase is the highest in industrial and commercial towns and they are closely followed by the market towns. In both these classes the rate of growth is higher than that of the State population. The population of agricultural and distributive towns has imcreased only by 19.6 per cent. and that of the temple towns by 18.2 per cent. both of which are less than the increase in the general population. Alwaye, the health resort, has shown an increase of 12.5 per cent. only. The season at Alwaye commenced before the date of the census in 1921, but only after the census date in 1931. If the season had been on during the present census, the increase would have been considerably more than what has been recorded. The very low rate of increase, piz., 3.6 per cent., in the two towns of old urbanised areas (Attingal and Fadmanabhapuram) is due to the reduction of the area of Attingal from 16 square miles in 1921 to 13 square miles in 1931. The industrial and commercial as well as the market towns stand out prominently, showing a much higher rate of growth of population than the other classes, and all towns having a population of more than 20,000, excepting Trivandrum, are in the above categories.

94. On page 21 of the Travancore Census Report for 1921 the area of the nineteen Density in mumicipal towns is given as 109 square miles, and the number of persons per square mile has arban aree been calculated on this area. The area of some towns furnished by the Mumicipal Presidents then was incorrect. The correct area of the nineteen municipal towns in 1921 was only $85-05$ square miles, and the total area of these and the nineteen other towns censused in 1921
was 137.08 square miles. The present area of these towns is 138.08 square miles. The adjusted population of 38 towns was 404,654 in 1921 and 503,881 in 1931. These figures give a density of 2,952 persons per square mile in 1921 and 3,649 in 1931 .

Taking the municipal towns separately, the area has increased from 85.05 square miles in 1921 to 86.05 square miles in 1931 and the population from 324,862 to 406,129 which gives a density of 4,720 in 1931 as against 3,820 in 1921. The diagram in the margin shows the mean density of the different municipal towns in 1921 and 1931. The only two towns in which the density has decreased in 1931 are Nagercoil and Padmanabhapuram and this is due to the extension of their area. The area of Nagercoil has increased from 3.05 square miles to 4.48 square -miles and that of Padmanabhapuram from 2 square miles to 2.5 square miles. Shenkotta which has only a population of 12,225 has the highest density, viz., 17,464 persons per square mile. Shenkotta, though only an agricultural town, has a density almost twice as large as that of Alleppey, the largest industrial and commercial town in the State. Shenkotta is like Tinnevelly. 2,788 houses are huddled together, with a population of 12,225 persons, in a small area of 0.7 square mile. Next to Shenkotta, Alleppey has the highest density, 9,656 persons per square mile, next to it comes Nagercoil with a density of 9,586 and only then comes Trivandrum, the Capital, which has a density of 8,505 persons per square mile. At the bottom of the scale stand Attingal and Neyyattinkara having a density of 816 and 926 respectively, which are considerably less than the densities of the taluks in which they are situated. The population of the 19 towns, other than municipalities which were censused in 1921 and 1931, has increased from 79,792 to 97,752 with a corresponding increase in the density from 1,534 to 1,879 persons per square mile. The eight new towns which were censused in 1931 have a total area of 23.4 square miles and a population of 45,574 which gives 1,948 persons per square mile. Comparing the entire urban area and population of 1931 with those of 1921, atter making necessary adjustments for changes in the area of certain towns, it is seen that the area has increased from 137.08 square miles to $161 \cdot 48$ square miles, and the population from 404,654 to 549,455 , showing an increase in the number of persons per square mile from 2,952 to 3,403 .

The congestion in towns can better be realised by a comparison of the mean distance between two persons if the

| Towns | Proximity In yards between persons |
| :---: | :---: |
| Shenkotta | 14.8 |
| Alleppey | $19 \cdot 3$ |
| Nagercoil | 19.3 |
| Trivandrum | $20 \cdot 5$ |
| Neyyattinkara | 62.2 |
| Attiugal | 66.2 | population were uniformly distributed over the whole area. The proximity in yards between two persons in some of the thickly and sparsely populated towns is given in the marginal table. Shenkotta, as we have already seen, is the most densely populated town in the State. Next to it come in order Alleppey, Nagercoil and Trivandrum. The most sparsely

populated towns are Neyyattinkara and Attingal.

Housen and
famillea la
urban area.
95. The number of occupied houses in the entire urban area has increased from 72,011 in 1921 to 93,196 in 1931, the percentage ot increase being 29.4 as against an increase of 36.3 per cent. in the population. In the 38 towns which were censused in

1921 and 1931 houses have increased from 72,011 to 85,176 or by $18: 3$ per cent., while the corresponding increase in the population has been 25.1 per cent. The eight new towns censused in 1931 contain 8,020 occupied houses.

The overcrowding of houses in towns can be seen from the figures given in the marginal statement, showing the

| Town | Number of houses per squase mile | Proximity in yards between two houses |
| :---: | :---: | :---: |
| Shenkotte | 3,983 | 30.0 |
| Nagercoil | 1,882 | $43 \cdot 6$ |
| Alleppey | 1,635 | 46.8 |
| Trivandrum | 1,264 | 63.8 |
| Quilos | 1,155 | $55 \cdot 7$ |
| Kottayam | 883 | $63 \cdot 7$ |
| Oolachel | 857 | 64.8 |
| Changanachery | 739 | $69 \cdot 6$ |
| Seyyattinkara | 137 | $161 \cdot 6$ |
| Attingal | 137 | 161.6 | number of houses per square mile and the mean distance between two houses in some of the municipal towns. The overcrowding is generally proportionate to the density of population, but it need not necessarily be so. Shenkotta heads the list in the overcrowding of houses as in the density of population. A square mile contains as many as 3,983 houses, and the mean distance between houses is only 30 yards. Nagercoil which has a lower population density than Alleppey shows greater overcrowding of houses than the latter. Trivandrum which has 1,057 persons more per square mile than Quilon contains only 109 houses more to the square mile and the mean distance between houses is only about two yards less than that of Quilon. Neyyattinkara and Attingal which have very low population densities show the least overcrowding of houses. Between the two, Neyyattinkara has a slightly higher density and yet the mean distance between houses is just the same in both the towns.

In paragraph 77, Chapter I, it has been mentioned that the number of families has been specially ascertained at this census. The extra families, $i$, e., those in addition to one in each house, have been found to be 2,382, and of these, 1,767 families are in municipal towns. The number of occupied houses in the 19 municipalities are 67,654 , so that the number of families living therein are 69,421 . The aggregate population of these towns being 408,462 , there are on an average 58 persons in every 10 families, whereas 60 persons live in every 10 houses.
96. Congestion in habitation depends not only on the density of population and Honse-room houses but also on the type of houses and the space available to each occupant thereof. In urban arem A town may be thinly populated with sufficient open space between the houses, and yet if the houses are small and contain too many inmates for their size, such a town cannot be considered healthy. Information has not been collected regarding the type of the houses, and it is not, therefore, possible to say how many of them are built on sanitary principles. The average house-room available to each person can be calculated from the total number of houses and the aggregate population in a locality. The average number of persons living in a house in the whole State is, as we have seen in paragraph 77 of Chapter I, 5.48 . In the urban area as a whole the average per house is $5 \cdot 9$ as compared with 5.6 in 1921. This means that every 10 houses in towns now contain three persons more than the number in 1921. In municipal towns the average number of persons per house has increased from $5 \cdot 7$ in 1921 to 6 in 1931 and in the other towns censused in 1921 and 1931 from $5 \cdot 3$ to $5 \%$. In the eight new towns censused in 1931 the number per house stands at $5 \cdot 7$. There is naturally less congestion in houses in rural parts than in urban areas. According to the present census every 100 houses in rural areas in Travancore contain 543 persons as against 590 in towns, but the variations between town and town in this respect are more striking as can

| Town | dverage number of permons per house |
| :---: | :---: |
| Neyyattinkara | $6 \cdot 8$ |
| Trivandrum | $6 \cdot 7$ |
| Kottayam | $6 \cdot 5$ |
| Quilon | $6 \cdot 4$ |
| Ohangenachery | $6 \cdot 2$ |
| Attingal | $6 \cdot 0$ |
| Alleppey | $5 \cdot 9$ |
| Yailom | $5 \cdot 5$ |
| Nagereoil | 5.1 |
| Shenkotia | $4 \cdot 4$ | be seen from the statement given in the margin. We have seen that of. the various towns, Neyyattinkara and Attingal are the most sparsely populated and contain the least number of houses per square mile, and yet it is in Neyyattinkara that we find the greatest number of persons per house. Trivandrum, which occupies the fourth place in the density of population and houses, comes next to Neyyattinkara in regard to the number of persons per house, whereas Alleppey which is second in density has a less number of persons per house than six other towns which have lower densities. It is not necessary to pursue this matter further. The inference that may be drawn is that the overcrowding of houses in any locality need not necessarily be accompanied by congestion within the houses.

Birthplace of the urban popu the urban
lation.
$\because$ 97. Figures showing the birthplace of the population of municipal towns have been separately compiled to see what proportions of this population are born in the taluks in which the towns are situated, in other taluks of the State, and in places outside the State, The nimber of these per mille of the total population for all the municipalities together, for Trivandrum separately, and for a few typical industrial and commercial, agricultural
 and distributive, and temple towns are given in the marginal statement. A very large majority of the population of towns are naturally persons born in the taluks in which the towns are situated. The proportion of persons born in other taluks of the State is the highest in Trivandrum, and next in order are the industrial and commercial, agricultural and distributive, and temple towns, Of the persons born outside the State, industrial and commercial towns contain the highest proportion. Trivandrum comes next to them, then the temple towns and lastly only the agricultural and distributive towns. Trivandrum, being the capital of the State and containing the highest educational institutions, naturally attracts a considerable number of persons from all over Travancore and from outside the State. The highest proportion of foreign-born persons in industrial and commercial towns shows that large-scale industrial and commercial activities are mostly in their hands. The higher proportion of the foreign-born in temple towns than in agricultural and distributive towns indicates the influence the temples exercise in attracting foreigners to such towns.

Religion in towns.
98. The distribution of the urban population by the main religions is shown in the

| State or Division | Number of each main religion por millo of the population of mundeipalitics |  |  |
| :---: | :---: | :---: | :---: |
|  | Hindu | Christian | Musim |
| - STATE | 648 | 239 | 112 |
| Southern Division Central | 745 $\mathbf{5 7 1}$ | 170 268 | 88 178 |
| Northern " | 567 | 358 | 72 | statement in the margin. Out of 1,000 persons in towns 648 are Hindus, 239 are Christians and 112 are Muslims. The proportion of Hindus is the highest in the Southern Division and is higher than that of the Christians and Muslims in all the divisions. The Hindu proportions decrease from the Southern to the Central and from the latter to the Northern Division. The proportion of Christians is the lowest in the Southern and the highest in the Northern Division, while the. Muslims preponderate in the"Central Division.

If the proportions of the total population of each religion who live in towns are
 considered, it will be seen from the figures given in the margin that the Muslims stand first, $19 \cdot 1$ per cent. of whom are town dwellers, as against $11 \cdot 3$ per cent. Hindus and 8.1 per cent. Christians. This order is maintained not only in the State as a whole but also in the different divisions. The Muslims, unlike the Hindus and Christians, are traders more than agriculturists and, therefore, live in towns in proportionately larger numbers than the other communities.
99. The occupations in towns are generally such as are better suited to mea than to sox in torna. women and consequently the proporion of women to' men in urban areas is leess than that in rural parts. The towns have 955 females per 1,000 males as against 990 in the rural area. It may be noted, however, that the sex-ratio has increased both in towns and in villages during the last decade, but moreslowly in the former than in the latter, the urban sex-ratio being 947 and the rural 973 in 1921. When the number of women per 1,000 men has increased by 17 in villages the increase in towns has been only eight.

The preponderance of men in urban areas is generally due to immigration. In the . natural population the sexratio invariably approxi--mates to that of the region in which the towns are situated. In the marginal statement are shown the sex-ratios of the actual and natural population of certain important towns in the State, and of the taluks in which they lie. The natural population here means only the persons born in the towns or in the taluks in which they are situated. Nagercoil, though an industrial town, has a higher proportion of females than males in its natural and actual population, but the surrounding taluk also has similarly a higher ratio. A high female ratio may, therefore, be regarded as a special feature of the locality. In agricultural towns like Nesyattinkara and Thiruvella, and in the market town of Changanachery, males outnumber females in the population both of the towns and of the taluks and their sex-ratios are nearer to the ratio for the whole State than those of other towns. Great disparities between the sex-ratios of the natural and actual population are seen in the capital town of Trivandrum and in the industrial and commercial towns of Quilon and Alleppey. In these towns the males preponderate to a much larger extent in the actual population than in the natural. The educational institutions in Trivandrum and the industrial and commercial occupations in Quilon and Alleppey attract large numbers of immigrants of the male sex and thus contribute to the higher male ratio in the actual population than in the permanent residents. It may be noted that Alleppey, which is the largest industrial and'commercial town in the State, has the lowest sex-ratio, namely, 851 females per 1,000 males in the actual population, and this is 136 less than the ratio for the State.
100. Towns generally, and those towns in particular which have a large immigrant Age-constitupopulation, have a smaller proportion of children than villages. This fact is borne out by tion of the arban popula the figures given in the statement below for the towns of Trivandrum, Nagercoil, Quilon tion. and Alleppey, and for the whole State: In every. 10,000 persons, children under 15 number less in all the towns than in the State, while towns have larger proportions of persons aged 15-25 and 25-55 than the State.

Distribution of 10,000 of the population of each sex by cortain age-groups

| State or town | $0-15$ |  | 15-25 |  | 25-55 |  | 55 and over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Males | Femsles | Males | Females |
| ETAYE | [,878 | \%,287 | 1,794 | 1,988 | 3,293 | 3,174 | 630 | 656 |
| Trivandrum | 3,661 | 2,768 | 2,414 | 2,061 | 3,529 | 3,448 | 596. | 723. |
| Nagerooll | 8,898 | 8,717 | 1,818 | 1,899 | 8,603 | 3,626 | 681 | 758 |
| Quilon | 8,814 | 3,981 | 1,988 | 2,103 | 3,647 | 3.368 | 551 | 548 |
| Alloppoy | 3,418 | 8,842 | 2,235 | 2,079 | - 3 ,788 | 3,454 | 554. | 625 |

Of old people of the ages 55 and over, Quilon and Alleppey have less males and females and Trivandrum less males than the State, but both males and females in Nagercoil and females in Trivandrum are more than in the State. The smaller proportions of children in towns must be due to the fact that the immigrants, who go to Trivandrum to join the higher educational institutions and to the industrial and commercial towns for employment, are composed more of adults than of immature persons.

The major moniajpal towns.
101. Although 38 towns were censused in 1921 and 46 in 1931, the conditions affecting the movement and distribution of the population of the smaller municipal towns and most of the other towns do not differ materially from those obtaining in the adjacent rural parts. It will, therefore, serve no useful purpose to examine in detail and compare the results of the census of these latter towns. The six major municipal towns, namely, Trivandrum, Alleppey, Nagercoil, Quilon, Kottayam and Changanachery, each of which has a population of more than 20,000, stand on a different looting. The statistics of these towns are dealt with at length below, and their general features are exhibited in the following statement:-


The rates of increase in the population of Trivandrum, Nagercoil and Quilon have been calculated after adjusting the population for the additions made in the area of these towns since the last census. The above statement should be compared with the one given on page 22 of the Travancore Census Report for 1921.
102. Trivandrum, the seat of the Royal House and the headquarters of the Government and its departments, is the premier town in the State. Its population according to the present census is 96,016 , and in 1921 it was 72,784 . When the present population is adjusted for the change in the area, the rate of increase in the population during the last decade is found to be 29.0 per cent. as compared with 14.5 per cent. in the previous decade, and $29 \cdot 5$ per cent. in the decade under review in the taluk in which it is situated. Alleppey and Kottayam are the only towns which show a higher rate of increase than Trivandrum. Occupied houses have increased by 16.4 per cent. as against 13.5 per cent. in the previous decade, while the corresponding increase in the taluk is 25.4 per cent. The increase in the number of occupied houses has not kept pace with the growth of population, and the average number of persons per house has, therefore, risen from 6.1 in 1921 to 6.7 in the present census. This is the highest average among the six major municipal towns. The mean distance between two houses is 53.8 yards and between two persons 20.5 yards. The mean density is 13 persons per acre. Manakad A Ward has the highest density, namely, 70 persons per acre which is 12 more than what it was in 1921. Shenkotta is the only other town which has a ward with such a high density as Manakad A Ward. The variations in the densities of different wards in Trivandrum are very marked. Vellayampalam H Ward has only 5 persons to the acre, and there are four other wards with a density of less than 10 per acre. In the three wards in the Fort 25 to 35 persons occupy one acre. If 20 persons per acre is considered to be a fair density, 15 out of 24 wards in the town have this or a lower density. The remaining nine wards are certainly congested. They are the three wards in the Fort, one ward in Manakad, three wards in Chalay and two wards in Pettah. Out of every 1,000 persons living in the town, the Hindus number

785, Christians 143 and Muslims 72 as against 794 , 131, and 75 respectively in 1921. The proportion of the Hindus has fallen by 9 and of the Muslims by 3 during the past decade and what these communities have lost the Christians have gained. The number of females per 1,000 males has decreased from 949 in 1921 to 944 in the present census. The proportions of Hindu and Muslim females have increased slightly and that of the Christian females has decreased appreciably. Out of the 96,016 persons enumerated in the town, 90,267 were born in Travancore and 5,749 outside the State, and of the former 68,074 were born in Trivandrum taluk, 9,175 in the three contiguous taluks, and 13,018 in the other taluks. Nineteen of the non-contiguous taluks contributed more than 100 persons each, the highest number ( 1,831 ) being from Kalkulam and the smallest (120) from Muvattupula. Out of 5,749 persons who were born outside the State and were enumerated in the town, 623 were from Cochin and 4,288 from the following districts of the Madras Province-Tinnevelly (2,601), Malabar (679), South Kanara (298), Madura (221), Chingleput (198), Tanjore (162) and South Arcot (129).
103. Alleppey is now the second largest town in the State and has taken the place Alloppoy. which Nagercoil occupied at the last census. It is the most important industrial and commercial town in the country and has one of the finest ports on the West Coast, second only to Cochin. Its present population is 43,838 , the increase during the decade being 36.7 per cent. as against $24^{\circ} 9$ per cent. in the previous. The corresponding percentage of increase in the rural portion of the taluk is only 26.8 per cent. Of all the towns. Alleppey has shown the highest rate of growth of population during the decade. It is growing fast on account of the rapid development of its trade and industries. How fast these have developed can be shown by a few figures. In 1920-21, 82 steamers and 100 country crafts having a total tonnage of 179,345 called at the port of Alleppey, while in 1929-30 the number of steamers and country crafts that called were 450 and 231 , and the tonnage $1,035,059$. The chief industries in Alleppey are copra (coconut kernel) crushing, coir mat and matting manufacture and rice hulling. In 1921 these industries employed about 4,000 persons and in 1930 more than 6,000 persons, an increase of 50 per cent. The development of trade and industries has naturally attracted large numbers of persons from other parts of the State as well as from outside. Out of a total population of 43,838 , nearly 10,000 or over 22 per cent. are immigrants, and of these 4,000 have come from outside the State and about 6,000 from other parts of the State itself. It is this large immigrant population that is mainly responsible for the high rate of increase in the population of Alleppey.

Occupied houses in Alleppey have increased by $27 \cdot 4$ per cent. during the decade against $13 \cdot 1$ per cent. in the decade previous, the corresponding increase in the rural area being only 16.1 per cent. As in Trivandrum the increase in houses is not commensurate with the growth of population, and consequently the average number of persons per house has risen from $5 \cdot 6$ in 1921 to $5 \cdot 9$ in the present census. The average density of population in the town is 15 per acre as against 2 per acre in the taluk. It varies from 8 per acre in the Palace Ward to 30 per acre in the Mullakkal. Ward. Out of the nine wards, five have a density of more than 20 persons per acre and these are Puthanangadi, Factory, Market, Mullakkal and Sherthala Canal Wards. Of the six major municipal towns, Alleppey has the lowest proportion of Hindus and the highest proportion of Muslims, the numbers being 433 and 302 per 1,000 of the-aggregate population against 462 and 264 respectively in the last census. The corresponding figures in the taluk are 634 and 45 . The proportion of Christians has decreased from 272 in 1921 to 264 in 1931. The sex ratio is the lowest in Alleppey. There are only 851 women for every 1,000 men and this is 47 less than what it was in 1921. The Christians have the lowest ratio, 841 women to 1,000 men. The sex ratio of all the religions is lower in the town than in the taluk.
104. Nagercoil has a population of 42,945 , the percentage of increase having Nagercoil. risen from $15 \cdot 1$ in 1921 to 23.0 in the present census, while occupied houses have increased by 17.9 per cent. The corresponding increases in population and houses in Agasthiswaram taluk in which the town is situated are only 15 per cent. and $12: 3$ per cent. respectively. The average number of persons per house has also gone up 'from 4.9 to $5 \cdot 1$. As in the last census females outnumber males both in the town and in the taluk, and this is so in all the religions. The town has an average density of 15 persons per acre against 2 in the rural parts, and the density varies from 4 in Nagercoil West Ward to 46 in Kottar Ward. Out of the ten wards five, namely, Elankadai, Vakayad, Kottar, Vadiveeswaram, and Krishnankoil East, have a density of more than 20 persons
per acre: The proximity of houses and persons in the town is 43.6 yards and 19.3 yards respectively. Hindus preponderate both in the population of the town as well as of the taluk. In every. 1,000 persons in the town there are 750 Hindus, 160 Christians, and 90 Muslims. The corresponding proportions in 1921 were 746, 159 and 95 respectively. The Muslims have lost five per 1,000, of which the Hindus have gained four and the Christians one. Out of the total population, the number of persons born in the State were 41,083; and those born outside were 1,862. Among the former 35,989 were born in the taluk in which the town is situated, 2,236 in the contiguous taluks of Thovala and Kalkulam, 636 in Vilavancode, 570 in Neyyattinkara and 1,163 in Trivandrum, while of the 1,862 . outsiders 1.520 were from Tinnevelly and 56 from Madura.

Qullon.
105. Quilon is the fourth largest town in the State in point of population, but unlike in 1921 when it showed the highest rate of increase among the five major towns then taken up for comparison, the increase is the lowest in this census except in Nagercoil. The recorded increase is 34.2 per cent. but when the population is adjusted for the change in area it drops to 27.5 per cent. The rate of increase in the number of occupied bouses has fallen from 31.3 per cent. in 1921 to 19.4 per cent. in 1931 and the average number of persons per house has risen from 6.1 to 6.4. The average density of population in the town is 12 per acre, as against 2 in the taluk, and the proximity in yards of houses and persons is $55 \cdot 7$ and 21.9 respectively. Since information regarding the exact area of the wards comprising the town is not available, it is not possible to compare the variations of density in the different wards. The Hindus preponderate both in the town and in the taluk. As compared with 1921 the Hindus in the town have increased from 522 to 534 per 1,000, the Christians have decreased from 287 to 279 and the Muslims from 190 to 187. The number of females per 1,000 males of the total population is 941 as against 924 in 1921, and in the different religions also males oumumber females, the Muslims showing the highest male ratio. Of the 33,739 persons enumerated, 31,703 were born in Travaricore and 2,036 outside the State. The former includes 26,446 persons born in the same taluk, 1,571 born in the four contiguous taluks, and 3,686 born in the other taluks of the State, while of the outsiders 461 are from Cochin, 55 from Ceylon, 130 from Anjengo, 189 from Malabar, 192 from Madura and 547 from Tinnevelly. Ten of the non-contiguous taluks in the State have contributed more than 100 persons each, the largest number ( 1,054 ) being from Trivandrum and the smaliest (120) from Sherthala.
106. Though there has been no change in the area of this town since last census, the population and the occupied houses have increased by 34.0 per cent. and $24 \cdot 1$ per cent. as against 24.4 per cent. and 18.4 per cent. in 1921. The corresponding increases in the taluk are, however, not far behind, being $33 \cdot 2$ per cent. and 25.6 per cent. respectively. The average number of persons per occupied house is $6 \cdot 5$. The sex ratio is 900 females per 1,000 males. The Muslims have the lowest ratio, being 741 only, and the Christians the highest, namely, 921. The Hindus contribute 461, the Christians 491 and the Muslims only 48 to every 1,000 of the population. The corresponding proportions in 1921 were 480,473 and 46. The Christians have increased by 18 and the Muslims by 2, while the Hindus have decreased by 19 per 1,000 . The town has an average density of nine persons per acre against two in the taluk and the density varies from six per acre in Ward II to. 17 per acre in Wards IV and V. Two of the wards have the average density of the town, five are above and six below the average. There is no ward having a density of more than 17 persons to the acre. The total population of the town is 25,236 composed of 24,635 persons born in the State and 601 born outside it. Of the former, 20,961 were born in the same taluk, 996 in the three contiguous taluks and 2,678 in the non-contiguous taluks, of which as many as ten contributed more than 100 persons each, the largest number (709) being from Thiruvella and the smallest (100) from Muvattupula. Of those born outside the State, 365 were from Cochin, 110 from Malabar and 43 from Tinnevelly.
Changanachery. 107. Changanachery has a population of 24,201, the increase during the decade being 27.7 per cent. as against $43 \cdot 3$ per cent. in the taluk. Occupied houses have increased by 19-I per cent. only. The average number of persons per house and the proportion of females to 1,000 males are $6: 2$ and 918 respectively. Of every 1,000 persons, Hindus number 479, Christians 423, and Muslims 98 . This town has the lowest average density of seven persons per acre. The density varies from four in Perunna Ward to 19 in the Market

Ward. Of the six wards one hat the average density of the town, three are above and two below the average. Of the total population, 23,929 were born in the State and 272 outside it. 21,254 of the former were born in the same taluk and 1,611 in the three contiguous taluks of Thiruvella, Ampalapula and Kottayam, while of those who were born outside the State 108 were from Cochin, 52 .from Tinnevelly and 42 from Malabar.
108. The administrative village, or the pakuthi as it is called, which has an average vilagen. area of 17.6 square miles, being too large for purposes of statistical comparison, the residential village, known as kara or muri which has well-known though undefined boundaries, having an average area of 1.9 square miles, has been adopted as the territorial Descripton: unit at this census as in the previous censuses. The kara is a sub-division of the pakuthi and a pakuthi generally contains from 3 to 20 karas. The "village", as it is used in Subsidiary Table I given at the end of this chapter and in the Imperial Tables, means the kara. It is not the same as the ordinary village in India. Except in the two southernmost taluks of Thovala and Agasthiswaram and in the taluk of Shenkotta, which are more like the East Coast than the West Coast, there is no village in Travancore in the strict sense of the word, which connotes a cluster of houses, huddled together in a small area, possessing a common well and a common tank, with wide stretches of arable land around them having no habitation. The rural parts of Travancore resemble more or less the country side in Bengal, :and Mr. Jack's description of rural Bengal will, with a slight modification, apply equally well to this. State. Mr. Jack says, "Each family lives within its own holding digging a moat round an ample piece of land, and planting a garden of fruit trees to enclose. the homestead. The homestead itself is a collection of mat and thatch huts on high mud plinths .all built on well-raised ground surrounding a court-yard. Near by within the moat is a muddy tank. The homestead is usually entirely concealed by trees so that at first sight it :appears as if all the cultivated land is a clearing in the forests. The Khola (opens) in which crops are grown are always kept delightully green by the unfailing moisture of raim and flood, and the eye is never tired by the weary miles of dust which is the common habit of an up-country landscape. " * The only alteration necessary to make the above description applicable to rural Travancore is to substitute the words "making an earthen wall" for the words "digging a moat." The rest of it is exactly like what one finds in this State.

The absence of compact-villages in Travancore has, however, not been a bar to the creation of a village organization. From very early times the kara came into existence as a unit of rural organization. Each kara contained a number of homesteads of Nayars and -other high caste Hindus, a sufficient number of field labourers of the depressed classes, a few washermen, barbers, carpenters, smiths and other artisans. In olden days the kara was a self-contained unit. The oldest member of the most influential Nayar family was the leader of the kara, and the others obeyed his orders and carried out his instructions. They lived like the members of a family, helping one another in times of necessity and co-operating together in conducting religious and social ceremonies, in thatching houses, and even in cultivating their lands. The artisans and labourers catered to the needs of all the families in the kara and usually received their wages in kind at the time of harvest. They were treated with great kindness and consideration by their masters and a mutual bond of attachment grew up between them. Such an organized life flourished in the karas till recent times; but with the growth of individualistic ideas it has broken up and has practically vanished except in some remote corners. The kara, however, still remains, though its organization has disappeared, and it is this kara that is treated as the village for census purposes.
109. The total number of karas (villages) according to the census of 1921 Number of was 3,897 including the 22 hill karas which were specially formed for that census. villagee. Although in the note on the contents page of Part III (Provincial Tables) of the Report of the last census it is stated that the hill karas and hill pakuthies were not given serial numbers, all of them appear to have been counted. As the hill karas and hill pakuthies are only temporary divisions made for the census, it is unnecessary to add them to the list of permanent karas. They have, therefore, not been separately coumted in this census. If the hill karas of 1921 are excluded, the total number of karas would then be only 3,875 . In the present census the corresponding figure is 3,936 , exclusive of the hill karas and 18 whole karas and portions of 17 other karas which are included in the eight additional towns separately censused this time, thus making the total

[^11]number 3,971 as shown on the fly leaf of Imperial Table I. Strictly speaking, portions of 17 town karas mentioned above should not be taken into account, because the corresponding taluk karas have been numbered along with the other karas in the respective pakuthies. If these are excluded, the total number of karas, including the eighteen whole karas falling within the eight new towns, is 3,954 instead of 3,971 , the increase from 1921 to 1931 being 79. .This increase may be explained thus. Eighty-seven of the karas included in the Kara Register of 1921 have ceased to exist, partly on account of the people there having migrated to adjacent karas and partly on account of their amalgamation with the neighbouring ones. On the other hand, as many as 166 new karas have been brought into existence by people settling in previously uninhabited karas and by the bifurcation of overpopulated ones. Several small groups of hamlets were clubbed together into one kara at the last census, particularly in Thovala and Agasthiswaram taluks Most of these hamlets have grown in size and importance during the course of the decade and have been treated as independent karas in the present census.

On page 18 of Part 1 of the Census Report for 1921, it is stated that the number of pakuthies at that census was 435 "excluding" the three Hill Pakuthies, but actually this included the three hill pakuthies also.

Rural popala. tion and its zariation.
110. The rural population, according to the present census, is $4,544,185$, as: compared with $3,601,408$ in 1921, showing an increase of 26.2 per cent. during the decade, which is only slightly less than the increase in the aggregate population. The occupied houses in rural areas have increased by $21 \cdot 3$ per cent. from 689,816 to 836,734 , and the average number of persons per house from 5.2 to 5 . 4 . The rise in the latter, we have seen in paragraph 81 of Chapter 1, is due to the larger proportion of children under 10 in 1931 than in 1921. The average population of a kara has increased from 929 in 1921 to 1,155 in 1931 and that of a pakuthi from 8,337 to 10,494 . The statement given in the margin shows the

| Villages classifed by population. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Popalation group | Number ofvillages |  | Proportion per cont. of the poppulation of thogroup to the toanal rural population |  |
|  | ${ }^{1921}$ | 1991 | 1921 | 1931 |
| Below 500 | 1,670 | 1,446 | 10.1 | 9.9 |
| $\xrightarrow{\text { 1,000- }} \mathbf{1 , 0 0 0 0}$ | ${ }_{886}^{937}$ | ${ }^{867}$ | $10 \cdot 2$ <br> 32.8 | 14.0 80.7 |
| ${ }^{2,0000} 5$ | $\begin{array}{r}45 \\ 48 \\ 48 \\ \hline 1\end{array}$ |  |  | 97.88 |
| - | 28 <br> 1 | $\stackrel{69}{4}$ | ${ }_{0}^{8.1}$ | 9.6 ${ }_{\text {9, }}^{1.0}$ |
| 20,000-50,000 |  | 1 |  | 0.5 | villages grouped according to population, the number of villages in each group, and the percentage of the population of each group to the aggregate rural population ${ }_{r}$ in 1921 and 1931. The number of villages and the population in the first two groups have decreased' during the decade. In the third group, though the number has increased, the population has fallen, and in the next three groups both the number and the population have increased. The largest increase in population is in groups of villages having 2,000 to 5,000 and 5,000 to 10,000 inhabitants. In the highest group having a population of 20,000 to 50,000 the State had no village in 1921, and now there is one. Villages with less than 2,000 inhabitants accounted for 62.1 per cent. of the rural population in 1921, but the proportion. has dropped to 51.6 per cent. in 1931. The loss in these groups is a gain to the higher groups. The proportion of the population living in the latter villages has risen from 37.9 per cent. in 1921 to 48.4 per cent. in 1931.

The population is growing fast in the towns as well as in the villages of Travancore. In the coastal taluks many villages are as populous as, or even more so than, some of the towns. The average density in this area is 1,743 persons per square mile, while. eleven of the forty-six towns have a lower density than this. As many as 209 villages have a density of more than 2,500 persons per square mile; in some it is even more than 3,500 ; and there is one village called Panna in Kadakkavur pakuthi of Chirayinkit taluk, in which nearly 8,000 persons live in a square mile. The whole region along the sea-coast is already over-populated and from one end to the other it is like a garden city where one can hardly walk a furlong without seeing some houses.

## SUBSIDIARY TABLE I

Distribation of the popalation between towns and yillages

| Division | Average population per |  | Number per mille residing in |  | Number per mille of urban population residing in towns with a popalation of |  |  |  | Namber per mille of rural population residing in villages with a population of |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Town | Village | Towns | Villages | and over | $\begin{gathered} 10,000 \\ t o \\ 20,000 \end{gathered}$ | $\begin{gathered} \text { 5,000 } \\ \text { to } \\ 10,000 \end{gathered}$ | $\begin{gathered} \text { Under } \\ 5,000 \end{gathered}$ | $\left\lvert\, \begin{gathered} 5,000 \\ \text { and over } \end{gathered}\right.$ | $\begin{gathered} 2,000 \\ \text { to } \\ 5,000 \end{gathered}$ | $\begin{array}{r} 500 \text { to } \\ 2,000 \end{array}$ | $\begin{gathered} \text { Onder } \\ 500 \end{gathered}$ |
| 1 | 2 | 8 | 4 | 6 | 6 | 7 | - 8 | 9 | 10 | 11 | 12 | 13 |
| BrATE | 11,985 | 1,155 | 108 | 882 | 482 | 241 | 185 | 92 | 111 | 878 | 377 | 69 |
| Administrative Division |  |  |  |  |  |  |  |  |  |  |  | * |
| Southern | 12,322 | 772 | 168 | 887 | 693 | 89 | 186 | 132 | 55 | 371 | 439 | 135 - |
| Central | 18,045 | 1,817 | 105 | 895 | 396 | 425 | 134 | 45 | 54 | 377 | 819 | 50 |
| Northern | 10,164 | 1,889 | 72 | 928 | 405 | 238 | 267. | 90 | 194 | 893 | 375 | 38 |
| High Range | -• | 885 | -• | 1,000 | - | - | -• | .. | 399 | 48 | 461 | 92 |
| Natural Division |  |  |  |  |  |  |  |  |  |  | - ., |  |
| Lowland | 26,804 | 1,288 | 169 | 831 | 660 | 176 | 120 | 44 | 133 | 405 | 395 | 67 |
| Midland | 6,468 | 1,166 | 51 | 949 | - | 405 | 368 | 227 | $82^{\prime}$ | 370 | 484 | $64^{\prime}$ |
| Highland | 8,555 | 729 | 88 | 918 | * | 476 | 329 | 195 | 202. | 164 | 506 | 128 |

## SUBSIDIARY TABLE II

Number per mille of the total population and of each main religion
who lixe in towns

| Division | Number per mille who live in towns |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Religions | Hindu | Ohristian | Muslim | Jew | Jain |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8TETE | 108 | 118 | 81 | 181 | 978 | 1,000 |
| Idministrative Diviaion |  |  |  |  |  |  |
| Southern | 163 | 175 | 114 | 227 | - | $\cdots$ |
| Oentral | 105 | 95 | 95 | 221 | - | 1,000 |
| Northern | 72 | 79 | 58 | 117 | 990 | 1,000 |
| High Rango | -• | $\cdots$ | -• | - | -• | - |
| Matural Division |  |  |  | - |  |  |
| Lowland | 169 | 161 | 162 | 251 | 989 | 1,000 |
| Midand | 61 | 66 | 36 | 102 | 1,000 | 1,000 |
| Highland | 88 | 99 | 38 | 201 | -• | - |

## SUBSIDIARY TABLE III

Towns olassiffed by population

| Olage of town | Number of towns ot each class in 1931 | Proportionto totalurbanpopulation | Number of fomales per 1,000 males | Increase per cent. in the population of towns as classified at previous censuses |  |  |  | Increase per cent. in urban population of cach clase from 1801-1431 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} 1921 \\ \text { to } \\ 1981 \end{gathered}$ | $\begin{aligned} & 1911 \\ & \text { to } \\ & \text { 1921 } \end{aligned}$ | $\begin{gathered} 1901 \\ \text { to } \\ 1911 \end{gathered}$ | $\begin{gathered} 1891 \\ \text { to } \\ 1901 \end{gathered}$ | (a) <br> In towns as clacsified in 1891 | $\begin{aligned} & \text { (b) } \\ & \text { In the total of } \\ & \text { cach class in } 11131 \\ & \text { as compared vith } \\ & \text { theorrespinding } \\ & \text { total of } 1891 \end{aligned}$ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| TOTEL | 46 | 100 | 855 | +25.1 | +19. ${ }^{3}$ | $+8 \cdot 8$ | +82.8 | +178.0 | +483.1 |
| I. 100,000 and over | -• | -• | - | " | $\bullet$ | $\bullet$ | -* | * | * |
| II. 50,000 ta 100,000 | 1 | 17.40 | 944 | +32.0 | +14.5 | $+9.8$ | ${ }^{\circ}$ | " | $\cdots$ |
| 1II. 20,000 to $50,00 \mathrm{C}$ | 5 | 30•80 | 935 | $+81 \cdot 6^{\prime \prime}$ | +18.7 | $+0 \cdot 6$ | +03.5 | +176.1 | +285.5 |
| IV. 10,000 to 20,000 | 11 | 24-11 | 987 | +20.9 | +14.8 | $+7 \cdot 5$ | $+68 \cdot 1$ | +190.1 | +100.8 |
| V. 5,000 to 10,000 | 18 | 18.62 | 954 | +19.4 | +53.8 | +9.2 | $+68 \cdot 1$ | +186.8 | $+646 \cdot 1$ |
| VI. Under 5,000 | 1F | $9 \cdot 17$ | 966 | +21.8 | $+75 \cdot 0$ | -• | 19 | - | " |

## CHAPTER III

## BIRTHPLACE AND MIGRATION

111. The statistics of birthplace have been utilized for various purposes in this Report. In Chapter I the natural increase in the population of the State and in Chapter II the variation in the natural population of municipal towns have been calculated with the help of these statistics; the infuence of migration on the normal age distribution of the population is discussed in Chapter IV:. The movement of the people from one place to another, the volume of this movement, its directions and chief causes are dealt with in this chapter.

The census returns do not deal directly with the physical movement of the population, nor do they distinguish between different types of migration. They only record the birthplace of the persons enumerated. It is assumed that a person born outside the State and enumerated within it is an immigrant and that a person born within the State and enumerated elsewhere is an emigrant. There are certain anomalies in this assumption. Children of foreigners born in Travancore are included in the natural population of the State, but strictly speaking they should also be treated as immigrants. Similarly, children of Travancoreans born outside the State are excluded from its natural population which is not correct. Travellers and pilgrims born elsewhere who happened to be in the State at the census time are included in the category of immigrants, while persons born in the State who might be temporarily absent from here during the census are treated as emigrants. These anomalies could not be eliminated from the census returns. In spite of this defect the figures of immigrants and emigrants, when viewed together, will indicate the general trend of the physical movement of the population.

In the case of persons born in the State, the name of the taluk of birth has been entered in column 13 of the census schedule, while in regard to those born outside the State but within India, the names of the district and province or of the State in which they were born have been entered. For persons born outside India the name of the country of birth alone has been noted. Though clear instructions were issued to enumerators on the above points, omissions of the names of taluks of birth were discovered in some schedules during the slip-copying stage, and they were filled in by the Superintendents in the copying sections. The information regarding birthplace that has been abstracted and compiled may, therefore, be regarded as fairly correct.
112. The statistics relating to birthplace are contained in Imperial Table VI, Main atatistioc. and the actual figures of immigration, emigration, migration between the natural divisions of the State, and between the State and other parts of India are exhibited in Subsidiary Tables I to IV given at the end of this chapter.

Indians are generally a home-loving people. They are not so adventurous as the western nations, and they seldom move out of their native place unless compelled to do so by pressing necessity or the force of circumstances. This innate quality of the Indians is shared by the Travancoreans also. True, they are found in various parts of India, and in foreign coumbries such as Ceylon, Straits Settlements, Persia, Mesopotamia, Alfrica, England, America and Borneo; but their numbers are so few, compared with the total population of the State, as to be negligible. According to the present census, only 58,466 Travancoreans have gone out of the country. The immigrants from other parts of India and from foreign countries number 135,103 , so that both immigrants and emigrants together are only 193,569, or 38 per 1,000 of the aggregate population. This is the position of external migration, and internal migration is still worse. The migration between the administrative divisions of the State is confined to a population
of 89,037 which is only about 18 per 1,000 of the State population. Of these, 78,798 persons have only moved between contiguous divisions and the remaining 10,239 persons alone betweer non-contiguous divisions. The position is slightly better in regard to the movement between natural divisions. The number of persons concerned in this movement is 163,108 which gives 32 per 1,000 of the population. The above figures show clearly the insignificance ' of the volume of migration, both external and internal, and the stay-at-home nature of the vast majority of the people of Travancore.

Factors
affecting
internal
migration
Yeans of
commanication
113. We shall now consider the movement of the population within the State in more detail. Before doing so let us take stock of the circumstances which facilitate this movement, such as the development of the means of communication, method of transport, and internal trade. The Government of Travancore have always recognised the importance of good communications and have never stinted expenditure in developing

| Communication s | Length in miles |  |
| :---: | :---: | :---: |
|  | 1921 | 1930 |
| Main soakis | 2,629 |  |
| Village ruads | 1,265 | 1,020 |
| Traces | 625 | 494 |
| Oanals | 184 | 240 |
| Total | 4,708 | 5,118 | them. During the year 1930-1931 A. D. they spent more than Rs. 22t lakhs on communications, which represents 57.1 per cent. of the expenditure on public works, or 9.4 per cent. of the total expenditure of the Government. The results of such a liberal outlay on communications are seen in the extent of roads and canals which have been opened in the country. The statement in the margin shows the length of roads and canals in 1921 and 1930. In 1921 there was one mile of main road for every 2.9 square miles and in 1930 every 2.3 square miles had a mile of this class of road. Taking all the communications together, it is seen that the State has now one mile of communication for every 1.5 square miles of its area including even hills and forests.

Method of transport.
114. The development of motor transport in Travancore in recent years has been phenomenal. The first motor vehicle was registered in this State in 1911. In the course of 10 years, i. e., till 1921, 44 motor cycles, 50 private cars, 51 buses and 7 lorries were registered, and in 1930 the number of buses, lorries and cars that plied for hire increased to 1,475 and private cars exceeded one thousand. Motor launches plying for hire increased from 36 in 1921 to 50 in 1930. There is hardly any important village situated on the main roads or on the chief canal routes which could not now be reached by a motor vehicle. Such a rapid development of motor transport has increased considerably the facilities for the movement of the population within the State.
115. In 1930 there were as many as 579 markets of all descriptions in the State, some public and others private, some held daily, others bi-weekly, tri-weekly, four days a week, and weekly. All the markets except five are situated on the plains, and there is one market for every 7 square miles in this region. The development of communications, motor transport and markets has brought about marvellous changes in the social life and the economic condition of the people. The home-loving persons, who avoided as far as possible the long and tedious journeys which they had to perform in slow-moving bullock carts and canoes formerly, now travel freely, visiting friends and relations in distant places, and paying business visits to towns, and division and taluk headquarters oftener than before, as they can finish their business and get back home in one day. The employés in Government offices and private institutions live in the outlying parts and suburbs of towns and attend to their business in the towns with ease and convenience. The timings of the buses are so arranged as to bring them to the towns in the morning and take them back to their homes in the evening. The quick transport of agricultural products in buses and lorries from villages and up-country parts to towns and markets has contributed largely to the growth of internal trade and to a substantial increase in the profits of the producers and the middlemen. These developments have increased to a very considerable extent the daily movement of the people from place to place within the State. A stranget who travels through the country will be struck by the number of passengers travelling in buses and cars and the quantity of goods carried by lorries and other motor vehicles. The census returns do not show the volume of this daily migration, nor has any attempt been made to estimate it in other ways. The statistics of birthplace recorded at the census only indicate the number of persons who stay out of their homes at the census time casually, temporarily or permanently. The discussion below is confined to such persons.
116. From Imperial Table VI it will be seen that the total number of persons who wigratlon bewae born in one administrative division and enumerated in another were 89,037 , of whom diveen dififerent

Actual nembert and proportions of persons born in the division where enwmarated and borm in other divitione

| Administrative Divisjon | Persons bort in the division where enamersted | Persons born in othor divisions | Number per 10,000 population |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Born in the division where enamerated | Born in other divisions |
| Southern | 1,405,212 | 13,493 | 9,905 | . 96 |
| Oentral | 1,808,064 | 30,803 | 9,832 | 168 |
| Northern | 1,643,164 | 25,478 | 9,847 | 153 |
| High Ranga ${ }^{\text {- }}$ | 15,393 | 19,263 | 4,442 | ${ }_{5}^{5} 558$ |

the large volume of migration to this division from'other parts of the State.
Short-distance movements are much more common than migration from long distances. Of the Travancore-born immigrants enumerated in the Southern and High Range Divisions more than 75 per cent. are persons born in contiguous divisions, while in the Northern Division the proportion is as high as 92 per cent. The movement of population between the natural divisions is more important than that between the administrative divisions. The statistics relating to the

Actual nambers and proportiont of mersons borm in the division where anumerated and born in other diririons

| Natural Division | Persons born in the division where enumerated | Persons born in other divisions | Number per 10,000 popalation |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Born in the division where enumerated | Born in other divisions |
| Lowland | 2,301,421 | 63,586 | 9,758 |  |
| Midland | 2,325,780 | 68.686 | 9,714 | 286 |
| Highland | 170,561 | 40,936 | 8,064 | 1,936 | nearly 89 per cent. stato.

were born in contiguous divisions. The actual numbers and propor. -tions of persons born in the division where enumerated and born in other divisions are shown in the marginal table. The very high proportion (more than 50 per cent.) of persons enumerated in the High Range who were born in other divisions shows natural divisions are given in the marginal statement. As in the High Range among the administrative divisions, so in the Highland among the natural divisions, the proportion of persons who have migrated from other parts of the State is considerably higher than that in other divisions, but they form only about 20 per cent. of the Travancoreans enumerated in the division as against over 50 per cent. in the High Range. The facilities that exist for the extension of cultivation and the large number of tea, rubber and cardamom plantations situated in the Highland Division account for the influx of persons from other parts of the State into this region. ; Of the 53,586 Travancoreborn immigrants enumerated in the Lowland Division, nearly 96 per cent. were born in the adjoining Midland Division and the remaining 4 per cent. only in the non-contiguous Highland Division, while in the Highland Division 71 per cent, are from the contiguous Midland Division and 29 per cent. from the non-contiguous Lowland Division. The lure of employment is a sufficient inducement even to the home-loving inhabitants of the coastal region to migrate to distant hills.

The actual number of immigrants to, and emigrants from, the different divisions, the proportions of these to the aggregate population of the divisions, and the net gain or loss to each division caused by the internal movement of the population, are given in the following statement :-

| Division | Beceived from other divisions |  | Given to other divisions |  | Loos( - ) or gain ( + ) to the division |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Proportion per cent. of the popalation of the division | Number | Proportion per cont. of the popalation of the division |  |
| 耳oministrative DiviaionSouthernCentraNorbennHigh Range |  |  |  |  |  |
|  | 13.493 | $0-9$ | 20.504 | $1 \cdot 4$ | -7,211 |
|  |  |  | 37,995 | $2 \cdot 0$ |  |
|  | 25,478 19263 | 15 18.3 | 30,037 | $1-6$ | - 6,492. |
|  | 19,263 | $18 \cdot 3$ | 501 | 0.5 | - 5,059 $+18,762$ |
| Datmral Diricion 89.586 |  |  |  |  |  |
| Lowland | 83,586 | 2.2 | 87,321 |  |  |
| Nidland | 68,586 40,936 | $2 \cdot 8$ | 80,675 | 83 | $-23,735$ $-12,089$ |
| Highinad | 40,936 | $14 \cdot 1$ | 5,112 | 18 | - $\mathbf{+} \mathbf{5 , 8 2 4}$ |

The statement shows that, as far as internal migration is concerned, all the plains divisions,. whether administrative or natural, send out more emigrants than the immigrants
 they receive and that the numbers they lose the High Range or the Highland Division gains. This fact is brought out very prominently by the ratio of emigrants to immigrants given in the marginal statement. For every 1,000 immigrants, the first three administrative and the first two natural divisions send out from 1,176 to 1,534 emigrants, while the High Range sends out only 26 , and the Highland 125 emigrants for every 1,000 immigrants they receive from the other divisions.
Intarnal migrathon in relatio tion in relatio
to density of population.
117. The relation between the density of population and internal migration is exhi-

| Density of population per square mile | Total population excluding that of Thovala and Bhenkotta taluks | Population enumerated in the density group but born in other groups | Natural population in the density group | Population born in the density genup and enumarated inother groaps | Proportion per cent. of immi grants to total population | Pmportion pir cenk of cmi grants to dataral popula. tion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| - Below 150 | 105,224 | 10,263 | 15,894 | 501 |  |  |
| 150-300. | 334,428 | 61,036 | 280,893 | 13,747 | $18 \cdot 3$ 18.3 | 8.2 $4 \cdot 2$ |
| 300- 450 | 338,440 | 37,001 | 316,482 | 18,410 | 109 | 8 |
| $\begin{aligned} & 450-600 \\ & .600-750 \end{aligned}$ |  |  |  |  |  |  |
| $\begin{aligned} & .600-750 \\ & 750-900 \end{aligned}$ | 665,175 $\mathbf{3 3 8 , 5 8 8}$ | 30,346 44,271 | 077,842 312,439 | 40,349 20,607 | 8.4 10.1 | 8.6 6.0 |
| 900-1,050 | 206,491 | 41,271 7,660 | 200,669 | $\begin{aligned} & 20,007 \\ & 11,188 \end{aligned}$ | 10.1 8.7 | 6.0 8.0 |
| $\begin{aligned} & 1,050 \text { and } \\ & \text { over. } \end{aligned}$ | 3,119,630 | 50,457 | 8,170,187 | 188,727 | 1.6 | 43 |

The population of Thovala and Shenkotta taluks has been excluded from the figures given in the above statement, because conditions there are similar to those in the Tamil country and are quite unlike what one finds inother parts of Travancore. The above statement reveals some interesting facts. The largest volume of immigration and the smallest volume of emigration gre seen in the lowest density group. The former varies inversely and the latter directly as the density, except in the density group 750-900 in the case of immigration, and in this as well as the higher density groups in the case of emigration. It is but natural that, as the density of population increases, the number of emigrants also increases. The tendency of the population is to move from regions of higher density to those of lower density. The exception noticed in regard to immigration in the density group $750-900$ should be attributed to the anomalous position of Changanachery taluk which falls in this group. A portion of this taluk is in the Lowland Division where the density is very high, but the major portion of it, nearly 84 per cent. of the total area, is in the. Midland Division where the density is low. To this part of the taluk there has been a large influx of population during the last decade, caused by the extensive development of rubber cultivation, the area of which in this taluk has increased from 621 acres in 1921 to 20,654 acres in 1930. The eastern parts of the taluk are extremely well-suited to rubber cultivation and in no other taluk has the area planted with rubber increased so largely as in this taluk in recent years. It is this special circumstance that has contributed to the larger proportion of immigrants to, and the smaller proportion of emigrants from, the density group $750-900$ than in the case of lower density groups. The slighty smaller number of emigrants from $900-1,050$ and higher density groups may probably be due to the fact that these groups contain practically all the towns which generally attract immigrants rather than send out emigrants. Notwithstanding the exceptions noticed above, the general proposition that immigration decreases and emigration increases as the density of population increases, may, therefore, be said to hold good in Travancore.
born and enumerated in the State is $4,960,870$. Of these, $4,587,957$ persons or $92 \cdot 5$ per cent. were enumerated in the taluk of birth only, and the remaining 372,913 or 7.5 per cent. alone were enumerated in taluks

| Talak | Immigrants from other taluks |  |
| :---: | :---: | :---: |
|  | Number | Proportion per cent. to total popalation of the taluk |
|  | 4,616 | 11.5 |
| Thovala | 28.996 | 12.8 |
| Nedumangad | 27,628 | $17 \cdot 6$ |
| Nedumangad | 20,259 | 20.0 |
| Pathanamthitta | 10,785 | 13.9 |
| Changanachery | 33,257 | 15.0 |
| Thodupnin |  | $24 \cdot 6$ |
| Pirmede | 16,418 | $35 \cdot 6$ | other than those of birth. Again, out of the latter number, 272,411 were persons born in contiguous taluks, and only 100,502 persons, who form but two per cent. of. the total State-born persons enumerated within the State, were born in noncontiguous taluks. These figures of inter-taluk migration go to prove, like those of inter-division migration, the comparative insignificance of the movement of population in general and more especially of long-distance movements within the State. There are, however, certain taluks in which migration plays an important rôle. In the above marginal statement are given the numbers of immigrants from other taluks and their proportion to the total population, in the case of those taluks in which the proportion is 10 per cent, or more.

In Thovala 4,616 persons representing 11.5 per cent. of the population are immigrants from other taluks; but out of these, as many as 2,784 belong to the adjoining taluk of Agasthiswaram and most of them are probably casual or temporary migrants who have crossed the border accidentally or on business on the census morning or on the previous night. Trivandrum has returned 28,996 immigrants from other taluks, but the town of Trivandrum alone accounts for 22,193 of them, and the remaining 6,803 persons form only about 5 per cent. of the population of the taluk excluding that of the town. This is too small a proportion to deserve special notice. The other taluks shown in the above marginal statement (Nedumangad, Pathanapuram, Pathanamthitta, Changanachery, Thodupula and Pirmede) stand on a different footing. Some of the immigrants in these taluks also may be casual visitors from the adjoining taluks, but the large majority of the 139,453 immigrants must have been persons who have settled there either semi-permanently or permanently as landholders, tenant cultivators, or agricultural labourers. These taluks contained and still contain extensive areas of cultivable lands and it is here that there has been the greatest development of cultivation during the past decade. The large influx of immigrants to these taluks must, therefore, be attributed to the facilities they have afforded for the extension of cultivation. The immigrants are drawn mostly from adjoining taluks, but the numbers contributed by non-contiguous taluks are not inconsiderable. For example, out of 20,259 immigrants to Pathanapuram, more than 10,000 are from non-contiguous taluks. Pirmede has drawn nearly 90 per cent. of its 16,418 immigrants from non-contiguous taluks.
119. So far, we have considered the movement of the population from one place to another within the State, and we shall now deal with the question of external migration. Of the aggregate population of $5,095,973$ enumerated in the present census, $4,960,870$, or 973 per mille , were born in the State, and 135,103, or 27 per mille, came from outside. Of the latter, 26,964 were born in the adjoining Cochin State; 82,963 in the contiguous districts of the Madras Presidency, namely, Anjengo, Coimbatore; Madura, Ramnad, and Tinnevelly; 21,379 in non-contiguous districts of the Madras Presidency and in the neighbouring State of Pudukottai ; 2,546 in other Provinces and States in India; and 1,251 in countries beyond India. These figures may be represented in percentage proportions as shown in the marginal

| Conntry, Province, District or State in which immigrants were born | Proportion per cent. to total immigrants |
| :---: | :---: |
| Contiguons distriçs of Madras Presidency | $61 \cdot 4$ |
| Contizuons State of Cochin | 20.0 |
| Non-contiguons districts of Madras Presidency and the adjoining State of Pudukotias | $15 \cdot 8$ |
| Other parts of India | $1 \cdot 9$ |
| Coantries bejond India | $0 \cdot 9$ | table. The Madras Presidency and the States of Cochin and Pudukottai have together contributed as much as 97.2 per cent. of the total immigrants. Those who have come from distant parts of India are less than two per cent. while less than one per cent. are immigrants from countries beyond India. Of these latter aggregating 1,251 , the largest number (453) is from Ceylon, and the next largest (377) from the United Kingdom, of whom more than 50 per cent. are Managers and Superintendents of tea estates in the High Range.

External migration.

## immigrants_

Territorial distribation of immigranta．

Of the immigrants from distant Provinces and States in India who number 2，546， Bombay has contributed the largest number，viz．， 517 of whom 64 per cent．are found in the town of Alleppey engaged on trade，and Mysore State has contributed 380 persons of whom the majority are coolies in the tea gardens in the High Range．
120．Of the 135,103 immigrants in the State， 19,745 are found in 19 municipal
towns， 70,568 in the High Range， 21,185 in the taluks of Thoval Shentor in the High Range， 21,185 in the taluks of Thovala，Shenkotta，Parur and Kunnathunad，and only the remaining 23，605，or about 17 per cent．of the total immigrants， in other parts of the State．It is evident from these figures that the immigrants are congre－ $J$（gated mostly in towns，in the High Range，and in the frontier taluks．

Immigrants by sax and religion．

121．The statistics of immigrants by religion and sex are shown in the marginal


The statement given in the margin below shows

| Division | Nales |  | Females |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Froportion per cinille | Number | Pmportion per mitle |
| Administratixe Division |  |  |  |  |
| Southern | 7，454 | 109 | 7，797 | 116 |
| Oentral | 11，028 | 162 | 11，577 | 173 |
| Northern | 10，561 | 155 | 16，118 | 241 |
| High Range Natural Diyision | 39，091 | 574 | 31，477 | 470 |
| Lowland | 15，010 | 220 | 19，532 | 292 |
| Midland | 9，814 | 144 | 11，314 | 169 |
| Highland | 43，310 | 636 | 36，123 | 839 | in different administrative and natural divisions．The preponderance of females in the Northern Division may be due to men in the frontier taluks taking the frontier taluks taking

their wives from the ad－ their wives from the ad－
joining Cochin State，and that of males in the High Range and in the High－ land Divisions to the semi－permanent immigra－ tion of more male than fermale coolies from the neighbouring districts of
the Madras Presidency to the tea gardens． statement．More than 75 per cent．of the immi－ grants are Hindus，and among them the propor－ tions of males and females． to the total of each sex are almost equal．But among the Christians who form about 20 per cent．of the immigrants females pre－ ponderate，while among the Musims who consti－ tute about 5 per cent．of the total，males are more numerous than females． n of immigrants by sex land Divisions to the

The distribution of immigrants by religion and sex in different administrative and natural divisions discloses wide and interesting variations as can be seen from the following statement ：－

| ，Division | Malen |  |  |  |  |  | Females |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hindu |  | Chriatian |  | Muslim |  | Hindu |  | Christian |  | Musllm |  |
|  | 寊 |  | 喜 |  | 总 | 号 | ｜墨 | 号 | 真 | 晨 | 考 | \％ |
| Administratixe Dixiaion |  |  | Y |  |  |  |  |  |  | ＊ |  |  |
| Southern | 5，979 | 11.7 | 1，062 | $8 \cdot 7$ | 408 | 8.0 | 0，308 | 12：7 | 1，18G | 8．8 | 231 | 9.8 |
| Central | 7，176 | $13 \cdot 9$ | 2，354 | 19.3 | 1，465 | $31 \cdot 8$ | 0，097 | 18.0 | 1，783 | 12.3 | 728 | $30 \cdot 6$ |
| Northern | 5，081 | 11.1 | 3，131 | 25.7 | 1，730 | 97－6 | 8，278 | 16.4 | 6，805 | 48.8 | 099 | $42 \cdot 2$ |
| High Range | 32，438 | $63 \cdot 3$ | 3，634 | 46.3 | 1，003 | 21.7 | 20，683 | B2．9 | 4，376 | 31.1 | 414 | $17 \cdot 4$ |
| Natural Diviaion |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowland | 8，900 | 17.6 | 4，050 | 38.2 | 1，915 | 41.6 | 11，736 | $23 \cdot 4$ | 6，400 | 46.1 | 1，198 | 50.7 |
| Midjand | 6，530 | $12 \cdot 8$ | 2，074 | 17.0 | 1，178 | 25.5 | 7，901 | $15 \cdot 8$ | 2，430 | 20.1 | 510 | 21.8 |
| Highand | 85，719 | 69.6 | 6，087 | 40.8 | 1，518 | 82.8 | 30，711 | 60.8 | 4，757 | $83 \cdot 8$ | 063 | 27.5 |

The highest proportion of Hindu immigrants is found in the High Range, with a preponderance of males, and they are mostly estate coolies from the neighbouring British districts. Of the Christian immigrants, the highest proportion of males is in the High Range and that of females in the Northern Division. The former are generally estate coolies and the latter have come over mostly from the Cochin State by marriage. Of the Muslim immigrants, both males and females are found in larger proportions in the Northern and Central Divisions than in the Southern or the High Range Division. Very few of them work in estates. They are generally petty merchants and, therefore, congregate more on the plains than on the hills. This is seen very clearly from the figures for the natural divisions. The Lowland Division contains the highest proportion of Muslims, as much as 50 per cent. of the females and over 41 per cent. of the males. The Hindus preponderate in the Highland, the ratio of females to males being smaller than that for the other regions.

The immigrants classified by sex according to the distance of the place of birth are given in the margin. The figures show that, as the distance between the place
 of birth and the place of enumeration increases, the proportion of females to males decreases except in the last class. Females are more than twice as many as males among the immigrants from Cochin State and Tinnevelly district to the contiguous frontier taluks. The ratio falls to 955 females per 1,000 males among other immigrants from Cochin, to 828 among other immigrants from the Madras Presidency, and still further to 526 among immigrants from other parts of India. The ratio among immigrants from countries beyond India is higher than that of immigrants from distant parts of India, probably because of the large number of nuns and nurses in the European population of the State.
122. The number of immigrants enumerated at each of the last five censuses and their proportion to the aggregate population are given in the marginal statement. The

| Year | Total population | Number of immigranta | Percentage of immigrants to total population |
| :---: | :---: | :---: | :---: |
| 1891 | 2,557,736 | 16,978. | 0.7 |
| 1901 | 2,952,157 | 54,903 | 1.9 |
| 1911 | 3,428,975 | 61,165 | 1.8 |
| 1921 | 4,006,062 | 73,591 | $1 \cdot 8$ |
| 1931 | 5,095,973 | 135,103 | 2.7 | volume of migration to the State has been growing from decade to decade. The number of immigrants in the last decennium was almost double that in the previous, and the ratio to the aggregate population was also higher than in any of the previous decades. The increase in the number of immigrants during the three decades prior to the last was not very appreciable and the ratio to the total population was almost constant. The large cultivation, which

123. Travancore has 224 tea and rubber plantations comprising an area of about Immigrants 75,000 acres under tea and 62,000 acres under rubber, and cardamom is cultivated in nearly in mea, rrabber 30,000 acres, so that these three crops together account for about 167,000 acres. They support altogether a population of 105,224 persons, of whom 79,433 are immigrants from outside Travancore and the remaining 25,791 only belong to the State. These 79 fires have been specially compiled from the census schedules of the estates. Of the 79,433 immigrants, 3,314 are workers in cardamom gardens and 76,119 in tea and rubber estates. Further, they consist of 76,699 field labourers and 2,734 other

Variation of immigrants at different censosseas.
employès, such as managers, superintendents, clerical staff, etc. The High Range lies entirely in the Highland Division. The estates in the former contain 70,568 immigrants and those in other parts of the Highland Division 8,865, making a total of 79,433 which is the aggregate number of immigrants in the whole Highland Division.

The population supported by the tea, rubber and cardamom estates, we have seen, is 105,224. They number 21 per mille of the population of the State, and consist of 75 per cent. outsiders and 25 per cent. Travancoreans. The population of the estates contains 79,433 immigrants and they represent as much as 59 per cent. of the total immigrants to the State. These figures give a clear indication of the influence which estates exercise in attracting immigrants to this State. Among 79,433 immigrants to the tea, rubber and cardamom estates there are 43,310 men against 36,123 women, which gives a ratio of 834 females per 1,000 males. The majority of the immigrants are labourers belonging to the depressed classes, such as Pallan, Parayan, Maravan, Nädar, etc. Classified by religion they consist of 83.7 per cent. Hindus, 13.6 per cent. Christians and 2.7 per cent. Muslims.

Immigrants in estates, classi fled according to the period of their stay.
124. A circular letter was sent round to the managers of 224 estates, requesting them to supply information as to the period during which the labourers who came from outside the State stayed in the estates. The managers of 121 estates complied with the request, furnishing particulars about 64,562 immigrants out of the total immigrant popu-

|  |
| :--- | :--- | :--- | :--- |
| Immigrants in 121 entetes |

lation of 79,433 . These particulars are given in the margin. 47.9 per cent. of the immigrants have been in the estates only for one year or less, 29.4 per cent. between one year and three years, and 22.7 per cent. for three years or more. From the enumeration schedules of the estates information has been specially collected as to the number of immigrant families who have had children born to them in Travancore, and the period of their stay,


Their proportion to the total immigrant population is, however, small. The large majority of immigrants are only temporary or semi-permanent sojourners.

Emigrante from from
the Btate.
125. The total number of emigrants from the State can only be estimated approximately, because information as to the actual number of Travancoreans who have gone to places outside India has not been received from all the countries. The marginal
 statement gives the estimated number of emigrants, their proportion per cent. to the natural population of the State and the number of emigrants per 1,000 immigrants at each of the censuses from 1891 . The number of emigrants has steadily increased from census to census, but the proportion to the natural population was the same in three decades since 1901 and increased from 0.8 per cent. to 1.2 per cent, in the last. The number of cmigrants were
fewer than immigrants at all the censusea, 'In the decade ended 1891; 811 persons went out of the State for every 1,000 who came in, in the next decade the proportion dropped to 446, in the next two decades there was a further fall، though somewhat small, and in the last decade there was a alight increase.
126. Of the 58,466 emigrants, as many as 49,984 or 85.5 per cent. are found in other parts of India and only the remaining $14 \cdot 5$ per cent. in other countries. Of the former, the largest number $(31,167)$ is in the adjoining State of Cochin, the inext largest (16,604) in the Madras Presidency, and poly 2,213 in other Provinces and States in India. Of the 16,604 emigrants in the Madras Presidency, the contiguous district of Tinnevelly has the highest number ( 5,469 ), next to it tome in order Malabar with 3,328, Madras with 1,850, Madura with 1,263, Ramnad with 951, Coimbatore with 763, Trichinopoly with 653; Tanjore with 524, Nilginis with 458, and then the other districts each having 250 or less.

The emigrants to different parts of India, classified according to the distanceof the places to which they have gone, and the sex ratio of the different groups are shown

| Prace of enumeration | Number of emigrants | Proportion per cent. to total emigrants | Number of females per 1,000 males |
| :---: | :---: | :---: | :---: |
| 1. Contipuous State of Jochin . <br> 2. Oontiguous district (Tinne- | 31,167 | $62 \cdot 4$ | 1,543 |
| velly) of the Madras Prea. dency | . 5,469 | 10.9 | 712 |
| 3. Other dietricts of the Madras Preafdenoy. | 11,135 | 22.8 |  |
| 4. Other parts of Indin. | 2,213 | $4 \cdot 4$ | 284 | in the marginal statement. The preponderance of females over males in the emigrants to Cochin may be due to. women bori in Travancore going over to Cochin by marriage. The low female ratio among the emigrants to other parts of India indicates the migration of allarger number of men than women temporarily or semi-permanently on business or for other purposes. In Madras, for example, there are 1,850 Travancoreans of whom 1,227 are men and only 623 are women. The preponderance of men in this case may be due to the large number of students attending the educational institutions in the Madras City.

127. The marginal.statement gives the number of emigrants from Travancore to Emigrants countries beyond India in 1921 and 1931. The figures of emigrants to Ceylon for 1931 to foreiga

| iipratst to foriegn countrica |  |  |
| :---: | :---: | :---: |
| Conntry | 1931 | 1921 |
|  |  |  | have ane been received from that country and the figures for the other countries have been abstracted from the special entries in the census schedules of this State. They may not be accurate; but since the results of the census in those countries are not available, we have to be satisfied with these approximate figures. The total number of emigrants has fallen from 8,665 in 1921 to 8,482 in 1931. The fall is seen markedly in the emigrants to Ceylon and Mesopotamia. The former is due to the disbandment of labourers from estates as a result of the present economic depression.: During the War and for some time after a number of Travancoreans were employed in Mesopotamia; but most of them have since returned home, and this accounts for the fall in the number of emigrants to that country. There is a slight increase in the number of emigrants to the Straits Settlements and Malay States. The development of rubber cultivation in those countries during the last decade attracted a large number of men from Travancore. But some of them had to come back on accoumt of the closing down of estates towards the end of the decade. Otherwise, their number would have shown a considerably larger increase. The emigrants to the United Kingdom and America may be mostly students, but a few in those countries and most of the emigrants to other countries may have gone there to earn their livelihood. Though Travancoreans, like other Indians, are generally a home-loving people, we see from the statement given above

that some of them have ventured to go out to such distant couniries as Persia, Mesopotamia, Africa, Borneo and Java under the pressure of economic necessity. If conditions of settlement are congenial, distance or other disadvantages will not deter the educated youth of Travancore from migrating to any country to earn a decent living. Such emigration will naturally be of a temporary or semi-permanent type only, because the Travancorean has an innate desire to return to his native land to spend the evening of his life. The preponderance of males over females among the emigrants to distant countriesit is seen from the figures that there are only 110 women for 1,000 men-shows clearly the temporary or semi-permanent character of this external migration.

Main currente of axternal migration.

Types of migration.
128. In the map facing this page are shown the main currents of migration between Travancore on the one hand, and Cochin and some districts of the Madras Presidency on the other. We have already seen that Cochin State and the Madras Presidency contribute more than 97 per cent. of the immigrants to Travancore and of the emigrants from the State more than 80 per cent. are absorbed by Cochin and Madras. Only the important currents of migration between these territories are shown in the map.
129. Migration is generally considered to be of diferent types. They are :(i) casual, or minor movements of people between adjacent villages; (ii) temporary, brought about by journeys on business visits to places of pilgrimage, and to religious or social festivals, or by temporary demand for labour in connection with the construction of new roads, bridges, etc., (iii) periodic, which generally takes place during harvest time or when agriculture is slack and the people move to industrial centres seeking employment in seasonal industries; (iv) semi-permanent, caused by the persons born in one place residing and earning their livelihood in another, but retaining their connection with their homes; (v) permanent, when overcrowding or other causes induce people to leave their place of birth and settle in another, permanently with their families; and (vi) daily, due to the practice of persons living outside large towns going to towns on business and returning home daily. The census returns do not distinguish between the different types of migration, but they contain some clues by which each type can approximately be determined. For example, the sex proporion and the distance between the place of birth and the place of enumeration will throw some light on this question. In casual and temporary migrations due to visits to places of pilgrimage, females will generally preponderate. The bulk of the periodic and semi-permanent migrations will consist of more men than women, while in permanent migration the sexes will be fairly equal.

The floating population of 15,504 enumerated in Travancore may practically be regarded as casual migrants, and 20 also a portion of the persons born in one taluk and enumerated in the adjoining taluks of the State, born in the frontier taluks and enumerated in the neighbouring State of Cochin or the contiguous districts of the Madras Presidency, and vice versa. It is not possible, however, to estimate the number of such migrants. The works in connection with the supply of water to the town of Trivandrum and the extension of the railway to the heart of the town, which were being executed vigorously during the census operations, employed more than 3,000 labourers. Some of them came from the adjoining taluks and may, therefore, be classed under temporary migrants. The labourers working in cardamom gardens are periodic visitors. They come generally from the adjoining British districts annually during the cultivation and harvest seasons and return to their native places after finishing the work. The large majority of nearly 3,300 persons enumerated in the cardamom district are, therefore, periodic immigrants. Most of the immigrants in the fea and rubber plantations, the emigrants generally from the State, as well as the majority of the immigrants to Nedumangad, Pathanapuram, Pathanamthitta, Changanachery, Thodupula, Pirmede and Devikulam taluks from other parts of the State, may fall in the category of semi-permanent migrants. The other Travancorean immigrants to the above taluks and the immigrants from other parts of India who have stayed in the tea and rubber plantations for more than five years may be regarded as permanent settlers. Daily migration is now a common feature of important towns like Trivandrum, Nagercoil, Quilon and Alleppey. A number of people live outside the towns, go there for work in the morning and return home in the evening. Owing to the convenience afforded for travelling by motor buses and cars, persons living in places within a radius of about 50 miles find it possible to visit the capital and the division and taluk headquarters, transact their business and get back home on the same day. Hundreds of persons are thus visiting Trivandrum and other towns daily. Statistics of such persons have not been collected, but there is no doubt that the volume of this daily migration has increased considerably since the development of motor traffic.

130. Travancore has always received more immigrants than the emigrants she has The economic sent out. The statistics showing the balance of migration during the last four decades are mispeation of

| Year of Census | Total immigrants | Total emigrants | Excens of immigrants over emigrants |
| :---: | :---: | :---: | :---: |
| 1891 | 16,978 | 13,768 | 3,210 |
| 1901 | 54,903 | 24,490 | 30,+13 |
| 1911 | 61,165 | 26,123 | 35,042 |
| 1921 | 73,591 | 30,260 | 43,331 |
| 1931 | 135,103 | 58,466 | 76,697 | given in the marginal statement. It is seen therefrom that the excess of immigrants over emigrants increased from 3,210 in 1891 to 30,413 in 1901, to 43,331 in 1921, and to 76,637 in 1931. In paragraph 123 above it has been stated that of 79,433 immigrants to the Highland Division of the State, the field labourers in tea, rubber and cardamom gardens number 76,699 . This is practically equal to the difference between the immigrants and emigrants in 1931. If these. field labourers had not migrated to Travancore, immigration and emigration would have balanced each other, and the State would have had neither gain nor loss to its population. As against 76,699 foreign labourers working in estates, the Travancorean labourers employed therein number only 25,791 . It is a legitimate question to ask why the estates import foreign labour when there is a large volume of unemployment in the country. If the estates would recruit all their labour from the State itself, more than 75,000 persons could find work, and to that extent the number of the unemployed here would go down. Foreign labour is employed more in tea and cardamom gardens than in rubber plantations. There are two reasons for this. One is that for work in tea gardens, particularly for plucking tea leaf, the Tamil coolies are considered to be more efficient, and the other reason is the inaccessibility of the tea and cardamom gardens to the people of the State. Till last year there was practically no road communication between the plains of Travancore and Devikulam taluk wherein are situated most of the large tea estates. Now that a new road has been opened from Neriamangalam to Pallivasáal, connecting the plains and the hills, local labour should be able to migrate to the tea district in larger numbers hereafter. That it is chiefly the want of communication that has hindered this migration is evident from the fact that Pirmede taluk which has long been connected with the plains by a good metalled road contains a much larger proportion of local labour than Devikulam. The total immigrants in Pirmede taluk number 39,725 , and of these 16,418 , or $41 \cdot 3$ per cent. are Travancoreans and the remaining 58.7 per cent. only are outsiders. On the other hand, in Devikulam there are only 2,891 Travancoreans in the total immigrant population of 50,152 , which gives a proportion of $5 \cdot 8$ per cent. Travancoreans against $94-2$ per cent. non-Travancoreans. The opening of the Netiamangalam-Pallivàasal road should, therefore, lead to a larger migration of local labour to the tea gardens in Devikulam taluk. The question of efficiency can easily be solved. Effciency of unskilled labour depends upon experience and, with the natural intelligence which the people of Travancore possess, they will easily pick up sufficient experience to become as good experts as the Tamilians in works like the plucking of tea leaf. The managers of estates would only look to the efficiency and cheapriess of labour. If the people of this country would be prepared to migrate to the hills and demonstrate their fitness for work in the tea gardens, they could gradually replace the labourers from the East Coast and no less than 75,000 of them could thereby get employment.

## SUBSIDIARY TABLE I

Immigration (actual figures)

| Division where enumerated | Bort in |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Division of enumeration |  |  | Contigupus Diviaions in State |  |  | Other parts of State |  |  |
|  | Total | Males | Females | Total | Males | Fcmales | Total | Males | Femalos |
| 1 | 2 | 8 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8TATE | 4,980,870 | 9,498,939 | 2,463,981 | ** | - | -• |  |  | $\cdots$ |
| Soutieern | 1,405,812 | 701,687 | - 703,525 | 10,018 | 8,987 | 4,086 | 3,480 | 2,988 | 1,128 |
| Contral | 1;808,084 | 906,988 | 901,191 | 30,803 | 15,208 | 16,506 | - | - | -* |
| Northern | 1,643,164 | 831,389 | 811,778 | 28,387 | 11,615 | 11,772 | 8,091 | 1,280 | 811 |
| High Range | 15,393 | 7,682 | 7,711 | 14,595 | 9,876 | 4,719 | 4,668 | 2,094 | 1,744 |
| Hatural Divicion |  |  |  |  |  |  |  |  |  |
| Lowland | 2,301,421 | 1,184,584 | 1,146,887 | 61,641 | 91,776 | 29,865 | 1,945 | 1,173 | 76 |
| Midland | 2,325,780 | 1,176,164 | 1,149,626 | 68,888 | 31,086 | 87,860 | * | $\bullet$ | - |
| Highland | 170,501 | 87,086 | - 88,805 | 29,034 | - 17,700 | 11,934 | 11,802 | 7,080 | 4,888 |



SUBSIDIARY. TABLE II
.Emigration (aotual figares)



## SUBSIDIARY TABLE III

Migration between Natural Dixisions (actual figures) compared with 1921

| Natural Division of birth |  | $\cdot$ | Total born in each Natural Division | Number enumerated in Natural Division |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lowland |  | Midland | Highland |
| Lowinad | 1. |  |  | 2 | 3 | 4 | 5 |
|  | $\{1981$ |  | 2,378,742 | 2.301,421 | 65,419 | 11,902 |
|  | ( 1921 |  | 1,792,269 | 1,742,164 | 19,823 | 30.282 |
| Midlard | $\{1931$ |  | 2,406,465 | 51,641 | 2,325,780 | 29,034 |
|  | - 1921 | . | 1,292,157 | 49,073 | 1,214,093 | 28,991 |
| Highland | $\left\{{ }^{1931}\right.$ | - | 175,673 | 1,942 | 3,167 | 170,561 |
|  | \{ 1921 | - | 848,045 | 9,138 | 9,600 | 829,307 |

NOTE :-The boandaries of the natural divisions bave been altered at this census, but the figures for 1991 have not been adjusted
as the details required for this purpose are not arailable. The figures for 1991 comparable.

SUBSIDIARY TABLE IV
Migration between Travancore and other parts of India


## CHAPTER IV

## AOE

131. The statistics that are collected at the census are of a varied nature. Ordi- Introdnotory narily, they provide material for the classification of the population into groups by birth- remarks place, religion; caste, age, sex, civil condition, literacy, mother-tongue, and occupation, Of these, statistics regarding age are the most important and the most interesting. They are important, because a knowledge of the age constitution is essential for a satisfactory computation of birth, death and marriage rates and their variations from time to time. The differences in the age constitution of different castes and creeds and of the populations of different localities have an intimate bearing on their economic, social and political conditions: Statistics of age may be affected by migration. Changes in the age distribution may give an indication of the volume of migration and its economic effect on the native population. Statistics of the literates and of the school-going population will lose much of their value if they are not correlated with age. In fact there is hardly any important question in sociology which can be studied properly without a knowledge of the age constitution of the population. Age statistics, along with those of sex, deal with the results of the laws of nature, while other census returns are concerned with the differentiations created by man for his own convenience. Herein lies the special interest of the statistics relating to the age and sex constitution of a population.
132. The statistics dealt with in this chapter are embodied in the following tables:- Reference to Imperial Table VIII. Age, sex and civil condition.
. VIII. Age, sex and civil condition of selected castes, tribes or races.
Subsidiary Table I. Age distribution of 10,000 of each sex in the State and each natural division.

| " | II. Age distribution of 10,000 of each sex in each main religion. |
| :---: | :---: |
| " | III. Age distribution of 1,000 of each sex in certain castes.* * |
| n | IV. Proportion of children under 14 and of persons over 43 to thase aged $14-43$ in certain castes; also of married females aged $14-43$ per 100 females. |
| " | V, Proportion of children under 10 and of persons over 60 to those aged $15-40$, also of married females aged $15=40$ per 100 females. |
| " | VA. Proportion of children under 10 and of persons over 60 to those aged $15-40$ in certain religions ; also of mamed females aged $15-40$ per 100 females. |
| " | VI. Variation in population at certain age-periods. |
| , | VII. Reported birth-rate by sex and natural division. |
| 3 | VIII. Reported death-rate by sex and natural division, |
| " | IX. Reported death-rate by sex and age during the decade per mille living at the same age. |
| " | X. Reported deaths from certain diseases per mille of each sex. |
| : | XI. Adjusted figures in the different age-groups, proportioned to 100,000 of the total population in 1911 and 1921 . |
| * | XII. Graduated figures showing individual age distribution proportioned to 100,000 of the total population in 1931 . |
| " | XHI. Rates of mortality and expectation of life at quinquennial ages. |

Nature of the age return.
133. In no country has the question asked about age remained the same at all the censuses. In Great Britain and the United States, for example, in some censuses the question asked was for the age last birthday, in some for the age next birthday, and in some others for the age nearest birthday. In Travancore, as elsewhere in India, the age last birthday was asked for at all the censuses from 1881 , and the ages recorded used to be tabulated into individual age-groups up to f five and thereatter into quinquennial groups. This method was found not to give satisfactory results on account of the numerous errors which vitiated the returns, and it was considered advisable, therefore, to change the question at the present census. The age recorded at this census was not the age last birth-

| Age-groups sorted from the ages recorded in the chedules | Corresponding limits of actual ages |
| :---: | :---: |
| 0 | , 0 - ${ }^{\frac{1}{1} \text { year }}$ years |
| 2 | 1\% 2\% |
| 3 | 2t-34 $\%$. |
| +-6 | 34-64 $n$. |
| 7-13 | 6\}-13¢ |
| $\cdots$ |  |
| 74 and over | 73¢ and over | day but the nearest age. Thus the age of babies below six months was recorded as 0 , that of infants above 6 months and below $1 \frac{1}{2}$ years as 1 , those above $1 \frac{1}{2}$ years but below $2 \frac{1}{2}$ years were included under the age 2 , and so on. The difference between this method and the one adopted at the previous censuses is that one who was 2 years and 9 months old, for example, was included under the age 2 at the previous censuses and under the age 3 at the present census. The ages recorded in the schedules were first sorted into individual ages up to three and thereafter into ternary and septenary groups. The sorted groups of the recorded ages and the corresponding limits of the actual ages are shown in the margin." If half of the lower group be added to half of the next higher group, very nearly the age last birthday would be obtained, which would correspond to the age recorded at the previous censuses. By this method the ternary and septenary groups were converted into the usual quinary groups as suggested by Mr. H. G. W. Meikle, Actuary to the Government of India. The results thus obtained are expected to be fairly accurate.

When a departure is made in the method of tabulation of any particular item with a view to secure greater accuracy, special caution is necessary in comparing the results obtained by the new method with those of the previous censuses. If the method remains unchanged the same inaccuracies will occur at all the censuses and may not, therefore, vitiate comparison. But, when an improved method is introduced at one census the figures of the previous censuses must be brought to the precision of the latter so that they may be strictly comparable. The figures in the various age-groups. in the censuses of 1911 and 1921 have accordingly been adjusted so as to bring them into line with those of the present census, and comparison has invariably been made between the.adjusted figures only.

The age-groups adopted for the selected castes at the present cenisus are not the same as those adopted at the previous census. In 1921, the age-groups were 0.5, 5-12, $12-15,15-20,20-40,40$ and over, and in 1931, they were changed to $0-6,7-13,14-16$, 17-23, 24-43, 44 and over. The age distribution of the castes at the two censuses does not, therefore, admit of strict comparison.

Errors in the age return.
134. Errors are quite common in the age returns of all countries. In apite of the great mprovements made in the method of recording the age from census to census, it has not yet been found possible to eliminate the errors altogether from the returns even in countries like Great Britain and the United States. In the United States the degree of inaccuracy is found to be greatest for those classes of population in which the proportion of illiterates is highest. The inaccuracies in the age returns of India are well known and have been dealt with fully in the previous census reports. Travancore is in the same boat with India. The errors discovered in the India returns were found to exist in the Travancore returns also. The greatest difficulty in recording age in Travancore, as in India generally, is that the vast majority of the depressed classes who are mostly illiterate have absolutely no idea of their age. If the enumerators see them they can at least guess their age as best as they could, but very often the enumerators may not see all the members of a family, and information about some of them will have, therefore, to be obtained from a person found at home, who knows little about his own age and less about his relations. In the Census Report of Travancore for 1921 no attempt was made to describe the nature, and estimate the extent of the errors in the age returns. In apite of the improvement effected in the method of recording and tabulating the age at the present census, errors more or less of a similar nature might have occurred now as at
the previous censuses. It may not, therefore, be out of place to give here a brief description of the main errors and of the methods of eliminating them. The errors may be divided into accidental or unbiassed, and deliberate or biassed errors.
135. Accidental or unbiassed mis-statements of age are due to ignorance of the Xocidental facts or a looseness in statement. People who are ignorant of their exact age will errort. generally give it in the nearest round number. Very often the enumerators will have to guess the age of such persons and the guess, even if it comes very near the actual age, will ordinarily be in round numbers. Positive and negative errors are equally probable in such cases and will tend to cancel each other when the figures are divided into groups. In guessing the age; whether it be by the enumerated or by the enumerator, there appears to be a remarkable preference for selecting ages ending with 0 or 5 . This extraordinary feature is seen at all the censuses. If correct ages had been returned the numbers in $0-1,1-2,2-3$, etc., would have formed a decreasing sequence. The diagram given below which shows the distribution of 100,000 males by annual age-periods in the population of 1921 brings out clearly the great inaccuracies in the recorded ages.*


The preference for stating the age in round or even numbers is seen clearly from the diagram. This preference persists in all censuses whether the age asked for is the age last birthday or next birthday, or the nearest age. The order of preference in Travancore is the same as in India, namely, $0,5,2,8,4,6,7,1,9 .+$
136. The United States Census Bureau used to calculate what is called the "index Inder of conof concentration" to express the degree of preference for round numbers. "It is the
per cent. which the number reported as multiples of 5 forms to $1 / 5$ of the per cent. which the number reported as multiples of 5 forms to $1 / 5$ of the total number between 23 and 62 years inclusive." $\ddagger$ The index of concentration increases with the

[^12]ignorance and illiteracy of the people. The indices have been calculated for the censuses of 1901 and 192! in Travancore, and these figures together with those for some other countries are given in the margin. Travancore

| Indes of concentration |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Malea | Femalos |
| Travancore | 1901 | 258 | 273 |
|  | 1921 | 223 | 250 |
| Baroda | 192」 | 358 | 367 |
|  | - | Both sexes |  |
| England | 1901 |  | 100 |
| France | 1901 |  | 106 |
| Rusgia | 1897 |  | 182 | does not come up to the level of England, France or even Russia, but she is certainly better than Baroda. The index of concentration could not be calculated for the present census in Travancore because individual age returns have not been compiled. It is not, therefore, possible to know whether any improvement is noticeable on the census of 1921, but the figures show that the latter is an improvement on the census of 1901. The index of concentration is higher for females than for males, evidently because illiteracy and ignorance are more prevalent among the former than among the latter.

"Ago next
birthday" errop.
137. A minor form of accidental error is the one caused by the age next birthday being returned inadvertently when the age that should have been given is the age last -birthday. The only age-group that is affected materially by this error is $0-5$. In other -groups the exaggeration at the oldest age will be counteracted by the depletion at the youngest in a particular group, owing to overstatement at the oldest age in the preceding group. In 0-5 group this is not possible. The depression that is invariably seen in $1-2$ group at all censuses is generally due to this error. The depresion will, of course, be deepened by under-enumeration among children as was the case in 1921 in

| Proportion per cent. of the numbers in the first five indiridual ages to the total in 0:-5 group |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age-group | 1931 | 1921 | 1011 | 1901 |
| Total | 100 | 100 | 100 | 100 |
| 0-1 | $24 \cdot 2$ | 21.0 | $10 \cdot 9$ | $19 \cdot 5$ |
| 12 | 21.0 | $13 \cdot 8$ | $16 \cdot 6$ | $17 \cdot 8$ |
| 2-3 | 19*7 | 21.5 | 22.5 | 20.0 |
| 8-4 | 18.0 17.1 | $23 \cdot 1$ 20.6 | 22.7 18.9 | $22 \cdot 8$ 20.4 |
| 4-5 | 1711 | $20 \cdot 6$ | 18.9 | 20.4 | Travancore. The extent of depression caused by this form of error can be seen from the figures given in the margin, showing the proportion per cent. of the numbers in 0-1, 1-2, 2-3, 3-4 and 4-5 groups to the total population in 0-5 group for the last four censuses in Travancare. The decline in the proportion in 1-2 group in 192 I is too great to be accounted for entirely by the error caused by the return of age next birthday. It must, partly at least, be due to underenumeration which, as we have seen in paragraph 51, Chapter I, must have vitiated the returns of 1921.

Adjustment for accidental errory.
138. There are several methods of adjusting the figures for the errors caused by accidental mis-statements of age. The well-known method of columnar difference consinto in transferring half. of the excess numbers returned at any age which is a multiple of 5 over the mean of the numbers returned at the immediately preceding and succeeding ages to the preceding group, Mr. Meikle has calculated in his Actuarial Report for 1921 what are known as "correction factors" 'which give the percentage proportions to be transferred from each group of recorded figures to the preceding group to obtain the correct numbers. The correction factors, calculated by the method followed by Mr. Meikle for the male population of Travancore, together with those for certain provinces in British India for 1921, are

| Oorrectiom factors for males |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age-group | Travancore | Madras | Bengal | Bombay | Panjab |
| 5-10 | $11 \cdot 6$ | $12 \cdot 8$ | 11.9 | $12 \cdot 1$ | 12.8 |
| 10-15 | $10 \cdot 8$ | $14 \cdot 8$ | 12.9 | 18.8 | 11.0 |
| 15-20 | $10 \cdot 2$ | 17.4 | 18.9 | 16.5 | 18.8 |
| 20-25 | $14 \cdot 3$ | $25 \cdot 5$ | 18.8 | 22.6 | 22.4 |
| 28-30 | 15.4 | $28 \cdot 7$ | 25.9 | 90.1 | 29.8 |
| 30-35 | $19 \cdot 4$ | 38.2 | $29 \cdot 2$ | $32 \cdot 8$ | 88.8 |
| 36 ¢ 40 | $22 \cdot 8$ | $34 \cdot 8$ | 82.4 | $35 \cdot 1$. | $87 \cdot 1$ |
| 40-45 | $24 \cdot 9$ | 38.9 | 84.7 | 37-9 | $42 \cdot 2$ |
| 45-50 | $27 \cdot 1$ | $34 \cdot 9$ | 84.2 | 36.4 | $40 \cdot 3$ |
| 80-55 | $24 \cdot 6$ | 40.2 | 38.8 | $40 \cdot 1$ | 43.9 |
| 55-60 | $22 \cdot 7$ | $34 \cdot 2$ | $35 \cdot 5$ | 86.4 | $10 \cdot 9$ |
| 60-65 | 23.9 | 44.1 | 48.5 | 43.7 | 47.2 |
| 65-70 | $23 \cdot 4$ | $34 \cdot 2$ | 86.1 | 40.8 | 42.4 |
| 70 and over | 13.5 | 22.7 | . 23.6 | 21.4 | 26.5 |
|  |  |  |  |  |  |

for in 1911 and 1921 was the age last birthday. given in the marginal statement. It will be noticed that the adjustments to be made in the recorded figures of Travancore are smaller than those for the provinces, indicating thereby greater accuracy in the returns of this State. The actual adjustment in the figures of Travancore for 1911 and 1921 has, however, been made not by the above method but by a different one which in principle corresponds to the new method of tabulation adopted at the present census. It is based on the assumption that the age returned was the nearest age, though what was asked Mr. Meilde justifies his assumption in
paragraphs $12-15$ of his Report for 1921. On the supposition that this assumption holds good for all ages above 5 , the total population was first re-distributed into individual ages on the basis of the proportions in the sample of 100,000 given in 1911 and 1921 reports, then classified into alternate ternary and septenary groups, namely, 4-6, 7-13, etc., and finally re-grouped into quinary periods as was done at the present census. The results obtained by this method are as satisfactory as those that could be obtained by the method of columnar difference. The results in both the cases will only be approximate because the adjustments are based on samples. To get more accurate results a further adjustment is necessary to allow for the decrement which death causes in the numbers living at the successive age-periods. The figures used in Chapter 1 have been obtained after making this further adjustment. The adjusted figures in the different age-groups, proportioned to 100,000 of the population in the censuses of 1911 and 1921,
Proportion per enille of the population of 1921 distributed in
certain aje-groupe are given in Subsidiary Table XI at the end of this chapter. It may be noticed that the adjusted figures in age-groups $0-5$ and 15-20 are larger and those in age-groups 5-10 and $10-15$ smaller than therecorded ones. This agrees with the findings in other parts of India. The marginal statement shows the difference between the adjusted and recorded figures for certain large age-groups in 1921. The method of tabulation adopted at the present census is such that the adjustment has been made in the tabulation itself and the recorded figures may, therefore, be taken to be the same as the adjusted ones.
139. So far, we have dealt with the errors which are accidental or local in systematic character. There is yet another, and more elusive, type of errors caused by deliberate mis-statements of age. These may be called systematic errars. Unmarried girls, middle-aged women and bachelors habitually umderstate their ages, while young mothers and old people overstate theirs. Sometimes these deliberate mis-statements are due to custom and superstition. It is practically impossible to eliminate completely such errors from the returns; but partial climination can be effected by a process of graduation described below. These errors will occur in the age returns of all classes of people; and for purposes of comparison between different sections of the population it is not, therefore, necessary to eliminate them altogether, .
140. The theory of graduation is based on the principle that, if correct ages were Graduation to returned, the numbers at different ages would form a smooth and continuous progression. matic erroreGraduation would, therefore, enable us to eliminate the inaccuracies in the age returns and would at the same time show the correct distribution of the population by individual ages. There are different methods of graduation, but the one adopted here is that suggested by Mr. Alfred Henry and described in paragraph 27 of Mr. Meikle's Report for 1921 By this method the figures for 1931 census in Travancore were graduated. The numbers recorded in successive age-groups were first adjusted for the decrement caused by mortality by the method suggested by Mr. W. Meikle in his note dated the 17th October 1929. To arrive at the numbers living at each age, the adjusted numbers above each quinquennial group were added up from the bottom upwards commencing with the group 70 and over, and the ratios of the numbers ( $\mathrm{T}_{5 \mathrm{n}}$ ) thus obtained to the corresponding numbers ( $\mathrm{T}_{\mathrm{y}}$ ) of a well-graduated table wree then worked out. The value of these ratios for the ages $70,65,60$, etc., being known, the logarithms of the ratios were graduated by the formula $y=c_{0}+c_{1} x+c_{3} x^{2}+c_{3} x^{2} \ldots \ldots$ in which $x$ stands for the age. The
observed and graduated values of the logarithms were then graphed for males and females. These graphs are given below:-

The continuous curves represent the observed values and the dotted ones the graduated values of the logarithms. It will be noticed that even the continuous curves are more or less smooth except for some minor deviations, and this is a clear indication of the efficiency of the method employed for the tabulation of the age figures at the present census. After the form of the equation was determined, the ratio for each age was ascertained by substituting the age figures for $x$ in the above equation. The numbers living above each age ( $\mathrm{T}_{\mathrm{x}}$ ) were then calculated and the numbers living at each age determined by differencing.

The table given below shows the graduated and recorded figures for quinquennial age-groups, proportioned to 100,000 of the population. The recorded figures do not agree with those given in Subsidiary Table I at the end of this chapter, because they have been adjusted for continuous decrement caused by death, and it is these adjusted figures that are given in the columns for recorded figures in the following statement. Subsidiary Table XII gives the proportion per 100,000 of the population at each individual age.

Graduatod and rocurded figwes shmoing the distribution of 100,000 of the population by age-gromp after adjusting for decrement due to murtality

| Age-group | Graduated figures |  | Bucorded figures |  | Difrerence between gradunted and recorded figures Increase ( + ) Decrease ( - ) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Femalee | Males | Females |
| 0-5 | 17,420 | 17,064 | 17,299 | 17.352 | $+130$ | $+212$ |
| 5-10 | 12,97\% | 13,292 | 13,347 | 13,147 | +368 | +145 |
| 10-15 | 11,219 | 11,639 | 12,079 | 11,871 | -860 | -332 |
| 15-20 | 10,031 | 10,256 | 9,432 | 10,002 | + 899 | $+254$ |
| 20-25 | 8,973 | 9,057 | 8.508 | 9,323 | +465 | --266 |
| 25-811 | 7.918 | 7,862 | 7,714 | 7,904 | $+204$ | - 43 |
| 30-35 | 6,894 | 6,724 | 6,919 | 6,799 | +25 | $-75$ |
| 35-40 | 5,935 | :,665 | 6,061 | 5.610 | -156 | + 60 |
| 40-45 | 4,963 | 4,700 | 4,949 | 4,563 | $\pm 14$ | $+137$ |
| 45-50 | 4,065 | 3,828 | 4,104 | 3,865 | $\pm 39$ | -3\% |
| 50-58 | 3,217 | 3,039 | 3,184 | 2,997 | + 33 | $+42$ |
| 55-60 | 2,438 | 2,335 | 2,481 | 2,435 | -43 | $-100$ |
| 60-65 | 1.739 | 1,711 | 1,742 | 1,746 | - 3 | $-35$ |
| 65-70 | 1,138 | 1,172 | 1,073 | 1,117 | +65 | $\pm 05$ |
| 70 and orer | 1,092 | 1,256 | 1,108 | 1,264 | - 16 | - 8 |

The excess of the graduated figures over the recorded ones in 0-5 group may be. due to under-enumeration. Under-enumeralion in this group occurs to some extent even in advanced countries like England, and it is not surprising that it happens in Travancore also, though only on a small scale. The increase in the graduated figures in the age-group 15-20 may be the result of mis-statement of ages.
141. - Having determined the probable errors in the age-returns we are now in a The effect of position to consider the general age distribution of the population, but before doing so let us mifration on posis see whether migration has any influence on the age the age

| Listribution per mille of emigrants by <br> certain aga-groups |  |  |
| :---: | :---: | :---: |
| Agr-group | Males | Fenaies |
| $0-15$ | 61 | 207 |
| $15-30$ | 579 | 613 |
| $30-60$ | 351 | 168 |
| 60 and over | 9 | 12 | see whether migration has any influence on the age distribution. see whether migration has any influence on the age

distribution in Travancore. Full particulars of the Travancore-born persons living outside the State are not available. A rough idea may, however, be obtained from the ages, recorded in the special columns of the schedules of this State, of the persons who left the country in the last decade. The distribution of these emigrants in certain large age-groups, compiled from the figures given in the schedules, is shown in the margin. About 64 per cent. of the male emigrants and 82 per cent. of the female emigrants are below the age of 30 . Female emigrants are generally those who go over to the adjoining British districts or Cochin State by marriage. They are, as a rule, young women, and hence women of 30 years and below figure largely among the emigrants.

Of the 135,103 persons returned as immigrants 70,000 were selected at random to ascertain the age distribution of immigrants. The migration to the High Range is mainly of families working in estates and that of females to the other divisions is essentially the

| Age gratp | State |  | High Range Division |  | Other administrative divisions |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Malca | Females |
| 0-15 | 266 | 237 | 308 | 375 | 203 | 180 |
| 15-30 | 334 | 358 | 368 | 398 | 285 | 317 |
| $30-60$ 60 | 358 | 330 35 | 316 | 222 | 421 | 438 |
| 60 and over | 42 | 35 |  |  | 91 | 65 | result of marriages. It is, therefore, desirable to treat these two sets of immigrants separately. The table in the margin gives the age distribution of these, proportioned to 1,000 of the total immigrants. The higher proportion of children under 15 in the High Range than in the other divisions indicates that more married men with families migrate to the former than to the latter regions. Taking

the State as a whe propartind female immigrants is greater than that of the male up to the $x$ 品 $m$, 30 and abovis this age the lemale proportion is smaller. The majority of the female imy igrants from the adjoining territories, as in the case of emigrants, come over-by marriage and they will generally be of younger ages, whereas men who ordinarily come for business will be older. Hence females preponderate among immigrants of younger ages and males among those of older ages.

The volume of migration compared with the aggregate population of the State is so small that its effect on the age distribution and the crude death-rate is practically negligible.

Age distribution of the actual and natural population proportioned to 10,000

| Age-groap | Actual population |  | Natural population |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Malos | Females |
| 0-15 | 4,274 | 4,297 | 4.270 | 4,253 |
| 15-30 | 2,548 | 2,706 | 2,568 | 2,720 |
| 30-60 | 2,773 | 2,631 | 2,761 | 2,603 |
| 60 sad over | 405 | 426 | 101 | 424 | The balance of migration in favour of Travancore, i. e., the excess of immigrants over emigrants during the last decade, was only 1.5 per cent. of the aggregate population. The difference between the actual and natural population in different agegroups is, therefore, not very appreciable as can be seen from the statement given in the margin. The largest difference is in the age-group 15-30 for males and in $30-60$ for females, and that is only 20 and 28 respectively per 10,000 of each sex.

General age distribution.
142. Subsidiary Table I at the end of this chapter gives the age distribution of 10,000 of each sex. The following diagram exhibis it graphically.


The above diagram shows that the age distribution in 1931 commences with the maximum for the youngest age-group ( $0-5$ ) and decreases more or less steadily with advancing age. Of the aggregate population, more than 17 per cent. are under five years of age, 30 per cent. under 10 years, and more than 42 per cent. under fifteen; the numbers at the adult ages of $15-50$ form about 48 per cent. and those above 50 a little
over 9 per cent. of the total population. Comparing the sexes in different age-groups it will be seen that the proportions up to the age of 15 and above the age of 50 do not show any material difference; but at the ages of $15-30$ there are only 25.5 per cent: of males as against $27 \cdot 1$ per cent of females, while at the age-group $30-50$ there are 22 per cent. of males and only a little less than 21 per cent. of females.
143. The graphs given below prepared from the adjusted figures of 1911 and 1921 Comparison of and the recorded figures of 1931 compare the age distribution of 100,000 of each sex in the age distrri1921 and 1931, and in 1911 and 1931.

## last three

censuser.

Diagram 21 - showing the age distribution
of 100,000 males in 1921 a 1931 prepared with adjusted ligures.


Diegram 23-showing the age distribation of 100,000 males in 181: a 1931 prepared with adjusted figures.


Diagram 22 - showing the age distribation of 100,000 females. in 1921 ( 193 : prepared with adjusted igares.


Dengram 24- sthowins the age distribation of 100,000 females: in $1911 \& 1931$ prepared with adjusted figures.


One prominent feature of all the curves in the above diagrams is the dip, though small, at the age-groups 15-20 and 25-30 which can only be attributed to deliberate mis-statement of age at these periods.

We have seen in Chapter 1 that there is a progressive increase in the rate of growth of the population in Travancore from decade to decade. It is not possible, therefore, to determine the normal age distribution. Famines and epidemics of a serious nature do not occur in this State, and consequently the age distribution remains unaffected by them. The influence ot migration on age distribution is negligible.

The most remarkable features of the age distribution at the present census, as

Distribution of 1,000 of each ser in ctertaik agg-growpa

| Age-gronp | 1921 |  | 1981 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Femalea | Males | Females |
| $\cdots 0-10{ }^{\circ}$ | 278 | 282 | 304 | 309 |
| 10-15 | 125 | 125 | 112 | 115 |
| 15-50 | 504 | 501 | 488 | 481 |
| 50 and over | 98 | 92 | 96 | 98 | compared with that in 1921, are the rise in the proportion of children under 10 years and of persons above 50 to the total population, and the fall in the proportion of persons aged 10-15 and 15-50, as can be seen from the marginal statement. In working out the proportions the adjusted figures of 1921 have been used.

Comparison of in the proporin the proportionsin differen
age-groups at the last three. censusea.
144. The following graphs which exhibit the ratio of the proportional number in each age-group in 1921 and 1931 to the corresponding number in 1911 taken as 100 bring out clearly the general features of variations in the age distribution.

Diagram 25 -- showing the ratio of the proportional number in each quinquennial age-group in 1921 a 1931 to the corresponding number in 1811 taken as 100.


The figures which the above curves represent are given in the marginal statement. Compared with 1911, the proportion of children under 5 years decreased in 1921 but in-

Ratio of the proportional number in each ago-grcup in 1021 and 1031 to the correponding.number in 1011 taken as 100

| Ago | 1921. |  | 1931 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Pemales | Malds | Femalea |
| 0-8 | 99 | 96 | 117 | 111 |
| 5-10 | 102 | 103 | 103 | 108 |
| 10-15 | 103 | 104 | 99 | 100 |
| 15-20 | 104 | 103 | 100 | 98 |
| 20-25 | 102 | 100 | 97 | 95 |
| 25-30 | 98 | 96 | 91 | 90 |
| 30-35 | 96 | 96 | 90 | 92 |
| 85 \$0 | 95 | 100 | 90 | 96 |
| 40-48 | 98 | 102 | 92 | 97 |
| 45-80 | 100 | 101 | 97 | 102 |
| 50-58 | 99 | 99 | 101 | 103 |
| 55-60 | 9 R | 95 | 103 | 101 |
| 60-65 | 102 | 97 | 107 | 104 |
| 65-70 | 104 | 103 | 103 | 110 |
| 70 and over | 107 | 107 | 115 | 114 | creased in 1931. Children aged $5-10$ increased in both the years. In the next three groups there was increase in 1921, but decrease in 1931. The further groups up to 50 showed a decrease in 1921 avid 1931, but more in the latter year than in the former. In agegroups $50-55$ and 55-60 there was decrease in 1921 and increase in 1931 and in subsequent groups an increase in both the years. In the absence of famines and epidemics and the influence of migration being negligible, the variations in age distribution are mainly the result of births and deaths. The present age distribution is the accumulated effect of births and deaths of the last 60 or 70 years. The decrease in the proportion of adults is probably due to a low birth-rate or high infant mortality some 30 or 40 years ago; the increase in the proportion of old persons, to a high birth-rate 20 or 30 years earlier; and the increase in children, to a high birth-rate or low infant mortality in recent years. The reduction in the proportion of the economically productive section of the population between the ages 15-50, which is lowest at the present census, is a distinct disadvantage to the country. It may also lead to a lower birth-rate during the current decade if the proportion of married women of child-bearing period does not rise. The increase in the proportion of children and old people may, on the other hand, result in a rise in the death-rate.

145. The proportional distribution of 10,000 of each sex by age-groups in the Aged dstribution different natural divisions is shown in Subsidiary Table 1 and also in the following by nataral. diagrams.

Diatram 26 - showting the distribution of $\mathbf{1 0 , 0 0 0}$ of each sez by age-group In Lowland Division.


Diagram 27- showing the distribation of 10,000 of each sex by age-group is Midiand Division.



The distribution of 1,000 persons by certain broad age-groups is given in the marginal statement. The proportion of children under 10 is the lowest in the Highland Division Proportional distribution of 1,000 perrons by cortain which indicates that the immigrants to ago-groupa in natural divisions

| ago-groupe in natural aivisions |  |  |  |
| :---: | ---: | ---: | ---: |
| Age-group | Lowland | Midand | Highland |
| $0-10$ | 801 | 810 | 281 |
| $10-15$ | 121 | . | 122 |
| $15-40$ | 892 | 380 | 120 |
| $40-60$ | 146 | 143 | 751 |
| 60 and over | 40 | 45 | 25 |
|  |  |  |  | that division consist more of adults than of immature persons. From Subsidiary Table $V$ it will be seen that the number of children per 100 married females aged - 15-40 is 173 in the Highland, 202 in the Lowland and 203 in the Midland. The higher fertility of women and the higher proportion of married women in the Midland probably account for the highest ratio of children under 10 in that division. The Lowland occupies an intermediate position in this respect. The proportion of adults aged $15-40$ is the highest in the Highland which, as has already been pointed out, is the result of immigration. The lowest proportion of adults in the Midland may be due to migration to the Highland and to the towns in the Lowland Division. Very few old persons generally migrate to the hills and hence the proportion of persons aged 40 and over is least in the Highland while there is not much difference between the other two divisions.

The variations between the proportions for the State and the natural divisions are brought out more strikingly by the following diagram which shows the ratio of the
proportional number in each age-group by sex for the State and the natural divisions to the corresponding number of persons in the State taken as 100.


The curves for the Lowland Division correspond closety to those for the State. The curves for the Midland Division differ somewhat, but not so largely as those for the Highland. The greatest variations shown by the latter curves are the very high proportion of adults and the very low proportion of old persons.
146. The population of only the four most important towns, namely, Trivandrum, Age distribation Alleppey, Nagercoil and Quilon, is considered in this paragraph. The best way of in urban area. studying the age distribution of the population of these towns is to compare it with that of the persons in the State as was done in the previous paragraph for the natural divisions.

The following statement and diagrams show the ratio of the proportional number in each age-group for males and females in the population of the towns to the corresponding number of persons in the State taken as 100.


Diagram 30 - showing the ratio of the proporitonal number in each age-group of males and femates In the population of the towns to the correspondiat number of persons in the State taken as 100.
$\begin{array}{llllllllllllllll}0 & 5 & 10 & 15 & 20 & 25 & 30 & 55 & 40 & 43 & 50 & 55 & 60 & 65 & 20\end{array}$





The age distribution of the population in towns differs considerably from that of the State. The curves for all the towns are more or. less convex in. shape, showing a higher proportion of adults, and this is the result of immigration. In Trivandrum most of the immigrants are of the younger adult ages due to a large number of students in the immigrant population.. The effect of immigration in raising the proportion of adults is seen more pronouncedly in Alleppey where the immigrants are mostly businessmen and employès in factories and consequently consist not only of young adults as in Trivandrum but also of older persons. The curves for Quilon resemble those for Alleppey. Both these are predominantly commercial and industrial towns which naturally attract adults of all ages, and hence the age distribution is similar in these two towns: - The cutyes-for Nagercoil are quite different from those for the other towns. The proportions of young women and old persons of both sexes are higher in Nagercoil than in any of the other towns. Evidently, the migration to this town is mostly of families iconsisting of members of adult and old ages. !
147. . Subsidiary' Table II gives the age distribution of 10,000 of each sex in each Xge ldistribr-
 main religion. The promtion by religion portions per mille of persons in each religion in certain broad age-groups. are given in the statement in the margin. The larger proportions : of children amongst the Christians and Muslims than amongst the Hindus must be due, as has been already pointed out, to the bigher proportion of marriages amongst them and to their higher fertility; and the higher proportion of adults amongst the Hindus is due to. immigrants who, as we have seen in Chapter III, consist mostly of Hindus.

The proportional variations in the different age-groups between the three communities are shown in the following diagram representing the ratios of males and females of each religion to 100 of each sex in each age-group.


The convexity of the curves for the Hindus showing a higher proportion of adults than children is, as stated above, due to immigration. The concavity of the curves for the Christians showing a larger proportion of children than adults is the result of their higher fertility. The curves for the Muslims show a gradually. decreasing sequence.

Ago distribution by caste or tribes.
148. Subsidiary Table III gives the age distribution of certain selected castes and tribes. The proportion per 1,000 of each eex of the important castes and tribes in broad age-groups is shown in the marginal table. The castes have been divided into advanced and depressed classes. Of the latter, the Pallan and the Parayan have been treated separately because about 45,000 of them are immigrants from outside the State. The primitive tribes have been clubbed together. The individual castes or tribes in each group show some variations between them. These may, however, be ignored because it is not possible to determine the exact causes which give rise to the variations between caste and caste or tribe and tribe in each group. The groups may be considered collectively and the average age distribution of one group compared with that of others. Viewed in this light it will be seen that the advanced classes have practically the lowest proportion of children under 14 and the highest proportion of old per sons aged 44 and over. The depressed classes and the tribes do not differ from each other materially. But amongst them the proportion of children is distinctly higher and that of old persons appreciably lower than amongst the advanced classes. The inference that may be drawn from these figures is that the depressed classes and primitive tribes are more fertile than the advanced classes, but they are more short-lived than the latter so that by the time the middle age is reached their proportion falls below that of the advanced classes. The economic condition and the mode of living account for this diference between these classes. The Pallan and the Parayan, though belonging to the depressed classes, have a low proportion of children and old people and a high proportion of adults, due to the large additions made to their numbers by the immigration of adults.

Yariations by age-pariods.
149. Subsidiary Table VI gives the variations in population by age-periods during the last three deeades. The recorded increase in the aggregate population since 1921 is 27.2 per cent. which is the mean of the increases in different age-periods. Among children under 10 years the recorded increase is as much as $44 \cdot 4$ per cent., the highest of aill the age-periods, and in the subsequent age-periods it is roughly about 21 per cent. The very large increase in the child population is due partly to under-enumeration in 0.5 group

In 1921 which has been fully dealt with in Chapter I, and partly also to a high birth-rate in the latter hall of the decade. Owing to the inaccuracies in the recorded figures of 1921 it is necessary for purposes of comparison to work out the'rates of increase from the teduced population at the different age-periods. The recorded and deduced rates of increase for the last two

Recorded and doduced rates of incroase per conb. of the population.
in certain agegroups

| - Ago-group | 1911-1921 |  | $\cdots$, 1921-1931 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Becorded | Dediced | Recorded | Deduced |
| 0.10 | 16.1 | 16.8 | 44.4 | 38.1 |
| - 10-15 | $22 \cdot 5$ | 20.0 | 20.9. | $23 \cdot 1$ |
| 15-40 | $10^{\circ} \mathrm{S}$ | $15 \cdot 9$ | $80 \cdot 7$ | $20 \cdot 4$ |
| 40.60 | 15.4 | $16 \cdot 1$ | 21.4 | $26 \cdot 4$ |
| 60 and over | 16.7 | 16.5 | $21 \cdot 3$ | 36.2 | decades are given in the margin. The rates of increase for the deeade 1911-1921 were calculated on the adjusted figures of the population in 1911 and 1921, and for the decade 1921-1931 on the adjusted figures of: 1921 and the recorded figures of 1.931. It is seen from the above statement that the deduced rates are lower than the recorded ones in the age-groups $0-10$ and 15-40, and that in the other groups they are higher. Even according to the deduced rates the increase in $0-10$ group is the highest of all the groups and is larger than the increase in the previous decade by nearly 21 per cent. This, as has been already pointed out, is the result of the combined effect of under-enumeration in 1921 and the rise in birth-rate in the latter half of the decade. The rise in the rates of increase in the later age-groups in the last two decades is probably due to a fall in the death-rate in adult ages. The increase in the proportion of old persons supports this inference. From Subsidiary Table VI it. will be seen that the rates of increase in different age-groups in the administrative and natural divisions are not uniform with those for the State as a whole. Internal and external migration creates wide differences which are seen markedly in the High Range and Lowland Divisions where the rates of increase at the oldest age-groups are much lower than those at the younger ages.

150. The mean age means the average age of ail the persons living. The correct Mean age. method of calculating it is to divide the sum of the ages of all persons by the total number of persons ; but in practice this is impossible, and hence the mean age is calculated from the recorded figures in quinguennial age-groups. This method * is based on- the assumption that the mean age of the persons in a particular group is the central age in that group. This is not an absolutely correct assumption, but the mean age thus calculated is, sufficient for purposes of comparison.

The mean age is apt to be mistaken for the average duration of life. The distinction between the two must be clearly borne in mind. The mean age will be the same as the average duration of life only in a population which is stationary. If the population increases by a rise in birth-rate or a decline in infant mortality, the increased proportion of children will reduce the mean age. Again, a rise in the death-rate among adults or the emigration of large numbers of them will bring down their proportion, and then also will the mean age fall. If, on the other hand, opposite conditions prevail, the mean age will rise. It is evident, therefore, that the mean age is not a sure index of the longevity of the people ; but from its variations one can draw certaip broad inferences regarding the changes in the age constitution of the people.

[^13]The mean ages for males and females calculated from the adjusted figures of the population at the last three censuses are given in the marginal statement (1). The mean age

| (1) Mean age by sex |  |  |
| :---: | :---: | :---: |
| Year | Males | Females |
| 1911 |  | $23 \cdot 6$ |
| 1921 | 23.5 | 23.2 |
| 1931 | 23.0 | 23.1 | of the females was lower than that of the males at all the censuses, though it is a well-known fact that women generally are more long-lived than men. The lower mean age of the females is therefore due to the preponderance of female children over the male. Similarly, the fall in the mean age from census to census is due to the increasing proportion of children, which is evident from the marginal statement (2). In Baroda the mean age of females has been higher than that of males since 1901. The (2) Propurtion per cent. of ohildren under 10 to the total population of each sext


| Year | Males | Fomales |
| :---: | :---: | :---: |
| 1911 | 27.69 | 28.32 |
| 1921 | 27.83 | 28.18 |
| 1931 | 30.49 | $30.3 \overline{0}$ |

males may be due partly to the 8
(3) Number of males and females over 60 in 10,000 of each sex

| Year | Males | Females |
| :---: | :---: | :---: |
| 1901 | 398 | 448 |
| 1911 | 414 | 4577 |
| 1921 | 416 | 455 |
| 1931 | 405 | 426 | lower mean age of females in Travancore does not indicate that males here are more long-lived than females. As a matter of fact, the recorded death-rates in this State are lower for females than for males, and among persons above 60 the proportion of women has preponderated at all the censuses, as can be seen from the marginal statement (3). These facts point to a greater longevity of females than of males. The higher mean age of the gain through migration. Though among the total immigrants the sexes are almost equally distributed, it is quite probable that the average age of the male immigrants is higher than that of the female immigrants. The larger proportions of females in the age-group 15-30, and of males in the age-group $30-60$, as can be seen from the marginal statement (4), support the above inference. The differences in the proportions of the sexes in the two agegroups may also be caused by differential death-rates. If, for example, the female death-rate below 30 is lower than that of the males, the proportion of females in the age-group 15-30 will be higher.


| Year: | Age-gronp 15-90 |  | Age-group 80-60 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females |
| 1901 | 2,658 | 2,879 | 8,168 | 2,827 |
| 1911 | 2,649 | 2,837 | 8,039 | 2,773 |
| 1921 | 2,686 | 2,844 | 2,963 | 2,731 |
| 1931 | 2,548 | 2,706 | 2,778 | 2,631 | But, as a matter of fact, the death-rate in the agegroup $15-30$ is higher among females than among males (Sce Diagram No. 32 in paragraph 162 below), and the difference in the proportions of sexes cannot, therefore, be the result of differential death-rates.

Mean age by religion.
151. Subsidiary Table II gives the proportionate age distribution and the mean age for different religions at the last threc censuses. The figures showing the mean age are
Nean age by religion

| Year | Hindu |  | Cbristian |  | Mablim |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Fomsles | Madea | Females | Majes | Females |
| 1911 | 24.7 | 24.5 | $23 \cdot 6$ | $22 \cdot 7$ | 23.8 | $22 \cdot 6$ - |
| 3121 | 24.5 | $24 \cdot 3$ | 23.5 | $22 \cdot 9$ | 28.6 | 22.0 |
| 1931 | $23 \cdot 8$ | $23 \cdot 3$ | $22 \cdot 6$ | $22 \cdot 2$ | $22 \cdot 2$ | $21 \cdot 6$ | extracted in the margin. The mean age of both males and females of all the religions has decreased fry census to census, excén in the case of Christial females whose mean age increased slightly in 1921. The mean age of females is generally less than that of males in all religions. The rise in the proportion of children is largely responsible for the fall in the mean age. At the present census the Hindus have the highest,


| Religion | Mean age in 1931 |  | Proportion of children under 5 per 10,000 of ench sex |  | Proportion per cent. of married femalen aged 15.40 to total fomales |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Malcs | Females | Malca | Femalea |  |
| Hindu | $23 \cdot 3$ | $23 \cdot 3$ | 1,700 | 1,693 | 30 |
| Chrintian | $22 \cdot 6$ | $22 \cdot 2$ | 1,745 | 1,773 | 31 |
| Muslim | $22 \cdot 2$ | $21 \cdot 6$ | 1,768 | 1,702 | 32 | and the Muslims the lowest mean age, the Christians occupying an intermediate position. The relation between the mean age and the proportion of children is brought out by the statement given in the margin. The Muslims whose mean age is the lowest in 1931 have the highest proportion of children under 5, due probably to the

proportion of married females aged 15-40 to the total females being the highest among them. Polygamy and widow re-marriage prevalent among the Muslims might have also contributed to the large number of children among them. On the other hand, this community appears to have the least longevity. Subsidiary Table V A shows that the proportion of persons aged 60 and over per 100 aged $15-40$ is lower among Muslims than. among Hindus or Christians. The lowest mean age of the Muslims must be attributed to the combined effect of these causes. The large number of adult immigrants among the Hindus might, on the other hand, be the cause of their higher mean age.
152. The mean ages for the different natural divisions are given in the marginal

| Year | Lowland |  | Midiand |  | Highland |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Malcs | [Females | Males | Females | Males | Females |
| 1911 | $24 \cdot 3$ | 23.9 | 24.5 | 24.0 | $24 \cdot 3$ | $23 \cdot 3$ |
| 1921 | $24 \cdot 1$ | $23 \cdot 7$ | $24 \cdot 2$ | $23 \cdot 9$ | $24 \cdot 3$ | $23 \cdot 2$ |
| 1931 | 23.3 | $23 \cdot 0$ | $23 \cdot 0$ | $22 \cdot 8$ | $22 \cdot 9$ | 21.4 | statement. It is seen therefrom that the mean age was generally higher in the Midland than in the Lowland at all the censuses, except in 1931 when the mean age of the females was slightly less in the Midland than in the Lowland. The differences are, however, too small to be of any consequence. Since the Midland Division had the highest proportion of children in 1931 one would have expected the mean age for this division to be the lowest. But the proportion of persons above 60 to those aged $15-40$ is , tho the highest in this division,

Proportion of pertome abore 60 per 100 aged 15-40

| $\text { Year }{ }^{\circ}$ | Lowland |  | Midand ' |  | Highland |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Malea | Fernales | Males | Fomales | Males | Females |
| 1911 | 10 | 11 | 11 | 11 | 8 | - 10 |
| 1921 | 10 | 11 | 11 | 12 | 7 | 9 |
| 1981 | 10 | 10 | 12 | 12 | 5 | 6 | as can be seen from the marginal table, and consequently the mean age has not declined as it. ought to have. There is a drop in the mean age in the Highland Division in 1931 and this may be due to two causes. Firstly, the larger proportion of the female immigrants to this division being of child-bearing ages, the proportion of children has increased. Secondly, the proportion of old men in this division has fallen due to either the departure of a number of old immigrants or the arrival of a large number of fresh immigrants. The latter appears to be the more probable cause.

153. Though the recorded vital statistics are far from correct, the volume of wean age at omission of deaths may be the same at all ages except at infancy where perhaps the death. omissions may be considerably more, and so the mean age at death may be calculated approximately from the recorded statistics. By this method the mean age at death is found to be about 33 for both sexes. The actual mean age at death will be slightly lower. According to Sir E. Chadwick, "In fairly healthy districts the mean age of the living was to the mean age at death as about 3 to $4 . "$. ${ }^{\prime \prime}$. The mean age of the living was 23 in Travancore during the last decade and the mean age at death might, therefore, be between 30 and 31 . The mean age at death is affected by variations in child mortality and is not, therefore, a true index of longevity.
154. "The median age is that age which divides the population into two equal median age. groups, one-half being older and one-hall younger than the median." $\dagger$ Subject to the same limitations as were pointed out for the mean age, the median aget: could also be used to exhibit

Median ages of males and femalez in Trarancore

| Year | Males | Females |
| :---: | :---: | :---: |
| 1911 | $20 \cdot 4$ | $19 \cdot 8$ |
| 1921 | $20 \cdot 0$ | $19 \cdot 5$ |
| 1931 | $18 \cdot 9$ | $18 \cdot 9$ | the salient features of the age distribution of a population. The median ages of the population of Travancore at the last three censuses, calculated from the adjusted figures, are given in the margin. The median age, it will be noticed, is less than the mean age. It has decreased steadily from

census to census as a result of the increasing proportion of children in the population.

[^14]In the United States the median age of the total population has increased steadily since

| Merian ages of malet and females in the United States |  |  |
| :---: | :---: | :---: |
| Year | Malea | Females |
| 1820 | 16.6 | 16.7 |
| 1900 | $23 \cdot 3$ | $82 \cdot 4$ |
| 1910 | $24 \cdot 6$ | 23.5 |
| 1920 | 25.8 . | $24 \cdot 7$ | 1820. The increase is attributed to two causes, firstly, an increase in the average length of life, and secondly, a reduction in the birth-rate, which has decreased the proportion of young persons. Conversely, a decrease in the median age might be brought about by a reduction in the average length of life and an increase in the proportion of children. There is nothing to prove that the average length of life in Travancore is getting reduced and the decrease in the median age should, therefore, be attributed to the increase in birthrrate and the consequent rise in the proportion of children.

Median age and caste.

Sundburs's age-categories.
155. The median ages have been calculated approximately for the main religions and for the more important castes and are given in the marginal statement. Generally speaking, those castes or communities which have a higher proportion of children have lower median ages. Pallan and Parayan are exceptions, their high median ages being caused by immigration. Of the clean castes, Brahmans and Vellalas who show the highest median ages have a very low proportion of children. The lowest median age of the Syrian Christian is an indication of their very high fertility.
 namely, progressive, stationary, and regressive. If the age distribution were normal the population of the ages $15-40$ would constitute 50 per cent. of the total. According to the variations in the numbers in the younger and older groups the types are distinguished from one another. The standard distribution of the population in the three types is shown in the margin. The distribution,
 which has been worked out for the European countries, may not hold good absolutely for the countries in the East, where birth and death rates are higher and the expectation of life is lower than in the West. The Gigures showing the distribution of the present population' of Travancore, together with those for Baroda at this census and for the United States at the last, are given in the margin. The population of Travancore is decidedly of the progressive type, but the depletion of the adults may lead to a lall in the birth-rate and consequently to a decrease in the rate of growth of the population umless there is a proportionate rise in the number of marriages.

In addition to Sundburg's three categories, Whipple gives two more, namely, the accessive type in which the central group contains more than 50 per cent. of the total population due to immigration, and the secessive type which contains less than 50 per cent. due to emigration. Taking the population of Travancore as a whole, it cannot be said to be of the secessive type, because the Slate only gains hy migration. The proportion in the central group is no doubt
lese than the normal by about 2 per cent. But the difference is too small to be of any

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Natum diviake | $0-13$ | $13-30$ | 30 and orts |
|  | 192 188 401 |  | $\underset{\substack{301 \\ 60}}{ }$ | consequence. If the distribution of the population by natural divisions is considered, the distinction between accessive and secessive types can clearly be made out, as can be seen from the figures in the margin. The population in the Midland Division which sends emigrants to the Highland is of the secessive type, while the population in the latter which receives immigranks from the other divisions and from outside the State is of the accessive type.

157. The recorded vital statistics, extremely inaccurate as they are, may be ased Recorded crade to compere the changes, is any, in the crude birth and death rates in the last decade. Let birth-raters. un frost consider the birthrate. Subsidiary Table VIl gives the birth-rates by sex and

| Andinues by 0 |  |  |
| :---: | :---: | :---: |
| Y | Male | Temeke |
| 18toma | 18.5 ${ }^{\text {\% }}$. | 18.2 |
| 1981-83 | 17.2 | 17.1 |
| 1283-93 | 16.6 | $16 \cdot 8$ |
| 1024-98 | $16 \cdot 8$ | 16.\% |
| 1024-85 |  | $13 \cdot 8$ |
| 1989-8 | ${ }^{18 \cdot 1}$ | 18.9 |
|  |  | 18.1 |
| 1987-36 | 19.7 | 18.6 |
| ${ }_{1030}^{103}-30$ | $20 \cdot 8$ 28.6 | $819 \%$ |
|  |  | $21 \cdot 7$ | natural division for the different years in the last decade. They were calculated on the estimated population for each year. The ligures given in the margin show that the birth-rates both among males and females decreased steadily up to the middle of the decade and thereafter increased gradually, reaching the maximum in the last year of the decade. The rise in the latter half of the decade was probably due to the increase in the number of marriaget. Of the natural divisions, the Highland


| Narunl Mrdate | A verajo bialm-rates for the deonde |  | Proportion per eent. of married semoles aged 15.40 to cotal female |
| :---: | :---: | :---: | :---: |
|  | Male | Pemale |  |
| Iorthad | $17 \%$ | 16.7 | 30 |
| Mrilamed | 38.7 | 18.8 | 81 |
| Hytmead | $30 \cdot 8$ | $22 \cdot 6$ | 36 | registered the highest birth-rate and there the population contains the largest proportion of married females of childbearing period, as can be seen from the marginal statement. It is seen that as the proportion of married lemales of child-bearing period increases the birth-rate also increases.

158. From the present age distribution of the population which shows a decrease in the efrect of the number of adula from that of the previous censua, one is litely to conclude that there the proment aso will be a decline in the birth-rate in the near future. But we have seen in chapter I that future barehnotwithetanding the decrease in the number of adults at the present census, the proportion natcoe. of marriod females at the earlier child-bearing ages has actually increased. Consequently, there is not likely to be any merked fall in the birth-rate unless there be an appreciable decline is the marriage rave also during the current decade. Further, the present high proportion of children will result in an increase in the number of adults in the next generation which will in all probability lead to a rise in the birth-rate. From these circumstances it may be inferred that the future growth of the population will be affected not so much by the variations of birth and death rates brought about by the changes in the age constitution as by economic and public health conditions.
159. Fertility, which means the actual degree of reproduction, is distinguished from Fortily. fecundity which represents the power of reproduction. The latter is measured by the number of ripe ova and the former by the number of fertilized ova. Subject to certain conditions the proportion of children below 10 years of age to the married women aged
$15-40$ will give an indication of the fertility. From the marginal figures it will be seen that in the decade 1911-192|

| Year | Number of children under 10 per 100 married fe 15.40 | Number of raarried females aged 15-40 per 100 femalca of all ages |
| :---: | :---: | :---: |
| ${ }_{1921}^{1911}$ <br> 1931 | 171 180 200 | 32 30 31 | the proportion of children under 10 increased from 171 to 180 while that of married females of 15-40 ages decreased from 32 to 30 . In the last decade, though there was an increase in both the proportions the former increased by 20 and the latter only by one. The higher rate of increase of children may be due to several causes, namely, a rise in the rate of fertility, a fall in the rate of mortality, and an increase in the number of married women of earlier child-bearing period. One or more of these causes may operate and bring about an increase in the number of childrea. There is no evidence to prove a fall in the rate of mortality. The recorded death-rates, on the other hand, show a gradual increase from decade to decade. In 1911-1921 the recorded death-rates were 8.2 per cent. for males and 7.1 per cent. for females, and in 1921-1931 they were 10.5 per cent. and 9.4 per cent. respectively. In paragraph 58 , Chapter I , we have seen that the proportion of married females at the earlier child-bearing ages 15-25 to total married females aged 15-45 has increased from census to census except in 1921 which might be due to inaccuracies in enumeration, but this increase has been counteracted by a fall in the proportion of total married females in the age-group 15-45. The only other factor which might have caused the increase in the proportion of children is a rise in fertility due to biological or economic causes. Whatever be the cause, the fact remains. that the proportion of children under 10 years has increased during the last two decades.

Fertlitity by
natural
division.

Fertillty by rellgion and caste.
160. A comparison of the proportions of children under 10 and of married females aged 15.40 in the different natural divisions in 1931 will show how migration affects these proportions. Both the

| Natural division | Nroportion of olitldren under. 10 years per 100 manried femalea ayed $15.40 \ln 1031$ remalem abed 10.40 in Ins | Number of married femules <br> aged 15.40 per 100 females of all ages in 1031 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { Lowland } \\ & \begin{array}{c} \text { Midland } \\ \text { Highland } \end{array} \end{aligned}$ | $\begin{gathered} 202 \\ 2003 \\ 173 \end{gathered}$ | 30 81 85 | proportions have increased simultaneously, though only slighty, from the Lowland to the Midland Division: but in the Highland the proportion of married women has increased, while the proportion of children has decreased. This must be due partly to the migration of a large number of married women without their children, and partly also to the low fertility of the immigrants from the Tamil country.

161. From the figures given in the margin it will be seen that among the Hindus

| Religion | Number of chikjren under 10 per 100 aged 15.40 in 103 | Number of married femates inged $15-40$ per 100 fermales of alt ugos in 1981 |
| :---: | :---: | :---: |
| Hindn Munilm | $\begin{aligned} & 197 \\ & \begin{array}{l} 206 \\ 206 \end{array} \end{aligned}$ | 30 31 32 | and Christians the proportion of children varies directly as the proportion of married females of $15-40$ years, while among the Muslims the proportion of children is lower but the proportion of married females aged $15-40$ is higher than among the Christians. As regards the different castes, Subsidiary Table IV shows that some castes which have a higher proportion of married females aged 14-43 than some others have a lower proportion of children under 14 years. This is probably because married females of the above age-group include young girls who have been newly married and who have not commenced childbearing. The fertility enquiry has shown that Syrian Christians are generally more fertile than Nayars; the proportion of married females aged 14-43 is higher among

the former than among the latter; and yet the proportion of children is the same in both the communities. This is seen from the figures given in the margin. We will see in Chapter VI that early marriage is more prevalent among Syrian Christians than among. Nayars. The married females of the ages 14-43 among Syrian Christians will, therefore, include a number of young married girls who are childless, and this circumstance will naturally reduce the proportion of children per 100 married females.
162. Subsidiary Table VIII gives the reported death-rates for the different years in Recoirded aende the last decade. From the figures given in ${ }^{\text {death-ratees }}$ the margin it can be seen that, as in the case of birth-rates, death-rates also declined steadily till the middle of the decade, after which it rose and reached the maximum towards its close. The average death-rate of females was lower than that of males in all the years. But variations are seen' in different age-periods. . The diagram below which shows. the male and female death-rates by age-groups for the year 1928-29 reveals the , general tendency of these variations.


At the ages 15-35 female mortality is higher, probably because of the greater risks incidental to child-bearing, and at all other ages male mortality is higher.

The death-rates in the different natural divisions vary to some extent. The Highland has the highest rate and the Midland the lowest. The figures are given in the margin. These variations may be the result of the difference in the conditions of living in the different divisions.

The effect of the present age constitution on the fature death-rate.

Acerage doath-rates for the decade in the natural divisionf

| the natural divisionf |  |  |
| :--- | :--- | :--- |
| Natural Division | Males | Females |
|  |  |  |
|  |  |  |
| Lowland | 10.6 | 9.3 <br> Midand <br> Highland |
|  |  | 12.1 |

Specific rates of mortality.
163. The present population contains a larger proportion of children and old persons than that of 10 years ago. Mortality is generally much greater among children and old people than among the adults. The age constitution of the present population, therefore, favours a higher death-rate than was prevalent in the last decade. But when the present children become adults after a few years, the proportion of adults will have increased and, therefore, there may be a fall in the death-rate. The decline in the death-rate caused by the increase in the number of adults may be counteracted by the increase in the number of old persons. The tendency for the increase in the proportion of old people is visible even now. Taking all things together, it looks as if the death-rate may increase in the near future unless it be counteracted by preventive measures; but in any case it may decline after a few years and then rise again after some further years.
164. The specific rate of mortality is the number of deaths per 1,000 persons at each individual age. The specific death-rates and their variations from time to time will show whether a community is physiologically healthy and whether its health is improving or deteriorating. The death-rates at different ages vary so greatly that changes in age constitution will profoundly affect them and through them the crude death-rate. Specific death-rates are required for the preparation of tables showing the expectation of life.

To compute correct rates of mortality we must know not only the number of persons living, but also the number dying at each age. The census results give only the numbers living at large age-groups, and the vital statistics which show the number dying at each age are inaccurate. Both these data are, therefore, useless for the preparation of mortality tables. The only alternative is to use some other method which may give at least approximate results. The Actuarial Reports published by the Government of India give tables of average mortality prepared in the following manper. The average age distribution of the population at three or four censuses, after allowing for migration if necessary, was graduated. The average figures for three or four censuses were used in order to eliminate the effect of famines and epidemics. Then, by applying the current rate of increase to the graduated figures, the population living at each age at the beginning and at the end of any particular year was deduced, and from the numbers living at the beginning of the year at each age and at the end of the year at the next older age the rate of mortality was calculated. By using the same method the mortality rates in Travancore were also calculated. Only, instead of using the average figures of three or four censuscs the calculations here were made on the graduated figures of the last census alone. The results obtained by this method can be expected to be as satisfactory as those given in the Actuarial Reports for India, because in Travancore there has been no famine nor any wide-spread outbreak of epidemics, and because the volume of migration has been so small that its influence on the total population is negligible. Assuming the rate of increase to be constant for the last 20 years and applying this rate to the graduated figures, the number of persons living at age-groups 3-7, 7-11, 11-15, ........ ...71-75, four years before the census, was deduced. The probability of dying in four years at the central age of each group was then determined from the numbers living at each of the above groups in 1927 and at the immediately older group in 1931. The probability of dying in one year was then deduced from the relationship existing between the probability of dying in four years and in one year according to a standard table. The results thus obtained give only the approximate death-rates for the last decade. They are likely to be less accurate for ages below 20 years than for higher ages. The rates for younger ages were, therefore, calculated by reference to a standard table, after making such adjustments in the latter as were necessary to evolve a smooth and contiguous progression out of the numbers estimated for all the ages. The fact must be borne in mind that the results obtained by these calculations are only approximate and are more of theoretical interest than of practical value.

The mortality rates prepared for Travancore from the figures of the present census and for Byreda from the figues of 1921 censun together with those for England and Wales, are

|  |  |  | atity $x$ | cene. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Trasancore$\$ 931-$ |  | Baroda 1921 |  | $\begin{gathered} \text { Fagland and } \\ \text { Wales } \end{gathered}$ |  |
|  | Males | Pepsples | Malea | Pemales | Males | Females |
| 5 | 0.91 | 0.89 | \$25 | $2 \cdot 40$ | $0 \cdot 66$ | 0.51 |
| 10 | $0 \cdot 38$ | $0 \cdot 36$ | $0 \cdot 98$ | $0 \cdot 82$ | $0 \cdot 21$ | 0.24 |
| 16 | 0.37 | $0 \cdot 45$ | 0298 | $0 \cdot 86$ | $0 \cdot 28$ | $0 \cdot 33$ |
| 20 | 0.42 | $0 \cdot 68$ | $1 \cdot 48$ | $1 \cdot 41$ | $0 \cdot 42$ | $0 \cdot 46$ |
| 25 | 0.61 | 0.91 | $2 \cdot 06$. | 2.06 | 0.54 | $0 \cdot 66$ |
| 30 | $0 \cdot 85$ | 1.16 | $2 \cdot 62$ | $2 \cdot 73$ | $0 \cdot 65$ | $0 \cdot 66$ |
| 85 | 1.13 | $1 \cdot 4 t$ | 8.18 | $8 \cdot 26$ | $0 \cdot 74$ | $0 \cdot 73$ |
| 40 | $1 \cdot 42$ | $1 \cdot 72$ | 3.76 | $3 \cdot 74$ | $0 \cdot 87$ | $0 \cdot 79$ |
| 45 | $2 \cdot 02$ | 2.23 | $4 \cdot 42$ | 4.25 | $1 \cdot 05$ | $0 \cdot 89$ |
| 60 | $2 \cdot 77$ | $2 \cdot 69$ | $6 \cdot 19$ 6.19 | $4 \cdot 85$ | 1.82 | 1.11 |
| 55 | $3 \cdot 53$ | $3 \cdot 22$ $\mathbf{8 . 9 8}$ | 6.12 | 5.75 | $1 \cdot 76$ | 1.00 |
| 60 | 4.68 6.89 | 3.98 6.01 | 7.31 8.91 | 6.93 8.49 | 2.61 3.71 | $2 \cdot 16$ |
| 65 | 6.89 | $8 \cdot 01$ | $8 \cdot 31$ | $8 \cdot 49$ | $3 \cdot 71$ | 3-27 | given. in the marginal table. It will be seen from the table that the mortality rates at all ages in Travancore are much lower than those in Baroda, and among adults of younger ages the Travancorerates are more like those of England and Wales. The female mortality rates at ages below 15 and above 45 in Travancore are lower than those of the males. In this respect the calculated and recorded rates agree.

165. A life table, to be of practical value, should be prepared from correct mortality rates. In the absence of reliable vital statistics mortality rates have been calculated by a method which gives only approximate results for middle ages and the least satisfactory results for younger and older ages. It is hardly justifiable to compute a life table on such unsatisfactory data. An attempt has, however, been made to prepare one for Travancore with the available material, the first of its kind in this State, on the hope that it may lead to more accurate tables being prepared at future censuses. The mortality rates and the expectation of life at birth and at quinquennial ages are given in Subsidiary Table XIII at the end of this chapter.

The method followed in this calculation is described below. After determining the probability of dying in one year at the quinquennial ages, which may be denoted by $q_{s n}$, the value of $q$ (the probability of dying in one year) at the other ages in the quinquennial group is obtained by graphical interpolation. Assuming that these values of $q_{x}$ are applicable to persons born on the same date and successively attaining different ages, we may start with 10,000 births-this is called the radix of computation-and calculate the number living at the beginning of each successive year ( $l_{x}$ ) until all die out. The expectation of life at each age is then determined by the application of the formula $f_{x}=\frac{1}{2}+\frac{l_{x+1}+l_{X+3}+l_{x+3}}{l_{x}} \ldots \ldots \ldots .$.

From these calculations the expectation of life at birth, i. e., the average length of life in Travancore, is found to be 43.80 years for males and 44.55 years for females. A

| Expectation of life in years |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Travancore (1931 censas) |  | Barode (1921 canяus) |  | Age | United States <br> (1920 census) |  |
|  |  |  |  |  |  |  |
|  | Males | Pemales. | Males | Females |  | Malea | Females |
| 0 | 43.80 | $44 \cdot 55$ | 22.44 | 22-91 |  | 0 | $55 \cdot 33$ | 57.52 |
| 10 | 43.97 | 44.78 | $32 \cdot 97$ | 59.33 |  |  |  |
| 20 | $37 \cdot 51$ | 86.56 | 25-86 | $25 \cdot 99$ | 22 | $43 \cdot 35$ | 44.2i |
| 30 | $29 \cdot 49$ | 29.49 | 20.42 | 20.63 . | 32 | $35 \cdot 62$ | 36.77 |
| 40 | 82.32 | 22.74 | 16.17 | $16 \cdot 66$ | 42 | 28.02 | 29.11 |
| 80 -60 | 16.05 | $17 \cdot 01$ 11.59 | 12.51 | 12,96 | 52 | 20.53 | 31:48 |
| -60 | 10.73- | 41.59 | 9-32 | 0.45 | 62 | $13 \cdot 85$ | 14-50 | few figures. are given in the margin to compare the expectation of life in Travancore with those in the United States and Baroda. The figures for the United States, based on 1920 census, were taken from The World Almanac and Book of Facts, 1932, page 441, and those for Baroda from The Baroda Census Report, 192I, paragraph 221. It is seen that the expectation of life in Travancore is considerably less than that in the United States where the death-rate is lower than here. On the other hand, in Baroda where the death-rate is much higher than in Travancore the expectation of life is correspondingyy lower than in this. \$tate.

The deduced crode deathrate.

## Longeyity.

166. In paragraph 55, Chapter I, it has been stated that the death-rate for the last decade may be taken to be 20 per mille per annum and that the method of determining it will be described in this chapter. From the probability of dying in one year ( $q_{x}$ ) at each age, which is known from the life table, the central death-rate $\left(m_{x}\right)$ at the same age is deduced from the formula $1-\mathrm{q}_{\mathrm{x}}=\frac{1-\mathrm{mx}}{2+\min }$. From the central death rate at each age Crudo death-rate per mille per annwim in the decade 1991-1931 the death-rates in each age-group

| Age | Mnies | Females |
| :---: | :---: | :---: |
| All ages : | $20 \cdot 1$ | $19 \cdot 8$ |
| $\bigcirc 0-15$ | $25 \cdot 2$ | 23.8 |
| 15-50 | $9 \cdot 5$ | 11.2 |
| 50 and over | $53 \cdot 1$ | $48 \cdot 7$ | $0-5,5-10$, etc., are worked out using the graduated figures of 1931, and by applying these rates to the mean of the populations of 1921 and 1931 at each age-group the crude death-rate for the decade 1921-1931 has been calculated. The results obtained are given in the margin. The crude death-rates for males and females separately are $20 \cdot 1$ and $19 \cdot 8$ per mille per annum, and that for the two sexes together is, therefore, 19.95 , which is practically the same as 20 per mille per annum.

167. Subsidiary Table $V$ gives the proportion of persons above 60 ycars to those aged 15-40. This proportion cannot be regarded as a correct index of longevity, because it varies with the changes in the age constitution of the population caused by migration, famines or epidemics. A fall in the number of adults by emigration or by deaths from famines and epidemics will raise the proportion, and vice versa. The ratio of old people to adults has not changed during the last three decades except in the case of males whose ratio has increased from 10 to 11 in the last decennium. Taking the natural divisions it is seen that in 1931 the ratio was the highest in the Midland and lowest in the Highland Division. The latter is probably due to the influence of migration. Between the males and females there is no difference in the ratio except in the Highland where the female ratio is six as against the male ratio of five.

In regard to the castes, only the proportions of persons above 43 to those aged 14-43
 are available and these are given in Subsidiary Table IV. The figures for some of the main castes are extracted in the margin. The advanced castes generally have a higher proportion of old persons probably due to their clean habits of life. Some of the depressed classes also, especially those who live a healthy open-air life like the Valan and the Yädavan, have a higher proportion of old people. Pallan is an immigrant caste and has, therefore comparatively fewer persons of old age. Only very few castes show a slighty higher proportion of old females than males, and the more important of them are the Chetti, the Ilava. the Nädar, the Nayar, the Vellàalan, the Veluthadanayyar and the Yâdavan.

Centerarians.
168. The number of persons who returned their age as 100 or over according to the schedules of the present census was 30 , of whom 13 were males and 17 females. At the last census the number returned was 105. These figures cannot be regarded as reliable. Even in England and Wales the number of persons who declared their ages as 100 or over in a population of nearly 38 millions at the census of 1921 was only 110 . It is incredible that a country like Travancore which had only a population of about 4 millions in 1921 had as many as 105 persons aged 100 or over. Even the considerably smaller number of 30 returned at the present census in Travancore was, on subsequert
inquiry, found to be an exaggeration. After the slips were copied and sorted, when particulars of these so-called centenarians were available, I had their ages verified by the Tahsildars of the taluks and the Municipal Presidents of the towns in which they resided, and I myself interviewed some of them and ascertained their correct ages. Out of the thirty persons returned at the census, eight died subsequently, and of the remaining twenty-two, there are not more than fifteen whose ages may be about 100 or over. Among them there are six males and nine females. All of them are illiterate and belong to the backward or depressed classes. They have absolutely no idea of the date of their birth. One Muslim male who is living in Haripad and who is said to be about 113 years old is able to narrate details of some well-known incidents which happened in his youth, from which his age could be inferred to be more than 100 years. About the others all that is possible. to say is that their ages may be anything between 90 and 100 .

## SUBSIDIARY TABLE I

Age distribution of $\mathbf{1 0 , 0 0 0}$ of each sex in the State and each natural division.

| Age | 1931 |  | 1921 |  | 1911 |  | 1901 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Males | Females | Males | Nemales |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| $0-1$ | 415 | 417 | 274 | 284 | 246 | 278 | 239 | 276 |
| 1-2 | 359 | 964 | 181 | 186 | 218 | 234 | 219 | 239 |
| 2-3 | 359 | 339 | 232 | 890 | 297 | 314 | 251 | 277 |
| 3-4 | 312 | 311 | 301 | 313 | 301 | 315 | 289 | 314 |
| 1-5 | 295 | 293 | 272 | 275 | 854 | 261 | 261. | 276 |
| Total 0-5 | 1,720 | 1,724 | 1,310 | 1,348 | 1,316 | 1,408 | 1,259 | 1,389 |
| 5-10 | 1,331 | 1,311 | 1,344 | 1,363 | 1,332 | 1,348. | 1,300 | 1,324 |
| 10-16 | 1,223 | 1,202 | 1,294 | - 1,259 | 1,260 | 1,183 | 1,227 | 1,110 |
| 15-20 | 930 | 985 | 952 | 1,018 | 924 | 984 | 909 | 989 |
| 20-25 | 864 | 947 | 880 | 945 | 836. | 926 | 880 | 940 |
| 25-30 | 754 | 774 | 854 | 886 | 889. | 927: | 929: | 980 |
| 30-35 | 709 | 696 | 694 | . 682 | 710 | 704 | $781{ }^{\circ}$ | 747 |
| 35-40 | 587 | 544 | 690 | 614 | 780 | 623. | 768. | 638 |
| 40-45 | 514 | 474 | 531 | 496 | 545 | 498. | 878 | 807 |
| 45-50 | 393 | 370 | 454 | 397 | 464 | 392. | 463 | 980 |
| 50-85 | 835. | 316. | 350 | 333] | 339 | 935. | 368. | 351. |
| 55-60 | 235 | 231 | 234. | 209. | 246 | 221 | 288: | . 203 . |
| 60-65 | . ${ }^{2387}$ | (20) 187 | ${ }_{116}\left\{\begin{array}{l}198 \\ 100\end{array}\right.$ | $455{ }^{207}$ | 414. $\left\{\begin{array}{l}196 \\ 100\end{array}\right.$ | $457\left\{\begin{array}{l}218 \\ 04\end{array}\right.$ |  |  |
| 65-70 70 and over | $\stackrel{405}{ } \cdot \underline{ } \begin{array}{r}98 \\ 120\end{array}$ | 426. $\left\{\begin{array}{l}102 \\ 137\end{array}\right.$ | $416\left\{\begin{array}{l}100 \\ 123\end{array}\right.$ | 455. $\left\{\begin{array}{l}98 \\ 150\end{array}\right.$ | 414. $\left\{\begin{array}{l}100 \\ 118\end{array}\right.$ | $452\left\{\begin{array}{c}9 y \\ 143\end{array}\right.$ | $\left\{\begin{array}{c}898 \\ .\end{array}\right.$ | $\{4.8$. |
| Mean age | 28.0 | 22. 8 | 24.2. | . 28.8 | 24] ${ }^{\text {R }}$ | 23'8 | 24.7 | 24'0 |


| Age | 1931 |  | 1921 |  | 1911 |  | 1901 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mnles | Females | Males | Females | Malea | Females | Males | Ferunles |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 |
| Lovaland Dixiaion |  |  |  |  |  |  |  |  |
| 0-5 | 1,705 | 1,679 | 1,320 | 1,342 | 1,331 | 1,400 | 1,201 | 1,869 |
| 5-10 | 1,342 | 1,296 | 1,348 | 1,361 | 1,336 | 1,943 | 1,808 | 1,321 |
| 10-15 | 1,224 | 1,187 | 1,296 | 1,258 | 1,247 | 1,171 | 1,220 | 1,137 |
| 15-20 | 1932 | 1989 | 951 | 1,020 | 923 | 991 | 909 | 967 |
| 20-40 | 2,904 | 3,009 | 3,115 | 3,144 | 3,165 | 8,208 | 8,275 | 8,319 1,440 |
| 40-60 | 1,501 | 1,425 | . 1,564 | 1,432 | 1,698 | 1,439 | 1,034 | 1,440 |
| 60 andi over | 392 | 415 | 406 | 443 | 405 | 451 | 987 | 488 |
| Mean age | 28.0 | $28 \cdot 0$ | 24.1 | 28.7 | 82.8 | 28.8 | 24.6 | 24.0 |
| Midland Diviaion |  |  |  |  |  | 1 |  |  |
| 0-5 | 1,760 | 1,780 | 1,313 | 1,356 | 1,308 | 1,406 | 1,269 | 1.402 |
| 5-10 | 1,342 | 1,321 | 1,354 | 1,375 | 1,338 | 1,958 | 1,908 | 1,381 |
| 10-15 | 1,235 | 1,207 | 1,294 | 1,251 | 1,254 | 1,184 | 1,227 | 1,135 |
| 15-20 | 908 | -972 | 945 | 1,000 | 918 | 970 | 1903 8,212 | 944 8,273 |
| 20-40 | 2,844 | 2,878 | 8,078 | 3,090 | 3,148 $\mathbf{1} 606$ | 8,149 1,463 | 8,242 $\mathbf{1 , 6 4 0}$ | 3,273 1,151 |
| 40-60 | 1,473 | 1,387 | 1,580 | 1,453 | 1,606 428 | 1,469 $\mathbf{4 7 0}$ | 1,640 416 | 1,451 |
| 60 and over | 438 | 405 | 436 | 475 | 428 | 470 | 410 |  |
| Mean age | 28.0 | $22 \cdot 8$ | $24 \cdot 2$ | 28.8 | 24.5 | 2파0 | 24.7 | 28.1 |
| Fighland Diviaion |  |  |  |  |  |  |  |  |
| 0-5 . | 1,503 | 1,634 |  |  | 1,236 | 1,371 | 1,107 | 1,300 |
| $5-10$ | 1,156 | 1,352 | 1,156 | 1,263 | 1,204 | 1,205 | 1,160 | 1,274 |
| 10-15 | 1,119 | 1,291 | 1,255 | 1,342 | 1,253 | 1,320 | 1,289 | 1,252 |
| 15-20 | 1,089 | $\cdot 1,071$ | 1,031 | 1,06R | 993 | 1,045 | 983 | 1,034 |
| 90-40 | 3,551 | 3,276 | 3,548 | 3,340 | 3,460 | 3,216 | 3,624 | 8,385 |
| 40-60 | .1,336 | 1,117 | 1,500 | 1,285 | 1,4y3 | 1,3415 | 1,671 | 1,366 |
| 60 and over | 246 | 250 | 332 | 379 | 861 | 407 | 820 | 384 |
| Mean afe | $82 \cdot 6$ | 21'푤 | $24 \cdot 8$ | 88.2 | 24.3 | 28.8 | 24•8 | 28.7 |

## SUBSIDIARY TABLE-II

Age distribution of $\mathbf{1 0 , 0 0 0}$ of each sex in each main religion

| Beligion and dge | 1931 |  | 1921 |  | 1911 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Malem | Females | Maleß | Females | Males | Females |
| 1 | 2 | 3 | 4 | ¢ | 6 | 7 |
| Einda |  |  | 1,281 | 1,307 | 1,296 | 1,357 |
| 0-8 | 1,700 1,302 | 1,693 | 1,297 | 1,310 | 1,294 | 1,290 |
| $8-10$ $10-15$ | 1,198 | 1,164 | 1,271 | 1,218 | 1,223 | - 1,143 |
| 10-45 | ${ }^{1917}$ | 977 | 942 | 1,015 | 914 | - 988 |
| 20-40 | 2,951 | 3,007 | 3,164 | 3,172 | 3,204 | 3,223 |
| 40-60 | 1,521 | 1,446 | 1,620 | 1,497 | 1,643 | 1,493 |
| 00 and over | 411 | 444 | 425 |  |  |  |
| Mamn ade | $28 \cdot 8$ | 28.8 | 24.5 | 24.3 | 24'7 | $24 \cdot 5$ |
| Ohristian |  |  |  |  |  | 1,493 |
| 0-5 | 1,745 | 1,779 1,378 | 1,361 1,422 | 1,461 | 1,407 | 1,470 |
| 5-10 | 1,374 | 1,378 1,264 | 1,422 1,329 | 1,461 | 1,310 | 1,275 |
| 10-15 | -1,26n | 1,264 | 1,329 976 | 1,016 | 1951 | 988 |
| $16-20$ $20-40$ | 949 | 2,863 | 3,035 | 3,021 | 3,107 | 3,056 |
| 20-40 | 2,850 1,419 | 1,916 | 1,477 | 1,334 | 1,483 | 1,327 |
| 60 and over | 1403 | 408 | 400 | 417 | 388 | 391 |
| Mann age | $22 \cdot 6$ | 22.2 | 28.5 | $22 \cdot 9$ | $23 \cdot 6$ | 22.7 |
| Muslim |  |  |  |  | 1,373 | 1,504 |
| $0-5$ | 1,768 | 1,792 1,382 | 1,353 | 1,4356 | 1,398 | 1,462 |
| 5-10 | 1,388 | 1,263 | 1,349 | 1,331 | 1,290 | 1,240 |
| 16-20 | 952 | 1008 | 943 | 980 | 919 | 957 |
| 20-40 | 2,882 | 2,994 | 3,056 | 3,144 | 3,076 | 3,183 |
| 40-60 | 1,369 | 1,227 | 1,483 | 1,283 | 1,545 | 1,280 |
| 60 and over | 363 | 334 | 409 | 372 | 399 | 374 |
| Mean aga | 22.2 | 21.6 | $28 \cdot 6$ | 1:326. | $23 \cdot 8$ | $22 \cdot 6$ |

## SUBSIDIARY TABLE-III

Age distribution of 1,000 of each sex in certain oastes


SUBSIDIARY TABLE IT
Proportion of children under 14 and of persons oyer 43 to those aged 14-43 in certain castes; also of married females aged 14-43 per 100 females

| Caste |  |  | Proportion of children, both sexes, per 100 |  | Proportion of persons over 43 per 100 aged 14.48 |  | Number of married fomales agod $14-43$ per 100 femalea of all nges |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\left\lvert\, \begin{gathered} \text { Persona nged } \\ 14-43 \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { Married } \\ \text { fomalos aged } \\ 14-43 \end{gathered}\right.$ | Males | Femalos |  |
| - | 1 |  | 2 | 3 | 4 | 6 | 6 |
| 1 | Atayan | Hindu | 88 | 287 | 38 | 10 | 34 |
| 2 | Brabman, Malayala (Nampatiri and Potti) | Ditto | 66 | 198 | 82 | 52 | 34 |
| $\beta$ | Brahmad-others | Ditto | 79 | 187 | 46 | 48 | 38 |
| 4 | Catholic Atajar | Christian | 90 | 259 | 87 | 28 | 32 |
| 5 | Chackaravar | Ditto | 87 | 248 | 32 | 25 | 34 |
| 6 | Ohetti | Hindu | 75 | 197 | 84 | 87 | 35 |
| 7 | flavan | Ditto | 88 | 248 | 88 | 38 | 38 |
| 8 | Eammslan (Viswakarma) | Ditto | 86 | 232 | 34 | 82 | 84 |
| 9 | KanikkEran (including Malavêlan) | Ditto | 74 | 284 | 30 | 88 | 34 |
| 10 | Kanijana | Ditto | 80 | 236 | 88 | 88 | 18 |
| 11 | Krishnanvaka | Ditto | 77 | 188 | 87 | 87 | H8 |
| 12 | Kuăumi | Ditto | 72 | 189 | 29 | 20 | 41 |
| 13 | Kuravan (including Malankuravan) | $\left\{\begin{array}{l}\text { Hindu } \\ \text { Ohristian }\end{array}\right.$ | 78 78 | 210 239 | 85 29. | $\begin{array}{r}\text { - } 80 \\ \hline 88\end{array}$ | $\begin{aligned} & \text { M1 } \\ & 31 \end{aligned}$ |
| 14 | Malayatayan Hindu and Tribe | al Rellgion | 66 | 172 | 20 | 28 | 41 |
| 15 | Mannén | Ditto | 102 | 236 | 41 | 84 | 88 |
| 16 | Maravan | Hindy | 68 | 12.4 | 28 | 28 | 37 |
| 17 | Mukknvan | Ihristian | 94 | 221 | 88 | 27 | 81 |
| 18 | Muthuvan . Hindu nind Tribal | al Religion | 99 | 231 | 81 | 0 | 80 |
| 19 | Nâdlăr (Chắnnถ̆n) | $\left\{\begin{array}{l}\text { Hindu } \\ \text { Christian }\end{array}\right.$ | 80 91 | 260 272 | 29 29 | 80 28 | $\begin{aligned} & 81 \\ & 31 \end{aligned}$ |
| 20 | Nayar | Hindu | 84 | 230 | 87 | 88 | 19 |
| 21 | Pallnn | Ditto | 68 | 175 | 18 | 12 | $41^{\circ}$ |
| 22 | Patavan | Ditto | 87 | 229 | 80 | 84 |  |
| 23 | Parayan (83̣mbarar) | $\left\{\begin{array}{l}\text { Hindu } \\ \text { Christian }\end{array}\right.$ | 70 78 | 191 208 | 82 80 | 27 28 | $\begin{aligned} & 38 \\ & 80 \end{aligned}$ |
| 24 | Pulayan (Ohtramar) | $\left\{\begin{array}{l} \text { Hindn } \\ \text { Christian } \end{array}\right.$ | 80 79 | 200 207 | 87 88 | 81 80 | $\begin{aligned} & 37 \\ & 37 \end{aligned}$ |
| 25 | Śsuyan (Pattsityan) | Hindu | 76 | 197 | 88 | 86 | 85 |
| 26 | Byrian Ohriatiad |  | 98 | 230 | 84 | 84 | 35 |
| 97 | Thantan (6ialy) | Hindu | 85 | 380 | 80 | 26 | 84 |
| 28 | Thantapulayan | Ditto | 87. | 208 | 4 | 28 | 87 |
| 29 | U11/3tan (Kocchuvelan) | Ohristian | 76 | 208 | 84 | 27 | 38. |
| 80 | Valan | Hindo | 87 | 220 | 40 | 88 | 86 |
| 81 | Vunijan (Vapigavairyan) | Dito | 86 | 222 | 87 | 35 | 85 |
| 82 | Vangy | Ditto | 81 | 205 | 88 | 82 | 87 |
| 38 | Velakkithalanayar | Ditto | 88 | 287 | 84 | 88 | 88 |
| 84 | Valan | Ditto | 83 | 212 | 85 | 88 | 88 |
| 36 | Vèjur (Xuchauy) | Ditto | 104 | 808 | 23 | 22 | 97 |
| 86 | Vellatan | Ditto | 78 | 105 | 41 | 42 | 85 |
| 87 | Veluthriantyar | Ditto | $91^{\circ}$ | 218 | 80. | 42 | 88 |
| 88 | Vötan (incluđing Malavotan) | Diteo | 85 | 214 | 82 | 28 | 87 |
| 39 | Vltadaivar (PantIfam only) | DItto | 88 | 225 | 36 | 84 | ${ }^{36}$ |
| 40 | Yädaran (Idayan) | Ditto | 70 | 188 | 87 | 14 | 38 |

SUBSIDIARY TABLEE
Proportion of children under 10 and of persons over 60 to those aged 15-40; also of married females aged 15-40 per 100 females

| Division | Proportion of children, both sexes, per 100 \| |  |  |  |  |  | Propdition of persons over 60, per 100 aged 15-40 |  |  |  |  |  | Number of married females aged 15 -40 per 100 females of all ages |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons aged 15-40 |  |  | Harried females aged 15-40 |  |  | 1931 |  | 1921 |  | 1911 |  |  |  |  |
|  | 1931 | 1921 | 1911 | 1931 | 1921 | 1911 | Males | Fëmales | Males | Females | Mrales | Females | 1931 | 1021 | 1911 |
| 1 | 2 | 3 | 4 | b | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | $1 \pm$ | 15 | 16 |
| 8TXTE | 78 | 65 | 65 | 200 | 180 | 171 | 11 | 11 | 10 | 11 | 10 | 11 | 31 | . 30 | 32 |
| Administ rative Diydaion |  |  |  |  |  |  |  |  |  |  |  | * |  |  |  |
| Southerri |  | 66 | 67 | 205 | 189 | 181 | 10 | 10 | 10 | $10^{\circ}$ | 11 | 11 | 29 | 29 | 30 |
| Central | 78 | 65 | 64 | 202 | 183 | 171 | 11 | 11 | 11 | 11. | 10 | 11 | 30 | 29 | 31 |
| Northera | 82 | 66 | 66 | 199 | 172 | 164 | 11 | 12 | 10 | 11 | 9 | 11 | 31 | 32 | 34 |
| High Range | 45 | 36 | 40 | 187 | 114 | 132 | 2 | 2 | 3 | 3 |  | 4 | 40 | 39 | 37 |
| Natural Ditition |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowland |  | 65 | 65 | 202 | 182 | 172 | 10 | 10 | 10 | 11 | 10 | 11 | 30 | 29 | 32 |
| Midland. | 82 | 66 | 66 | 203 | 180 | 169 | 12 | 12 | 11 | 12 | 11 | 11 | 31 | 31 | 32 |
| Eighland | 62 | 54 | 58 | 173 | 160 | 166 | \% | 6 | 7 | 9 |  | 10 | 35 | 33 | 33 |

## SUBSIDIARY• TABLE Y A

Proportion of children under 10 and of persons over $\mathbf{6 0}$ to those aged $\mathbf{1 5 - 4 0}$ in certain religions; also of married females aged 15-40 per 100 females


SUBSIDIARY TABLE YI
Yariation in population at certain age-periods


SUBSIDIARY TABLE YII
Reported birth-rate by sex and natural division

| Year | Number of births per 1,000 of total population |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State |  | Lowland Division |  | Midland Diviaion |  | Highland Division |  |
|  | Males | Femalea | Males | Fomales | Males | Fomales | Males | Femaica |
| 1 | 2 | 3 | 4 | $\square$ | 6 | 7 | 8 | 0 |
| 1920-1921 | 18.5 | 18.2 | $19 \cdot 6$ | 18.8 | 17-2 | 17.3 | 21.0 | $22 \cdot 9$ |
| 1921-1922 | 17.2 | 17-1 | $18 \cdot 0$ | 17.5 | $18 \cdot 1$ | 16.9 | $20 \cdot 2$ | 21.8 |
| 1922-1923 | 16.5 | 16.8 | 17.2 | 16.4 | $15 \cdot 7$ | $15 \cdot 6$ | $19 \cdot 8$ | 21.5 |
| 1923-1924 | 16.8 | 16.7 | 17.9 | 17.2 | $15 \cdot 6$ | 16.0 | 10.0 | 21.0 |
| 1924-1925 | $14 \cdot 1$ | 13.5 | $15 \cdot 4$ | 14.5 | 12.6 | 12.2 | 16.7 | 18.3 |
| 1925-1926 | 17-1 | $15 \cdot 9$ | $16 \cdot 4$ | 15.0 | 17.5 | 16.4 | 19.10 | 21.1 |
| 1926-1927 | $18 \cdot 9$ | $18 \cdot 1$ | $17 \cdot 3$ | 16.2 | 20.8 | 19.6 | 20.6 | 22.4 |
| 1927-1928 | 19.7 | $18 \cdot 6$ | $17 \cdot 6$ | 16.3 | 21.6 | 20.5 | 21.9 | 22.8 |
| 1928-1929 | 20.8 | 19-7 | $18 \cdot 3$ | 17.3 | 23.0 | 21.6 | 22.9 | 24.4 |
| 1929-1930 | $22 \cdot 5$ | 21.7 | $19 \cdot 4$ | $18 \cdot 3$ | $25 \cdot 3$ | 24'5 | $24 \cdot 3$ | $26^{\circ} 6$ |
| Ararage for the deade | 18- | 17.7 | 17•7 | 16.7 | 18.7 | $18 \cdot 2$ | $20 \cdot 7$ | $22 \cdot 6$ |

## SUBSIDIARY TABLE VIII <br> Reported death-rate by sex and natural division

| Year | Nomber of deaths per 1,000 of lotal population |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State |  | Lowland Division |  | Midiand Division |  | Highland Division |  |
|  | Males | Femalcs | Males | Females | Males | Females | Males | Females |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | - 9. |
| 1920-1921 | $12 \cdot 9$ | 11.2 | 136 | 11.6 | 11.9 | 10.5 | 16.6 | 15.6 |
| 1921-1922 | 11.9 | $10 \cdot 3$ | $12 \cdot 5$ | $10 \cdot 5$ | 11.4 | 10.0 9.6 | $13 \cdot 4$ | 13.0 12.8 |
| 1922-1923 | 11.5 | $10 \cdot 0$ | $11 \cdot 9$ 11.8 | $10 \cdot 3$ | 10.9 | $9 \cdot 6$ $9 \cdot 4$ | $14 *$ $15 \cdot 5$ | 12.8 13.7 |
| 1923-1924 | 11.6 8.2 | 10.0 | 11.8 10.1 | $10 \cdot 2$ 8.5 | $11 \cdot 0$ 8.3 | $\stackrel{9 \cdot 4}{ }$ | 15.6 10.6 | 19.8 |
| 1924-1925 | $9 \cdot 2$ | $8 \cdot 0$ | $10 \cdot 1$ | $8 \cdot 5$ | $8 \cdot 3$ | $7 \cdot 3$ | 10.6 | $\bigcirc$ |
| 1925-1926 | $8 \cdot 4$ | $7 \cdot 6$ | 8.4 | $7 \cdot 4$ | $8 \cdot 1$ | 7.4 | 10.9 | $10 \cdot 9$ |
| 1926-1927 | $9 \cdot 4$ | $9 \cdot 0$ | $9 \cdot 2$ | $8 \cdot 6$ | $9 \cdot 5$ | $9 \cdot 3$ | $11 \cdot 6$ | $12 \cdot 2$ |
| 1927-1928 | $9 \cdot 2$ | $8 \cdot 4$ | $8 \cdot 9$ | $8 \cdot 0$ | $9 \cdot 3$ | $8 \cdot 8$ | 11.4 | $12 \cdot 2$ |
| 1928-1929 | $10 \cdot 9$ | $10 \cdot 1$ | $11 \cdot 3$ | 10.2 | 10.5 | $9 \cdot 8$ | $12 \cdot 3$ | 12.2 |
| 1929-1030 | 10.0 | 9.6 | 9.5 | $8 \cdot 8$ | $10 \cdot 5$ | $10 \cdot 1$ | $11 \cdot 4$ | $12 \cdot 0$ |
| Xrerage for the decade | $10 \cdot 6$ | 8•3 | 10'6 | 9•8 | 10.1 | $9 \cdot 2$ | $12 \cdot 6$ | 12.4 |

## SUBSIDIARY TABLE IX

Reported death-rate by sex and age during the decade per mille living at the same age

| Age | Average for the decade |  | 1920-1921 |  | 1921-1922 |  | 1922-1923 |  | 1923-1924 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Males | Feinales | Males | Females | Males | Females |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11. |
| All ados | $10 \cdot 5$ | 9-3 | $12 \cdot 8$ | 11.2 | 11.9 | $10 \cdot 8$ | 11.5 | 10.0 | $11 \cdot 6$ | $10 \cdot 0$ |
| 0-1 | $48 \cdot 3$ | $35 \cdot 3$ | 54.8 | 43.0 | 53.2 | $43 \cdot 0$ | 48.1 | - $41 \cdot 1$ | 46.1 | 39.5 |
| $1-5$ $5=10$ | 13.5 56 | $12 \cdot 5$ $5 \cdot 1$ | 17.7 8.4 | $15 \cdot 8$ 7.5 | 18.3 | $15 \cdot 3$ | 16.0 | 14.3 | $17 \cdot 6$ | $14 \cdot 8$ |
| $5-10$ $10-16$ | 56 3.3 | $5 \cdot 1$ $3 \cdot 0$ | 8.4 4.6 | $7 \cdot 5$ $3 \cdot 9$ | 7.6 8.9 | 6.7 3.3 | 6.8 3.7 | 5.8 | 6.8 3.8 | 5.8 3.1 |
| $10-16$ $15-20$ | $3 \cdot 3$ 3.8 | $3 \cdot 0$ 3.9 | 4.6 5.2 | $3 \cdot 9$ 4.3 | $3 \cdot 9$ $4 \cdot 2$ | $3 \cdot 3$ $3 \cdot 9$ | 3.7 4.2 | $3 \cdot 3$ $3 \cdot 7$ | $3 \cdot 8$ 4.5 | $3 \cdot 1$ $3 \cdot 9$ |
|  |  |  |  |  | 4 | $3 \cdot 9$ | $4 \cdot 2$ | $3 \cdot 7$ | $4 \cdot 6$ | $3 \cdot 9$ |
| 20-30 | 5.3 | $5 \cdot 4$ | 6.5 | 6.4 | 5.6 | $5 \cdot 5$ | $5 \cdot 8$ | $5 \cdot 4$ | 6.0 | $5 \cdot 5$ |
| 80-40. | 6.8 | 6.8 8.8 | $9 \cdot 0$ | 8.7 | 7.8 | 7.5 | 7.8 | 7.4 | $7 \cdot 8$ | $7 \cdot 2$ |
| 40-60 $50-60$ | 10.2 17.7 | 8.2 12.8 | $13 \cdot 6$ | $11 \cdot 0$ | $12 \cdot 1$ | 9.6 | $12 \cdot 3$ | $9 \cdot 8$ | 11.9 | $9 \cdot 7$ |
| 50-50 | $17 \cdot 7$ | 12.8 16.0 | 21.4 | $15 \cdot 3$ | $20 \cdot 3$ | 14.4 | $2 \mathrm{l} \cdot 5$ | $14 \cdot 4$ | $19 \cdot 8$ | 14.7 |
| 60 and over | $51 \cdot 6$ | $46^{\circ} 0$ | 58.2 | 50.8 | 51.8 | $48 \cdot 0$ | $55 \cdot 7$ | 47-2 | $55 \cdot 6$ | $47 \cdot 3$ |


| 1934-1925 |  | 1925-1925 |  | 1926-1927 |  | 1927-1928 |  | 1928-1929 |  | - 1929-1980 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | Femalea | Males | Females | Males | Females | Males | kemales | Males | Females | Males | Females |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 8.2 | 8.0 | $8 \cdot 4$ | $7 \cdot 6$ | 9-7 | $8 \cdot 0$ | $8 \cdot 2$ | 8-3 | 10.8 | 10.1 | $10 \cdot 0$ | $8 \cdot 6$ |
| $33 \cdot 0$ | $33 \cdot 2$ 11.4 | 33.7 10.5 | 25.3 | 40.4 | 32-9 | $38 \cdot 6$ | 321 | $40 \cdot 7$ |  |  |  |
| $13 \cdot 1$ $4 \cdot 8$ | 11.4 3.9 | 10.5 8.9 | $9 \cdot 8$ | 11.9 | $12 \cdot 1$ | 10.5 | 10.2 | 11.4 | $32 \cdot 4$ 11.2 | $48 \cdot 4$ 12.5 | $39 \cdot 5$ 12.7 |
| $3 \cdot 8$ $3 \cdot 0$ | 3.9 2.7 | $8 \cdot 9$ 2.5 | $3 \cdot 7$ $2 \cdot 2$ | 4.0 $2 \cdot 3$ | 4.3 | 4.0 2.6 | $4 \cdot 1$ | $5 \cdot 9$ | 5.4 | 4.1 | 12.7 4.0 |
| $3 \cdot 6$ | $2 \cdot 7$ 8.2 | 2.8 2.9 | $2 \cdot 2$ $3 \cdot 3$ | 2.3 2.9 | $2 \cdot 3$ 3.6 | $2 \cdot 6$ $3 \cdot 3$ | 2.6 3.6 | $4 \cdot 5$ $4 \cdot 4$ | $4 \cdot 3$ $5 \cdot 4$ | 2.3 3.2 | 2.4 4.1 |
| 4.7 6.3 | $4 \cdot 6$ 6.0 | $4 \cdot 1$ $5 \cdot 0$ | $4 \cdot 4$ $5 \cdot 3$ | 4.8 5.4 | 4.8 | $4 \cdot 4$ | $4 \cdot 8$ | 6.5 | 6.9 | $4 \cdot 6$ | $5 \cdot 3$ |
| $9 \cdot 1$ | 6.0 6.9 | $6 \cdot 0$ $7 \cdot 9$ | $5 \cdot 3$ 6.3 | 5.4 8.3 | 6.0 6.8 | $5 \cdot 6$ 8.5 | $5 \cdot 9$ | $7 \cdot 8$ | $8 \cdot 2$ | $6 \cdot 2$ | 6.6 |
| 16.8 | 12.0 | $14 \cdot 0$ | 6.3 10.1 | 8.3 16.2 | 6.8 12.2 | 8.5 15.7 | 6.9 10.9 | 10.5 | 8.4 | $8 \cdot 6$ | $7 \cdot 2$ |
| $47 \cdot 3$ | 38.4 | 42.4 | 10.1 39.6 | 16.2 50.9 | $12 \cdot 2$ 50.2 | $15 \cdot 7$ 49.0 | 11.2 45.5 | 17.5 | $12 \cdot 8$ | 15.7 | 12.0 |
|  |  |  |  | 50.9 | 60.2 | 49•0 | - $45 \cdot 5$ | $50 \cdot 2$ | $45 \cdot 3$ | 52.0 | 49.0 |

SUBSIDIARY TABLE X
Reported deaths from certain diseases par mille of each sex

| Disease and year |  | State e |  |  |  |  | Actual number of deaths in Natural Divisions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Actoal number of deaths |  |  | －Ratio per mille of each sex |  | Lowland |  | Midland |  | Highland |  |
|  |  | $\begin{aligned} & \text { 5 } \\ & 0 \\ & 0 \end{aligned}$ | $\frac{8}{5}$ | 8 名 品 | $\frac{5}{5}$ |  | 芭 |  | $\frac{\text { 类 }}{\underline{E}}$ |  | $\frac{\mathbf{g}_{4}^{3}}{4}$ |  |
| 1 |  | 2 | 3 | 4 | 5 |  | 7 | 8 | 9 | 10 | 11 | 12 |
| Small－pox $\quad\{$ | ［1920－1921 | 80 | 48 | 32 | $0 \cdot 02$ | 0.02 | 31 | 24 | 16 | 3 | 1 |  |
|  | 1921－1922 | 46 | 25 | 21 | $0 \cdot 01$ | 0.01 | 13 | 13 | $0$ | 3 | 6 |  |
|  | 1922－－1923 | 320 | 182 | 138 | $0 \cdot 09$ | 0.07 | 105 | 102 | 68 | 30 | 15 |  |
|  | 1923－1924 | 228 | 119 | 109 | 0.05 | 0.05 | 72 | 76 | 44 | 99 | 3 |  |
|  | 1924－1925 | 227 | 126 | 101 | 0.06 | 0.05 | 48 | 47 | 76 | 58 | 3 |  |
| Small－pox－ | $\left\{\begin{array}{l}1925-1926\end{array}\right.$ | 63 | 33 | 30 | 0.01 | $0 \cdot 01$ | 24 | 20 | 9 | 9 | ． |  |
|  | $1926-1927$ $1927-1928$ | 69 13 | $\begin{array}{r}36 \\ 8 \\ \hline\end{array}$ | 38 5 | ． $0 \cdot 02$ | $0 \cdot 01$ | 8 3 | 6 | $\begin{array}{r} 28 \\ 4 \end{array}$ | 37 | i |  |
|  | 1928－1929 | 160 | 84 | 81 | $0 \cdot 03$ | 0.03 | 45 | 41 | 35 | 37 | 1 |  |
|  | 1929－1930 | 989 | 639 | 456 | 0.21 | $0 \cdot 18$ | 340 | 318 | 180 | 135 | 19 | 9 |
| Fever | （1920－1921 | 17，177 | 9，290 | 7，887 | 4.57 | $4 \cdot 00$ | 4，437 | 3，792 | 4，181 | 8，783 | 672 | 810 |
|  | ｜1921－1022 | 10，210 | 8，392 | 6.818 | 4.03 | $3 \cdot 37$ | 3.936 | 3，154 | 3，970 | 3，300 | 477 | 3118 |
|  | $1922 \cdot$－1923 | 15，647 | 8,605 | 7,042 | 4.04 | $3 \cdot 47$ | 4，088 | 9，345 | 3，980 | 3，308 | 687 | 3810 |
|  | 1923－1924 | 15，359 | 8，415 | 6，944 | $3 \cdot 86$ | 3.27 | 3,910 | 3，328 | 3，893 | 8，206 | 612 | 410 |
|  | 1924－1925 | 12，433 | 6，690 | 6，743 | $3 \cdot 00$ | $2 \cdot 63$ | 8，359 | 2，824 | 8，993 | 2，604 | 338 | 26.3 |
|  | 1925－1926 | 10，980 | 5,798 | 5.182 | $2 \cdot 54$ | $2 \cdot 32$ | 2，655 | 2，366 | 2，760 | 2，470 | 983 | 9113 |
|  | 1926－1927 | 13，566 | 7,021 | 0，545 | 3.00 | $2 \cdot 86$ | 3，165 | 2，827 | 3，365 | 8，208 | 801 | 16.3 |
|  | 1927－1928 | 18，108 | 6，839 | 6，275 | 2.86 | $2 \cdot 67$ | 3，052 | 2,716 | 3，352 | 3，160 | 490 | 393 |
|  | 1928－1929 | 12，893 | 6，717 | 6，176 | $2 \cdot 74$ 3 | $2 \cdot 50$ | 2，998 | 2，603 | 8，299 | 3，118 | 493 | $8{ }^{\text {Sin }}$ |
|  | （1929－1930 | 15，510 | 8，066 | 7，444 | $3 \cdot 22$ | 3－02 | 3，447 | 3,215 | 4，055 | 8，722 | 564 | noi |
| Chutara | （1920－1921 | 4 | 2 | 2 | $\cdots$ | $\cdots$ | 1 | ． | $\cdots$ | 2 | 1 | ． |
|  | 1921－1922 | 1 | 1 |  | $\cdots$ | $\ldots$ | ． |  | $\cdots$ | $\cdots$ | 1 |  |
|  | 1922－1923 | 1 |  | 1 |  |  | $\ddot{i}$ |  |  |  |  |  |
|  | 192s－1924 | 179 | 117 | 62 | 0.05 | 0.09 | 24 | 20 | 21 | 10 | 78 | 13 |
|  | $\{1924-1925$ | 748 | 408 | 345 | 0.18 | $0 \cdot 16$ | 150 | 151 | 167 | 185 | 80 | 31 |
|  | $\left\{\begin{array}{l}1925-1926 \\ 1920\end{array}\right.$ | 182 | 108 | 79 | $0 \cdot 05$ | 0.04 | 48 | 30 | $t$ | 11 | 16 | $\wedge$ |
|  | 1926－1927 | ${ }_{7}^{21}$ | 4 | 121 | $0 \cdot 17$ | 0.011 0.15 | ${ }_{212}^{4}$ | 8 185 | 178 | 147 | $20 \cdot$ | 98 |
|  | 1927－1928 | 772 9,842 | \％186 | 357 <br> 4,056 | 0.17 2． 0 | 0．15 | 8，010 | 2，717 | 1，898 | 1，704 | 288 | 235 |
|  | －1928－1929 | $\begin{array}{r}3,836 \\ \hline 36\end{array}$ | － $\mathbf{0} \mathbf{1 7 7}$ | ${ }^{4} 169$ | 2.12 0.07 | $0 \cdot 08$ | －70 | 27 | ${ }_{85}$ | ${ }^{1} 72$ | 22 | 20 |
| $\cdots \cdot 1$ | （1920－1921 | 0，183 | 3，248 | 2，890 | $1 \cdot 60$ | $1 \cdot 46$ | 1，808 | 1，412 | 1，428 | 1，802 | 2017 | 176 |
|  | 1921－1922 | 5，578 | 2，963 | 2，615 | 1.42 | 1.29 | 1，511 | 1，292 | 1，207 | 1，100 | 156 | 151 |
|  | 1922－1923 | 5，251 | 2，698 | 2.568 | $1 \cdot 27$ | 1.28 | 1，379 | 1，325 | 1，141 | 1，068 | 178 | 168 |
|  | 1923－1924 | 5，674 | 2，928 | 2，746 | $1 \cdot 34$ | $1 \cdot 29$ | 1，426 | 1，340 | 1，288 | 1，185 | 214 | 2181 |
| Dyscitery and Diarrhoea | 19241925 | 6，320 | 3，372 | 2， 2 ＋8 | $1 \cdot 51$ | $1 \cdot 35$ | 1，760 | 1400 | 1,396 1,600 | 1,278 1,886 | 210 241 | 171 |
|  | $\left\{\begin{array}{l}1020 \\ 1020 \\ 1026\end{array}\right.$ | 6，768 | 3，4561 | 3，307 | 1.51 | 1.48 | 1，615 | 1,510 1,787 | 1,600 1,838 | 1,886 1,040 | 241 237 | 202 220 |
|  | 1926－1927 | 7，777 | 3，815 | 3，962 | 1.63 | 1.73 | 1，740 | 1，787 | 1,838 1,419 | 1,040 1,380 | 297 228 | 211 |
|  | 1927－1928 | 6，142． | 3，118 | 3，024 | $1 \cdot 30$ | $1 \cdot 20$ | 1，477 | 1,428 1,304 | 1,419 1,154 | 1,123 | 198 | 101 |
|  | $\left(\begin{array}{l}1928-1929 \\ 1919-1930\end{array}\right.$ | 5，211 5,007 | 2，623 $\mathbf{2 , 7 6 2}$ | 2,588 2,895 | $1 \cdot 07$ $1 \cdot 10$ | 1.07 1.17 | 1,276 1,237 | 1,204 1,278 | 1，809 | 1，423 | 210 | 111. |
| Plague | 1920－1921 | 3 | 3 | ．$\cdot$ | ．． | ． |  |  | $\cdots$ |  | 8 |  |
|  | 1922－1923 | 1 | 1 | ． 0 | － | ．． | ＇． | ． | ． | $\bullet$ | 1 |  |
|  | $\left\{\begin{array}{l}1928-1924 \\ 1027-1928\end{array}\right.$ | 1 6 | $\frac{1}{2}$ | 4 | ． | ． | 1 | $\cdots$ | － | $\because$ | 8 |  |

## SUBSIDIARY TABLE XI

Adjusted figures in the different age－groups proportioned to 100,000 of the total population in 1911 and 1921

| Age－group | 1911 |  | 1921 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | －Males | Femsles | Males | Fomalem |
| 1 | 2 | 8 | 4 | 0 |
| 0－5 | 14，715 | 16， $\mathbf{B}^{4} \mathbf{5}$ | 14，602 | 14.986 |
| 5－10 | 12，980 | 12，778 | 13，238 | 18，195 |
| 10－18 | 12，345 | 11，997 | 12，634 | 12，474 |
| 15－20 | 9，321 | 10，038 | 9，682 9,091 | 10，804 |
| 20－2F | 8，949 | 0，871 | 9，091 | 0，930 |
| 25－30 | 8，387 | 8，641 | 8，158 | 8,287 |
| $30-35$ | 7，901 | 7，590 | 7，611 | 7298 |
| －35－40 | 6，561 | 5，690 | 6，258 | 5，702 |
| $40-45$ $45-50$ | 5，597 | 1,878 8,619 | 8，478 | 4，987 |
| 45－50 | 4，061 | 8,619 | 4，061 | \＄，9159 |
| $80-55$ | 3，315 | 8，066 | 3，300 | 3，046 |
| 85－60 | 2,278 | 2，267 | 2，221 | 2，185 |
| 60－65 | 1，750 | 1，800 | 1，791 | 1742 |
| 65－70 | 807 | 926 | 889 | 1952 |
| \％0 and over | 1，044 | 1，194 | 1，114 | 1，276 |

## SUBSIDIARY TABLE XII

Graduated figares showing individual age distribation proportioned to $\mathbf{1 0 0 , 0 0 0}$ pf the total population in 1931


## SUBSIDIARY TABLE XIII

Rates of mortality and expectation of life at quinquennial ages....


## CHAPTER V

## PART I-SEX

## Introductory

 remarks.169. The differentiation of sex is a natural phenomenon. By constitution and temperament the woman is different from the man. This difference affects all sociological questions and hence the sex distinction is maintained in the discussion of all problems arising out of the census returns. In the other chapters of this report the sex figures are correlated to various population statistics, and in this chapter they are discussed with a view to bring out their numerical importance in different sections of the people and the country, and to estimate, as far as possible, the variations caused by race, religion, caste, migration, environment, and other factors.

Of all the census returns, those relating to sex are undoubtedly the most accurate. There is no chance of any mistake being committed on account of the ambiguity of the terms or the ignorance of the enumerated or the enumerator, nor is there any possibility of deliberate misstatement of facts. The only possible source of error is omission or duplication. These may occur more in the case of one sex than of the other and thereby the sex ratio may be affected. In India generally there are more males than females, while in Europe the opposite is the case. In Travancore, as in India, malea exceed females. The shortage of females as compared with males has been attributed by some critics to mistakes in enumeration. Accuracy in enumeration increases with each census and, as far as Travancore is concerned, the present census can certainly claim to have attained to as high a degree of accuracy as is now possible. It will be seen later that, though in the total population of the State males exceed females, there are certain sections of the population and certain localities which have shown a higher female ratio at all the censuses, while in the other sections and other localities there has always been a higher male ratio. If the disproportion in the sexes had been due to mistakes in enumeration, there could not have been such a uniformity in the variations at the different censuses. If mistakes had occurred it is quite improbable that they would have repeated themselves in the same direction at the same locality at different censuses. The sex returns for Travancore may, therefore, be taken to be correct, and the difference in the sex ratio between this State and Europe can only be attributed to natural causes.
170. The statistics of sex, in combination with those of religion, age and civil condition, are given in Imperial Table VII, and combined with caste, tribe or race they are shown in Imperial Table VIII. The main features of the figures relating to sex and of the vital statistics for the past decade are exhibited in the following subsidiary tables given at the end of this chapter.
I. General proportion of the sexes by adminitrative and natural divisions.
II. Number of females per 1,000 males'at different age-periods by main religions at each of the last three censuses.
III. Number of females per 1,000 males at different age-periods by religion and natural division (Census of 1931).
IV. Number of females per 1,000 males for certain selected castes.
V. Actual number of births and deaths reported for each sex during the decades 1901-10, 1911-20 and 1921-30.
VI. Number of deaths of each sex at different ages.
VII. Size of family correlated with the duration of marriage and the caste or religion of family.
VIII. Average size of family correlated with the age of wife and the difference between the ages of husband and wife.
171. The expression "sex ratio" is used in this chapter to indicate the number of
 females per 1,000 males. As in most other parts of India, so in Travancore are males in excess of females. According to the present census there are 987 females per 1,000 males in the aggregate population of this State. This is the highest sex ratio that Travancore has had since 1881 . In that year the ratio was 1,006 , it dropped to 982 in 1891, to 981 in 1901 and 1911 and to 971 in 1921, and in 1931 it rose to 987. The variations in the sex ratio at the last six censuses are shown in the diagram given in the margin. The very high ratio in 1881 and the fairly heavy drop in the ratio in 1921 are somewhat abnormal.

Of the administrative divisions, the sex ratio is the highest. in the Southern Division at the present census, the sexes being almost equal there, 999 females per 1,000 males. In the Central Division it is slightly less, viz., 995, but in the Northern Division it drops to 983 and in the High Range to so low a figure as 766 due mainly to the excess of male immigrants. The order of variation in the different divisions has been the same at all the previous censuses. The difference in the sex ratio is seen more. strikingly in the natural than in the administrative divisions. In the Lowland Division the general rule has been reversed. The females here exceed the males by four per $1,000$. In the Midland Division the ratio drops to 985 and in the Highland Division to 870 . At the previous censuses also the ratio was less in the Midland than in .the Lowland and. still less in the Highland, but in no census since 1881 have the females exceeded the; males in the Lowland Division except at the present.
172. To work out the sex ratio of the natural population the influence of migration has to be eliminated. Immigrants and emigrants by sex are shown in the marginal

|  | Immigrants and emigranta by sex |  |
| :---: | :---: | :---: |
|  | - Majes | Females |
|  | - |  |
| Immigrants | 68,134 | 66,969 |
| Emigrants | 31,707 | 26,759 |
| Excess of Immigrants over emigranta | 36,427 | 40,210 | statement. It will be seen from this statement that Travancore has gained 76,637 persons by migration during the last decade, and that in this number there are 4,783 more women than men. The sex ratio of the actual population must; therefore, be higher than that of the natural population. Subsidiary Table I shows that this is actually the case. The sex ratio of the actual population of the State is 987 as against 985 for the natural population. At the previous censuses also the natural population showed a slightly lower ratio than the actual. The sex ratio of the natural population has decreased from the Southern to the Central and from the latter to the Northern Division at all the censuses ; but in the High Range Division it has increased to 1,003 at the present census unlike at the previous ones. In the natural divisions there has been a steady fall in the ratio from the Lowland to the Midland and from the latter to the Highland.

The variations in the sex ratio of the natural population of the different divisions. at the present census, which are extracted in the marginal statement, seem to support the observations of Sir Alexander Baines in his Census Report of India for 1891. He says, "A review of the whole field of statistics resulting from the census enquiries seems to afford ground for the following deductions, which however are not put for the present as more than conjectural. The ratio of females to males, taking the whole population in existence at one time, has a tendency to be higher along the coast or within the influence of the sea air, to an extent beyond what can be accounted for merely by the temporary absence of a certain number of males at sea. It runs higher, too, in hilly tracts, as a rule, than on the plains, and it seems to be depressed by a dry and hot climate, particularly if accompanied by a considerable range of temperature." The Lowland Division of Travancore lies along the sea-coast and here we have the highest proportion of females to males in the natural population. The High Range Division is a hilly tract where the climate is the opposite of hot and dry, accompanied by a limited range of temperature, and there the sex ratio is higher than that on the plains. In these two respects the variations noticed in this State are in agreement with the inferences drawn by Sir Alexander Baines.
173. In the previous two paragraphs we have considered the sex ratio of the actual

The effeet of migration on mex ratio.

Number of fomales per 1,000 wales in the natural population

$$
\text { of adminiefrative and ralural divitione in } 1951
$$

| - Adminitarative Diviaion |  |
| :---: | :---: |
| Southern Division | 998 |
| Oentral $n$ | 990 |
| Nortbern * | 974 |
| High Range $n$ | 1,003 |
| Natural Dificion |  |
| Lowland Division | 996 |
| Midland $n$ | 980 |
| Highland " | 955 |

## MAP OF TRAVANCORE

Showlog by Tainks the Proportion of Sezes in the Actual Population Sente 1 truch $=16$ Miles


## MAP OF TRAVANCORE

Showing by Talaks the Proportion of Sexes in the Natural Popalation
Sente 1 Iuch $=16$ Miles


There has been an appreciable exodus of people from the above taluks to other parts of the State, and to this may be attributed the higher proportion of females in the actual than in the natural population. The ratios in the taluks of Thovala, Agasthiswaram, Shenkotta and Parur do not agree with either of the above propositions. These are taluks lying at the

| Taluk | Immigrants into certain taluks |  |
| :---: | :---: | :---: |
|  | Males ${ }^{\prime \prime}$ | Femalea |
| Thovala | 816 | 1,183 |
| Agnsthiswaram | 1,628 | 2,491 |
| Shenkotta | 2,597 | 6,599 |
| Parur | 2,521 | 7,398 | frontier and they receive large numbers of immigrants from the adjoining British districts or Cochin State, and yet the sex ratio of their actual population is' greater than that of the natural population. This is undoubtedly due to the fact that the immigrants consist of more females than males, as can be seen from the. marginal figures. The preponderance of females in the immigrants, which has raised the sex ratio of the population, indicates that the migration is of a permanent type brought about by women coming over to Travancore by marriage from the adjoining territories. Thus we see that the fall in the sex ratio of the actual population is generally due to immigration of a temporary or semi-permanent type and its rize may be caused either by emigration or by permanent immigration.

174. In Western countries the ratio of females to males is higher in urban than sex proportion in rural communitics. In the United States, for example, the number of females per $1,000{ }_{\substack{\text { in rural and } \\ \text { urban } \\ \text { aneas. }}}$ males was 996 in urban areas as against 925 in rural areas in 1920. The preponderance of females in urban areas is attributed to the fact that "the cities afford many ,"more opportunities for the gainful employment of women than do the rural districts." In Travancore there are no large industrial cities like those found in the United States, England or other Western countries. The occupations in the chief towns in this State are more suited to men than to women, and consequently the immigrants to towns consist more of males than of females. Some figures showing the sex ratio in urban and rural areas in this State have been given in paragraph 99 , Chapter II. Here we shall examine this question a little more in detail. The municipal towns are more urban in character than the other towns and so the comparison is confined to the statistics relating to municipal

Number of femalet por 1,000 males in the actual and natural
population in municipal tonons and rural areas
 towns and rural parts. In the marginal statement are given the numbers of males and females and the sex ratio of the actual and the natural population of the urban and rural areas. In the actual population the sex ratio in municipal towns is distinctly lower than that in rural areas. This difference is, as has been already pointed out, due to the towns attracting more male than female immigrants unlike in. Western countries. In the natural population, however, the difference in the sex ratio between the urban and the rural areas is negligible. It is to be inferred, therefore, that in Travancore urbanization not only does not decrease, but actually increases, masculinity in the actual population, and makes hardly any difference in the natural population.

Urbanization, in the sense in which it is understood in Western countries, is not applicable to Travancore. Towns here are only out-grown villages. There is hardly any large-scale factory industry as in the West, The cottage industries, of which there are a few important ones like coir yarn spinning and weaving, are not concentrated in towns but are carried on generally by the people living in the coastal tract. This region is much more thickly populated than the rest of the country. In view of large numbers of the
persons living in the coastal tract being engaged on industries and other diverse occupations, and of the very high density of

| Natural Division | Number of females per 1,000 males |  |
| :---: | :---: | :---: |
|  | Actual population | Natural population |
| Lowland | 1.004 | 996 |
| Midland | 985 | 980 |
| Highland | 870 | 955 | population in this region, the Lowland Division may be said to partake more of the character of urban than of rural area. The Midland and the Highland Divisions, on the other hand, are purely rural in character. The sex proportions of the actual and natural population in these divisions are given in the margin. The Lowland Division which is least rural has the highest ratio of females to males, and the Highland Division which is most rural has the smallest ratio. urbanization lowers masculinity. These figures seem to support the theory that

175. A wide range of variations is seen in the sex ratios of the different communities

Comparison
Fith other
Eith other
States, Provin-
ces and
Coungties. The probable causes of these variations will be dealt with later. It will suffice here to note the existence of the variations. From the figures given in the margin it will be seen

Niumber of females per 1,000 males

| Indian States (1931 census) |  | British Indian Provinces (1931 cenbus) |  | Oountries* |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pudukottai | 1,096 | Madras | 1,025 | United Kingdom | 1,086 |
|  |  | Bihar and Orissa | 1,008 | Norway | 1,064 |
| Oochin | 1,043 | Binar and Orissa | 1,008 | Denmark | 1,058 |
|  |  | Oentral Provinoes and |  | Sweden Spain | 1,049 1,049 |
| Trayancore | 987 | Berar | 1,000 | ${ }^{\text {Spain }}$ Austria | 1,036 |
|  |  | Burma | 958 | Germany | 1,032 |
| Hyderabad | 959 |  |  | France | 1,022 |
|  |  | Bengal | 924 | Italy | 1,010 |
| Mysore | 955 | Bombay | 909 | Greece | 986 980 |
| Baroda | 942 | United Provinces | 904 | Bulgaria | 958 |
|  |  |  |  | India | 940 |
| Jammu and Kashmir | 881 | Punjab | 831 | China | 801 | that among the Indian States, Travancore has a lower sex ratio than Cochin or Pudukottai, but a higher one than Hyderabad, Mysore, Baroda or Kashmir. Among the provinces, Madras, Bihar and Orissa, and the Central Provinces and Berar have higher and the others lower ratios than Travancore. Among the foreign countries, those in Western and Central Europe show a preponderance of females over males and their sex ratio is naturally higher than that of Travancore. But the countries in Eastern Europe and Asia have fewer females than males and among them Greece and Japan come nearer to Travancore in their sex proportions than any other country.

Sex Proportions Sex Proporti
by religion.
176. The sex proportions among Hindus, Christians, and Muslims at the last

Number of fomales per 1,000 males by religion at the last three censuses

| Religion | 1911 | 1921 | 1931 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
| Hindus |  | 993 | 984 |
| Christians | 999 |  |  |
| Muslims | 960 | 953 | 969 |
|  |  | 945 | 927 | three censuses are shown in the marginal statement. At all the censuses the Hindus have had the highest sex ratio. In 1931 the proportions of males and females among them are almost equal, there being only a deficiency of-one female per $\mathrm{I}, 000$ males. The Christian sex ratio is lower than that of the Hindus but higher than that' of the Muslims. This has been so at all the censuses. In 1931 the Christian females are short of the males by 31 per 1,000. The Muslims whose sex ratio has always been the lowest have now a deficiency of 43 females per 1,000 males.

The fall in the sex ratio of the total population in 1921 already referred to was shared by all the religions. The variations by religion at the last three censuses are

[^15]shown in the diagram given in the margin.


The deficiency of women among the Christians and the Muslims cannot be due to migration, because the large majority of the migrants are Hindus. The explanation must, therefore, be looked for in the higher female mortality amongst them. The vital statistics collected in Travancore do not record mortality among the different religions separately, but the social customs and the mode of living prevalent among the Christians and Muslims are such as are likely. to result in a higher female mortality. The purdah system compels the Muslim women to remain within the four walls of their ill-ventilated houses, very few of them receive proper medical attendance during their illness or at child-birth, and it is not surprising, therefore, that they die in comparatively. larger numbers than their Christian or Hindu sisters. Among Christians, and particularly among the Syrian Christians who constitute nearly 60 per cent. of the Christian population, we will see in Chapter VI that child marriage is more prevalent than among the Hindus except one or two minor communities like the Brahmans and the Kudumis whose numbers form but' an 'insignificant proportion of the total Hindus. Premature maternity may, therefore, be the primary cause of a higher female mortality among the Syrian Christians. Among the Hindus, on the other hand, there is neither the purdah habit nor is child marriage a common custom. These circumstances may have contributed to the highest sex ratio among the Hindus, a lower ratio among the Christians and the lowest among the Muslims.

The marginal statement will show that, except in the case of the Christians whose : sex ratio is slightly higher in the

| Religion | Number of ferales per 1,000 males by religion in different natural divisions |  |  |
| :---: | :---: | :---: | :---: |
|  | Lowland <br> Division | Midisnd Division | Highland Division |
| Hindus Ohristians Muslims | $\begin{array}{r} 1,018 \\ 974 \\ 976 \end{array}$ | 995 977 944 | 881 .848 853 | Midland than in the Lowland Division, the different religions show a fall in the proportion of females to males from the Lowland to the Midland and from the latter to the Highland Division. Both religion and locality, therefore, seem to affect the sex ratio.

177. The proportions of sexes among the different castes and tribes are shown in sex ratio by
sidiary Table IV given at the end of this chapter. The more important castes and caste or tribe Subsidiary Table IV given at the end of this chapter. The more important castes and caste or tribe, tribes included therein can be divided into three broad groups, namely, (1) primitive tribes, (2) castes which are entirely or mainly marumakkathayis, and (3) castes which
are entirely or mainly makkathäyis, The sex ratios of these three groups of castes and rribes are given in the following statement : and are shown graphically by the diagram below:-



Generally speaking, the primitive tribes have a higher sex ratio than the marumakkathayis and the latter a higher ratio than the makkathayis. There are no doubt some variations within the groups. Among the primitive tribes the Kuravan is the only
tribe having a population of considerable numbers, and they have an excess of females over males. The numbers of the other tribes are too few to justify a general inference being drawn about their sex ratio. However, the tendency of the tribes, as is seen from the average ratio, is for the females to outnumber the males. Most of the castes included in matumakkathayis show a slight excess of females over males and in the case of the few, among whom the proportion of females is less than that of males, the deficiency ranges only from 13 to 50 per 1,000 males. The marumakkathanyis have on the whole more females than males, but the average excess of females is only six per 1,000 males as against 57 in the case of the primitive tribes. Of the makkathayis, all the important communities except four minor ones show a deficiency of females. The average proportion of the makkathayis is only 968 females to 1,000 males. There is thus a distinct difference between the marumakkathāyis and makkathayyis in their sex ratio, which may probably be attributed to the fact that the women of the former communities enjoy more freedom and receive better treatment than those of the latter. The inference that may be drawn from the figures discussed above is that the highest sex ratio of the primitive tribes is probably due to the race; and the higher ratio among the marumakkathayis than among the makkathãyis, may be due to the difference in their social customs.

The satement given above shows that in certain tribes and castes females are in

Number of femalea per 1,000 males in certain salected caskes at the last four censuces

| Oaste | 1931 | 1921 | 1911 | 1901 |
| :---: | :---: | :---: | :---: | :---: |
| Chetli | 1,011 | 978 | 982 | 1,010 |
| favan | 1,009 | 996 | 1,011 | 1.012 |
| Kuravan | 1,074 | 1,039 | 1,048 | 1,059 |
| Ninyar | 1.014 | 996 | 1,004 | 1,002 |
| Patavan | 1,023 | 999 | 1,004 | 1,030 |
| Ṡáliyan | 1,049 | 968 | 1,003 | 1,010 |
| Vēlan | 1,014 | 964 | 1,040 | 1,030 |
| Veluthidanzyar | 1,029 | 1,023 | 986 | 1,041 |
| Yadsvan | 1,077 | 1,085 | 1,006 | 983 | excess of males. Such has been the case not only at the present census but invariably at the previous censuses also, as can be seen from the marginal statement showing, the sex proportions of the more important of these castes at the last four censuses. There 15 a general agreement between the sex ratios of most of the castes in 1901, 1911 and 1931. The lower ratios in 1921 are abnormal and may be due to defective enumeration.

178. The map showing the proportion of sexes in the actual population opposite ser ratio page 128 gives the sex ratio in the different taluks. The proportion of sexes per mille by localityof the population of each taluk is exhibited in the following diagram: -


In some taluks females are in excess of males. The sex ratios in these taluks

Nwmber of fewales per 1,000 males in certain talule at the lest fowr censuses

populion permanent feature of ap taluks where women were in deficiency at the previous censuses their numbers have increased and out-stripped those of men at the present census. It is worthy of note that practicaily all the taluks which have a higher proportion of women than men lie at the sea-coast.

In the previous paragraph we have seen that in certain castes females preponderate over males. It will be interesting to know whether there is any correlation between the proportion of these castes to the total population of the taluks and the sex ratio in the

| Taluk | Proportion of castes having excess of females over males to total population. Number per 1,000 | Sex ratio |
| :---: | :---: | :---: |
| 1 chirayinkil - | 690 | 1,077 |
| 2 - Karthikapally. | 664 | 1,024 |
| 3 Mavellkata. | 643 | 1,009 |
| 4 Shorthala | 640 | 1,001 |
| 5 Kunnathur | 613 | 096 |
| 6 Kottarakkara | 579 | 990 |
| ${ }^{7}$ Karunagapaily | 577 | 1,030 |
| 8 Quilon | 565 | 1,020 |
| 9 Trisandrum | . 539 | 985 |
| 10 Vaikom | 508. | 004 | taluks. The figures concerned for the selected taluks are given in the margin. In Trivandrum taluk is situated the capital which contains a large number of immigrants consisting of more males than females. This taluk has, therefore, a low sex ratio and may be left out of account. In the other taluks the sex ratio varies directly as the proportion of the strength of the castes having a higher female ratio, to the total population, except in Karunagapally and Quilon taluks. These figures seem to suggest that both the locality and the constilution of the population affect the sex proportions.

Sex proportions at birth.
179. We have seen in paragraph 48, Chapter I, how defective the recorded vital statistics are. If the errors of omission are equal for both sexes, they will tend to cancel each other, in which case the proportions of sexes at birth may zafely be compared and correlated with the sex ratio of the population. In Travancore, the people have no special motive in concealing the birth of one or other of the sexes. Boys are not held in greater esteem than girls, especially among the marumakkatháyam communities who form the bulk of the population, and there is no ground, therefore, to think that omissions in reporting births will be more numerous in the case- of girls than in the case of boys. Omissions are unintentional and are due entirely to ignorance or indifference. Under such circumstances it is not possible to say whether the omissions are likely to be equal or not for the two sexes, and in view of this uncertainty it seems to be hardly worth while to correlate the sex ratio of the population with the sex proportions at birth. There are, however, certain general facts concerning masculinity at birth which may as well be set forth here.

It is a well-known fact that in all communities and in all countries male births exceed female birthis: This fact is borne out even by the imperfect record of births registered in Travancore. During the past decade the female births in Travancore averaged 944 per 1,000 male births, and the sex ratio in 1931 was 987 . In India the proportion of female to male births during the decade 1911-1920 was 933 and the sex ratio in 1921 was 945. Thus it is ceen that a higher proportion of females at birth results in a higher females

Itratio in the population. The sex proportions' at birth vary considerably from year to year as can be seen from the diagram given in the margin. In the earlier part of the past decade the ratio of lemale to male births was higher than in the latter part. It reached the maximum of 972 in 1923-24, then dropped to 911 , in 1925-26, and thereafter, increased gradually to 948 in 1929-30. The causes of these variations are not known and owing to the absence of separate vital statistics for different races, castes, and religions, it is not possible to ascertain whether the variations are shared by all the communities or are "confined to any particular community or communities. The sex ratio of children under one year may probably give a better indication of the degree of masculinity at birth than the imperfect vital statistics. In the population of Travancore in 1931 there were. 991 female children to 1,000 male children under one year. A higher infant mortality among boys than among girls, which is a common phenomenon in all the countries, may have raised the female ratio of infants. It is noteworthy, however, that this ratio is very nearly equal to the sex ratio of the aggregate population, the former being 991 and the latter 987 .
S. de Jastrzebski has shown in his paper The Sex Ratio at Bitth "that masculinity at birth is affected by race, that it is greater in rural than in urban populations, that it is probably slightly greater in first than in subsequent births and that, as far as present evidence goes, war raises the ratio of masculinity. "*. Reliable material is not available to test the. applicability of these conclusions to Travancore. Vital statistics are not collected here separately for different races or castes, and the statistics of rural parts are much more inaccurate than those of urban areas. On the question of masculinity at first and subsequent births some trustworthy information has been collected in the course of the enquiry regarding ferility and mortality, the results of which are described in Part II of this chapter. The general inference that may be drawn from the figures is that males preponderate to a larger extent among the first than among the subsequent births, the proportions being 1,152 males to 1,000 females in the first births and 1,125 to $\lceil, 000$ in the subsequent births. This inference agrees with that of Mr. Jastrzebski.
180. The birth of more boys than girls is a common phenomenon ir all the countries; but in Western countries this difference is wiped out even in early child-

Dlagram 38 - showing the number of femate deaths per $\mathbf{1 , 0 0 0}$ male deaths.

hood by a larger number of deaths among boys. The selective' elimination of the male sex continues. in subsequent years, so that ultimately the initial proportion of males to females is reversed. But in Travancore, as in the rest of India, though the mortality of females is on the whole .less than that of the males, the difference has not been large enough to make up for the deficiency in the females at birth, except in the case of a few castes and tribes referred to in paragraph 177 above, and consequenily the population of this country has always had a higher male ratio. The. diagram in the margin shows the proportion of female to male deaths in each year
of the past decade. In the first half of the period the proportion of deaths was in the neighbourhood of 840 females per 1,000 males. In the course of the next two years it rose to 940 , the maximum for the decade, in the following two years it dropped, and rose again to 937 in the last year, the average for the decade being 879. These mortality figures have been calculated from the recorded vital statistics, and the patent inaccuracies in the latter preclude any reliable inference being drawn about the relation between mortality and sex ratio.

From Subsidiary Table $V$ at the end of this chapter it will be seen that the total number of deaths recorded during the decade 1921-1930 was 446,420. Of these, 216,686 deaths were caused by small-pox, fever, cholera, dysentery and plague (See Subsidiary Table $\mathbf{X}$ at the end of Chapter IV). Plague has not yet found a hold in Travancore. There were only 11 deaths from this disease during the decade. Of the other four diseases, fever accounted for the largest number of deaths, viz., 141,883, dysentery caused 60,506 deaths, cholera 12,086, and small-pox 2,200 deaths. The proportions of females per 1,000 males who die of these different
 diseases vary greatly as can be seen from the marginal table. If these figures could be relied upon, they show that in regard to all diseases female deaths are less than those of males, and that the difference is greatest in deaths from small-pox (157), least in those from dysentery (47), and intermediate in the case of deaths from fever (129) and cholera (115). All available evidence goes to show that female deaths, from all causes together or from any specific disease, are proportionately less than male deaths, but the difference is too small to cover the deficiency in females caused by the excess of male births.
sex proportlons. .181. Two diagrams are given below showing the number of female deaths per 1,000 ages. The figures which the diagrams represent are given in the marginal statement for purposes of comparison. Both these sets of Gigures are not quite reliable. Mortality

| Agc-period | Number of female deaths per 1,030 male deaths | Number of females por 1,000 malen |
| :---: | :---: | :---: |
| 0-5 | 867 | 988 |
| 5-10 | 891 | 971 |
| 10-15 | 868 | 970 |
| 18-20 | 1,061 | 1,046 |
| 20-m 30 | 1,060 | 1,046 |
| 30-40 | 931 | 944 |
| 40-50 | 719 | 918 |
| $50-60$ | 668 | 945 |
| 60 and over | 944 | 1,036 | rates have been calculated from imperfect vital statistics and sex ratios from the ages recorded in the census schedules in which there are probably exaggerations and under-statements. Unmarried females are likely to understate their ages; married girls, on the other hand, may do the opposite because of their desire to show to the world that they are grown up, though they aro not actually so, and men in early maturity may exaggerate their ages. In spite of these defects the figures may be compared to see if, any correlation exists between, and whether any useful inference could be drawn from them. The figures in columnie 2 of the statement show that in the ages up to 15, females die in

 smaller numbers than males, that in the age-periodz $15-20$ and 20-30 female deaths exceed male deaths, and that thereafter there is a ateady fall in female mortality up to the age of 60 , after which there is a perceptible increase. In England * the course of mortality is quite different. In the age-period 0-5 male deaths out-number female deaths as in Travancore, but in 5-10 group the deaths among the sexes are about the same, in $10-15$ group more females than males die, and from 15 years onward the position is reversed, the ratio of male deaths increasing steadily up to the age of 50 . Up to the age of 10 and after 30

[^16] in The Evolution of Siac by PiGeddes and J. A. Thomson.
the course of mortality is more or less similar in England and Travancore. Between .10 and 30 the two countries differ materially in the sex proportions at death. The higher female mortality in the age-period 10-15 in England is held to be the result of the exhaustion of puberty in the female, and the excess of male mortality from the 15th year is probably due to occupational stress. The effect of selective mortality in England is seen in the swing of the sex ratio of the population. Up to the 5th year males exceed females, in 5-10 group both sexes are almost equal, in 10-15 group females are in excess, and in 15-20 group there is a rise in the male ratio consequent upon the increased mortality of females in 10-15 age-group. From this point the male ratio drops continuously as a result of higher mortality among males. In Travancore the hidest female. mortality which exceeds that of males by 60 to 61 per 1,000 occurs in the age-period 15-30, and must certainly be attributed to the early marriage of girls and the consequent premature maternity. Death of young mothers at child-birth is not an uncommon occurrence, but more common than this, however, is the death of women in the later period of maturity, say between the years of 20 and 30, brought on by the physical exhaustion, the nervous break-down and other ailments which are the after-math of premature childbearing. The weaklings succumb by the age of 30 , but those who pass through this critical period will have a greater resisting power and the mortality among women after that age is, therefore, less than that among men. On the analogy of what is obtaining in England, the higher female ratio in the age-group 15-20 in Travancore is as it should be, because of the lower mortality among females in the earlier age-periods; but on account of the higher female mortality in the 15-20 age-group the female ratio in the next higher group of $20-30$ ought to have been less, but actually it is not so. This discrepancy :may be due to the exaggeration of the ages of the younger married females and the understatement of the ages of the older women. The decrease in the ratio of women in the age-period $30-40$ is the result of the increased female mortality in the earlier age-period $20-30$. The variations in female mortality and the ratio of women to men in the later age-periods do not show any marked irregularity.
182. So far, we have dealt with the statistics of sex as returned at the census. Before concluding this portion of the chapter it may not be out of place to pass in review, as brielly as possible, the general question of sex determination and the various hypotheses that have - been propounded from time to time as to its probable causes. It has been proved beyond doubt that, as a rule, more boys than girls are born in all countries and in all communities, and that from early childhood the process of elimination of the excess of boys proceeds. Richard Goldschmidt says that the elimination starts even before birth. "Statistics of still-born children indicate a still greater excess of boys, namely, Germany $128 \cdot 3$, Austria 132.1, France $142 \cdot 2$ and Italy 131."* He further says, "Finally in the investigation of aborted embryos a still greater boy excess is found, nearly $160: 100$. Thus there can be no doubt of a selective elimination of the male sex. But these statistics supply no answer to the question whether the relation of the fertilized eggs is 1:1 or not, and why it varies from this norm. A safe answer regarding this is. scarcely attainable." $\dagger$ Numerous hypotheses have been put forward as to the causes of the preponderance of males over females at birth. The constitution, age, nutrition, and environment of the

Ser determination.

[^17]parents are the main factors which were once considered to be concerned in sex differentiation. Geddes and Thomson summarise these factors in their book called, The Evolution of Sex, as follows :-
"According to Thary (1863) followed by Dussing (1883) an ovum fertilized soon after liberation tends to produce a female, while an older ovum will develop into a male. Hofackes (1823) and Sadler (1830) independently published statistics in favour of the generndisation that when the male parent is the older the offepring are preponderatingly male ; while if the parents be of the same age or if the male parent be the younger, female offspring appear in increasing majority. The law of Hofacker and Sadler cannot be regarded as in any way established. The best known, and still most influential, theory is that of comparative vigour. As elaborated by Girou and others this hypotheeis connects the sex of the offspring with that of the more vigorous parent. It cannot be said, however, that the facts bear out the case. Partly included in this theory is the conclusion that highly nourished females tend to produce female offspring. Hough thinks that males are borm when the internal system is at its best; more females at period of growth, reparation or disease. Statistics show that after an epidemic or war the male births are in a greater majority than is usually the case".

In paragraph 179 above Jastrzebski's conclusions have been referred to. They are that masculinity at birth depends upon the race, that it is higher in rural than in urban areas, and that it is slightly more in first than in subsequent births. This last conclusion, it has been pointed out, is supported by the evidence collected in the enquiry regarding fertility and mortality in Travancore. All the hypotheses mentioned above connect the sex differentiation with external factors. But recent investigations of embryologists have undoubtedly proved that sex, like many other qualities, is a hereditary character and "is determined by a definite inherited constitution." By experiments it has also been established that external agents can and do influence this hereditary character. Richard Goldschmidt says, "It has been discovered that this is possible to a far-reaching degree which is different, however, for different hereditary strains. Three groups of factors can be isolated which exert such an influence, namely, temperature, food, and the chemical nature of the environment."*

The present position of this much discussed question of sex differentiation may be summed up thus. Sex is a hereditary character and is decided at the time of the fertilization of the ovum. Certain external factors may influence this hereditary quality in the course of the development of the fertilized egg.

If external factors do influence sex differentiation the question naturally arises whether sex reversal is possible. On this point Prof. F. A. E. Crew, in an article contributed to The Spectator of 11th April 1931, observes, "Every individual is endowed with the potentialities of both sexes, it can develop the character of either; but in the higher forms there are innate and opposing forces which swing the mode of development in one direction or the other. The actual direction is determined by the balance which exists between these forces. If the male-determining influences are greater than the femaledetermining, then the individual will become a male. Recent advances in bio-chemistry have provided reasons for thinking that these forces are chemical in nature. If it should so happen that during that portion of the life of the individual when the sex equipment is developing, or at any other time when this is capable of responding to the stimulus of these sex-determining substances, there is a reversal in their relative,potency, then sex reversal may occur."

[^18]
## PART II-Enquiry Regarding Fertility and Mortality

183. It is not long since the census officers have begun to collect and analyse Introdnotory statistics relating to the fertility of women in India. An enquiry of this kind was for the first remarks. time conducted by Mr. J. T. Marten in the Central Provinces along with the 1911 census. Subsequenty, it was taken up by other provinces and States, notably Bengal and Baroda in 1921. A cursory attempt was made in Travancore also at the last census, but it was cinfined to a few municipal towns and the figures collected were not dealt with elaborately. The present enquiry in this State is a more ambitious one, but even this is not exhaustive; it should only be regarded as paving the way for more elaborate enquiries in the future.
184. The standard form prescribed by the Census Commissioner for India was adopted here with some additions. The additional information sought to be elicited was regarding the sex of the children born and surviving, the ages

Nature and method of the enquiry.

1 Name of woman.
Her caste, tribe or race.
8 Her rge.
4 Ocaupation of the husband.
8 Age of the present husband
6 Duration of married life.
7 Bex of the first child, whether quick or still-born
Number of children born alive and their sex.
9 Number of still-born children and their gux.
10 Number of children liviug.
11 Age and sex of children. of the children living, and the number of stillborn children. The headings under which information was collected are shown in the margin. A special schedule was prepared with these headings, and instructions for filling in the columns were printed in Malayalam. In Municipal towns the schedules were entrusted to the officers of the municipality, and in rural areas they were distributed to the schoolmasters. The municipal officers filled up the schedules themselves by obtaining the information directly from the married women or their husbands. The schoolmasters got the work done by the grown-up boys and girls studying in the higher classes. The students took the schedules home and filled them up in consultation with their parents. The filled-up schedules were scrutinised by the teachers and all apparent discrepancies were removed by further reference'to the parents concerned. The students showed great zeal and interest in this work, and in fact the schedules which they filled up were found to be more satisfactory than those filled up by the municipal officers. The data collected are so interesting that it would be desirable to extend the scope of the enquiry at the next census and make it, if possible, as comprehensive as the one conducted in England and Wales in 1911.
185. A comprehensive enquiry should include all maried women in the country, but this was not practicable and was not, therefore, attempted. Special care was, however, taken in the distribution of the schedules to obtain information about as many women as possible, representative of the different strata of society. In Travancore where there is hardly a village without a school no diffculty was experienced in this matter. Particulars were collected about 104,895 married women, and of these, only 2,827 or about $2 \cdot 7$ per cent. had to be rejected. In Baroda the rejections amounted to 12 per cent. in 1921. Among 102,068 women selected for this enquiry there were 18,456 completed marriages, i. e., marriages in which the women had passed the upper limit of child-bearing period, namely, 45 years of age, and the remaining 83,612 were continuing marriages.
186. The marginal table shows the age distribution of the women included in the

| Age | Number | Proportion per cent. to the total married women in the age-group |
| :---: | :---: | :---: |
| Sll ages | 102,088 | $8 \cdot 9$ |
| Below 15 | 473 | 1.8 |
| 15-19 | 9,087 | $6 \cdot 2$ |
| 20-24 | 14,6c3 | $7 \cdot 6$ |
| 25-29 | 14,172 | $8 \cdot 2$ |
| 90-84 | 16,160 | $10 \cdot 6$ |
| $35-39$ $40-44$ | 17,371 | 16.0 |
| 40-44 45 and over | 11,746 | $18 \cdot 5$ |
|  | 18,456 | $13 \cdot 1$ | enquiry and their proportions to the total married women in each age-group. Abou 10 per cent of the married women of all by enquiry ages have been brought under enquiry. The proportions in the different age-groups vary somewhat irregularly, those in the higher age-groups being considerably larger than those in the younger ones. Since information was collected through the grown-up boys and girls in schools about their mothers who would ordinarily be elderly women, the proportions in the older age-groups are naturally higher

187. The data collected have been analysed and compiled into nine tables, seven General of which have been prescribed by the Census Commissioner for India and two have been reaults. specially prepared for this State. These tables are intended to throw light on the sex of the frrst-born children ; the size and sex constitution of the families ; the number of children born per family by the occupation of the husband and by the caste or religion of the family ; the average size of the family correlated with the age of wife at marriage, with the age of wife and the difference in the ages of husband and wife, and with the duration of

The sax of the firgt-born
marriage by the caste or religion of the family; the correlation of the age of marriage of wife with the period before first birth; the proportion of sterile to fertile marriages ; the number of still-born children; and the proportion of still-born to quick-born children by the age of marriage of the mother. These are some of the specific points on which results have been obtained and they are set forth as concisely as possible in the following paragraphs.
$\qquad$ 188. The data collected about the sex of the first-born are given in the statement below which has been prepared from completed marriages only.

| State or natural <br> - division | Number of females first-born | Percentage of such families in which female ohildren preponderate | Number of males firstburn | Percentage of such familles in which male children proponderate | Number of females arstborn to 1.050 males flestbora | Number of olips examined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . STATE | 8,416 | $51 \cdot 7$ | 8,790 | $81 \cdot 8$ | 860 | 18,456 |
| Lowland | 4,309 | 82.4 | 4,986 ${ }^{\circ}$ | $60 \cdot 8$ | 864 | 9,427 |
| Midland | 3,753 | 50.6 | 4,374 | $61 \cdot 3$ | 858 | 8,298 |
| Highland | 354 | 86.2 | 430 | 67.7 | 828 | 794 |

The above statement shows that there is a decided preponderance of males over females at the first births. The proportions of males to females at first and subsequent births are shown in the margin. The dif-
 ference in masculinity between the first and subsequent births is not so marked as it was found to be in Baroda in 1921 where first births showed a proportion of 1,392 to 1,000 females and subsequent births only 1,099 males to 1,000 females, a difference of 293 , whereas the corresponding difference in Travancore is only 38 . According to the vital statistics the number of male births to 1,000 female births in the decade 1921-1931 in this State was 1,060, as against 1,131 obtained in this enquiry. The vital statistics are highl; defective, and the number of women selected for this enquiry are so few that they cannot be considered to be truly representative. It is not, therefore, possible to decide from one or the other of these data the actual proportion of masculinity at birth; but both the data point to an excess of male over female births.

From the figures given in the margin it will be seen that masculinity at first birth is the highest in the Highland and the lowest in the Lowland Division. This difference may

| Natural Division | Number of males per 1.000 females at first birth |
| :---: | :---: |
| STATE | 1,163 |
| Lowland | 1,187 |
| Midland | 1,165 |
| Highland | 1,216 | be due, as has been already pointed out in paragraph 179 above, to the fact that the Lowland is more urbanized than the other two divisions and that the Highland is most rural in character. While considering the sex proportions in rural and urban areas in paragraph 174 above we have seen that the male ratio in the actual population of the towns is higher than that in the rural population and that in regard to the natural population there is hardly any difference in the ratio between the rural and urban areas. We find from the data collected in connection with this enquiry that the sex ratio at birth is 1,072 males to 1,000 females in towns as against 1,132 in the whole State. These fgures support Mr. Jastrzebski's theory that masculinity is grcater in rural than in urban population.

 some influence on the sex of the subsequent children. Taking the State as a whole it is seen that $61 \cdot 3$ per cent. of the families in which the first-born is a male have a preponderance of male children, while only 51.7 per cent. of the families in which the first-born is a female show a preponderance of female children. Difference between these two proportions exists not only in the whole State but in the different natural divisions
also, as can be seen from the marginal figures. Whatever be the cause of it, the figures seem to justify the inference that masculinity at first birth tends to increase masculinity at subsequent births.
190. The table below shows the distribution of the number of children born The nax at to completed marriages by sex; religior and caste., Masculinity, at birth is the least among Nayars. İlavas have the next higher ratio. The depressed classes have the highest masculinity and next to them Brahmans. Muslims and Christians occupy intermediate positions.

| Cante or religion | Number of males per 1,000 females at birth | Number of males per 1,000 females in the actual population |
| :---: | :---: | :---: |
| Nayar | 1,064 | 986 |
| Ilava | 1,117 | 991 |
| Ohristian | 1,123 | 1,032 |
| Muslim | 1,166 | 1,045 |
| Braluman | 1,217 | 1,042 |

The figures given in the margin show that the ratio of males to females in the general' population- of different communities varies directly as masculinity at birth.
191. The following statement gives the data compiled from completed marriages ${ }_{T h e}$ alze and
 regarding the size sax constlitution. and sex constitu- of families. tion of families. 18,456 married women above 45 years of age have had 119,813 children ( 63,590 boys and 56,223 girls) in the course of their married life. The average number of children born to each woman is, therefore, 6.5 . In Baroda the average was 5.8 in 1921 and $5 \cdot 69$ in 1931. In the 1921 enquiry in Travancore the upper limit of child-bearing period was taken as 35 years. This, undoubtedly,
too low. Women here give birth to children up to 45 years and sometimes even beyond this age. The reauls of the previous enquiry in this State cannot, therefore, be compared with those of the present.
marriage by the caste or religion of the family ; the correlation of the age of marriage of wife with the period before first birth; the proportion of sterile to fertile marriages; the number of still-born children; and the proportion of still-born to quick-born children by the age of marriage of the mother. These are some of the specific points on which results have been obtained and they are set forth as concisely as possible in the following paragraphs.

The sex of the first-born
188. The data collected about the sex of the first-born are given in the statement below which has been prepared from completed marriages only.


The above statement shows that there is a decided preponderance of males over females at the first births. The proportions of males to females at frrt and subsequent births are shown in the margin. The difference in masculinity between the first and subsequent births is not so marked as it was found to be in Baroda in 1921 where first births showed a proportion of 1,392 to 1,000 females and subsequent births only 1,099 males to 1,000 females, a difference of 293 , whereas the corresponding difference in Travancore is only 38. According to the vital statistics the number of male births to 1,000 female births in the decade 1921-1931 in this State was 1,060 , as against 1,131 obtained in this enquiry. The vital statistics are highly defective, and the number of women selected for this enquiry are so few that they cannot be considered to be truly representative. It is not; therefore, possible to decide from one or the other of these data the actual proportion of masculinity at birth; but both the data point to an excess of male over female births.

From the figures given in the margin it will be seen that masculinity at first birth is the highest in the Highland and the lowest in the Lowland Division. This difference may

| - Natural Division | Number of males per 1.000 females at first birth |
| :---: | :---: |
| , |  |
| STATE | 1,163 |
| Lowland | 1,187 |
| Midland | 1,165 |
| Highland | 1,215 | be due, as has been already pointed out in paragraph 179 above, to the fact that the Lowland is more urbanized than the other two divisions and that the Highland is most rural in character. While considering the sex proportions in rural and urban areas it paragraph 174 above we have seen that the male ratio in the actual population of the towns is higher than that in the rural population and that in regard to the natural population there is hardly any difference in the ratio between the rural and urban areas. We find from the data collected in connection with this enquiry that the sex ratio at birth is 1,072 males to 1,000 females in towns as against 1,132 in the whole State. These figures support Mr. Jastrzebski's theory that masculinity is greater in rural than in urban population.


| The relation betreen the sar at fime birth and sabeequen birthl. | 189. The figures in columns 3 and 5 in seem to suggest that the sex of the first-born |  |  |
| :---: | :---: | :---: | :---: |
|  | Natural Division | Percentage of familien in which the first-born is a female, having a preponderance of semale | $\begin{aligned} & \text { Percentage of farmilias } \\ & \text { in which the firt-borra } \\ & \text { is a malce, having an } \\ & \text { preponderanoe of } \\ & \text { male childrea } \end{aligned}$ |
|  | 19TE | 81.7 | 81.3 |
|  | Lowland | 82.4 80.6 | 60.8 61.8 618 |
|  | Highland | $36 \cdot 2$ | ${ }_{67} 7$ |

## he statement in the previous paragraph

 seem to suggest that the sex of the first-born has some influence on the sex of the subsequent children. Taking the State as a whole it is seen that $61 \cdot 3$ per cent. of the families in which the first-born is a male have a preponderance of male children, while only 51.7 per cent. of the families in which the first-born is a female show a preponderance of female children. Difference between these two proportions exists not only in the whole State but in the different natural divisionsalso, as can be seen from the marginal figures. Whatever be the cause of it, the figures seem to justify the inference that masculinity at first birth tends to increase masculinity at subsequent births.
190. The table below shows the distribution of the number of children born The sex at

| Craste or religion | Number of familles | Total number of births |  | Number of male births per $1 ; 000$ female births |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Males | Females |  |
| Total | 18,468 | 68,590 | 56,228 | 1,181 |
| Brahman | 699 | 2,017 | 1,658 | 1,217 |
| Nazyar | 8,793 | 12,323 | 11,083 | 1,064 |
| Ijava | 1,711 | 6,063 | 6,430 | 1,117 |
| Depresaed Hindus | 431 | 1,0053 | 1,223 | 1,270 |
| Backwand Hindus | 8,394*e.5 | 10,977 | 9,127 | 1,203 |
| Indian Christian | 7,456 | 27,525 | 24,515 | 1,123 |
| Muslim | 942 | 3,132 | 2,687 | 1,166 | to completed marriages by sex. religior and caste., Masculinity, at birth is the least among Näyars. IIlayas have the next higher ratio. The depressed classes have the highest

masculinity and next to them Brahmans. Muslims and Christians occupy intermediate positions.

| Caste or religion | Number of males per 1;000 females at birth | Number of males per 1,000 females in the actual population |
| :---: | :---: | :---: |
| Niyar | 1,064 | 986 |
| Llava | 1,117 | 991 |
| Ohristian | 1,128 | -1,032 |
| Muslim | 1,166 | 1,045 |
| Bralıman | 1,217 | 1,042 |

The figures given in the margin show that the ratio of males to females in the general population- of different communities varies directly as masculinity at birth.
191. The following statement gives the data compiled from

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Number of children born to a marriage} \& \multicolumn{4}{|l|}{Stise and sex oonstitution of families in the State} \& <br>
\hline \& \multirow{2}{*}{Number of families} \& \multicolumn{2}{|l|}{Total number of children born} \& \multirow[t]{2}{*}{Number of female children per 1.000 male children -} \& \multirow{2}{*}{Percentage of tamilies to total namber} <br>
\hline \& \& Males \& Females \& \& <br>
\hline Total \& 18,458 \& 88,680 \& 56,228 \& $\because \because$

888 \& . $100 \cdot 00$ <br>
\hline 0 C'hild \& 2:50 \& \& \& \& 1-36. <br>
\hline 1. \& \& 283 \& - 2804 \& 898 \& 2.91 <br>
\hline 2 Children \& 889 \& 918 \& 740 \& 806 \& 4.49 <br>
\hline 3 ${ }^{3}$ \& 1,100
1,608 \& 1,785 \& - 1,515 \& 849 \& $5 \cdot 96$ <br>
\hline  \& 1,608 \& 8,455 \& 2,977 \& 862 \& 871 <br>
\hline 5
5
6 \& 2,120
2,486 \& 6,782 \& . 4,818 \& 833 \& 11.49 <br>
\hline 6
7 \& 2.486
$\mathbf{2 . 6 3 2}$ \& 7,940
9749 \& 6,976 \& 879 \& 1347 <br>
\hline 7
8 \& 2.632 - \& 9,749. \& 8,675 \& 890 \& 14*26) <br>
\hline 8 \& 2,564
1,846 \& 10,816 \& 9,696. \& 896 \& 13.89. <br>
\hline 10 " \& 1,846 \& 8,731 \& 7,883 \& 903 \& 10.00 <br>
\hline 11. ${ }^{\text {n }}$ \& 1.436 \& 7,051. \& 6,249 \& 886 \& $7 \cdot 21$ <br>
\hline $12 \cdot \stackrel{n}{n}$ \& 338 \& 8,644: \& 3,341 \& 917 . \& $3 \cdot 44$ <br>
\hline 18. \& 111 \& 2117 \& 1,949 \& 916. \& $1 \cdot 83$ <br>
\hline 14 \% \& \& 738. \& 709 \& 966 \& -60 <br>
\hline 15 " \& 19 \& ${ }_{7}^{298}$ \& 220 \& 738 \& -20 <br>
\hline 16 \& 8 \& \& 130 \& 838 \& -10 <br>
\hline 17 .. ${ }^{\text {\% }}$ \& 4 \& $\begin{array}{r}\square \\ \hline \quad 38\end{array}$ \& 83
30 \& - 707 \& -04 <br>
\hline 18 \% \& 4 \& - 98 \& 30
9 \& - $\begin{array}{r}789 \\ \hline\end{array}$ \& .02 <br>
\hline 19 \& 1 \& - 10 \& 9
9 \& $\begin{array}{r}1,000 \\ \hline \mathbf{9 0 0}\end{array}$ \& $\stackrel{.01}{.01}$ <br>
\hline \& \& \& \& \& <br>
\hline
\end{tabular}

Average per family 8.4 males and 8.1 females or 6.5 childrei. here give birth to children up to 45 years and sometimes even beyond this age. The
reumlts of the previous enquiry in this State cannot, therefore, be compared with those of
the preeent. the present. and sex constitu- of families. tion of families. 18,456 married women above 45 years of age have had 119,813 children ( 63,590 boys and 56,223 girls) in the course of their married life. The average number of children born to each woman is, therefore, 6.5. In Baroda the average was $5 \cdot 8$ in 1921 and 5.69 in 1931. In the 1921 enquiry in Travancore the upper limit of child-bearing period was taken as 35 years. This, undoubtedly, is
regarding the size sax constituation

The average
The ararage family in the State.

The arerage slse of the family in towns
192. The size of the family most favoured is one of seven children in Travancore. This is the Mode. 2,632 families out of a total of 18,456, or $14 \cdot 3$ per cent., have seven children each. The number having 5 to 8 children each is 9,802 which is 53 per cent. of the total. As many as 98 per cent. of the total number have one child to 12 children each: A little more than one per cent. have no children at all and a little less than one per cent. more than 12 children each. The largest family has 19 children, but the number is only one in 18,456 families. The proportions of families with $9,10,12$ and 14 children in Scotland as per Dr. Dunlop's enquiry were 8, 6, 3 and I per cent. respectively; the corresponding proportions in Baroda in 1921 were 6, 3, 1 and 2 per cent.; and in Travancore according to the present enquiry they are $10,7,5$ and a little less than 1 per cent.
193. When towns are compared with the State as a whole it will be seen from the

| Number of childron born to a marriage | Sixe and ses constitution of familien in towonr |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | hildren | Percentage of |
|  |  | Males | Females | number |
| 0 | 152 |  |  | $3 \cdot 5$ |
| 1 | 298 | 131 | 107 | $8 \cdot 5$ |
| 2 | 312 | 351 | 273 | $7 \cdot 3$ |
| 3 | 365 | 560 | 535 | $8 \cdot 6$ |
| 4 | 456 | 950 | 869 | $10 \cdot 6$ |
| 5 | ${ }^{555}$ | 1,473 | 1,302 | 12.9 |
| . 6 | 519 | 1,086 | 1,528 | $12 \cdot 1$ |
| $\cdot 7$ | 500 | 1,781 | 1,719 | 11.6 |
| 8 9 | 460 308 | 1,529 1,404 | 1,751 | 10.7 |
| $1{ }^{9}$ | 302 | 1,404 | 1,314 | 7.0 |
| 10 | 252 93 | 1,268 516 | 1,202 | 8.9 |
| 11 | 93 64 | 616 390 | 607 378 | $2 \cdot 2$ |
| 12 | 64 15 | 390 97 | 378 98 | 1.5 |
| 13 14 | 15 8 | 97 69 | 98 43 | 0.3 0.8 |
| 15 | 6 | 42 | 48. | $0 \cdot 1$ |
| 16 | 4 | 39 | - 25 | 0.1 |
| 17 | 2 | 18 | 16 | . $\cdot$ |
|  | 4,303 | 12,609 | 11,765 | $100 \cdot 00$ |
| Average per family - $2 \cdot 9$ males and 2.8 fernales ar 6.7 children. |  |  |  |  | marginal statement that the average number of children born to each woman is 5.7 in the towns as against 6.5 in the State and the Mode is five for the former against seven for the latter. The mode in towns constitutes 12.9 per cent. of the total number of families examined. The difference in the size of the families between the towns and the State is shown in the marginal diagram. In the towns the Mode is smaller and in the State it is greater than the mean. The proportions of families having less than six children areuniformly higher in the towns than in the State; but in the case of families having six children and more the town proportions are lower than the State averages.

194:" The average number of male children per family_in the State is. $3 \cdot 4$ and that The nex constaof female child- tution of abil-


|  | Most faroured combination |  |
| :---: | :---: | :---: |
|  | Males | Females |
| 2 3 4 4 8 6 7 8 9 10 10 |  | 4 1 1 2 2 3 3 3 4 4 5 8 | number of female children. Among children the most favoured combination is that of four males and three females in the State and three males and two females in the lowns. The statement in the margin shows the most favoured combination in families having two to eleven children each in the State.:

Two diagrams are given below showing the distribution of families according to the number of male children born to them.


In one diagram the families-having a specific number of children of both. sexes are distributed according to the number of their male children, the curves representing the variations in the latter, and in the other the families having a specific number of female children are distributed according to the number of their male children. In all cases the curves, starting from a minimum and rising gradually, reach a maximum and then fall off.

In the margin is shown the average number of female children in families having

| Number of male children jer family | Corresponding number of female children | Number of female children per famils | Corresponding number of male children |
| :---: | :---: | :---: | :---: |
| 0 | 1.84 | 0 | $2 \cdot 43$ |
| 1 | $2 \cdot 66$ | 1 | $3 \cdot 55$ |
| 2 | $2 \cdot 77$ | 2 | 3-59 |
| 8 | 3. 31 | 3 | 3.68 |
| 4 | $3 \cdot 28$ | 4 | 3. 59 |
| 5 | $3 \cdot 22$ | 5 | . $3 \cdot 55$ |
| 6 | $3 \cdot 06$ | 6 | - 3-18 |
| 7 | $2 \cdot 81$ | 7 | 3.12 |
| 8 | : 2.70. | 8 | $2 \cdot 88$ |
| 9 | - $2 \cdot 44$. | . 5 | $3 \cdot 08$ | varying numbers of male children, and oice versa. It may be noted that the correlation in both cases is direct in the case of families having up to three male or female children, and inverse in the case of families having more than three children.

We have already seen that total female births are fewer than male births. But the proportion of female children tends to increase with the increase in the number of children born. This can be seen from the statement given at the beginning of paragraph 191 above and also from the following diagram :-


The highest proportion of female children is seen in families having thitteen children of both sexes. In Baroda it was found to be in families having nine children iii 1921 .

The sice of family by the occupation of the husband.
195. The statement given below compiled from completed marriages shows the average number of children born, the number surviving, and the proportion of the latter to the former in families classified according to the occupation of the husbands.

| Occopation of husband | Number of families | Namber of cbildren born | Average per family | Surviving childreu | Proportion of surriving children to 1,000 born |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 18,456 | 118,818 | 6.5 | 90,489 | 755 |
| Agricalture | 9,054 | 61,399 | 6.8 | 47,902 | 780 |
| Industry | 1,33! | 7,968 | 6.0 | 5,74 | 781 |
| Trade | 2,333 | 15,146 | 6's | 11,281 | 745 |
| Public Administration | 1,148 | 6,814 | $5 \cdot 9$ | 6,228 | 767 |
| Persons living on their income | 1,663 | 10,272 | $6 \cdot 2$ | 7,280 | 703 |
| Labourer (Unspecified) | 1,538 | 9,367 | $6 \cdot 1$ | 6,478 | 699 |
| Others | 1,389 | 8,847 | 6.4 | 6.579 | 744 |

The number of returns received for some occupations was too small to be representative, and hence only those occupations for which more than 1,000 returns were received have been included in the above statement.

The statement in the margin gives the comparative fertilities of the classes engaged on

| Average number of ehildran born per 100 families |  |  |  |
| :---: | :---: | :---: | :---: |
| Occupation of husband | Number of families | Number of children born | Number of children per 100 familles |
| Pablio Adminiatration | 1,148 | 6,814 | 594 |
| Industry | 1,331 | 7,968 | 699 |
| Labourer | 1,538 | 9,367 | 609 |
| Persons living on their income . | 1,663 | 10,272 | 618 |
| Trade | 2,333 | 15,140 | 649 |
| Agricalture | 9,054 | 61,399 | 678 | different occupations arranged in the ascending order of the number of children born per 100 families. Agriculturists show the highest fertility. They consist mostly of small cultivators who do practically all manual work in the feld themselves. They do not generally live in comfort nor are they in very poor circumstances. They are above want unlike the ordinary labourers, but their economic condition does not come up to the standard of those engaged in public administration. This is also true more or less of the petty merchants who form the bulk of the persons returned under trade. The size of families among these two classes of people, namely, agriculturists and traders, is, therefore, larger than that of the other classes. Those engaged in public administration (Government officers) have the smallest families. They are the best educated and well-to-do classes and the smallness of their families is in accordance with the observations recorded elsewhere. The industrialista and unskilled labourers have larger families than Government officers, but contrary to the experience in Western countries their families are smaller than those of the small cultivators and petty merchants. The industrialists are persons engaged on small cottage industries and belong mostly to the depressed classes, and so also the labourers. Economically, these two classes of people are very poor. Their income is unsteady, and they seldom earn enough to keep them and their families above want. It may be that these conditions affect their vitality and tend to reduce their fertility.

Usually, as fertility increases survivalship decreases. !The rule holds good in

Proportion of surviving children to those bom

| Occopation | Number of children born per 100 families | Number of surviving children per 1,000 born |
| :---: | :---: | :---: |
| Prblic Administration | 894 | 767 |
| Industry | 599 | 721 |
| Labourer | 609 | 692 |
| Persons living on their income | 618 | 708 |
| Trade | 649 | 745 |
| Agriculture | 678 | 780 | the case of the first three classes of occupation, namely, public administration, industry, and labour, but in the case of the other three occupations survivalship varies dircetly as fertility. It is noteworthy that agriculturists who have the highest fertility also show the highest ratio of survival. This may be due to the low death-rate among them on account of the healithy open air life they live in rural parts.

196. The data.regarding: the size of the family by caste and religion prepared from completed marriages are given in the following table:-


The main features of the above table are summarised in the marginal statement. The Brahmans are a well-educated community, engaged generally on intellectual work.

| Caste or religion | Number of children bora per family | proportion of surviving children per 1,000 born |
| :---: | :---: | :---: |
| Brahman | $5 \cdot 3$ | 730 |
| $\begin{aligned} & \text { Depressed and } \\ & \text { backward Rindus } \end{aligned}$ | 5.9 | 699 |
| Muslim | 6.2 | 714 |
| Nayar | 6.3 | 750 |
| Ifsva | 6.7 | 756 787 |
| Indian Ohristian | 7.0 | 787 | They have naturally the smallest families. Depressed and backward Hindus are ordinarily unskilled labourers and workers at cottage industries. Their fertility is higher and their survival ratio is lower than that of the Brahmans. Their economic condition is, however, so poor that it affects their fertility adversely. when compared with the other more prosperous communities: shown in the statement. This inference agrees with that drawn from the data relating to occupations. Of the different communities, the Indian Christians have the highest fertility, next to them the Ilavas, then the Nayars, and lastly the Muslims. Among these the law of inverse relation between ferility and survival ratio does not hold good. The survival ratio, instead of decreasing, actually increases with the rise in fertility. The Indian Christians have not only the highest fertility but also the highest survival ratio. The Indian Christians included in this enquiry are mostly Syrian Christians and we have seen in Part I of this chapter and in Chapter I that they are the most fertile community in Travancore. On a special examination of 1,128 returns of the Syrian Christians it has been found that the average number of children born per family among them is 7.5 which is even higher than the average for the Indian Christians as a whole. The high fertility of the Syrian Christian females is probably due to the fact that a large proportion of them are married in the early ages. after puberty, and the high survival ratio may be due to their satisfactory economic condition.

In his book, The Law of Births and Deaths, C. E. Pell says, "The net resulf of the variation of the degree of fertility under the direct action of the environment will bear an inverse proportion to the variations of the capacity for survival." The results of the enquiry in Travancore show that this theory holds good, broadly speaking, in communities in whose standard of living there is marked disparity, e. g., the depressed and the backward classes on the one hand and the Brahmans on the other. But in the case of the other communities the general theory seems to be affected by some disturbing factors.
197. The age of marriage of females varies considerably in different communities. The average The distribution of the women included in this enquiry by community and by the ages age of at which they were married is shown in the following statement:-

| Caste or religion |  | Number of families with wife mintied at nges |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 18-14 | $\cdots$ 15-19 | 20-30 | 30 and above |
| Brahman including <br> Nampütiti |  |  |  |  |  |
| Nisyar |  | 861 | 1,928 | 879 | $12 \overline{0}$ |
| Ijava |  | 357 | 925 | 384 | 45 |
| Depresed Hindus |  | 130 | 243 . | 77 | 11 |
| Backward Hindss |  | 791 | 1,910 | 646 | 74 |
| Indian Ohristian (Mostly Syrian Christian) |  | 3,303. | 3,125 1 | 946 | 74 105 |
| Mualim | - | 3,303. | 3,125 | 923 178 | 105 16 |

The average ages of marriage worked out from the figures in the above statement are given below:-

| Brahman | 16.4 years | Muslim | ... | 18.3 years |
| :---: | :---: | :---: | :---: | :---: |
| Christian ... | 17.1 | Ilava | $\ldots$ |  |
| Syrian Christian... | $16 \cdot 8$ | Näyar | ... | 18.9 |
| Depressed Hindu ... | 18.1 |  |  |  |

The age of marriage given in the statement should not be regarded as absolutely correct, because it has been obtained not by directly questioning the women concerned but by deducting the duration of marriage from the age of the woman. In the case of some castes, like the Brahmans, the theoretical marriage takes place before the girl reaches puberty, but the actual consummation only after the attainment of puberty, i. e., generally at the age of 15 or 16. This circumstance, together with the fact that the Brahmans shown in the statement include also Nampütitis, among whom girls are often married long after puberty, accounts for the average age of marriage of Brahman girls being 16.4. Of the other communities the Syrian Christian females show the lowest age of marriage.

The data relating to the age of marriage, inaccurate as they are, give a clear
 indication of the prevalence of early marriage among Brahmans and Syrian Christians, as can be seen from the figures given in the margin. Brahmans and Syrian Christians marry comparatively higher proportions of their girls at the early ages of 13-14 than the other communities. We have already seen from other sources that they are the communities in which early marriage is most prevalent in Travancore.

Infurence of
the age of rife at marriage on the dize of
198. The correlation between the age of wife at marriage and the size of the family is exhibited in the following statement :-

| Age of wife at martiage | Number of families | Number of Oblidron born | Average per family | Number of ohildron aurviving | Avorase per tatilly |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 18,458 | 118,818 | $8 \cdot 5$ | - 80,432 | 4 |
| 13-14 | 8,985 ${ }^{\circ}$ | 41,965 | 7.0 | 32,075 | 8.4 |
| 15-19 | 8,993 | 88,778 | 6.5 | 44,040 | $4 \cdot 9$ |
| 20-24 | 2,491 | 14,637 | - $5 \cdot 9$ | 10,9+3 | $4 \cdot 4$ |
| 25.29 | ${ }_{6}^{638}$ | - 3,149. | $5 \cdot 0$ | 2,348 | $8 \cdot 7$ |
| 80 and above | 354 | . 1,284. | 3.6 | 1,020 | $2 \cdot 9$ |

Of the 18,456 completed marriages shown in the above statement 5,985 women, or 32 per cent.; began their effective marriage at 13-14 years, as against 80 per cent. in Baroda according to the 1921 enquiry. About 49 per cent. of the women were married between 15 and 20 years in this State, while in Baroda the percentage was only 13. One remarkable feature noticed in Travancore, unlike in Baroda, is that the size of the family decreases as the age of marriage of wife advances. This tallies with the results obtained by Dr. Dunlop in the Scottish Census. The above marginal table shows that in Travancore fertility declines with the postponement of marriage, as in Scotland, and that the rate of decline rises as the age of marriage of wife increases.
. 199. The influence of the age of marriage of wife on the survival ratio of children in Infrience of Travancore is contrary to what one would ordinarily expect, as can be seen from the marriage of figures given in the following statement.


The "effective fertility" is 4.9 per family for completed marriages in Travancore. In the case of girls marrying between 13 and 15 years of age the effective fertility is 5.4 per family, but when the marriage age is between 15 and 20 it comes down to $4 \cdot 9$, and this is the mean effective fertility for all ages. The majority of women in the State marry between 15 and 20 and consequently the mean effective fertility for all ages is. the same as that for the age-group 15-20.

As the age of matriage of wife advances the size of the family decreases.in Travancore-this is but naturalbut the proportion of surviving children also decreases. in marriages up to the age of 30 . This is contrary to one's expectatron. Travancore and Baroda are compared in this respect in the marginal table.
200. Subsidiary Table VII at the end of this chapter which has been prepared from Relation continuing and completed marriages shows by caste and religion the average number of between the children born per family according to the duration of marriage. The total number of marriage and marriages from which this table has been prepared is 102,068 , of which 18,456 are the isize of the completed marriages and the remaining 83,612 are continuing ones. The latter have had 299,880 children born to them, or an average of $3 \cdot 6$ children per family.

The figures showing the comparative size of the family in relation to the duration of marriage in Travancore (1931) and in Baroda (1921) are given in the margin. The

| Daration of marriage | A verage number of children boru alive per 100 marriages |  |
| :---: | :---: | :---: |
|  | Travancore 1931 | Barode 1921 |
| Onder 10 years |  |  |
| 10 years | 126 | 145 |
| 10-19 years | 275 413 | 263 |
| 20-81 ${ }^{\text {n }}$ | 413 569 | 359 |
| 32 years ${ }^{\text {n }}$ | 6411 | 500 |
| 38 and over | $665\}$ | 528 | mean of the first group (under 10 years) is five years, at which the number of children per 100 families may be assumed to be the, same as that for the group, namely, 126 which is equal to 25 per year. At 10 years 100 families have 275 children which represents an increase of 149 children in five years or nearly 30 per year. In the next five years, $i$. e., at 15 years of marriage, the addition to 100 families is 138 children or 11 years, i. . e, at 26 years of marriage, the increase in the number of children of 100

:. families is 156 which is equal to about 14 per year. The above rates of increase in

| Duration of masriage | Rate of increase in the number of children per 100 families per annum |  |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Travancore } \\ & 1931 \end{aligned}$ | $\begin{gathered} \text { Barnda } \\ 1921 \end{gathered}$ |
| First 5 years | 35 | 29 |
| Stecond 5 " | 30 | 24 |
| Third 5 ", | 28 | 19 |
| Next 11 years | 14 | 13 | Travancore are compared with the corresponding rates for Baroda in 1921 in the marginal table. In Travancore the rate of increase in the ize of the family shows a rythmic variation during the first 15 years of marriage and thereater a sudden fall. In Baroda there is a continuous fall. In Scotland Dr. Dunlop's investigations showed frist a nise in the rate, followed by a fall and again by a rise. This corresponds to the variations observed in Travancore. Marriage of girls takes place at later ages in Travancore than in Baroda, though not as late as in Scotland.

From Subsidiary Table VII it will be seen that of the different communities Brabmans have always the lowest fertility, whatever be the duration of marriage. The depressed and backward Hindus have the next higher fertility, followed by Nayars and Muslims who have more or less the same fertility. Ilavas have a slighty higher fertility than Nayars throughout their married life. In the case of Christians, fertility is lower than that of the Nayars, Muslims and Ilavas in the first 10 years of married life, and is more or less equal to that of the latter communities in the next 10 years, but after that it increases steadily. From the 20th year onward the Christians have the highest fertility.
201. The correlation between the age of marriage of wife and the period before age of marriag first birth is shown in the following table. It has been compiled from marriages in which all the children born are surviving.

| Year of first Confinement 3 | Number of familles by nge of marriage of wife |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 13-14 | 16-19 | 20-24 | 88-29 | 80-84 | 85 and ovor |
| Total | 12,789 ${ }^{\text {. }}$ | 88,761 | 3,684 | 478 | 188 | 68 |
| $0-1$ | 417 | 1,258 | 394 | 83 | 9 | 9 |
| 1-2 | 1,421 | 8,271 | 971 | 106 | 35 | 25 |
| 2-3 | 2,329 | 5,671 | 882 | 122 | 38 | 18 |
| 8-4 | 1,845 | 8,561 | 528 | 82 | 28 | 6 |
| 4-5 | 1,655 | 2,383 | 317 | 31 | 13 | 1 |
| -5-6 | 1,938 | 1,666 | 190 | 39 | $\stackrel{8}{8}$ | 2 |
| -6-7 | 1,016 | 938 | 88 | 16 | 8 | $\cdots$ |
| $\therefore 7-8$. | 838 | 748 | 87 | 11 | 1 |  |
| . 8-9 | . 577 | 579 | 85 | 5 | 4 | . |
| 9-10 | 413. | 350 | .81. ${ }^{\text {c }}$ | 6 | 1 | - |
| - 10-11 | 309 | 362 | 26 | 6 | 1 | - |
| $\checkmark 11-12$ | 209 | 164 | 12 | ${ }^{8}$ | 2 | . |
| ' 12-13 . | $15 \%$ | 188 | 12 | , | $\cdots$ | - |
| 13-14 | - 78. | 99 | 10 | 1 | " | - |
| -15 and over | 61 185 | 64 164 | 5 17 | $\ddot{2}$ | .. | $\because$ |
|  |  |  |  |  | . |  |

The actual numbers given in the above table are converted into proportional figures and given in the statement below. It shows that there is a tendency for the interval between the date of marriage and the date of first confinement to decrease as the age of marriage advances.

| Year of first confinement | Proportion por cent. of marriages at different agee to total number of marriagoe |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age of marriage |  |  |  |  |  |
|  | 13-14 | 15-19 | 20-24 | 25-29 | 30-34 | 85 and over |
| 0-1 year | $3 \cdot 8$ | $5 \cdot 3$ | $9 \cdot 4$ | 11.2 | 6.7 | 10.1 |
| 1-2 yeara | $11 \cdot 1$ | 22-6 | 27.2 | 22.4 | - 25.9 | $44 \cdot 6$ |
| $2 \rightarrow 8 \mathrm{l}$ | $\therefore 18 \cdot 3$ | $24 \cdot 2$ | 24.8 | 25.8 | $24 \cdot 5$ | 23.2 |
| 3-4 ${ }^{\text {n }}$ | - 14.5 | $15 \cdot 2$ | $14 \cdot 8$ | 17.8 | $20 \cdot 7$ | 10.7 |
| 4-5 ${ }^{\text {\% }}$ | $12 \cdot 2$ | $10 \cdot 1$ | $8 \cdot 9$ | 6.6 | $9 \cdot 6$ | 1.8 |
| 8.6 | $10 \cdot 6$ | $7 \cdot 1$ | $8 \cdot 8$ | $6 \cdot 1$ | 3.7 | 8.6 |
| 6-7 | $8 \cdot 0$ | 4.0 | $2 \cdot 5$ | $3 \cdot 4$ | 22 |  |
| Total 0-7 yeara <br> 7 yeary and uver | $77 \cdot 9$ |  |  |  | 98.3 | 100 |
|  | $22 \cdot 1$ | 11.6 | $7 \cdot 1$ | 7.2 | 6.7 | Nil |
|  | 100 | 100 | 100 | 100 | 100 | 100 |

202. Subsidiary Table VIII at the end of this chapter shows the correlation $\begin{aligned} & \text { Infaenoe of } \\ & \text { the ditpparity }\end{aligned}$ between the difference in the ages of tin the agas of husband and wife and the size of the harband and family. The figures given in the lity. margin relating to completed marriages have been extracted from the above table. They show that, as the difference between the ages of husband and wife increases, the number of. children born decreases. This may probably be due to the fact that in the case of the younger husbands the duration of effective married life is longer.

A strange correlation, the significance of which is not quite clear, is seen between fertility and the disparity in the ages of husbands and wives in regard to wives below 35 years of age. In such cases the maximum fertility is reached when the husband is about 40 years old, whatever be the age of the wife. For example, wives of $15-20$ years have the largest number of children born to them if they are married to husbands 20-24 years older. For wives of $20-25$ years the maximum fertility is attained with husbands older by 15-19 years, for wives of 25-30 years with husbands older by 10-14 years and for wives of $30-35$ years with husbands older by $5-9$ years. The result may be exhibited graphically by the diagram given in the margin. Each curve represents the number of children born to a married woman of a particular agegroup when the husband is older than the wife by a varying number of years. Thé curves, and particularly those representing wives below 35 years, first rise to a maximum and then drop. .The position of this maximum point differs according to the age of the wife, but it generally indicates the age of the husband to be about 40 years.
203. The following table prepared from continuing marriages gives the number of fertile and sterile marriages by the age of wife at marriage and the duration of marriage.

| Age of wife at marriage | Duration of marriage in years |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 |  | 5-9 |  | 10-14 |  | 15 and above |  |
|  | Fertile | Sterile | Fertile | Sterile | Fertile | Sterile | Fertite | Sterile |
| Total ${ }^{\text {\% }}$ | 6,890 | 6,898 | 12,688 | 1,480 | 18,178 | 571. | 41,03 | 728 |
| 13-14 | 1,012 | 2,218 | 3,392 | 619 | 3,982 | 182 | 17,630 | 284. |
| 15-19 | 4,586 | 3,971 | 7,396 | 647. | 7,358 | 294 | 20,532 | 875 |
| 20-24 | 1,093 | ${ }^{695}$ | 1,447 | 140 | 1,525 | - 74 | 2,702 | 62 |
| 30 and $\begin{gathered}\text { 25-29 } \\ \end{gathered}$ | 214 85 | 71 88 | $\begin{array}{r}128 \\ \hline \quad 75\end{array}$ | 20 | 273 | 19 | 156 | 5 |

[^19]The proportions of sterile to fertile marriages are shown in the marginal statement. The variations in the proportions are more or less similar to those observed in Baroda in

| of |  | Duration of | $f$ magriage . |  |
| :---: | :---: | :---: | :---: | :---: |
| marriags | 0-5 years | \%-10 years | 10-16 years | 15 yedrs and over |
| All agoe | 99 | 11 | 4.3 | $1 \cdot 8$ |
| $13-15$ yeas | 219 | . 18 |  | 1.6 |
| $15-20$ $20-250$ | - ${ }^{87}$ | ${ }^{8} 8$ | 4 | 1.8 <br> 2.3 |
| 25-30 ", | ${ }^{33}$ | $\stackrel{9}{1}$ | 7.a. | $4 \cdot 5$ | 1921. The proportion decreases as the duration of marriage increases. When the duration of marriage is the same, the proportion decreases as the age of marriage advances. In the case of marriages of more than 15 years' duration the proportion of sterile to fertile marriages is higher among women who marry at 25 years or over than among those who marry at an earlier age. In other words, there are less chances of conception after the age of 40 than at earlier ages. The majority of women become fertile within the first ten years of their married life.

Influence of the. age of wife at mavriage on the proportion of still-born to quiak-born
children.

| i. Age of wife at marriage | Number of families | Number of still.born children | Pcrcontage of still-born to quick-born children |
| :---: | :---: | :---: | :---: |
| Total. $\quad 3$ | i. 18,456 | 4,514 | $8 \cdot 8$ |
| - 13-14 | - 8,985 | 1,598 | $9 \cdot 8$ |
| - 16-19 | 8,993 | 2,154 | 8.7 |
| $\therefore$ - $20-24 \quad \therefore$ | . 2,491 | 55 | 9.8 |
| , 25-29. ${ }^{\text {a }}$ | - 633 | 151 | $4 \cdot 8$ |
| 30 and over | 354 | 87 | $4 \cdot 4$ | and the proportion of still-born to quick-born children by the age of wife at marriage are shown in the marginal table. There is practically no difference in the proportion of the still-born to the quick-bom children in the case of women marrying up to the age of 25 , but after that age there is a perceptible increase.

The balance of birthe and death.
205. Before concluding this chapter I wish to deal very briefly, though somewhat imperfectly owing to the lack of accurate data, with the question of the balance of births and deaths in Travancore. The idea suggested itself to me on reading the first two volumes of the series on The Balance of Births and Deaths, dealing with Western and Northern Europe, and Eastern and Southern Europe, written by Robert R. Kuczynski and published by the Brooklings Institution, Washington. Mr. Kuczynski has based his calculations on correct vital statistics which are available for the countries he has examined. In Travancore this is not possible, because birth-rates at individual ages of mothere or even at quinquennial age-groups are not being recorded, and even those vital statistics that are available are unreliable. The figures discussed here have, therefore, been calculated from the data collected in the enquiry regarding fertility and mortality, the fertility rates estimated in paragraph 54 , Chapter I, and the life table for individual years prepared by the method described in paragraph 165, Chapter IV. The results thus obtained will naturally not be very accurate, and yet I have ventured to state them more for their theoretical interest than for their absolute practical value. Nevertheless, it is interesting to note, as we shall see presenty, that the net reproduction rate in Travancore is higher than the rates in most European countries.

The vitality of a community cannot be judged entirely from the annual births and deaths. It might so happen that under certain circumstances, even if births exceed deaths, a community may not be able, in the long run, to hold its own. "The question is not," as Mr. Kuczynski puts it, "Is there an excess of births over deaths? but rather, are nativity and mortality such that a generation which would be permanently subject to them would during its lifetime produce sufficient children to replace that generation?" He shows by facts and figures that "with a fertility and a mortality as they have prevailed for some years, the population of Western and Northern Europe is bound to die out. With the present age constitution it would take decades until there actually would be an excess of deaths over births, and it would be centuries until the population would be half of what it is now. The process can be stopped by an essential change in mortality or in fertility." Let us try to find out what the position is in Travancore.

The number of children born to 1,000 women at the child-bearing ages. (15-45 for Travancore) is known as the general fertility rate of a population. Fertility varies at different ages in the child-bearing period, and the age constitution of the married women in this period will, therefore, affect the general fertility rate. To arrive at the correct general lertility rate it is necessary to calculate the specific fertility rates, i. e., the number of children born to 1,000 women at each annual age from 15 to 45 . The sum of these specific fertility rates is the total fertility which gives the number of children that will be born to 1,000 newly born girls, if all of them survive till the age of 45. According to the present birth-rate in Travancore a girl married at the age of $14-15$ will generally have seven children during her full child-bearing period, and the total fertility of 1,000 married women, assuming the present birth-rate to continue may, therefore, be taken to be 7,000 children.

The specific fertility rates of 1,000 married women at quinquennial age-groups which. have been estimated are given in paragraph 54, Chapter I. The proportions of married women to total women being different at different age-groups, the specific fertility rates of 1,000 women, whether married or unmarried, have to be specially calculated. The specific fertility rates per 1,000 married women and $\mathbf{1 , 0 0 0}$ total women thus warked out. are given in the margin. In calculating these rates it has been assumed that all the 1,000 girls born will survive till the age of 45. This is not actually the. case. Death will naturally reduce their number and consequently allowance has to be made for mortality. In the absence of correct vital statistics a life table has been prepared as described in paragraph 165 , Chapter IV, from which the number of females surviving at each annual age from $15-45$ out of 1,000 girls born can be known. The number living between the ages of 15 and 16 may be taken to be the mean of those surviving at 15 and 16, and so on for all ages up to 45. Applying the specific fertility rates given in the last column of the above marginal table to the mean population of each age-group, the total fertility rate of 1,000 girls born and passing through the full child-bearing period, after making allowance for their mortality, can be ascertaimed. This comes to 3,867 children. This is the net fertility of 1,000 women.

We have now to calculate the reproduction rate, for which female births alone need be considered. From the results of the enquiry regarding fertility and mortality we have seen that out of 119,813 children born to 18,456 women wha have passed the child-bearing period, 56,223 are girls. The total fertility of 1,000 women is 5,350
 That is to say, 1,000 girls born now, if all of them pass through the child-bearing period, will give birth to 2,51 I girls. This is the gross reproduction rate. We have seen that the net fertility of 1,000 girls, after allowing for their mortality; is 3,867 .
 In other words, out of 1,000 girls born now; those who reash the child-bearing period and survive till the close of that period at the present rate of mortality, will give birth to 1,815 future mothers. This is the net reproduction rate. If 1,000 giris born now: live up to the end of the child-bearing period and give birth to 1,000 future mothers, the population will hold ite own. If the number is more than 1,000 the popualtion will increase, and if it falls below 1,000 it is bound to die out. Tested by this

| Country | Total fertility of 1,000 women | Grose reproduction rate of 1,0C0 women | Net reproduction rate of 1,000 women |
| :---: | :---: | :---: | :---: |
| Austria (1928) | 1,999 | 978 | 782 |
| Weatern and Northern Europe (1926) | 2,300 | 1,120 | 930 |
| 8 Feden (1891-1900) | 4,184 | 1,960 | 1,440 |
| Rassin (1896) | 7,060 | 3,440 | 1,650 |
| Travancore (1901-1931) | 8,350 | 2,510 | 1,820 | method the population of Travancore is a highly progressive one. The gross and net reproduction rates for Travancore and for some European counatries taken from Mr. Kuczynski's books are given in the margin. In comparing these figures it must be remembered that the child-bearing period is $15-50$ in Europe and $15-45$ in Travancore.

## SUBṠIDIARY TABLE I

General proportion of the sexes by administrative and natural divisions

| Divisions | Namber of femalea per 1,000 malea |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual population |  |  |  | Nataral population |  |  |  |
|  | 1981 | 1921 | 1911 | 1901 | 1931 | 1981 | 1911 | 1901 |
| 1 | 2 |  | 4 | 5 | $\ldots 6$ | 7 | 8 | 9 |
| STEATE | 987 | 971 |  | 981 | 985 | 889 | 980 | 888 |
| Southern | 999 | 981 | 990 | 996 | 908 | 980976 | 983989 | 1,0099088966 |
| Cantral | 995 | 978968968 | 988 | 986 | 990 |  |  |  |
| Northern | 983 |  | 974 | 970 | 974 |  |  |  |
| High Rango | 766 | 791 | 758 | 685 | 1,003 |  |  | 966 $\cdots$ |
| Natural Dirision |  |  |  |  |  |  |  |  |
| Lowland | 1,004 | 987 | 992 | 909 | 996 |  |  |  |
| Midland | 985 | 965 | 977 | 977 | 980 |  |  |  |
| Highland | 870 | 875 | 888 | 885 | 985 |  |  |  |

Note :-Since the boundaries of the natural divisions have been altered for this censas, flguree showing the natural populution or: these divisions for previous censuses are not arailable.

## SUBSIDIARY TABLE II

Number of females per 1,000 males at different age-periods by main religion . at each of the last three censuses


## SUBSIDIARY TABLEIII

Number of femsles per 1,000 males at different age-periods . by religion and natural division (Census of 1931)


| Age | Midland Division |  | Highland Division |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Christians | Maglims | All religions | Hindus: | Ohristians | Muslims |
|  | 8 | 9 | 10. | 11 | 12 | 13 |
| 0-1 | 998 | 987 | 997 | 976 | 1,008 | 1,114 |
| 1-2 | 1,008 | \&77 | 1,010 | 1,017 | 965 | 1,131 |
| 2-3 | 1,016 | 977 | 807 | 999 | 536 | 1,065 |
| $3-4$ | 1,003 | 974 | 968 | 975 | 944 | - 990 |
| 4-5 | 987 | 942 | 976 | 984 | 965 | 972 |
| Total 0-5 | 1,008 | 973. | 846 | . 901 | 841 | 1,058 |
| $5-10$ - | 974 | 951 | 1,017 | 1,034 | 1.004 | 954 |
| 10-15 | - 961 | -.936 | 1,003 | 1,953 | 1,194 | 91 I : |
| 15-20 | 1,025 | 992 | 856 | 853 | 845 | 810 |
| 20-25 | 1,057 | 1,044 | 891. | 905 | 874 | 796 |
| 25-30 | 985 | 963 | 816 | 843 | 755 | 819 |
| Total 5-30 | - 905 | 978 | 821 | 921 | $830^{\circ}$ | 865 |
| 30-40 | 920 | 895 | 732 | 755 | 688 | 685 |
| 40-50 | 905 | 865 | 703 | 710 | 670 | 756 |
| $50-60$ | 932 | 848 | 775 | 783 | 767 | 746 |
| 60 and over | 1,011 | 887 | 917 | 951 | 333 | 925 |
| Total 30 and over | 881 | 878 | 745 | 762 | 705 | 734 |
| Total of all agen. Xotual population | 977 | 94프제 | 870 | 881 | $\therefore 848$ | 858 |

## SUBSIDIARY TABLE IV

Number of females par $\mathbf{1 , 0 0 0}$ males for cortain selected castes

| Caste |  | Number of females per 1,000 males |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All ages | 0-6 | 7-13 | 14-16 | 17-23 | 24-43 | 44 and over |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Atayan Hisdu | 969 | 1,005 | 972 | $8: 7$ | 1,125 | 950 | 869 |
| 2 | Brahman, Malayala (Namputiti and Potti) Ditto | 888 | 934 | 1,025 | 839 | 846 | 794 | 813 |
| 3 | Brabman, others Ditto | 988 | 1,026 | 991 | 874 | 1,090 | 971 | 956 |
| 4 | Catholic Arasar Christian | 960 | 898 | 921 | 1,148 | 1,061 | 1,081 | 808 |
| ${ }^{6}$ | Chackaravar Ditto | 978 | 917 | 980 | 972 | 1,279 | 916 | 813 |
| 6 | Chetti Hindu | 1,011 | 1,098 | 970 | 1,048 | 1,045 | 928 | 1,057 |
| 7 | İavan Hindu | 1,009 | 1,004 | 966 | 1,017 | 1,115 | 985 | 1,027 |
| 8 | Kammalan (Viswakarma) Hindu | 993 | 2,008 | 979 | 980 | 1,103 | 977 | 050 |
| 9 | Kanikkǐran (Including Malavēlan) Hindu and Tribal religion | 887 | 945 | 924 | 1,190 | 1,458 | 682 | 901 |
| 10 | Kaniyin Hindu | 980 | 964 | 949 | 1,130 | 1,086 | 964 | 987 |
| 11 | Exishnanvaka Hindu | 969 | 1,098 | 878 | 867 | 989 | 994 | 966 |
| 12 | Kudumi Eindu | 923 | 939 | 788 | 892 | 1,114 | 931 | 99 |
| 18 | Euravan (incleding Malanizurevan) Hindu and Ohristian | 1,074 | 1,065 | 986 | 1,181 | 1,486 | 1,084 | 1,024 |
| 14 | Mniayałayan Hindu and Tribal rellgion | 974 | 1,010 | 018 | 1,049 | 1,403 | 729 | 1,217 |
| 15 | Mannan ${ }^{\text {an }}$ - Ditto | 919 | 1,078 | 723 | 980 | 1,28] | 871 | 811 |
| 16 | Marsvan Hindu | 946 | 982 | 902 | 896 | 910 | 901 | $8 \times 2$ |
| 17 | Mukkuvan Caristian | 978 | 978 | 986 | 054 | 1,210 | 968 | 824 |
| 18 | Muthuvan Hindu and Tribal religion | 1,005 | 1,000 | 1,290 | 1,195 | 1,115 | 1,042 | 330 |
| 19 | Nadar (Chānnãn) Hindu and Ohristian | 959 | 058 | 966 | 918 | 987 | 042 | 012 |
| 20 | Nayar - Hindu | 1,014 | 987 | 985 | 984 | 1,109 | 089 | 1,004 |
| 21 | Pallan Hindu | 875 | 961 | 1,072 | 882 | 1,061 | 709 | 877 |
| 22 | Paravan Hindu | 1,023 | 978 | 912 | 904 | 1,278 | 1,088 | 1,042 |
| 23 | Parayan (Sàmbavar) Hindu and Christian | 973 | 1,006 | 060 | 969 | 1,285 | 884 | 800 |
| 24 | Pulayan (Chêramar) Ditio | 987 | 1,009 | 945 | 1,012 | 1,234 | 083 | 893 |
| 25 | ŚEliyan (Pattrílyan) Hindu | 1,040 | 981 | 1,100 | 870 | 1,158 | 1,008 | 1,007 |
| 26 | Syrian Ohristian | 968 | 090 | 072 | 924 | 1,026 | 085 | 061 |
| 27 | Thantann Hindu | 978 | 989 | 971 | 969 | 1,18i | 960 | 888 |
| 28 | Thantapulayan Eindo | 1,060 | 920 | 1,179 | 1,400 | 1,718 | 1,010 | 765 |
| 29 | OlJȧtan (Kocchavêian) Christjan | 1,222 | 1,095 | 1,467 | 1,000 | 1,600 | 1,226 | 1,000 |
| 30 | Valan - Hindn | 950 | 092 | 980 | 920 | 1,098 | 050 | 828 |
| 31 | Vániyan (Vapigavaiayan) " | 980 | 1,038 | 910 | 007 | 1,071 | 002 | 938 |
| 82 | Vangin ${ }_{\text {a }}$ | 984 | 988 | 970 | 1,008 | 1,171 | 967 | 901 |
| 88 | Velakldthalanāyar | 1,006 | 1,007 | 850 | 038 | 1,129 | 08 | 1,000 |
| 34 | Velan | 1,014 | 1,058 | 910 | 1,096 | 1,257 | 948 | 988 |
| 35 | Velan (Kusavan) | 1,000 | 995 | 848 | 846 | 950 | 1,275 | 1,018 |
| 86 | Vellijan | 985 | 962 | 976 | 966 | 1,050 | 902 | 1,013 |
| 37 | Velathindankyar | 1,029 | 878 | 998 | 1,080 | 1,408 | 900 | 1,172 |
| 38 | Vēkan (including Malavētan) Hindu \& Christian | 984 | 020 | 986 | 1,143 | 1,438 | 984 | 770 |
| 89 | Firninivar (Pantåtam only) Elnda | 998 | 1,032 | 988 | 918 | 1,129 | 965 | 945 |
| 40 | Yadavan (Idayan) n | 1,077 | 929 | 994 | 1,056 | 1,158 | 1,060 | 1,288 |

## SUBSIDIARY TABLE- $\mathbf{Y}$

## Actual number of births and deaths reported for each sex during the decades 1901-1910, 1911-1920 and 1921-1930

| Year | Number of births |  |  | Number of deaths |  |  | $\left\|\begin{array}{c} \text { Excess }(+) \\ \text { or } \\ \text { deficiency } \\ \text { ( }- \text { ) of } \\ \text { female } \\ \text { births over } \\ \text { male births } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { Excess }(+) \\ \text { or } \\ \text { deficiency } \\ (-) \text { of } \\ \text { female } \\ \text { deaths over } \\ \text { male desths } \end{gathered}\right.$ | Excess ( $\dagger$ ) <br> or deficiency (-) of Lirths over deaths | Numberof femalebirths per1,000 maslebirths | Number of female deaths per 1,000 male deaths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Total | Males | Females | Total |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1900-1901 | 27,228 | 26,253 | 53,481 | 26,076 | 20,472 | 46,548 | 975 | - 5,604 | + 6,933 | 904 | 785 |
| 1901-1902 | 27,010 | 26,214 | 53,224 | 27,908 | 22,040 | 49,948 | -. 796 | - 5.868 | + 8,276 | 971 | 790 |
| 1902-1903 | 26,500 | 20,665 | 62,165 | 25,123 | 20,170 | 45,293 | - 885 | 4,953 | + 6,872 | 968 | 803 |
| 1903-1904 | 27,516 | 26,776 | 54.292 | 23,337 | 18,956 | 42,293 | 740 | - 4,381 | + 11,999 | 973 | 812 |
| 1904-1905 | 29,428 | 28,924 | 58,352 | 23,009 | 18,949 | 41,958 | - 504 | - $\quad 4,060$ | + 16,394 | 983 | 824 |
| 1905-1906 | 20,859 | 20,468 | 41,817 | 17,449 | 13,706 | 31,155 | - 401 | - 3,743 | + 10,162 | 981 | 785 |
| 1906-1907 | 19,404 | 18,899 | 38,353 | 23,750 | 19,031 | 42,781 | - 655 | - $\begin{array}{r}4,719 \\ -\quad 3,477\end{array}$ | $+\quad 4,428$ $+\quad 4149$ | 971 | 801 |
| 1907-1908 | 26,381 | 25,509 27,979 | 51,870 56,903 | 25,599 20,946 | 22,122 $\mathbf{1 7 , 3 3 2}$ | 47,721 38,778 | $\begin{array}{r} \\ -\quad 852 \\ -\quad 945 \\ \hline\end{array}$ | -- <br> - <br> , 4714 | $+\quad 4,149$ $+\quad 18,125$ | 968 967 | 864 851 |
| $1908-1909$ $1909-1910$ | $\mathbf{2 8 , 9 2 4}$ $\mathbf{2 7 , 9 7 1}$ | 27,979 $\mathbf{2 6 , 8 7 9}$ | 56,903 $\mathbf{5 4 , 8 5 0}$ | 20,996 $-\quad 25,188$ | 17,832 21,798 | - 46,986 | - 1,092 | -- 3,114 <br> . | + + $+\quad 7,864$ | 968 | 885 |
| sal 1901-1910 | 261,251 | 258,558 | 614,807 | 288,885 | 195,076 | 433,461 | -7,695 | -48,309 | +81,848 | 971 | 818 |
| 1910-1911 | 28,605 | 27,603 | 56,208 | 26,058 | 23,434 | 50,092 | - 1,002 | - 3,224 | + 6,116 | 965 | 859 |
| 1911-1912 | 30,780 | 30,103 | 60,883 | 27,528 | 23,997 | 51,525 | - 677 | - 3,531 | + 9,358 | 978 | 872 |
| 1912-1913 | 32,586 | 31,846 | 63,882 | 28,713 | 24,267 | 52,980 | - 1,100 | - 4,446 | + 10,902 | 963 | 845 |
| 1913-1914 | 37,789 | 35,717 | 73,506 | 24,675 | 21,215 | 46,890 | - 2,072 | - $\quad 3,460$ | + 27,616 | 945 | 860 |
| 1914-1915 | 36,724 | 35,656 | 72,380 | 25,314 | 21,440 | 46,754 | - 1,068 | - 3,874 | + 25,626 | 971 | 847 |
| 1915-1916 | 35,890 | 34,514 | 70,404 | 25.223 | 21,484 | 46,707 | - 1,376 | - 3,739 | + 23,697 | 962 | 852 |
| 1916-1917 | 38,295 | 36,696 | 74, 991 | 26,086 | 22,155 | 48,241 | - 1,599 | - . ${ }^{1,931}$ | + 26,750 | 958 | 849 |
| 1917-1918 | 36,893 | 35,760 | 72,608 | 29,138 $\mathbf{3 9 , 2 9 2}$ | 24,928 | 54,066 74,739 | - $\quad 1,128$ | - 4,210 | + 18,592 | 969 | 856 |
| $1918-1919$ $1919-1920$ | 33,779 33,920 | 32,904 $\mathbf{3 2 , 4 4 6}$ | 66,683 66,366 | 39,292 $\mathbf{3 5 , 7 5 9}$ | 35,447 $\mathbf{3 0 , 1 2 9}$ | 74,739 66,888 | 875 $-\quad 1,474$ | - 3,815 |  <br> $+\quad 8,056$ <br> $+\quad 478$ | 974 $\mathbf{9 5 7}$ | 902 843 |
|  |  |  |  |  |  |  |  |  |  | - |  |
| tal 1911-1980 | 356,211 | 832,750 | 677,981 | 288,386 | 288,486 | 536,882 | -12,461 | -89,890 | +171,078 | 964 | 868 |
| .1920-1921 | 37,702 | 36,068 | -3,770 | 26,288 | 22,212 | 48,500 | - 1,634 | - 4,076 | + 25,270 | 957 | 845 |
| 1321-1922 | 35,837 | 34,610 | 70,447 | 24,936 | 21,009 | 45,945 | - 1,227 | - 3,927 | + 24,502 | 966 | 843 |
| 1922-1923 | 35,303 | 33,675 | 68,978 | 24,606 | 20,833 | 45,439 | $=\quad 1,628$ | - 3,773 | + 23,539 | 954 | 847 |
| 1923-1924 | 36,722 | 35,766 | 72,428 | 25,382 | 21,293 | 46,675 | $-3,016$ | - 4,089 | + 25,753 | 972 | 839 |
| 1924-1925 | 31,511 | 29,603 | 61,114 | 20,721 | 17,469 | 58,190 | - 1,908 | - 3,252 | + 22,924 | 939 | 843 |
| 1925-1926 | 39,158 | 35,676 | 74,834 | 19,221 | 16,994 | 36,215 | - 3,482 | - 2,227 | + 38,619 | 911 | 884 |
| 1926-1927 | 4,313 | 41,501 | 85,814 | 22,163 | 20,831 | 42,994 | - 2,812 | - 1,332 | + 42,820 | 937 | 940 |
| 1927-1928 | 47,191 | 43,879 | 91,070 | 22,055 | 20,145 | 42,200 | $-3,312$ | - 1,910 | + 48,870 | 930 | 913 |
| $1928-1929$ 1929-1930 | 50,927 56,461 | 47,445 | $\begin{array}{r}\text { 98,372 } \\ \hline 109\end{array}$ | 26,855 | 24,402 | 51,257 | - 3,482 | - 2,453 | + 47,115 | 932 | 909 |
| 1929-1930 | 56,461 | 63,638 | 109,999 | 25,299 | 23,706 | 49,005 | - 2,923 | - 1,693 | +60,994 | 948 | 937 |
| tal 1921-1890 | 415,185 | 391,701 | 806,826 | 287,626 | 208,894 | 446,420 | -28,424 | -28,682 | $\cdots$ $+880,408$ | 943 | 879 |
| al of <br> ude | 1888892 | 177,552 | 366,444 | 113,455 | 89,399 | 212,874 | - 11,340 | - 14,076 | +153,570 | 940 | 876 |
| 1-1930 | 201,133 | 190,295 | 391,428 | 108,782 | 96,446 | 205,228 | - 10,838 | - 12,336 | +186,200 | 946 | 887 |
| isiona Highland | 25,100 | 23,854 | 48,954 | 15,269 | 13,049 | 28,318 | - 1,246 | - 2,220 | + 20,636 | 950 | 855 |

## SUBSIDIARY TABLE-YI

Number, of deaths of each sex at different ages

| Age | 1920-1991 |  | 1921-82 |  | 1922-23 |  | 1923-24 |  | 1924-25 |  | 1985-26 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Males | Females | Males | Females | Males | Females | Males | Fomales |
| 1 | 2 | 3 | $\pm$ | 5 | 6 | 7 | 8 | 0 | 10 | 11 | 12 | 19 |
| 0-1 | 3,072 | 2,410 | 3,031 | 2,493 | 2,819 | 2,422 | 2,763 | 2,412 | 2,415 | 2,061 | 3,166 | 2,381 |
| 1-5 | 3,732 | 3,326 | 3,958 | 3,288 | 8,038 | 3,156 | 3,967 | 3,9+4 | 3,020 | 2,651 ${ }^{\text {c }}$ | 8,132 | 2,85\% |
| 5-10 | 2,301 | 2,004 | 2,131 | 1,837 | 1,942 | 1,643 | 1,992 | 1,668 | 1,430 | 1,160 | 1,196 | 1,096 |
| 10-15 | 1,212 | 988 | 1,060 | 838 | 1,030 | 862 | 1,082 | 826 | 853 | 741 | 686 | 393 |
| 15-20 | 999 | 859 | 835 | 800 | 850 | 784 | 941 | 828 | 747 | 718 | 621 | 731 |
| 20-30 | 2,304 | 2,301 | 2,030 | 2,048 | 2,158 | 2,043 | 2,269 | 2,148 | 1,815 | 1,847 | 1,880 | 1,889 |
| -30-40 | 2,519 | 2,216 | 2,244 | 1,974 | 2,302 | 1,907 | 2,348 | 1,997 | 1,964 | 1,686 | 1,472 | 1,477 |
| 40-50. | 2,718 | 1,928 | 2,486 | 1,730 | 2,57」 | 1,816 | 2,565 | 1,84!. | 1,995 | 1,346 | 1,688 | 1,179 |
| 50-60 | 2,6i4 | 1,640 | 2,461 | 1,583 | 2,544 | 1,628 | 2,821 | 1,707 | 2,179 | 1,487 | 1,839 | 1,219 |
| 60 and over | 4,892 | 4,570 | 4,710 | 4,420 | 4,849 | 4,482 | 4,944 | 4,622 | ¢,303 | 8,838 | 3,981 | 3,766 |


| Age | 1926-27 |  | 1927-28 |  | 1928-1929 |  | 1929-80 |  | Total |  | Avernge number of fomalo deaths por 1,000 malu deaths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Males | Females | Males | Fomales | Males | Feranles |  |
|  | 14 | 15 | 16 | 17 | 18 | . 19 | 20 | 21 | 22 | 23 | 24 |
| 0-1 | 3,917 | 3,1ธ8 | 3,824 | 3,146 | 4,114 | 3,202 | 5,034 | 4,072 | 34,155 | 27,827 | 815 |
| 1-5 | 3,619 | 3,693 | 3,262 | 3,141 | 3,636 | 3,513 | 4,088 | 4,088 | 38,962 | 32,048 | 918 |
| 3-10 | 1,291 | 1,290 | 1,280 | 1,258 | 1,927 | 1,704 | 1,363 | 1,801 | 16,798 | 14,061 | 891 |
| 10-15 | 667 | 628 | 769 | 722 | 1,349 | 1,251 | 707 | 702 | 0,418 | 8,124 | 863 |
| 15-20 | $6 \pm 0$ | 815 | 741 | 841 | 1,010 | 1,2i8 | 753 | 989 | 8,137 | 8,687 | 1,061 |
| 20-30 | 1,688 | 1,903 | 1,703 | 1,959 | 2,574 | 2,872 | 1,934 | 2,279 | 19,805 | 21,089 | 1,060 |
| 30-40 | 1,622 | 1,692 | 1,715 | 1,721 | 2,481 | 2,453 | 1,998 | 2,017 | 20,665 | 10,230 | 091 |
| 40-50 | 1,769 | 1,312 | 1,855 | 1,371 | 2,831 | 1,707 | 1.946 | 1,494 | 21,882 | 15,724 | 719 |
| 50-60 | 2,177 | 1,528 | 2,151 | 1,434 | 2,465 | 1,682 | 2,268 | 1,619 | 28,139 | 18,467 | 618 |
| 60 ald over | 4,833 | 4,872 | 4,756 | 4,552 | 4,968 | 4,670 | 5,308 | 8,146 | 47,518 | 44,887 | 944 |

## SUBSIDIARY TABLE YII

Size of family correlated with the duration of marriage and the caste or religion of family

| Caste | Duration of marriage with the present wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 10 years |  |  | 10 уеагя |  |  | 10-19 years |  |  |
|  | Number of familics | $\begin{gathered} \text { Number of } \\ \text { children } \end{gathered}$ | Average per family | $\begin{gathered} \text { Number of } \\ \text { families } \end{gathered}$ | Number of children | Average per family | Number of families | Namber of children | Average per family |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | - 9 | 10 |
| ASATE | 27,110 | 34,206 | $1 \cdot 26$ | 8,762 | 10,848 | \% 8.75 | 28,883 | 108,926 | 4-18 |
| Brahman | - 1,301 | 1,322 | $1 \cdot 02$ | 202 | 494 | $2 \cdot 45$ | 1,347 | 5,035 | 3-74 |
| Nbyer | 6,449 | 8,416 | 1.31 | 788 | 2,276 | $2 \cdot 88$ | 6,610 | 27,203 | 4-12 |
| Ilaya | 2,718 | 3,749 | 1.38 | 391 | 1,167 | $2 \cdot 98$ | 2,678 | 11,725 | $4 \cdot 38$ |
| Depressed Hindu | 528 | 576 | $1 \cdot 10$ | 88 | 209 | $2 \cdot 38$ | 478 | 1,769 | $3 \cdot 70$ |
| Backward Hindo | 8,699 | 7,238 | $1 \cdot 27$ | 916 | '2,387 | - 2:61 | 6,114 | 23,844 | 3-89 |
| Christian | 8,004 | 9,755 | $1 \cdot 22$ | 1,013 | 2,764 | $2 \cdot 73$ | 7,342 | 31,680 | 4.31 |
| Muslim | 2,428 | 8,150 | $1 \cdot 30$ | 364 | 1,049 | $2 \cdot 88$ | 1,814 | 7,620 | 4-20 |


| Caste | Duration of marriage with the present wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20-31 years |  |  | 32 years |  |  | 33 years and over |  |  |
|  | Number of families | $\begin{array}{c}\text { Numbar of } \\ \text { children }\end{array}$ $\begin{array}{c}\text { Average } \\ \text { per family }\end{array}$ |  | $\begin{array}{\|c\|c\|c\|} \hline \begin{array}{c} \text { Number of } \\ \text { families } \end{array} & \begin{array}{c} \text { Number of } \\ \text { children } \end{array} & \begin{array}{c} \text { Average } \\ \text { per family } \end{array} \\ \hline \end{array}$ |  |  | Number of Number of <br> families Average <br> per faildren  |  |  |
|  | 11 | 12 | 13 | 14 |  | 16 | 17 | 18 | 19 |
| 8TXTE | 82,710 | 186,281 | $5 \cdot 69$ | 1,987 | 12,415 | 6.41 | 10,157 | 67,569 | $6 \cdot 68$ |
| Brabman | 1,492. | 7,883 | 5-08 | 91 | 521 | , 5.73. | - 450 | 2,612 | . $5 \cdot 80$ |
| Nāyar | 7,021 | 88,625 | 5.51 | 359 | 2,249 | $6 \cdot 26$ | 1,781 | 11,407 | 6.40 |
| İava | 8,016 | 17,993 | $5 \cdot 95$ | 165 | 1,092 | 6.62 | 765 | 5,133 | 6.71 |
| Depressed Hindo | 586 | 3,050 | $5 \cdot 20$ | 54 | $316{ }^{\circ}$ | 5.85 | 145 | 906 | $6 \cdot 24$ |
| Reckward Hindu | 7,302 | 88,784 | $5 \cdot 31$ | 390 | 2,337 | 5.99 | 1,950 | 11,929 | $6 \cdot 11$ |
| Christian | 11,386 | 69,643 | 6.12 | 778 | 5,268 | 6.77 | 4,612 | 32,692 | $7 \cdot 09$ |
| Mualim | 1,907 | 10,663 | $5 \cdot 59$ | 100 | 632 | 6.32 | 454 | 2,890 | $6 \cdot 36$ |

## SUBSIDIARY TABLE YIII

## Average size of family correlated with the age of wife and the difference between the ages of husband and wife

| Difference between the age of hasbaud and wife | Age of wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Below 14 |  |  | 13-19 |  |  | 20-24 |  |  |
|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { families } \end{aligned}$ | A corage children per family | Ratio of female children to 1,000 malo children | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { failice } \end{aligned}$ | Avernge children per family | Ratio of female children to 1,000 male children | $\begin{gathered} \text { Nunber } \\ \text { of } \\ \text { familics } \end{gathered}$ | Arerago childran por family | Ratio of fenale chililien to 1,000 manle children |
| 1 <br> Total | $\begin{gathered} \cdot 2 \\ 473 \end{gathered}$ | $\begin{array}{r} \mathrm{y} \\ \mathbf{0 . 0 4} \end{array}$ | $\begin{gathered} 4 \\ 818 \end{gathered}$ | $\begin{gathered} 5 \\ \mathbf{9 , 0 8 7} \end{gathered}$ | $\begin{aligned} & 0 \\ & 0.39 \end{aligned}$ | 7 972 | $\begin{gathered} 8 \cdot \\ 14,608 \end{gathered}$ | $\begin{gathered} 9 \\ 1.81 \end{gathered}$ | $\begin{aligned} & 10 \\ & 978 \end{aligned}$ |
| Huphand yonnger than wife | 123 | 0.04 |  | $\begin{array}{r} 3 \\ 2,142 \end{array}$ | 0.66 0.35 | 1,077 |  | 1.50 $1.3 t$ | $\therefore 9$ |
|  | 123 | 0.04 0.03 | 500 500 | 2,142 $4,27 \mathrm{C}$ | 0.35 0.48 | 1,077 | 3,482 | 1.34 1.53 | 904 |
| Ditto $10-14 \%$ | 126 | 0.07 | 120 | 1,956 | 0.60 | 958 | 3,154 | 1.88 | 1,020 |
| Ditto 15-19" | 25 | . | . | 467 | 0.62 | 800 | 1,018 | $1 \cdot 13$ | 932 |
| Ditto 20-24 ${ }^{\text {20 }}$ : | 5 | . | $\cdots$ | 166 | 0.76 | 1,260 | 304 | $1 \cdot 89$ | 802 |
| Ditto 25 years and nver: | 3 | . | - | 87 | 0.62 | 840 | 173 | $1 \cdot 40$ | 1,196 |


| Difference between the age of husbund and wife | Ago of wife |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25-49 |  |  | 30-34 |  |  | 48-3y |  |  |
|  | $\left.\begin{gathered} \text { Namber } \\ \text { of } \\ \text { fn milies } \end{gathered} \right\rvert\,$ | Average children per family | Ratlo of female children to 1,060 male children | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { familics } \end{gathered}$ | Avorage ohililien per family | Ratlo of female children to $1,(\mathrm{CH})$ malo children | Number of <br> famition | Average childrun pur frmily | Ration of feanale childrons to $1,0 \mathrm{NH}$ male childret |
| Total | $\begin{gathered} 11 \\ 14,172 \end{gathered}$ | $\begin{gathered} 12 \\ 2 \cdot 87 \end{gathered}$ | $\begin{aligned} & 13 \\ & 918 \end{aligned}$ | $\left\lvert\, \begin{gathered} 14 \\ 16,160 \end{gathered}\right.$ | $15$ | $\begin{gathered} 10 \\ 922 \end{gathered}$ | 17,371 | $\begin{gathered} 18 \\ 8 \cdot 85 \end{gathered}$ | $\begin{gathered} 19 \\ 878 \end{gathered}$ |
| Hnaband younger than wiff | 13 | $2 \cdot 62$ | 870 | 9 | $2 \cdot 67$ | 667 | 17 | 8.04 | 881 |
| Husband older by $0-4$ yeurs | 2,818 | $2 \cdot 65$ | 925 | 2,862 | 4.33 | 891 | 3,836 | 8.40 | 818 |
| Dito 3-9 | 6,016 | 2-85 | 907 | 6,633 | 4.46 | 3 Sis | 6,810 | $8 \cdot 30$ | $N 72$ 480 |
| Ditto 10-14 \# | 8,624 | $3 \cdot 09$ | 927 | 4,3715 | $4 \cdot 40$ | 901 | 4, 1610 | $5 \cdot 85$ | 880 |
| Ditto 15-19 | 1,046 | 3.08 | 866 | 1, 仓17 | $4 \cdot 10$ | 9018 | 1,287 | 5.12 | H 10 |
| Ditto $20-24 *$ | 140 | $2 \cdot 63$ | 907 | 400 | $8 \cdot 87$ | 909 |  | $4 \cdot 62$ | N8: |
| Ditto 25 years and over | 21\% | $2 \cdot 71$ | 772 | 278 | 8.48 | \%ss | 217 | 4.85 | 818 |


| Difference between the age of husimand add wlife | Age of wife |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10-44 |  |  | 45 and above |  |  |
|  | Number of Ramiliea | Avorage children per family | Hetio of female children to 1,000 male children | Number of familles | Average children per tnmily | Ratio of female chaldren to 1,000 male childron |
| Total | $\begin{gathered} 20 \\ 11,748 \end{gathered}$ | $\begin{aligned} & 21 \\ & 8 \cdot 90 \end{aligned}$ | $\begin{aligned} & 22 \\ & 905 \end{aligned}$ | $\begin{gathered} 23 \\ 18,468 \end{gathered}$ | 24 8.49 | $\begin{aligned} & 25 \\ & 884 \end{aligned}$ |
| Husband ymanger than wife Husband older by 0-4 yearn | 18 2,136 | 4.38 | 781 | ${ }^{32}$ | 4.50 | ${ }^{925}$ |
|  | 2,136 4,990 | ${ }_{8.92}$ | 911 | 4,531 7,734 | 8.62 | 8808 |
| Ditto 10-14. | 8,070 | 8.85 | 883 | 4,310 | 6.25 | 847 |
| Ditto 15-19 | 1,048 | 3.82 | 862 | 1,268 | 6.41 | 993 |
|  | 376 | $5 \cdot 01$ | 978 | 40. | 6.49 | H01 |
| Ditto 25 years and over | 118 | $4 \cdot 47$ | 862 | 268 | $4 \cdot 74$ | 868 |

## CHAPTER VI

## CIVIL CONDITION

## PART I-Desoriptive

206. In the notes of instructions for the preparation of this chapter, the Census Commissioner for India observes, "It may be assumed that the customs and institutions, e. g., polygamy, polyandry, hypergamy, etc., connected with marriage in India are known, and no general description of them need be given again, except when fresh information is available." Chapter XI of the Travancore Census Report of 1901 contains a detailed description of the marriage customs and other connected institutions of the important castes and tribes of this State. It is unnecessary to repeat what has been stated there, and all I propose to do, therefore, is to make a lew observations to supplement the information and correct certain misstatements already published.
207. The institution of marriage is as old as man. It rests on biological and Porms of sociological foundations. The instinct of reproduction for the preservation of the species marriage. can be traced to the lower orders of the animal kingdom. In man this instinct has been fully developed, and as he passed from the savage to the civilized stage the instinct, tempered by reason, gave rise to different forms of marriage, suited to the requirements and conditions of the stage of civilization he attained to. Among the savages who lived in isolated communities the wife was an economic asset. The more children she gave birth to, the more numerous became the workers in the family. The search for food and the procuring of a sufficient supply of it were all the requirements of the savage. As man ascended the ladder of civilization, the ideas regarding marriage underwent such changes as were adapted to the social conditions that he passed through. At one time, in certain localities, the conditions were such that the husband had to go and live with the wife in her house, and thus matriarchy arose. At another time under different conditions the husband took the wife to live with him in his house, and thus the patriarchal family came into existence. The family, in course of time, became glorified " as a means of living the fullest communal life " as Rabindranath Tagore puts it, and in India it ultimately received a religious sanctity. "According to India's ideal, even the home must be given up in due course, in quest of the Infinite-the household, in fact, is only to be set up as an important stage in this quest. "*"

According to the circumstances under which man lived, and in consonance with his requirements and ideals, the form of marriage varied from time to time and from society to society. The earliest known form is marriage by capture. In Travancore there is. no tribe extant, resorting to the use of force to procure spouses. A relic of this custom is, however, seen among the hill tribes, Muthuvan and Mannän, living in the jungles in the High Range. "A peculiar practice with the Muthuvans is that after the marriage is settied the bridegroom forcibly takes away the maiden from her mother's house when she goes out for water or firewood and lives with her separately for a few days or weeks in some secluded part of the forest. They then return, unless in the meanwhile they are searched for and brought back by their relations".t Among Mannäns also it sometimes happens that a woman, if she refuses to return the love of a man, is forcibly taken away by him. They then live together in the forest for ten or twelve days and are afterwards searched for and taken to the hamlet. The offence is generally condoned and they are allowed to live as husband and wife. Elopement is also a recognised institution among this tribe and is resorted to if parents object to the union of a man and woman.

Marriage by service is an earlier form of marriage by purchase. It is "common everywhere among peoples who do not yet possess the wealth which would enable the suitor to buy a wife." Among Paliyans and Mannäns, two hill tribes found in Travañcore, the bridegroom generally lives with his future father-in-law for six months or one year and renders service to him before the marriage is consummated. Marriage by purchase, $i$. en, the system under which the bridegroom pays a bride's price to her father, is quite comman among the primitive tribes, Malapulayan and Malankuravan. Exchange

[^20]marriage, by which a brother and sister of one family are exchanged in marriage with the sister and brother of another in the same clan, is prevalent among Malapantaram, Úrāli, Malankudi (Vizhavan), and Malavétan.

Dowry marriage, which is the prevalent system among Brahmans and some other high-caste Hindus, is considered to be a later development of marriage by purchase. The transformation is believed to have been accomplished in the following manner. "The upper classes took the first step by renouncing the purchase price either wholly or in part and bestowing it upon the daughter, thereby assuring her certain rights in her husband's house by dividing it. In a second phase of development the bridegroom himself gives the present to his wife, and the father furnishes her with a trousseau, often with the idea that his daughter shall at least be distinguished from concubines by this endowment. In the third phase the purchase was felt to be a barbarism and at least was legally banned, while the dowry, the gift to the daughter, became a legal duty, as was the case among the Romans at the time of Augustus. Thus dowry marriage evolved from purchase marriage; the higher classes led the way and the great mass followed after. "* In Travancore dowry marriage is the universal custom among Brahmans. It is also prevalent among Christians and is becoming prevalent among Nayars, Ilavas and Nanjanàd Vel!àas, especially after the recent enactment of legislation affecting their marriage and inheritance. Among them, girls belonging to well-to-do families are now sought after by educated young men in view of their share of the family properties. The practice of parents procuring husbands for their daughters, either by payment in cash or by meeting the expenses of their higher education in Indian or foreign Universities, is also coming into vogue among Nayars and other marumakkathãyam communities.

Thalikettu-
kalyanam
and 8 gam-
bandham.
208. Thäliketlukalyanam and Sambandham are two forms of marriage which were prevalent till recently among all the marumakkathayam communities in Travancore. I say till recently, because under the influence of modern civilization and as a result of the work of social reformers, Nayars and Ilavas, the two most numerous and important marumakkathāyam communities, have now practically given up the thälikettukalyäpam or combined it with sambandham. Other minor marumakkathäyam communities are also showing a tendency to effect a similar reform so that before very long the institution of thalikettukalyänam may become extinct. The, Travancore Census Report of 1901 contains a full description of these two forms of marriage. $t$ It is unnecessary, therefore, to describe them any further. The significance and relative importance of these two ceremonies require, however, elucidation. Fantastic interpretations have been put upon them in previous Census Reports and other publications. For example, Moore has propounded atheory in his Malabar Law and Custom, which is quoted at page 242 of the India Census Report of 1911. Moore thinks that the thālikettu ceremony "bears a curious resemblance to the mock marriage to a god which is often performed when girls are dedicated to temple service and religious prostitution." The comparison of thälikettukalyannam to the dedication of girls to temple service is unfortunate. Girls dedicated to temple service are known to be professional prostitutes, but girls of marumakkathayam communities are not. There is as much fidelity among them as there is among the most orthodox makkathayam communities. The misconception about thälikettukalyānam and sambandham has arisen from the opinions expressed by some learned judges, mostly Brahmans, who, contrasting their own system of indissoluble marriage which does not admit of diviorce under any circumstance, with the freedom which marumakkathayam men and womer enjoy to dissolve marriage when they find that persons of incompatible temperaments have been united, a freedom now longed for by many women, and strongly advocated by some eminent men, in the most advanced countries like the United States of America, have declared, on the strength of secondhand information, that thālikettukalyānam is a mock marriage and that sambandham is only an alliance for concubinage. Thälikettu ceremony has no doubt degenerated into a mock marriage, but it is not a license for prostitution ; and sambandham is true wedlock and not a hall-mark of concubinage.

One cannot say with any degree of accuracy when thälikettukalyānam was started and why it has been kept up so long in spite of its mockery. There are certain customs associated with it which go to show that it was once the real marriage and that circumstances compelled certain communities to resort to sambandham and retain the other only as $n$ relic of an earlier form. Among Nayars it is imperative that the boys who officiate as bridegrooms at thālikettukalyānam should belong to the same sub-caste as the girls. In recent times boys of higher castes, such as Thirumulpād and Brahman, have also been

[^21]permitted to perform this function, especially in North Travancore. But in South Travancore it has always been the practice that the boys and girls taking part in thalikettu ceremony should be of the same sub-caste. Strict endogamy was thus insisted upon in this form of marriage. The Nayars were formerly a military class. They formed the militia of the country. The loss of lives among their male population, caused by the warfare they were engaged in constantly, depleted their numbers, and consequently it must have become impossible for girls to get suitable husbands if the selection had been confined to the limited circle of their own sub-caste. The necessity, therefore, arose for looking for suitors from among other sub-castes also. The community evidently sanctioned this custom, but insisted that though the men and women thus united may remain as husband and wife, they thould not break the taboo on interdining, which was a corollary of strict endogamy. Restriction on endogamy was relaxed, but restriction on interdining continued to be strictly enforced. As a result of this change one finds the curious circumstance, especially in North Travancore, of a man of a lower sub-caste and a woman of a higher sub-caste entering into marital relationship by sambandham, but observing a strict taboo on interdining. That thälikettukalyānam was once the real form of marriage among Nayyars is further corrom borated by the fact that even in recent times, especially in South Travancore, when the man who officiated as the bridegroom to a girl at kettukalyānam ceremony dies, the latter is considered to be under pollution for three days. Such.a custom would not have come into existence if kettukalyannam did not, at one time, confer the true relationship of husband and wife on the man and woman. Moore's theory, that ketukalyānam "was instituted under Brahmanical influence as an important sacrament anterior to polyandrous cohabitation" is, therefore, unsustainable. Circumstantial evidence and existing customs point to kettukalyañam having been the real marriage at one time; but when sambandham had to be resorted to for widening the field for the selection of husbands, it degenerated into a mock marriage and became but a relic of an ancient custom.
209. "Primitive man lived in hordes and troops, a form of association favouring sexral morapromiscuous relations. Under these circumstances; he was not likely to develop a sudden primitizo liking for the virtues of monogamy," says Joseph Tenenbaum." Sir Edward Gait observes, rribeat in his Census Report of India for 1911, "On the other hand most of the aboriginal tribes, both Dravidian and Mengolian, the low castes in Kashmir and the Puinjab Hills, and various low castes in the United Provinces, Central Provinces and Berar, and Southern India allow the utmost freedom between sexes prior to marriage." $\dagger$ In' Travancore there is not at present a single tribe or caste in which pre-marital intercourse between sexes is permitted. Nay, it is strictly prohibited by all castes and communities and even: by the primitive tribes. Some of the hill tribes, such as Muthuvans, Mannāns and Kānikkā̀r, go to the extent of taking special precautions to prevent such intercourse. They keep separate dormitories where unmarried young women sleep at night under the surveillance of an elderly woman. Chastity in women is highly priced by these tribes, both before as well as after marriage. Adultery is strictly tabooed by the Kạnikkär, U!latans, Malavetans and other tribes, and those who commit this heinous crime are severely punished. The following is the punishment inflicted by the Kanikikär: A man who commits adultery is tied to a branch of a tree by his legs, with his head hanging down; straw is spread on the ground below his head and smoked; he is then swung to and fro and given 24 lashes. The woman involved in the crime is given 12 lashes. Whatever might have been the custond among the most primitive men, when they were probably hardly better than beasts in their habits and mode of living, there is no evidence whatsoever among the primitive. tribes now found in Travancore that they permit or even tolerate freedom between sexes either before or after marriage.
210. Westermarck, Atkinson, and others think that the primitive man lived in Polygamy separate families and not in social groups, and was, therefore, monogamous. This theory has not been accepted by other anthropologists. According to them the primitive man was a herd animal like the mammals, and the earliest form of sex relations among human beings was probably polygamous herd grouping. Whatever might have been the case among the earliest primitive men, we may infer from the customs prevalent among some existing primitive tribes that, when man was in the hunter stage, he was monogamous and probably so out of necessity arising from the shortage of food supply. In Travancore there is a small section of a hill tribe, called Malapantaŕam, living in inaccessible forests near Rajampara. They are still nomadic hunters and have not settled in a permanent

[^22]habitation nor taken to agriculture like another section of the same tribe found in the forests in Pathanapuram taluk. The former are monogamous, while the latter are polygamous. Polygamy is also allowed and indulged in, wherever economic conditions permit, by most other hill tribes of Travancore who have passed from the hunting to the agricultural stage. Polygamy is a sign of plenty. Only those who can afford it will go in for the luxury of having more than one wife. This we see in primitive tribes as well as in civilized communities in Travancore. Even in those tribes and castes in which polygamy is not tabooed, the large majority of men are content with one wife, and the few who do take more than one wife are generally the rich. Among advanced communities, like the Nayars, polygamy has now been prohibited by law ; but even before this prohibition was legalised polygamous marriages were exceedingly rare, especially among the educated rich, who came under the influence of Western civilization. Educationally Travancore is one of the most advanced parts of India, and with the spread of education among all classes of people polygamy is practically dying out.

Polyandry.
211. While prosperity may lead to polygamy poverty may give rise to polyandry. Probably, there was a time when the conditions of some lower castes and hill tribes in Travancore were such as necessitated polyandry, but practically all communities except perhaps a few primitive tribes, like Ullatans and Malayarayans, have now tabooed it. If stray instances of polyandry are still seen in some low castes, they are confined generally to the older generations and are only the remnants of a custom which is practically dead. It was at one time commonly believed that polyandry and matriarchy were connected and that matumakkathayis were generally polyandrous: "Polyandry", in the opinion of Sir Edward Gait, "may be regarded as a state intermediate between promiscuity and monogamy."* It may be so it promiscuity was the common custom among primitive tribes and if they passed through a polyandrous stage before they became monogamous; Malapantarams, the most primitive of the tribes in Travancore, are monogamous, and there is no vestige of any custom among them suggestive of their having ever passed through a promiscuous or polyandrous stage. Sir Edward Gait further says, "Fraternal polyandry may exist in a community where mother-kin is the rule, but it is generally associated with male kinship, the wife having taken to live in her husband's home.' There are several matumakkathayam communities in Travancore who trace their descent in the female line, wholly untainted by the practice of polyandry, while there are some makkathāyam communities, like Kapiyāns and Kammâlans who have tolerated it, at any rate till recently. The theory that polyandry is connected with matriarchy docs not, therefore, seem to rest on solid foundation.

Of the marumakkathayam communities in Travancore, the Nayars are in the front rank in point of numbers and importance. This community has been wrongly accused of being polyandrous by several eminent Oriental and Western writers. The inference is based on incorrect appraisement of the real state of affairs. In the northern parts of the State a Nayar wife never used to leave her own home and live with her husband, while in the south where the makkathyyam Tamilians' exercised influence over the custome of the Malayalis, the husband invariably took the wife to live with him in his house. In a marumakkathayam household, the mother and her children, brothers and sisters, and other relations in the female line all live together. If in such a household the elder brother marries and takes his wife to his home, she becomes the common worker in the household. On her devolves chiefly the duty of cooking the food and serving it to all members of the household including the younger brothers of her husband. The Nayar women are not gosha. There is no objection to the wife of the elder brother moving freely with his younger brothers. To a stranger she may appear to be the common wife of the brothers, but in reality she is only the wife of the man who has married her and her children are the children of her husband. Sooner or later the younger brothers also get married, and all the brothers and their wives may live together in the same house if it is spacious enough, and if not, some of them may set up their own household and live separately. It is the practice of a married man living with his wife and unmarried brothers in the same house, and the privilege of free social intercourse which the women enjoy with their husbands' younger brothers that led to the inference that fraternal polyandry is prevalent among Nayars. Sexual jealousy is as strong in them as in any other civilized community. J. D. Mayne rightly asys, "that they (Sambandam unions) are guarded with the utmost jealousy and that their violation is most savagely avenged." $\dagger$

[^23]212. Sir Edward Gait says in the India Census Report of 1911, "Hypergamy in Hypargamy. its proper sense is almost unknown in the south of India and in Assam .................. But there is no widespread demand on the part of the lower sections to secure husbands from the higher; and it is this which constitutes the essence of hypergamy."*. Even in the strict sense of the word, hypergamy does prevail among some sections of the people in Travancore. Among Malayala Kshatriyäs there is a sub-caste known as Kōil Thampưāns. It has been their custom to marry their women only to Namputifi Brahmans and not even to their own caste men. This is a clear case of hypergamy. Among Nayyars there are some families in North Travancore who, regarding themselves as superior in social status to other sections of the community, have not been allowing men of any caste other than the Brahman to marry their women. This practice is, however, dying out. After the passing of the Näyar Regulation which has conferred certain legal obligations on the men who marry Nayar women, the difficulty of procuring Brahman husbands has been intensified and the rule of hypergamy has had to be abrogated. Even among the Köil Tampurãans who are now agitating for the passing of a Regulation similar to the Nayar Regulation, there is a strong move by the younger generation to recognise the right of marrying their women into their own caste. It may probably not be very long, therefore, before hypergamy which now prevails, though to a limited extent, in Travancore becomes altogether extinct.
213. Under the rule of exogamy which is one of the widespread customs in India a man is not allowed to marry a woman belonging to the same clan. In marumakkathayam communities the children belong to the clan of their mother, and hence the marriage between the sons and daughters of sisters is strictly prohibited. In theory this prohibition does not apply to the children of brothers, but in practice yery rarely, if at all, do marriages take place between the sons and daughters of brothers also. On the other hand, the marriage of the sons and daughters of brothers and sisters is the common practice among them. It may either be between the brother's son and sister's daughter or between the sister's son and the brother's daughter. Both these forms of cousin-marriage take place freely, both among civilized communities following marumakkathayam law of inheritance, for example, Nayyars, as well as among the primitive tribes, such as Muthuvans; Mannāns, Paliyans, Malavetans, Malankuravans, and U!!!atans, who are matrilinear.

## 214. Eugenics has been defined by Sir Francis Galton, its frrst advocate, as "the Exogamy

 study of agencies under social control which may improve or impair racial qualities of and engenics. future generations either physically or mentally." Westermarck thinks that consanguineous marriages are injurious to the offspring. D. H. Darwin also holds the same view: Contipuous inbreeding, in his opinion, will result in diminished constitutional vigour, size and fertility of the offspring. In the light of these observations exogamy may be regarded as a device of the ancient Indians to prevent consanguineous marriages and avoid the evils accruing therefrom. It does not, however, fully serve the purposes of modern eugenics because, while it prevents the marriage of the children of sisters or brothers, it does not place any restriction on the marriage of other near relatives, such as the children of a brother and sister who are as closely related to each other as are brothers or sisters. Pitt-Rivers has rightly pointed out that the supposed origin of the exogamous system to prevent close inter-breeding and consanguineous alliances is based on misconceptions of the nature of exogamy and of its dual organization. If exogamy had prohibited the marriages of near relatives of all linds; it would certainly have avoided the evils of inbreeding which is condemned by the modern protagonists of eugenics. The object of eugenics is to improve mankind, and the material on which it works is heredity. Intelligence and character are born with the man. He inherits them from his parents. At one time it was thought that environment makes the man. This theory has now been disproved. Environment will not create a new trait in a man. It will only help to draw out and develop the qualities which he has inherited. Of the qualities which he inherits, some are dominant and others recessive. According to Mendal's Law a trait which is recessive in both the parents will become dominant in the ofspring. If a family is tainted with an undesirable trait, the descendants of that family will inherit it. In some it will be dominant and in others it will be recessive. In the dominants it will manifest itself, while in the recessives it will remain masked. But when two recessives unite it will become dominant in the offspring. Hercin lies the real danger of consanguinity and that is why it has been condemned. The rule of exogamy prescribes restrictions on consanguineous marriages,[^24]Matriarchy or Mother: right.
but in its practical application its scope has been narrowed down. If its application is extended to all cases of consanguinity, it may promote the betterment of mankind by reducing the possibilities of perpetuating in future generations the undesirable elements of family traits.
215. A very large section of the Hindus and most of the hill tribes in Travancore trace their descent in the female line and follow the matumakkathayam law of inheritance. Mother-right is the common custom of many castes and tribes not only in Travancore but throughout the Malabar Coast, and the only other tract in India where it prevails is Assam where its adherents are mostly the primitive hill tribes. In Travancore and other parts of the Malabar Coast, on the other hand, both primitive tribes as well as certain advanced castes, like the Kshatriya and the Nayyar who are not behind any other caste or community in India in point of education or civilization, have retained the matriarchal system. How matriarchy arose on this coast and why it has persisted through centuries are interesting problems to speculate upon. Many have speculated and formulated various hypotheses. Whatever be the origin of mother-right, the old theory that "matriarchy corresponds with lower, and parriarchy with more highly developed peoples and cultural groups" has been disproved by the investigations of recent anthropologists. Based on a mass of evidence collected in regard to ancient and modern peoples who traced their descent through the female line, Bachofen and later Mclennan expounded the theory that all human races started with the most primitive custom of communism in sexual relations, then passed through matiarchy, the rulership of woman over man, and finally reached the stage of patriarchy which establistied the prerogative of man. Though this theory was in direct contravention of the conclusion set forth by Maine in his Ancient Law, it held the field until recent researches have shown, as Leo Frobenius observes, "that there was a time when in certain parts of the world patriarchal and matriarchal institutions existed separately and were in their own territory the decisive, determining and motivating cultural factors. At one time the two extensive regions comprising the interior of Asia (including Eastern Europe) and the interior of Africa must have been patriarchal; that is to say, the vast steppe lands were patriarchal. The Mediterranean country and those of Southern Asia lying in between these two expanses, that is to say, their coasts, were at the same time under matriarchal sway. Patriarchy, in its least modififed form, is still prevalent among the Africans of the steppes." " The hypothesis now accepted by the anthropologists is that among the earliest savages who lived by hunting, the man took the wife to himself, and that the husband, wife and children all wandered together forming a patriarchal family. There was no well-defined system of inheritance among them because there was nothing to inherit, but the relationship that subsisted was distinctly patriarchal. In Travancore one section of the Malapantartam who is still leading the life of nomadic hunters, affords an example of this earliest form of patriarchy. When the savage passed from the hunting to the agricultural or pastoral stage, the inchoate form of patriarchy that prevailed among the hunters developed into matriarchy under certain conditions and into well-defined patriarchy under other conditions. Gilbert Slater describes this process of dual development as follows. "When these pioneers of civilization added cultivation to their activities as a supplement to the chase, fishing, and gathering of wild fruits and roots, the new work was undoubtedly assigned to the women, cand therefrom the ownership of the agricultural tools, of the growing plants, and as soon as ownership in land was recognised, the ownership of the little cultivated plots, would naturally be regarded as being vested in the women and descending by inheritance from mother to daughter. As long as hunting was the mainstay, this arrangement would be secure. As soon as the population depended mainly upon agriculture, and the men as well as the women worked in the fields, the social equilibrium became unstable, but might still be maintained for many generations, as it was in Egypt and Mesopotamia, until some sort of shock led the men to question its reasonableness. This might come through war, or conceivably through contact with peoples who passed directly from the hunting to the pastoral stage, and among whom the hereditable property from the begining was held by men, or perhaps merely from the pressure of increasing population upon the land, leading to the extension of cultivation into more difficult areas which from the beginning were cleared and cultivated by the men." $\dagger$ Mr . Slater's view is more or less in agreement with that of other modern students of anthropology. $\ddagger$ It affords a satisfactory explanation for the origin and survival of

[^25]matriarchy on the Malabar Coast: We shall see in Chapter XII that Southern India was. occupied by the Dravidians long before the advent of the Aryans and that the various sections of the Dravdian stock who lived in different geographical regions developed occupations and cultures suited to their particular environments. That branch which occupied the hilly tract on the West Coast lived originally by hunting. Later on, when they migrated to the narrow strip of land lying between the mountains and the sea, they took to agriculture. The soil was very rich, nature was bountiful and conditions were very favourable to cultivation. The labour irvolved in the tillage of the soil and the growing of crops being very light, the women found it possible to attend to this work, and the men. continued to be engaged on hunting. The women who were the first agriculturists naturally became the owners of the cultivated land which descended from mother to daughter, and thus the matriarchal system came into existence. In the territories beyond the Western Ghats, those who occupied the tract containing cultivable land also developed agriculture, but the work had to be done by men and not by women. Cultivation there was a hard task. The soil was not fertile and the rainfall was scanty. Artificial irrigation had to be resorted to for the raising of crops. Women were unft to undertake such difficult work and it consequently devolved on men. They became the owners of the land and thus the patriarchal system was evolved. Another section of the people who lived in wooded lands unfit for cultivation turned to the breeding of cattle and sheep for their sustenance, and others who occupied the coastal region lived by fishing in the sea. Both these occupations, demanding strenuous labour, were unsuited to women, and consequently they fell to the lot of men. The livestock and the fishing gear which thus became the men's property descended from father to son giving rise again to the patriarchal system of inheritance. In the light of this argument it becomes clear why the :people living to the west of the Western Ghats developed marumakkathäyam, while those found on the east coast developed makkathayam. Marumakkathăyam once established found a favourable soil to grow on in the west coast. The men of this coast who were originally hunters subsequently turned into fighters. They had no need to worry about their food, because it was supplied by their women. Their only business consisted in protecting their rich country from the intrusion of strangers. Later on, a number of chieftains established their sway over the different parts of this tertitory and various principalities thus came into. existence. They were constantly at war with one another, each trying to subdue his neighbours and establish his suzerainty over them.: This constant warfare necessitated the utilization of all available man-power for military duties. Men had to leave their homes and go to war whenever called upon by their chiefs to do so. Many lost their lives in the war. The wives and children could not remain in safety in the husband's homes. They had perforce to look to their maternal home for protection and sustenarice. Such was the condition of Ketala till about the beginning of the eighteenth century, and no wonder that matriarchy grew and throve under such circumstances. Added to this, the influence of Nampütiri Brahmans also contributed to the preservation and strengthening of this system. With a view to prevent the disintegration of their family estates the Namputitis adopted the custom, that only the oldest male member of their families should marry in their caste, and that the junior male members should find their spouses in the Kshatriya and Nayyar castes, without however being subject to the obligation of providing for their sustenance and other worldly wants. Marumakkathayam for the latter castes was; therefore, an ideal institution Irom the point of view of the Nampūtiris, and they must have used all their religious influence and temporal power to have it preserved intact by the castes who supplied wives to the large majority of their men. According to some writers; the Nampütritis themselves are believed to have created the mafiumakkathayam system and imposed it on the Kshatriyas and Nayars. It is hardly possible that the communities who formed the largest and the most induential section of the population would have meekly submitted to the imposition by a few alien immigrants of a custom which affected vitally their social organization. No, it could not be so. The system must have originated spontaneously under the special circumstances under which the communities lived and the influence of the Namputitis might have only helped in its preservation.

As long as the cardinal principle of matriarchy, namely, that the family unit consisted of a woman and her children, just as the father and his childern constituted the patriarchal family, was understood and acted upon, it remained a sound institution, promoting the orderly progress and the social unity of the communities concerned. Its degeneration has set in only when, under the impact of Western civilization, the tendencies of the educated section began to draw them towards the universal system of patriarchy. From
the social point of view matriarchy cannot, in any way, be regarded as inferior to patriarchy. "The two great regulations of early civilization, matriarchy and exogamy," says Edward Byron Reuter, "haye nothing about them fantastic, outrageous, absurd, but are the practical outcome of the practical purposes of people like-minded with ourselves." * The old theory propounded by Bachofen and Mclennan, that matriarchy indicated only a stage of development in civilization next to promiscuity and polyandry, has now been exploded, and yet one occaspionally finds strange statements, connecting matriarchy and polyandry, appearing in print. In the course of an article contributed to the London Times of November 6, 1931, a Trivandrum correspondent observes, "Since polyandrous times, when fatherhood was in doubt, the estates of subjects and Ruler alike descend from uncle to sister's son." Such light-hearted comments can only be attributed to the prejudice or ignorance of the commentator.

Legialation arrecting mrocting
martiage.
216. We have seen in paragraph 208 above that among Nayars thalikettukalyanam, which was once the real marriage, degenerated into an empty ceremonial and that marital relationship between man and woman came to be recognised by what is known as sambandham. Both Nayar husbands and wives enjoyed the utmost freedom to dissolve this alliance. There was no formality to be gone through for the dissolution except that the husband or wife had to inform the other party of his or her intention. Under the marumakkathayam law the dissolution of marriage entailed no hardship on the wife and children, because they would be maintained by their tarwad. It was all smooth sailing as long as the manager of the tarwaid, or the kdranavan as he is called, was a true marumakkathayi, both in form and in spirit. But when under the influence of Western civilization his inclinations became less matriarchal and more patriarchal, troubles and dissensions arose in the tarwàd and the women whose interests were invariably neglected by the katranavan had to look to their husbands for the maintenance of themselves and their children. In this transitional stage, suits for maintenance grants were filed in courts of law and the Judges, who were invariably makkathăyis, held that sambandham was not a legally valid marriage. The educated section of the community then began to agitate for legislation to validate the sambandham form of marriage. The first attempt at legislation was made in 1896, when leave was granted for the introduction, in the local Legislative Council, of a Bill relating to marriages among the followers of marumakkathăyam law. It did not aim at introducing "any material change in the existing matrimonial usage." It merely sought "to formulate and declare such usage and to provide a means of preserving the evidence of dissolution of the union in view chiefly to mitigate litigation." The Bill was introduced in the Council and discussed, but was dropped subsequently. A law was, however, enacted in 1912 regulating the marriage, succession, and family management of the Nayars. This law was further amended and amplified by the Nayar Regulation I of 1088 passed on the 13th of April 1925. This Regulation has recognised sambandham, openly solemnised by the presentation of cloth to a ferale by a male, as a valid marriage for all legal purposes; it has legalised the sambandham between the different sub-castes of Nayars, the term "Nayar" including not only the sub-castes but also others known or recognised as such, and also between a Nayar female and any male other than a Nayar with whom conjugal union is permitted according to recognised social cbustom and usage; it has made provision for the dissolution of marriage, which can be effected either by mutual consent evidenced by a registered instrument or by a formal order of dissolution by a Civil Court; it has penalised polygamy and polyandry; it has made it obligatory on the part of the husband to maintain his wife and minor children; it has altered the customary system of inheritance by conferring the right of inheritance of a Nayar male's self-acquired and separate property on his wife and children; and it has made provision for the partilion of the tarwad properties among its members. This Regulation was the first piece of legislation enacted in Travancore, and probably in any part of India, which paved the way for a complete overhauling of the social organization of a community. The Nayar community which had previously adopted some radical social reforms, like intermarriage and interdining between sub-castes, anticipating legal sanction, was not slow to take advantage of this Regulation. The only permissive provision in the Regulation is that relating to partition of tarwad properties, all the other provisions being obligatory. In regard to the partition of tarwàd properties it has been laid down that the Government may exempt any tarwãd from the provisions concerned, if within six months from the commencement of the Requlation all the major members of the tarwâd jointly apply for such exemption. The fact that as many as 32,903 tarwàds have partitioned their properties within five years after the passing of the Regulation

[^26]and that only a very few families have applied for exemption is proof positive of the eagerness with which the community has availed itself of even this permissive provision. The Regulation has made far-reaching changes in the customs relating to marriage and. inheritance among Nayars. The obligation thrown upon the husband or the father to maintain the wife or children, combined with the right of the wife and children to inherit the self-acquired and separate property of the husband or the father, has made hypergamous marriages between Nayar females and Brahman males very rare, almost nil. The restrictions placed on the dissolution of marriage have made divorce less frequent. The Regulation has sounded the death-bell of matriarchy and ushered in the dawn of patriarchy. It has been in force now only for seven years and it is too early yet to see these changes refected in the census statistics; but changes are taking place rapidly and before another census comes round they will have gone far enough to affect the statistics vitally.

Along with the passing of the law concerning Nay yars, a similar law to regulate the marriage and inheritance among $1 \underline{l}$ avas, the other most important marumakkathayami community in Travancore, was also passed at the same time. The llava Regulation came into force, like the Nayar Regulation, on the 13th of April 1925. In 1926 a third mał̌umakkathayam community, namely, the Nanjanād Vellạạas, had a Regulation enacted more or less on the lines of the Nayar and the Illava Regulations. The changes noticed in the Nayar community are fast taking place on exactly the same lines among the Ilavas and the Nänjanād Vellạalas also. Other marumakkathäyam communities are now maling strenuous efforts to get similar laws enacted for them as well. The Malayala Kshatriyas; an influential, though numerically less important, community, have succeeded in getting a Bill introduced in the Legislative Council to reform their marriage and other social customs. This Bill is now under the consideration of the Select Committee. Even the matumakkathayam sections of the Depressed Classes, the Pulayas, for example, are clamour: ing for the codification of their customs on the lines of the Nayar Regulation. The wave of reform is dashing upon the ancient customs of all the marumakkathāyis. It looks as if before long marumakkathayam will have been completely wiped out of this country.
217. The dedication of ummarried girls to deities for service in remples is a Tamilian Dēradiasis. custom and is prevalent in all the temples in the Tamil districts. Under the influence of the Tamilians it found its way into some temples in South Travancore, but has not travelled further north of Trivandrum. This ancient custom was started with the best of intentions to serve a religious purpose. The Dévadàsis, as servants of the temples, were originally an order of ascetics leading a life of personal purity, rectitude of conduct and virgin chastity. In course of time they lost sight of these noble ideals and degenerated into a class of women of loose morals. Till about 10 years ago they were disqualified from entering into any form of lawful marriage. The practice till then was this. A girl, to be dedicated to the deity, is given a cloth by the temple authorities on the completion of her twelfth year. On that day she is purified by a bath in holy water, a dagger is placed beside her and she is wedded to the dagger. She thus becomes a Dēvadasi. This practice of marrying the girls to the dagger was abolished in Travancore in 1921, and since then they were allowed to have marriages solemnised in their homes and attend to temple service on their completing 16 years of age. From the beginning of the year $1106 \times$. в., corresponding to the middle of August 1930, the Government of Travancore, by an executive order, abolished the institution of Dẽvadasis from all temples in the State, but sanctioned the payment of the remuneration these women were getting for their lifetime without the corresponding obligation to do service in the temples. These unfortunate women who were looked down upon as a class of professional prostitutes have thus been emancipated and have now got the freedom to enter into lawful wedlock with the men of their own liking. No woman has been returned as a prostitute at this census in Travancore. Probably, the abolition of Dévadasis has contributed to this happy circumstance.
218. "It is generally thought that the social position of its women is one of the The zoeina truest ways of measuring the height of a people's culture. In reality, however, this is the poadtion of case only in a small degree."• A close study of the history of mankind will reveal many romen. vicissitudes in the social status of women, as man advanced step by step from the condition of the savage. At first, when he was hardly more advanced than the animal, both the sexes were generally on an equal footing; when he reached the stage of the nomadic hunter he became a parriarch and the woman occupied a subordinate place. ln. the agricultural stage, when matriarchy was established, the woman gained ascendancy
and the man became her helpmate. It was during this stage that clan organization developed and reached its zenith. In the later stage man took to diverse occupations and began to accumulate wealth. He had no longer the necessity to move into the wife's clan. He was in a position to buy his wife and take her? to live with him. At this stage the patriarchal family came into existence and the woman descended from the high position she occupied under the matriarchal system and became the handmaid of man. The family was then an economic mint. It made its own food, clothing and other necessaries. The husband, the possessor of all wealth, was the autocrat of the family and the wife was practically his slave. The next change in the social organization came about with the growth of capitalism and industrial revolution, when the production of goods passed from the family to the factories. In the factories both men and women worked and earned wages, and women thus began to acquire ecrnomic independence which reached a high watermark in Western countries during the World War. The emancipation of women in those countries is now progressing rapidly. Equality of sexes in all walks of life is being established. The husband and wife, whose union was once considered to be indissoluble, are now allowed to separate under certain circumstances. Nay, advanced social reformers like Judge Lindsey of the United States go even to the extent of advocating "trial marriages" or "companionate marriages." These changes that are taking place in the West have their repercussions on the East also. In Travancore the marumakkathâyam system has always recognised the supremacy of the woman. She has as much right in the tarwād properties as any male member of the tarwād and;is, therefore, on an equal footing with him. No doubt, in recent times the influence of the woman has waned on account of the unauthorised assertion of authority by the man and the mismanagement of the common properties by the karanavan. These disintegrating causes are now contributing to the break-up of the matumakkathiyam system. But during this period of transition the woman is gaining her economic independence, as in the West. She refuses to be the slave of the other sex. This attiude is seen prominently in the women of the educated communities. The high degree of education attained by the women of Travancore, and the liberal policy pursued by the Government in the matter of appointment to State service and of representation on political institutions, without the distinction of sex, have contributed not a little to make the women of the country self-reliant and self-dependent. Of the total female population numbering $2,530,900$ as many as $1,128,770$ have been returned either as wage earners or as working dependants, and of these, 7,265 women are engaged in public administration and liberal arts, showing an increase of 595 over the number $(6,670)$ returned at the last census. Women have for a long time been employed in the Education and Medical Departments of this State and recently appointments in other departments have also been thrown open to them. There are now two women lawyers practising at Trivandrum. The Travancore women got the right to vote at Legislative Council elections about ten years ago. In India this State was the first to confer franchise on women, Membirship of the Legislative Council and the Sri Mülam Popular Assembly has also been thrown open to them and women representatives now sit in both these institutions. The social and political changes taking place in advanced communities have had their repercussions even on the most orthodox women of the Nampūtiti Brahmans. They are showing signs of revolt against the lifelong slavery imposed upon them by men. Some of them have already thrown off the purdah ond begun to attend public meetings and take part in the proceedings. They are demanding the same social privileges and political rights which their sisters of other communities enjoy. In fact, the process of emancipation is proceeding fast in all classes of women in this country.

The phenomenal progress women have made in education, the economic independence they are gaining and the political consciousness that has been awakened in them, have begun to act as a brake on their desire to enter into matrimonial bondoge. Several of them, especially the educated young women of the Nayyar and Christian communities, are now content to remain single, earning their livelihood by their uwn labours or devoting themselves to social work if they have other means to live upon. The change in the attitude of women towards marriage is so rt ht and the number of them who have come under its influence so far are comparative to c 5 few that the effect of the change is not yet visible in the census figures of civil con.yf f. But if the future progress is going to be as rapid as it has been in the immediate ©, the next census is likely to record a distinct shrinkage in the number of marriag. ntracted.

## PART II - Statistical

219. The statistics regarding civil condition are embodied in Imperial Tables VII and VIII and theii general features are exhibited in proportional figures in the Subsidiary Tables at the end of this Chapter. Imperial Table VII shows the civil condition of the population by sex, age and religion, and Imperial Table VIII the same by sex, age and caste. In the former the age periods have been adjusted to the quinary groups and in the latter they have not been so adjusted. "In Table XIV of the 1921 census, which corresponds to Table VIII of this census, the age-groups shown are $0-5,5-12,12-15$, 15-20, 20-40, 40 and over, whereas in Table VIII of the present census the age-groups
adopted are $0-6,7-13,14,16,17-23,24-43,44$ and over. This difference borne in mind when the civil condition of different castes at this census. is compared to be that at the previous. The Subsidiary Tables at the end of the chapter show :-
(1). The distribution by civil condition of 1,000 of each sex, religion and main age-period at each of the last five censuses,
(2) A. The distribution by civil condition of 1,000 of each sex at certain ages in each religion and natural division,
B. The distribution by civil condition of 1,000 of each sex at certain ages in each main religion in rural and urban areas,
(3) The distribution by main age-periods and civil condition of 10,000 of each sex and religion,
The proportion of the sexes by civil condition at certain ages for main religions and natural divisions,
The distribution by civil condition of 1,000 of each sex at certain ages for selected castes,
220. The statistics collected are intended to show whether a person was married; The meaning of unmarried, or widowed on the date of the census. The instructions to the enumerators were:-
" Enter each person. whether infant, ohild or grown-up, as either married, nnmarried or widowed. Divorced persons, who have not remarried should be entered as widowed. A woman who has never been married must be thown in columnr 6 as unmarried, even though she be a prostitute or concubine, but persons who are recognised by oustom as married are to be entered as such, even though they have not gone through the proper ceremony."
In the Travancore Census Report of 1891 it is stated -and this statment is repeated in the Report of 1901 - that "a Nayar lady would not speak of her Sambandhakaran as her married husband, nor a Nayar husband speak of his Bharya as his married wife."* As I have already pointed out in Part I of this Chapter, the Nayyar community has always recognised sambandham as a proper form of marriage, and a man and woman who have entered into sambandham as husband and wife. Doubt existed only in the minds of the judicial officers as to whether this is a legally valid marriage, and it is this. doubt that is seen reflected in the statements of the State Census Commissioners of 1891 and 1901. However, even the legal objection to recognise sambandham as marriage has been removed by the passing of the Nayar Regulation of 1925 which has been already referred to. Thälikettukalyaṇam, whatever it might have been at the time of its origin, does not now confer the status of husband and wife on the boy and girl who pass through the ceremony, and the return of civil condition will not, therefore, be vitiated by misstatements about this form of mock marriage. It is evident, therefore, that there is no ground, either real or imaginary, to suspect the accuracy of the statistics of civil condition of the Nayars collected at this census.

The only class of persons about whose marital condition inaccuracies might possibly occur in the return of civil condition are the Dēvadàsis who are supposed to be married to deities in Hindu temples, but who lead the life of prostitutes or concubines. In Travancore the institution of Dévadãsis has been abolished and this source of inaccuracy in the statistics has also disappeared.

[^27][^28]Unjuersality of marriage.
221. In India, where marriage is considered to be a religious sacrament, it is naturally more universal than in Western countries where economic considerations and sociological ideas influence the incidence of marriage. It is one of the accepted doctrines of Hinduism that "a man must have a son to save him from hell." No such religious sentiment operates among the Western nations. The Hindu father considers it his religious duty to get his daughter married, and in the case of some castes, even before she attains puberty. Whatever be the economic condition of the parties contracting the marriage, whether they are in a position to support themselves and the children that may be born to them or not, the marriage is peformed, its consequences being left to the mercy of God. The Hindus have been brought up in the tradition that woman is the handmaid of man and that she is always dependent upon him for maintenance and protection. In her childhood she must depend on her father, in her adolescence on her husband, and in her old age on her son. At no time is she a free individual, able to stand on her own legs. This helplessness of the woman also influences every father to see that his daughter is married somehow or other. It is in those parts of India and in those castes in which the orthodox religious sentiment reigns supreme, and in which the woman is kept in the thraldom of the man, that universal marriage prevails most. In Travancore these two factors operate less rigorously, and hence marriage is not so universal here as in other parts of India. The bulk of the population in Travancore are Dravidians who are not governed by the Sastraic Hindu law of marriage. The Dravidians do not believe that a woman who dies unmarried and a man who is without a son are destined to go to hell, and with them marriage is not, therefore, a religious duty, the violation of which is blasphemy. Only a microscopic minority of the people of this State, mainly the Brahmans who form but 1.3 per cent. of the total population, look upon marriage as a religious duty which every man and woman must perform. J. D. Mayne says, "It is part of the Brahmanical doctrine that a man must have a son to save him from hell ; but this belief obtains little currency among the generality of people in Southern India and the strong tendency to marriage has little connection with religious sentiments." * Moreover, the prevalence of marumakkathayam which recognises the supremacy of the woman has made the women of those communities who follow this system of inheritance and who constitute the large majority of the population of this State more self-reliant and self-dependent than the women of the makkathatyam communities. The rapid progress made in female education in the State during the last two or three decades has also strengthened the spirit of self-reliance and selfdependence in women. All these causes have contributed to the unique position that Travancore occupies in India in regard to the marital condition of the people. Cochin State and British Malabar are also probably in the same position on account of the operation of similar causes. A comparison of the statistics of the unmarried people in India and Travancore with those of some Western countries will reveal the position of Travancore. In the margin are given

|  | Number per mille of unmarried |  |
| :---: | :---: | :---: |
|  | Mnles | Females |
| India (1921 cansus) | 498 684 | $\underset{\substack{358 \\ \text { aib } \\ \hline \\ \hline}}{ }$ |
|  | ${ }^{525}$ | ${ }^{635}$ |
| census) | 855 | 607 | the latest available figures for India, Travancore, England and Wales, and the United States. Among both males and females India has the smallest proportion of unmarried. Travancore appears to have a larger proportion of unmarried males than even England and Wales and the United States, while as regards the unmarried females she occupies an intermediate position between these countries and India. The proportions of children in the population are much higher in Travancore than in Western countries and must have, therefore, contributed to the swelling of the numbers of the unmarried in this State. In the western countries the statistics regarding marital condition are collected only in respect of

[^29]the population of 15 years and over. If the population below 15 years is excluded from the statistics of all the countries, a correct comparison can be instituted between them. From the figures in the margin we see clearly that Travancore occupies an intermediate position between India and the western countries in respect of unmarried females as well as males. In the population of 15 years and over Travancore has 276 unmarried males and 107 unmarried females per mille of each sex against 208 and 44 respectively in India, while the corresponding proportions in England and Wales are 365 and 368, and in the United States 417 and 318 respectively. These Ggures show clearly that marriage is more universal in Travancore than in Western countries, but is less so than in India as a whole. The disparity between India and Travancore is very marked at the earlier age-periods, but it practically disappears at about the age of 45 . From the 45 th year onward the total number of unmarried in a thousand of the population is 20 in India and 19 in Travancore, while it is as high as 104 in the United States.


The larger proportions of unmarried persons in Travancore than in India is not a peculiarity noticed at this census alone, but has been a common feature of all the previous censuses as can be seen from the marginal table.
222. The numbers of the unmarried, married, and widowed per mille of each sex The early age at different age-periods in Travancore, according to the present census, are shown in .the of marriage. accompanying diagram and table :-


| Age-group | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Widowed | Married | Enmarried | Unmarried | Married | Widowed |
| 70 and over | 330 | 647 | - 23 | 10 | 124 | 866 |
| 65-70 | 238 | 741 | 21 | 10 | 189 | 801 |
| 60-65 | 175 | 806 | 19 | 10 | $2 \times 8$ | \%02 |
| $55-60$ | 143 | 836 | 21 | 11 | 361 | 628 |
| 50-55 | 94 | 877 | 29 | 12 | 816 | 472 |
| 45-50 | 75 | 893 | 32 | 13 | 690 | 397 |
| $40-45$ | 46 | 916 | 38 | 16 | 728 | 956 |
| $35-40$ | 37 | 915 | 48 | 18 | 787 | 198 |
| 30-30̄ | 26 | 864 | 110 | 27 | 868 | 103 |
| 2i-30 | 22 | 777 | 201 | 39 | 883 | 78 |
| 20-25 | 10 | 395 | 595 | 162 | 802 | 86 |
| 15-20 | 5 | 182 | 813 | 388 | 693 | 20 |
| 10-15 | 0 | 9 | 991 | 920 | 78 | 8 |
| 5-10 | 0 | 1 | 999 | 992 | 8 | 0 |
| 0-5 | 0 | 0 | 1,000 | 1,000 | 0 | 0 |

"The number of males and females who are married by the age of twenty is 9 and 25 per cent. respectively of the population of each sex up to that agc." ${ }^{*}$. This is the observation of the Census Commissioner in regard to India in 1921. In Travancore, according to the present Census, the proportions are 3 and 13 per cent. respectively. In other words, in Travancore the proportion of males who marry by the age of twenty is onethird, and that of females who marry by the same age is about one-half of those in India. The proportions in Western countries are no doubt much lower. In the United States only 4 in 1,000 males and 28 in 1,000 females were found married below the age of twenty in the 1920 census, and in England and Wales there were in 1921 not more than one married man in 1,000 males and five married women in 1,000 females up to the age of twenty. The figures quoted above show that a larger proportion of children get married at an early age in India than in the United States, and England and Wales. As in the general marital conditions, so also in regard to early marriage, Travancore occupies a position intermediate between India. and the western countries. In Travancore marriage becomes common from the 15 th year among girls and from the 20th year among boys. In India 382 girls in the age-group $10-15$ and 298 boys in the age-group 15-20 per 1,000 of each sex of these ages were married in 1921, whereas the corresponding proportions in Travancore as per the present census are only 78 and 182 respectively. In this State the largest proportions of married women are found at the ages of 20 upwards and of married men at 25 upwards.

The large proportion of widown.
223. In India the proportion of widows is considerably higher than that in Western countries. In this respect, as in other marital conditions, Travancore again holds an intermediate position. This is borne out by the figures in the margin. It will be noticed that the proportion of widowers in Travancore is less than even in England and Wales and the United States. This is probably due to a larger number of widowers in Travancore marrying a second time than those in the western countries. The proportion of widows per mille of lemales stands as high as 175 in India and as low as 76 and 82 in the United States, and England and Wales respectively, while in Travancore it is 119 which is less than in India by 56 and more than in England and Wales by 37. It is also noteworthy that widows below 45 years of age, which may be taken as the maximum age of child-bearing period, form $40 \cdot 3$ per cent. of the total number of widows in India, $35 \cdot 2$ per cent. in Travancore, $21 \cdot 3$ per cent. in the United States and 12.3 per cent. in England and Wales. These figures show that the proportion of women of child-bearing period who become widowed is greater in Travancore than. in Western countries, but is distinctly less than in India. This is one of the causes

[^30]that contribute to the higher rate of increase in the population of Travancore than in that of India. The lower rate of increase in England and America is due to the very low birth-rates prevalent there. It must be borne in mind that the widowed in Travancore and India include also the divorced persons, because separate statistics of these have not been collected here as in Western countries.

The strict Hindu law forbids divorce and widow remarriage. In Travancore the castes that observe these customs are very few and their strength :is hardly more than 1.6 per cent. of the total population. Among the rest of the people divorce and widow remarriage are allowed and practised. According to the Madras Census Report of 189 ! widow remarriage is not practised by as much as 40 per cent. of the total population in that province, and probably the proportion is higher in other parts of India. The striking difference in this custom of widow remarriage between Travancore and the rest of India accounts for the comparatively smaller proportion of widows in this State.
224. The Hindus form 61.5 per cent. of the total population of this State, and the cirll condition characteristics of the civil condition of the general population ought, therefore, to be by religion. more or less uniform with those of the Hindus. That this is actually the case is evident from the following diagram and statement. The Syrian and other Christians have been shown separately because the former differ widely in their civil condition from the latter.


| . | Males |  | Religion | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Widowed | Married | Unmarried |  | Unmarried | Married | Widowed |
| . 29 | 887. | 583 | Ell religions . . | 475 | 408 | 119 |
| 29 $\therefore$ | 881. | . 690 | Hindu . . | 467 . | . 399 | 134 |
| . 29 | 404 | 567 | Ohristian | 488 | $421^{\circ}$ | 91 |
| 28 | 423 | 549 | (a) Syrian Cbristian | 480 | 438 | 82 |
| 29 | 379 | 592 | (b) Other Ohristians | 501 | 395 | 104 |
| 21 | 867 | 612 | Muslim | 485 | 402 | 113 |
| 48 | 429 | 523 | Tribal religions | 418 | 465 | 117 |

The smallest proportions of unmarried males and females are found among the primitive tribes, while the largest proportion of unmarried males is seen among the Muslims and of unmarried females among the Christians, with the Muslims closely following thero. The Hindus, on the other hand, occupy an intermediate position, being nearer to the averages for the general population than any other community. As regards married persons, the tribes show the highest proportion both among males and females and the Christians come next. The Muslims have the smallest proportion of married men, but among their women the proportion of the married is slightly more than that of the Hindus and less than that of the Christians. The proportions among the Hindus both of married men and women do not differ much from the averages for the general population. The Hindus show the highest proportion of widows. This is but natural because among them alone, though only in a small section of them, is widow remarriage prohibited. The smallest proportion of widowers is found among the Muslims and of widows among the Christians. The variations between the different religions can be seen more clearly from the following statement showing the proportions of the married at each age-period.

Number married per 1,000 of each sex in the main religions at different agr-periveds

| Age-group | Hindu |  | Christian |  | Muslim |  | Tribal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females | Wales | Females | Males | Females |
| 0-5 | Nil | NiI | Nil | Nil | Nil | Nil | Nil | Nil |
| 5-10 | 1 | 7 | 2 | 9 | 2 | 7 | 5 | 19 |
| 10-15 | 6 | 73 | 14 | 86 | 6 | 77 | 6 | 94 |
| $15-2 n$ | 144 | 676 | 266 | 619 | 124 | 607 | 169 | 1872 |
| 20-40 | 684 | 818 | 776 |  | 688 | 851 | 6675 | 861 |
| 40-60 | 882 | 549 | 893 | 658 |  | ${ }^{668}$ |  | G08 |
| 60 and over | 748 | 177 | 724 | 290 | 794 | 188 | 790 | 212 |
|  |  |  |  |  |  |  |  |  |

The largest proportion of married women in the early ages of $5-10$ and $10-15$ is seen among tribal religions. By enquiry it has been found that the custom among primitive tribes in Travancore is to marry early. The statistics corroborate this observation. Next to the primitive tribes, the Christians are more addicted to early marriage than the other communities, and consequently there are more married persons among them than among the latter in the early age-periods. Of the Christians, the custom of early marriage is practised more by the Syrian Christians then by the other Christians. This question will be dealt with fully in a subsequent paragraph. Of all the communities, the Hindus and Muslims follow the custom of early marriage least. The numbers married per 1,000 in the age-periods $5-10$ and 10-15 are respectively one and six among Hindu males, two and six among Muslim males, seven and 73 among Hindu females and seven and 77 among Muslim females, as against two and 14 among Christian males and nine and 86 among Christian females. With the large majority of the Hindus in Travancore, it must be remembered, pre-puberty marriage of girls is not obligatory, and among them, as among the Muslim community, late marriage is more common than early marriage. This is the reason for the proportions of married persons being less among the Muslims and Hindus than among the Christians and primitive tribes at the early ages.

The following diagrams and statements show the general features of the civil condition of the population by religion and sex at each age-period:-

Diagram 49- showing the proportion per mille of males and females WHO ARE UNMARRIED, MARRIED AND WIDOWED AT EACH AGE-PERIOD BYRELIGION.




Mustim



Civil condition by uatura division.
225. The Lowland Division is the most thickly populated part in Travancore and almost all the available land there has been brought under cultivation long ago. The Highland is the most sparsely populated region and contains the largest extent of cultivable land. The Midland occupies a middle position in both these respects. The pressure of population on land has necessitated a gradual movement of the people from the Lowland to
the Midland and from the latter to the Highland. The Highland wherein are situated the rubber and tea estates has also attracted a large number of labourers from the adjoining districts of the Madras Presidency. The population of the Midland Division contains a larger proportion of Christians-mostly Syrian Christians-chan that of the Lowland and Highland Divisions. All these circumstances affect the civil condition of the population, the main features of which by the natural divisions are shown in the following diagram and statement:-


In the Lowland Division 604 per mille of males and 478 per mille of females are unmarried．The corresponding proportions are 567 and 472 in the Midland and 570 and 473 in the Highland．Taking the main religions separately，we find that the Lowland Division contains a larger proportion of unmarried Hindu males than the other two divisions，while the variation in the proportion of unmarried Hindu females between the different divisions is negligible．In the case of Christians（Syrians as well as others）both unmarried males and females in the Lowland are more than in the other two divisions，but the difference between the latter two is not appreciable．Taking all the religions together，married males number 370， 402 and 403 per mille in the Lowland，Midland，and Highland respectively， while the corresponding proportions of married females are 390,419 and 431．All the religions show an increasing number of married males from the Lowland to the Midland and from the latter to the Highland．As regards married females there is very little differ－ ence between the Hindus and the Christians excluding Syrians，but the Syrian Christians show a much higher proportion in all the divisions．This is due to the fact that early marriage is more common among them than among the other Christians or Hindus．The proportion of widowers does not vary much between the different regions，but of the widows there is a distinct fall from the Lowland to the Midland and from the latter to the Highland among the Hindus and Christians．From the figures given above it may be inferred that the people who move from the congested areas to the thinly populated regions consist more of married persons than of the unmarried and the widowed．This is probably why there are more married males and females and less widows in the Midland and the Highland than in the Lowland．It is naturally the married people more than the bachelors and old widowers who would feel the necessity and possess the enthusiasm to go in search of ＂fresh woods and pastures new．＂When they go the whole family moves and settles in places where they can get land for cultivation．The larger number of school－going popula－ tion in the Lowland and the concentration of industries there may be other factors which have contributed to the smaller proportion of the married in that division．Very few of the school－going children marry in this country．The facilities that industrial concerns provide for the employment of women naturally act as a check on their desire to get married．

The number of females per 1,000 males is 1,004 in the Lowland， 985 in the Midland and 870 in the Highland．As the proportion of females decreases one would expect a corresponding decrease in the proportion of married males，but the figures in the following statement show the opposite．

Number married per 1,000 of each sex at different aso periods by natural division

| Natoral⿳亠二口欠刂 Division | All ages |  | 0－10 |  | 10－15 |  | 15－40 |  | 40 and over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | M ales | Females | Mnles | Females | asinles | Females | Males | Femates |
| Lowland | 370 | 390 |  | 6 | 5 | 62 | 8387 | 740 | 860 | 456 |
| Midland | 402 | 419 | 1 | 9 | 13 | 04 | 633 | 800 | 854 | 6，33 |
| Higcland | 403 | 431 | 2 | 9 | 10 | 77 | 575 | 805 | 857 | 810 |

The proportion of married men has increased，instead of decreasing，from the Lowland to the Midland and from the latter to the Highland．This again goes to show that the movement from one place to another is more of married men than of bachelors． The above statement also shows that early marriage，i．e．，marriage below the age of 15 ， is more prevalent in the Midland and the Highland than in the Lowland．This is due to the larger proportion of Syrian Christian population in the former two divisions than in the latter．
226. Urban population in this section means only the inhabitants of municipal towns. Cryir condition The rest of the population, including those of the towns other than municipalities, is treated of rarban popala. as rural. The general features of the civil condition of these two sections of the population ton. are shown in the following table :-
dimber por wille of winarriod, married and vidnsed in the rwral and urban population by religion


From the above statement we see a striling difference between the Christians and Muslims. Among the former there are more unmarried and less married males and females per 1,000 of each sex in the urban than in the rural area, whereas among the latter the opposite is the case. Among Hindus there are more unmarried and less married males in the urban than in the rural area, while in the case of the females the position is reversed. The municipal towns are the seat of all higher educational institutions, and the boys and girls who attend high schools and colleges and who are generally unmarried are, therefore found in larger numbers there than in the rural parts. This accounts for the lower proportion of married boys and girls of the Christian community and of married boys of the Hindu community found in towns. The higher proportion of Hindu married girls in towns may be due to the fact that, taking the community asa whole which includes a large section of the educationally backward depressed classes, there is a smaller proportion of girls among them attending the higher educational institutions than among the Christians. It may also be due to the fact that the Brahman community among whom marriage is compulsory and who are employed mainly in Government service, trade, banking and other business, are found in much larger numbers in towns than in the rural area. The result of these special circumstances which affect the number of married Hindu girls is seen very prominently in the early age-period of $10-15$. Of the Hindu girls of these ages, 107 per 1,000 are married in the urban area against only 71 in the rural area, whereas among Christians the proportions are 46 and 89 respectively. In the case of Muslims the position, as has already been noted, is the opposite to that of the Christians: Among them there are more married males and females in towns than in rural parts. The explanation for this is simple. Educationally they are a backward community and economically they are better off than several other communities. Their chief occupation is trade which is mainly carried on in towns, and the towns, therefore, attract more grown-up Muslims who are married and who could settle down in life than bachelors and unmarried girls. This circumstance and the fact that comparatively fewer numbers of the Muslim youth go in for higher education account for the larger proportion of married Muslims in urban than in rural area.

In Western countries city life has always a discouraging influence on marriage: In the United States there are 100 more unmarried persons per 1,000 in cities than in the country. Taking the population as a whole the proportion of unmarried men of all ages in the urban area in Travancore is about 23 per mille more than that in the rural parts. At the age-periods at which marriage largely takes place in this country, iviz., 15-40, the diference rises to 113 for the whole population and to 227 for the Christians alone Among adult men town life in Travancore, as in the United States and other Western countries, discourages marriage.
227. The discussion in this section is based on the Exures contained in Subsidiary civil condition Table $V$ which has been prepared from limperial Table VIII. It goes without zaging gy civicondertion tribes that there are wide variations between the marital condition of different castes, tribes, and or races.
races owing to the peculiar customs prevalent among them, though these have been somewhat modified by the influence of education and the infiltration of new social ideas. With some communities, e.g., Brahmans, marriage is a socio-religious institution, and it is considered to be a $\sin$ to violate the rules prescribed by ancient scriptures. Even among other communities customs which have grown up through centuries die hard. It is these customs which differ from community to community and from locality to locality that are mainly responsible for the variations in the civil condition of different communities. I shall illustrate this statement with the statistics relating to a few communities selected from different social strata in Travancore.

| Caste, tribe or race | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unmarried | Married | Widowed | Unmarried | Marrled | Whawed |
| Hindus |  |  |  |  |  |  |
| 1. Malsyala Brahman | 469 | 494 | 37 | 363 | 423 | 214 |
| 2. Other Brahmans | 507 | 460 | 33 | 357 | 468 | 175 |
| 3. Krishp̣envaks | 563 | 407 | 30 | 383 | 154 | 163 |
| 4. Ilavai | 602 | 372 | 26 | 490 | 383 | 127 |
| 5. Nayar | 611 | 961 | 28 | 467 | 383 | 150 |
| 6. Kudumi | 549 | 419 | 32 | 861 | 462 | 187 |
| 7. Yädavan | 548 | 410 | 42 | 367 | 411 | 222 |
| 8. Pulayan | 527 | 434 | 39 | 445 | 400 | 108 |
| 9. Parayan (Eaxmbavar) | 530 625 | 429 | 41 | 450 | 447 | 103 |
| -10. Nadàr - | 625 | 848 | 27 | 510 | 808 | 122 |
| Primitive tribes | 556 | 407 | 37 | 464 | 445 | 91 |
| Ohristians |  |  |  |  |  |  |
| 1. Syrian Christian <br> 2. Other Christians | 549 592 | 423 379 | 28 29 | 480 501 | 438 395 | 82 104 |
| Muslims | 612 | 867 | 21 | 485 | 402 | 118 |

In point of education the Brahman community is the most advanced. As regards general literacy among males there is not much difference between the Malayala and other Brahmans, and yet in their marriage customs there is considerable difference. Among the Malayala Brahmans post-puberty marriage of girls is not forbidden as in the other section, but marriage is more or less compulsory. The prohibition of the remarriage of widows is common to both.. Owing to these customs we find that the non-Malayala Brahmans, in spite of the high percentage of literacy they possess, have comparatively larger proportions of married and widowed females than some of the less educated communities. Among the Malayala Brahmans the unmarried females are slightly more, the married females are somewhat less and the widowed females are considerably more than those among the other Brahmans. It is the custom among the Malayala Brahmans to marry young girls to old men, because only the oldest male member of a family is allowed to marry in the caste, and polygamy being quite common among them an old man is very often married to a number of young girls. This is the cause of an unusually high proportion of widowed females being found in this caste.

Krishnanvaka, Illava and Näyar castes may be considered together. They are all mostly agriculturists, fairly high up in literacy, and following generally the marumakkathay yam law of inheritance. The Krishnanvaka caste is, however, addicted to the practice of early marriage much more than the other two castes, and consequently there is among them a higher proportion of married males and females. Kudumi and Yâdava castes are backward in education, but both pracise early marriage and have prohibited the remarriage of widows, and so their marital condition is more or less similar, a fairly high proportion of married males and females and a similarly high proportion of widowed females. The next three castes, the Pulayan, the Parayan and the Nädär, are very backward in education, and they are all generally field labourers. Yet, owing to the varying customs prevailing among them, smaller proportions of Nâdar males and females enter into wedlock than those of the other communities. It is strange that of all the communities, the Nadars have the leest proporition of married males and females, less than even the highly educated Nayar community. Primitive tribes resemble more or-less the depressed classes, such as the Polayan and the Parayan in all respeects execept in the proportion of widowed females which is considerably less than in the depressed classes. Of the Christians, the Syrians
stand out prominently from the rest in that they have a much higher propotion of married males and females and a considerably lower proportion of widows. In education ? Christians are far more advanced than the other communities and the peculiar features of their civil condition are, therefore, due to the custom of early marriage which even education has not succeeded in rooting out completely. The Muslims, in spite of their backwardness in education, are accustomed to marry late and, hence, the proportions of married males and females among them are much smaller than those among the more highly educated Syrian Christians.
228. The discussion in the foregoing paragraphs leads generally to the conclusion Infuence of that the prevailing customs of a community rather than its educational progress determine edacation on the nature of its civil condition. But it does not follow from this that education is altogether without any influence on the marital state of a community. Let us consider this question a little more in detail. For this purpose we shall divide the various Hindu castes into three categories, according to the prevalence of literacy amongst them. The Brahmans, for obvious reasons, have been excluded from this classification. Imperial Table XIV contains figures showing the literacy in the population, 7 years and over, of

Nurber per 1,000 of the population of each sex

| Advanced Hindus Intermediate Hindus Illiterate Hindus | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unusarried | Married | Widowed | Unmarried | Married | Widowed |
|  | 605 | 865 | 30 | 461 | 387 | 152 |
|  | 597 | 376 | 27 | 484 | 390 | 126 |
|  | 535 | 423 | 42 | 454 | 433 | 113 | the different castes. On the basis of these figures the castes have been divided into "Advanced", " lntermediate" and "Illiterate", those castes which have more than 50 per cent. of literates in the male population of 7 years and over being classed under "Advanced", those with less than 10 per cent. of male literates under "Illiterate", and the rest under "Intermediate". The statistics of civil condition worked out for these three groups of Hindu castes (excluding the Brahmans and the primitive tribes) are given in the above marginal table. The figures speak for themselves. The proportions of unmarried males and females, with the exception of a small deviation in the case of the Intermediate class, increase pari passu; and those of married males and females vary inversely as literacy.

229. The proportional figures per mille showing the civil condition by religion for comparioon the last five censuses are given in the following statement:zith preyious


The proportion of unmarried males has increased in all the religions from census to census and that of married males and widowers has more or less correspondingly decreased. The same variations are seen among females also except in the censuses of 1901 and 1931. The Census Report of 1901 has shown that there was under-enumeration in 1891, and I have proved in Chapter I that there was under-enumeration in 1921. This probably accounts for the decrease in the number of unmarried females and the increase in the number of married females in 1931 and 1931, which are at variance with the
general trend of changes. -t may not, therefore, be wrong to infer that both among males and females in all religions the proportion of the unmarried to the total population of each sex has increased and that of the married has decreased from census to census. Both economic necessity and the civilizing influence of education may have contributed to this result.

Proportion of wives to
hasbands.

The widowed Comparison with India.

Widown to Widowers by religion.
230. The factors which affect the proportion of wives to husbands are migration and the prevalence of polygamy or polyandry. In the margin are given the figures showing the

| Religio: | 1931 | 1021 |
| :---: | :---: | :---: |
| All religions | 1.034 | 994 |
| Hindu | 1.047 | 1,001 |
| Christian | 1.007 | 979 |
| Muslim | 1,049 | 905 |
| Tribal | 1,002 | 993 |

proportions for different religions in 1921 and 1931.
During the last decade 1,165 more men than women immigrated to Travancore, while 4,948 more men than women emigrated so that the net effect of migration was the loss of 3,783 more men than women to the country. The effect of this loss is likely to increase, but will certainly not decrease, the proportion of wives to husbands. The larger proportion of wives to husbands revealed by the present census may partly be accounted for by this circumstance and partly also by the prevalence, though very rare, of polygamy among some sections of the people. Polyandry is dead if it ever existed at all. The larger proportion of husbands to wives shown by the census of 1921 is, therefore, unintelligible. Taking the figures for the different religions at this census, we find the highest proportions of wives to husbands among the Hindus and the Muslims, namely, 1,047 and 1,049 wives respectively per 1,000 husbands. The Christians have 1,007 wives per 1,000 husbands. This small excess of wives among Christians is undoubtedly due to the effect of migration, because among them a man cannot have more than one wife. Married men who leave the country in search of employment elsewhere generally leave their families behind and thus more married women than men will remain in the country. The actual excess of wives over husbands among Christians is only 2,426 and this is much less than the net loss of men caused by migration. The hill tribes are not affected by migration and the proportion of wives to husbands among them is a sure indication of the prevalence or absence of polygamy or polyandry. The census shows that there are 1,002 wives for every 1,000 husbands among them. The excess of wives is small, but it shows that polygamy is still practised by them, though very rarely.
231. The proportion of the widowed to the population of each sex is much less in Travancore than in India. The ratios for Travancore at this census are 29 widowers to 1,000 males and 119 widows to 1,000 females as against 64 and 175 respectively for India in 1921. But the proportion of the married to the total population is also less here than in India and so the widowed must naturally be correspondingly less. If, however, we examine the proportion of the widowed to the married, we find that in India there were 146 widowers to 1,000 married males and 375 widows to 1,000 married females in 1921, whereas in Travancore the corresponding proportions are only 75 and 293 at the present census. These figures seem to show that probably less men and women become widowed, or more widows and widowers get remarried in Travancore than in India. This is due to the fact that early marriage is less common and widow remarriage is not prohibited among the bulk of the population in this State. Though there is practically no prohibition of widow remarriage in Travancore, the proportion of widows to widowers is much higher here than in India. There were only 2,596 widows to 1,000 widowers in India in 1921 as against 4,127 in Travancore at this census. Evidently, remarriage of widowers is more common than that of widows in this State. The factor that influences most the decision of a widower already burdened with some children to marry again is his economic condition. There is no doubt that the general economic condition of the people of Travancore is better than that of the people of India, taken as a whole, and hence we see a greater propensity among the widowers of this State to marry again. Neither religion nor social custom prevents the marriage of widows among the bulk of the population and they remain unmarried only because of the difficulty of getting suitable husbands.
232. The proportion of widows to widowers varies greatly in the different religions. Among the Hindus it is 4,598, among the Christians 3,069 (Syrian Christians 2,803 and others 3,442), and among the Muslims 5,016. Compared with 1921, 1931 records a fall in the proportion of widows to widowers in all the religions; but it must be noted that the proportion in 1921 showed a large increase over that in 1911 .
233. A comparison of the figures of the widowed in different Hindu castes will widows to bring out clearly the factors which affect the ratio of widows to widowers. The Velann widomers

| Caste | $\begin{gathered} \text { Number of widows per } 1,000 \\ \text { widowers } \end{gathered}$ |
| :---: | :---: |
| : |  |
| 1. Velin (including Kudavan) | 8,271 |
| 2. Yadevan (Tdayan) | 8,651 |
| 3. Kıdum! | 5,456 |
|  | 5,300 |
| - 4. Anyar |  |
| 5. Krishnanvaka | 5,297 |
| 6. Brabman (excluding Nampititi and Pôtti) | 8,237 |
| 7. Ve긷a | 8,190 |
| 8. Nampatiti mad Potti | 5,018 |
| 9. Ifaven | 4,954 |
| 10. Väpiyn | 4,858 |
| 11. Knmmàlas | 4,821 |
| 12 Thantan | 4,746 |
| 13. Cbett | 4,666 |
| 14. Vejakcithalanayar | 4,478 |
| 15. Kuravan | 4,293 |
| 16. Kapiyĩa | 4,280 |
| 17. Nidar | 4,264 |
| 18. ṠIliyan | 3,979 |
| 19. Vitasaivar | 3,933 |
| 20. Patavar | 3,841 |
| 21. Maravan | 3,711 |
| 22. Veluthādaņsyar | 3,588 |
| 23. Volan | 3,037 |
| 24. Atayan | 2,947 |
| 25. Pulagan | - 2,694 |
| 26. Valen | 2,644 |
| 27. Parayan | 2,370 |
| 28. Pallias | 2,036 |
| -- | $-1$ | caste shows the highest proportion of widows to widowers. Early marriage is common among them and widow remarriage is prohibited among the Tamil speaking section. Pottery making is their occupation and both men and women work at it. It is the combined earning of the husband and wife that maintains the family. A Velàan male cannot afford to remain single and the widowers, therefore, freely marry again. The Yädavan and the Kudumi castes are addicted to early marriage and have prohibited the remarriage of widows, and hence the proportion of widows among them is high. ${ }^{-1}$ Among Brahmans other than the Namputitit and Pötti, prepuberty marriage of girls is compulsory and widow remarriage is prohibited. Among the Nampütiri and Pötti pre-puberty marriage of girls is not compulsory, but widow remarriage is prohibited, and owing to the paucity of available husbands polygamy is common and often many young women are married to old men. These are the causes that operate to keep the proportion of widows high among the Malayala Brahmars. The Nāyars, Ilavas, and a large section of the Vellalas are marumakkathāyis. Among them girls are allowed to marty either before or after puberty, divorce and polygamy are allowed, and widow remarriage is not prohibited. But economically these castes are better off than the labourer classes like the Pulayan, Parayan, Pallan, etc., and there is consequently remarriage of more widowers than widows among the former. This probably accounts for the high proportion of widows among them. Among the labourer classes in which both men and women have to work for the maintenance of the family, pre-puberty marriage of girls is not compulsory nor is widow remarriage probibited and their economic condition is such that an old widower, when he remarries, prefers a grown-up widow for his second wife to a young girl. Hence widow remarriage is more common among them than among the other castes which keeps the proportion of widows comparatively low. The proportion among them ranges from 2,000 to 3,000 only, whereas among the more prosperous castes it goes up to 5,000 and more. Thus we see that marriage customs, restrictions on divorce and widow remarriage, and economic necessity are the main factors which determine the proportion of widows to widowers in the different castes.

Propartion of ridomers and population of each mex.
234. The diagrams and the table below show the number of widowers and widows to 1,000 of each sex in each main religion at different age-periods.


Number voidoted per mille by zeax and religion at each ago-period

.... The main features revealed by the above diagrams and statement are these. There is practically no widow below the age of 15 in any of the religions. The lowest proportions of widows to the female population in all the ages together and at different ageperiods are seen among the Christians. The proportions among the Hindus-and the Musling vary only slighty. Widow remarriage is not very common in any of the religions and the proportion of widows that do remarry, if at all, does not vary much between the different religions. As regards widowers the number per mille of the male population is less among the Christians than among the other communities up to the age of 35, thereafter the proportion among the Christians increases gradually and from the 45th year it exceeds considerably the proportions among the Hindus and the Muslims. Remarriage of widowers in quite common among all the communities, but from the large increase in the proportion of widowers among the Christians from the 45th year onwards it is to be inferred that the rate of remarriage of widowers after that age is lower among the Chiristians than among the other communities. This is in fact what one finds in actual practice among them, and particularly among the Syrian Christians. There is a general disinclination on the part of thei Syrian Christian widowers who have passed well beyond the middle age to marry again. This tendency is at any. rate stronger in them than in the other communities.
! 235. The proportions of widowers and widows at the most fertile reproductive age-period of 15-40 have a natural bearing on the increase of population.. The figures
 for the different religions for both

Fidows at child-bearing period 15-40. the sexes in 1911, 1921 and 1931 are given in the margin. : All the religions show a decrease in the proportion of widowers and widows between the ages of 1.5 and 40 from census to census except the Muslims whose ratio of widows has increased from 75 in 1921 to 83 in 1931. A fall in the number of widows combined with a rise in the number of married women in
the child-bearing age is mainly responsible for the high rate of increase in the population in the last decade: Taking the figures for the different religions at the present census, we find that the Christians have the smallest proportions of widowers and widows in the age-period 15-40, the Muslims the next higher proportions and the Hindus the highest. The rate of increase in the population of these religions varies inversely as the above ratios.
236. Child marriage is not a serious problem in Travancore. The numbers getting child marriage married up to the age of 15 are considerably fewer in this State than in India as can be in Trazanecore seen from the figures of the unmarried given in the following table:compared.

|  | Indis (1921) |  |  |  |  |  | Tyavancore (1931) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Namber unmarried per mille |  |  |  |  |  | Namber onmarried per mille |  |  |  |  |  |
| : 1 | Males aged |  |  | Females aged |  |  | Malee aged |  |  | Females aged |  |  |
|  | 0-5 | 5-10 | 10-15 | 0-5 | 5-10 | 10-15 | 0-5 | 5-10 | 10-18 | 0-5 | 5-10 | $\sqrt{10-15}$ |
| Ell ivoligions | 901 | 988 | 878 | 888 | 907 | 601 | 1,000 | 989 | 981 | 1,000 | 988 | 820 |
| Hindx | 998 | 956 | 849 | 985 | 883 | 543 |  |  |  |  |  |  |
| Mharistian | 998 | 993 | 973 | 997 | 984 | 912 | 1,000 |  | 986 | 1,000 | 991 | 925 913 |
| Trikal | 997 | 985 | 931 | 993 | 947 | 644 | 1,000 | 998 | 994 | 1,000 | ${ }^{991}$ | 913 920 |
| Trikal | - 996 |  | 937 | 995 | 972 | 820 | 1,000 | 995 | 994 | 1,000 | -981 | 901 |

In the age-period 0-5 there is none married in Travancore, whereas in India six males and twelve females per thousand are married. In the next period (5-10) only one in 1,000 boys and eight in 1,000 girls are married in Travancore against 34 boys and 93 , girls in mdia.- It is noteworthy that out of eight. girls in 1,000 that are married in Travancorie. Hindus and Muslims have the smallest number, viz., seven in 1,000 , while the Christians have nine and the primitive tribes 19. These are only proportional
figures; but the insignificance of the problem of child marriage in this State will be brought out more clearly by the actual figures. Out of a total population of over $2 \frac{1}{2}$ million females, of whom over a million are married, there are only 2,484 married girls at the age-period 5-10. Of these, the Hindus number 1,362, Christians 942, Muslims 177 and primitive tribes three. Of the Hindus, the highest proportions are found among the Brahmans and the Kudumis, among whom pre-puberty marriage of girls is compulsory. The point that deserves special mention is that the Christians show a higher proportion of married girls. between the ages of 5-10 than the Hindus taken as a whole, though the proportion is naturally lower than that of the castes like the Brahmans and the Kudumis who are bound to marry their girls before they attain puberty. Of the Christians, the Syrians have eleven and the other Christians only five married girls out of 1,000 in this age-group.

Taking the age-period $10-15$ we see that the number of unmarried boys and girls in Travancore are 991 and 920 per 1,000 of each sex as against 879 and 601 in India. This means that 112 more boys and as many as 319 more girls in every 1,000 males or females of the age-group 10-15 remain unmarried in Travancore than in India. The proportions of girls of $10-15$ who get married per 1,000 females in this group are 99 among the primitive tribes, 87 among Christians, 80 among Muslims and 75 among Hindus. Marriage at this age-period, as at the earlier period, is more common among Christians than among Hindus as a whole. Among the latter the Syrian Christians again show a much higher proportion than the other Christians, the number per 1,000 females being 115 for the former and 45 for the latter.

General conclusions.
237. The conclusions to which the figures discussed above lead are that child marriage is much rarer in Travancore than in India, that comparatively it is more common among the primitive tribes than among the civilized-communities, that of the latter the Christians are more addicted to the practice than the Muslims or the Hindus, and that it is least prevalent among the Hindus taken as a whole. - Of the different castes of the Hindus, the few among whom pre-puberty marriage of girls is compulsory no doubt marry a larger proportion of their children, but they form such a small percentage of the total Hindu population that their practice does not materially affect the general position.
238. It is interesting to know whether child marriage is decreasing from census to census. The proportions of unmarried males and females at certain age-periods at the last three censuses are shown in the following diagram and statement.


| Age-group |
| :---: |

The marginal figures show that the proportions of females who remained unmarried at the age-periods 5-10 and 10-15 in 1931 were generally less than those in 1921, but did not differ

Number of fomalea mnsmarriod per mille of the wer at age-periode 5.10 and 10-15
 materially from those of 1911 except in the case of Christian females aged 10-15. The higher ratios in 1921 were probably due to the inaccuracies in enumeration. Among Christians the number of unmarried females per 1,000 of the total female population at $10-15$ age-group rose from 876 in 1911 to 913 in 1931. We have seen in paragraph 236 above that marriage of girls aged 10-15 is more prevalent among the Syrian Christians than among the other Christians. The increase in the population of unnarried girls at this age-group among Christians between 1921 and 1931 may be due to the decline in marriage of Syrian Christian girls of 10-15 years. . The Syrians are one of the most highly educated communities in the State and it is but natural that they are gradually giving up the pernicious practice of child marriage. The influence of education and social customs on child marriage will be'made clear by the figures of married girls among different castes and religions at the age-group 7-13 given in Imperiai Table VIII and Subsidiary Table V at the end of this chapter. The Hindus, excluding the Brabmans, have been grouped into three classes;
 'Advanced,' 'Intermediate,' and 'lliterate,' on the basis of literacy as has been done for the purpose of paragraph 228 above. The figures in the margin show that the Brahmans stand by themselves, the number of married girls per 1,000 females at the age-period 7-13 being 45 among the Malayala Brahmans and 87 among the other Brahmans. These are far above the proportion in any cther community. As regards the other Hindus, the highest proportion is found in the illiterate classes. If the Brahmans are excluded from consideration, child marriage appears to be most common among the primitive tribes, the Syrian Christians coming very close to them. The other Christians stand at the bottom of the scale and the Muslims are just above them. These and other figures relating to marital condition reveal the striking feature of the Syrian Christians being more addicted to child marriage than the other Christians or any Hindu caste other than the Brahmans.
239. It may appear strange that child marriage is more common among the Syrian Child marriage Christians than among the Hindus. Pre-puberty marriage is not compulsory among the among gyria Christians and there is, therefore, no religious obligation on them to resort to child marriage. The following explanation may be offered for the prevalence of this custom among the Syrian Christians. The nucleus of the present Syrian Christian community was formed in the early part of the Christian era by the conversion of the Dravidian Hindus, among whom child marriage was prevalent in those times: The early converts retained
the practice of their Hindu brethren, and their descendants and others who joined their rank later through proselytization kept it up. It thus took a firm root and became in course of time an established custom of the community. Besides this deep-rooted custom there is also the natural desire of the Christian parents to see their children settled in life as early as possible, because unlike the matumakkathayam communities they have no tarwäds to fall back upon and their girls do not get a share of the paternal property. The practice of child marriage is, however, vanishing under the influence of Western civilization, but it has not yet completely disappeared.

Probable
origin of child marriage

Legislation
against child
marriage
240. Child marriage was not an institution of ancient Aryans. " In no place do the Shastras speak of late marriage in prohibitive terms and of child marriage as the only commendable form of marriage." * "If we collect all the remarks in the Manu Smriti bearing on this question, their collective purport is found to be that after a girl enters puberty she should wait for three years and if even during that period her father fails to arrange for her marriage she should take the matter in her own hand and get herself wedded to a suitable husband. " $\dagger$

Various theories have been put forward as to the origin of child marriage in India. Sir William Hunter regards it as a measure of safety adopted by the Hindus against the atrocities committed by the Moghul invaders. Mr. C. V. Vaidya thinks that it was of Buddhist origin and that Śri Sankarāchārya in winning over Hinduism from the "Buddhists made certain compromises with them, one of which was the adoption of the Buddhistic custom of child marriage. Sir Edward Gait observes in his Census Report of 1911 "that it (child marriage) was either a feature of the primitive Dravidian culture, or the result of contact between it and the culture of the Aryans, rather than a spontaneous development of the Aryan culture itself ". $\ddagger$ This observation gains support from the marriage customs prevalent in Travancore. We have already seen that child marriage is comparatively more prevalent among the primitive tribes than among the civilized communities. In the first part of this Chapter, I have given reasons for regarding the Thalikettu- 1 kalyanam prevalent among Nayars and other matumakkathayam communities as having once been the real marriage among them. This ceremony must be conducted before the girls attain puberty and it was, therefore, a clear case of child marriage. We have also seen that the Syrian Christians who practise child marriage must have copied the custom of the Dravidian Hindus in the early part of the Christian era, when probably Thalikettukalyannam was the prevalent form of marriage among the Dravidians. All these are circumstantial evidences which go to support the theory that child marriage was originally a Dravidian or pre-Dravidian institution and that the Aryans must have copied it when they came in contact with the Dravidians. Strangely, the originators of the institution have since abandoned it, because most sections of the Dravidians now permit post-puberty marriage, while the later recruits, namely, the Aryans, have clung to it tenaciously and made rigid rules prohibiting marriage after puberty.
241. The Sarda Act of British India prescribing the age limit for the marriage of girls at 14 and for boys at 18 is not in force in Travancore. There is no general demand from the people as yet for the enactment of a similar law in this State, nor does there seem to be any urgent necessity for it. We have seen that child marriage is far less common in this State than in India and that it is declining with the spread of education. The custom is not, however, altogether extinct as could be seen from the marginal figures. 42 girls out of 1,000 between the ages of 5 and 15 are married or widowed in this State as against 221 in India. . Marriage of immature persons is a serious social evil. Its existence, on however small a scale, tends to undermine the health and vigour of the future generations. Whether it should be allowed to die a natural death under the stress of enlightened public opinion or summarily disposed of by legislation is a question that ought to engage the earnest attention of social reformers.

Eariy
marriage
242. In this paragraph I propose to deal with the question of the marriage of boys, and girls at the age-periods, $14-16$ and 17-23, as distinguished from the age-periods,

[^31]5-10 and 10-15, already dealt with under child marriage. In doing so there is, no doubt, a little over-lapping which could not be avoided. The figures which form the subject of discussion in this section are those contained in Imperial Table VIII. In this table the age-periods shown are 0-6, 7-13, 14-16, 17-23, etc., whereas the discussion on child marriage was based on the figures in Imperial Table VII in which the ages are divided into quinary groups of $0-5,5-10,10-15$, etc. It must also be mentioned in this connection that the age-periods in Imperial Table XIV of 1921 which corresponds to the present Imperial Table VIII are 0-5, 5-12, 12-15, 15-20, etc., and that owing to this difference between these two tables it is not possible to compare the figures of this census with those of the previous in respect of early marriage.
243. As in paragraphs 228 and 238 the Hindu castes, excluding the Brahmans, Early have been divided into three classes, according to their literacy. The diagram and the malriage by statement below reveal some interesting facts.



The proportions of males aged 7-13 who are married are considerably less than those of girls of the same ages who enter into wedlock in all classes of the population. The early marriage of boys between the ages of 7 and 13 is negligible. Marriage in large numbers commences only at the age-period $14-16$ in the case of girls and 17-23 in the case of boys. In regard to the marriage of boys. between the ages of 17 and 23, the Syrian Christians top the list with as many as 523 married per 1,000 boys. Next to them the Malayala Brahmans have the highest proportion, and they are closely followed by the primitive tribes. The other Brahmans come next and then the other Hindu castes and the Muslims, and lastly the non-Syrian Christians. The position is not quite the same in the case of girls. Here the non-Malayala Brahmans take the lead. At the age-period 14-16 they have 842 girls married out of 1,000 . Next come the Malayala Brahmans, then the Syrian Christians, the primitive tribes, the Hindus and Muslims, and lastly the non-Syrian

Christians. In regard to the marriage of girls between the ages of 17 and 23 the nonMalayala Brahmans lead of again, but the Syrian Christians have secured the second place held by the Malayala Brahmans in the younger age-group and among the other classes the position has not changed materially. The inference that may be drawn from the above figures is that early marriage of boys is most common among the Syrian Christians and that of girls among the Brahmans. Both these communities are educationally more advanced than the others, and yet it is among them that early marriage is more prevalent. It is, therefore, the social or religious customs more than education that influence a community to decide whether the marriage of their boys and girls should take place early or should be postponed. Education, no doubt, does exercise some influence, but it has not succeeded so far in eliminating the force of customs altogether.
. 244. In considering the influence of education on early marriage we shall confine Influence of ourselves to the three groups of Hindu castes mentioned in the previous paragraph. It will education on be seen from the table given in that paragraph that the proportion of married males at the early marriage. age-period 14-16 is so small that it may safely be left out of account. In the next ageperiod 17-23, the proportion of unmarried or married males varies in the descending or the ascending order from the 'Advanced' to the 'Intermediate' and to the 'Illiterate" classes. More or less similar variations are also seen in the proportions of unmarried or married girls of both the age-periods. Early marriage is not compulsory in the various castes constituting these classes. The smaller proportions of boys and girls of educationally more advanced communities getting married at earlier age-periods may, therefore, be the result of education increasing the tendency for the postponement of marriage.

## SUBSIDIARY TABLE I

Distribution by cixil condition of 1,000 of each sex, religion and main age-period at each of the last five censuses


The figures under Hindu for 1891 include thome for trikal religions also.

SUBSIDIARY TABLE I-(Concluded)


Separate figres are not available for tribal religions for 1891.

SUBSIDIARY TABLE II A
Distribution by civil condition of 1,000 of each sex at certain ages in each religion and natural division


SUBSIDIARY TABLE II A－（concluded）

| Natural Division and Heligion | Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All ages |  |  | 0－5 |  |  | 5－10 |  |  | 10－15 |  |  | 15－40 |  |  | － 40 and over |  |  |
|  | 䂞 | $\begin{aligned} & \text { Z } \\ & \frac{E}{E} \\ & \frac{E}{2} \end{aligned}$ | 苞 | 完 | 吉 | $\begin{array}{\|l} 7 \\ 0 \\ 0 \\ 0 \\ \hline \end{array}$ |  | $\begin{aligned} & \text { 总 } \\ & \underset{E}{E} \\ & \text { 品 } \end{aligned}$ | $\begin{aligned} & \text { 荡 } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 邑 | $\begin{aligned} & \text { 를 } \\ & \text { 恚 } \end{aligned}$ | 菏 | 豆 | 苞 | ＂d <br> 关 <br> 0 | 彦 | 范 | 艮， |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\therefore$ STATE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All Religions | 475 | 408 | 119 | 1，000 | $\cdots$ | ．. | 892 | 8 | $\cdots$ | 920 | 78 | 2 | 161 | 774 | 75 | 13 | 495 | 492 |
| Hinju | 467 | 389 | 134 | 1，000 | $\cdots$ | －• | 993 | 7 | ． | 925 | 73 | 2 | 155 | 759 | 86 | 13 | 461 | 526 |
| Christian | 488 | 421 | 91 | 1，000 | － | $\cdot$ | 991 | 9 | $\cdots$ | 913 | 86 | 1 | 147 | 803 | 50 | 13 | 571 | 416 |
| Syrian Christian Other CAristians |  | 488 | 82 | 1，000 | $\cdots$ |  | 889 | 11 | ． | 884 | 115 | 1 | 113 | 847 | 40 | 11 | 610 | 379 |
|  |  | 385 | 104 | 1，000 | $\cdots$ | ． | 985 | 5 | － | 854 | 45 | 1 | 182 | 744 | 64 | 17 | $511{ }^{\text {－}}$ | 478 |
| Muslim | 485 | 402 | 113 | 1，000 | －• | ． | 993 | 7 | － | 920 | 77 | 3 | 127 | 790 | 83 | 7 | 482 | 611 |
| Tribal Religion | 418 | 465 | 117 | 1，000 | $\bullet$ | ． | 981 | 19 | － | 901 | 93 | G | 139 | 794 | 67 | －• | 527 | 473 |
| Others | 467 | 450 | 83 | 1，000 | $\bullet$ | －． | 1，000 | $\cdots$ | －• | 913 | 87 | ． | 122 | 865 | 13 | $\cdots$ | 517 | 483 |
| 1 Lovaland |  |  |  |  |  |  |  |  |  |  | 4. | 1 |  |  |  |  |  |  |
| All Religiona | 478 | 390 | 132 | 1，000 | －• | ． | 994 | 8 | － | 937 | 62 | 1 | 170 | 748 | 85 | 14 | 456 | 530 |
| Hindu | 468 | 389 | 143 | 1，000 | $\cdot \cdot$ | $\bullet$ | 994 | 6 | －． | 932 | 66 | 2 | 164 | 743 | 93 | 13 | 436 | 551 |
| Christian | 508 | 389 | 103 | 1，000 | $\bullet$ | $\cdots$ | 996 | 4 | － | 952 | 48 | － | 199 | 742 | 59 | 18 | 520 | 462 |
| Surian Christian |  | 415 | ${ }_{9}^{97}$ | 1，000 | $\cdots$ | $\cdots$ | 985 | 5 | $\cdots$ | 928 | 73 | 1 | 148 | 805 | 47 | 15 | 553 | 432 |
| Other Christiant |  | 376 | 107 | 1，000 | ．． | － | 998 | 4 | － | 905 | 34 | 1 | 224 | 711 | 65 | 20 | 501 | 470 |
| Muslim | 480 | 401 | 119 | 1，000 | $\cdots$ | ． | 994 | 6 | －$\cdot$ | 929 | 69 | 2 | 135 | 977 | 88 | 8 | 467 | 525 |
| Tribal Religion | 400 | $\pm 00$ | 100 | 1，000 | $\cdots$ | ．． | 1，000 | ． | $\cdots$ | 500 | 500 | $\cdots$ | 250 | 500 | 250 | －• | 1，000 | － |
| Others | 465 | 459 | 76 | 1，000 | － | ．$\cdot$ | 1，000 | ． | －• | 909 | 01 | $\cdots$ | 114 | 872 | 14 | －• | 556 | 441 |
| Midland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All Religions | 472 | 419 | 109 | 1，00 | $\therefore$ | $\cdots$ | 991 | 9 | ．． | 904 | 94 | 2 | 134 | 800 | 68 | 12 | 533 | 455 |
| Hindu | 466 | 407 | 127 | 1，000 | － | ． | 992 | 8 | － | 915 | 83 | 2 | 147 | 774 | 79 | 13 | 491 | 496 |
| Christian | 477 | 437 | 86 | 1，000 | $\cdots$ | ． | 989 | 11 | － | 890 | 109 | 1 | 118 | 837 | 45 | 11 | 600 | 389 |
| Syrian Chridian Other Ohriatiant | 477 478 | $\begin{aligned} & 44 \\ & 418 \end{aligned}$ | 79 103 | 1，000 | $\because$ | $\cdots$ |  | 13 | $\bullet$ | 874 | 125 | 1 | 106 | 858 | 38 | 10 | ${ }^{623}$ | 367 |
|  |  | 418 | 103 | 1，000 | － | ． | 885 | 5 | ． | 988 | 81 | 1 | 150 | 787 | 63 | 11 | 527 | 462 |
| Muslim | 492 | 402 | 106 | 1，000 | －• | ．． | 991 | 9 | ．$\cdot$ | 912 | 85 | 3 | 121 | 803 | 76 | 6 | 505 | 489 |
| Tribal Religion | 440 | 467 | 93 | 1，000 | $\cdots$ | － |  | 38 | － | 896 | 104 | $\bullet$ | 115 | 841 | 44 | ． | 569 | 431 |
| Others |  | 333 | 333 | － |  |  |  | $\cdots$ |  | 1，000 | $\because$ | $\cdots$ | ． | 1，000 | $\cdots$ | ．． | $\cdots$ | 1，000 |
| Fitghland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ； |  |
| XIL Religions | 473 | 431 | 88 | 1，000 | $\cdots$ | －$\cdot$ | 990 | 9 | 1 | 981 | 77 | 2 | 127 | 805 | 68 | 9 | 510 | 481 |
| Hinde | 468 | 428 | 104 | 1，000 | $. .1$ |  | 990 | 10 | ． | 928 | 70 | 2 | 134 | 798 | 73 | 9 | 481 | 510 |
| Christian | 485 | 422 | 78 | 1，000 | $\cdot$ | ．． | 991 | 7 | 2 | 914 | 84 | 2 | 120 | 831 | 49 | 10 | 591 | 399 |
| Syrian Ohridian Other Ohristians |  | $455$ | 56 | 1,000 1,000 |  |  |  | $7$ |  |  |  |  | 73 |  |  | 10 | 691 672 | 389 |
| Other Ohristians | 481 | 430 | 89 | 1，000 | . | $\cdots$ | $892$ | 7 | 1 | $\begin{aligned} & 868 \\ & 855 \end{aligned}$ | 132 | 3 | $\begin{array}{r}73 \\ 164 \\ \hline\end{array}$ | 895 784 | 32 68 | 5 | 672 518 | \＄888 |
| Musim | 475 | 416 | 109 | 1，000 |  |  | 989 | 11 | $i$. | 882 | 115 | 3 | 88 | 825 | 87 | 2 | 486 | 512 |
| Tribal Religion | 409 | 464 | 127 | 1，000 | － | ．$\cdot$ | 991 | 9 | $\ldots$ | 911 | 80 | 9 | 147 | 780 | 78 | ． | 508 | 492 |
| Othens |  | 286 | 143 | 1，000 | $\bullet$ | ．． | 1，000 | $\because$ | $t$ | $\therefore$ | $\cdots$ | － | 333 | 667 | ＊ | － | $\cdots$ | 1，400 |

Distribution by civil condition of 1,000 of each sex at certain ages in each main religion in rural and urban areas

| Religion | Masles |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All ages |  |  | 0-5 |  |  | 6-10 |  |  |
|  | Un- married | Married | Widowed | $\xrightarrow[\text { married }]{\text { Un- }}$ | Married | Wirowed | U'n- married | Married | Widowed |
| 1 | 2 | 3 | 4 | 万 | 6 | 7 | 8 | 9 | 10 |
| All Reltgions $\left\{\begin{array}{l}\text { Rural } \\ \text { Urban }\end{array}\right.$ | 682 605 | 389 370 | 29 | 1,000 1,000 | $\cdots$ | $\cdots$ | 899 898 | 1 2 | $\because$ |
| Hindu $\quad\left\{\begin{array}{l}\text { Rural } \\ \text { Urbsn }\end{array}\right.$ | 590 <br> 595 | 381 379 | 29 26 | 1,000 1,000 | $\because$ | $\because$ | 999 908 | 1 2 | " |
| Christian $\quad\left\{\begin{array}{l}\text { Rural } \\ \text { Urban }\end{array}\right.$ | \| 568 | 409 $\mathbf{3 4 3}$ | 29 24 | 1,000 1,000 | $\cdots$ | $\because$ | 908 909 | 1 | $\cdots$ |
| Nuslim $\quad\left\{\begin{array}{l}\text { Rural } \\ \text { Crbsa }\end{array}\right.$ | 614 <br> . | 364 383 | 22 23 | 1,000 1,000 | $\cdots$ | $\cdots$ | 999 992 | 1 | $\because$ |
| Religion | Males |  |  |  |  |  |  |  |  |
|  | 10-15 |  |  | 15 - 40 |  |  | 40 and over |  |  |
|  | Un- | Marriod | Widowed | Unmarried | Married | Widowed | Un. married | Married | Widower |
|  | . 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 14 |
| All Religions\{ $\left\{\begin{array}{l}\text { Rural } \\ \text { Urban }\end{array}\right.$ | 982 983 | 8 17 | - | 387 500 | $\mathbf{5 9 7}$ $\mathbf{4 8 7}$ | 19 | 29 | 858 887 | 115 108 |
| Hindu $\quad\left\{\begin{array}{l}\text { R ural } \\ \text { Orban }\end{array}\right.$ | 995 $\mathbf{9 7 7}$ | 5 23 | $\because$ | 418 482 | 561 504 | 21 14 | 37 28 | 852 868 | 111 |
| Christian $\quad\left\{\begin{array}{l}\text { Rursal } \\ \text { Urbsan }\end{array}\right.$ | 985 995 | 15 | $\cdots$ | 319 546 | 665 444 | 16 10 | 17 35 | 856 850 | 127 115 |
| Mnslim $\left\{\begin{array}{l}\text { Rural } \\ \text { Urban }\end{array}\right.$ | 905 <br> 983 | 5 17 | $\because$ | 429 480 | 855 504 | 16 16 | 12 15 | 808 898 | ${ }_{87}^{90}$ |


| Religion |  | Females |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All ages |  |  | 0-5 |  |  | $j-10$ |  |  |
|  |  | $\begin{gathered} \text { Un. } \\ \text { married } \end{gathered}$ | Married | Widowed | $\begin{gathered} \text { Un. } \\ \text { married } \end{gathered}$ | Marriod | Widowed | $\begin{aligned} & \text { Un- } \\ & \text { marrixl } \end{aligned}$ | Married | Widowed |
| 1 |  | 2 | 8 | 4 | 5 | 6 | 7 | 8 | 0 | 10 |
| All Religions $\left\{\begin{array}{l}\text { Rural } \\ \text { Urban }\end{array}\right.$ | - | 478 459 | 408 .402 | 118 | 1,000 1,000 | ". | -• | 992 980 | 8 10 | $\because$ |
| Hindu $\quad\left\{\begin{array}{l}\text { Rural } \\ \text { Uurban }\end{array}\right.$ | - | 471 431 | 897 416 | 132 153 | 1,000 1,000 | $\because$ | $\because$ | 998 987 | ${ }_{18}^{6}$ | $\because$ |
| Ohristian $\quad\left\{\begin{array}{l}\text { Rural } \\ \text { Urban }\end{array}\right.$ | - | 485 539 | 4.4 360 | 91 101 | 1,000 | $\because$ | $\cdots$ | 091 096 | 0 | $\cdots$ |
| Maslim $\quad\left\{\begin{array}{l}\text { Raral } \\ \text { Urban }\end{array}\right.$ | : | $\begin{aligned} & 490 \\ & 449 \end{aligned}$ | 400 418 | 110 138 | 1,000 1,000 | $\because$ | $\cdots$ | 908 900 | 7 10 | $\because$ |


| Religion | Females |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10-15 |  |  | 15-40 |  |  | 40 and over |  |  |
|  | $\left\lvert\, \begin{gathered}\text { Un- } \\ \text { married }\end{gathered}\right.$ | Married | Widowed | $\begin{gathered} \text { Un* } \\ \text { married } \end{gathered}$ | Married | Whowed | Un- married | Married | Widowed |
|  | 11 | 12 | 18 | 14 | 15 | 16 | 17 | 18 | 19 |
| All Religions $\left\{\begin{array}{l}\text { Rupal } \\ \text { Urban }\end{array}\right.$ | -821 | 77 88 | 2 | 148 187 | 778 | 84 | 13 | 498 468 | 488 631 |
| Hitudu $\quad\left\{\begin{array}{l}\text { Rural } \\ \text { Crban }\end{array}\right.$ | 927 891 | 71 167 | 2 | 156 | 759 763 | 85 98 | 18 | 484 437 | 603 683 |
| Cbrintian $\quad\left\{\begin{array}{c}\text { Rursl } \\ \text { Urban }\end{array}\right.$ | 910 <br> 954 | 89 46 | - | 135 310 | 815 628 | 60 63 | 12 28 | 575 518 | 418 |
| Muslim $\quad\left\{\begin{array}{l}\text { Rusal } \\ \text { Crban }\end{array}\right.$ | $\left\lvert\, \begin{aligned} & 920 \\ & 921\end{aligned}\right.$ | 77 76 | 3 3 | 126 136 | 793 768 | 81 97 | 7 | 480 44 | 804 849 |

## SUBSIDIARY TABLE III

Distribution by main age-periods and civil condition of 10,000 of each sex and religion

| Relligion and Age | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unmarried | Married | Widowed | Onmarried | Married | Widowed |
| MLL RELIGIONS | 5,842 | 3,878 | 285 | 4,750 | 4,059 | 1,191 |
| 0-10 | 3,448 | 1 | $\cdots$ | 3,025 | 10 | - |
| 10-15 | 1,212 | 11 | $\cdots$ | 1,106 | 94 | 2 |
| 15-40 | 1,527 | 2,247 | 71 | 596 | 3,056 | 295 |
| 40 and over | 55 | 1,614 | 214 | 23 | 899 | 894 |
| Eindu | 5,908 | 3,807 | 291 | \$,872 | 3,989 | 1,339 |
| 0-10 | 3,000 | 1 | - | 2,953 | 9 | $\cdots$ |
| 10-15 | 1,191 | 7 | , | , 1,076 | 85 | 2 |
| 15-40 | 1,641 | 2,150 | 78 | 618 | 3,023 | 343 |
| - 40 and over | 70 | 1,649 | 213 | 25 | 872 | 994 |
| Christian | 6,687 | 4,046 | 288 | 4,883 | 4,205 | 912 |
| $0-10$ | 3,117 | 2 | - | 3,199 | 12. | - |
| 10-15 | 1,241 | 18 | -• | 1,153 | 110 | 1 |
| 15-40 | 1,276 | 2,465 | 69 | 568 | 3,098 | 195 |
| 40 and over | 33 | 1,560 | 229 | 23. | 985 | 76 |
| Mualim | 6,117 | $\mathbf{3 , 6 8 7}$ | 218 | 4,846 | 4,020 | 1,134 |
| 0-10 | 3,153 | 3 | - | 3,163 | 10 | .. |
| 10-15 | 1,270 | 8 | - | 1,162 | 98 | 4 |
| 15-40 | 1,672 | 2,101 | 62 | 510 | 3,159 | 333 |
| 40 and over | 22 | 1,555 | 154 | 11 | 753 | 797 |
| Tribal Religion | 5,228 | 4,289 | 483 | 4,178 | 4,649 | 1,175 |
| 0-10 | 2,508 | ${ }^{7}$ | $\cdots$ | 2,507 | 22 | .: |
| 10-15 | 1,132 | , 6 | - | 1,046 | 107 | 7 |
| 15-40 | 1,562 | 2,996 | 205 | 623 | 3,553 | 301 |
| 40 and orer | 26 | 1.880 | 278 | - | 967 | 867 |
| Others | 5,823 | 4,016 | 161 | 4,867 | 4,500 | 833 |
| 0-10 | 2,490 | - | - | 3,000 | $\cdots$ | - |
| 10-15 | 924 | - | $\cdots$ | 1,167 | 111 | - |
| $15-40$ | 2,369 | 2,410 | 80 | 500 | 3,556 | 56 |
| 40 and over | 40 | 1,606 | 81 | - | 833 | 777 |

SUBSIDIARY TABLE IV
Proportion of the sexes by oivil condition at certain ages for main religions and natural divisions

| Natural Division and Religion | Number of females per $\mathbf{1 , 0 0 0}$ maies |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All ages |  |  | 0-10 |  |  | 10-16 |  |  |
|  | Unmarried | Married | Widowed | Unmarried | Married | Widowed | Unmarried | Married | Widowed |
| STATE | 2 | 3 | 4 | Б | 6 | 7 | 8 | 9 | 10 |
| All religions | 808 | 1,034 | 4,127 | 979 | 6,402 | 3,381 | 900 | 8,712 | 8,687 |
| Hindm | 791 | 1,047 | 4,098 | 984 | 8,513 | 3,808 | 904 | 12,134 | 6,981 |
| Christion | 835 | 1,007 | 3,069 | 976 | 5,322 | 3,000 | 901 | 5,874 | 3,733 |
| Muslinu | 758 -38 | 1.049 | 5,016 | 960 | 3,440 | $\bullet$ | 875 | 11,385 | 31,010 |
| Tribal religion | 738 | 1,002 | 2,247 | 923 | 3,000 | $\cdots$ | 854 | 15,000 | . |
| Others Loysland | 579 | 810 | 3,750 | 881 | - |  | 913 | -• | - |
| All religiona | 795 | 1,060 | 4,982 | 978 | 5,937 | 7,250 | 916 | 18,688 | 9,700 |
| Hindu | 791 | 1,069 | 5,401 | 984 | 9,262 | 22,000 | 916 | 13,99R | 10,143 |
| Ohristina | 821 | 1,024 | 3,665 | 969 | 3, 426 | 1,667 | 926 | 10,686 | +,400 |
| Muslim | 754 | 1,095 | 6,675 | 954 | 2,74 | $\cdots$ | 893 | 9,096 | 30,000 |
| Tribal religion | 800 | 833 | . 3 | 2,00n | $\cdots$ | - | 500 | - | $\cdots$ |
| Others Midland | 508 | $9 \pm 0$ | 4,333 | 879 | . | . | 1,000 | . | $\cdots$ |
| All religions | 820 | 1,024 | 3,513 | 981 | 6,778 | 3,750 | 888 | 7,304 | 6,805 |
| Hindu | 804 | 1,036 | 3,943 | 980 | 8,513 | 3,400 | 801 | 11,297 | 7,1313 |
| Christian | 851 | 1,011 | 2,792 | 986 | 6,057 | 3,667 | 873 | 5,268 | 3,inti |
| Muslim | 771 | 1,012 | 4,960 | 961 | 4,529 | $\cdots$ | 859 | 2,000 | 28,000 |
| Tribal religion | 716 | 989 | 3,889 | 905 | 2,000 | $\cdots$ | 015 | b,000 | . |
| Others Eighland | 167 | 1,000 | - | . | . | - |  | . | . |
| All religions | 721 | 930 | 3,149 | 974 | 5,857 | 1,833 | 934 | 7,941 | 2,400 |
| Hindu | 710 | 963 | 3,331 | 1,007 | 5,947 | 871 | 892 | 8,371 | 1,917 |
| Christian | 755 | 871 | 2,488 | ¢102 | 8,143 | 4,000 | 1,110 | 6,130 | 2,310 |
| Musilim | 703 | 882 | 4,480 | 1,008 | 7,000 | . | 816 | 14,556 | . |
| Tribal religion | 747 | 1,049 | 2,000 | 927 | .. | . | 836 | . | . $\cdot$ |
| Others | 571 | 125 | 1,000 | 3,000 | - | $\cdots$ | . | - | $\bullet$ |


| Natural Division and Religion | Number of females per 1,000 malcs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - 15-10 |  | Widowed | to and over |  |  |
|  | Unmarried | Married |  | Unmartied | Marricd | Wdownl |
| STATE | 11 | 12 | \| 13 | 14 | 15 | 16 |
| All religions | 885 | 1,342 | 4,141 | 415 | 650 | 4,119 |
| Hindu | 376 | 1,405 | 4,420 | 350 | 529 | 1,0181) |
| Christian | 432 | 1,218 | 3,213 | fi68 | 612 | 3,012 |
| 3148 slim | 292 | 3,439 | 5,164 | 488 | 468 | 4,183 |
| Tribal religion | 369 | 1,370 | 1,355 | , | 476 | 2.8 Cit |
| Others Lowland | 15 | 1,067 | 500 | .. | 375 | 7,0(5) |
| All religions | 898 | 1,453 | 5,490 | 409 | 518 | 4,828 |
| Hindu | 372 | 1,476 | 5,610 | 356 | 614 | 8,326 |
| Christian | 468 | 1,352 | 4,668 | 615 | 615 | 3,4137 |
| Muslim | 304 | j,067 | 6,741 | 444 | 158 | [,170 |
| Trival rellgion Others | 800 | 667 | 6,74 | , | 067 | O,00 |
| Others midiand | 151 | - 1,350 | 1,000 | - | 893 | 6,000 |
| All rallgions | - 891 | 1,977 | 8,294 | 457 | 891 | 8,680 |
| Hindu | 387 |  |  |  | 587 | 4,076 |
| Ohristian | 419 | ${ }_{1}^{1,1769}$. | 2,695 | ${ }_{749}$ | 650 | 2,1815 |
| ${ }_{\text {Masllm }}$ | 293 | 1,334 | 8,794 | 667 | 485 | 4,5194 |
| ${ }^{\text {Tribal }}$ Others ${ }^{\text {a }}$ (ion | 265 | 1,419 | 1,750 | 6 | 446 | 2,610 |
| Etas Eighland | - | . | - | - | -• | - |
| All religions | 256 | 1,142 | 2,707 | 183 | 450 | 3,407 |
| Hindu | 257 |  |  |  |  |  |
| OLristian | 277 | 1,017 | 2,841 2.206 | 147 478 | 437 487 | 2,618 |
| Tribal religion | 166 | 1,091 | 3,663 | 188 | 418 | 4,970 |
| Others | 410 200 | 1,361 | 1,269 | .- | 485 | 2,614 |

SUBSIDIARY TABLE $\mathbf{Y}$
Distribation by oixil condition of 1,000 of each sex at certain ages for selected oas tes


SUBSIDIARY TABLE Y--(Continued)


SUBSIDIARY TABLE $\mathbf{Y}$-(Continued)

| Caste |  | Distribution of 1.000 males of each age by civil condition |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 24-43 |  |  | 44 and over |  |  |
|  |  | Unmarried | Married | Widowed | Unmarried | Married | Widowed |
|  |  | 17 | 18 | 19 | 20 | 21 | 22 |
| 1 | Arayan Hiridu | 109 | 854. | 37 | 14 | 827 | 159 |
| 2 | Brahman, Malayala (Namptititi and Prtti) " | 140 | 828 | 32 | 61 | 831 | 108 |
| 3 | Brahman, othera - | - 83 | 893 | 24 | 21 | 854 | 125 |
| 4 | Catholic Atasar Christian | 187 | 844 | 19 | 22 | 836 | 142 |
| 5 | Chackaravar " | 172 | 810 | 18 | 6 | 873 | 121 |
| 6 | Chetti Bindu | 169 | 800 | 31. | 17 | 842 | 141 |
| 7 | flavan $\because$ | 143 | 828 | 29 | 26 | 836 | 118 |
| 8 | Kamimijan (Viswakarma) " | 125 | 851 | 24 | 21 | 871 | 108 |
| 9 | KagikkĖan (including Malavēlan) * | 226 | 704 | 70 | 99 | 727 | 174 |
| 10 | Kaniyãn " | 158 | 814 | 28 | 49 | 830 | 121 |
| 11 | Krishnanvaica in | 112 | 864 | 24 | 112 | 761 | 127 |
| 12 | Kudumi " | 105 | 862 | 33 | $24^{\prime}$ | 831 | 145 |
| 13 | Koravan (including Malankuravan) Ditto $\qquad$ | 112 | 853 862 | 35 65 | $\begin{array}{r}1 \\ .13 \\ \\ \hline\end{array}$ | 851 693 | 136 289 |
| 14 | Malayatayan Jlindu and Tribal religion | 70 | 901 | 29 | - | 795 | 205 |
| 15 | Mannãn $\quad$ \% | 65 | 888 | 47 | - | 856 | 144 |
| 16 | Maravan Hindu | 102 | 863 | 35 | 8 | 842 | 100 |
| 17 | Mukkuvan Christion | 120 | 868 | 12 | 16 | 853 | 131. |
| 18 | Knthuvan Hindu and Tribal religion | 37 | 937 | 26 | $\cdots$ | 932 | 68 |
| 19 | $\underset{\substack{\text { Näd } \\ \text { Dito } \\ \text { (ChInnān })}}{$ Hindu  <br>  Christian $}$ | 178 | $\begin{aligned} & 795 \\ & 813 \end{aligned}$ | 27 | 11 | 8847 | $\begin{aligned} & 142 \\ & 134 \end{aligned}$ |
| 20 | Nigar Hindu | 207 | 764 | 29 | 44 | 833 | 123 |
| 21 | Pallan -n | 114 | 845 | 41 | 10 | 856 | 134 |
| 22 | Patavan | 90 | 872 | 38 | 18 | 840 | 142 |
| 28 | $\begin{array}{cl} \text { Parayan (Sāmbarar) } \\ \text { Ditto } & \text { Obristian } \end{array}$ | 97 98 | 861 | 42 39 | 26 18 | 808 821 | 166 161 |
| 24 | Pulayan (Chētamar)DittoHindu <br> Christian | 76 82 | 882 875 | 42 43 | 13 | 841 831 | $\begin{aligned} & 146 \\ & 154 \end{aligned}$ |
| 25 | ĖAliyan (Pattarigan) Hindu | 107 | 862 | 31 | 18 | 808 | 174 |
| 26 | Syrian Ohristian | 49 | 929 | 22 | 13 | 836 | 151 |
| 27 | Thantin (fisli) Hindu | 118 | 851 | 31 | 28 | 872 | 100 |
| 28 | Thantapulayan . | 29 | 971 | - | 29 | 971 | * |
| 29. | OWhtan (Kocchuvêlan) Chrintian | 161 | 774 | 65 | - | 750 | 250 |
| 30 | Valan Hindn | 68 | 890 | 42 | 12 | 840 | 148 |
| 31 | Vrijyan (Vanigavaisyan) . " | 119 | 851 | 30 | 15 | 862 | 123 |
| 32 | Vapplin | 103 | 841 | 56 | 21 | 817 | 162 |
| 38 | Velackithslaniyar | 126 | 840 | 34 | 29 | 848 | 123 |
| 34 | Velan | 68 | 884 | 48 | 18 | 834 | 148 |
| 35 | Vejhn (Kusavan) $\quad$ - | 94 | 868 | 38 | 18 | 946 | 36 |
| ${ }^{36}$ | Veluspa | 168 | 802 | -30 | 81 | 845 | 124 |
| 37 | Veluth[idanzyar " | 91 | 868 | 41 | 40 | 798 | 162 |
| 38 | Vētan (including Maluvētan) n | 102 | 859 | 39 | 19 | 835 | 146 |
| 39 | VItasaivar (Pantyism only) | 121 | 850 | 29 | 24 | 837 | 139 |
| 40 | Yrdavan (Idayan) " | 133 | 818 | 44 | 10 | 823 | 167 |

SUBSIDIARY TABLE Y-(Continued)


## SUBSIDIARY TABLE Y-(Continued)



SUBSIDIARY TABLE Y-(Concluded)


## CHAPTER VII

## INFIRMITIES

245. From 1901 onward it has been the practice in Travancore to collect statistics of five infrrmities, namely, insanity, deaf-mutism, blindness, leprosy and elephantiasis, Elsewhere in India the first four only are included in the inquiry. Elephantiasis is very largely prevalent in the coastal tract in this State. Its seriousness will be evident from the fact that the number' afficted with it, according to the present census, is 14,709 as against 10,910 persons afflicted with all the other four infirmities. together. It has, therefore, been considered advisable to make use of the opportunity afforded by the census to ascertain the number of persons suffering from elephantiasis in addition to those afflicted with the usual four infirmities about which statistics are collected throughout India.

The instructions issued to the enumerators for recording the infirmities were:"If any person be totally blind of both eyes, or deaf and dumb, or insane, or suffering from corrosive leprosy, or elephantiasis, enter the name of the infirmity in the column. Do not enter those who are blind of one eye only, or who are suffering from white leprosy only. In eliciting information about elephantiasis, take care that no offensiye question is put, but observe whether there is any swelling in the leg or hand and obtain the particulars from the chief person in the house." The caution in regard to elephantiasis is necessary, because some people, and particularly the educated and the well-to-do, - consider it derogatory to be known to be suffering from this disease.
246. The difficulty of correctly diagnosing diseases like insanity and leprosy, their wilful concealment by the enumerated, and accidental omissions by the enumerators make the returns of infirmities the least reliable of all the statistics collected at the census. This is so not only in India but even in more advanced countries like England and the United States, and in those countries the inquiry about infirmities at the population census has been already abandoned. The untrustworthiness of the returns of infirmities collected at the Indian census has been pointed out in all the previous Census Reports and it has even been suggested that the inquiry should be left out from the census altogether. This suggestion has not yet been acted up to, because there is no other means of obtaining any kind of statistics regarding these infirmities in India. An expert inquiry into each infirmity by duly qualifed medical men cannot be undertaken without incurring very heavy expenditure, and without the work being protracted over a number of years, though this, no doubt, is the most satigfactory way of obtaining reliable statistics. In the absence of such special inquiries it has been decided to continue the practice of collecting whatever information it is possible to obtain at the population census. Mistakes due to omissions, whether intentional or accidental, being more or less constant at the different censuses, the figures collected can certainly be used to compare the variations in the intensity of the infirmities from census to census and their distribution in different localities at the same census. It must also be noted that the inaccuracies are becoming less and less after each census. This can be proved by the number of deal-mutes returned at different age-periods at the last three censuses in Travancore. Deaf-mutism is a congenital disease, and appears in-

| Actual number of deaf-mutes at certain age-periods at last chree censuges |  |  |  |
| :---: | :---: | :---: | :---: |
| $\Delta \mathrm{Ac}$-period | 1911 | 1921 | S1 |
| $\begin{aligned} & 0-10 \\ & 1020 \\ & 20-30 \end{aligned}$ | 131 | $\stackrel{40}{4}$ | $\ddot{\square}$ | variably at bith; and only very rarely, if at all, is it likely to be acquired during life. If the enumeration were correct the statistics would reveal a progressive decline from census to census in advancing ages. That this has not always been the case will be evident from the figures given in the margin. The number of deafmutes in 20-30 age-period in 1931, instead of being less, is actually more than that in the age-period $10-20$ in 1921, and the latter again is more than the number at the ages below 10 in 1911. These figures show that the inaccuracies at the earlier censuses are being removed gradually at the subsequent ones.

Every possible precaution was taken to collect as correct statistics as possible at this census. The enumerators were intelligent schoolmasters acquainted: with the inhabitants of the localities to which they were posted, and hence the chances of omission

Nature of the
inquiry.

Accuracy of the return.
due to wifful concealment of the infirmities by the enumerated were greatly minimised. The instructions to the enumerators were made sufficiently clear to remove all doubts and ambiguities in the definition of the terms. Omissions due to the inability of the enumerators to diagnose the diseases in their incipient stages, on account of the lack of technical knowledge, could not. however, be avoided, and this defect will continue to vitiate the results of the inquiry as_ long as it is conducted by laymen at the ordinary population census.

Reference to statistics.

Yariations in infirmitie aince 1801.
247. The statistics dealt with in this chapter are contained in :-
I. Imperial Table IX which shows the distribution of the afficted persons by age and locality.
2. Subsidiary Table 1 showing the infirm per 100,000 of the total population at each of the last five censuses.
3. Subsidiary Table II showing (a) the infirm per 100,000 , and (b) the female infirm per 1,000 males, at certain age-periods.
4. Subsidiary Table III showing the age distribution of 10,000 infirm of each sex.
248. The statement in the margin gives the number of persons afficted with each infirmity and their totals

| Infrnity | 1931 | 1921 | 1911 | 1901 | Number afficted in 193 per 100 athicted in 1901 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Insann | 2,068 | 1,271 | ${ }^{628}$ | ${ }_{503}$ | 41 |
| ${ }_{\text {den }}^{\substack{\text { Snpf-mutes } \\ \text { Blind }}}$ | 2, | ci, | ${ }_{1}$ |  | ${ }^{3}$ |
| ¢ | ${ }_{\text {2,789 }}$ | ${ }_{2,088}^{1,080}$ | ${ }^{1,115}$ | ${ }^{1,14}$ | 19\% |
| neticted with | 4,709 | 11,633 | 4,217 | ¢, 294 | 218 |
| Total | 25,840 | 18,815 | 8,170 | 9,693 | 265 | at the last four censuses. The figures show that there has been a general increase in the incidence of all infirmities from census to census except in 1911, when the numbers returned under leprosy and elephantiasis were appreciably less than those returned at the previous census. Comparing the numbers in 1901 and 1931 it is seen that, for every 100 persons afficted with each infirmity in 1901, there were 411 persons suffering from insanity, 356 from deaf-mutism, 306 from blindness, 197 from

Increase in the numberx nficted in the decade 1021-1031 leprosy and 248 from elephantiasis in

| Infirmity | Per cent. |
| :---: | :---: |
| Iname | $62 \cdot 7$ |
| Denf-mates | 39-9 |
| Blind | 89.9 |
| Lepers | $35 \cdot 5$ |
| Persons afflicted with elephantiasis | $25^{-4}$ |
| Total | $36 \cdot 3$ | 1931, and that the total number of all the afflicted persons increased by more than two and a half times during the last thirty years. This is indeed a large increase if the figures are correct. The figures must, however, be regarded as an indication of the greater accuracy in the returns of the recent censuses as well as of an actual increase in the prevalence of the diseases. The very large rise in the numbers of the insane and the blind between 1921 and 1931, namely, 62.7 per cent. and 89.9 per cent. respectively, may be due partly to greater accuracy in the returns of 1931 and partly also to the spread of the diseases during the intercensal period.

Insanity and leprosy appear to be more prevalent in Travancore than in India as a whole, while in deaf-mutism

| Infirmity | Number afficted per 100,000 of the Population in Travancore and India |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Travancore |  |  |  | Indin |  |  |
|  | 1931 | 1921 | 1911 | 1001 | 1021 | 1911 | 1001 |
| Insane | 41 | 32 | 18 | 17 | 28 | 26 | 26 |
| Deaf-mates | 87 | 54 | 29 | 28 | 60 | 64 | 62 |
| Bhind | 63 | \$2 | 35 | 35 | 152 | 142 | 121 |
| Lepers | 55 | 51 | 33 | 48 | 32 | 35 | 33 |
| Total | 218 | 178 | 115 | 128 | 272 | 287 | 232 |

striking. In 1921 Travancore had only 42 blind persons in 100,000 of the population as
against 152 in India. The proportion of deaf-mutes was only six less, that of the insane four more and of the lepers nineteen mote per 100,000 in Travancore than in India.
249. The statements below show the distribution of the infirm and the ratio Distribution per 100,000 of the population in the various administrative and natural divisions of the State. Of the administrative divisions the Northern Division contains the largest number and the highest ratio of afficted persons, and the High Range the smallest number and the lowest ratio. The Central and the Southern Divisions occupy intermediate positions, and of the two, the Central contains a larger number and a higher ratio than the Southern. Out of the total number of 25,640 afflicted persons, the Southern Division contains $15 \cdot 1$ per cent, the Central 32.7 per cent., the Northern 51.7 per cent., and the High Range 0.5 per cent. Among the natural divisions the distribution is 76.3 per cent. in the Lowland, $21 \cdot 7$ per cent. in the Midland, and 2 per cent. in the Highland. The High Range and the Highland Divisions consist of high hills and elevated lands where air, water, and soil are free from the impurities likely to be found in the congested parts of the plains. All the infirmities except elephantiasis are fairly well distributed in the plains divisions. Elephantiasis is essentially a disease of the lowlands, especially of the coastal tract, where there are extensive water-logged areas affording facilities for the breeding of the particular species of mosquito which is the medium for the communication of this disease from man to man. Of the total number of persons afflicted with this disease, as many as 91.8 per cent. are in the Lowland Division only. Of the administrative divisions the Central Division contains 31.8 per cent. and the Northern 65.4 per cent. The disease is prevalent chiefly in the coastal regions of these divisions.

250. The proportions of females per $\mathrm{J}, 000$ males afflicted with different infirmities Infirmities are given in the margin below. The figures show that males more than females are subject to by sex. Nus mber of females per 1000, malas aflicted

| Disease | 1931 | 1921 |
| :---: | :---: | :---: |
| Insane | 797 | 713 |
| Deaf.mates | . 838 | 681 |
| Blind | 763 | 700 |
| Lepers | 369 | 391 |
| Persons afflicted with elephantinsis . | 746 | 700 |
| Total | 889 | 658 |

exposed to the infection of diseases like leprosy and elephantiasis the the being less the attack of these infirmities. Taking all the infirmities together, the ratio is 689 females to 1,000 males in 1931. The highest ratio is among the insane, there being 797 insane females to 1,000 insane males, while the lowest ratio, namely, 369 females to 1,000 males, is among the lepers. More or less similar variations are seen in the ratios in 1921 also. The low proportion of females among the afflicted may be due chielly to greater concealment of the infirmities by them, and probably also to their

Infirmities by age.

Infirmitiea in tomins.

Combined infirmities.

Definition
of insanity.
251. Congenital diseases like deaf-mutism and blindness are prevalent generally

| Number of persons afflicted in dificrent age-groups |  |  |
| :---: | :---: | :---: |
| Age-group | Number | Per cent. cf the total |
| 0-20 | 3,431 | 13.4 |
| 20-50 | 14,492 | $58 \cdot 5$ |
| 50 \& over | 7,717 | $30 \cdot 1$ | among children and adults, while insanity, leprosy and elephantiasis are seen more among adults than among children; but all infirmities taken together seem to be more prevalent among the grown-ups than among young persons, as can be seen from the marginal figures. More than 56 per cent. of the afflicted persons are of the ages 20-50, about 30 per cent. are above 50 and only a little over 13 per cent. are below 20.

252. Particulars regarding the number of persons afflicted with one or other of the infrrmities in the nineteen municipal towns were abstracted from the census schedules and compiled separately. The relevant figures are given in the margin. The population of the municipal towns is eight per cent. of the aggregate population of the State, but the number of persons afflicted with infirmities in the municipal towns forms only 6.5 per cent. of the total number afflicted in the State. The incidence of infirmities is, therefore, slightly less in municipal towns than in other parts of the State. This is true of all the infirmities as can be seen from the last two columns of the marginal statement. The. average ratios for the State are higher than those for the towns in all cases. The infirmities under reference are not such as will find a more favourable soil to grow on in towns than in country parts, and particularly in towns like those existing in Travancore which have not got such impure atmosphere and unhealthy surroundings as large industrial cities of the West. It is not, therefore, surprising that the infirmities in question are not more prevalent in towns than in other parts of the State.
253. Details of persons afflicted with more than one infirmity are given on the fly leaf of Imperial Table IX. The total number of such persons is 63 consisting of 44 males and 19 females. The combination of leprosy and elephantiasis has the largest number, viz., 26; the next most favaired cortibination is deaf-mutism and blindness which account for eleven cases; and the next in order, aré combinations of blindness and elephantiasis having eight afflicted persons, and insanity and dibaf-mutism, and insanity and elephantiasis having six afflicted persons each. The other dáble infirmities can claim only one or two persons each, and there is; one individual suffering̈:from triple infirmities of deaf-mutism, blindness and elephantiasis.

254. "The standard of mental health," says E. G. Younger," is in itself so variable in different individuals that it is impossible to fix any hard-and-fast line between sanity and insanity. This line is replaced by a belt or borderland of no-man's country." * Bucknill defines insanity "as a condition of the mind in which a false action of conception or judgment, a defective power of the will, or an uncontrollable violence of the emotions and instincts, have separately or conjointly been produced by disease." This, I believe, is practically the definition adopted for census purposes. Mr. J. T. Marten observes in the Census Report of India for 1921, "The term, insanity, as used at the census, includes not only congenital idiots and raving lunatics but also the weak-minded who are not actually insane." $\dagger$ It is neither attempted nor is it practicable for the census enumerator to distinguish between the violent forms of mental derangement and the milder forms of idiocy, melancholia, dementia, imbecility, cretinism, etc.
255. The difficulty of diagnosing insanity, especially the milder forms of it, is so great that the census returns could not be expected to be a correct record of the persons
[^32]
## MAP OF TRAVANCORE

Showing by Taluks the Distribution of the Insnne
Scale 1 Iuch = 16 Mriles

afficted with this malady. Added to this, there is the probability of parents concealing cases of insanity in children in the hope that, when they grow up, they will get over it and become normal persons. Owing to such accidental and deliberate omissions the figures returned at the census are likely to fall short of the actual numbers. But, as we have seen in paragraph 246 above, the returns are improving from census to census, and the figures recorded at different censuses may be utilized for a comparative study of the incidence of this disease.
256. The number of insane males returned at the present census in the State is 1,151 and that of insane females 917, the proportion of females per 1,000 males afflicted being

Distribation and variation. . 797. The proportion of the insane per 100,000 of each sex has increased from 19 in 1891 to 37 in 1921 and to 45 in 1931 in the case of males, and from 11 in 1891 to 27 in 1921 and to 36 in 1931 in the case of females. (See Subsidiary Table I at the end of this chapter.) Probably, the disease is spreading more among males than among females. The total number of insane persons increased by 27.7 per cent. between 1891 and 1901, and by $24^{\circ} 9$ per cent., in the next decade. From 1911 to 1921 the increase was as high as 102.4 per cent., and during the last decade it was 62.7 per cent. The very large increase during the last two decades was probably due to greater accuracy in the returns. The net increase during the past fifty years, according to the census records, was as much as 424.9 per cent.

The distribution of the insane in the different taluks of the State is shown in the map opposite. It must be noted that the inmates of the Lunatic Asylum in Trivandrum have been included in the afflicted population of the respective taluks in which they were born. The figures printed in the map are those of the afflicted persons per 10,000 of the population of each taluk. From the map it will be seen that the taluk of Minachil contains. the highest proportion of the insane, namely, seven per 10,000 or 70 per 100,000 of the population, as against the State average of 41 per 100,000 . Six talukg have a proportion of 50 , eleven taluks 40 , nine taluks 30 , one taluk 20 , and two taluks 10 insanie persons each per 100,000 of the population. The two taluks of the High Range Division have the smallest proportion.
257. In the previous paragraph it has been stated that insanity is more prevalent among Insanity by males than among females. This has been the case in Travancoreat all the censuses. The sex and age. diagram given below, showing the incidence of insanity among males and females at diferent age-periods at the last three censuses, bears out this statement.


Throughout India the proportion of the insane is greater among males than among females. According to 1921 census there were in India three male insane for every two female insane. The proportion for Travancore at the present census is 5 to 4 . The lunatic asylums in England and Wales generally contain more women than men, and so it may be inferred that women! are more liable to become insane than men. But it must be remembered that the population in England and Wales has an excess of women and also that women lunatics have been found to live longer than male ones in that country.

Insanity is a hereditary disease and it may appear at any age. "Sir George Savage says that in his experience at least one-third of all the patients admitted into asylums have insane blood relations........... It is generally believed that a father is more likely to pass his insanity on to his sons and a mother to her daughters." $*$ Being a hereditary disease insanity ought to be more common among children than among adults. But from the diagram given above it would appear that in Travancore there are very few insane children below ten years of age. This was found to be the case throughout India in 1921 , and Mr. J. T. Marten says in his Report for that year, "I think it unlikely, however, in any case, that the return of insane children would be at all accurate and I doubt if any inference could bedrawn from the paucity of children in the record." + E. G. Younger says that attacks of insanity are rare under the age of puberty. It may be that children who inherit the disease from their parents do not develop it in their childhood. In Travancore we see a perceptible increase in the incidence of insanity both among males and females after the 10 th year. The upward course reaches the maximum at the age-group $20-30$ for males and $40-50$ for females, after which there is a gradual fall. From Subsidiary Table III given at the end of this chapter it will be noticed that out of 10,000 insane men, 3,832 are of the ages 40 and over, while the corresponding proportion of insane women is 4,941 . The larger proportion of women in the higher age-groups indicates either that the disease develops in them later than in men, or that insane women live longer than insane men, which, be it noted, agrees with the observation already referred to regarding the longevity of women lunatics in England and Wales.

Canses of insanity.

Lunatic
Asylum.

258 Heredity as a contributing factor to insanity has already been mentioned. Excessive indulgence in alcohol and drugs is also believed to be a potent cause of insanity. The habit of opium-eating is more prevalent in some localities in Travancore than in others. Though there is no direct evidence of any connection between this habit and insanity, it is interesting to note that in Minachil taluk which contains the highest proportion of insane persons there is also the largest consumption of opium, the average consumption per head of population in the taluk in the year 1930-31 being 0.275 tola. $\ddagger$
259. The Travancore Government maintains a lunatic asylum at Trivandrum. It is situated, along with the Leper Asylum, on a hill three miles away from the town and comprising an area of 35 acres of land. It was started as early as in 1870 as an annex to the General Hospital, Trivandrum, but was separated from the latter and removed to its present habitation in 1896. In 1904 the Travancore Government passed a Lunacy Regulation on the lines of the British Indian Lunacy Acts 35 and 36 of 1858, under which the Government have been empowered to establish lunatic asylums for the reception and detention of lunatics, and the District Courts have been authorised to enquire and adjudge whether any person alleged to be a lunatic is of unsound mind and, if so adjudged, to appoint a guardian of the property and person of the lunatic. The Regulation also contains provision for arresting and sending to the lunatic asylum any person who appears to be a dangerous lunatic wandering at large in any public street or thoroughfare. By enacting this Regulation and by giving effect to its provisions the Travancore Government have undertaken the duty, cast on every Government, of safeguarding the interests of persons of unsound mind who are unable to manage their affairs and of maintaining at the Government's cost such of them as have no means to maintain themselves nor any relations to look after them. It is for the latter purpose that the lunatic asylum is maintained at Trivandrum.

On the census day the lunatic asylum had 141 inmates consisting of 99 males and 42 females. Of the inmates, 79 were Hindus, 48 were Christians and 14 were Muslims. Out of the total number of 2,068 insane persons recorded at the census, only about seven per cent. were in the asylum.

## Deaf-mutism

Yariation
and diluribution
260. The number of deaf-mutes returned at the census increased gradually from 1891 till 1911, but in 1921 there was an abnormal rise and in 1931 the increase was considerabl) less. The increase was 8.6 per cent between 1891 and 1901, $22 \cdot 7$ per cent. between 1901

[^33]
## MAP OF TRAVANCORE

Showing by Taluks the Distribution of the Denf-mutes
Scale 1 luch $=10$ Milas

and 1911, 118.4 per cent. between 1911 and 1921, and 32.9 per cent. between 1921 and 1931. The sharp rise in 1921 must have been due to the change made in the imstructions for recording the deaf-mutes at that census. - In previous censuses the :instruction was that only persons who had been deaf and dumb from bith should be recorded as deaf-mutes; but in 1921 the words "from birth" were omitted, and consequently persons who became deaf subsequent to birth might have also been included in the return and the number thus swelled up. Deaf-mutism is a congenital disease and will, therefore, appear at birth only. If a person becomes deaf by some other cause, such as senility in old age, the secondary effect of a deadly disease, etc., he could not be treated as a genuine deaf-mute. This distinction was made clear to the enumerators at the present census and the chances of the inflation of the number by including persons who became deaf subsequent to birth were, therefore, less in 1931 than in 1921. One cannot, however, vouch for the complete accuracy of the return. Inclusion of cases of senile deafness acquired late in life and omission of congenital deaf-mutism; in children might have occurred at this census also, but not so largely as at the previous censuses.

The variations in the number of deaf-mutes of males and females per 100,000 of each sex at the last five censuses are shown in Subsidiary Table I at the end of this chapter. The proportion among males decreased from 34 in 1891 to 31 in 1931, increased to 34 again in 1911, to 63 in 1921 and to 69 in 1931, while among females it decreased from 24 in 1891 to 23 in 1901, increased to 24 in 1911 and to 45 in 1921 and decreased to 44 in 1931. Female deaf-mutes have always been less than the male, the ratio in 1931 being 638 females to 1,000 males.

The map opposite gives the number of deaf-mutes per 10,000 of the population of each taluk. The highest proportion, namely, eight per 10,000, is seen in Sherthala taluk. This is equal to 80 per 100,000 as against the State average of 57 pen 100,000 .: Five taluks have a proportion of seven per 10,000 , and of these, three are in the Northern Division and two in the Southern Division. There are nine taluks with six deaf-mutes, another nine with five, four with four, and two with three each per 10,000 persons. Mr. J. T. Marten says in the India Census Report of 1921 that it. was shown in the report of last census that the areas of maximum prevalence are generally along the seacoast or along the upper reaches of certain rivers. In Travancore the taluk which has-the highest proportion (Sherthala) and two out of the five taluks which have the next highest (Neyyattinkara and Chirayinkil) lie at the seancoast, while two taluks of the latter category, (Minachil and Muvattupula) and two others which have the next highest proportion (Thodupula and Devikulam) are along the upper reaches of large rivers. These circumstances seem to support the inference drawn from the India census returns of 191.
261. The diagram given below represents graphically the number of male and Deas-matime female deaf-mutes per 100,000 of each sex at each decennial age-period at the last three by sax and censuses.


The figures for quinquennial age-periods for 1931 are given in Subsidiary Table II, and similar :figures for the previous censuses are contained in Subsidiary Table III for those years. One remarkable feature is that a much larger proportion of children are aflicted with deaf-mutism than with any other infirmity. This is as it should be, because deaf-mutism is a congenital disease. If the record had been correct the proportion should have shown a progressive decline from the lowest age onward; but actually we find that the ratio at the age-period 10-20 is higher than that below ten. This can only be attributed to the omission of deaf-mute children of early ages from the return. In 1931 the ratio reaches the maximum at the age of 20 and thereater there is a gradual decline in ea-h successive decennial age-period, except in the case of males whose. ratio shows a small rise at the age-period 60 and over. In the 1921 census, on the other hand, both the male and lemale ratios increased from infancy up to the age of 30 , decreased slighty in the next two decennial age-periods and increased again sharply reaching the. maximum at the age-group 60 and over. The progressive decline in the ratios of 1931. and the ups and downs in those of 1921 after the 20th year support the observation, already referred to, regarding the inflation of the returns of later age-periods in 1921 by the inclusion: of cases of deafness brought on by senility

Distribution of 10,000 dedf-mutes of each sese by decennial agr-periwds in $19 \$ 1$ and 1981
 and other causes. The greater irregularities in the variations in 1921 than in 1931 will be made clear by the distribution of the deaf-mutes by the decennial age-periods; which is shown in the marginal statement. The figures were taken from Subsidiary Tables II of 1921 and III of 1931. In 1931, barring the increase from $0-10$ to-10-20; age-period, there is a progressive. fall in the proportions of both male and female deaf-mutes after the 20th year. whereas in 1921 the rise in the proportions at the ages of 60 and over in the case of males and females, and in the age-group 20-30 in the case of females, is anomalous which can only be explained by the discrepancies in the returns.

## Blindness

Yariation and distrlbation.
262. Of all the infirmities blindness is the easiest to diagnose and omissions in the returns due to failure to detect this infirmity will, therefore, be rare. Omissions due to wilful concealment will also be rare, because blindness is not looked upon by the people with aversion as madness or leprosy is. The only source of error in the record of the bind is the accidental omission due to the carelessness of the enumerators, and this may sometimes be appreciable, as will be seen presently.

The number of blind persons has increased steadily from decade to decade. In the decade 1891-1900 the recorded increase was only 26 per cent., in the next decade it rose to 16.7 per cent., in the following to 38.0 per cent., and in the last decade (1921-1930). it was as high as 89.9 per cent., the actual number having risen from 1,680 in 1921 to3,191 in 1931. Such a large increase cannot be entirely due to natural causes. The. Medical Officer in charge of the Ophthalmic Hospital, Trivandrum, told me that from his. knowledge of the country he thought that the number of blind persons recorded in 1921 was far short of the actuals. His inference is justified by the large increase disclosed by the returns of 1931. As in the case of insanity and deaf-mutism, blindness also appears to be more prevalent among men than among women, the ratio being 763 blind females to 1,000 bind males in 1931. The rate of increase in numbers during the last decade was, however, 99.6 per cent. for females and 83.2 per cent. for males, which shows that blindness is spreading faster among the female sex than among the male.

As has been pointed out in paragraph 248 above, blindness is less prevalent in: Travancore than in most other parts of India. In 1921 Travancore had only 42 bind persons per 100,000 of the population as against 319 in Baroda and 152 in India as a whole. The proportion in Travancore even in 1931 is only 63 per 100,000 which is less than half of what it was in India in 1921. The damp climate, the green vegetation seen throughout the year, and the laterite soil which is least dusty probably cause comparatively less eye troubles and consequently less blindness in Travancore than elsewhere in India.

## MAP OF TRAVANCORE

Showing by Taluks the Distribution of the Blind
Scale 1 hach $=16$ Miles


The map opposite shows the distribution of the blind in the different taluks. : The number afflicted per 100,000 of the population is 63 for the whole State, but in three taluks; namely, Minachil, Muvattupula, and Vaikom, the proportion is nine per 10,000 or 90 per 100,000; in Kalkulam, Kunnathunad and Thodupula it is 80 ; in Agasthiswaram, Vilavancode, Shenkotta, Ampalapula, Sherthala and Parur it is 70; and in the other taluks it ranges between 60 and 20. It is noteworthy that in almost all the taluks in the Northern Division the proportion of the blind is higher than the average for the: State: Minachill which, as we have already seen, has the highest proportion of the insane is also one of the three taluks having the highest proportion of the blind:
263. The diagram below shows the distribution of the blind per 100,000 of each Bundness by: sex by decennial age-period at the last three censuses.:


At all the age-periods in all the censuses the male blind have outnumbered the female. The proportion in infancy and early childhood has always been the lowest, and in subsequent' ages there has been a progressive increase, the highest proportion being reached in the age-group 60 and over both for males and. females. Blindness is generally. acquired during life and is more a defect of old age than of childhood or of adult period. But among the youth, especially of the school-going ages, the number of the blind is unfortunately increasing, as can be seen from the figures given in the margin, showing the distribution of 10,000 blind in the age-periods 0-5, 5-10, $10-15,15-20$ and $20-25$ in 192 and 1931. The figures were taken from Subsidiary Tables II of 1921 and III of 1931. In the ages up to 15 the number of blind males has decreased during the decade and in . the: 'next two age-groups it has increased, while of the blind females there has been an increase in the agegroups $0-5$ and $20-25$ and a decrease in the other age-groups. The school-going youth are of the ages 5.25 , Up to 15 they are in the elementary schools and in the lower forms of the secondary schools,
and from 15 to 25 they are in the higher forms and colleges. It is gratifying to note that the number of blind has decreased among boys and girls aged $5 \cdot 15$, and among girls aged 15-20, but among boys aged 15-25 and among girls aged 20-25 the number has unfortunately increased. The evil of defective eye-sight is evidently increasing among young adults, especially students in the higher forms of English schools and in colleges. The Government of Travancore have realised the seriousness of this evil and arranged for the periodical medical inspection of the students. The work has been started only recently, but if it is continued satisfactorily and if the detected cases of eye trouble are treated promptly, the next census ought to show a perceptible decrease in the prevalence of blindness among students.
264. There are two ophthalmic hospitals in Travancore, one at the capital managed by the Government and the other at Nagercoil maintained by the Salvation Army. Both the institutions are doing good work in the treatment of eye diseases. The number of successful operations for cataract and other eye diseases performed in these two institutions during the past decade are given in the margin. The number of operations performed at both the institutions have steadily increased from year to year. The total number of operations performed during the decade was 5,301, and most of them are reported to have been successful. The Medical Officer in charge of the Ophthalmic Hospital, Trivandrum, thinks that about 75 per cent. of the population of Travancore are served by this institution, but that due to ignorance or economic causes many cases do not go to this or any other hospital. The majority of the afficted persons, he observes, either stoically put up with blindness, or resort to native physicians often with disastrous results.

## Leprosy

265. Leprosy is one of the most difficult diseases to diagnose especially in its initial stages. The thickening of the skin and other external symptoms do not appear until after the disease is well advanced. The infection may remain in the blood without these symptoms showing themselves for a considerable period, and in that stage the disease could not be detected except by the examination of the blood by medical experts. Omissions in the records of lepers at the census from the failure to diagnose it are, therefore, considerable. Wilful concealment is an equally fruitful source of omissions, and it appears to be more common among women than men. This is the main cause of the very low proportion of female to male lepers returned. The recorded figures of lepers, therefore, fall far short of the actuals. Various authorities on leprosy have pointed out this defect. The opinions of Sir Leonard Rogers and Dr. E. Muir were quoted in the India Census Report for 1921. Lieutenant Colonel C. A. Sprawson, Surgeon-General, Madras, in the course of an address delivered at the Madras Rotary Club on the 24th July 1931, said "We find that where skilled observers enumerate the number of lepers in a locality, their figures are about six times what those of the ordinary census show. There are certainly many more lepers in the community than are generally suspected."
Yariation and diatribution.

Acearacy of the return.

## MAP OF TRAVANCORE

## showing by Tralnks the Distribution of the Lepers

-Seate 1 hadh $=16$ Milas

contains the highest proportion of deaf-mutes, also contains the highest proportion of lepers namely, fourteen per 10,000 , or 140 per 100,000 of the population as against 55 for the whole State. Karthikapally and Mavelikara taluks have each eleven lepers, and Nedumangad has ten per 10,000 persons. Devikulam is the only taluk completely free from this infirmity, while Shenkotta, Changanachery, Kottayam and Pirmede have each only one leper in 10,000 of the population.
267. The diagram below shows the variations in the number of lepers per 100,000 of each sex at the decennial age-periods in the last three censuses. The ratio of female to male sufferers is lower in the case of leprosy than in the case of any other infirmity. According to the recorded figures of 1931 there are only 369 female to 1,000 male lepers. In 1921 the ratio was 391 . The abnormally low female ratio does not necessarily indicate that women are less prone to the attack of leprosy than men. It is very largely due to greater concealment of the -disease by women. In early childhood, i. e., in the age-period $0-5$, the sex ratio of lepers is 750. In subsequent years there is a progressive decline in the ratio till about the 35th year when it is very nearly the same as the ratio for all ages. Even after that, it continues to fall till the 45th year after which there is a small but steady rise.


The diagram given above shows that the proportion of lepers under the age of 10 lis very small; it rises rapidly up to the age of 60 and then drops sharply. This is so in the cane of both males and females.

From Subsidiary Table II it will be seen that if 10,000 lepers of each sex are classified by age-periods, the proportion of females exceeds that of males up to the age of 30, after which the position is reversed.
268. There are three institutions in the State for the segregation and treatment of lepers. One of them is a well-equipped hospital maintained by the State on a suitable of aspylome about three miles from the capital. Of the other two, one is maintained by the London Mission Society at Neyyur in Kalkulam taluk and the other is situated in Sherthala taluk at a short disfance from Alleppey. Special attention is paid to preventive measures at all the institutions. Admission which is not compulsory is limited to the accommodation for 250 patients. All lat Trivandrum was started in 1896. It contains accommodation but they have to be within the premises and and can remain there as long as they like, mission. Dr. Muir's treatment is being followed in the asylum at Triver out without perwith satisfactory results. The total number of inmates of the three asylums aince 1923 the census was 318 ( 246 males and 72 females) as against $215(173$ males at the time of in 1921. Of the inmates of the asylum at Trivandrum ten males and twa 42 females) born outside the State; the two females and four of the males weres and two females were each from Tinnevelly and Madura, and one each from Males were from Cochin, two males the Presidency of Madras.

In 1902 the Travancore Government enacted a Leper Regulation on the lines of the British Indian Lepers Act III of 1898. The Regulation provides for the compulsory removal to an asylum of any mendicant or vagrant leper who goes about begging or who has no means of subsistence. It also prohibits other lepers from following the occupations connected with food, drink and clothing. Though the Regulation has now been in force for nearly 30 years, only 318 out of 2,789 lepers recorded at the census, i. e., a little over eleven per cent. have gone into the asylums. The vast majority of them still remain at large as potential sources of infection.

## Elephantiasis

Descriptlon of the disease.

Accuracy of
the return.

Yarlation and distribution.
269. Elephantiasis is a disease peculiar to the west coast of India and is prevalent largely in the coastal tracts of Travancore, Cochin and Malabar. It is caused by a parasitic worm, called Wuchereria bancrofti, which is communicated from man to man by the Culex species of the mosquito. The embryos of the parasite infest the blood of the human host and produce inflammation and obstruction of the lymphatics. In the initial stages no external symptoms will be visible, but later on the skin and subcutaneous tissues, especially in the lower parts, become thickened, rough, hard and fissured, like an elephant's hide. At this stage it can easily be recognised.
270. The census record of persons afficted with elephantiasis is far from accurate. The inaccuracy is due to the inability of the enumerators to detect the disease until it is well advanced and has made itself visible by external symptoms, and also to the deliberate concealment of the disease, especially by the educated and the better classes of people, even after external symptoms have appeared. The swelling in the legs and other lower parts of the body can easily be hidden from the enumerators by the clothes one wears. There is no doubt that several educated men and well-to-do people in the town of Trivandrum have successfully played this trick on the enumerators. According to the census record this town contains only 180 afflicted persons, but the survey recently conducted by the Public Health Department showed that out of 31,021 persons in the town whose blood was examined under the microscope, 3,268 or 10.5 per cent. proved positive to microfilaria, and 1,033 persons had definite symptoms of filarial disease. The census enumerators could not possibly detect all cases of filarial infection or even all those cases with definite symptoms of filarial disease, particularly those having elephantiasis of the scrotum, hydrocele, and filarial fever. The cases that could be detected are those with elcphantiasis of the leg or hand; but even these have not all been recorded in the schedules, because of the deliberate concealment of the disease by the persons enumerated. The omissions in the town of Trivandrum are considerable, and are probably much more than in rural parts. The Public Health Department detected 533 persons with elephantiasis of the leg or hand in a population of 31,021 in Trivandrum, whereas the number in the whole town whose aggregate population is 96,016 that has been recorded in the census schedules is only 180 . The disparity between the figures is so patent that it needs no further comment.
271. Of all the infirmities recorded at the census, elephantiasis is the most prevalent in Travancore. 14,709 persons have been returned under this infirmity at the present

Number of persone afticted icth elrphantinsis and the percentage of rarialion

| Year | Number | Variation per cent. |
| :---: | :---: | :---: |
| 100t | 8,924 |  |
| 1911 | 4,217 | - 2*-8 |
| 1921 | 11.638 | +175! |
| 1031 | 14,704 | $+26.1$ | census as against 10,931 returned under all others together. The number of persons afflicted with elephantiasis at the last four censuses and the percentage of variation during the inter-censal periods are given in the margin. The decrease in 1911 and the very large increase in 1921 were evidently due to mistakes in enumeration. It is noteworthy that in the course of 30 years the number of the afflicted rose from 5,924 to 14,709, showing an increase of $148 \cdot 3$ per cent.

The variations in the proportion of the afflicted per 100,000 of the population are slightly different from those in the actual numbers shown above as can be seen from the
 marginal figures. The proportion dropped in the decade 1901-1911, but increased in the next decade as was the case with the actual numbers. In the last decade, however, the proportion decreased by one per 100,000 in spite of an increase of 26.4 per cent. in the actual numbers. If the returns had been correct the figures for the last decade would have indicated a check in the spread of the disease, but the inaccuracies in the returns do not warrant such an inference.

## MAP OF TRAVANCORE

Showing by Taluks the Distribution of Persons afficted with Elephantinsis Seale 1 Inch $=16$ IIflos

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The proportions of the afflicted in the different taluks of the State show very wide variations as can be.seen from the map opposite. Sherthala taluk heads the list with as many as 427 afflicted persons per 10,000 of the population, or 4,270 per 100,000 , as against the State average of 288 per 100,000 . The difference is tremendous. One in every 23 persons in the above taluk is suffering from elephantiasis according to the recorded figures. Sherthala is an unfortunate taluk. It has the highest proportion of persons afflicted with deaf-mutism, leprosy, and elephantiasis. As regards elephantiasis, next to Sherthala comes the adjoining taluk of Ampalapula where the proportion of the afflicted is 171 per 10,000 , or one in every 58 persons. Ampalapula is followed by its neighbour, Karthikapally, which has a proportion of 30 per 10,000 or one in 333 persons. Parur has 24 afflicted persons per 10,000 and Vaikom 23 per 10,000 . These five taluks together account for 13,714 out of 14,709 afficted persons recorded in the whole State, and the remaining 995 persons alone are distributed over the remaining 25 taluks. Of these, Pathanamthitta and Muvattupula contain none, as many as 12 taluks have each only one in 10,000 and in the other taluks the proportion varies from two to nine per 10,000 persons. Of these latter, Trivandrum taluk has the highest number, namely, nine per 10,000 and most of them are found in the town of Trivandrum where the proportion is 19 per 10,000 .
272. From general observations one cannot say that elephantiasis attacks one sex Elephantiasis] more than the other. But the recorded figures show that the proportion of afflicted females by sox and asfe. to males is 746 to 1,000 . This may be due, partly at any rate, to women concealing the disease more than men. The sex ratio of the afflicted varies considerably in different ageperiods. The female ratio is higher in the ages 10 to 30 and lower in the earlier and later ages than the average for all ages. It may be that the exhaustion caused by early maternity weakens the constitution of women in the early child-bearing period and renders them more susceptible to the disease than their younger sisters, and that because the afficted women die earlier than men, the female ratio becomes less after the'middle ages, The proportions of the afficted males and females per 100,000 of each sex at each decennial age-period in the last three censuses are shown in the diagram below: -


The proportion of both males.and females is practically negligible in infancy and early childhood, but it increases progressively as the age advances, and the maximum is reached in the case of males as well as females at the ages of 60 and over. Young persons will be able to resist the disease better than the old folk, and even if the infection is in the blood the disease may not show itself outwardly till the constitution has become weak through advancing age. These are probably the causes of the progressive rise in the proportion of the afflicted as the age advances.
273. The rapid growth of elephantiasis in recent years has engaged the serious attention of the Government of Travancore. In 1922-23 the State Medical Department conducted a survey of this disease among the school children in Sherthala taluk and it was found that $22 \cdot 3$ per cent. of them between the ages of 5 and 18 were afficted with the infirmity. The Public Health Department which has been organized recently has made provision in its programme of work for conducting local surveys to determine the incidence and intensity of the malady in different parts of the State. The first of these surveys was conducted in Trivandrum town last year, which has already been referred to in paragraph 270 above. A special entomologist is now engaged in studying the life-history and habits of the different species of the mosquito which are the carriers of filarial germ. When his investigations are completed in the course of a year or so, the Public Health Department will commence its programme of preventive measures and an organized campaign against this frightful malady.

## Other Diseases

274. The Medical and the Public Health departments have investigated the causes and nature of certain other special diseases, such as yaws, and hookworm. The results of the enquiry conducted by the Medical Department during the year 1924-25 showed that 22 per cent. of the persons examined at Mallappally in Thiruvella taluk were suffering from yaws, while in Mavelikara 49 per cent. of the houses visited were infected and 295 out of the 1,245 persons residing in them had had the disease in one form or another in some period of their life.
Hookrorm. - 275. A hookworm survey of the State was conducted by the Public Health Department in 1930. All the 30 taluks, 26 towns and 32 estates were included in the survey. Out of 27,79 feecal specimens examined, 25,714 positive cases were discovered with an average egg-count of 1,400 per c. c. 93 per cent. of the cases examined were found to be positive in the Central and Northern Divisions, 92 per cent. in the Southern Division and 87 per cent. in the High Range. In regard to intensity, the Southern Division takes the lead followed by the Northern, Central and High Range Divisions in order. Comparatively higher incidence and intensity was observed in the coastal regions than in the interior. The average egg-count was practically the same among males and females. The incidence of the disease was found to be the highest among Government servants and then in a descending order among merchants and businessmen, doctors, labourers, agriculturists, landlords and householders, students and persons with no occupation, vakils and clergymen. In March 1931 a treatment campaign was started by a staff of three Assistant Surgeons and six Sub-Assistant Surgeons to whom the whole State was apportioned in small units to be taken up in succession. In the course of about six months the campaign was completed in 13 taluks, when as many as 71,285 persons were treated. The work has since been suspended temporarily, but it will soon be revived with renewed vigour and extended throughout the State.

## SÚBSIDIART TABLE I -

Infirm per $\mathbf{1 0 0 , 0 0 0}$ of the total population at each of the last fixe censuses



SUBSIDIARY TABLE I-(Conduded)



Note:-1. The State contains one Lunatic Asylum and three Leper Anylums. 141 insane perme, 0 ( 09 malea and 42 femalen) were enumeraterl
 proportions of the insane and the lepers for the divisiona containing theee anyluma, after devlucting the ulumber of inmates born outside the divisions in which they are altunted, are shown in italica below the actual proportions.
2. The proportions for the nataral divisions for the previous four censusea have been worked out in conformity with the alterations made in the areas of these divisions since the last census.

SUBSIDIARY TABLE II
(a) Infirm per 100,000 , and (b) female infirm per 1,000 males, at certain age-periods



## SUBSIDIARY' TABLE III

Age distribution of $\mathbf{1 0 , 0 0 0} \mathrm{infirm}$ of eaoh sex


|  | Agre | Deaf-mutes |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males |  |  |  |  | Pumales |  |  |  |  |
|  |  | 1931 | 1921 | 1911 | 1901 | 1891 | 1931 | 1921 | 1911 | 1901 . | 1891 |
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SUBBIDIARY TABLE III-(concluded).



## CHAPTER VIII

## OCCUPATION

Classiflcation of occupations.
276. For purposes of the present census occupations have been divided into four classes, twelve sub-classes, fifty-five orders and 195 groups. The classes and sub-classes and the number of orders and groups in each sub-class are given below:-


The classes and sub-classes are the same as those at the last census. The number of orders has been reduced from 56 to 55 by amalgamating Orders 4 and 5 of the last census. Order 3 has been altered from 'mines' to 'metallic minerals' and Order 4 from 'quarries of hard rocks' to 'non-metallic minerals,' which now includes also Order 5 of the last census (Salt, etc.). Several important changes have been made in the groups. Some have been split up and some others have been combined. For example, group 3 of 1921 (Agents, managers of lands, estates, etc.) has been broken up into groups 2 (Estate agents and managers of owners), 3 (Estate agents and managers of Government including officers of the Departments of Agriculture, Land Records, and Settement), and 4 (Rent collectors, clerks, etc.). Similarly, groups 6 and 7 of 1921 (Growers of apecial products and market gardening) have been expanded into groups $9-16$, separate groups being assigned to cinchona, coconut, coffee, ganja, pan-vine, rubber, tea, market gardeners, flower and fruit growers. The present groups 29 to 34 comprising different metallic minerals, such as gold, iron, etc., were all included in group 21 in 1921, and the present groups 35 to 41 dealing with different non-metallic minerals in groups 22 and 23 at the last census. Group 75 of 1921 (Manufacture of tobacco, opium, and ganja) has now been split ip into groups $78-80$. Cotton spinning, sizing and weaving which formed groups 26 and 27 in 1921 have been combined into group 43 , groups 30 and 31 of 1921 into the present group 45 (Rope, twine and string, and other fibres), groups 31 to 35 of 1921 have been reclassified as groups 46 and 47 , groups $52^{\prime}$ to 54 and 57 of 1921 have now become group 65, groups 60,63 and 64 have been amalgamated into group 70 , groups 66,69 and 70 into group 81 , groups 85 to 89 into group 90 , groups 94 and 95 into group 95, groups 98 and 99 into group 98, groups 102 and 103 into group 100 and so on. Managers and employés of places of public entertainment who were included in group 101 of Order 18 in 1921 (Miscellaneous and undefined industries) now form group 183 of Order 49 (Letters, arts and sciences). Similarly, wizards, witches and mediume have been taken out of 'Unproductive' group in Sub-class XII, and included in group 181 of Sub-class VIII (Professions and liberal arts).

Nature of the occupation retupin.
277. Four columns were provided in the enumeration schedule for recording information about the occupations of persons. The main instructions issued by the Census Commissioner for India as to the filling up of these columns were as follow:-
"Column 9 (W orker or dependant)-Enter 'earner' or 'dependant.' A woman who does house work is a dependant, so is a son who works in the felds but does not
earn separate wages. A cultivator cultivating as a principal occupation is an earner. Only those women and children will be shown as earners who help to augment the family income. A woman who looks after her house and cooks the food is not an earner but a dependant. But a woman who collects and sells firewood or cowdung is thereby adding to the family income, and should be shown as an earner. A boy who sometimes looks after his father's cattle is a dependant, but one who is a regular cow-herd and earns pay as such in cash or in kind is an earner."
"Column 10 (Principal occupation of actual workers) -Enter the principal means of livelihood of all persons who actually do work or carry on business, whether. personally or by means of servants, or who live on houserent, pension, etc. Enter the exact occupation and avoid vague terms such as 'service' or 'writing' or 'labour.' If a person makes the articles he sells, he should be entered as 'maker and seller' of them. Persons temporarily out of employ should be shown as following their previous occupation."
"Column 11 (Subsidiary occupation of actual workers)-Enter here any occupation which actual workers pursue at any time of the year in addition to their principal occupation. Where a man has two occupations the principal one is that on which he relies,mainly for his support and from which he gets the major part of his income.
"Dependants who assist in the work of the family and contribute to its support should be shown as dependants in colum 9 and under subsidiary occupation in column 11 . Thus a woman who keeps house for her husband is a dependant and entered as such in column 9, but has a subsidiary occupation (column 11). of house-keeping. It may be assumed, as a rough and ready rule, that boys and girls over the age of 10 who actually do feld labour or tend cattle are adding to the income of their family and should, therefore, be entered in colum 10 or 11 according to whether they earn pay or not."
"Column 12 (Industry in which employed)- For managers', clerks, operatives or workmen employed in a factory or by any person employing industry fill up the nature of the industry, i. e., biscuit making, coal mining. In this column only persons working in organized industries will be entered. Thus a carpenter employed by a furniture manufactory will be entered 'carpenter' in column 10 and 'furniture making' in column 12. A village carpenter working at home or a jobbing carpenter working for his. own band must not appear in column 12 at all. Agricultural labourers should only be entered in this column when they are employed in some special branch of agriculture, or other industry involving agriculture incidentally or when they are employed by some person or company practising agriculture on an extensive scale. . In the former case the name of the particular industry will be entered, e. g., "dairy farming,' 'horse breeding'; in the latter the entry will be 'agriculture.'

Educated unemployment.-A special enquiry was conducted at the present census as to the extent of unemployment among the educated. Elsewhere was the enquiry confined to persons educated in English; but in this State it was also extended to persuns who had passed examinations in the vernaculars. A special schedule was prepared for this purpose containing columns for the entry of the name and caste of the person, place of residence, father's profession, age, period of unemployment, university and other examinations passed and the employment for which he is fitted by his education. This schedule was distributed by the enumerators to all persons literate in English or vernaculars, who were wishful for employment and had not obtained the employment for which their education had fitted them. The filled-up schedules were subsequently collected by them and returned to the census office where the results were tabulated.
278. In 1921 the population was divided into workers and dependants, the former pifference including not only persons who earned wages but also those who regularly assisted the between the earners and thereby added to the family income without actually earning wages. At the rectupation present census a distinction has been made between these two classes of workers, the 1921 and 1931 . former being treated as earners and the latter as working dependants. By this innovation the population has been divided into earners, working dependants and non-working dependants. The first two together correspond to the workers and the last to the dependants of the 1921 census. Non-working dependants are those who neither work and earn wages nor assist the earners and add to the family income. Boys and girls at school or college are, for example, non-working dependants, and so also are the old and the infirm who are unable to work and the unemployed persons who are not engaged on any occupation either as wage earners or as their helpers.

Another important difference is that at the last census workers and dependants were shown separately for each occupation, whereas at the present census earners and working dependants only have been thus recorded separately and not the non-working dependants who are supported by the workers. The entire population (earners, working dependants and non-working dependants) supported by each occupation could not, therefore, be known from the returns of the present census. The figures of total non-working dependants have, however, been obtained by deducting from the aggregate population the totals of earners and working dependants and are given at the head of Imperial Table X.

In 1921 there was no definite instruction as to whether women engaged on housekeeping should be returned as workers or depeadants and it is not posssible to say in which class they were included in that census. For the present census the Imperial Code has laid down that a woman who keeps house for her husband should be shown as a working dependant and her occupation as house-keeping. In a subsequent circular' issued by the Census Commissioner for India it has been pointed out that, as there is no head of housekeeping in the occupation list, persons earning a livelihood by house-keeping should be shown under "domestic service," but that only those women who do actual manual work at house-keeping should be so shown and that women who only superintend should be shown as non-working dependants. In this State, large numbers of housewives do actual manual work and they have been recorded as working dependants under domestic service. This procedure, as we shall see later on, has contributed to the swelling up of the number under this head far above that recorded at the last census.
279. The returns under industry in column 12 of the schedule of the present census do not correspond to the information collected on the special industrial schedule at the previous two censuses. In 1911 industrial establishments containing twenty or more employés were brought under this enquiry. In 1921 , the scope of the enquiry was extended and made to cover all industrial establishments in which ten or more persons were employed. In 1931 the instructions first issued by the Census Commissioner for India were that all persons working in organized industries should be entered in column 12 of the schedule. In the course of the preliminary enumeration doubts arose as to the exact deínition of the term "organized industry," and it was decided at the Conference of Census Superintendents held in Delhi on January 7 and 8, 1931, under the presidency of the Census Commissioner for India, that to constitute a case of organized industry the minimum number of persons required was three - one paying the wage and two others working for wages simultaneously, but that this minimum would apply only when the wage payer was also working himself, and that if he did not work, one wage payer and three workmen would be the minimum under the definition given. If it had been possible to give effect to the decision of the conference, the returns would have included all industrial establishments in which three or more persons were working, of whom at least two would be receiving wages. It has not been possible to do so in this State, because the preliminary enumeration was completed by about the '15th of January 1931, i. e., within a week after the date of the conference. The instructions to the enumerators here were that only persons working in organized industries should be entered, that is to say, only those persons who were employed by other persons or by a company or firm and paid wages for the work they did, and who worked in company with others similarly paid. The enumerators understood these instructions to mean that particulars should be recorded only of persons working in industries conducted on factory scale or in plantations of tea, rubber and other special crops cultivated on estate scale. For the above reasons the industrial returns of this State are not strictly comparable with those of other parts of India nor with those of the previous two censuses in this State itself. But they certainly afford material to gauge the progress in the development of factory industries and the cultivation of tea and rubber.

Accuracy of the returns.
280. Instructions as regards the entry of the exact kind of labour or service, the nature of the goods made or sold, etc., appear to have been clearly understood by the enumerators. Very few entries of vague terms like 'labour' or 'service' or 'shop-keeping' have been noticed in the schedules, and there is hardly any room to suspect the accuracy of the returns of principal occupations except in the caze of the entries under Sub-class XI, which includes manufacturers, businessmen, contractors, mechanics, labourers and workmen otherwise unspecified, and cashiers, clerks and other employ's in unspecified offices. The extent of the accuracy of the occupation returns can more or less be judged from the numbers recorded under the above Sub-class. A labourer does not always stick to a particular kind of work. He will take up any work which is available and it
is not unusual to find a man engaged in agricultural labour in one season, in road work in another, in carrying loads at certain times, and in diverse other kinds of labour as necessity and occasions arise. The labourer himself may not know from which item he: derives the largest income and the enumerator will naturally be obliged to put him down as an unspecified labourer: The entire elimination of such labourers from the census return is, therefore, impracticable. But any reduction in the numbers of unspecified labourers, manufacturers and other businessmen from the figures recorded at the previous census must be regarded as an indication of greater accuracy in the returns. Viewed in this light the present census can claim to be more accurate than the previous one, because the numbers returned under Sub-class. XI dropped from 205,725 in 1921 to 118,082 in 1931 .

Another possible source of error in the occupation returns is in regard to the subsidiary occupations of principal earners and working dependants. A person who follows more than one occupation may sometimes find it difficult to decide from which he derives the largest income. In such cases the entries regarding the principal and subsidiary occuptions may not always be correct. Mistakes may also occur in recording the subsidiary occuptions, if a person who has more than one such occuption is unable to decide which is the most important of them.
281. The distinction that has been made between earners, working dependants and non-working dependants is sointricate and subtle that owing to the lack of a clear grasp of the underlying principles on the part of the enumerators, persons who should have been included in one class might have got into another. This might have happened particularly in the case of working and non-working dependants. According to the instructions issued on the subject, one who regularly assists an earner in his work without receiving wages is a working dependant, but one who merely renders a little occasional help is only a nonworking dependant. The difficulty of deciding whether one is a working or non-working dependant must have puzzied many an enumerator, especially in regard to women engaged in house-keeping. The rule laid down is that a woman who does actual manual work at house-keeping is a working dependant, while one who merely superintends the work is a non-working dependant. In many middle-class families the housewife may have a servant to assist her in her household duties, but she will invariably have to do a portion of the manual work herself and at the same time superintend the work of the servant. Such women might have been included in either working or non-working dependants.
282. As regards the principal occupations recorded, there is one item the accuracy of which one cannot vouch for, and that is the cultivation of coconut. In this State rice and coconut are the two principal crops of the ordinary cultivators. Invariably each individual farmer cultivates both the crops, and it is hardly possible to say whether one should be treated as a rice or coconut cultivator. It is quite likely that persons who should have been included in group 10 (coconut cultivator) have been brought under group 5 (cultivating owners) or 6 (tenant cultivators), and vice versa.

Subject to the limitations and exceptions described above occupational figures recorded at the present census may be regarded as approximately correct.

$$
\begin{aligned}
& \text { 283. The statistics discussed in this chapter are set forth in the following tables:- } \\
& \text { Imperierence to } \\
& \text { statistices. }
\end{aligned}
$$

## Part I. State Summary.

Part II. Distribution by administrative division
Part III. Distribution by natural division.
Part IV. Distribution by religion.
Imperial Table XI. Occupation of selected castes, tribes or races.
" XII. Part I. Educated unemployment by class.
Part II. Educated unemployment by degree.
Subsidiary Table I. (A) $\begin{aligned} & \text { Number of earners (principal occupation) and working } \\ & \text { dependants per } 10,000 \text { of the total population. }\end{aligned}$

- (B) Number of earners (subsidiary occupation) per 10,000 of the total population.

Subsidiary Table II. Distribution of occupation by sub-classes in administrative and natural divisions.

| ,' |  | Earners (principal occupation and working dependants). <br> Earners (subsidiary occupation). |
| :---: | :---: | :---: |
| " | III. | Occupation of females by sub-classes, selected orders and groups. |
| " | IV. | Selected occupations giving figures for 1921 and 1931. |
| " | V. | Occupation of selected castes. |
| " | VI. | Special statistics for Railways, the Fost Office, Telegraph and Irrigation departments. |
| " | VII. | Distribution of industries, persons employed and ratios per mille of women and children to other operatives. |
| " | VIII. | Number of persons employed in industry as compared with previous figures. |

General distribution of the population by occupation.
284. Of the total population of $5,095,973$ in this State $1,477,388$ are earners, 929,906 are working dependants, and $2,688,679$ are non-working dependants. The corresponding proportions are 29 per cent., 18.2 per cent. and 52.8 per cent. respectively. For comparison with the figures of 1921 the first two items must be taken together, because in that census earners and working dependants were included under workers. The proportions of workers and dependants in 1921 were 37 per cent. and 63 per cent. respectively of the total population, and the corresponding proportions in 1931 are 47.2 per cent. and 52.8 per cent. The increase in the proportion of workers by over 10 per cent. has been contributed mainly by domestic service. The workers (earners and working dependants) in different sub-classes of occupations and the proportion of each sub-class to the total of all sub-classes in 1921 and 1931 are shown in the marginal statement and the following diagram. It will be seen from the statement that there has been a general increase in the working population engaged in most of the occupations during the past decade. Subclass I consists essen-

| Sub-class occupatio$4_{4}^{0}$ | Workers (enrners and working dependants) |  | Proportion of workers in each sub-class pur 1,000 of all sulb-clawies |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1921 | 1931 | 1921 | 1931 |
| All occupations | 1,482,242 | 2,407,294 | 370 | 472 |
| I Exploitation of animals and vegetation | 6688.849 | 941,777 | 4.1 | 301 |
| II. Exploitation of minerals | 1,6it0 | 2,801 | 1 |  |
| III Industry | 328,093 | 371,076 | 221 | 146 |
| IV Transport | 31,796 157395 | 37,628 | ${ }_{2}^{22}$ | 16 |
| VI Prable fore | 157,395 ,+ 013 | 156,031 3,860 | 106 | 68 |
| VII $\begin{aligned} & \text { Public arce } \\ & \text { tion }\end{aligned}$ | 4.013 12,789 | 3,860 16,684 | 3 | 2 |
| VIII Profegsions and - | 12,78; | 16,684 | 9 | 7 " |
| IV Piberal arts | 56,813 | ¿E,737 | 38 | 21 |
| IX Persons living on their income | 2,387 | 2,841 |  |  |
| $X$ Domestic service | 7,856 | 716,278 | 5 | 297 |
| XI Insuthiciently |  |  |  |  |
| XII Cnproductive | 4,869 | 11,459 | 139 3 | 1 | tially of agricultural workers. Hunters and fishers included in this sub-class form only a small minority. The population engaged in agriculture and allied occupations has increased from 668,849 in 1921 to 941,777, an increase of nearly of 50 per cent. This large increase is due chicfly to the breaking-up of marumakkathayam families by the partition of the common properties into individual shares. The phenomenal increase in the numbers engaged in domestic service from 7,856 in 1921 to 716,278 in 1931 is, as has been already pointed out in paragraph 278 above, to be attributed to the inclusion in this category of women doing manual work at house-keeping at the present census and their omission from the returns of the working population at the last census. The heavy fall in the number of persons who have

insufficiently described their occupation from 205,725 to 118,082 is an indication of the greater accuracy in the occupational return of this census.

285. Taking the working population of 1931, it is seen that, 39 , per cent. of themare engaged in agriculture, pasturage, hunting and fishing; about 15 per cent. in industries ; a little less than two per cent. in transport; about seven per cent. in trade; a little over three per cent. in public administration and professions; nearly 30 per cent. in domestic service; and the rest in unspecified and other miscellaneous occupations. Agriculture is the chief occupation of the people of this State. Out of nearly 942,000 returned under Sub-class I (Exploitation of animals and vegetation) about 900,000 are engaged in agriculture proper and stock breeding. Industry comes next to agriculture in the order of importance, but out of 351,000 persons engaged in industrial occupations as many as 326,000 or more than 93 per cent. are cottage workers' and only about seven per cent. are engaged in organized or factory industries excluding tea and rubber.

The proportion of the numbers returned under domestic service to the total workers ot all kinds has increased from 0.5 per cent. in 1921 to about 30 per cent. in 1931. It is this rise that has contributed to the fall in the corresponding proportions in other occupations in spite of the increase in the actual number of workers. The comparison of the ratios worked out on this basis for 1921 and 1931 is strictly not correct. The correct position would have been revealed by the comparative ratios of the population supported by each occupation, (earners and working as well as non-working dependants) to the aggregate population, but such a comparison could not be instituted because the figures of non-working dependants supported by each occupation have not been collected in this census.
286. The marginal table shows the proportion of workers (earners and working dependants) and non-workers (non-working dependants) per 1,000! of each sex in Tra-

| State or Proviuce | Number per 1,000 of each sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Workers |  | Non-workers |  |
|  | Malea | Females | Males | Females |
| Gralior | 685 | 276 | 315 | 724 |
| Rajputana: | 655 | 388 | 345 | 612 |
| Mysora | 615 | 388 | 845 | 612 |
| Assam | 618 | 276 | 388 | 784 |
| Baroda | 601 | - 383 | 399 | 617 |
| Pengal | 481 | ${ }^{79}$ | 519 | 921 |
| Trayancore | 488 | 446 | 502 | 554 |解 vancore, other States Proxinces and provinces from which figures have been received for the present census. Taking the male population it is seen that Gwalior stands first with the largest volume of em. ployment, more than 68 per .cent. 'being returned either as earners or working dependants. Rajputana has more than 65 per cent. of the males in employment, Mysore 62 per cent., Assam 61 per cent., Baroda 60 per cent. and Bengal 48 per cent.

Comparison
with some forelgn conntries.

Workers and non-workers

Bengal is the only province which is worse than Travancore which has nearly 50 per cent. of her male population engaged in some occupation or other. ln regard to female: employment Travancore appears to head the list, but if the women who have been returned as working dependants under domestic service $(681,716)$ are excluded, the number of female workers per 1,000 drops to 177 and Travancore then takes a place above Bengal and below all other provinces as in the case of male employment. Unemployment both among males and females is, therefore, greater in Travancore than in most other States and. provinces. Probably Cochin is no better, but Cochin figures have not been received. Bengal is the only province which has more unemployment than Travancore.
287. It will be interesting, to see how Travancore compares with Western. countries in regard to the employment of the population. In Great Britain occupation is. recorded only of the population of 12 years

|  | Percentage of total population |  |  |
| :---: | :---: | :---: | :---: |
|  | Onder 12 years | /12 years and over |  |
|  |  | Employed | Unemployed |
| Great Britain | $22 \cdot 1$ | $45 \cdot 2$ | $32 \cdot 7$ |
| Travancore | 33-3 | 47.2 | 19.6 | and over. The proportion of workers and: non-workers according to the census of 1921 in Great Britain and the corresponding. proportions in Travancore in the presentcensus are noted in the margin. The proportion of the unemployed in Travancore is a little over half of what it is in Great Britain. In the United States the population of 10 years and over alone. is included in the occupation returns. The proportions of workers and non-workers, according to the census of 1930 in the United States, and


|  | Population 10 years and over |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage |  |  |  |
|  | Employed |  | Uxemployed |  |
|  | Malea | Temales ${ }^{\text {Stales }}$ / Femates |  |  |
| Unitel States | 76.2 | 23.1 | 23.8 | 77.9 |
| Travancore | 71.7 | 64.0 | $28 \cdot 8$ | $36 \cdot 0$ | the corresponding proportions for Travancore are shown in the margin. As regards employment among males the United States is. somewhat better than Travancore, but in the case of females nearly 78 per cent. are unemployed in the United States as against 36 per cent. in Travancore. It must be remembered that the employed women in Travancore include a large number of housekeepers doing manual work. Such women are probably not counted as employed in. Great Britain or the United States.

288. Workers include earners and working dependants in the present census and, correspond to the actual workers recorded in the previous ones, and non-workers are the nonworking dependants in thepresent census and corres-pond to the dependants in the previous ones. The ratios of the total workers: ard non-workers and of the workers in different: sub-classes of occupations: to 10,000 of the aggregate. population at the last three censuses are given in themarginal table. The fall in the proportions does not necessarily mean a decrease in the actual 'numbers. At best it only indicates that the increase. in the numbers employed has not kept pace with the increase in the population. Taking, Ior example, industry, it is seen that the numbers employed in it increased from 288,947 in 1911 to 328,093 in 1921 and to 351,076 in 1931, but the ratioper 10,000 of the population decreased from 843 to 819 and 689 respectively. In

Sub-class I. (Exploitation of animals and vegetation) the ratio has risen during the last decade, which means that the workers. in this sub-class have increased faster than the general population, and so also in the case of workers in Sub-class II (Exploitation of minerals) and ir- Sub-class VII- (Public-administration) during the last two decades. The abnormal rise in the ratio of workers in Sub-class X (Domestic service) in 1931 is, as has already been pointed out, due to the inclusion of women engaged in housekeeping. The variations in the proportions of non-workers and workers in all occupationsthe figures given in the first two horizontal lines at the head of the above marginal tableshow at first sight that there was an appreciable increase in unemployment during the decade 1911-1921 and a large fall in the next. But actually there was only a very slight decrease in the last decade, as we shall see presently, and even this may be due to inaccuracies in enumeration in 1921. To make the figures strictly comparable the working dependants under domestic service should be added to the non-workers. The number of working dependants under domestic service per 10,000 of the population in 1931 is 1,368 and with the addition of this figure the proportion of non-workers in 1931 rises to 6,644 . The increase in population during the intercensal period is generally in the age-group $0-10$ and children under 10 will ordinarily be non-workers. If the ratio of children under 10 per 10,000 of the population is deducted from the non-workers, we may get a more or less correct idea of the variation in the volume of unemployment. The proportions of nonworkers will then be as follows:-


There was an increase of 462 unemployed persons per 10,000 of the population in 1921 over the proportion in 1911 and a nominal decrease of 17 per 10,000 in 1931. If 1921 Ggures be left out owing to their unreliability, the increase in the unemployed between 1911 and 1931 is 445 per 10,000 of the population. The question of unemployment will receive a more detailed rreatment in a later paragraph.
289. We have already seen that the distinction between earners and working Earners and dependants is an innovation introduced at the present census. The earners number morking and

| Oconpation | Percentage of carners in each sab-class to total earners | Percentage of worting dependants in each sub-class to total working dependants | Proportion of working dependants to 1,000 earners |
| :---: | :---: | :---: | :---: |
| All ocoupations | .. | $\cdots$ | 628 |
| Sob-class I. Exploitation of animals and vegetation | $55 \cdot 5$ | $13 \cdot 2$ | 149 |
| III. Industry | $\text { . } 186^{\circ}$ | 8.2 | 297 |
| IV. Transport ${ }^{\text {V }}$, - | . 2.4. | 0.3 | 72 |
| Viv. Prade | - $\begin{aligned} & 9.7 \\ & 1.1\end{aligned}$ | $1 \cdot 3$ | 84 |
| VIII: Profestions and liberal |  | - - | - |
| $\cdots$ - arts | -3.7 | 0.3 | 46 |
| X. Domertic service | - 1-3 | 750 | 36,842 |
| XI. Unspecified occupationi . | -7.0 | 1.6 | $36,8+2$ 149 | 1,477,388 and the working

dependants 929,906. The distribution of these in the various subclasses and the proportion - of working dependants to 1,000 earners are shown in the marginal table. For every 1,000 are 629 working dependants. The highest ratio is amongst persons engaged in domestic service, among whom there are 36,842 working dependants per 1,000 earners. Weste now familiar with the cause of this very large ratio. Of other occupations, industry supports the largest proportion of working dependants, viz., 277 per 1,000 earners, and next
to it come agriculture and unspecifed occupations, each with 149 working dependants per 1,000 earners. In other occupations the ratio is well below 10 per cent. These ratios are represented graphically in the following diagram.


Of the total working dependants, 75 per cent. are engaged in domestic service, 13 per cent. in agriculture and 8 per cent. in industry. The remaining four per cent. are distributed among the other occupations. In the case of earners 55.5 per cent. are employed in agriculture and allied occupations, $18 \cdot 6$ per cent. in industry, $9 \cdot 7$ per cent. in trade, 7 in unspecified occupations, 3.7 in professions and liberal arts; 1.3 in domestic service and $*$ - I in public administration. Agriculture naturally heads the list, followed by industry, both together accounting for 74 per cent, of the total earners.

8vbeldiary cecopationa.
290. Out of 10,000 of the population ' 4,724 are workers, i. e., earners having a principal occupation and working dependants who assist them, and out of 4,724 workers 967 have a subsidiary occupation. The actual number of persons following one or other
 of the various occupations as subsidiary is given in Imperial Table X and the proportional distribution in Subsidiary Table I B. The figures for different sub-classes are extracted in the margin. Out of the total number of earners wih a subsidiary occupation, nearly 54 per cent. have agriculture as a subsidiary field of employment. In a country where agriculture is the occupation of the majority of the people and where investment in land is considered to be the safest method of utilizing one's surplus money, it is no wonder. that agriculture is a subsidiary occupation of a large proportion of persons having some other principal means. of livelihood. Next to agriculture is domestic service the most fayoured subsidiary occupation. Nearly 30 per cent. of earners having a subsidiary occupation fall in this category and most of them are naturally women, there being 144,735 women against 3,521 men or roughly 41 women for every man. Industry gives subsidiary employment to 68 persons and trade to 40 per 10,000 of the total population and they form about 7 and 4 per cent. respectively of the total earners having a subsidiary occupation. The proportions for other occupations are too small to deserve notice.

From the above marginal table it will be seen that 518 out of 10,000 or over 5 per cent. of the total population, who are engaged in some principal occupation other than agriculture, have betaken themselves to agriculture as a subsidiary occupation. This may be regarded as the proportion of non-agriculturists following a subsidiary agricultural occupation. It would have been interesting to know what proportions of agriculturists follow non-agricultural subsidiary occupations, but this information is not available because the compilation of the table relating to it was abandoned as a measure of economy.
291. The occupational distribution of the population in administrative and natural occupational divisions is shown in Subsidiary Table II A. The figures relating to important $\begin{gathered}\text { distributionion by } \\ \text { admative }\end{gathered}$

| Occupation | Number per 1,000 of the population in , administrative division |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | State | $\left\lvert\, \begin{aligned} & \text { Southern } \\ & \text { Division }\end{aligned}\right.$ | Central Division | Northern Division |  |
| Non-wrorking dependante. | 528 | 635 | 508 | 559 | 269 |
| Workerm (Eapners and working dependanta) All ocoupation: | [72 | 485 | 489. | 패즤 | 731 |
| Sub-clase I. Exploitation of animals and vegetation | 185 | 150 | 202 | 169 | 618 |
| $n$ IIL. Industry . | 69 | 73 | 69 | 67 | 26 |
| " IV. Transport | 7 | 9 | 8 | 6 | 8 |
| " V. Trade ${ }^{\text {\% }}$ | 31 | 38 | 30 | 27 | 13 |
| * VII. Public administra- | 8 | 5 | 3 | 2 | 3 |
| , VIIL. Professions and liberal arts | 11 | 12 | 11 | 11 |  |
| $\checkmark$ X. Domestio service . | 140. | 146 | 145 | 137 | 41 |
| - XI. Unspecified occupa- $\begin{gathered}\text { tions }\end{gathered}$ | 23 | 27 | 23 | 20 | 17 |

proportionately more agricultural earners than the Southern. In Northern Division has particularly in industry, transport, trade and public administration, the Southern occupations, takes the lead, followed in order by the Central, Northern and High Range Divisions. The proportion of earners in domestic service in the High Range is less than one-third of what it is in other divisions, which shows that women in the High Range are generally engaged in some wage-earning occupation in addition to house-keeping.
292. As regards the natural divisions it will be seen from the marginal statement that, as is to be expected, the Highland has the lowest proportion of dependants and the highest proportion of agricultural earners, and the proportion of the latter is higher in the Midland than in the Lowland. In the case of all other important occupations the Lowland has higher proportions of earners than the other divisions. This is particularly noticeable in the case of industry and trade. The proportion of industrial workers in the Lowland is nearly three times that in either of the other divisions, and the proportion in the case of trade in the former division is nearly double that in the Midland and more than double of what it is
in the Highland.

The diagram below shows graphically the proportions mentioned above.


Distribution of ccupations in
rural and urban areas.
293. The nineteen municipal towns alone are treated asiurban area and the rest of the State as rural in this paragraph. Eight per cent. of the aggregate population live in towns and the remaining 92 per cent. in rural parts. But we see from the marginal table that only seven per cent. of the total earners are found in towns. Evidently, there is more unemployment in urban than in rural area. Towns naturally contain proportionately less agricultural population than the rural area and this is seen from the fact that the percentage of agricultural workers in towns is less than half of what it should be on the basis of population. In industry the percentage of workers in towns is only slightly less than their due share. Travancore has very few factory industries concentrated in towns. The large majority of the industrial population are cottage workers and they are found in urban as much as in rural areas. Domestic service is in the same position as industry. The earners in this occupation are distributed in towns and rural parts almost proportionately to their respective population. In all other occupations towns can claim distinctly larger percentages of earners than they are entitled to. More than 60 per cent. of the public force and over 50 per cent. of the persons living on their income are congregated in towns. In public administration towns have four and a half times, in professions and liberal arts three and a half times, in transport three times and in trade twice the number of earners they should have according to
their population. In unproductive occupations townget nearly sivice their share. The distribution of occupations in rural and urban areas exhibited in the following diagram."

294. The statistics dealt with in this paragraph are taken from Imperial Table X- Distribntion of Part IV. The proportional figures for important occupations are given in the marginal pecuigiona.
 statement. The ratio of non-working dependants is less among Hindus than among Christians or Muslims, and conversely the ratio of workers is higher amiong the former than among the other two. In agriculture the Christians have the largest proportion of workers and they are closely followed by the Hindus, while the Muslims are very much behind both of them. In industry the first place is held by the Hindus, the Muslims stand second and among the Christians the ratio of earners is only a little over half that of the Muslims. In transport and trade the Muslims are employed in larger proportion than the other two communities and the Christians larger than the Hindus. The ratio of workers in transport is 108 for Muslims, 82 for Christians and 66 for Hindus, and the corresponding ratios for trade are 884, 301, and 244 respectively. We have seen in an earlier chapter that Muslims are largely traders. The occupational figures bear out this fact. In public administration and professions the position of the communities is the reverse of what it is in transport and trade. Here the Hindus lead, the Christians follow them and the Muslims come last. Of 10,000 Muslims only 10 are engaged in public administration and 87 in professions and liberal arts, the ratios for Christians are 19 and 106 and for Hindus 43 and 117 respectively. Muslim women are generally confined to their home and hence we find a larger proporion of them engaged in domestic
service than their sisters of the other communities. These special features of occupational distribution in the main religions are represented in the following diagram.


Occupations of
295. Imperial Table XI contains the statistics showing the occupations of selected gelected castes. Hindu castes, Anglo-Indians and Europeans, and Subsidiary Table V gives the proportional figures. In the case of the Hindus the traditional occupations of the castes are alsoshown as far as possible, and the tabies show to what extent they are giving up their traditional occupations and betaking themseives to other professions. This tendency, though tabooed by orthodox caste rules, is growing rapidly under the stress of economic necessity. Caste principles are conveniently shelved in the struggle for existence. Taking the Hindus as a whole, more than half their number are non-working dependants including children and others who do not do any work at all. Among certain castes, particularly those who are advanced in education, the proportions of absolute dependants are higher. For example, among Brahmans the proportion is nearly 55 per cent. and among Nayars. it is 54 per cent. On the other hand, among the depressed and backward classes the ratio of dependants is less than half. Among Pulayas it is 49 per cent., among Kuravas 47 per cent., among Vaṇnāns 41 per cent. and among Parayas (Sämbavar). 40 per cent. The conclusion that may be drawn from these figures is that among the illiterate labourer classes there is less unemployment than among the educated higher castes.
296. Let us now examine how far the castes are giving up their traditional occupations. The statistics relating to' a few important castes are given in the margin. The llava community has returned

| Caste | $\underset{\substack{\text { Truditiona! } \\ \text { occupution }}}{ }$ | $\begin{array}{c}\text { Number per } 1,000 \text { carners } \\ \text { engnged } \mathrm{n}\end{array}$ |  |
| :---: | :---: | :---: | :---: |
|  |  | Truditional oculupation | $\begin{gathered} \text { Other } \\ \text { occupations } \end{gathered}$ |
| Ampalavasi | Temple service | 379 | 621 |
| ${ }_{\text {chen }}^{\text {Araxinu }}$ |  | $\stackrel{\text { cis }}{1615}$ | ${ }_{83,}^{325}$ |
| Ihavan | Toddy dirnwing | ${ }_{38}$ | 9:2 |
| Kammialan | Carpentry and other cratts | 825 | 173 |
|  | ${ }_{\text {a }}^{\text {a }}$ | ${ }_{\text {¢ }}^{\substack{83 \\ 174}}$ | ${ }^{1626}$ |
| Nayar | Africulture | $6 \times 3$ | 311 |
| ${ }_{\substack{\text { Prayan } \\ \text { pulayan } \\ \text { Pa }}}$ |  | (832 | ${ }_{16 i}^{106}$ |
|  | Wearing | $\underset{5 \times 0}{ }$ | ${ }_{420}^{117}$ |
| ${ }_{\text {Then }}^{\text {Thintin }}$ | Treve climbing | 5018 | +122 |
| Valan |  |  | ${ }_{6}^{279}$ |
| Vatizan | Wasting | $6 \times 1$ | 319 |
| Yechekiththanazar | Hair drealing | \%880 | 320 |
| Velethădongar | Areaticulure | \$991 | 171 | the least proportion under its traditional occupation of toddy drawing. The anti-drink campaign of the prohibitionists must have contributed to a decline in the numbers engaged in this profession. But the very low proportion of toddy drawers recorded may more likely be due to the aversion of the persons engaged in the profession to admit it. The same remarks also apply to the Nàdar community whose traditional occupation is, like that of the Ilavas, toddy drawing. In spite of the probable incorrectness of the returns there is no denying

the fact that large numbers of both these communities are engaged in other occupations. Among tilavas more than 30 per cent, of the workers are agriculturists and over 22 per cent. are industrialists, while among Nädars 34 per cent. are agriculturists and 14 per cent. are labourers. The next noteworthy feature of the figures in the above marginal table is the very low proportion of the Brahmans following their traditional occupation of priesthood. Only about 16 per cent. of the earners among them are now engaged in this profession, and of the remaining 84 per cent., 26 are agriculturists, 12 are traders, nearly 15 are public administrators, and about 11 are lawyers, doctors and teachers. There is no other caste which contains such high proportions of persons engaged in public administration, professions and liberal arts. The Ampalavåsis, whose traditional occupation is temple : service, are, like the Brahmans, steadily giving up their caste profession in favour of other occupations. Only about 38 per cent. of the workers are now engaged in the former 'and nearly 35 per cent. are agriculturists. The Nāyars are not abandoning their traditional occupation (agriculture) as rapidly as the above mentioned communities. About 69 per cent. of their working population are still engaged in agriculture. Vell!alas' whose caste occupation, like that of the Näyars, is agriculture, on the other hand, have only 48 agriculturists in 100 workers, but as against the Nayars a larger number of them have taken to trade.. Hardly five per cent. of the Nayar workers are traders, whereas among the Vellàaas nearly three times that proportion are engaged in this occupation. The Vaniyan, the oil-presser, is discarding his ancestral profession pretty fast; not more than 38 per cent. of the total workers are now following this occupation, and of the other occupations the most favoured is trade, in which are engaged more than one-fifth of the working population.. Among Thantanns, the tree-climbers, only 50 per cent. of the workers are following the traditional occupation, and others have gone in chiefly for field labour and cottage industries, 58 per cent. of the workers among Saliyans still retain their traditional occupation of weaving, while about 10 per cent, are agriculturists and 11 per cent. are traders. Among the fishermen castes of Afayan and Valan, 67 and 72 per cent. of the workers are now engaged in fishing, while among the artizan caste of Kammàla, the washerman caste of Veluuthädanăyar and the labourer castes of Kurava, Paraya and Pulaya, as much as 83 per cent. of the working population are engaged in their traditional occupations only. The general conclusion that emerges out of the above figures is that the educationally advanced castes, except the Nayyars and Vellalas, are abandoning their traditional occupation more rapidly than the backward and iliterate castes. The exception in the case of the Nayars and Vellalas is due to the fact that their traditional occupation is agriculture which is still the predominant occupation of the bulk of the population.
297. The number of Europeans in the State is 587 of whom 425 are earners, 43 occapations of are working dependants and 119 are non-working dependants. Of the 425 earners, $162 \begin{aligned} & \text { Earopeans and } \\ & \text { anglo-ndiant. }\end{aligned}$ are agents and managers of landed estates and planters, 141 are priests, ministers, nuns and other religious workers, 45 are lawyers, doctors, nurses, teachers, etc., 22 are owners and managers of industries, 19 are commercial men, five are gazetted officers, five are employed in the public force and the remaining 26 are engaged in other miscellaneous occupations. The proportion of European female to male earners is 1 to 3. In some occupations, such as industry, transport, trade, public force and public administration, there. is no female earner at all. - Among agents and managers of estates there are only two females as against 160 males, while in religion the proportion of female to male earners is 3 to 4 , and in the medical and teaching professions females are more than two and a half times the number of males.

Out of 790 Anglo-Indians, 407 are non-working dependants, 110 are working dependants, and 273 or a little more than one-third are earners. The professions in which they are chiefly engaged are transport, industry, agriculture and public administration. Among them female earners are only about one-fifth of the males.:
298. Out of the female population of $2,530,900$ in this State, 360,603 have been occupations of returned as earners, 768,167 as working dependants and $1,402,130$ as non-working females. dependants. These give a ratio of 446 workers (earners and working dependants) and 554 non-workers per 1,000 of total females. If females below 10 years and above 55 years are excluded as being incapable of work, the ratios of workers and non-workers are 707 and 293 per 1,000 females aged 10-55. Of the former, as many as 427 are houseleepers who do actual manual work and if these are excluded from the calculation the number of females engaged in other occupations, both as earners and working dependants; is 280 per 1,000 females of $10-55$ years of age.
299. The actual and proportional figures of female workers are given in Subsidiary Table III. The figures for the sub-classes of occupations, together with those for 1921,
 are set forth in the marginal table. Taking all occupations together, we see that the number of female workers per 1,000 males has more than doubled itself between the last two censuses. This is mainly due to the inclusion of female working dependants engaged in house-keeping under domestic service at the present census and their exclusion at the previous. In agriculture and allied occupations (Sub-class I), in exploitation of minerals (Subclass II) and. in industry (Sub-class III) the proportion of female workers has increased substantially from what it was at the last census. In public administration there was no female employed in 1921, but now there are 25 females per 1,000 males. In professions and liberal arts there is only a nominal increase of four per 1,000 males. On the other hand, there is a distinct drop in the proportion of female to male workers in transport, trade, unspecified and unproductive occupations. The fall in unspecified occupations is indicative of greater accuracy in the occupational returns of females. The decrease in the proportion of females returned as inmates of jails, beggars, vagrants, and prostitutes (Sub-class XII) is indeed a healthy sign inasmuch as it points to less women being engaged in these disreputable prolessions.
300. The specific occupations in which women workers are largely employed will be dealt with in detail later. The general position may, however, be explained here with :special reference to the ratio of female to male workers. The figures for the more important

Number and progortion of female workers in speojic ocoupations

| Order or groap | Strength of female workers | Number of female per 1,006 male workers |
| :---: | :---: | :---: |
| -Pastrue and-agriculture | -217,412 | 317 |
| Rope, twine and other fibres | 76,166 | 2,079 |
| Lace, crope, embroiderios, etc. | 2,902 | 68,087 |
| .Basket makera, cto. . | 17,860 | 2,423 |
| Potters - | 2,544 | 702 |
| Rice pounders and huskers | 17,141 | 19,390 |
| Makers of sugar molasses | 4,394 | 6,197 |
| Sweet meat and condiment makers | 6,755 | 5,915 |
| Washing and clcaning. - | - 11,700 | 1,081 |
| Scavenging <br> Trade of all sorts | - 1,365 | 2,735 |
| Inste of all sorts | 36,415 | 304 |
| Domestic servico | 8,117 $\mathbf{6 9 2 , 1 6 4}$ | 101 81,469 | of these occupations are given in the margin. If domestic service is left out of consideration, agriculture employs the largest number of women. Industries connected with rope, twine, etc., come next, followed by trade of all sorts, basket making, and rice pounding. The making of lace, crepe, embroideries, etc., is essentially a woman's industry, as can be seen from the very large proportion of female to male workers. Under rope, twine, etc., the industry that is mainly carried on in this State is that connected with coir yarn, and this employs nearly two and a half times as many women as men. Rice husking is another essentially woman's occupation, in which there are tweity female workers per every male worker. The other chief occupations in which more women thian men are engaged are the making of gur, molasses, sweetmeats and condiments, scavenging, washing and cleaning. Under instruction there are 191 female employ's per 1,000 males, the actual number being 3,117 as against 1,819 in 1921, showing an increase of over 70 per cent. This is due to the expansion of female education and the increasing employment of women teachers in the department of Public Instruction.

Peminle carnaer
301. The women of Travancore are not kept in purdah as those in Northern India. Except in some minor communities like the Nampatifi Brahman and a few sections of the Muslims they are as free as men. Among the matumakkathayman communities they inherit
ancestral property and with the break-up of the joint family system under the recently enacted social legislation several of them have become independent owners of land. The spread of education among women has enabled many of them to compete with men in different walks of life. Among the labourer classes woman freely shares with man the burden of maintaining the family and both are as a rule earning members. These diverse conditions are reflected in the statistics of the workers of the two sexes in different castes. The marginal table gives the proporion of female to

| Caste |  |
| :---: | :---: |
| Brahman | 99 |
| Enmmikan | 136 |
| Ihavan | 330 |
| Miyar | ${ }^{425}$ |
|  | 644 |
| Pulayan | ${ }^{338}$ |
| Paragan | 651 |
|  | ${ }_{792}^{658}$ |
|  |  | 1,000 male earners in some of the important castes. Among Brahmans very few women have independent means of livelihood. They do not generally go in for outdoor work nor do they inherit ancestral property, and hence female earners number only 99 per 1,000 males. The Kammàla caste consists of carpenters, smiths and other artizans. Their traditional occupations are such as are unsuited to women. Even men have not taken to other occupations to any appreciable extent and much less have women, so that in this community the proportion of female to male earners is only 116 to 1,000 . Vellata women are generally confined to their homes. They are housewives and not outdoor workers. The Nānjanād Velḷàlas who form the bulk of the Vellạala community have conceded to their women the right of inheriting property, and the ownership of land. is the main cause of their female earners being about one-fifth of the male. The Ilava women are engaged largely in coir yarn industry and are also landholders. The proportion of women to men having independent means of livelihood in this community is, therefore, 330 to 1,000 . Nayars are chiefly agriculturists. Both men and women possess property. The women are well advanced in education and a large number of them are employed in Government service. These factors have raised the ratio of female to male earners in this community to 425 per 1,000 . Vanṇan and Veluthadanāyar are professional washermen. Both men and women are engaged in the occupation and the ratio of female workers is consequently high. Higher still is the ratio among the labourer classes such as Pulayan, Parayan, Kuravan and Pallan, among whom the proportion of female workers ranges from 538 to 792 per 1,000 males. If Nayars, Illavas, and Nãnjanäd Vellạlas who are marumakkathayam communities are excluded from consideration, the proportion of female to male earners in different castes varies according to their social status. Among Brahmans, the highest caste in the social scale, there are hardly ten female earners per 100 males, among the artizans the ratio is about 12 to 100, among washermen 50 to 100 , and among the labourers, especially the Pallan, as much as 80 to 100 . The lower the social status of a caste, the greater is the number of women working for their own livelihood.


| Religion | Number of femnete to <br> 1,000 male earners <br> (Principal ocoupstion) |
| :---: | :---: |
| All religions | 828 |
| Hindn | 383 |
| Ohristian | 2214 |
| Muslim | 251 |

Taking the religions separately, it is seen from the marginal figures that the Hindus have the highest proportion of female to male earners, $(383$ to 1,000$)$ the Christians the lowest, ( 214 to 1,000), and the Muslims. occupy an intermediate position ( 251 to 1,000 )
302. Working dependants are those who assist the earners in their occupation: In Female woridng some occupations male helpers preponderate, and in some others females. The ratio of dependants.

| Occupation | Number of female to <br> 1,000 manle working <br> dependan.s |
| :--- | :---: |
| Agriculture <br> Industry <br> Trude | 224 | female to male working dependants in a few typical occupations is shown in the margin. Industry has the largest ratio, female helpers being nearly two and a half times the number of males. It is but natural that workers in small industries carried on at home receive more help from women than from meri. In trade the ratio is 535 females to 1,000 males and in agriculture it is 224 to 1,000 . The above figures show that agriculturists receive the least assistance from women, traders more and industrialists most.

303. So far, we have dealt with some general aspects of the occupational distribution statistics of of the population and we shall now proceed to discuss in detail the special features of important certain specific occupations of importance to this State. The figures for this discussion have been taken from either Subsidiary Table IV or Imperial Table X. Let us begin with

Agriculture. 'agriculture, the chief occupation of a large majority of the people. The term agriculture ' is used in a wide sense: It includes the following groups of the classification scheme.

## 'Order 1 (a) Cultivation

Group 1. Non-cultivating proprietors taking rent in money or kind.
, 2. Estate agents and managers of owners.
" 3. ' Estate agents and managers of Government.
" 4. Rent collectors, clerks; etc.
, 5. Cultivating owners.
; 6. Tenant cultivators.
" 7. Agricultural labourers.
" '8. 'Cultivators of jhum, 'taungya and shifting areas.
Order• (b) Cultivation of special crops, fruil, ètc.

## 'Group' 9. 'Cinchona

10. Coconut.
:11. Coffee.
" 112. Ganja.
" '13. 'Pan-vine.
," 14. Rubber.
" 15. Tea.
„ 16. Market gardeners, flower and fruit growers.
Of the above 16 groups, no person has been returned under groups 4,9 and 12 in this State. The remaining 13 groups include a variety of agricultural interests. The happy landlord who does nothing towards the cultivation of his land and knows very little about agriculture, the paid agents and managers of private and Government farms and officers of 'the departments of Agriculture, Land Records and Settlement, and clerks and others 'employed in the collection of rent, are all persons engaged in agriculture according to the classification adopted for census purposes. In the strict sense of the word only those who are directly concerned with cultivation could be brought under this category, such as ordinary cultivators, (both cultivating proprietors and tenants), agricultural labourers, and cultivators of shifting areas and of special crops. There is a class of landlords who are only nominal owners of lands in this State; they have leased out their lands permanently to tenants whom they have no power to evict under ordinary circumstances. These landlords are called jenmies and the tenants kudiyäns. The jenmies, strictly speaking, should be included in Order 50 (Persons living on their income) and it is very likely that some of them may have been returned under this group. The numbers returned under cultivating owners and tenant cultivators may not be absolutely correct. There are persons who are both cultivating owners as well as tenant cultivators, and it is often difficult to decide whether they should be included in one or the other. Similarly, it is not quite practicable to draw a clear line of demarcation between agricultural labourers and unspecified labourers and workmen returned under group 191. Unspecified labourers are invariably also part-time agricultural workers, and persons who should have been included with the latter may have been returned under the former, and vice versa. These discrepancies and possible inaccuracies in the fgures returned under various groups of - agricultural occupation have to be borne in mind in the discussion that follows.
11. The total number of persons returned as earners and working dependants under the groups constituting agriculture at the present census is 893,010 and the corres. ponding figure in 192I was 627,474 . There has thus been an increase of 42 per cent. in the category of agricultural workers. This large increase has been contributed by the rise in the number of ordinary cultivators, cultivators of special crops, and agricultural labourers. The cause of this rise will be explained when the respective groups are dealt with. As has been already stated in paragraph 278 above, information as to the total number of persons supported by the different occupations is not available, because the:
number ofnon-working'dependants has not been recorded separately for each pocupation.

| Year | Percentage of total population |  |
| :---: | :---: | :---: |
|  | Workers in agriculture | $\left\{\begin{array}{c}\text { Popriation sup } \\ \text { ported by } \\ \text { ngricalture }\end{array}\right.$ |
| 1921 | 15.7 | 51.7 |
| 1931 | 17.5 | $54 \cdot 8$ | Assuming that the proportion of workers. to idependants now is the same, as it was:in 1921 , viz, 10 to 21 , whe number of dependants of the agricultural workers . . oriks -out to $1,875,320$. Adding to this the working pppula.tion of 893,010, we get the population supported by agriculture as $2,768,330$. From the figures, given in the margin it will be.seen that the proportion of agricultural workers to the total population has risen from $115 \cdot 7$ per cent. in ' 1921 to 17.5 per cent. in 1931 and that of the population'supported'by' agriculture from $51 \cdot 7$ per'cent. to $54 \cdot 3$ 'per' cent. The increase in the'actual number of workers is seen reflected in the proportional figures also. it is worth noting that in spite of this'increase the proportion has-not-eome-up to the level 'in India as a whole, where'the population'supported by 'agriculture was 71 per-cent.-of the 'total in 1921.

305. Non-cultivating proprietors are, persons who own.land .but. do not cultivate it. Non-eultivating The transfer of .land by agticulturists to non-agriculturists. will snaturally increase , the proprietors Inumber of non-cultivating proprietors. These men may either live. entirely on, the rent they receive from land or it may be a subsidiary source of income to them :with, some sother occupation as the principal means of livelihood. To gauge the extent to which the land passes from agriculturists to non-agriculturists, the rent receivers returned under principal and subsidiary occupations must be considered. In 1921 there were 18,728 rent receivers - under principal: and subsidiary. occupation

| $\cdots$ Land thenging haride in' a year |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Total area in sores | From ngricolturists to non-2griculturists |  |
|  |  | Ares in acres | -Percentage of total |
| 1920.26 . | 286,752. | 52,742 | 22 |
| 1926.27 | 302,211 | 64,499 | 18 |
| 1927-28 | 373,023 | 61,899. | . 17 |
| 1928-29 | 366,035 | 53,472 | 15 |
| 1929-30 | 307,341 | 81,287 | 27 |
| Axaraga | 327,163 | 63,580 | 20 | and in 1931 their number has increased to 23,518. The increase during the decade is, therefore, about 26 per cent. The statistics 'supplied by the !Registration © Department show that of the land which changes hands in a year about one-fifth passes from agriculturists to non-agriculturists. The figures for the last five years are given in the margin. The average area that changes hands in a year is 327,164 acres, of which non-agriculturists purchase 63,580 acres. In other words, 20 per cent. of the land transferred in a year passes from agriculturists to non-agriculturists, which must naturally increase the , number of non-cultivating proprietors. An increase in the latter will automatically lead to a proportionate increase in the number of tenant cultivators, and we find from the figures that it is actually so. The number of tenant cultivators returned under principal and subsidiary occupations has risen from 59,288 to 74,462 which is equal to an increase of 26 per cent, almost the same as the increase in the number of non-cultivating proprietors:

306. According to the classification scheme the term ' cultivator' includes only the Curtivators - cultivating owner and the tenant cultivator of ordinary crops. But as far as-Travancore is in, $13 \times 16$ ). - concerned, coconut and pan-vine cultivators, market gardeners, fruit and flower growers -should also be considered as belonging to this group. In Travancore these crops are cultivat-- ed not by a special class of farmers, but by the general agriculturists engaged in the cultivation of other crops like rice, tapioca, etc. Rubber and tea stand on a different footing. They are grown in large estates by European and Indian planters and seldom by ordinary -cultivators. The number of cultivators excluding those of rubber and tea has increased "from 482,254 to 551,234 or by 14 per cent. during the decade. The number returned 'under principal occupation alone has been included in these figures. If those returned under subsidiary occupation in 1931 are also taken into account, the number at this census -rises to 784,047 which gives an increase of nearly 63 per cent: over the figure for 1921. :Such a large increase is primarily due to the effect of the passing of Regulations permitting -the partition of tarwàd properties of the three most-important-marumakkathayam communi$\because$ ties, namely; the Nāyar, Ilava and Nänjanād Vellạa.al Before the passing of these Regulations the properties of the tarwads remained intact under the management of the oldest male - member of the tarwād. 'The ijunior members, though entitled to maintenance, could not - claim their individual, share bf the -common properties and would not, therefore, have appeared as earners in the census-schedules. With the partition of the tarwad properties - each member of the tarwād becomes the absolute owner of his or her share and will, -therefore, have been returned as. an agricultural earner. During the five years ended

August 1930 since the passing of the Regulations, 46,644 marumakkathayam tarwads have partitioned their properties among members numbering nearly 560,000 . Of these, the individual share of more than 218,000 persons does not exceed 25 cents of land. Most of these will have sold away these minute bits of land and betaken themselves to other occupations or joined the ranks of the unemployed. Many of the fortunate persons who have inherited larger extent of land have probably become cultivators and the addition of these must have contributed mainly to the increase in the number of cultivators returned at this census.
307. If the proposition that the increase in the number of cultivators is chiefly due to the partition of the properties of marumakkathayam families is correct, there ought to be a fall in the acreage of land per cultivator. Excluding the land under rubber and tea, the area under cultivation in 1921 was $1,910,837$ acres and this when divided by the number of cultivators $(482,254)$ gives an average area of 3.96 acres per head. In 1931 the area under cultivation was $2,064,693$. If this is divided by the number of cultivators returned under principal occupation ( 551,234 ), the average area per cultivator is $3 \cdot 7$ acres and if divided by the numbers returned under principal and subsidiary occupations $(784,047)$ it drops to 2.6 acres, a fall of nearly one-third from the figure for 1921, as compared with an increase of 63 per cent. in the number of cultivators returned under principal and subsidiary occupations.
308. An increase in the number of cultivators; without a proportionate increase in the area under cultivation, leads to the sub-
 division of holdings and tends to render them uneconomic. The magnitude of this evil cannot be fully realised from the average acreage per cultivator. The very minute fractions to which boldings have been sub-divided as a result of the partitions effected will be evident from the figures given in the margin which have been worked out from the statistics supplied by the Registration Department. Nearly 39 per cent. of the individuals got only less than 25 cents of land each, 63 per cent. got less than 50 cents, 82 per cent. less than one acre, 93 per cent. less than two acres, 98.6 per cent. less than five acres and only $1 \cdot 4$ per cent. more than five acres each.
309. As has been already stated, most of the persons who received small bits of land may have sold away their shares and thereby some consolidation of holdings may have been brought about. Statistics regarding the size of the holdings in general in this State were collected in the economic census conducted along with the population census. The results of this census are dealt with at length in Appendix IV. Here it will suffice to state the conclusions. It is seen that about 6 per cent. of the total holdings in this State are less than 20 cents in extent, about 11 per cent. less than 60 cents, 38 per cent. less than one acre, 62 per cent. less than two acres, 87 per cent. less than five acres, $95 \cdot 5$ per cent. less than 10 acres and 4.5 per cent. 10 acres and over. If 10 acres is considered to be the minimum size of an economic holding, only less than five per cent. of the holdings fall within this category.

Agricultural
labour (Group
7 and 191.)
310. The numbers recorded as agricultural labourers under group 7 in the census schedule do, not show their correct strength. A great many 8 those returned as labourers otherwise unspecified under group 191 will have also to be included under the category of agricultural labourers, but it is impossible to say what proportion of them should be so included. The disparity between the figures in these two groups at the present and the last census, which can be seen from the marginal statement, can only be due to a larger

| Occopation | 1091 | 1921 | Varintion per cent. |
| :---: | :---: | :---: | :---: |
| Group 7-Agriealtural labourers . Group 191-Labourers natpecified. | $\begin{aligned} & 250,618 \\ & 112,267 \end{aligned}$ | 108,685 202,858 | +131 -48 |
| . Total . | 802,885 |  | +17 |

fore, be considered together. The total labour population has increased from 311,443
in 1921 to 362,885 in 1931, i. e., by 17 per cent., and the number of labourers per 100 cultivators returned under principal occupation has also risen from 65 to 66 . The increase, though small, indicates the tendency on the part of the cultivators to depend more and more on hired labourers to carry on actual cultural operations. The majority of the agricultural holdings in Travancore, as we have already seen, are so small that the cultavators can attend to the farming operations themselves without the help of hired
labour. But the $T$ a rule, a gentlemavancore cultivator, though his holding may only be a few cents, is, as The Nazyar, the Vellala, the Ilava and not like to soil his hand by handmg a plough. farmers in this State generally, want the Pulayan, the Parayan or the Kuravan to do all the manual work in the field for them and that is why we find here a larger number of agricultural labourers than the smallness of the size of the majority of holdings warrants. In this respect Travancore differs from some provinces in Noithern India as can be seen

| $\begin{aligned} & \text { it } \therefore \text { Province } \\ & 3 \mathrm{y} \cdot \end{aligned}$ | Numher of agricaltural labourers per 100 cultivntors |
| :---: | :---: |
| Arsam (1921) | 3 |
| 'Panjab ${ }^{\text {a }}$ - | 12 |
| United Yrovinces (1921) | 16 |
| Bengal " | 19 |
| Bihar and Orissa " |  |
| Burme ${ }^{\circ}$ | 29 |
| Bombay . " | 41 |
| Travancore (1981) | 45 |
| Madras (1921) | 53 |
| Central Provinces and Berar (1921) | 82 | from the figures given in the margin. The figure for Travancore is the proportion of agricultural labourers returned under group 7 at the present census, and the fgures for the provinces are those given in paragraph 212 of the India Census Report, 1921. The statement shows that excepting Madras and Central Provinces and Berar, Travancore has a higher proportion of agricultural labourers to cultivators than any other province. In Assam there are only three labourers to 100 cultivators, while in Travancore there are 15 times that number. Bengal, where the average size of the holding is about threes acres as against 2.6 acres in Travancore, has only 19 labourers per 100 cultivators as compared with 45 in this State. In Bengal the small cultivator evidently attends to the cultural operations him self, while in Travancore he leaves it to the members of the, depressed classes to work for him.

311. The cultivators of coconut and pan-vine, market gardeners, flower and fruit curtivation of growers have been already dealt with in the foregoing paragraphs under geineral agri- tea and rabculture. Coffee is a minor crop in Travancore. Very little of it is grownand only 110 14, and 15). persons have been returned as engaged in its cultivation. The only: special crops of importance to this State are tea and rubber. The area under tea has increased from 47,105 acres to 74,616 acres during the decade, i. e., by 58.4 per cent., and rubber by $21 \cdot 5$ per cent. from 51,018 acres to 61,986 acres. Separate figures of the workers in tea and rubber gardens are not available for 1921. Both together numbered 16,786 in that year and now the number stands at 71,159 showing an increase of nearly 324 per cent.. The area under tea and rubber has increased only by about 40 per cent. and the increase in the working population by 324 per. cent. is, therefore, abnormal. Great care was taken to obtain correct figures of the estate population at the present census. The estate schedules were specially scrutinised and all mistakes committed in copying the entries on slips removed. Separate returns were also called for from the estates in connection with the enquiry into immigration, and the returns that were received were found to tally with the corresponding enumeration schedules. The actual number of workers in tea and rubber gardens is' even slightly more than the number shown by the occupation returns. In paragraph 123, Chapter III, of this Report the correct number which has been specially compiled from the estate schedules, atter correcting the possible mistakes in the entries, has been given as 76,119 as against 71,159 as stated above. This amall difference is probably due to some workers in estates having been included in unspecified labourers (group 191) on account of the ambiguous entries in the occupation kolumns of the schedules. The number of workers in tea and rubber gardens at the present census could, therefore, be, under no circumstances, less than the figures given in the occupation table: The estate population would have even been considerably more than that revealed by the census if normal conditions had prevailed. By the beginning of 1931 the economic depression had reached an acute stage, and of all commodities rubber suffered most. At the time of the census hardly any rubber estate in the State had the full complement of the labour force it maintained before the depression. Large numbers of coolies had been disbanded and several estates were put on a care and maintenance besis. But for these circumstances 62,000 acres of rubber would certainly have had considerably more than 7,099 workers, the number returned at the census.
312. Tea and rubber, as far as they come within the definition of organized industry, will be dealt with in a subsequent paragraph. It may, however, be noted here that the number of workers returned under organized industry comes to 62,452 in the case of tea and 6,838 in the case of rubber as against 64,060 and 7,099 respectively given in the occupation table. Tea is cultivated only on estate scale, and rubber mostly so. The difference between the two sets of figures mentioned above must, therefore, be due to the failure to fill up column 12 of the schedule in respect of some workers. Out of 74,616 acres of tea more than 70,000 acres are owned by Europeans and only about 4,000 acres by Indians, and out of 61,986 acres of rubber about 45,000 acres are in the hands of Europeans and 17.000 in the hands of Indians. From State Table III it will be seen that the managers of tea estates consist of 31 Indians and 115 Europeans, while among the managers of rubber estates there are 170 Indians and 45 Europeans. Some European estates have Indians as Assistant Managers or Superintendents and that is why the ratio of European to Indian Managers is not proportionate to the area of the plantations owned by them. In the case of other supervising and technical staff the proportion of Indians to Europeans is greater. Out of a total of 528, as many as 497 are Indians and only 31 are Europeans.

One remarkable feature of the labourers employed in tea and rubber gardens is the large proportion of women to men in the former. Tea gardens employ 756 females to 1,000 males, while in rubber plantations the proportion is only 167 to 1,000 .

Cattle breeding 313. The total number returned under stock raising (Order 1-d) is 5,889, of (Group 21). whom 4,541 are cattle and buffalo breeders. Cattle breeding is not a profitable occupation in Travancore. There are hardly nine persons in 10,000 engaged in this profession. The unsuitability of the moist climate, the inadequacy of pasture lands, and the indifference of the people account for the dearth of cattle breeders.

Fithing (Group 27).

Though the heading of this group in the classification scheme is "fishing and pearling", the latter may safely be omitted, because there is no pearl fishing in this State at present. Travancore has a coast line of about 200 miles and backwaters covering an area of nearly 175 square miles. It, therefore, affords great scope for the fishing industry. It is estimated that the annual harvest of fish amounts to more than 90,000 tons of which two-thirds are consumed locally and one-third is exported yielding an annual income of about Rs. 40 lakhs to the country. The number of persons returned at the present census with fishing as their principal occupation is 38,120 and as subsidiary occupation 1,110 , the two together making a total of 39,230 as against 33,402 at the last census, the increase being 17 per cent. Fishing is ordinarily man's occupation, and hence for every 1,000 men 83 women only are engaged in it. This is an industry which affords great possibilities of development. The introduction of improved methods of catching and curing fish and the exploitation of the deep sea fisheries which have not yet been touched would increase the food supply and give employment to a larger population than is now engaged in this occupation.

Industrien,
(Sub-claen III).
314. I have passed over Sub-class II (Exploitation of minerals) because the total number employed in mining in this State is only 2,801 of whom 1,952 are engaged in quarrying building materials and 439 in the manufacture of salt. Next to agriculture industry is the most important occupation of the people, and so 1 propose to deal with it at some length. The total working population (earners and working dependants) returned under industries is 351,076 in 1931 as against 328,093 in 1921 showing an increase of seven per cent. only, while the increase in the population of the State is 27.2 per cent. The much slower rate of growth of the industrial than of the general population has naturally reduced the proportion of industrial workers to the total population during the decade. In 1921 the proportion was 8.1 per cent. and in 1931 it dropped to 6.9 per cent. The number of persons supported by industries (workers and dependants), assuming that the ratio of workers to dependants in 1921 holds good now also, is 771,312 in 1931 as compared with 720,837 in 1921, giving a ratio of 15.1 per cent. of the aggregate population at the present census and 18 per cent. at the last. It may be noted in passing that the proportion of the population supported by industries is higher in Travancore than in India as a whole, where the percentage was 10.5 in 1921 as against 15.1 per cent. in Travancore at present.
315. The marginal statement shows the number and proportion of workers in the principal industries and the variations since 1921. The general increase in industrial workers, as has been already stated, is about 7 per cent. Taking the different classes of industries, it is seen that the increase in building industries is as much as $344 \cdot 6$ per cent. This is abnormal and can only be due to some workmen engaged in building construction being included in unspecified labourers in 1921, Among the other industries increase is recorded in textiles, wood, ceramics, chemical, dress and miscellaneous industries and decrease in metals and food industries. In the case of the latter the decrease, which is 19.4 per cent., is entirely in the number of toddy drawers, while in other industries there is not only no decrease but a substantial increase. The cause of the fall in the number returned under toddy drawing has already been explained.

The relative importance of the different groups of industries can be gauged from the figures in column 3 of the above table and from

Diagram 65- showiog the percentage of workers In different groups of industries to tatal lndustrial workers.

316. The marginal table shows the distribution of workers in factory (organised)

| ludustry | Total workers | Factors worke | ttage workers |
| :---: | :---: | :---: | :---: |
| Ell Industries | 351,076 | 24,611 | 326,565 |
| Textiles | 130,890 | 8,520 | 122,070 |
| Hides, etc. | 380 | 112 | 268 |
| Wood | 55.253 | 318 | 54,935 |
| Metals | 13,493 | 727 | 12,766 |
| Ceramics | 9,302 | 2,926 | 6,376 |
| Chemical | 11,610 | 1,198 | 10,412. |
| Food | 56,167 | 8,128 | 48,039 |
| ${ }_{\text {Drens }}$ | 42,156 | 309 | 41,847 |
| Purniture | 48 | 48 |  |
| Building | 17,024 | 64 |  |
| Constroction of means of transport | 1,140 | 463 | 677 |
| Production and transmission of physical force | 176 | 175 | 1 |
| Miscellaneous | 18,737 | 1,523 | 12,214 |

Factory and cottage. industries.
317. The spinning wheel has not yet found a haven in Travancore. Cotton is not Cotton spinning grown in this country and probably could not be to any appreciable extent owing to the and mearing unsuitability of the climate. Hand spinning has so far failed to establish itself in this (Group 48). country in spite of the vehement propaganda of the advocates of the charka. A spinning
mill was started in Quilon some years ago and after passing through many vicissitudes it has become practically defunct. Cotton weaving, on the other hand, is a long established cottage industry in the State. There was a time when Travancore was able to produce all the cloths she required and even more for export. But with the advent of cheap millmade cloths the indigenous hand loom industry began to languish and continued to decline. Some enthusiasm is now being shown for the revival of this industry, but it has not been in operation long enough to produce any material improvement. The census returns practically show no increase in the number of persons following weaving as their principal means of livelihood. The number was 14,713 in 1921 and 14,636 in 1931. Weaving has, however, been taken up as a subsidiary occupation by a number of persons in recent years, and according to the present census there are 1,588 such persons. If these are added to the full-time weavers and their helpers, the total number in 1931 showa an increase of about 10 per cent. over the fgure in 1921.

Weaving is cerried on mainly as a cottage industry. Of 14,636 workers, only 1,070 are employed in organized industry and the remaining 13,566 are all cottage workers. The workers are composed of 12,768 males and 1,868 females which give a ratio of 146 females to 1,000 males.
318. The heading of group 45 in the classification scheme is "Rope,twine, string and

Coir yarn
induetry
(Group 15). other fibres," but the discussion here is confined to coir yarm, because practically all the persons returned under the above group, except a few engaged in the palmyrah fibre industry in South Travancore, are workers in the coir yarn industry. The number recorded as earners (principal occupation) and working dependants at the present censuis is 112,799 , and besides these 13,628 persons who follow some other principal occupation have returned coir yarn industry as subsidiary occupation, so that the total number of persons engaged in this industry either as full-time or part-time workers is 126,427 . In 1921 the number was 102,634 and the increase during the decade has, therefore, been 23 per cent. Of the total number, 7,245 or a little below 6 per cent only, are workers in factories and the remaining 119,182 ( 94 per cent.) are carrying on the industry in their own homes. It is interesting to note that more than two-thirds of the workers are females, the ratio being 2,079 females to 1,000 males among earners and working dependants together. Among full-time earners there are only 1,339 females per 1,000 males, but among the working dependants, i. e., those who regularly assist the earners without themselves earning wages, the ratio of females to males is as much as 4,811 to 1,000 . Preparation of the coconut fibre and the spinning of coir yarn are carried on mainly as cottage industries. Very often men, women and grown-up children in a household are engaged in these works during their leisure hours. Women who prefer to work indoors find this occupation more congenial to them than men and consequently there are considerably more women than men workers in it. The weaving of mats and mattings out of coir yarn prepared by cottage workers is done largely in factories and there more men than women are engaged, the proportion being only 181 females to 1,000 males.
319. The importance of coir yarn industry to this country can be gauged from the fact that out of 351,076 industrial workers. 126,427 or 36 per cent: are employed in this industry alone, and that out of the total export trade of Rs. $11 \cdot 25$ crores in 1930, the value of the products of the coir yarn industry exported from the country amounted to more than two crores. The industry has been hit hard by the present economic depression. Coir yarn prices have slumped heavily. In 1925 the price went up to a maximum of Rs. 122 per candy, but in 1931 it dropped to $s 0$ low as Rs. 40 . In spite of this heavy fall the industry is struggling on and with the return of normal conditions it is bound to develop and provide employment to a larger number of persons than at present.
320. The number employed in various wood industries included in Order 7 is 55,253 as against 47,934 in $\cdot 1921$. The order containa 10,122 sawyers, 20,607 carpenters, turners and joiners, and 24,524 basket-weavers, cane workers, etc. In the first two classes very few women are employed, while in the last the number of women is about two and a half times that of men. Basket weaving is a common cottage industry among the depressed classes, such as Kuravas and Farayas, and it is mostly their womenfolk who do the work. The industry provides employment to 16,572 earners of whom two-thirds are women, and to 7,952 working dependants of whom more than 81 per cent. are women. Besides these, 2,770 men and 3,439 women follow, basket weaving and allied industries as subsidiary occupations. Of the number engaged in wood industries, organized industry can claim only 318 persons of whom nearly one-half are employed in saw mills and the rest in cane works.
321. The number of metal workers is 13,493 , which is only about a fourth of that engaged in wood industries. Blacksmiths account for 9,826 of the above number. Workers in brass, copper and bell-metal number 2,915 which shows an increase of 16 percent, over the figure in 1921. Travancore has been famous for the bell-metal industry from very early times. The metal mirror (Āranmula kanñadi) is not made anywhere in India except here. Bell-metal images of fine workmanship which .adorn many a temple in this country bespeak of the glorious days when the art of casting had attained a high degree of excellence. The introduction. of cheap machine-made brassware from outside has made the indigenous bell-metal articles unpopular and the local industry has, therefore, fallen on-evil days. By the organization of the workers it ought to be possible to lessen the cost of production and turn out articles suited to modern tastes, and by wide advertisements new markets could be tapped and better prices obtained for the goods. In these ways this languishing industry could be revived and developed.
322. The manufacture of earthenware gives employment to 6,167 persons and brick ${ }^{\text {Geramios }}$ and tile works to 3,135 persons. Since 1921 there has been a slight fall in the number ! (Order 9 engaged in both these industries. Tile manufacture is a comparatively recent introduction: in Travancore, but it has made rapid progress and continued to do so till the presertit trade. depression set in. The fall in price and the lack of demand have forced the managers of tile factories to reduce the number of operatives and diminish the output. At the time of the census the number of employés in brick and tile factories was 2,926 which was less than the number employed in 1921 by 43.1 .
323. The number employed in different chemical industries, such as the manufacture $\begin{gathered}\text { Chemieal } \\ \text { industries }\end{gathered}$ of matches, soaps, and aerated waters, and the reining of vegetable oils is 11,610 of whom industries as many as 10,705 are engaged in the last named industry. Oil pressers have increased ${ }^{\text {aroups }} 66$-70). by nearly 15 per cent. during the decade. The increase is mostly among the cottage workers. Organized industry, represented by the power-driven copra crushing mills which are congregated in the town of Alleppey, has recorded only 612 workers against 659 in 1921. The fall is naturally due to the effect of thestrade depression.
324. Food industries consist chiefly of rice husking, pounding, and grinding, jaggery Food industries and molasses manufacture, sweetmeat and condiment making and toddy drawing. The (orroups $71-81$ ). total number returned under these industries is 56,167 which is less than the number in 192 I by 19.4 per cent. The fall is entirely under toddy drawing. The other industries have all recorded a substantial increase in the number of workers.
325. The persons engaged in rice husking and pounding have increased by 17 Rioe hasking per cent. Rice husking is carried on chielly as a cottage industry by women. There are (Group 71). no doubt a few rice husking mills in good working condition, but the number of employés therein is only 226. Though this is slighty more than the number recorded in 1921 (149), the progress in the industry cannot be considered to be adequate in view of the large scope that exists for its development. There is, however, the consolation that in the absence of sufficient mills, rice husking as a cottage industry is giving employment to 18,025 persons, of whom 17,141 are women consisting of 15,672 earners and 1,469 working dependants.
326. Jaggery making occupies 5,110 persons of whom only 46 are engaged in Jaggery making organized industry, and the remaining 5,064 are carrying on the business as a cottage (arooup 74). industry in their own homes. Jaggery is made from palmyrah palm juice in South Travancore and from sugarcane in Central and North Travancore. The former is mainly in the hands of women and hence the proportion of women to men workers is 6,137 to 1,000 . The number returned under this industry has increased from 3,012 in 1921 to 5,110 in 1931.
327. The number of sweetmeat and condiment makers has multiplied about seven sweetmeat times that recorded in 1921. In that year there were only 1,159 workers in this industry, making but now there are 8,026 . This large increase is due to the development of a new (Groap 73). industry, namely, the preservation and export of cashew kernels to the United States during the last few years. Cashew-nuts are first roasted and shelled, and the kernels are cleaned, graded and packed in cans with carbon dioxide gas as a preservative. In 1930 cashew kernels to the value of Rs. 71 lakhs were exported from Travancore, whereas in 1921 there was no export at all. This is an organized industry and according to the present census 6,285 females and 665 males are employed in it. There is a growing demand for this article in the United States and if introduced in other Western countries,
it will surely create a demand there also. This is what the Indian Trade Commissioner in London says about the market for cashew-nuts in England in his repart for 1931-32. "These nuts will have a good market in this country if their use as dessert nuts can be cultivated. They can easily be introduced as an alternative to almonds, especially as the latter are very dear, and are not readily forthcoming from Empire sources." The industry has, therefore, great possibilities of development.
328. The fall in the recorded number of toddy drawers is from 47,824 in 1921

Other
Industrics. to 23,246 in 1931. The anti-drink movement and the spread of education have probably contributed to this fall to some extent ; but the main cause is, I believe, the aversion on the part of the men engaged in the profession to own it.
329. Persons employed in dress and toilet industries (Order 12) have increased from 40,221 in 1921 to 42,156 in 1931, though among barbers there is a fall of 3,557 . Under building industries (Order 14) the number of workers recorded at the present census is 17,024 as against 3,829 at the last. Evidently, a large number of labourers engaged in building construction were included in unspecified workmen in 1921. Printers and book-binders (Group 95) have increased from 1, 235 to 1,665 and makers of jewellery (Group 98) from 9,357 to 9,714 during the last decade. Of the printers and bookbinders as many as 1,409 out of 1,665 are working in organized industry, while out of 9,714 jewellers there are only 36 such workers.

Tranaport
330. Persons engaged in transport number 37,628 as against 31,796 in 1921.
Transport
(sub-clact IY). Water transport employs the largest number, viz., 13,541 . In Travancore which has an extensive system of water communications, with canals and backwaters forming a continuous chain and running throughout the length of the country, and with numerous navigable rivers flowing across the land from the mountains to the sea, it is but natural that water transport outstrips other methods of transport. The chief vehicle used for this purpose is the old fashioned canoe which in point of speed is slower than any other vehicle, but in point of cheapness beats all others. Out of 13,541 persons engaged in water transport all but 237 earn their livelihood as canoemen. Motor and steam boats which employ 237 persons and which are used mainly for passenger traffic have increased from 36 to 50 between 1921 and 1931. Of 20,353 workers returned under transport by road, 7,108 are labourers employed on roads and bridges, 4,373 are owners, managers and employés connected with motor-cars, buses and lorries, and 7,911 are mainly owners and drivers of bullock carts. In 1921 the corresponding figures were 3,339, 167 and 3,278 respectively. Labourers and cart drivers seem to have more than doubled since the last census. Such an apparently large increase might be due to some employés of these classes having been included in unspecified labourers and workmen in 1921. In the case of mechanically driven vehicles plying for hire, the owners and employés have increased from 167 to 4,373 . If to these are added private motor-drivers and cleaners returned under group 186, the total number employed in connection with motor-cars, buses and lorries, according to the present census, is 6,492 , which is seven times the number ( 925 ) recorded in 1921. Such a large increase indicates the phenomenal development of motor traffic in the last decade, which is fully borne out by the rise in the number of motor vehicles in use and the number of vehicles and accessories and the quantity of pettol imported annually. Up to 1921 only 152 motor vehicles were registered in Travancore, while the number registered up to 1931 rose to 2.475 . Similarly, the value of motor cars and accessories imported rose from Rs. 91,456 in 1921 to Rs: $10,99,097$, and that of petrol from Rs. $2,16,997$ to, Rs. $20,83,667$.
331. The number employed on railways has increased from 1,090 to 1,997 since 1921. There has been no addition to the railway mileage during the last decade, but at the time of the census, work was going on in connection with the extension of the line from the outskirts of Trivandrum to the centre of the town, which presumably accounts for the increase in the number of employes. The number of persons employed in Post (including Travancore Anchal Service) and Telegraph has risen from 1,515 to 1,737 which may be regarded as normal increase due to the natural expansion of these services.
Trade:
(Bnb-elass Y).
Trade
(Sab-olase
Y).
332. Next to agriculture and industry, trade is the most important occupation of the people of this State. It gives employment to 156,031 earners and working dependants and to 20,617 others as subsidiary occupation, both together totalling 176,648 as against 157,395 in 1921. The increase during the decade is, therefore, 12 per cent. The earners and working dependants form about three per cent. of the population, and the number supported by this occupation (i. e. workers and dependants), assuming the ratio of workers to dependafts to be the same as that in 1921, comes to nearly 8 per cent. of the population. The corresponding proportion in India in 1921 was only 5.7 per cent. The importance
-of trade to Travancore can be gauged from the following statistics. In 1921 the value of exports and imports aggregated nearly Rs. H1 $\frac{1}{2}$ crores and in 1931 it rose to. Rs. $20 \frac{1}{2}$ crores. In 192I the number of markets recorded in the Census Report was 107 and their annual transactions were over Rs. $3 \frac{1}{2}$ crores. In 1931 the number reported by the Tahsildars is over 500 and the annual transactions exceed Rs. 6 crores. In addition to these, there are also 58 cattle markets transacting business for over Rs. 34 lakhs annually:
333. The total number following banking and allied business has risen from 2,922 Bank managers, in 1921 to 4,089 in 1931, an increase of nearly 40 per cent. The enormous. growth of money lenders, joint-stock banks and co-operative credit societies accounts for such a large increase in the number of persons employed in these concerns. Banks have increased from 42 to 195 :and their working capital from about Rs. 15 lakhs to Rs. $42 \frac{1}{2}$ lakhs, and the co-operative societies from 227 to 1,784 and their working capital frọm Rs $3 \frac{1}{3}$ lakhs to Rs. $63 \frac{3}{4}$ Jakhs in the course of the last decade.
334. Hotel-keepers, tea-shop proprietors and employés have increased by 14 per Hotelr, cafes, cent. from 14,880 in 1921 to 16,963 in 1931. The development of motor trafic has eto. (Order 31). contributed largely to the increase in the number of hotels and tea-shops. At the junctions -of roads and at the bus halting stations one sees a number of these refreshment. stalls; well patronised. In towns and important villages one can hardly walk a few yards without passing one of them. The investment required for opening a tea-shop is small and to a man of limited means it appears to be a lucrative business。 A tea-shop is generally run as a joint family -concern, the wife attending to cooking, cleaning and other menial works and the husband -serving the customers. The proportion of women to men engaged in this occupation is, therefore, 866 to 1,000, while taking trade as a whole there are only 304 women. workers to 1,000 men.
335. Dealers in various sorts of foodstuffs such as rice, fish, grains, pulses, sweet- other trade in meats, tobacco, etc., form the bulk of the people engaged in other trade. Their total foodstuffis strength is 99,280 as compared with 90,580 in 1921. The workers, excluding those ${ }^{(0 r d e r} 32$ ). who follow the business as subsidiary occupation, number 86,299 , forming 55 per cent. -of the workers in the entire trading business. The general store-keepers, shop-keepers and other traders returned under Order 39 (Group 150) belong in all probability to the class of traders included in Order 32. With the addition of these the number in the latter -order goes up to 96,411 which is nearly 62 per cent. of the total number engaged in trade. In other words, 62 per cent. of the traders deal in commodities which make up the food of the people.
336. Persons eigaged in public administration include the officers of the municipal Public adminibodies and of the State service other than the Army, Police, engineers, doctors, school, stration masters, etc., who are shown under their respective occupations in the classification scheme: (8ub-olass yII). The number returned under public administration in the above restricted sense is 16,684 against 12,786 in 1921, showing an increase of more than 30 per cent: during the decade. One noteworthy feature of the figures of the present census is that 411 females are found to be employed in the State service, while at the last census no such female employé: was returned. The liberal policy pursued by the Government of Travancore in spreading female education and in throwing open appointments in the various departmenta of the State to women has enabled them to enter Government service and compete with men in, the administrative field which was till recently the latter's exclusive preserve.
337. Sub-class VIII includes religion, law, medicine, instruction, letters, arts and professions and sciences. The number returned under these heads now and at the last census and the ibeeral arts

| Head | Number in 1981. | Number in 1921 | Variation per cenc. |
| :---: | :---: | :---: | :---: |
| Total | 64,270 | 86,818 | +13.1 |
| Religion | 20,770 | :22,524 | - 7.8 |
| Law | 6.778 | 3,525 | +92.1 |
| Medicise | 9,636 $\mathbf{2 1 , 2 0 9}$ | -6,688 | $+46.2$ |
| Instruction | 21,209 . | 14,425 | +67.0 |
| - sciences | 5,882 ${ }^{\text {² }}$ | ${ }^{19} 9,750$ | -65.8 | variations between the two censuses are shown in the marginal table. These figures have to be accepted with caution. The fall under religion may be due to some religious mendicants being recorded under beggars and vagrants. Letters, arts and sciences include persons following such a variety of professions that some of them may have been shown under other heads. Under law are shown not only lawyers,. law agents and multiars, but also lawyers' cerks, petition writeīs, etc. An addition of over 3,000 persons in these professions as principal and subsidiary occupations and as working dependants in the course of the decade cannot be considered to be too large in a country where litigation is always on the increase and where a frrst grade Law College is.

Domestic
seryioe
(Sub-alause X.)
turning out year after year increasing numbers of law graduates and pleaders, and various educational institutions are sending forth hundreds of educated men and women who, finding little scope for other employments, take to petition writing and occupations of allied nature. Under medicine there is an increase of more than 48 per cent. during the decade. This head includes medical practitioners of registerable qualifcations (247), other practitioners of allopathic, homoeopathic and ayurvedic systems of medicine, dentists, midwives, vaccinators, compounders, and veterinary surgeons. The increase has been contributed: mostly by the miscellaneous medical practitioners. An increase of 6,783 in the number engaged in instruction is a natural consequence of the rapid spread of education. It is interesting to note that this profession now employs as many as 3,272 women as against1,819 in 1921. Out of the total number of employés of both sexes in the Department of Public Instruction, nearly 97 per cent. are professors and teachers and the remaining. three per cent. are clerks and servants connected with education.
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Private motordriyere and
cleaners
(Group 186)

Organized industries.
338. The abnormal increase in the number under domestic service from 7,098 in 1921 to 714,159 in 1931 is due, as has been already explained in paragraph 278 above, to the inclusion of women engaged in house-keeping and doing actual manual work under. this head at the present census. The number of such women is 681,716 . It is not known. under which head they were shown at the last census. Some might have been included in: unspecified labourers, but the large majority of them might probably have been counted as dependants.
339. The number of private motor-drivers and cleaners has increased from 758 to2,119 in the course of the decade, which is a clear indication of the progress in the use of motor cars in this State, apart from the motor vehicles plying for hire under which also a substantial increase in the number of employés has been recorded as we have seen in para-graph 330 above.
340. The expression "organized industry," as it is used in this Report, has been: defined and the scope of its application to the census in this State explained in paragraph 279 above. As has been stated therein the figures recorded here relate only to plantations of special crops (tea, rubber and cardamom) cultivated on estate scale and industries conducted.
 on factory scale. These figures. cannot strictly be compared. with the results of the indus-. trial census in 1921, because. that enquiry was made in regard to industrial establishments employing 10 or more. persons. Bearing this fact in. mind let us examine in a general way the main features of the organized indus. tries as revealed by the present. figures. The number of persons employed in organized.: industries is 103,490 . Their distribution in the main indus-tries is shown in the margin. Of 103,490 persons employed". in various industries, tea gardens have 62,452 or $60 \cdot 3$ per cent., and these together with the cultivators of rubber. cardamom and other special crops account for as much as: 70 per cent. of the total number, and of the remaining 30 per cent., textiles can claim 8.2 per cent. The chief textile industry conducted on factory scale is the manufacture of coir mat and matting which employs 7,132 persons or 6.9 per cent. of the total number. Organized food industries give employment to. 8,128 workers of whom $6,950 \cdot$ are engaged in cashew-nut factories. Ceramics employ 2,926 persons of whom 2,249 find:
employment in tile factories. 1,198 persons are engaged in chemical industries and of these 612 work in oil mills. Under miscellanezus industries 1,409 persons are employed in printing presses. Organized transport by mechanically driven vehicles engages 5,775 workers or 5.6 per cent. of the total number employed in organized industries, and of these 3,788 persons are connected with mote: traffic.

341. The difference between the figures of the present and the previous censuses comparison has already been pointed out. In 1911 the industrial census covered all establishments with previous employing 20 persons or more, and in 1921 all establishments employing 10 persons cenases. or more. Owing to these differences it is strictly not correct to institute a comparison between the figures of these three censuses. Siill, a general idea of the progress in the development of organized industries may be obtained from such a comparison. The statistics relating to some important industries are, therefore, given in the marginal table. Rubber cultivation

| Industry | Number of employes |  |  |
| :---: | :---: | :---: | :---: |
|  | 1911 | 1921 | 1931 |
| İubler plantations | 2,491 | 5,867 | 6,838 |
| Teas grdens | 2,462 | 11,350 | 62,452 |
| Cuir factories | 1,983 | 5,101 | 7,132 |
| Brick and tile works | 1,510 | 3,357 | 2,926 |
| Oil milis | 659 | 653 | 612 |
| Oashimenut factorics | Nil | Nil | 6,950 |
| Printinu presses | 523 | T24 | 1,409 |
| Moter bines and lorris, | Not | available | 3,788 | shows a gradual development, the number of workers having risen from 2,496 in 1911 to 5,867 in 1921 and to 6,838 in 1931. The abnormal increase in the tea garden employés in the last:decade is, as has been already shown, probably due to inaccuracies in the figures of 1921. Nevertheless, there has been phenomenal development of tea cultivation in the decade. Coir factories have made good progress during the last two decades. In 1911 there were only 1,983 workers, but in 1921 the number rose to 5,101 and in 1931 to 7,132. Brick and tile works and oil mills show a slight decline at the present census, probably due to the economic depression. Cashew-nut industry is a recent introduction and there are no figures for the previous censuses. The number employed in printing presses has almost doubled during the last ten years. Transport by motor buses and lorries came to prominence only in the last decade and hence statistics relating to it were not collected in 1911 or 1921. At the present census 3,788 persons have been returned as being employed in it.

342 Of the total number of 103,490 employés in organized industries, 3,739 are Proportions of directıng, supervising and clerical staff, 172 are welfare workers and 99,579 are orgpanizes operatives, the proportions per 1,000 being 36,2 and 962 respectively.

Directing, aperyising and elerical staff.
343. The directing; supervising and clerical staf consists of 3,494 Indians and 245 others who are mostly Europeans. The staff includes 1,030 managers of whom 843 are Indians and 187 are' Europeans. European managers are found chielly in rubber and tea plantations. In the supervising and clerical staf there are 2,651 Indians against 58 others.

Labour.

Women and children employed in organized industries:
344. The number of welfare workers in all the industries logether is only 172. This may appear to be too small for a population of nearly 100,000 operatives. But the conditions under which most of the industries are carried on are such that there is no necessity to make special arrangements to attend to the welfare of the labourers. The only places where such arrangements are necessary are rubber and tea plantations and a few large factories. The plantations have 90 welfare workers for a population of a little over 70,000 labourers, and coir factories which employ less than 7,000 operatives have 64 of them.

- 345. The operatives engaged in the organized industries number 99,579 and of these more than 71 per cent., $i$. e., 70,735 , are employed in the cultivation of special crops, tea alone accounting for as many as 61,414 , rubber for 6,347 and other cropa for 2,974 . The distribution of the operatives

| Industry | Operatives |  |
| :---: | :---: | :---: |
|  | Number | Percentage |
| Coir factories | 6,662 | $23 \cdot 1$ |
| Ootton weaving factories | 934 | 8.2 |
| Tile and brick worts | 2,783 | 9.5 |
| Oil mills | 661 | $2 \cdot 0$ |
| Onshew-nut factories | 6,923 | $24 \cdot 0$ |
| Printing presses | 1,071 | 8.7 |
| Motor buses and lorries | 3,634 | $12 \cdot 6$ |
| Railways | 1,637 | $5 \cdot 3$ |
| Others | 4,789 | 16.6 |
| Total | 28,84兵 | $100 \cdot 0$ | or two saw mills, one paper mill, two match factories, and a few soda water factories, rice mills, fish curing yards, lace and embroidery factories, boot and shoe factories and some other minor industries. This is all that Travancore can claim in the shape of organized industries and the fact that they together employ only less than 30,000 operatives shows their comparative insignificance.

346. Of the 99,579 operatives employed in organized industries, 35,878 (i. e. 36 per cent.) are females. The ratio of females per 1,000 males is 563 . About 78 per cent. of the females are employed in tea, rubber and cardamom plantations, in which there are 655 female workers per 1,000 males. There is no other industry which employs such a large number of females. The only important organized industry in which there is a higher proportion of female to male workers is the cashew-nut industry. It employs 6,285 females as against 665 males. Coir factories have 1,092 female operatives, but this gives only about one female per five males. All the other industries together employ about 564 females only.

Considering the adults separately, it is seen that females number 23,778 against 44,424 , males which gives a proportion of 535 to 1,000 . Of the adult females, 16,567 ( 70 per cent.) are employed in plantations and of these again more than 15 thousand are workers in tea gardens. Cashew-nut industry employs 5,873 adult females and coir factories 1,004 . In the former there are 17 adult females to one adult male while in the latter the proportion is one to five.

Children number 31,377 in the total labour population of 99,579 employed in organized industries. In other words, nearly one-third of the operatives are children. Plantations, and particularly tea gardens, contain the largest number of them, viz., 28,348 in all plantations together and 26,936 in tea gardens alone. The proportion of children to adults in the latter is 781 to 1,000 . Cashew-nut factories employ 705 children against 6,218 adults or about one child per nine adults, and in the coir factories there are 361 children as compared with 6,301 adults or one child per 17 adults.

Children employed in organized industries consist of 12,100 females and 19,277 males, and of these 11,393 females and 16,955 males are employed in plantations, the proportion being 672 females to $1 ; 000$ males. The number of children employed in. cashew-nut factories is 705 of whom 412 are females and 293 are males. Coir factories employ only 361 children of whom the majority (283) are males and only 78 are females.

To sum up, the plantations employ the largest number of labourers, (men, women and children) but more men than women and the highest proportion of children to adults. Cashew-nut factories employ mostly women, children forming almost one-ninth of the adults and nearly 59 per cent. of the children being females. The proportions of women to men and of children to adults are considerably less in coir factories than in the plantations or cashew-nut factories. The number of women and children employed in other industries is too small to deserve notice.
347. Unemployment is now a world-wide problem. In Europe it started mainly as the Unemplogment. aftermath of the War and in a few years it grew into a big monster which threw out its tentacles on all sides and engulfed the whole world. With the present economic depression the problem of unemployment has reached an acute stage in every country. In the West it is the industrial worker that has been hit hard. The dislocation of trade caused by monetary troubles and tariff barriers in various countries, the diminution in the purchasing power of the people and the restriction on the output of industrial products have thrown millions of factory hands out of employment. In India it is the agriculturist that has suffered most. The heavy drop in the prices of the raw materials is mainly responsible for the sad plight into which he has been driven. Owing to the absence of statistics it is not possible to say to what extent unemployment has increased in Travancore as a result of the present slump. The rapid growth of the population which has taxed to the utmost the resources of agriculture, the chief occupation of the people, has been the primary cause of unemployment in this country. It has been aggravated in recent years by the spread of a system of education which has created in the minds of the youth an aversion to manual labour and a craving for employment in Government service. On the top of these has come the economic depression which has further reduced the sphere of profitable. employment.
348. With a view to ascertain the extent of unemployment among the educated a Unemployment special enquiry was conducted at the present census. The results of this enquiry will be among the dealt with presently. Here I wish to discuss the question of general umemployment with yopars and oners the help of the Gigures of non-working dependants abstracted from the enumeration schedules. We have seen in paragraph 286 above that judged from the proportion of nonworking dependants to the total population, there is more unemployment in Travancore than in any other State or Province in India except. Bengal. Out of a total population of $5,095,973$ in this State, $2,688,679$ are non-working dependants. By a. special sort these have been separated into three groups by sex, namely, those below the age of 15 , literates of 15 years and over, and illiterates of 15 years and over. The figures obtained

| Non-working dependants of 15 years and over |  |  |
| :---: | :---: | :---: |
|  | Males | Females |
| Literate Illiterate | $\mathbf{9 1 , 9 5 7}$ $\mathbf{9 9 , 8 4 3}$ | 76,015 $\mathbf{2 4 8 , 1 7 9}$ |
| Total . | 191,799 | 824,19\% |
| Deduct number of stadentes of 15 years and over. | 12,219 179,680 | 3,959 $\mathbf{3 2 0 , 9 8 5}$ | are males and 321 thousand are fematent. of the total population. Of these, 179 thousand are males and 321 thousand are females, the ratio to the total male and female population being 7 per cent. and 13 per cent. respectively. Of the males, about 79 thousand are literate and 100 thousand are illiterate, and of the females 73 thousand are literate and 248 thousand are illiterate. Thus it will be seen that the literates unemployed population of 15 years and over is 152 thousand and the illiterate unemployed of the same ages is 348 thousand. In other words, there are about 44 literate per 100 illiterate unemployed in the

population of 15 years and over. If every person who is totally unemployed were to do some work and earn even two annas a day, 500 thousand unemployed mentioned above, supposing they work for 20 days in the month, will earn nearly Rs. $12 \frac{1}{2}$ lakhs in a month or Rs. 150 lakhs in a year. This is not the place to consider what work they should do. For our purpose it is sufficient to note that by doing some work which will give them even two annas a day the present unemployed population will be able to add 150 lakhs of rupees : to the national income. Be it remembered that in this calculation we have left out all children below 15 years, all women engaged in house-keeping and all boys and girls of 15 years. and over who are at school or college.

Unemployment by religion.
349. The number of unemployed literates and illiterates by sex in the population of15 years and over of each main religion and the percentage of the unemployed to the total

| Religion | Unemployed males |  |  | - Uneruployed females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Literates 16 <br> yeans and over | Mliterates 10 years and orer | Percentage of total unem- ployed to total popula- tion of all ages | Literates 15 years and over | Illiterates Is years and over | Percentage of total unem- ployex to totol popula- tion of all ages |
| Hindu |  | 60,061 | 6.9 | 38,382 | 157,530 | $12 \cdot 5$ |
| Christian | 32,97] | 31,408 | 7.9 | 33,815 | 76,534 | $14 \cdot 0$ |
| Muslim . | 2,709 | 8,373 | 6.1 | 559 | 14,115 | 8.6 |

and highest among Christians. The variations are greater in the case of Hindus than in the case of males. It may seem strange that unemployment is less Muslim than among Hindu or Christian females. This may be due to the engaged in house-keeping have been excluded from the category of the unemployed. Among the unemployed, the proportion of literates to illiterates is 40 to 100 in the case of Hindus, 60 to 100 in the case of Christians and 15 to 100 in the case of Muslims. These proportions correspond more or less to the variations in the extent of literacy prevalent among the three communities.
Unemployment by caste.
350. We shall now consider unemployment among certain important Hindu castes. The discussion is confined to males of 17 years and over. The figures worked out from. the number of non-working dependants of 17 years and over, together with the percentages of literates to male population, 7 years and over, are given in the marginal table.

| Caste | Unemployed males 17 years and over | Percentage of unemployed to total male popalation of all ages | Percentage of male literntes to male population 7 years and over |
| :---: | :---: | :---: | :---: |
| Kaniyán | 1,104 | $14 \cdot 0$ | $68 \cdot 9$ |
| Ampalaviai | 1560 | $13 \cdot 3$ | $78 \cdot 4$ |
| Brabman | 4,520 | 19.0 | $80 \cdot 3$ |
| Nayar | 36,839 | $8 \cdot 5$ | 61.8 |
| Velakkithalanāyar.1 | 13,239 | $8 \cdot 1$ | 42.6 |
| Vellatan | 2.818 | $8 \cdot 0$ | $58 \cdot 8$ |
| Arayan | 743 | 6.3 | $43 \cdot 2$ |
| Krishnanvald] | 306 | $5 \cdot 0$ | $40 \cdot 6$ |
| Ilavan | 20,259 | $4 \cdot 7$ | 42.7 |
| vániyan | b28 | $4 \cdot 6$ | $35 \cdot 4$ |
| Najdar | 5,075 | $4 \cdot 2$ | 17.9 |
| Kammajan | 4,037 | 3.9 | $45 \cdot 2$ |
| Vilau | 425 | $3 \cdot 9$ | 27.3 |
| Pulayan | 3,229 | $3 \cdot 1$ | 6.9 |
| Thantán | 448 | $2 \cdot 1$ | $17 \cdot 3$ | Generally speaking, it may be said that unemploy-. ment increases with the increase in literacy, with no doubt a few minor. exceptions. The Brahman, the Ampalavãsi and the Kaniyän who show the greatest male literacy ( 70 to 80 per cent.) have also the largest volume of unemployment among the male population of 17 . years and over, namely, 13 to 14 per cent. The Nayar whose male li-. teracy is about 62 per cent. has a male unemployment ratio of 8.5 per cent. The corresponding proportions for the Ilava are 42.7 per cent. and 4.7 per cent.; for theNädär 17.9 per cent. and 4.2 per cent.; for the Pulayan 6.9 per cent. and 3.1 per cent. A striking exception to the general rule is the Kammalan. The literacy ratio of this community is $45-2$ per cent. which is higher than that of Velakkithalanāyar, Arayan, Krishnanvaka and llava, and yet the unemployment ratio is distinctly lower than that of the other castes. Evidently, the spread of education does not affect the employment of artizans of the Kammàla caste as much as it affects the other castes mentioned above. The labourer classes like the Pulayan and the Thantan have the least literacy and also the least. unemployment.

351. The results of the special enquiry into educated unemployment conducted at Rdoostedjunthe present census are set forth in Imperial Table XII-Parts I and II. The special main feyment. schedule prescribed for this enquiry was supplied only to those who desired to fill it up. of the returns The statistics collected do not by any means represent the total number of educated unemployed in the country at the time of the census. Many of them did not care to receive the schedule and fill it up, either because they feared that the enquiry was prompted by some sinister motive or because they were conscious that it would not lead to the opening up of fresh avenues of employment. The returns have, therefore, been vitiated by a large number of omissions. It is gratifying to note, however, that the enquiry in this State has not been such a dismal failure as it has been in some other States and provinces. In Baroda, for example, only 270 males educated in English have been returned as unemployed, whereas the corresponding number returned in Travancore is 2,534. Several other States and provinces seem to have shared the fate of Baroda and the Census Commissioner for India, seeing the failure of the enquiry, suggested in his circular letter No. 23-Comp. dated 4th February 1932 that it might be dropped altogether. But since the results of the enquiry in this State are not as unsatisfactory as those elsewhere and since the numbers returned may be regarded as a random sample of the total unemployed which could be used for a comparative study of the problem of unemployment among different classes of people, they are dealt with here as briefly as possible.

On the whole, 12,220 filled-up schedules were received in connection with this enquiry and they were distributed as shown below:-

1. Passed examinations in English.
(a) Totally unemployed
... 1,820
(b) Employed but not suitably
2. Educated in English but not passed any examination.
(a) Totally unemployed
(b) Employed but not suitably
3. Passed examinations in vernacular.

| (a) Totally unemployed | $\ldots$ | 3,491 |
| :--- | :--- | :--- |
| (b) Employed but not suitably | $\ldots$ | 1,392 |

4. Educated in vernacular but not passed any examination.
$\begin{array}{rcr}\text { (a) Totally unemployed } & \ldots & 3,373 \\ \text { (b) Employed but not suitably } & \cdots & 954 \\ & \text { Total } & \ldots \\ & & 12,220\end{array}$
Of the above number, 9,531 were totally unemployed and 2,689 had some employment with which they were not satisfied. Of the 9,531 totally unemployed, 3,373 were only

|  | Number | $\begin{gathered} \text { Percentage } \\ \text { of the } \\ \text { totai } \end{gathered}$ |
| :---: | :---: | :---: |
| 1. Passed examinutions in Rnglish | 1,820 | 29.6 |
| a) Graduates <br> (b) English School Leaving Certi- | 837 | $5 \cdot 5$ |
| ficate holders or Matricalates | 1,483 | $24 \cdot 1$ |
| 2. Educated in English | 847 | $13 \cdot 7$ |
| 3. Passed examinations in vernacular | 3,491 | 56.7 | literate in vernacular and had not passed any examination, and these have therefore been left out of account. The remaining 6,158 persons were distributed as shown in the margin. $5 \cdot 5$ per cent. of the number of persons returned were graduates, $24 \cdot 1$ per cent. had passed the English School Leaving or Matriculation examination, 13.7 per cent. were educated in English but had not passed any examination and 56.7 had passed examinations in vernacular.

352. The above figures may be compared with some other statistics available in this comparison State. In 1926 the Government of Travancore appointed a committee of officials and with other non-officials to enquire into the problem of unemployment in the State and suggest atatisistios. remedial measures. The report of this Committee was published in 1928. In response to a notice published and widely circulated by the Committee, they received 1,312 forms filled up by the unemployed. Of these, 321 were from persons who had not passed any examination and the remaining 991 were distributed as shown below:Graduates 58, those who passed other examinations in English 279, and those who passed examinations in vernacular 654. The corresponding numbers received in the unemployment engairy at the present census are $337,1,483$ and 3,491 . The . census enquiry has, therefore, had much better response than the one conducted by the Committee.

A general idea of the extent of unemployment among persons who have passed

|  | Statistics collected by the Unemployment Enquiry Oommittee. Applications received by some major departments of Government in the years 192t-1926 | Applications received in the Census Office in 1931 |
| :---: | :---: | :---: |
| Graduates | 410 | 220 |
| Those who passed other examinations in English | 970 | 730 |
| Those who passed examinations in vernacular | 1,412 | 531 |
| Total | 2,792 | 1,481 | examinations can be obtained from the number of applications for appointments received by the various departments of Government. The statistics collected by the Unemployment Enquiry Committee and the number of applications for appointments - received in the Census Office are given in the margin. In the years 1924-1926 the major departments of Government received 2,792 applications, while in 1931 the Census Office alone received 1,481 applications, $i$. e., more than half the number received by the major departments in three years.

The Unemployment Enquiry Committee also made an estimate of the probable number of eligible candidates for appointments, the number finding employment and the number remaining unemployed. The following is their estimate :-

| Number seeking employment every year | ... | 3,500 |
| :---: | :---: | :---: |
| absorbed in Government service |  | 820 |
| . ". in private colleges and schools | ... | 480 |
| " ". in other private service |  | 60 |
| Total number finding employment | .. | 1,360 |
| Number unemployed |  | 2,140 |

2,140 persons out of the numbers that pass out every year fail to obtain employment.

Unemployment amodǵ persons among per
who haye Tho have passed ex
English.
353. The total number of persons who have passed some examination or other in English, returned as unemployed, is 1,820 , consisting of 337 graduates and 1,483 Matriculates or English School Leaving Certificate
 holders. The latter includes also those who have passed the Intermediate examination and the former comprises those who have obtained the degrees of B. A., M. A., M. Sc., B. Sc., L. T. and technical degrees in Agriculture, Commerce, Medicine and Law. The proportional distribution of the total number, according to the examinations passed, is shown in the margin. The large majority of the unemployed (nearly 72 per cent.) are Matriculates or School Leaving Certificate holders, next to them come B. A.'s with about 13 per cent. and then the Intermediates with about 10 per cent. These proportions correspond more or less to the number of persons who pass these examinations every year. In 1930,

| Age-groun | Persons | . Males | Females |
| :---: | :---: | :---: | :---: |
| Below 20 | 232 | 209 | 23 |
| 20-24 | 944 | 882 | 62 |
| 25-29 | 488 | 474 | 14 |
| 30-34 | 121 | 120 " | 1 |
| 35-39 | 30 | 30 | . 0 |
| 40 \& above | 5 | 5 | - | 1,370 persons passed the School Leaving examination, 496 passed the B. A. degree examination and 267 passed the Intermediate examination. The unemployed graduates returned include 10 females and the S. L. C. holders and Matriculates 90 females. The marginal table shows the distribution by age-group of 1,820 unemployed who have passed examinations in English. It will be seen from the table


| $\underset{\substack{\text { Catce or } \\ \text { rellgion }}}{ }$ | ( Percentage |
| :---: | :---: |
| ${ }_{\text {Con }}^{\text {Christian }}$ | 37.2 38.5 |
|  | 10.7 9.9 |
| Ilara | ${ }_{8.0}^{8.9}$ |
| Hinsilim | 0.7 | that about 52 per cent. of the total are between 20 and 25 years of age and 27 per cent. between 25 and 29 years. The unemployed are distributed by caste and religion as shown in the margin. The Christians have the highest. proportion of the unemployed ( 37.2 per cent.) and the Muslims the lowest ( 0.7 per cent.). Of 100 unemployed females, 49 are Christians, 34 are Nayars and the rest belong to other communities. 55 per cent. of the unemployed are sons of cultivators and there is hardly one per cent. whose fathers are artizans or menials.

354. This group most probably contains persons who have failed to secure a pass

| Caste or religion | Porcentage of the total |
| :---: | :---: |
| Christian | 37-3 |
| Nigar | 32.8 |
| Other Biadus | 12.2 |
| Ilava | $9.2{ }^{\text {. }}$ |
| Brahman | $5 \cdot 4$ |
| Buatim | 1.4 | in ariculation examina among permons in the English School Leaving or Matriculation examina- edincated in tion. Of 847 such persons 33 are females. The Engilsh and not distribution by caste or religion is shown in the margin. pasined exaIn this group also the highest proportion of the unemployed is in the Christian community, the next highest is among Nayyars, the other Hindus come third, and then the Ilava, the Brahman, and the Muslim in order. It is interesting to note that in the Brahman caste the proportion of persons who have failed in examinations is less than that of persons who have passed.

355. The total number of persons who have passed/examinations in vernaculars Unemployment returned as unemployed is 3,491 , of whom 1,037 or nearly 30 per cent. are females. amons persons

| Oaste or <br> religion | Percentage <br> of tne total |
| :--- | ---: |
| Mayar | 51.1 |
| Ohristian | 20.1 |
| Other Hindas | 11.6 |
| Ilara | 8.9 |
| Brahman | 1.8 |
| Muslim | 1.1 | 207 possess qualifications in drawing music and other who have 207 possess qualifications in drawing, music and other passed oxatechnical subjects. The marginal table shows the distri- minations in bution by caste or religion of the total number. In this group more than half the number of unemployed are Nayars, and about ione-fourth are Christians. Among Brahmans the proportion is so low as 1.8 per cent. As in other groups the Muslims have the least proportion and this is no doubt due to the paucity of qualified persons among them. Of the Depressed Classes other than Ilava, this group contains 13 unemployed persons, the previous one five and the one above it none.

356: Judged from the returns of the unemployed in the'special enquiry. the conclasion. Christians show the largest' volume of unemployment among the English-educated and next to them the Nayars, whereas in the case of the vernacular-educated the Nayars occupy the first place and then the Christians. Among Brahmans unemployment is more prevalent in the English-educated scction than in the vernacular-educated, and among the llavas and other Hindus it is more or less the same in both the sections. Of all the communities excepting the Depressed Classes, educated unemployment seems to be least prevalent among Muslims.

SUBSIDIARY TABLE IA
Earners (principal occupation) and working dependants

| Class, Sub-class and Order | Number per 10,000 of total popalation | Perountage recorded |  |
| :---: | :---: | :---: | :---: |
|  |  | In citics and urban industrial areas | In rural areas |
| 1 | 3 | 3 | 4 |
| Non-working dependants * | 5,276 | 9 | 91 |
| All occupations-Earners (principal occupation) and working dependants | 4,724 | 7 | 93 |
| A. Production of raw materials | 1,854 | 3 | 97 |
| 1. Exploitation of animale and yegetation - . | 1848 | 3 | 97 |
| 1 Pastare and agriculture 1 | 1.773 1,378 | 2 2 3 | 98 98 |
| (a) Cultivation (b) Cultivation of special crops, fruit, etc. | 1,378 | 2 <br> 3 | 98 |
| (c) Forestry | 8 | 9 | 91 |
| (d) Stock raising | 13 | 8 | 95 |
| (e) Raiking of smnll animals and insects | 1 | 3 | 97 |
| 2. Fishing and hunting, etc. | 75 | 8 | 02 |
| 11. Exploitation of minerals | 6 | -• | 100 |
| 3. Metallic minerals | 1 | $\cdots$ | 100 |
| 4. Non-metallic minerals | 5 | - | 100 |
| B. Preparation and supply of material substances | 1,069 | 11 | 89 |
| III. Industry | 689 | 7 | 98 |
| 5. rextiles | 256 | 3 | 97 |
| 6. Hides, skins and hard materials from the animal kingdom | 1 | 75 | 25 |
| 7. Woord | 109. | B | 04 |
| 8. Metuls | 27 | 11 | 80 |
| 9. Ceramics | 18 | 17 | N3 |
| 10. Chemical products properly so-called and analogous | 23 | 16 | 84 |
| 11. Foorl indust=les | 110 | 6 | 94 |
| 12. Industries of dress and the toilet | 83 | 9 | 11 |
| 13. Furniture industries | $\because$ | 75 | 25 |
| 14. Buildiag indastries | 38 | 10 | 00 |
| 15. Oonstruction of means of transport | 2 | 9 | 91 |
| 16. Production and transmission of physical force |  | 67 | 38 |
| 17. Misceilancons and undefined industries | 27 | 30 | 70 |
| IY. Transport | 74 | 23 | 77 |
| 19. Transport by water | 27 | 10 | 84 |
| 20. Transport by road | 40 | 24 | 76 |
| 21. Transport by rail | 4 | 50 | 50 |
| 22. Post Office, Telegraph and Tolephone services | 3 | 30 | 70 |
| Y. Trade | 808 | 15 | 85 |
| 23. Banks, establishments of credit, exchange and ingurance | 6 | 38 | 67 |
| 21. Brokerage, comunission and export - | 1 | 65 | 36 |
| 25. 'Irade in textiles | 7 | 27 | 73 |
| 26. Trade in skins, ieather and furs |  | 21 | 79 |
| 27. Tracle in wood | 20 | \% | 95 |
| 28. Trade in metals | 1 | 38 | 134 |
| 29. 'r'rade in pottery, bricks and tiles | 2 | 12 | 88 |
| 30. Trade in chemical products | 2 | 21 | 79 |
| 31. Hotela, cafes, restaurants, etc. | 32 | 12 | 88 |
| 32. Other trade in food stuifs | 160 | 14 | 88 |
| 33. Trade in clothing and toilet articles | 1 | 16 | 84 |
| 35. Trade in building materials | ${ }_{5}^{2}$ | 75 27 | 25 73 |
| -36. Trade in means of transport |  | 12 | 88 |
| 37. Trade in fuel 38. Trade in articles of luxury and those pertnining to letters | 4 | 12 | 88 |
| 38. Trade in articles of luxury and those pertaining to letters and the arts and sciences | 3 | 45 | 88 |
| 39. Trude of other sorts | 48 | 16 <br> 16 | 84 |
| C. Publlc Administration and Liberal Arts | 152 | 32 | 68 |
| Y1. Public Foroe | 8 | 61 | 39 |
| 40. Arny <br> 43. Police | 4 | 92 36 | 8 68 |
| YII. Public Administration | 38 | 36 | 64 |
| 4. Public Administration | 33 | 36 | 64 |

## SUBSIDIARY TABLE 1 A-(concluded)

| Olam, Sub-class aud Order | Number per 10,000 of total population | Percentage recorded |  |
| :---: | :---: | :---: | :---: |
|  |  | (n cities and urbau | In rural areas |
| 1 | 2 | 3 | 4 |
| YIII. Profeationt and Lbexal arks | 111 | 29 | 71 |
| 45. Relligion | 86 | - 10 | 90 |
| 46. Law | 11 | 67 19 | 83 |
| 47. Medielne 48. Instraction | 16 38 | 19 40 | 60 |
| 48. Instruction ${ }^{\text {49. }}$ Letters, arta and sciences iother than 44) | 38 10 | 19 26 | 74 |
| D. Miscollaneous | 1,649 | - 8 | 92 |
| IX. Parsons living on their income | 5 | '51' | 49 |
| 80. Persons living principally on their income | 5 | 61 | 49 |
| X. Domestio meryice | 1,405 | 7 | 98 |
| b1. Domestic eervice | 1,405 | 7 | 93 |
| XI. Infuffiolently desoribed ocoupations | 238 | 11 | 89 |
| 52. General termy which do not indicate a definite oscupstion . | 232 | 11 | 89 |
| XII. Unproduotire | 7 | 26 | 74 |
| 63. Inmates of jails, asylums and alms houses <br> B4. Beggers, vagrante, prostitutes | 1 | 100 -15 | - 98 |

Norm:-In this table urban industrial arcas refer to manicipal towns only.

SUBSIDIARY TABLE I B
(Earners as subsidiary ocoupation)


## SUBSIDIARY TABLE II

Distribution of occupation by sub-classes in administrative and natural divisions
(a) Earners (principal occupation) and working dependants

(b) Earners (subsidiary occapation)


## SUBSIDIARY TABLE III

Occupation of females by sub-classes and selected orders and groups


## SUBSIDIARY TABLE III-(continued)



SUBSIDIARY TABLE III - (concluded)


## SUBSIDIARY TABLE IV

Selected ocoupations giving figures for 1921 and 1931


SUBSIDIARY TABEE IV - (concluded)


## SUBSIDIARY TABLE Y

Oceupation of seleeted eastes


NOTR:-In this table the ocenpationg of a caste for which the nomber in column 2 is less than 10 per 1,000 are included in
"Others" under that particular castes.

SUBSIDIARY TABLE Y-(continuel)


SUBSIDIARY TABLE•-(continued)


SUBSIDIARY TABLE Y-(concluded)


## SUBSIDIARY TABLE 'YI'

Special statistics for Railways, the Post Office, Telegraph and Irrigation Departments
(i) Number of persons employed in the Railway Department on the 20th February 1931

| - Class of persons employed | Europeans and Anglo-Indians |  | Indians |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1931 | 1921 | 1931 | 1921 |
| 1 1 | 2 | 3 | 4. | 5 |
| Total persons employed | 5 | 18 | 348 | 884 |
| Officers |  |  |  |  |
| Sabordinates on mcales of pay rising to Rs. 250 per mensem or over | 1 |  | 2 |  |
| Subordinates on scales of pay rising from Rs. 30 to Rs. 249 per mensem. | 4 |  | 102 |  |

NoTe :-The form prescribed for this table differs from that used in 1821 censins and hence the figures of the total persons employed alone are given for 1921.
(il) Number of persons employed in the Post Office and Telegraph Department on the 26th February 1931


SUBSIDIARY TABLE YI-(concluded)
(iii) Number of persons employed in the Irrigation Department on the 26th February 1931


## SUBSDIARY TABLE YII

Distribation of industries, persons employed and ratios per mille of women and children to other operatives


SUBSIDIARY TABLE YII-(continued)


SUBSIDIARY TABLE YII-(contimued)


SUBSIDIARY TABLE YII-(concluded)


## SUBSIDIARY TABLE VIII <br> Namber of persons employed in industry as compared with previous figures



SUBSIDIARY TABLE YIII-(concluded)


## CHAPTER IX

## LITERACY

357. The term "literacy," as it is used in the census returns, means ability to read The scope of and write a language. The instructions to the enumerators were that all persons who the return could write a letter to a friend and read the answer to it must be classed as literate and all others as illiterate. This dual classification was first introduced in 1901 and has been retained since then. Prior to 1901 persons were returned under three categories, namely, learning, i. e., under instruction either at home, or at school or college; literate, i. e., able to read and write a language, but not under instruction; and illiterate, $i$. $e_{n}$ neither under instruction nor able to read and write any language. Experience showed that the returns of those under "learning" were always incomplete and hence it was decided in 1901 to abandon this category and record the population either as literate or illiterate only. No degree of profciency has, however, been prescribed as a criterion to decide whether a person is literate or not. The simple test of ability to write a letter and read the answer to it has been considered sufficient to distinguish the literate from the illiterate. But it may happen, as it did happen in this State in 1921 which will be explained presently, that under this test persons who could read and write a few words in a language with difficulty at the time of the census are returned as literate, though they would soon forget what they had learned and become illiterate. The inclusion of such persons would naturally increase the census figures of literacy beyond the actual numbers of the true literates. In 1911 the State Census Commissioner had issued definite instructions that children and others who were able to read and write a few words in a language with difficulty should not be classed as literate. This necessary precaution was not taken in 1921 and the result was that the literacy figures of that census were greatly inflated. At the present census the necessity of obtaining correct returns of literacy was impressed upon the enumerators, and they were required to record not only whether a person was literate according to the test prescribed, but also whether he or she had passed the fourth standard in vernacular education. All the literate persons might not have gone through the regular school course and passed the fourth standard, but the enumerators were made to understand that only those persons should be returned as literate who possessed at least the same degree of profir ciency in reading and writing as one who completed this standard. It may, therefore, be claimed that the literacy returns of this census are as accurate as they could be. At any rate they have not been vitiated by the inclusion of persons who could only with difficulty read and write a few words in a language, as had happened in 1921 census.

The language in which a person is literate has been recorded at this as at the previous censuses, especially in regard to the two vernaculars of the State, namely, Malayalam and Tamil. Literacy in English has, as ustual, been separately recorded in the column provided for the same in the schedule.
358. The statistics discussed in this chapter are embodied in the following tables:-
Reforence to
statistiom

Subsidiary Table VIII A Number of unrecognized institutions and pupils according to the returns of the Education Department.
IX Literates who have completed primary education (four classes): by religion and locality.
X Main results of the University and other examinations.

Diserepancies In the literacy
ifgres of 1921 .
359. Before proceeding to discuss the statistics of literacy at the present census it is necessary to point out certain discrepancies in the figures of the last census, which. preclude a strict comparison being instituted between the results of the two censuses. One of the methods suggested by the Census Commissioner for. India to test the correctness of the literacy figures collected at the census is to compare them with the number of students in the vernacular schools during the previous decade. The State Commissionerfor 1921 does not seem to have done this. To acquire the census standard of literacy a child should have at least completed the primary course consisting of the first four classes in the vernacular schools. Assuming that all children who have studied in the fourth class will have become literate-this assumption is not absolutely correct, because in case of education being discontinued after Class IV some children are likely torelapse into illiteracy - the number of children who studied in the fourth class during the decade 1911-1920 ought to bear a reasonable proportion to the increase in the number of literates at the census of 1921. The statistics of the Education Department published in Travancore Statistics show that the number of girls who studied in Class IV during the decade 1911-1920 was 74,566. Among some communities there is the practice: of educating girls by private tuition at home without sending them to the school. The number of girls acquiring literacy in this manner will not be very large. Even supposing that their number is 10 per cent.-this is a very liberal estimate-of the number becoming literate. by attending school, the increase in the number of female literates during the decade could not have been more than 82,000 or say even 90,000 . But according to the census of 1921 the increase in literate females was 211,967 over the figure for 1911, or more than two and a half times the number warranted by the statistics of the Education Department.
360. The statistics of the Education Department further show that the number of girls at school has always been considerably less than the number of boys at school. In 1920 the proportion of girls to boys at school was 1 to 2. Even if allowance is made for a

Literacy by ses in the agegroup 0 - 10 incertain taluke in 1081

| Taluk |  | Religion | Population in agcgroup 0.10 |  | Number of literatés In age-group 0-10 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Males | Females | Males | Fomale |
| Neyyattinkara | \{ | Hindu | 20,024 | 19,888 | 1,427 | 5,623 |
| Nesyathina |  | Ohristian | 10,141 | 9,946 | 456 | 948 |
| Trivandrum | \{ | Hindu | 16,888 | 16,983 | 2,111 | 5,697 |
|  |  | Christian | 3,105 | 2,955 | 393 | 1,900 |
| Changanachery |  | Ohristian | 11,804 | 11,400 | 1,946 | 2,544 | small proportion of girls acquiring literacy by privatetuition, the num-ber of female literates will, under no circumstances, exceed the number of male literates. From the figures given in the margin which have been extracted from Travancare Provincial Table V of 1921 it will be seen that in certain taluks the number of female literatesof the age-group 0-10 in 1921 far exceeded the number of male literates in the same group. Only a few instances of wide disparity have been given, but there are several more. The figures of female literacy are evidently wrong. The mistake must have beencaused by including among literates girls who might have been able to read and write a few words in vernaculars and who within a short time after the census might have become absolutely illiterate. This, as we have seen in paragraph 357 above, was due to want of clear instructions to the enumerators not to treat such children as literate. It is quite possible that mistakes might have occurred in the returns of literate females as well as males; but they are more patent in the case of the former than in the case of the latter. In any case the literacy figures of 1921 cannot be used for comparing the progress of literacy, and in the following paragraphs I have, as far as possible, compared literacy in 1931 with that in 1911.

Rxtant of
litaracy.
361. The population of the State excluding children under five years of age is: 4,218,731, and of these $1,217,924$ are literate which gives a proportion of 289 literate persons per 1,000 . Among the male population of five years and over the literates number 866,313 giving a proportion of 408 per 1,000 , and among females of five years and' over there are 351,611 literates or 168 per 1,000 . The progress in general literacy during the last twenty years can be seen from the following figures. The total number of:
literates in 1914 was 513,049 consisting of 428,949 males and 84,100 females. They haveincreased by 137 per cent., males. by 102 per cent. and females by 318 per cent., during the. last two decades. Considering the age-groups by sex in 1931, we see that in the age-group 5-10 male literates number 166 and female literates 113 per mille; in the age-group. $10-15$ the proportions are 314 in the case of males and 200 in the case of females; in the next age-group 15-20 which is the most representative period in regard to literacy, the proportions of literates are the highest, namely, 530 among males and 274 among. females per 1,000 . Children at school will certainly have completed the elementary education well within the age of 15 and very few of those who do not become literate by 20 can be expected to do so after that age. In a country where illiteracy still prevails among a section of the population and where literacy is steadily increasing it is only natural that the highest proportions of literates are found among the population of 15-20 years of age. It may be noted that 53 per cent. of the male population and 27 per cent. of the female population of 15-20 years in this State are now literate. In spite of the faulty figures of 1921 these proportions represent an increase of about 9 per cent. in the case of males and 4 per cent. in the case of females over the corresponding proportions in 1921. At the ages of 20 and over the proportions of literates in 1931 are 475 per mille of males and 153 per mille of females. It will be noticed that these proporions are less than those in the age-group $15-20$. The drop at the age of 20 cannot be attributed to relapse into illiteracy at that age, because a person who retains literacy till his twentieth year will certainly not lose it thereatter. Effective literacy will have been acquired by the age of 20, and the smaller proportion of literates after that age is due to the ever increasing; addition of literates to the age-group 15-20.
362. The proportional figures of literates by sex and locality extracted from Literacy in Subsidiary Table II are given in the marginal statement. Among the administrative admininittrative

| State ar Division | Number per mille of all ages, 5 and over, who are IIterate |  |  |
| :---: | :---: | :---: | :---: |
|  | Perrons | Males | Females |
| STATE | 889 | 408 | 168 |
| $\underset{\text { DIviston }}{\text { Administrative }}$ |  |  |  |
| Southern | 234 | 347 | 121 |
| Oentral | ${ }_{308}^{308}$ |  | 134 |
| Nigh lango | ${ }_{135}^{325}$ | ${ }_{202}$ | ${ }_{44}$ |
| Natural |  |  |  |
|  |  |  |  |
| $\underset{\text { Midand }}{\text { Midand }}$ | 302 <br> 187 | ${ }_{273}^{420}$ | $\begin{array}{r}181 \\ \hline 86\end{array}$ | Range contains the lowest proportions of literates, onl cent. among females. The. High 4 per cent. among females. The population in this der cent. among males and about: coolies who are generally illiterate. Among the natural divisions, the Midland which contains about 60 per cent. of the total Christians stands first in literacy. The Lowland Division closely follows the Midland ; but the Highland is very far behind, due to the: illiterate cooly population of the estates.

363. Considering the different religions separately in the different divisions, it will ${ }^{\prime}$ be seen from Subsidiary Table III at the end of this chapter that the Christians of the Central and Northern Divisions take the lead. In the Central Division 55 per cent. of their males and 32 per cent. of their females are literate. In the Northern Division the corresponding ratios are 49 and 27 and in the Southern Division they drop to 27 per cent. and 14 per cent. respectively. We will see later on that among Christians the Syrians are the most highly educated community and they are found mostly in the Central and Northern Divisions, which accounts for the high proportion of literates among Christians in those divisions. The Hindus, in spite of the large numbers of illiterate Depressed Classes among them, have nearly 44 per cent. literate males and 16 per cent. literate females in the Northern Division and about 41 per cent. and 15 per cent. respectively in the Central Division. In the Southern Division the ratios are 38 per cent. and 13 per cent, and in the High Range only about 13 per cent. and 1.5 per cent. respectively. The
proportions of literates among the Muslims do not vary widely between the different divisions. The lowest ratio of male literates is 23 per cent. in the Northern Division and the highest is 35 per cent. in the High Range, while the lowest ratio of female literates is 2.5 per cent. in the Northern Division and the highest is 3.5 per cent. in the Central and High Range Divisions.
364. Towns afford greater facilities for education and naturally the town population is proportionately more literate than the rural. Subsidiary Table II A shows the ratio of literates among males and females in towns and rural parts. The main figures are extracted in the margin. It may be noted that the towns here mean only the nineteen municipalities. In the urban area 410 out of every 1,000 persons of five years and over are literate, while the corresponding ratio in rural parts is only 278. The ratios of literates among males are 542 in towns and 396 in rural area, and those of female literates are 270 and 159 respectively. The number of literate females per 100 literate males is only 40 in rural parts, but 50 in towns. It is but natural that women in towns go in for education more largely than those in country parts. Literates at the age-period 15-20 constitute 65 per cent. of the males and 40 per cent. of the females in towns, while in the rural area the corresponding ratios are 52 per cent. and 26 per cent. only.
365. The statement in the margin shows the number of literates per 1,000 of each sex in the six major municipal towns. In male literacy Kottayam town stands frst, where 66 out of every 100 males of tive years and over are literate. Next in order are Changanachery, Trivandrum, Quilon, Nagercoil and Alleppey. As regards female literacy also Kottayam takes the lead, the number of literates being 44 out of every 100 females. As in male literacy so also in female literacy Changanachery comes next to Kottayam and is followed by Trivandrum. After Trivandrum come Alleppey, Quilon and Nagercoil in order. Alleppey has the lowest ratio of male literates and Nagercoil the lowest ratio of female literates. The very high proportions of male and female literates in the towns of Kottayam and Changanachery are due to the presence of a large Syrian Christian population there. The lowest proportion of female literates in Nagercoil is due to the backwardness in female education of the Tamilians who preponderate in that town. It is worthy of note that Trivandrum, in spite of being the capital of the State, lags behind Kottayam and Changanachery both in male and female literacy.

Literaoy by taluk.
366. The maps opposite give the ratios of literates by sex in the different taluks of the State. In male literacy Minachil leads off with 542 literates per 1,000 males of five years and over, closely followed by Kottayam (541), Thiruvella (538) and Changanachery (507). In these four taluks more than one-half of the male population is literate. It may also be noted that in these taluks the Syrian Christians preponderate. In the taluks of Sherthala, Vaikom, Ampalapula, Pathanamthitta, Trivandrum, Karthikapally and Mavelikara 40 to 50 per cent. of the male population (five years and over) are literate; fifteen taluks have 30 to 40 per cent, male literates ; in three taluks, namely, Kalkulam, Vilavancode and Pirmede, the percentage is 20 to 30 ; and in Devikulam alone where the bulk of the population consists of estate coolies male literates are as few as about 15 per cent. As regards female literacy, Thiruvella stands first with 310 literates per 1,000 females ( 5 years and over) and next in order are Minachil (282), Changanachery (275) and Kottayam (274). In these four taluks more than one-fourth of the female population is literate. Ampalapula, Trivandrum, Mavelikara and Vaikom have 20 to 25 per cent female literates. In Nedumangad, Thovala, Vilavancode, Pirmede, Shenkotta and Devikulam the percentage is less than 10 , Devikulam being at the bottom of the scale with only three per cent. In 16 other taluks the percentage of female literacy varies from 10 to 20. The above figures lead to the following general conclusions. In places where the Syrian

## MAP OF TRAVANCORE

Showing by Talnks the number of Literates in every, 1,000 of the Mine Popuiation

Sonle 1 buoh = 16 Miles



## MAP OF TRAVANCORE

Showlug by Taluks the number of Literates in every 1,000 of the Female Populution
Sicalo I Inoh = 16 Milen


Christians preponderate as in Thiruvella, Changanachery, Kottayam and Minachil, literacy among males as well as females is greater than in other localities. In taluks where the estate coolies preponderate as in Pirmede and Devikulam, literacy is least prevalent both among males and females. In taluks like Shenkotta, Thovala and Agasthiswaram where the population is predominantly Tamilian, female literacy is considerably less than in other taluks where the Malayalis form the majority of the population.
367. Taking all ages together the proportion of literates among males and females is 100 to 41. But the proportions in diferent age-groups vary considerably as can be seen

## Litaracy by

 sex. from the marginal figures. At the ages of 20 and above there are only 32 female literates for 100 male literates, but in the next younger age-group 15-20 the proportion of female literates has increased to 54, in the age-group 10-15 to 62 and in the age-group 5-10 to 66. This progressive increase in the' proportion of female to male literates at the younger ages indicates the more rapid spread of female education in recent years than, say, two decades ago. Travancore has always been noted for its encoirragement of female education and during the last two decades there has been phenomenal progress in this direction. Yet we have in the whole population only two female to five male literates. Twenty years ago the position was one female to five male literates. In other words, the proportion of female to male literates has doubled in the course of two decades.368. Of the three main religious communities (Hindu, Christian and Muslim) the Literaog by Christians take the lead in point of literacy. Next to them come the Hindus and religion. lastly the Muslims. The proportions of literates among these communities are shown in the following diagram.


Among Hindus there are certain advanced castes who take rank with the Christians in literacy, as we shall see later. A large proportion of the Hindus, however, belongs to the Depressed Classes who are very backward in education, and hence literacy among Hindus is less than that of the Christians. The Muslims have the least proportion of literates. They have taken to education seriously only in recent years, but during the last twenty years they have made substantial progress, especially in male education. In 1911 the numbers of literates per mille were 142 in the case of Hindus, 184 in the case of Christians and 94 in the case of Muslims. In 1931 these proportions have risen to 270,357 , and 144 respectively. Taking the sexes separately it is seen that among Hindus male literates have increased from 242 to 399 per mille and female literates from 42 to 142 per mille during the last two decades. The corresponding increases among the Christians are from 286 to 460 for males and from 78 to 251 for females and among the Muslims from 171 to 253 for males and from 13 to 30 for females. The above figures reveal the striking progress the different communities have made in the education of males as well as females. Of the three communities the Muslims are the most backward in education. Among their male population of five years and over only one in every four is !iterate, whereas among Hindus two in every five males and among Christians almost every other male are literate. Among the females the

Literacy by sex in the main religions

| Religion | Number of female literates per 100 male literates |
| :---: | :---: |
| All religion: | 41 |
| Hindu | 35 |
| Christian | 63 |
| Muslim | 11 | disparities are even greater. This can be seen clearly from the figures given in the margin showing the number of female literates per 100 male literates in each main religion. In the total population there are 41 female to 100 male literates. The Christians have a higher proportion than the State average, namely, 53 females to 100 males. The Hindu proportion is 35 to 100 and that of the Muslim is only 11 to 100 . During the last twenty years the number of literate females per 100 literate males has increased from 17 to 35 in the case of Hindus, from 26 to 53 in the case of Christians and from 7 to 11 only in the case of Muslims. That is to say, the Hindus and Christians have doubled their proportion of literate females, while the Muslims have increased it by only 57 per cent.

369. Persons who have been at school will have acquired literacy by their 15 th or 16 th year of age. A comparison of the proportion of literates at the age-period 15.20

| Literacy by sex and religion at the age-period 15 - 20 |  |  |
| :---: | :---: | :---: |
|  | Number per mille who are literate |  |
|  | Males | Females |
| Hindu | 515 | 237 |
| Christian | 606 | 397 |
| Muslim | 318 | 45 | will, therefore, show the extent to which the different communities are availing themselves of the facilities provided for education. The figures for males and females by main religions are given in the margin. Among Hindu males of 15-20 years more than 50 per cent. are literate, among Christians the percentage is more than 60, but among Muslims it is only a little over 31. As regards females of the same ages, the proportion of literates among Hindus is about 24 per cent., among Christians about 40 per cent., and among Muslims as low as 4.5 per cent. Further comment on these figures is unnecessary.

Of the minor religious communities whose total strength is only 3,336 , the followers of Tribal Religions number 2,907 and among them there are only 54 persons able to read and write. Of these, 51 are males and three are femalcs. The Jews, Buddhists, Jains, Zoroastrians and Sikhs together number 428 only and among them there are 165 literates consisting of 124 malez and 41 females.

Literacy by
caste, tribe and religion.

Twmber per mille of the population 5 years and ocer
who are literate in each muin religion

| Religion | Persons | Males | Females |
| :---: | :---: | :---: | :---: |
|  | 270 | 399 | 142 |
| Christian | 357 | 460 | 251 |
| Maslim | 144 | 253 | 30 |

(Table VA) showing the number of literates per 1,000 of the total population at the last three censuses. The figrres of the present census are not comparable with those of the previous censuses given in Table V because of the difference in the age of the population on which literacy is calculated. For purposes of comparison should, therefore; be used the figures in Table V-A which are based on the total population.

Absolute figures of the literates in the different castes and communities are given in Imperial Table XIV and the proportional figures in Subsidiary Table V. The statistics relating to the more important castes and communities are given below with a view to exhibit the relative importance of each caste or community in respect of its numerical strength, the number of literates and the percentage of literacy. The castes and communities are arranged in the order of the number of literates. The population that has not been included in the statement comes to 87,038 which consists mostly of minor Hindu castes and the primitive tribes.


It will be notiged from the above statement that owing to the difference in the extent of literacy prevalent, different castes and communities, when arranged according to the number of literates, do not follow the same order as that of their total population. For example, the non-Malayala Brahman community which has only a total population of 54,141 has 26,431 literates, whereas the Hindu Pulayas who number 207,337 have only 6,778 literates.

Iale literacy by caste, tribe and religion.
371. Having dealt with total literacy among castes and communities in a general way we shall now proceed to consider the question of male and female literacy among them separately. In accordance with the instructions of the Census Commissioner for India, castes and communities have been divided into "Advanced," "Intermediate," and "illiterate" according as they contain more than 50 per cent., 10 to 50 per cent. or less than 10 per cent., of literates in the male population of seven years and over. For purposes of comparison the Christians by sect and the Muslims have also been brought under this classification.

Population classified by the proportion of literates in the male population of seren yrars and orer


DIAGRAK GEELITERACYAMONG MALES
 $\rightarrow+1+1$

Brahmen Others K Shatave Malayad









$1+1$

## ERMEDIATE $1+1$




$1+++\tan ++1$




OtherChristians









右


$t$ Anghican Communtor








The total population of Hindus and Tribal Religions together is $3,137,795$. Of these, the literacy figures for 71,534 persons of minor castes have not been compiled. The remaining population of $3,066,261$ has been divided into the three categories of 'Advanced,' 'Intermediate,' and 'Illiterate' on the basis of literacy. The first category includes $1,032,853$ persons or 33.7 per cent. of the total, the second includes $1,614,218$ persons or 52.6 per cent., and the third 419,190 persons or 13.7 per cent. Of the Christians by sect 59.9 per cent. come under "Advanced," 40.1 per cent. under Intermediate,' and none under 'Illiterate.' The whole Muslim population is in the 'Intermediate' class only. The Hindu castes falling in the category of 'Advanced' are the nonMalayala Brahman, Malayala Kshatriya, Ampalavāsi, Malayala Brahman, Kaṇiyān, Nayar and Vellạala. All the primitive tribes, and the Parayan, Pulayan, Pallan, and Kuravan among the Depressed Classes belong to the 'Illiterate' group, and all other castes to the 'Intermediate' group. It may be noted that some of the Depressed Classes such as Arayan, Illavan, Velakkithalanāyar, Vêlan, Veluthādanāyar (including Vaṇ̣än), Patavan, Välan, Nädàr, Thantän, Marakkan and Maravan, are in the 'Intermediate' group, the percentage of literates among their male population ( 7 years and over) ranging from 10 to 50 . The percentage among some of them, e. g., Arayan, llavan. and Velakkithalanayar, is more than 40, and though socially they are subject to certain disabilities, educationally they cannot be said to be depressed. Among the primitive tribes there is not one which can boast of having more than six per cent. literates in the male population of seven years and over. The Mala-Ürali has the highest percentage and that is only $5 \%$. The percentage among the other tribes is less than four and there are as many as six tribes, namely, Malapantä́áam, Malapulayan, Mannān, Muthuvan, Paliyan and Thantapulayan having no literate at all.
372. Female education is advancing rapidly in Travancore, and to-day she occupies Pemale iteraoy the second place, the place of honour being held by Cochin, among the different Provinces by casste, tribe and States in India in female literacy. In spite of this progress there are at present only and religion. 168 literates per 1,000 females in Travancore ( 5 years and over), while the corresponding ratio of literate males is 408 . The disparity between male and female literacy in some communities is even more marked than that in the general population. In order to bring this fact home to the communities concerned I give below a statement showing by caste, tribe, race and religion the ratio of literates in the female population of seven years and over. As in the case of the male literates, the communities have been divided into 'Advanced,' 'Intermediate,' and 'Illiterate' exactly on the same basis.

Pepulation classifed by the propurtion of literates in the female population of reven years and orer


DIAGRAM 69:- LITERACY AMONG FEMALES

BY CASTE, TRIBE AND RELIGION.


The above statement shows that in regard to female literacy 0.1 per cent. of the Hindu females are in the 'Advanced,' 66.0 per cent. in the 'Intermediate' and 33.9 per cent. in the ' Illiterate' group ; of the Christian females 96.3 per cent. are in the ' Inter-
mediate ' mediate' and $3 \cdot 7$ per cent. in the ' illiterate' group; and the Muslim females fall entirely in the 'iliterate group only. Of the Hindus, the Malayala Kshatriya females, and of the The females of the primitive tribes and of most of the Depressed Classes are in the 'Illiterate', group. Among many primitive tribes there is no female literate at all, while among others the proportion is not even one per cent. Among the Depressed Classes the Kaniyän is fairly well up in female literacy, the proportion being 21.7 per cent.; among Velaakkithalanäyar, 12 ; and among the rest it rayan and Velan the percentage varies from over 10 to over
373. We have seen in the previous paragraphs that most of the Depressed Classes of the Hindus and the primitive tribes have a very low percentage of literacy. It is these
 castes and tribes that gene-

Influence of Christianity on literacy. rally contribute converts to Christianity, but with the change of religion they make rapid progress in education through the influence of the Christian missionaries. Some figures are given in the . marginal statement to illustrate this point. The proportional figures in the last column of the statement show to what extent Christianization has increased literady among the Depressed Classes. Among Hindu Nādärs, for example, only a little over 10 per cent. of persons of seven years and over are able to read and write, whereas among the Christian Nadars the ratio is 30 per cent. While only about 4 per cent. are literate among the Hindu Pulayas, 13 per cent. of the Christian Pulayas are literate. The ratio among the Hindu Sämbavar is about 5 per cent., but among the Christian Sämbavar it is more than 15 per cent. Only less than two per cent. of the Hindu Kuravas, but nearly 10 per cent. of the Christian Kuravas are literate.
374. Malayalam and Tamil are the vernaculars of the State and are spoken by 84 per cent. and 15 per cent. respectively of the population. The literates in these languages

Literacy by sex in Malayalan and Tamil.
 are shown in the marginal statement. Of the total literate persons 92 per cent. are literate in Malayalam and 8 per cent. in Tamil. Among literate males the proportions are $91 \cdot 3$ per cent. and 8.7 per cent., and among literate females 93.6 per cent. and 6.4 per cent. respectively. For 1,000 Malayalam speakers there are 185 . Tamil speakers in the country, but for 1,000 literates in Malayalam there are only 87 literates in Tamil. Tamil schools are conducted only in three or four taluks of the State where the population is preponderatingly Tamilian, and the Tamilians in other taluks are oblized to send their children to Malayalam schools, This is the reason for the proportion of the Tamil literates to the Malayalam literates being less than that of Tamil speakers to Malayalam speakers. Not only so, the literates in Tamil are gradually falling of while the literates in Malayalam are increasing rapidly. The latter rose from 453,119 in 1911 to $1,126,387$ in 1931, while the former fell from 108,523 to 98,406. In other words, when literates in Malayalam have increased by nearly 149 per cent. in 20 years, literates in Tamil have decreased by 9 per cent. in the same period.

The proportions of literates in Malayalam and Tamil by religion are shown in the margin. It will be noticed that among Syrian Christians there is only one per 1,000 of the population ( 5 years and over)

| Religion | Number of literates per nuille ( 5 years and over) in |  |
| :---: | :---: | :---: |
|  | Malayalam | Tamil |
| All religions | 867 | 83 |
| Hindu | 2.52 | 22 |
| Syrian Christian - | 453 | 1 |
| Cther Cbristians | 157 | 60 |
| Maslim | 116 | 22 |

have the same proportion of Tamil literates and Syrian who is literate in Tamil. For 1,000 Malayalam literates there are about two Tamil literates among Syrian Christians, 89 among Hindus, 190 among Muslims and 383 among other Christians. Tamil literacy is prevalent most among non-Syrian Christians who reside chiefly in South Travancore. Next to them come Hindus and Muslims who Christians have the least.

Literates who have completed primary primary
375. In October 193Dthe Census Commissioner for India issued a circular letter suggesting to the Provincial and State Superintendents of Census Operations "that a return should be obtained in the literacy column (16) of the General Schedule which will indicate the numbers of all persons who claim to be able to demonstrate that they have reached some specifed standard of education, such as the satisfactory completion of a primary school course." The Indian Statutory Commission had suggested that the possession of a certificate that a person had reached the fifth class or the corresponding standard of the primary school might be regarded as a qualification for voting. The number of persons who possessed such a certificate, it was thought, would be useful to the Indian Franchise Committee. The report of the Franchise Committee was, however, published before the figures collected at the census could be made available to them.
376. In accordance with the instructions of the Census Commissioner for India enumerators in this State were asked to enter in column 16 of the Schedule "Class IV" against all persons who admitted to have passed this standard. Fourth class was selected because it marks the 6rst stage in elementary education in this State. After the fourth class children have the option to conlinue their education either in Vernacular Middle schools or join the English schools. This classification of schools was introduced in 1901. Prior to that year the primary school course consisted of three classes only. There were also in those days a large number of private unrecognized schools which contained two or three classes only, and children who could not proceed to higher classes remained in those schools until they acquired such proficiency in the vernacular as would enable them to become document writers or obtain petty posts in Government service. Such of them as have acquired permanent literacy in this way, though they must have been returned as literate at this census, could not have been shown as haviog passed the fourh class. The disparity between the recorded figures of total literates and literates who have passed the fourth class, which we will see presently, is to be attributed to this cause. The number of persons who have been returned as having passed the fourth class may be considered to be those who have gone through the regular school course and completed the primary standard since 1901 when the present classification of schools was frst adopted. With these preliminary remarks we shall consider the Ggures that have been collected.

Literntes who hare paused the fourth clast

|  | Persons | Males | Females |
| :---: | :---: | :---: | :---: |
| Total population | 5,095,973 | 2,565,073 | 2,530,900 |
| Total literates | 1,217,924 | 866,313 | 851,611 |
| Literates who have passed the fourth class | 429,778 | 309,180 | 120,648 | Subsidiary Table IX at the end of this chapter gives the number of literates who have passed the fourth class by religion and locality. The main figures for the State are extracted in the margin. It will be seen that 35 per cent. of the total literates ( 36 per cent. of the male and 34 per cent. of the female literates) claim to have passed the fourth clase.

The marginal statement shows by religion the total number of literates, the number

Litoratos by roligion who have passed cho fourth clase
 of literates who have passed the fourth class and the percentage of the latter to the former. As is to be expected the Christian males and females show the highest percentages ( 37 and 35); the Hindus closely follow them with 36 and 34 per cent. respectively; but the Muslims naturally lag far behind. Among Muslim males 22 per cent, and among Muslim females 10 per cent. of the literates only have been returned as having passed the fourth class.
377. The table and diagram below show the progress of literacy in the population progress of of the State since 1901 .

| Year. |
| :---: |

Children below ten years of age, if they are literate, are likely to lose the literacy they have acquired if they do not continue their education beyond that age, and hence to compare the progress of literacy from census to census it is advisable to consider the proportions of literates in the population aged 10 years and over. For reasons explained in paragraphs 359 and 360 above the 6 gures of 1921 may be left out of account. During the last thirty years literacy has made striking progress in this State. In 1901 only 283 out of 1,000 males and 39 out of 1,000 females in the population of 10 years and over were
able to read and write. In 1911 the ratios increased to 329 and 64, and in 1931 to 454 and 178 respectively. In other words, ten out of 35 males aged 10 and over and ten out of 256 females of the same ages were literate in 1901, but now ten out of 22 males and ten out of 56 females of the above ages are literate. Literacy has made considerably more progress among females than among males, and yet the former is still a great deal behind the latter, because for 100 literate males of 10 years and over there are only 39 literate females of the same ages.
378. The Census Commissioner for India observes in his notes of instructions for the preparation of the Census Report, "The progress in the general spread of education can best be gauged by looking to the number of persons of each sex who are literate in the age-group 15-20. The proportion of literate persons in this group may be taken as furnishing a good guide to the number of children who have been under effective instruction during the preceding quinquennium, i. e., it will show the proportion of children of school-going age who have attended school long enough to attain the census standard of literacy." It will be seen from the table given above that among males of the age-group 15-20 the literates have increased from 264 to 530 per mille and among females of the same age-group from 58 to 274 per mille during the last thirty years. That is to say, in 1901 there were 10 male or female literates for 38 males or 172 females at the age-group 15-20, whereas in 1931 the proportions were 10 literates for 19 males or 37 females. The rapid progress in female literacy is evident from the fact that in 1901 there were only 23 female per 100 male literates in the age-group 15-20, but in 1931 the ratio has increased to 54 per 100 male literates.
379. A clear idea of the comparative progress in effective education may be obtained from the actual numbers of literates in the age-group 15-20 returned at different censuses. The figures for

Literates in the age-group 15-20 at the last four censmets

| Year | Persons | Incrense per cent. | Males | Increase per cent. | Females | Increase per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1901 | 43,887 |  | 35,778 |  | 8,100 | $\cdots$ |
| 1911 | 67,076 | 63 | 50,805 | 42 | 16,2il | 101 |
| 1921 | 129,730 | 94 | 84,573 | 66 | 45,157 | 178 |
| 1931 | 194,671 | 80 | 126,411 | 49 | 68,260 | $\triangle 1$ | the last four censuses are given in the margin. The total literates in the population of 15-20 years have increased from 43,887 in 1901. to 194,671 in 1931 or by nearly 344 per cent., the male literates have increased by 253 per cent. from 35,778 to 126,411 and the female literates by as much as 742 per cent. from 8,109 to 68,260 . It will be seen from the above table that the increase in the decade 1911-1921 was abnormal which could only be attributed to the inaccuracies in the literacy figures of 1921 census. If correct figures had been obtained at that census, the rates of increase. during the decade 1911-1921 would have been lower and those during the next decade higher than the recorded rates, and the figures would have revealed a progressive rate of increase from decade to decade. Whatever it be, the fact that male literates of the agegroup 15-20 have increased by 253 per cent. only while the female literates have increased by 742 per cent. in the course of the last thirty years, shows the more rapid progress female education has made than male education during this period.

Progress of literacy by locallty.
380. The table below which gives the number of literates per 1,000 of each sex in the age-group 15-20 in the administrative divisions at the last four censuses shows the difference in the

Number of literates per 1,000 of each sex at the agogroup 15.20 in the administratity dicisions at the last four censues

| Division | Males |  |  |  | Females |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1901 | 1911 | 1921 | 1931 | 1001 | 1911 | 1021 | 1981 |
| Southern | 220 | 580 | 373 | 441 | 86 | 93 | 104 | 198 |
| Central . | 281 | 338 | 487 | 868 | 55 | 97 | 248 | 30\% |
| Northern High Range | 283 128 | 235 | 459 | 597 | 63 | 104 | 267 | 327 |
| High lange. | 128 | 188 | 94 | 107 | 41 | 83 | 85 | 67 | progress of education in the different divisions. The greatest progress is seen in the Northern Division where 597 males and 327 females per 1,000 of each sex at the age-group 15-20 are now literate, and the least proo gress is recorded in the High Range where only 197 males and 57 females per 1,000

of each sex of the same age-group are able to read and write. In the High Range Division the population consists mostly of estate coolies among whom education makes little headway ; facilities for education are also considerably less there than elsewhere, and consequently literacy is least prevalent in that division. In the other three divisions more or less equal and ample facilities exist for education, especially of the primary standard. The greatest extent of literacy prevalent in the Northern Division is due to the population there being composed largely of Syrian Christians who evince greater interest in the education of their children than the other communities.
381. The literates per 1,000 males and females of different religions in the agegroup 15-20 in 1901 and 1931 are shown in the marginal statement. Separate figures are given for the Syrian and other Christians in 1931. Separate figures for 1901 are not

Progress of ilteracy by religion.

| Roligion | Males |  | Females |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1901 | 1931 | 1901 | - 1931 |
| All religione | 264 | 530 | 58 | 274 |
| Hindu | 254 | 515 |  | 237 |
| Christian | 333 | 606 | 95 | 397 519 |
| (a) Syrian | $\cdots$ | 740 401 | ${ }^{\circ}$ | 519 229 |
| Mrasion | 153 | 318 | 16 | 45 | available. Christians show the greatest progress and among them Syrian Christians more than the other Christians. Of the Syrian Christian males of 15-20 years, nearly 75 per cent., and of their females of the same ages more than 50 per cent., are literate. Next to the Syrian Christians the Hindus show the greatest progress, then come the other Christians and lastly the Muslims. Compared with the Hindus and Christians the Muslims are backward in education and more so in female education. The proportion of literates among Muslim males of 15-20 years, though it has increased from 153 to $3!8$ per mille between 1901 and 1931, is still only 60 per cent. of the State average for males. The literates among Muslim females of 15-20 years have increased only from 16 per mille in 1901 to 45 per mille in 1931 and the latter is only about 17 per cent. of the corresponding proportion for the females of the State.

382. Subsidiary Table VA at the end of this chapter shows the proportions of literates in selected Hindu castes at the last three censuses. The figures of 1921, being incorrect, may be left out of consideration and comparison confined to those of 1911 and 1931. The population of the castes dealt with is $2,174,077$ out of the total Hindu population of $2,282,617$ in 1911 and $3,003,350$ out of $3,134,888$ in 1931. The castes have been divided into four groups according as the proportion of literate persons is below 10 per cent., 10-25 per cent., $25-50$ per cent., or 50 per cent. and over. The actual population in these four groups and the percentage of each group to the total population dealt with in 1911 and 1931 are shown in the marginal statement. In the group with

| Progrest of literacy in certain selected Hindu castes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of litarate population | 1911 |  | 1931 |  |
|  | Actual number | Percentage of the group to the total population | Actabl number | Percentage of the group to the total popnlation |
| Population of Hindu castes dealt with <br> Below 10 per cent. literate <br> 10-25 per cent. <br> 25 - 50 per cent. <br> 50 and uvar | $2,174,077$ 629,893 $.1,465,483$ 88,701 Nil | 290 290 66.9 $4-1$ Nil | $3,003,350$ 694,530 $1,278,903$ $1,007,831$ 22,086 | 76 $23 \cdot 1$ 42.6 33.6 0.7 | 50 per cent. literates and over there was none in 1911, but 22,086 persons have gone into this group in 1931. In the group with 25-50 per cent. literates the percentage of the population has increased from 4.1 in 1911 to 33.6 in 1931, and there has been a corresponding reduction of 24.3 per cent. and 5-9 per cent. in the groups with 10-25 per cent. and below 10 per cent. literates respectively. The last group consists mostly of very backward Depressed Classes and the fact that only about six eer cent. of this population have moved from the last group to the next higher group is an indication of the comparatively slow progress these communities have made in education. Progress has been more rapid in the second group, from which a. little over

24 per cent. have got into the next higher group in the course of 20 years. The varying rates of progress among the different castes can be seen clearly from the statistics relating to - a few representative castes in each group given below:-

Progness of literacy among representatice castes

| Ouste | Number of literates per 1,000 of the propulation of all nqes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1911 |  |  | 1931 |  |  |
|  | Persons | Males | Fomales | Persons | Males | Fenales |
| Ampalavãsi | 291 | 456 | 125 | 510 | (i) ${ }^{\text {a }}$ | 384 |
| Brahman, Malayna | 452 | 628 | 224 | 809 | 648 | 345 |
| Brahmsu, others | 356 | 589 | 97 | 188 | 659 | 315 |
| K3niyãn | 293 | 499 | 76 | 363 | 549 | 173 |
| Nayar | 238 | 398 | 81 | 255 | 483 | 290 |
| Seflajan | 239 | $4+2$ | 35 | 310 | 476 | $1+3$ |
| İsran | 101 | 186 | 17 | 213 | 338 | 94 |
| Kammaxlan | 142 | 286 | 14 | 214 | 352 | 71 |
| Kuravan | 7 | 12 | 2 | 12 | 21 | 4 |
| Nsulàr | 55 | 104 | 5 | 83 | 143 | 31 |
| Parayan | 13 | 25 | 2 | 40 | 71 | 7 |
| Putayan | 8 | 15 | ${ }^{1}$ | 83 | 88 | 10 |

The above table brings out the comparatively small progress of literacy among the Depressed Classes, such as, Kuravan, Nädär, Parayan and Pulayan. Both male and female literacy is extending less rapidly among these than among the other castes, and among the Depressed Classes female literacy is advancing more slowly than male literacy. When the proportion of literates among Nayar females, for example, has increased from 81 to 229 per 1,000, it has increased only from one to 10 among the Pulayas, from 2 to 4 among the Kuravas, from 2 to 7 among the Parayas and from 5 to 21 among the Nädărs in the course of twenty years. Nearly 95 per cent. of the total population and about 99 per cent. of the females of these Depressed Classes are still unable to read and write.

Comparative literacy of different classes
of people as por
State Table II.
383. In State Table II contained in Imperial Tables Volume (Part II) the total literate population of each sex of the Hindus classified into Brahmans, other Hindus and

Number literate prer cent. of the total population of all "ges of each sex of different classes of people

| Clase of people | Males | Females |
| :--- | ---: | ---: |
|  |  |  |
|  |  |  |
|  |  |  |

Depressed Classes, of the Christians, Muslims, and the tribes following Tribal Religions are given. The proportional figures worked out from this table are shown in the margin. The proportion is based on the population of all ages. Brahmaus include Malayala and other Brahmans. Depressed Classes comprise all those Hindu castes which are treated as untouchables. Even the llavas who are fairly high up in literacy are included in the Depressed Classes because they belong to the untouchables. On the basis of this classification the Brahman males and lemales are seen to be the most literate. The other Hindus take razk next to the Brahmans in regard to male literacy, and the Christians who are below the other Hindus in male literacy occupy the second place in female literacy. The Muslims are less literate than the Depressed Classes taken together. The backwardness of the Depressed Classes and Muslims in female education is evident from the fact that only seven per cent. of the females of the former and two per cent. of the females of the latter are literate. Among the primitive tribes following Tribal Religions only three per cent. of the males and not even one per cent. of the females claim to be able to read and write.
384. The literacy figures of the Provinces and States in India for 1931 have been received and the proportional figures are set forth in the marginal table for purposes of

Comparison with other States and Proxinces.

| State or Province | Number literate per 1,000 of the population aged 5 ycars and over |  |  |
| :---: | :---: | :---: | :---: |
|  | Persons | Males | Females |
|  |  |  | 165 |
| Burma | 368 337 | 560 460 | 220 |
| Cochin State ${ }^{\text {a }}$ | 289 | 408 | 168 |
| Trayancore 8 sato | 209 | 331 | 79 |
| Baroda stato |  |  |  |
| Conrg | 176 | 246 | 87 |
| Bhannagar State | 163 | 255 | 64 |
| Ajmer-Merwara - | 125 | 203 | 35 |
| Western Indis states | -125 | 204 | 43 |
| Pudukottai State | 114 | 217 | 20 |
| Bengal | 110 | 180 | 32 |
| Madras | 108 | 188 | 30 |
| Myeure State | 106 | 174 | 33 |
| Bombay | 102 | 167 | 29 |
| Assam | 91 | 152 | 23 |
| -Central Provinces and Berar | 60 | 110 | 11 |
| Yunjab | 59 | 95 | 15 |
| TUnited Provinces | 54 | 94 | 11 |
| 'Bihar and Orissa | ¢2 | 95 | 8 |
| -Central India States | 52 | 92 | 9 |
| Bikanir Slate | 50 | 85 | 9 |
| North West Frontier Province | 49 | 80 | 12 |
| Baluchis/an | 48 | 76 | 11 |
| Hyderabad | 47 | 83 | 10 |
| :Majputana | 13 | 76 | 6 |
| Jammu and Kashmir | 40 | 70 | 6 |
| Sikhim | 35 | 66 | 3 |
| India | 95 | 155 | 29 | from less than one per cent. to about three per cent. only. Taking India as a whole male literacy is about 16 per cent. and female literacy three per cent.

385. We have seen in the previous paragraph that in India there is no Province or State except Burma and Cochin so advanced in literacy as Travancore, but when com-
 pared with the countries in the West she is still in the background. A few figures taken from The World Almanac and Book of Facts, 1932, are given in the margin to illustrate this point. In countries like the United Kingdom, Italy, Denmark, Germany, United States, etc., where primary education has long been compulsory the percentage of illiteracy is practically nil or very low. Even among the Negroes of the United States education has so far advanced that only 16.3 per cent. of the population aged 10 years and over are illiterate as against 68.3 per cent. in Travancore.
In Russia and Spain very nearly one-half of the population are illiterate. In Portugal

Comparison
with other countries.

68 per cent. of the population of five years and over are unable to read and write, while the corresponding ratio in Travancore is 71 per cent. It must be remembered that in all the countries mentioned above education is compulsory, but in Travancore it is not. In China the illiterate form 80 per cent. of the total population. Iravancore is more advanced than China in that she has only 76 per cent. of her total population illiterate. In Egypt primary education has been made compulsory since 1923 and yet 92 per cent. of her population are still illiterate.]

Literacy in English.

Literacy in English by sex.
386. The number of literates in English in the population of the State aged five years and over is 80,651 , composed of 65,500 males and 15,151 females. The Hindus can claim 41,704 persons as literate in English, the Christians 37,296 and the Muslims 1,608 . The number of English literates per 1,000 of the population of five years and over has. increased from 15 in 1921 to 19 in 1931. Out of 1,000 of each sex 31 males and 7 females are now able to read and write English as against 28 males and 6 females at the. last census. In other words, one in every 32 males and one in every 143 females have acquired literacy in English as compared with one in 36 males and one in 166 females in 1921.
387. Subsidiary Table IV at the end of this chapter shows the proportion of literates in English by age and sex in the State and the different administrative and natural divisions. The figures in

| State or Division | Number of literates in English per mille of all ages tive years and over |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1931 |  | 1921 |  | 1911 |  | 1001 |  |
|  | Males | Females | Males | Females | Males | Females, |  | Females |
| StATE | 31 | 7 | 28 | 6 | 15 | 2 |  | 8 |
| Sonthern Division | 38 | 9 | 33 | 7 | 27 | 4 |  | 2 |
| Central | 30 | 8 | 24 | 5 | 11 | 2 | 7 |  |
| Northero | 25 | 5 | 18 | 6 | 10 | 2 | 7 | 1 |
| High Range " | 39 | 11 | 33 | 9 | 23 | 6 | 40 | $10^{\circ}$ | the margin which are extracted from that table show the progress of English literacy by sex in the State and its administrative divisions during the last thirty years. Taking the State as a whole, the proportion of male literates in English increased by 50 per cent. during 1901-1911, by 87 per cent. in the next decade and by 10.7 per cent. in thelast decade. Among females, while there was no variation in the decade 1901-1911, the proportion trebled itself during the next decade, and increased from six to seven. per mille during the last decade. As in the case of general literacy the number of literates. in English also showed an abnormal increase in 1921. This again is due probably to mistakes in the return.

Literacy in English by locality.
388. Taking the divisions separately; we see from the marginal table which shows the variations in the proportion of literates in English per mille of each sex during the last three decades, that there has been an in-

| Division |  | Varintion in the proportion of literutes in English per mille of ench sex |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1:121-1:31 | 1911-1921 | 1900-1911 |
| Southern | $\left\{\begin{array}{l}\text { Malcs } \\ \text { Remales }\end{array}\right.$ | $+\sqrt{+5}$ | +8 +8 +8 | +11 + +8 |
| Contral | $\left\{\begin{array}{l}\text { Mnles } \\ \text { Females }\end{array}\right.$ | +6 +3 +8 | +13 +3 +8 | +4 +1 |
| Nurthern | $\left\{\begin{array}{l}\text { Snalse } \\ \text { Femalee }\end{array}\right.$ | $\pm 7$ | $\pm{ }_{+}^{8}$ | +8 +8 +1 |
| Higb Range | $\left\{\begin{array}{l}\text { Malce } \\ \text { Fenules }\end{array}\right.$ | +6 +2 | +10 +3 | $-17$ | crease in the proportion of male literates in all the decades and in all the. divisions except in the High Range Division in the decade 1901-1911 and in the female literates with the additional exception of the Northern Division in the last decade. It is to be noted that in all the divisions the increase in the proportion was greater . in the decade 1911-1921 than in the one preceding or follow. ing it. The large decrease in the proportions both among males and females in the High Range during 1901-1911 might be due to the fact that, while prior to 1901 the population of this division consisted largely of European

planters and their families and other employes in the service of the State possessing a knowledge of English, the rapid development of tea and rubber cultivation in the first decennium of the present century led to the immigration of large numbers of illiterate coolies from the adjoining British territory. From Subsidiary Table IV it will be seen that the Southern Division has the highest proportion of literates in English in all the age-groups among males as well as females. This is but natural inasmuch as Trivandrum, the capital, and Nagercoil, both of which are situated in this division, contain between them six out of nine Arts and Science Colleges in the State and several English High Schools for boys and girls. The head-quarters of most of the departments of the State, including the highest Court of Justice, in all of which the recognized official language is English, are also situated at the capital. These as well as the numerous trading and other business establishments in Trivandrum employ a considerable number of persons possessing a knowledge of English. It may be noted that in the High Range Division the proportions of literates in English are the lowest among males in the age-groups 10-15 and 15-20 and the highest in the age-group 20 and over. The low proportions in the former two age-groups may be explained by the fact that the majority of the population of these groups are coolies working in the estates who scarcely go in for education, if at all, beyond. the primary stage. The highest proportion in the age-group 20 and over is due to the presence of a large number of European planters.
389. The figures in the margin which are extracted from Subsidiary Table I show uteracy in the proportion of literates in English by sex in the main religions. The Christians have the English by highest proportion of English literates, the Hindus come next and the Muslims last. Among Christians the Syrians are more literate than the other Christians, the former having 48 literates per 1,000 males and 15 literates per 1,000 females and the latter 32 and 15 respectively. The Muslims are very backward in English as in vernacular education. Among their males only eleven per 1,000 are able to read and write English and among females the proportion is practically nil, there being only a total number of 37 women literate in English. Subsidiary Table V shows that among Europeans and Anglo-Indians aged seven and over, the proportions of literates in English are 969 per mille for males and 874 per mille for females

Literacy in English among Christians by seot and a0x

| Sect | Number per mille aged 7 yenrs and over who are liteß́re in English |  |  |
| :---: | :---: | :---: | :---: |
|  | Persons | Males | Pemales |
| Anglican Commanion | 51 | 68 | 33 |
| Jecobite Syrians | 32 | 49 | 14 |
| Mar Thoms Syrians | 69 | 87 | 29 |
| Romo Syrians | 23 | 34 | 10 |
| Roman Catholics | 25 | 34 | 17 |
| Ralvationists | 16 | 24 | 8 |
| South Indin United Church | 25 | 86 | 14 |

male literates in English is pretty high
Christians and 45 per 100 for the Anglicans. among the former and 795 per mille for males and 574 for females among the latter. This is but natural, because most of them have English as their mother-tongue. The marginal statement shows the proportion of literates in English among Christians by sect and sex. The Mar Thoma Syrians have the highiest proportion of male literates, viz., 87 per mille, while in female literacy the Anglicans stand first with 33 per mille. The Salvationists have the lowest proportions, namely, 24 per mille among males and 8 per mille among females. The other sects occupy intermediate positions between these two extremes. It will be noticed that the ratio of female to

Literacy in English b caste.
390. Subsidiary Table V shows the extent of literacy in English by sex and age in selected castes, and Subsidiary Table V A the corresponding proportions based on the total population for those castes for which figures are available for the last three censuses. The proportions for the most important castes based on the population aged seven years and over for 1931 are given in the margin. Of the different castes, the Brahmans have the highest proportion of literates in English, 3,514 per 10,000 males and 213 per 10,000 females. There is no other caste or community which approaches them in English literacy among males. The highest proportion among Christians is only 867 per 10,000 males in the case of the Mar Thoma Syrians. In regard to females the highest proportion ( 331 per 10,000 ) is seen among the Anglicans, while among the Brahmans the ratio is only 213 per 10,000 . The proportions of literates in some castes appear to be somewhat high because their population is small. The actual numbers of female literates among the nonMalayala Brahman, Malayala Kshatriya, Ampalavàsi and Vellạanan, for example, are only $460,55,31$ and 217, though their ratios per 10,000 work out to $213,493,96$ and 77. The Depressed Classes who are backward in general literacy are more so in English literacy. Among Kuravans, for example, there are only three males and one female in 10,000 of each sex who are literate in English. One noticeable feature of literacy in English is the very wide disparity in the ratio of female to male literates of different castes as can be

| Cante | Number of female literates per 100 English |
| :---: | :---: |
| Ilaran |  |
|  | ${ }_{7}^{22}$ |
|  | 6 |
|  | ${ }_{1}^{4}$ |
| Yàlavau | 1 | seen from the figures given in the margin for a few typical castes. For 100 male literates in English the Illavas have 26 female literates, the Nayars 22, the Ampalavásis 7, and the Brahmans only 6. Though more than one-third of the Brahman males of 7 years and over are able to read and write English, there are only six females to 100 males who can do the same. On the other hand, only a little less than 5 per cent. of Nayar males of 7 years and over are literate in English, but for every 100 such malea there are 22 females. In certain castes, such as Krishnanvaka and Yâdavan, English education among females is so poor that for 100 male literates there is only one female literate.

391. The statement in the margin below gives the number literate in English per Comparison 1,000 persons aged 5 years and over in the various Provinces and States in India. Travan- states and

| Province or State | Number Ifterate in English per 1,000 aged 5 years and over |  |  |
| :---: | :---: | :---: | :---: |
|  | Persons | Males | Females |
| Oochin State | 37 | 58 | 16 |
| Bengal | 25 | 43. | 5 |
| Bombay | 20 | 32 | 7 |
| Trayancore Stato | 19 | 31 | 7 |
| Bharnagar State | 17 | 32 |  |
| Mysore State | 16 | 27 | 5 |
| Batoda State | 15 | 28 | 2 |
| Baluchistan | 14 | 21 | 4 |
| Madras | 14 | 26 | 4 |
| North West Frontiar Province | 13 | 21 | 2 |
| Assam | 13 | 22 | 1 |
| Punjab | 13 | 21 | 2 |
| Burma . | 13 | 20 | 5 |
| Weatern India States | 11 | 20 | 1 |
| Contral Provincea and Berar | 6 | 11 | 1 |
| Pudukottai State | 6 | 13 | - |
| United Provinces | 6 | 11 | 1 |
| Jammu and Keshmir | 6 | 11 | 1 |
| Bikanir State | 5 | 9 | $\cdots$ |
| Gwalior Btate | 5 | 8 | 1 |
| Bihar and Otisga | 5 | 10 | 1 |
| Central India States | 5 | 9 | 1 |
| Hyderabad State | 5 | 8 | 1 |
| Punjab Statea | 5 | 8 | - |
| Rajputana | 3 | 6 | 0 |
| India | 12 | 21 | 3 | core takes the fourth place in English Proxinces. literacy. As against Burma in general literacy, Cochin holds the frrst place in English literacy, and Bengal and Bombay which are fairly low down in general literacy accupy the second and third ranks respectively. Madras Presidency has 14 literates in English per 1,000 persons aged five and over, while Travancore has 19. The proportions in the States and Provinces in Northern India, such as the Central Provinces and Berar, the United Provinces, Bikanir, Gwalior, etc., are only 5 or 6 per 1,000 , and Rajputana has the lowest proportion of 3 per 1,000 . If the sexes are considered separately, it will be seen that as regards male. literacy in English Cochin stands first, followed in order by Bengal, Bombay, Bhavnagar and Travancore; as regards female literacy Cochin again heads the list, but Travancore occupies the second place along with Bombay. In most of the Pravinces and States the female literates in English number only one or two per 1,000 , whereas in Travancore the ratio is seven per $I, 000$.

392. We have seen that Burma, Cochin and Travancore are far ahead of other Progress of Provinces and States in India in literacy. Burma owes this position to her monastic schools edncation. through which a large proportion of her Buddhistic population passes. In Cochin and Travancore the people have from very early times shown special interest in education. Till the Governments of these States took over the direction and control, of the educational system, private teachers, called $\bar{A}$ säns, conducted schools in villages and imparted such instruction as was required for the everyday life of the ordinary people. The Government, in those days, took no direct part in education. The remuneration to teachers was not paid out of State coffers, but was contributed by the villagers themselves voluntarily. The system, though devoid of State control, worked satisfactorily and met the requirements of the people until individualistic tendencies had begun to manifest themselves and undermine corporate action on which the ancient village organization was based. Such was the condition of the society in Travancore at the beginning of the nineteenth century. Education had deteriorated and was almost completely neglected in the northern parts' of the State. The people in those parts were so poor that they could not afford to pay the teachers, and the large majority of the children consequently went without any education. At this juncture the Government of Travancore undertook the responsibility of fostering - elementary education in the country. In 1817 Her Highness Rani Gouri Pärvathi Bhai, the then ruler of Travancore, issued a rescript by which Her Highness commanded "that the State should defray the entire cost of the education of its people in order that there might be no backwardness in the spread of enlightenment among them, that by diffusion of education they might become better subjects and public servants and that the reputation of the State might be advanced thereby." About the time when the above rescript was issued a beginning was also made in the introduction of English education in the State by the voluntary efforts of the Christian missionary bodies. In the years 1816-19 they opened two English schools, one at Kottayam and the other at Nagercoil. The first Government English school was started at Trivandrum in 1834. This was later developed into a high school and ultimately into a frst griade college. The first English school for girls was opened at Trivandrum by the Zenana Mission in 1863 and in the following year a Government High School for girls was started at Trivandrum, which has recently been
developed into a first grade college for women. The first Normal School for training teachers was established in 1885 and in 1910 it was converted into a Training College.

The policy of the Government has always been to encourage private enterprise in the field of education. Schools under private management have gradually been brought under the supervision of the Education Department and in all deserving cases grants-in-aid have been given. To regulate the system of awarding grants a comprehensive Grant-in-aid Code was prepared and brought into force in 1895. In that year there were 2,722 vernacular schools of which 295 were departmental, 1,311 aided and 1,116 unaided institutions. In course of time many of the inefficient private institutions were weeded out and the efficient ones brought under the control and supervision of the department. In 1921 the total number of recognized educational institutions in the State stood at 3,112 and the unrecognized ones at 933 , but in 1930 the recognized institutions increased to 3,641 and the unrecognized ones decreased to 299.

Increase in the number and strength of educational institutions since 1911.
.
393. We see from the above figures that the publication of the Grant-in-aid Code in 1895 has had the desired effect of weeding out most of the inefficient unrecognized schools. A further step towards the improvement of education was taken in 1910 by the publication of a more comprehensive Education Code by which the whole educational system has been remodelled and systematized, and since then the progress of education in all directions has been phenomenal. Subsidiary Table VIII at the end of this chapter gives the number of institutions of different grades and their strength from year to year from 1911 to 1930. The figures for 1911, 1921 and 1930 are given below :-

Number of recognised educational institutions and their atrength

| Description of institutions | Number |  |  | Scholars |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1011 | 1921 | 1990 | 1911 | 1981 | 1080 |
| Arts and Science Oolleges | 4 | 4 | 7 | 432 | 1,114 | 2,841 |
| Training Oollege | 1 | 1 | 1 | 56 | 75 | 100 |
| Banktit College | * | 1 | 1 | $\cdots$ | 324 | 83 |
| English High Echools for boys | 26 | 41 | 55 | 8,963 | 22,161 | 27,508 |
| Ditto for girls | 3 | 9 | 15 | 600 | 2,639 | 4,126 |
| English Middle Schools for boys | 32 | 89 | 165 | 2,791 | 11,611 | 19,643 |
| $\xrightarrow{\text { Ditto for girls }}$ | 7 | 10 | 21 | 348 | 1,330 | 2314 |
| Vernacular High and Middle Schools for boys <br> Ditto | 81 | 227 | 243 99 | 28,046 7,001 | 68,088 21,683 | 98,699 |
| Ditto for girla | 49 | $\begin{array}{r}86 \\ \hline 278\end{array}$ | $\begin{array}{r}99 \\ \hline\end{array}$ | 7,001- | 21,632 | 81,259 |
| Primary Schools for boys | 1,264 | 2,278 | 2,624 | 96,301 | 238,467 | 331,020 |
| Ditto for girld | 169 | 285 | 366 | 13,711 | 20,488 | 49,859 |
| Training Schools | 5 | 16 | 18 | 108 | 820 | 138 |
| Technical Schools | 10 | -61 | 19 | 398 | 1,5196 | 1,243 |
| Other Special Schools |  | 4 | 17 | 818 | 226 | 2,106 |
| Total | 1,888 | 8,112 | 8,641 | 159,688 | 892,918 | 588,708 |

The number of institutions increased by 89 per cent. in the decade 1911-1921 and by 17 per cent. in the next decade, the total increase in the two decades together being 121 per cent. The scholars increased by 146 per cent. in the first decade, by 45 per cent. in the next and by 256 per cent. in the two decades together.

Increase in the number and atrength of primary schoola. since 1811.
394. In considering the progress of literacy we have to take into account mainly the primary schools. These increased from 1,433 in 1911 to 2,563 in 1921 and to 2,990 in 1930, and their strength from 110,012 in 1911 to 264,945 in 1921, and to 383,579 in 1930 . The area and population served by these schools in the three years under consideration are given in the margin. Taking the State as a whole the average area served by each primary school was $5 \cdot 3$ square miles in 1911, 3.0 square miles in 1921 and 2.6 square miles in 1930 . The forest regions are practically uninhabited and if the primary schools were distributed over the State area excluding the reserved forests, the average area served by each primary school would
be $3 \cdot 7,2 \cdot 0$, and $1 \cdot 7$ square miles in 1911, 1921 and 1930 respectively. The number of persons served by each school works out to 2393, 1,563, and 1,704 in 1911, 1921 and 1930 respectively. The higher ratio in 1930 than in 1921 is due to the fact that the number of schools has not increased proportionately to the increase in the population.
395. The total number of boys under instruction in 1921 was 263,357 and it Progress of increased to 353,513 in 1930, i. e., by about 35 per cent, whereas the number of girls edication by

Number of males and femalesunder instruction in diforont grades of institutions in 1091 and 1930

| Description of institutions | 1921 |  | 1930 |  | Percentage of increase |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kales | Females | Males | Females | Males | Females |
| - Oolleges | 1.339 | 174 | 2,458 | 236 | $83 \cdot 6$ | $35 \cdot 6$ |
| Engligh Schools | [31,533 | 6,108 | 41,536 | 12,165 | $31 \cdot 7$ | 99-1 |
| Verracular Schools. | 229,361 | 122,248 | 307,251 | 201,286 | 34.0 | 64-7 | under instruction in- the decade creased by 66 per cent. ${ }^{\text {1921-193a }}$ from 129,556 to 215,190. The difference in the rates of increase indicates the more rapid progress in the education of females than of males. From the figures given in the margin it will be seen that the difference is more - marked in the strength of English and Vernacular schools than in that of colleges: While men under instruction in colleges increased by 83.6 per cent. women under instruction increased only by 35.6 per cent., but whereas boys under instruction in English and Vernacular schools increased only by 31.7 per cent. and 34.0 per cent., girls under instruction increased by as .much as 99.1 per cent. and 64.7 per cent. respectively.

396. The number of pupils of important Hindu castes, primitive tribes, Christians :and Muslims under instruction in 1921 and 1930 are given in the margin. The figures for

Number under inetruction in 1981 and 1830

| Onate of religion | Number in 1921 | Number in 1930 | Percentage of increase |
| :---: | :---: | :---: | :---: |
| Atayan | 1,357 | 3,103 | 129 |
| Brahman | 9,937 | 10,664 | 7 |
| Tavan | 64,777 | 91,555 | 67 |
| Kammalan | 11,066 | 20,179 | 82 |
| Kanigha | 633 | 1,559. | 146 |
| Krishnatarka | 839. | 1,036 | 23 |
| Knhatriya | 541 | 507 | 6 (decrease) |
| Kurata | 851 | 2,310 | 171 . |
| N8dir | 11,214 | 16,649 | 48 |
| Nayme | 100,236 | 126,240 | 28 |
| Parayar | 5,135 | 4,425 | 14 (decrease) |
| Polayan | 12,381 | 14,373 |  |
|  | 1,067 | 2,815 | 164 |
| Vellitan | 7,564 | 8,433 | 11 |
| Vetan Primitivs Tribes | 139 | 170 | 22 |
| Irimitiva Tribes <br> Ohristiang | ${ }_{144} 241$ | 939 | 290 |
|  | 144,193 11,986 | 217,417 | . 51 |
| Mualims | 11,986 | 19,269 | '61 | some of the backward and religion. depressed classes and the primitive tribes may not be quite correct. They are the only available statistics and are, therefore, included in the statement. It is noteworthy that the increase in the case of educationally advanced Hindu castes such as the Brahman and the Nayar is only 7 per cent. and 26 per cent. respectively, whereas among the equally advanced Christian community the increase is 51 per cent. These ratios confirm the conclusion drawn from the census figures of literacy that the progress of education among Christians is greater than among Hindus. The llavas, though they belong to the Depressed Classes, are progressing rapidly in education. In the course of the last decade the number of llavas under instruction has increased by 67 per cent. The Muslims are also advancing rapidly, the increase in the number under instruction during the decade being 61 per cent. The Kuravan, one of the Depressed Classes, has shown an increase of 171 per cent. The Pulaya, another of the Depressed Classes, has increased only by 16 per cent., while the Parayan, also a Depressed Class, has shown a decrease of 14 per cent. These figures could have been compared with the rates of increase in the literate population of the different castes and religions if correct figures of literacy had been obtained at the different censuses.' But the inaccuracies in the literacy figures of 1921 preclude such'a comparison.

Progress of education judged by the examination resulth.
397. The results of public examinations afford a good test of the progress of effective education. A few figures showing the results of the examinations in 1921 and 1930

| Examination | 1921 |  | 1930 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Candidates |  | Candidates |  |
|  | Sent up | Passed | Sent up | Passod |
| B. A. Degree | 287 | 151 | 870 | 516 |
| Intermedinte | 256 | 113 | 630 | 267 |
| Enulish School Leaving | 1,644 | 636 | 3,628 | 1,370 |
| Leaving | 4,490 | 1,564 | [,8,81 | 1,514 |
| $V$ ernaular Higher | 463 | 144 | $4!2$ | 139 | extracted from Subsidiary Table X at the end of this chapter are given in the margin. One noteworthy feature of these figures is the large increase in the number of candidates sent up and passed in all the English examinations (B. A., Intermediate and School Leaving), while in the case of the Vernacular examinations, though the candidates who were sent up have increased slightly, those who passed have actually decreased in number. Of the candidates who passed the English School Leaving Examination there were 546 boys and 40 girls in 1921 and 1,241 boys and 129 girls in 1930, and of those who passed the Vernacular School Leaving Examination boys numbered 1,111 and girls 453 in 1921, while in 1930 the corresponding numbers were 1,105 and 409. The increase in passes in the English examinations is shared by boys as well as girls but more by the latter than by the former and the decrease in the passes in the Vernacular examination is also seen among both boys and girls.

Proportion of pupils to total population. gauged from the proportion of the pupils under instruction to the total population. The proportions for the aggregate population and for the different communities in Travancore in 1930 together with those for the United States in 1930 and for Great Britain in 1931 are given in the marginal statement. In the United States 20.5 per cent., and in Great Britain 18 per cent. of the total population were under instruction in 1930 and 1931 respectively, while in Travancore the present proportion is only just over 11 per cent. Among the different castes and religious communities the proportions vary widely. The Mar Thoma Syrians have the highest proportion, viz., $19 \cdot 5$ per cent., which is even 1.5 per cent. more than that in Great Britain. This does not mean that the Mar Thoma Syrians are educationally more advanced than the British. The population of Travancore contains a higher proportion of children and the adolescent than that of Great Britain and the proportion of students should, therefore, be higher here than there. The Anglicans and the Brahmans closely follow the Mar Thoma Syrians with $18 ; 3$ per cent. and $15 \cdot 7$ per cent. respectively of the population under instruction. The proportions for the Depressed Classes are rather low, Nädär 7.1 per cent., Pulayan 6.9 per cent., Thantãn 6.8 per cent., Parayan 6.3 per cent., and Kuravan 2.7 per cent. The Muslims whose proportion is only 5.5 per cent. are even more backward than some of the Depressed Classes. This is due to the very slow progress in the spread of education among their women, though the men are advancing as fast as or even faster than the men of the other backward communities.
399. In the above paragraph we have dealt with the proportion of the number of boys and girls under instruction in all grades of educational institutions to the total population. In considering the question of general literacy according to the census standard we are concerned only with the boys and girls receiving instruction in primary schools and their-
proportion to the population that ought-to be attending these schools. Before entering into a discussion of this question we must decide the length of primary school course one has to go through to acquire literacy and the ages during which one ought to complete that course. The Hartog Committee have assumed that "no child who has not completed a primary course of at least four years will become permanently literate," and they have taken six to eleven years as the ages of the children who should be receiving primary education and 14 per cent. of the total population as the basis for the calculation of the population of the above school-going ages. In Travancore children invariably start their education between 5 and 6 years of age and ordinarily reach the fifth class in Vernacular Schools or the Preparatory Class in English Schools by the time they complete the tenth year. They will then have had five years' schooling which, I think, is absolutely necessary to acquire permanent literacy. Under the conditions obtaining in Travancore we should, therefore, treat all boys and girls who have completed five to ten years of age as the population of school-going age and instruction in five classes (four classes in Primary Schools and Class V in Vernacular Middle Schools or the Preparatory Class in English Schools) as the minimum required to acquire permanent literacy. The population by sex of individual ages in the age-period $5-16$ according to the present census is given in the marginal table.

Population by sex of indicidual age in the ago-period $5-16$ in 1831

| Age last <br> birthdsy | Persons | Males | Females |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 6 | 143,491 | 72,729 | 70,762 |
| 6 | 136,984 | 69,093 | 67,841 |
| 7 | 138,410 | 67,671 | 65,739 |
| 8 | 180,623 | 66,388 | 64,235 |
| 9 | 128,687 | 65,464 | 63,173 |
| 10 | 127,168 | 64,739 | 62,429 |
| 11 | 120,682 | 64,028 | 61 |
| 12 | 124,283 | 61,654 |  |
| 18 | 121,995 | 61,121 | 61,162 |
| 14 | 118,811 | 69,981 | 60,136 |
| 15 | 114,392 | 67,368 | 58,330 |
| 16 | 108,288 | 53,872 | $56,924$. |
|  |  |  | 54,416 | The population of school-going age (5-10) is 800,263 ( 406,084 males and. 394,179 females) which works out to $15 \cdot 7$ per cent. of the aggregate population. The Hartog Committee have taken - 14 per cent: of the total population as the population of schoolage (6-11) in British India. In Travancore the proportion of children being higher than in British India, $15-7$ or roughly 16 per cent. of the total population may be taken to be the correct proportion of the population of 5-10 years. In Travancore there were 298,894 boys and $197,925_{0}$ girls, or a total of 496,819 children in the first five classes of the Vernacular Schools and in the Preparatory Class of the English Schools in 1930. This means that 62 per cent. of the children of school-going age ( 74 per cent. of boys and 50 per cent. of girls) were under instruction in elementary schools in 1930. In other words, 26 per cent. of the boys and 50 per cent. of the girls of school-age were not attending the school.

400. The term 'wastage' is used in the sense in which it- is used in Hartog Committee's Report. It means "the premature withdrawal of children from school at any stage before the completion of the primary course." Wastage can be calculated approximately from the census figures of literates in the age-group 10-15 and the number of children in the age-group $5-10$ at school Give years previous to the census. Children of 5-10 years who were at school (i. e., those who were studying in five classes of the Vernacular Schools and in the Preparatory Class) numbered 422,193 in 1926. The number of literates in the age-group 10-15 according to the present census is 159,412, which is equal to 38 per cent. of the number at school five years previously. Allowance has to be made for mortality among the children at school for five years and also for 'stagnation' which in the words of the Hartog Committee means "the retention in a lower class of a child for a period of more than one year." Even after making allowance for these two items the number of children becoming literate may not be more than about 50 per cent. of those at school. We have already seen that out of the total population of school-going age only 62 per cent. are at school, and of these only 50 per cent. become literate, which means that under the existing conditions only about 31 per cent. of the population of school-going age are likely to acquire literacy. The remaining 69 per cent. either do not attend school at all or leave school before they become effectively literate.
401. In the previous paragraphs we have assumed that a child to be literate should have received instruction in five classes. Ordinarily one will acquire the ability to read

Wastage in education.
be slighty less than that among the general population, a mortality rate of 15 per cent. for the decade might be assumed for the literate population of five years and over. The number of survivors in 1931 of 968 , 133 literate persons of 1921 would, therefore, be 822,913. The number of children who studied in Class IV during the decade was 576,422 . To find the incidence of mortality among these children it may be assumed that the average number of pupils per annum was 57,642 and that they were exposed to the risk of five years at an average mortality rate of 4 per mille per annum. Applying this rate to the number of pupils, the number that survived in 1931 would be 575,270. To this should be added 18,630, being 10 per cent. of the girl pupils in the fourth class in the decade, to allow for the girls who might have become literate without going to school. The total expected literates in 1931 would thus be $822,913+575,270+18,630$ or $1,416,813$, but the actual number according to the present census is $1,217,924$, and there is, therefore, a deficiency of 198,889 . Calculating on the same basis from the figures of literates in 1911 and the number of pupils who studied in Class IV during the decade 1911-1921, the expected literates in 1921 would have been 758,732 . The actual number of literates according to the census of 1921 was 968,133 . There was thus an excess of 209,401. We have already seen in paragraphs 359 and 360 above that the literacy figures of 1921 census are unreliable. If these are left out of consideration and the calculations made for the two decades (1911-1921 and 1921-1931) together, on the basis of the literacy figures of 1911 and the number of pupils who studied in Class IV from 1911 to 1931, the expected literates in 1931 would be 1,263,529 as against the actual number of $1,217,924$, which would give a deficiency of 45,605 . The results described above are summarised below:-


The abnormal excess of the recorded literates over the expected numbers in the decade 1911-1921 and the equally abnormal deficiency in the decade 1921-1931 must be attributed to mistakes in the literacy figures of 1921 census. If the 1921 Ggures are left out and the two decades are considered together, it is seen from the above table that 3.6 per cent. of the expected literates may be regarded as having relapsed into illiteracy. It may be mentioned in this connection that lapse from literacy in Baroda State has been found to be 3.5 per cent. of the expected literates calculated from the number of children who have had four years' schooling (vide Census Report of Baroda for 1931, paragraph 327). The remarkable similarity between Travancore and Baroda in this matter is indeed noteworthy.
402. Travancore can justly be proud of the progress she has made in education. About 41 per cent. of her male population and 17 per cent. of her female population of five years and over are literate. In male literacy only Burma and Cochin and in female literacy Cochin alone are somewhat better than Travancore. This result, it must be remembered, has been obtained without having had recourse to compulsory education Great as has been the progress in the spread of education, there is still much leeway to be made up for the complete banishment of illiteracy from the State. There are some communities so backward in education that hardly five per cent. of their population of five years and over are literate, e. g., Kuravan, Parayan, Pulayan, Vetan, Känikkäran and other hill tribes. The number of boys and girls under instruction is no doubt increasing rapidly. It rose from 159,668 in 1911 to 392,913 in 1921 and to 568,703 in 1930, an increase of more than 250 per cent. in the course of twenty years. Notwithstanding such phenomenal rise in the numbers under instruction it is doubful that the goal of universal literacy could be reached by the continuance of the voluntary system of education as at present. The population of school-going age (five to ten) that ought to be at school is, according to the present census, 800,263 and of these only 496,819 were at school in 1930 . Of the latter not more than 50 per cent. are likely to acquire permanent literacy, so that nearly 552,000 out of more than 800,000 children of schoolgoing age, or nearly 69 per cent. of them, cannot but remain illiterate either because they do not attend school at all or because they do not remain at school long enough to become permanently literate. To aequire permanent literacy a child should go through a course of at least five classes. If it discontinues its education after the fourth class, there is the possibility of its relapse.intoilliteracy.

## SUBSIDIARY TABLE I

Literacy by age, sex and religion.


## SUBSIDIARY TABLE II

Literacy by age, sex and locality


## SUBSIDIARY TABLE II A

Literacy by age, sex and locality (Rural and Urban)


## SUBSIDIARY TABLE III

Literacy by religion, sex and locality


SUBSIDIARY TABLE JY
English literacy by age, sex and locality


14 M.


Norti-Since the boundaries of the nataral divisions have been altered at the present census, figures relating to the number of Ifterates in these divisions at previous censuses are not available, and hence columns 12 to 17 are left blank.

SUBSIDIARY TABLE $Y$
Literacy by caste and religion

| Caste and religion | Namber per 1,000 who are literate |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All ages 7 and over |  |  | All agen ó amd over |  |  |  |  |  |
|  | 1931 |  |  | 1921 |  |  | 1911 |  |  |
|  | Total | Males | Femalex | Total | Malex | Females | Total | Mates | Females |
| 1 | 2 | 3 | 4 | - | ${ }^{\text {i }}$ | 7 | * | 9 | 11 |
| diyanarar Chrintian . | 117 | 150 | 81 | ** | 08 | $\because$ | $\because$ |  |  |
| Auppalaraxisial Hindu | 832 | 784 907 | 472 | 2 N | 592 | 250 | 341 | 333 | $14 i$ |
| Anglo-Indian - Hinda | -8\% | $4 \times 12$ | 118 |  | $\cdots$ | - | $\cdots$ | - | . |
| Athyan $\quad\left\{\begin{array}{l}\text { Ohristinn } \\ \text { Orisina }\end{array}\right.$ | 382 | 433 | 325 | .- | $\cdots$ | $\cdots$ | - | $\cdots$ | $\cdots$ |
| Bhatathar Christian. | 164 | 231 | 96 | - | - | .. | . | $\cdots$ |  |
| Braluman, Malaynula (Nampātiri Hindu | 013 | 773 | 443 | 520 | 680 | 324 | 498 | 0 aid | 419 |
| Brahman, others Mindu | 60.4 | 812 | 398 | 374 | T06 | +32 | 414 | Gist | 113 |
| Craholic Atajar Cristian. | 152 | 180 | 124 | -• | . | . | .. |  |  |
| Chackaravar . Ohristian. | 190 | 328 | 48. | $\because$ | $\because$ | is |  |  | $\cdots$ |
| Olietti . Hindu | 395 | 477 | 111 | 249 | 373 | 118 | 190 | 358 | 2 in |
| Earopear | 98. | 1,000 | 955 |  | $\because$ | \% |  |  |  |
| Havan . Hicdu ${ }^{-}$ | 273 | 427 | 121. | 228 | 364 | 95 | $1 i$. | 213 | ig |
| Kammajan Hindu . . | 234 | 452 | ${ }^{95}$ | 258 | 411 | 100 | 164 | 805 | 17 |
| Kanikklran $\quad\left\{\begin{array}{c}\text { Hindu } \\ \text { Tribal Reltion }\end{array}\right.$ | 14 22 | - 22 | 4 | $\because$ | $\cdots$ | $\because$ | . | .. | $\ldots$ |
| Laniyen frin Hindu. | 155 | 689 | 217 | 430 | 663 | 190 | 39 | 348 | -is |
| Kırathi Christian . | 205 | 356 | 62 | - | . | - |  |  |  |
| Kêtajamuthali Cliristian. | 374 | 407 | 136 | ... | . | $\cdots$ | $\cdots$ | $\cdots$ | $\because$ |
| Krishnanvaka Hindu . | 242 | 405 | 71 | 254 | 397 | 104 | 207 | $3 \dot{7}$ | Bi |
| Kshatriya, Mialayala Hindu | 730 | 786 | 665 | $\because$ |  | $\because$ |  |  |  |
| Kudumi Hiadu | 101 | 180 | :50 | 194 | 247 | 137 | 0.5 | 103 | 18 |
| Kuravan (including alalan- $\begin{aligned} & \text { kurvan) }\end{aligned} \begin{aligned} & \text { Hindu } \\ & \text { Christian }\end{aligned}$ | 15 97 | 27 151 | 5 45 | 23 | 35 | 10 | 8 | 14 | 5 |
|  |  |  |  | - | - | $\cdot$ | - | $\cdots$ | . |
| Tribal lellgion . | 31 | 56 | 6 | -• | -• | -• | -• | -• | . |
| Nalayarayan Hindu and |  |  |  |  |  |  | . | . | . |
| Matakkin $\quad$ Tribal Religion ${ }^{\text {Hindu }}$ : | 16 | 348 | 13 | $\ddot{8}$ | $\ddot{7}$ | $\ddot{8}$ | 9 | iis | \% |
| Matakkin  <br> Maravan Hindu <br> Hindu  | 88 | 162 | 9 | 177 | 301 | 88 | 89 | 152 | 6 |
| Mukkuvan Ihristian . | 144 | 205 | 83 |  | - $\cdot$ |  |  |  |  |
| Muslim | 158 | 268 | 31 | 148 | 288 | 50 | 110 | 198 | is |
|  | ${ }^{105}$ | 179 | ${ }_{2}^{27}$ | 101 | 159 | 38 | 65 | 123 | 6 |
|  | 305 | 324 | 285 | - | - | - | . | -• | $\cdots$ |
| Chaklkja) Nindu | 453 | 618 | 1291 | 467 | 605 | 323 | 276 | 454 | 07 |
| Pallan . Hitula | 24 | 43 |  | 70 | 110 | 26 | 29 | 46 | 14 |
| Patavan Hindu | 162 | 288 | 46 | 164 | 581 | 128 | 01 | 114 | 8 |
| Parayan (8\%mbarar) $\quad\left\{\begin{array}{l}\text { Rinilu } \\ \text { Chriatian }\end{array}\right.$. | 19 | 87 | 9 | 88 | 109 | 35 | 15 | 28 | 3 |
|  | 102 | 238 | 75. | $\cdots$ | $\because$ | i | $\because$ |  | $\cdots$ |
| Pulayan (Chëtarar) $\quad\left\{\begin{array}{l}\text { Hindu } \\ \text { Chrintian }\end{array}\right.$ | 131 | 194 | 18 | 27 | 40 | 14 | ${ }^{\text {a }}$ | 18 | 1 |
|  | 287 | 489 | 65 97 | $2 \dot{1 i}$ | 361 | 112 | 37 | $\ddot{84}$ | $2 i$ |
| Syrian Ohristiou | 482 | 610 | : 48 | - | .. | . 1 | .. | . |  |
| Thnntin. Hindo | 101 | 173 | 29 | 78 | 140 | $17^{\circ}$ | 40 | 76 | :3 |
| Cllătan Ohristinn. | 51 | 61 | 51 |  | . |  |  |  |  |
| Yilan Hinda | 159 | 273 | $3{ }^{31}$ | 58 | 90 | $23^{\circ}$ | 42 | $7{ }^{\mathbf{7}}$ | is |
| Vanignn (Vanigavaidyan) Hindu | 214 | 354 | 69 | 197 | 343 | 86. | 100 | 149 | $10 \cdot$; |
| Velakkithaianayar (including <br> Ampattan) <br> Hinda | 275 | 426 | 124 | 207 | 342 | i0. | 133 | 237 | 20 |
| Velan Hinda | 247 | 394 | 101 | 172 | 266 | 75 | 81 | 162 | 22 |
| Vedinn (Rumavan) Eindu | 175 | 297 | 67 | 172 | 26. | $\because \quad$. | 81 | 182 | ii |
|  | 382 | 688 | 175 | 328 | 467 | 1838. | $2 i 3$ | 500 | i0. |
| Veluthădanãyar (including Vappin <br> Mapqån and Pathiyan) Hindn | 243 | 366 | 124 | 01 | 146 | 35 | 34 | 120 | 18 |
| Vetan $\{$ Hindu . | 9 | 14 | 3 | 0 |  | a |  |  |  |
| Fliabaivar (Pantetam only) $\mathcal{C l}$ Christian. | 25 | 41 | 3 | - 0 | . 0 | $\because$ | $\cdots$ | $\cdots$ |  |
| Firasaivar (Pantram only) Yidavan (Idayan) $\begin{gathered}\text { Hinda } \\ \text { Hindu }\end{gathered}$ | 241 | 402 | - 77 | 222 | 312 | 128 | 120 | 210 | $2 i$ |
| Kadavan (Idayan) Hindu | 185 | 349 | 45 | 185 | 166 | 114 | 1611 | 210 | 8. |
| Christiane by sect |  |  |  |  |  |  |  |  |  |
| Anglican Commanion | 329 |  |  |  |  |  |  |  |  |
| Jacobite Syrians | 484 | 624 | 328 | $\because$ | ". | $\because$ | ". | $\because$ | $\cdots$ |
| Mar Thoma (lleformed) Syrians Rumo Syrians | 594 | 712 | 469 | $\cdots$ | - | $\cdots$ | $\because$ | ". | $\cdots$ |
| Other Syriaus | 445 | fit3 | 322 | . | $\because$ | $\cdots$ | $\because$ | $\cdots$ | . |
|  | 613 | 826 | 428 | $\cdots$ | $\cdots$ |  | . | .. | . |
| Roman Cathulica Salrationista | 219 |  |  |  |  |  |  |  |  |
| 8uuth India United Oharch | 169 | 243 | 149 98 | $\because$ | ". | $\because$ | $\because$ | $\cdots$ | -. |
| Othera | 231 423 | 808 | 153 | - $\quad$. | -. | $\because$ | $\cdots$ | $\cdots$ | $\cdots$ |
|  | 424 | 586 | 250 | - | -• | - | . | * | $\cdots$ |

SUBSIDIARY TABLE Y
Literacy by caste and religion


## SUBSIDIARY TABLE Y A

Literacy by caste based on the total population

| Caste (Hindn only) | Number per $\mathbf{1 , 0 0 0}$ of the total population who are literate |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1981 |  |  | 1981 |  |  | 1911 |  |  |
|  | Total | Males | Females | Total | Males | Females | Total | Nalea | Femalos |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Ampalavasa | 510 | 627 | 384 | 365 | 517 | 207 | 201 | 450 | 136 |
| Brahuran, Malayaju | 509 | 647 | 348 | 468 | 630 | 281 | 452 | 628 | 224 |
| Brahman, others (including Konkani) | 488 | 659 | 915 | 514 | 644 | 379 | 350 | 589. | 17 |
| Chetti | 239 | 390 | 89 | 220 | 333 | 104 | 167 | 810 | צ8 |
| Ilavan | 218 | 332 | 94 | 201 | 310 | 85 | 101 | 188 | 17 |
| Kammảlan (Visivakarma) | 214 | 352 | 74 | 224 | 359 | 86 | 142 | 268 | 14 |
| Kapiyãn | 363 | 549 | 173 | 382 | 580 | 164 | 293 | 409 | 76 |
| Krishnanvaka | 194 | 327 | 57 | 226 | 3505 | 02 | 188 | 321 | 40 |
| Kadomi | 79 | 142 | 12 | 178 | 221 | 121 | 54 | 81 | 15 |
| Saravan (inciuding Malankuravan) | 12 | 21 | .4 | 20 | 81 | 0 | 7 | 13 | 2 |
| Marakkān | 76 | 144 | 11 | 68 | 64 | 74 | $\boldsymbol{H}$ | 101 | $\boldsymbol{T}$ |
| Maravan | 78 | 135 | 7 | 154 | 259 | 51 | 70 | 138 | 1 |
| Naddr (Ohznnán) | 88 | 142 | 21 | 87 | 138 | 33 | 66 | 104. | \% |
| rexar (including Matan and Chakkila) | 365 | 483 | 229 | 399 | 520 | . 271 | 238 | . 808 | 81. |
| Palan | 20 | 37 | 1 | 62 | 99 | 22 | 20 | 41 | 18 |
| Patnvan | 127 | 220 | 36 | 134 | 157 | 111 | 53 | 100 | 7 |
| Parayan ISȧmbevar) | 40 | 71 | 7 | 78 | 96 | 49 | 18 | 25 | 2 |
| Pulayau (Chēramar) | , 93 | 35 | 10 | 24 | 36 | 12 | 8 | 15 | 1 |
| Sallyan : .. | 230 | 389 | 79 | 218 | 332 | 100 | 48 | 72 | 2i) |
| Thantan. | 78 | 134 | 22 | 07 | 120 | 15 | 44 | 08 | 20 |
| Válan | 124 | 214 | 29 | 30 | 79 | 20 | 36 | 64 | 5 |
| Vipiyan (V̌upigavaisyan) | 169 | 281 | 54 | 170 | 298 | - 31 | 98 | 178 | 17 |
| Vanpàn (inoluding Mappōn and Pathiyan) | 152 | 234 | 69 | 31 | 58 | 9 | 10 | 33 | 2 |
| Velaldkithalanayar (including Ampattan) | 213 | 330 | 97 | 180 | 298 | $\cdots 162$ | 115 | 203 | 25 |
| Velan | 104 | 810 | 78 | 151 | 232 | - 60 | 80 | 144 | 10 |
| Vellajan | 310 | 476 | 148 | 290 | 114 | 168 | 230 | 442 | 85 |
| Voluthēdauñyar | 223 | 326 | 123 | 113 | 182 | 40 | 106 | 14. | 26 |
| Vliasaivar (Pantȧfam only) : | 187 | 314 | 59 | 198 | 278 | 110 | 107 | 112 | 18 |
| Yidavan (Idayan) | 155 | 281 | 38 | 120 | 140 | 102 | 98 | 184 | 7 |

NOTE :-Only thoec orstes for whioh literacy flgares are available for previous censures are included in thin tabla

## SUBSIDIARY TABLE Y A

Literacy by caste based on the total population


SUBSIDIARY TABLE YI Progress of literacy since 1901



Note :-Figures of literacy for natural divisions in the previous censuses are not available since the boundinries of these divimions have been alterud at the present census. The table shown the progress of literacy for tour decades only. The lituracy figures under the several age-groups tor the previous deeades are not available.

SUBSIDIARY TABLE YII
Proportion of literacy at certain ages

| Age-group | Total population |  |  | Total literate |  |  | Total Ifterate in Einglisin |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons | Males | Females | Persons | Malea | Femalen | Permons | Malca | Femaler |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 4 | ! | 10 |
| 7-18 years | 806,869 | 455,693 | 441,176 | 182,806 20 | 110,156 24 | 72,650 10 | ${ }^{\text {- }}$ 8,743 | 3,449 | 1,1919 |
| 14-16 years | 840,878 | 173,662 | 167,216 | 185,818 40 | 86,605 50 | 40,213 20 | ${ }^{0,067}$ | 7,059 | $\stackrel{\text { 2, }}{\sim}$ |
| 17-23 years | 634,833 | 303,211 | 331,622 | 253,806 40 | 166,206 85 | 87,300 20 | 23,765 | 18,017 | 5,18 2 |
| 24 years and over | 2,122,602 | 1,079,204 | 1,018,399 | 643,298 30 | 501,910 | 141,379 | 41,669 | 30,372 | 8,347 |

[^34]in columis is to 10 .

SUBSIDIARY TABLE YIII
Number of recognized institutions and pupils according to the returns of the Education Department


| Class of inaritation | Number of institutions |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1920 \\ \text { to } \\ 1921 \end{gathered}$ | $\begin{gathered} 1921 \\ \text { to } \\ 1922 \end{gathered}$ | $\begin{gathered} 1922 \\ \text { to } \\ 1923 \end{gathered}$ | $\begin{gathered} 1923 \\ \text { to } \\ 1924 \end{gathered}$ | $\begin{gathered} 1924 \\ \text { to } \\ 1925 \end{gathered}$ | $\begin{gathered} 1925 \\ \text { to } \\ 1926 \end{gathered}$ | $\begin{gathered} 1926 \\ \text { to } \\ 1927 \end{gathered}$ | $\begin{gathered} 1927 \\ \text { to } \\ 1928 \end{gathered}$ | $\begin{aligned} & 192 \varepsilon \\ & \text { to } \\ & 1929 \end{aligned}$ | $\begin{gathered} 1989 \\ \text { to } \\ 1930 \end{gathered}$ |
| Arts and Scicace <br> Colleges <br> Training Oollege <br> Sanakrit Oollege <br> Englinh High 8chools for Boyn <br> English High Qchools for Girls <br> Knglish Middle Schools for Boys <br> English Middle Schools for Girls <br> Vernacular High and Middlo Schools for Hoys <br> Vernacalar High and Middle Schools for Girls <br> Primary sichools for Bovs <br> Primary Schools for Girls <br> Training 8chools Technical Schools Other Special Schools <br> Total number of ingtitutions | 12 | 13 | 14 | 15 | 16 | 17 | $18{ }^{\circ}$ | 19 | 20 | 21. |
|  | 4 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|  | 1 | - 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 1 | - 1 | 1 | 2 | 1 | 1 | 1 | 1 |  | 1 |
|  |  | $\therefore 42$ | 44 | 47 | $\cdot 49$ | 51 | 50 | 51 | 53 | 55 |
|  | 9 | 9 | 9 | 11 | 11 | 12 | 13 | 14 | 14 | 15 |
|  | 9 |  |  | 11 | 11 | 12 | 13 | 14 | 14 | 15 |
|  | 89 | 100 | 112 | 116 | 126 | 130 | 136 | 111 | 150 | 155 |
|  | 10 | 14 | 15 | 14 | 17 | 18 | 21 | 22 | 21 | 21 |
|  |  |  |  |  |  |  |  |  |  |  |
|  | 227 | 200 | 199 | 200 | 210 | 220 | 229 | 230 | -30 | 243 |
|  |  |  |  |  |  |  |  |  |  |  |
|  | . 86 | 90 | 88 | 92 | 95 | 94 | 94 | 94 | 97 | 99 |
|  | 2,278 | 2,420 | 2,495 |  |  |  |  |  |  | 2,624 |
|  | 2,278 | 2,220 | 2,495 | 2,6n6 | 2,093 | 2,603 | 2,633 | 2,661 | 2,642 | 2,624 |
|  | 285 | 282 | 289 | 293 | 299 | - 323 | 345 | 350 | 361 | 365 |
|  | 16 61 | 16 | 16 | 16 | 19 |  | 20 | 20 | 19 | 18 |
|  | ${ }_{4}^{61}$ | 12 | 11 | 12 | . 14 |  | 17 | 18 | 18 | 19 |
|  | 4 | 4 | 8 | 10 | 17 | - 13 | 16 | 18 | 18 | 17 |
|  | 8,112 |  |  |  |  |  | 8,588 |  |  |  |
|  | 0,112 | 8,187 | 8,29\% | 8,428 | 8,459 | 8,509 | 8,588 | 8,628 | 3,682 | 8,654 |

SUBSIDIARI TABLE YII-(concluded)

| Class of inntitution | Number of pupils |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1910 \\ \text { to } \\ 1911 \end{gathered}$ | $\begin{gathered} 1911 \\ \text { to } \\ 1912 \end{gathered}$ | $\begin{gathered} 1912 \\ \text { to } \\ 1913 \end{gathered}$ | $\begin{gathered} 1913 \\ \text { to } \\ 1914 \end{gathered}$ | $\begin{gathered} 1914 \\ 60 \\ 1915 \end{gathered}$ | $\begin{aligned} & 1915 \\ & \text { to } \\ & 1916 \end{aligned}$ | $\begin{gathered} 1916 \\ \text { to } \\ 1917 \end{gathered}$ | $\begin{gathered} 1917 \\ \text { to } \\ 1918 \end{gathered}$ | $\begin{gathered} 1018 \\ \text { to } \\ 1919 \end{gathered}$ | $\begin{gathered} 1919 \\ 10 \\ 1920 \end{gathered}$ |
|  | 22 | 23 | 24 | 35 | 26 | 27 | 28 | 29 | 30 | 31 |
| Arts and science Colleges | 132 56 | 449 64 | 598 40 | 671 43 | 724 61 | 836 74 | 901 76 |  | 1,461 | 1,124 |
| Training College Sanskrit Collere |  |  | $\pm$ | 4 | 288 | 237 | 224 | 259 | 351 | 976 |
| English High Schools for Boys | 8,963 | 9,045 | 3,924 | 11,031 | 11,904 | 13,031 | 14,329 | 16,048 | 17,094 | 20,04. |
| $\underset{\text { for Girls }}{\substack{\text { English High } \\ \text { Schools }}}$ | 600 | 608 | \$51 | 1,071 | 1,224 | 1,385 | 1,545 | 1,708 | 1,949 | 2,131 |
| English Middle Sichools for Brys | 2,791 | 2,965 | 3,647 | 4,470 | 5,065 | 5,510 | \%,965 | 8,88\% | 6,041 | 8,263 |
| English Midde Schools for Girls | 348 | 345 | 385 | 484 | 647 | 770 | 867 | 746 | 847 | 1,117 |
| Verascular High and Midde Sclivols for |  |  |  |  |  |  |  |  |  |  |
| Brys | 28,046 | 33,734 | 39,023 | 47,707 | 45,147 | 65,035 | 84,820 | 85,128 | 79,676 | 75,796 |
| Vernacular High and |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Middl } \\ & \text { Girls } \end{aligned}$ | 7,601 | 8,820 | 11,269 | 12,903 | 14,439 | 16,190 | 19,398 | 21,060 | 20,694 | 21,2:03 |
| Primary Schools for Boys | 96,301 | 104,402 | 116,542 | 122,300 | 159,487 | 187,56i5 | 192,037 | 215,917 | 209,60x | 215,938 |
| Primary Schools for Girls | 19,711 | 17,297 | 21,066 | 23,393 | 24,531 | 27,314 | 26,970 | 25,454 | 25,609 | 27,180 |
| Training Schools . | 103 | 122 | 162 | 250 | 357 | 240 | 231 | 249 | 8820 | 330 |
| Technical Schuols - | 998 | 547 | 570 | 610 | 876 | 9617 | 1,029 | 1,747 | 1,415 | 1.456 |
| Ofiter Special Schools . | 318 | 337 | 334 | 408 | 173 | 134 | 94 | 104 | 143 | 161 |
| Total number of pupils under instruction | 159,688 | 178,775 | 204,971 | 225,341 | 263,928 | 319,238 | 348,886 | 378,¢48 | 885,888 | 375,974 |
| Number of Boys under instruction | 116,586 | 129,567 | 147,834. | 161,975 | 191,091 | 227,628 | 247,698 | 261,451 | 250,146 | 253,580 |
| Namber of Girla under instruction | 43,082 | 49,208 | 57,137 | 63,366 | 73,892 | 91,610 | 101,288 | 113,997 | 115, 322 | 122,444 |


| Grave of institution | Number of pupils |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1920 \\ t o \\ 1921 \end{gathered}$ | $\begin{gathered} 1921 \\ \text { ro } \\ 1922 \end{gathered}$ | $\begin{gathered} 1022 \\ t_{0} \\ 1929 \end{gathered}$ | $\begin{gathered} 1923 \\ t o \\ 1924 \end{gathered}$ | $\begin{gathered} 1924 \\ \text { to } \\ 1925 \end{gathered}$ | $\begin{gathered} 1925 \\ t 0 \\ 1926 \end{gathered}$ | $\begin{gathered} 1926 \\ \text { to } \\ 1927 \end{gathered}$ | $\begin{gathered} 1927 \\ \text { to } \\ 1928 \end{gathered}$ | $\begin{gathered} 1998 \\ \text { to } \\ \text { toge! } \end{gathered}$ | $\begin{gathered} 1: 920 \\ t \\ 1980 \end{gathered}$ |
|  | 32 | 33 | 34 | 35 | 36 | 87 | 38 | 38 | 40 | 41 |
| Arts and science Oolleges | 1,114 | 1,420 | 1,856 | 2,222 | 2,358 | 2,560 | 2,457 | 2,404 | 2,699 | 2,041 |
| Training Oollege | 75 | 73 | 76 | 109 | 100 | 101 | 99. | 99 | 988 | 100 |
| Sanskrit College Englinh High Schoola | 324 | 846 | 48 | i3 | 45 | 51 | $66^{\circ}$ | 51 | 35 | 63 |
| Englist Hoygh Schoola for | 22,161 | 22,325 | 23,741 | 24,828 | 25,306 | 25,340 | 24,793 | 20,204 | 25, 223 | 27,568 |
| Engliah Middle Schools ${ }^{\text {Ginds }}$ | 2,5:30 | 2,743 | 2,803 | 2,080 | 3,019 | 3,098 | 3,423 | 3,563 | 8,727 | 1,120 |
| for Boys English Middle Schools | 11,611 | 12,448 | 13,102 | 13,003 | 14,433 | 14,934 | 15,814 | 17,118 | 18,447 | 10,093 |
| for Girls <br> Vernacular (High and Middle Schwols for | 1,330 | 2,607 | 1,776 | 1,648 | 1,732 | 1,836 | 1,946 | - 2,178 | 2,306 | 2,314 |
| Boya <br> Vernacular High and Middle Schools for | 65,032 | 58,499 | 60,931 | 07,546 | 73,680 | 76,927 | 78,480 | 84,875 | 88,478 | 2:1,409 |
| $\begin{aligned} & \text { Girls scioos tor } \\ & \text { Primary Schools for } \end{aligned}$ | 21,632 | 22,026 | 22,631 | 24,415 | 25,739 | 26,510 | 26,665 | 28,041 | 20,021 | 31,2i0 |
| Boys <br> Primary Schools for Girls | 235,457 $+29,488$ | 248,482 | 264,653 | 280,110 | 285,790 | 286,770 | 288,030 | 307,832 | 322,1057 | 334,120 |
| Girls | 129.488 329 | 30,831 333 | 33.461 321 | 34,858 | 36,198 | 39,942 | 42,551 | 4 5,190 | 47,403 | 40,569 |
| Technieal schonls | 1.546 | 333 $\mathbf{8 0 8}$ | 321 | 872 | 326 | 324 | 351 | 847 | 345 | 332 |
| Other Sipecial sichools | 225 | 888 240 |  | 817 118t |  | 1,336 1,197 | 1,376 | 1,326 | 1,2119 | 1,243 $, 2,116$ |
| Total number of pupile under inatruction | 392,813 | 402,181 | 427.143 | 454.465 | 1,235 471,028 | 1,197 480,988 | 1,4100 888,431 | $.1,767$ 519,288 | 2,011 | ${ }_{888,708}^{2,116}$ |
| Number of Boyn under |  |  |  | 464,465 | 471,028 | 480,988 | 488,431 | 519,288 | 645,225 | 568,703 |
|  | 263,357 | 266,606 | 282,608 | 209,412 | 307,461 | 310,507 | 312,012 | 82N,387 | 341,52] | 353.513 |
| instraction | 129,356 | 135,575 | 144,035 | 155,023 | 163,562 | 170,479 | 176,410 | 190,951 | 203,659 | 215,10\% |

Sore.:-The tigares for thia table were thinen from The Itatistices of Travancorc.

## SUBSIDIARY TABLE VIII A

Number of unrecognized institutions and papils according to the returns of the Education Department

| Clase of institution | Number of instftutions |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1920 to 1921 | $\begin{gathered} 1921 \\ \text { to } \\ 1922 \end{gathered}$ | $\begin{gathered} 1922 \\ \text { to } \\ 1923 \end{gathered}$ | $\begin{gathered} 1923 \\ \text { to } \\ 1924 \end{gathered}$ | 1924 to 1925 | $\begin{gathered} 1925 \\ \text { to } \\ 1926 \end{gathered}$ | $\begin{gathered} 1926 \\ \text { to } \\ 1927 \end{gathered}$ | $\begin{gathered} 1927 \\ \text { to } \\ 1928 \end{gathered}$ | 1928 to 1929 | $\begin{gathered} 1929 \\ \text { to } \\ 1930 \end{gathered}$ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| English High Schools for Boys | ** | $\cdots$ | - | - | $\cdots$ | -• | -• | - | 1 | - |
| Eoglish Middle Achools for Buys | 26 | 24 | 22 | 24 | 20 | $26^{\circ}$ | 19 | 23 | 14 | 10 |
| Ditto for Girls | 5 | 1 | 2 | 6 | 5 | 4 | 2 | 2 | 1 | 3 |
| Vernacalar Middle Schools for Boys . | -* | $\cdots$ | $\bullet$ | - | - | -• | -• | 1 | 3 | 6 |
| Ditto for Girls | . | -• | $\cdots$ | 1 | 21 | $\cdots$ | - | . ${ }^{4}$ | . | - |
| Primary Schools for Boys | 890 | 927 | 730 | 519 | 474 | 381 | 330 | 324 | 359 | 261 |
| Ditts for Girls | 4 | 18 | 23 | 31 | 2 | 19 | 22 | 32 | $22^{\circ}$ | 15 |
| Epecial Schools for Boys | 8 | 1 | 1 | * | -• | '7 | 2 | 2 | 2 | 3 |
| . Ditto for Girls |  | 3 | 5 | 4 | 5 | 2 | 1 | 2 | 2 | 1 |
| Total number of institutions . | 988 | 973 | 783 | 585 | 527 | 438 | 376 | 886 | 403 | 299 |
|  |  |  |  |  |  |  |  |  |  |  |


| Olass of institution | Number of pupils |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1920 \\ \text { to } \\ 1921 \end{gathered}$ | $\begin{gathered} 1921 \\ \text { to } \\ 1922 . \end{gathered}$ | 1922 to 1923 | 1923 to 1924 | 1924 to 1925 | 1925 10 1926 | 1926 to 1927 | $\begin{gathered} 1927 \\ \text { to } \\ 1928 \end{gathered}$ | $\begin{gathered} 1928 \\ \text { to } \\ 1929 \end{gathered}$ | $\begin{gathered} 1929 \\ \text { to } \\ 1930 \end{gathered}$ |
|  | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Englich Higt Schools for Boys | - | . | -* | $\bullet$ | $\cdot$ | - | $\cdots$ | - | 112 |  |
| English Middle Schools for Boya | 1,214 | ${ }^{1,135}$ | 1,183 | 1,134 | 816 | 1,100 | 1,116 | 1;150 | 768 | , 562 . |
| Ditto for Girls | 148 | 22 | 32 | 120 | 178 | 177 | 58 | 48 | 28 | . 191 |
| Vernacalar Middle Schools for Boys | - | - | . |  | - |  | $\cdots$ | 65 | 129 | 354 |
| Ditto for Girls |  | -• | . | 42 | 1,280 |  |  |  | - | . |
| Primary Schools for Boys | 28,743 | 29,737 | 23,222 | 16,483 | 15,591 | 13,585 | 11,849 | 12,468 | 14,752 | 10,803 |
| Ditto for Girls | 286 | 1,358 | 1,136 | 1,938 | 66 | L,251 | 1,317 | 2,434 | 1,703 | 1,307 |
| Special Schools for Boys | 279 | 77 | 80 | $\cdots$ | $\bullet$ | 313 | 68 | 54 | 61 | $271^{\circ}$ |
| Ditto for Girla | -•• | 64 | 116 | 96 | 411 | 156 | 28 | 50 | 59 |  |
| Total number of pupils under mertruction | 30,670 | 32,388 | 25,788 | 19,813 | 18,342 | 16,532 | 14,436 | 18,269 | 17,612 | 13,502 |

NoTE:-The figures for this table were taken from The Statistics of Tratancore

## SUBSIDIARY TABLE IX

Literates who have completed primary education (four classes) by religion and locality

| Religion | State |  |  |  |  |  | Southern Division |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total population |  | Total literates |  | Literates who bave completed primary education |  | Total population |  | Total literates |  |
|  | Males | Femsles | Males | Females | Males | Females | Males | Females | Males | Fematex |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Xll Religions. | 2,585,073 | 2,530,900 | 866,313 | 351,611 | 309,130 | 120,648 | 717,488 | 716.470 | 208,746 | 72,011 |
| Mindu | 1,067,925 | 1,566,963 | 519,200 | 184,240 | 185,971 | 62,922 | 486,075 | 485,264 | 154,440 | 60,591 |
| Chriatian | 814,833 | 789.642 | 309,276 | 163,081 | 114,833 | 57,273 | 180,357 | 173,053 | 40,8i5 | 20,193 |
| Minslitn | 180,555 | 172,719 | 37,661 | 4,246 | 8,281 | 445 | 60,025 | 31,246 | 11,394 | 1207 |
| Tribal Religions. | 1,511 | 1,396 | 51 | 3 | 3 | -• | 1,009 | 891 | 22 | 2 |


| Religion | - Southern Divixion |  | Central Division |  |  |  |  |  | Northern Disision |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Literates who have completed primary education |  | Total population |  | Total literates |  | Literates who have corupleted primary education |  | Total population |  |
|  | Males | Females | Males | Females | Mnles | Femalen | Males | Frmales | Malan | Femalen |
|  | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| All Religions | 85,724 | 28,712 | 933,169 | 928,303 | 332,637 | 141,999 | 125,408 | 51,809 | 854,845 | 840,478 |
| Hindu | 65,477 | 19,906 | 616,644 | 623,572 | 207,978 | 78,977 | 75,342 | 2i,381 | 421,048 | \$20,600 |
| Christian | 17,014 | 8,623 | 240,091 | 232,164 | 108,756 | 66,092 | 46,6in8 | 24,0.42 | 380,978 | 371,480 |
| Muslim | 3,229 | 179 | 76,066 | 72,218 | 15,856 | 2,027 | 3,400 | 185 | 62,632 | 48,277 |
| Tribal Religions. | 8 | -• | 324 | 325 | 17 | 1 | -• | . | 26 | 27 |


| Keligion | Northern Division |  |  |  | High Range Divixion |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total literates |  | Literates who have completed primary education |  | Total pupuiation |  | Total literates |  | Literates who have completod primary education |  |
|  | Malea | Females | Majes | Females | Malcs | Females | Males | Fomates | Malen | Females |
|  | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Sll Religiona. | 316.298 | 135,868 | 94.638 | 39,777 | 59,573 | 45.651 | 10.684 | 1,735 | 3,469 | 550 |
| Hindu | 151,713 | 54,205 | 43,411 | 15,403 | 44.158 | 35,527 | - 4,989 | 467 | 1,741 | 232 |
| Christian | 154,1002 | 80,652 | 49,609 | 24,298 | 13,407 | 8,986 | 5,044 | 1,240 | 1,657 | 310 |
| Maslim | 0,826 | 985 | 1,488 | 73 | 1,832 | 978 | 885 | 27 | 164 | 8 |
| Tribal Religions. | 3 | - | $\bullet$ | -• | 152 | 153 | 0 | " | -* | . |

## SUBSIDIARY TABLE X

Main results of Unixersity and other examinations


[^35]
## CHAPTER X

## LANGUAGE

## oducto

 ramarka403. An important innovation has been made in the language returns of this census. Till 1921 only one language was recorded for each person and that was the mothertongue ordinarily spoken at home. At the present census, besides the mother-tongue, any other language or languages commonly spoken by a person in his daily life have also been recorded. In those parts of India where more languages than one are generally spoken from the cradle, this addition to the return has enabled all such languages being recorded. Travancore, however, does not come in this category. Here, though a person may sometimes speak more than one language, he generally uses only one language in his home and that is always his mother-tongue. When the husband and wife speak different languages, for example, a Tamil Brahman husband and a Nayar wife, the husband speaks to his wife in her mother-tongue, but to his caste people in his own. The children of such marriages invariably speak the language of their mother, though they may also be able to speak the language of their father.

The main object with which information about subsidiary languages has been collected at this census is to see how far the intermingling of communities speaking different languages enables one community to acquire a knowledge of the mother-tongue of the other. The assimilation of foreign languages by communities is one of the means of stimulating the interaction of different cultures. The reciprocal influence of Malayali and Tamilian cultures as a result of the intermingling of the communities speaking these languages is seen markedly in some parts of Travancore. Mr. F. J. Richards, in his "Note on Cultural Borders in India," says, "As to the areas which are transitional from one culture to another, a rough convenient test is at hand in the published statistics of language. The use of more than one language in any given area is good evidence of the overlapping of cultures." This object has been kept prominently in view in the collection and compilation of language returns at this census.

Reforence to atatiatios.
404. The Statistics dealt with in this chapter are embodied in Imperial Table XV. Parts I and II, showing the various languages spoken as mother-tongues and as subsidiary to the mother-tongues in this State. The proportional figures worked out from the two parts of the above table are given in the two subsidiary tables at the end of this chapter. The languages have been classified and shown in the tables according to the scheme laid down by Sir George Grierson.
405. The instructions to the enumerators for filling up the columns for languages were:-
"Column 14 (Language) - Enter in this column each person's mother-tongue, the language which he or she ordinarily speaks at home. In theicase of infants and deaf-mutes the language of the mother should be entered.
*Column 15 (Other languages in common use)-Enter the language or languages habitually spoken by each person in addition to his morher-tongue. The entry in column 14 should be that of a man's genuine mother-tongue as first apoken from the cradle. In column 15 should be entered any other language or langunges commonly used by the sperker."
The instructions were definite and clear and the enumerators could not have made mistakes due to the ambiguity of the terms as in some other census returns. The results of the compilation show that the returns of 99.5 per cent. of the population, speaking one or other of the Dravidian languages, are correct. Of the remaining 0.5 per cent. of the population who speak various other languages, some mistakes might have crept in on account of the enumerators or the enumerated not being able to know the distinction between such languages as Hindi, Urdu, Hindustani and Arabic, or Maräthi and Konkani. In regard to the speakers of Hindi and Urdu the enumerators were specially instructed to enter only "Hindustāni" in column 14, and "Hindi " or "Urdu" in column 16 (literacy) according as the enumerated writes in one or the other of the scripts. In spite of these instructions a few mistakes might have been committed, as otherwise 3,458 persons would not have been returned as speaking Arabic. The mistakes, however, are confined to less than 0.5 per cent. of the aggregate population and will not, therefore, materially affect the main results of the language returna
406. On the whole 29 languages have been returned at this census, and of Main features these Malayalam is the mother-tongue of $4,260,860$ persons, and Tamil that of 788,455 persons in an aggregate population of $5,095,973$. In other words, about 84 per cent. of the population speak Malayalam and 15 per cent. Tamil, both together constituting as much as 99 per cent. of the total population. Only the remaining one per cent., i. e., 46,658 persons, speak as many as 27 other languages. According to the 1921 census 99.2 per cent. of the population spoke Malayalam or Tamil as mother-tongue and 0.8 per cent. other languages. The Malayalam speaking population has increased during the last decade from $3,349,776$ to $4,260,860$ or by $27 \cdot 2$ per cent. which is equal to the recorded-increase in the aggregate population. The increase in the Tamil speaking population is slightly less than that of the population increase, viz., 26.2, and that of the persons speaking other languages is 48.7 per: cent. The difference between the rate of increase of the persons speaking Tamil and other languages and that of the aggregate population must be due to migration.

The hill tribes in Travancore do not seem to have separate languages of their own: They speak a crude form of Malayalam or Tamil. A Malayali or Tamilian of the plains may not be able to follow their conversation; but on careful examination it will be found that the words they use are of Malayalam or [Tamil origin, though their endings are different and the pronunciation is uncouth.
407. Out of every 1,000 Malayalam speaking persons, 198 are in the Southern Division, 410 in the Central, 386 in the Northern and six in the High Range Division; on the other hand, of every 1,000 Tamil speaking persons, the Southern Division has 735, the Central 125, the Northern 43 and the High Range 97. Thus nearly 80 per cent. of the Malayalam speaking population are found in the Central and Northern Divisions and about 74 per cent. of the Tamil speaking population in the Southern Division.

Considering each division separately, it will be seen that in the Southern Division 59 per cent. of the population speak Malayalam and 40 per cent. Tamil, In this Division the four southernmost taluks of Thovala, Agasthiswaram, Kalkulam and Vilavancode contain a large number of Tamilians and there more than 87 per cent. of the population speak Tamil and only 12 per cent. Malayalam, as against 8 per cent. speaking Tamil and 91 per cent. speaking Malayalam in the other taluks of the division. In the Central Division - 94 - per cent. of the persons speak Malayalam and 5 per cent. Tamil, but in the taluk of Shenkotta which is contiguous to Tinnevelly district, the Malayalam speaking population is only two per cent., and the Tamil speaking is more than 95 per cent. In the Northern Division 97 per cent: of the population speak Malayalam and two per cent. Tamil, and in the High Range the corresponding proportions are 22 per cent: and 73 per cent. respectively. Thus we see that in the taluss of Thovala, Agasthiswaram, Kalkulam, Vilavancode and Shenkotta and in the High Range Division the preponderating language is Tamil, and in other localities it is Malayalam.

Besides Malayalam and Tamil, twenty-sevenen other languages have been returned by 46,658 persons. 'Of these, 10,015 persons are in the Southern Division, 14,245 in the Central, 16,858 in the Northern, and 5,540 in the High Range Division. The speakers of these twenty-seven languages constitute only a little below one per cent. of the total population in the Southern, Central and Northern Divisions and over five per cent. in the High Range Division. The comparatively higher proportion of the speakers of these foreign languages in the High Range Division is due to its immigrant population which consists of diferent castes and races speaking diverse languages.
408. The figures showing the distribution of the languages according to the classifcation of Sir George Grierson are given in the margin. The Dravidian Family is

| ...) Family, sub-family, etc. | $\left\{\begin{array}{l} \text { Number of } \\ \text { langoages } \\ \text { returned } \end{array}\right.$ | Number of speakers |
| :---: | :---: | :---: |
| STATE | 29 | 5,095,973 |
| Yomaculare of India | 14 | 6,091,006 |
| Druridiax Family | 5 | 5,004,323 |
| Dravida Group <br> Andhra Group | 4 | $\begin{array}{r} \cdot 5,054.468 \\ 9,855 \end{array}$ |
| C. Indo-Eurapean Fasrily |  |  |
| - Indo-Aryan Branch. | 9 | 26,683 |
| Yernaculars of other Xyiatic Countries | 6 | 3,598 |
| Eincopean languagea | 9 | 1,871 |

in almost equal numbers in the Southern, Northern and High Range Divisions, each having represented in this Sta chasiffed by Malayalam, Tamil, Kanarese group. Tulu and Telugu. We have already seen that 99 per cent, of the total population speak Malayalam or Tamil. - If the other languages of the Dravidian Family are also included, the percentage of the population speaking the languages of this family comes. to $99 \cdot 4$. The Kanarese speakers num-
a little over 500 speakers, whereas the Central Division contains only a little more than 300 speakers. Tulu is spoken by 3,196 persons of whom 1,268 are in the Southern Division, 1,013 in the Northern, 604 in the Central and 311 in the High Range Division. Telugu is spoken by 9,855 persons of whom the largest number, namely, 3,981 , is in the High Range Division where it is the commonest language, next to Tamil, of the immigrant coolies. The Southern and Central Divisions have 2,705 and 2,607 Telugu speakers respectively while the Northern Division has only 562. Of the vernacular languages included in the Indo-Aryan Branch of the Indo-European Family, nine are represented in this State. There is a population of 26,683 speaking these languages and of these Marathi and Konkani account for 19,229 persons. Konkani spoken in this State is a dialect of Maräthi and it is quite possible that some persons may have returned their mother-tongue as Maräthi, though strictly speaking it is Konkani. Hence, these two languages must be considered together. Next to these languages Western Hindi has the largest number of speakers, namely, 4,552. Western Hindi includes Hindi and Urdu. In common parlance they are called Hindustani and it is the mother-tongue chiefly of the Dakhanni Musalman. Of the other languages of the Indo-Aryan Branch, Gujarâti has been returned by 2,275 persons, Sindhi by 247, Punjabi by 76, and Sanskrit by 23 persons. There is also one solitary individual speaking Naipäli. Of the vernaculars of other Asiatic countries, Singhalese which is a language of the Indo-Aryan Branch is spoken by 54 persons. Tibeto-Chinese Family is represented by three speakers of Chinese. Arabic, Hebrew and Syriac are the only languages recorded under the Semitic Family. There is hardly any Arab in Travancore and the return of Arabic as the language of 3,458 persons is evidently wrong. It is not unlikely that those Muslims who are well versed in the Koran may have stated Arabic as their language either under a misapprehension or to show of their learning. Their real mother-tongue may be Malaỵlam. Tamil or Hindustāni. Hebrew has been returned by 39 and Syriac by two persons only. Of the European languages, nine have been returned by 1,371 persons, and of these 1,199 are English speakers. They include persons born in the United Kingdom, Australia and America and also the large majority of the Anglo-Indians. Of the other European languages, Portuguese has been returned by 88 persons, German by 34 , Spanish by 22, Flemish by 14, Italian by seven, and French and Norwegian by two each. Three persons have returned Gælic (Scotch) as their mother-tongue, but they should probably be included in English speaking persons.

Languages compared with castes and com munities.
409. Castes have not been classified according to the languages they speak. There are castes which consist of groups speaking different languages. For example, the Kammàla (Visiwakarma) caste includes the Malayalam as well as the Tamil speaking groups, and so also the Parayan (Sambavar,) the Paravan, the Kuravan, and several other castes which are found both in the Malayalam, and Tamil districts. The Chetti caste contains Malayalam, Tamil and Telugu speaking groups. There are several such composite castes, especially of the Dravidian race, and it is not, therefore, possible to correlate the languages with the castes except in the case of a few minor ones.

The language returns show that Kanarese is the mother-tongue of 1,957 persons. They belong to a number of minor castes, and their numbers have not been separately compiled except in the case of the Karnatika Brahmans who number 507 only. The Kanarese speaking people are all immigrants from Kanara. From Imperial Table VI it is seen that immigrants from South Kanara number 1,936. This is very nearly equal to the number of Kanarese speaking persons. 3,196 persons returned Tulu as their mother-tongue. They are generally the Tulu Brahmans, and their number according to Imperial Table XVII is only 2,843. The remaining Tulu speaking people are probably included under the Pötti Brahman. Tulu Brahmans are sometimes called Pöttis, though the real Pöttis are a Malayalam speaking caste, and it is quite likely that some Tulu Brahmans might have been included under Pötti. As has been already stated, Marathi and Konkani must be considered together. The number of persons speaking these languages is 19,229. The castes whose mother-tongue is Maräthi or Konkaṇi are the Maharāshtra and Gauda Saraswath Brahmans, and the Kudumi. All these together number 19,502 which does not differ materially from the language figure. Western Hindi has been returncd by 4,552 persons. The large majority of the Muslim community in Travancore consists of Malabar and Tamil Musalmans whose mother-tongue is Malayalam or Tamil. Besides these, there are 7,188 Dakhaṇi Musalmans of whom some are Hindustani speakers, and some probably Gujarati speakers. The latter together with the Saurashtra (Pattunol) caste, numbering 1,397 who speak a dialect of Gujarati, constitute the 2,275 persons who have returned Gujaratiti as their mother-tongue. 1,199 persons have returned English as their mother-tongue. They are naturally composed of the persons born in the United Kingdom,


Lirmo. Tacyamosum ant panniws woax.


Australia, and America, and the Tocal Anglo-Indizins. Their number, according to Imperial Tables VI and XVII, is $1,330^{\circ}$. The small diference of 137 may be due to some Indian Christians who have adopted the European mode of dressing having returned themselves as Anglo-Indians, in spite of the language they speak at home being Malayalam.
410. Malayalam and Tamil are the vernaculars of the State, and we have seen that the Language and former is the mothertongue of 84 per cent. and the latter' of 15 per cent. of the population. ${ }^{\text {literacy. }}$ If proportional figures are considered it will be seen that for every 1,000 Malayalam speakers there are 185 Tamil speakers. But the literates in the two languages do not stand in the same proportions, there being only 87 Tamil literates to 1,000 Malayalam literates. This disparity between the proportions of speakers and literates is due to two causes. Firstly, the Malayalis are taking to education more largely than the Tamilians. Secondly, some Tamilians learn Malayalam instead of Tamil at school, with the result that there are Tamilians who can read and write Malayalam but not their own mother-tongue.

We have seen that only 1,199 persons have returned English as their mother-tongue, but there are 80,65 l literates in this language. English is practically the official language in Travancore. It is the medium of correspondence in almost all Government offices. It is the language used in courts of law, and the Government publish their proceedings and other documents invariably in this language. English education was started in Travancore more than a century ago and is progressing much more rapidly here than in other parts of India. It is not surprising, therefore, that the number of persons who are able to read and write English is several times more than the numbers who speak it as their mother-tongue.
411. We shall frst consider bi-lingualism in respect of Malayalam and Tamil, The B1-lingualum. linguistic map opposite exhibits the main features of this bi-lingualism. The figures represented

| Division and taluk | Proportion per cent. of popalation speaking Malayalam as mothercongue | Proportion per cent. of popalation speaking 'amil as mothertongue | Proportion per cent of persons having Malayalam as mothertongue, speating Tamil as sabsidiary langange | Proportion per cent. of persons having Tanila as mothertongre, spcaking Malayalam as subsidiary language |
| :---: | :---: | :---: | :---: | :---: |
| Thovals, Agasthiswaram, Kalkulem and Vilavancode taluks in Southern Division | $12 \cdot 1$ | 87.3 | 13.7 | 3.5 |
| Other talaks in Southern Division | $90 \cdot 9$ | $8 \cdot 4$ | 1.4 | 400 |
| Oentral Division excluding ohenkotta taluk | 96.4 | $2 \cdot 9$ | 0.4 | 67.4 |
| Shentotta taluk | 2.0 | $95 \cdot 4$ | 10.8 | $\cdots$ - 43 |
| Northern Division- | 97.0 | 20 | 0.1 | . 78.9 |
| High Range | 22.0 | 72.7 | 123 | $\therefore \quad 3.3$ | therein are extracted in the marginal statement. The statement reveals some interesting facts. Where the preponderating mother-tongue is Malayalam, the proportion of Malayalis who could speak Tamil is very small، It varies from 0.1 per cent. in the Northern Division to 1.4 per cent. in the Southern, excluding the four southernmost taluks. On the other hand, the Tamilians who are in the minority, varying from two per cent. to 8.4 per cent. of the total population, acquire the habit of speaking Malayalam in much larger proportions. In the Northern Division where there are only two per cent. of Tamilians nearly 77 per cent. of them are able to speak Malayalam. Similarly, in the Central Division excluding Shenkotta and in the Southern Division excluding the four taluks in the South, $67 \cdot 4$ per cent. and 40 per cent. respectively of the Tamilian population speak Malayalam. Where "the preponderating mothertongue is Tamil the reverse order holds good. That is to say, the proportion of Tamilians who speak Malayalam is much smaller than that of Malayalis able to speak Tamil. The conclusion that may be drawn from the above figures is that when a community is in a minority in any locality, it tries to adapt itself to its surroundiags by learning to speak the language of the majority community. It is seen, however, that the Tamilians show a greater tendency to learn Malayalam than the Malayalis do to learn. Tamil. This will be evident from the figures for Shenkotta and the Northern Division. In Shenkotta out of two per cent. of the Malayalis, only 10.8 per cent. are able to speak Tamil, whereas in the Northern Division out of two per cent. of the Tamilians nearly 77 per cent. can speak Malayalam. Taking the State as a whole, only 77 persons out of 10,000 who speak Malayalam as mother-tongue speak Tamil as subsidiary language, while 1,432 persons out of 10,000 who !speak Tamil

as mother-tongue are able to speak Malayalam as subsidiary language. If the Malayalis and Tamilians living in localities where Tamil or Malayalam is the preponderating vernacular are considered separately, it will be seen that 158,363 Tamilians live in the midst of $4,166,350$ Malayalis and 94,510 Malayalis live in the midst of 630,092 Tamilians. The former is in the proportion of one Tamilian to 26 Malayalis: and the latter one Malayali to seven Tamilians only. It is this variation in the proportions of the two communities living together that accounts mainly for the very large difference in the proportion of the members of one community learning to speak the language of the other. Women naturally have less necessity to learn a foreign language than men. Among the Malayalis the number of fenales to 1,000 males who speak Tamil is 622 ; but among the Tamilians the proportion of the Malayalam speaking women is somewhat larger, namely, 740 to 1,000 men.
412. Of the languages other than Malayalam and Tamil that may be examined for bi-lingualism, the only ones that need be considered are Telugu, Tulu, Kanarese, Konkani, Marathi, and Western Hindi. The proportions of persons

Number if pertons per 10,000 tho
speak as mother-tomulue

| Language | Number |
| :---: | :---: |
| Teluga | 19 |
| Tulu | 6 |
| Kanarese | 4 |
| Kunkani | 24 |
| Marāthi | 14 |
| Western Hindi | 1 | speaking these languages as mother-tongue per 10,000 of the total population are given in the margin. Arabic speakers number seven per 10,000 , but they have been left out of account because of the incorrectness of the returns. Other languages which do not have even one speaker per 10,000 of the population have also been left out. Even with regard to the languages shown in the marginal stalement it is necessary to consider only combinations of these with Malayalam or Tamil, combination with other languages being too small to be of any material consequence. Proportions of persons speaking the above languages as mother-tongue together with Malayalam or Tamil as subsidiary language are shown in the marginal table below. Whether Malayalam or Tamil is spoken as a subsidiary language in any locality depends upon which of them is the preponderating vernacular there. Thus in the southern taluks of the Southern Division, in Shenkotta taluk and in the High Range Division where Tamil is the preponderating vernacular, this rather than Malayalam is ordinarily spoken as subsidiary to other languages, and vice versa. Taking the State es a whole it is scen that Tulu, Konkani, Marähi, and Western Hindi are combined more largely with Malayalam than with Tamil, Telugu with Tamil more than with Malayalam, and Kanarese more or less equally with either of them.

Other instances of bi-lingualism which may be worth noting are combinations of Tulu and Kanarese, and Marathi and Western Hindi. Subsidiary Table II at the end of this chapter shows that out of 10,000 persons speaking Tulu as mother-tongue 131 speak Kanarese as subsidiary language, out of 10,000 speaking Kanarese as mother-tongue 61 speak Tulu also and out of 10,000 speaking Marathi as mother-tongue 30 speak Western Hindi as well.

The lingua
franca movement.
413. Of late, a movement has been started in Travancore to popularise the study of Hindi. It is an offshoot of the nationalist movement in British India to make this language the lingua franca of India. Hindi, or its allied form Urdu, is the language spoken by more than 30 per cent. of the total population of India. In Northern India more than 50 per cent. of the people speak these languages, but in the south, e. g., in Madras Presidency, the proportion is not even three per cent. In Travancore it is still less. According to the returns of the present census the number of persons who have given Western Hindi (which includes Hindi and Urdu) as their mother-tongue is 4.552 , which gives a proportion of about nine per 10,000 of the aggregate population. The task of making Hindi the common language in Travancore, if it is ever possible to do so, is not an easy one. The educated section of the population is evincing interest in acquiring at least a working knowledge of this language. The local Legislative Council passed a resolution, moved by a non-official member in August 1931, recommending to Government the teaching of Hindi as a compulsory subject in the three highest classes in English schools and in Classes V to VII in the

Vernacular schools. Even before this question was discussed by the Legislative Council, the Government of Travancore had accepted Hindi as an optional subject to be taught in the schools in which there was demand for its teaching.

The Dakshina Bhärat Hindi Prachàr Sabha, Madras, which is a private organization, started Hindi propaganda in Travancore about five years ago. Prachăraks preparing candidates for Präthamik, Madhyama, and Räshtrabhäsha examinations were opened at different centres. It is reported that there are at present 35 such centres in Travancore, that about 600 candidates appeared for the Hindi examinations held by the Dakshina Bhärat Hindi Prachar Sabha in February 1932 and that so far about 5,000 persons, according to the estimate of the Secretary to the Sabha, have acquired a working knowledge of Hindi. The figure 5,000 may be an over-estimate, or it may be that all these persons have not acquired a sufficient knowledge of the language to be able to speak it fluently. The census figures show that only 721 persons have returned Western Hindi as a subsidiary language. Of these 721 persons, 606 are males and 115 females. $\ln$ other words, for every 100 males there are only 19 females who are able to speak Western Hindi as a subsidiary language. The 721 speakers consist of 504 Malayalis, 179 Tamilians and 38 others. Evidently, the Malayalis take to the study of Hindi more largely than the other communities. If the enthusiasm now shown in the study of Hindi does not turn out to be a passing phenomenon, and if the propaganda that is being carried on is persisted in, the number of men and women who can speak Hindi will undoubtedly show a substantial increase at the next census. But in spite of the best efforts it is doubtul whether Hindi will attain the position of the lingua franca of Travancore in the near future.
414. Malayalam and Tamil, as has been already observed, are the vernaculars of Relation this State. They both belang to the Dravidian Family of languages, but their exact rela- betzeen tionship is still a moot question. Sir George Grierson thinks that "the Dravidian languages and ramali are derived from the speech of an aboriginal Dravidian population of Southern.India." He says, "The name Dravida is derived from the Sanskrit word Dravida which is probably derived from an older word Dramila, Damila, and is identical with the name of Tamil." The fact that the original language of the Dravidians was called "Tamil" is regarded by the modern Tamil scholars as a proof of the present Tamil being practically the original language from which the other Dravidian languages were derived. This point is not conceded by the Malayalam scholars. They agree with Sir George Grierson in thinking that Tamil and Malayalam are two sister languages derived from a common stock. The present Tamil language is only a developed form of the ancient Chentamil (refined Tamil) which was quite distinct from Kodumtamil, the colloquial language which was then in vogue. This Kodumtamil, or may be an earlier form of it, was probably the original language from which modern Tamil and Malayalam were derived. The Dravidian word 'Tamil' probably connotes language in general and not any language in particular. It is identical in meaning with the Sanskrit word "bhäsha" now current in Malayalam, and it is in this sense that it is used in such works as Sundara Kändam Tamil, Mattavilasam Tamil, etc.; which are written in Malayalam with a large admixture of Sanskrit words. In modern phraseology these works would be called Bhashā Sundara Kändam, etc. It may, therefore, be inferred that the name 'Tamil' was once applied to all the languages of the Dravidian Family. They were distinguished from one another by such specific names as 'Chōla Tamil'; 'Pändy Tamil', which first developed into Chentamil and later into modern Tamil; 'Karinadu Tamil ' or Karnätika which is Kanarese; and 'Malanädu Tamil' which has become Malayalam. All these different tamils of ancient times must have been derived from a common slock which was possibly " the speech of an aboriginal Dravidian population of Southern India," to put it in Sir George Grierson's words.
415. The Chentamil equivalents of Malayalam words like "thala" (head) and "vala" (net) are "thalai" and "valai." The author of Molinūl (nasv" - grammarians point out that the "a" (men) ending was the original form in the ancient Dravidian language and that the "ai"" ( 0.0 ) ending found in Chentamil is a later variation. The retention of the " $a$ " ending in Malayalam shows that it must have separated from the parental stock before Chentamil had developed its literary form. The author of Tholkappiyam, one of the earliest Chentamil grammars, refers to the language of Malanädu (Malayalam) as a language of the Dravidian Family other than Chentamil. These facts point to the possibility of the modern Malayalam and Tamil having been derived from an earlier common language. It cannot, however, be denied that there are several words in ordinary use, such as pronouns, names of parts of the body, names of domestic animals, etc., which are common to both Tamil and Malayalam; that early Malagalam literature, e. g., Ramachartitham published at the beginning of the 13th century :contains many Tamil words and

Tamil grammatical forms; that famous Tamil works like Chilappadikdram and Pathiltippathu were composed by men who were natives of Kerala; and that ancient copper plates and stone inscriptions discovered in Kerala were written in the Tamil language. From these facts some Tamil scholars argue that Malayalam is only a daughter and not a sister of Tamil.
416. Tamil, it must be admitted, had developed a literature much earlier than Malayalam, and in ancient days the study of Chentamil was extensively pursued in Kerala. The kings of Kérala had intermarriages with the Chōla and Pändyan dynasties. Tamil scholars like Kapilar and Chäthanar came to Kerala to teach Chentamil and were appointed as court pandits by Kerala kings. The literary language of those times, even in Kerala, was Chentamil only and the stone inscriptions and copper plates were, therefore, written in that language. Later, when Malayalam began to dovelop its own literature, Chentamil did exercise some influence over it, as could be seen from early Malayalam literature. It contains several grammatical forms, such as the inflection of verbs for gender, number and person and also numerous words which are also found in Chentamil literature; but whether it could be inferred from this that Malayalam is a derivative of Tamil is doubful. It may be that Malayalam borrowed the grammatical forms and words from Tamil, or more probable still, both Malayalam and Tamil might have derived them from an earlier common language. This, at any rate, seems to be the view of eminent philologists like Dr. Caldwell and Sir George Grierson, and reputed Malayalam scholars like Mr. A. R. Raja Raja Varma.

The growth of the Malayal
isnguage.
417. In the previous paragraph we have seen how the sudy of Chentamil was fostered by the ancient kings of Kétala and how the indigenous Malayalam language itself was influenced by it. But in course of time the influence of Chentamil waned and its place was taken by Sanskrit. Being the language in which the sacred books of the Hindus were written, Sanskrit soon gained ascendancy in Ketrala. Elementary Sanskrit was taught in most of the pial schools in Travancore till the introduction of English education. The leisured classes pursued higher studies in Sanskrit literature and grammar, and many became distinguished scholars and authors of eminent works in that language. With the spread of Sanskrit education, words and expressions of that language were freely introduced into Malayalam in tathbhava form, using Drāida characters to represent certain sounds which were peculiar to Sanskrit. Thus Sanskrit Sita became Malayalam Chita, Bälan became Pälan and so on. Later, the mutilation of these Sanskrit words was discontunued and the Malayalam alphabet was strengthened by the addition of new symbols to represent the peculiarly Sanskrit sounds. Since then Sanskrit words were introduced into Malayalam in tathsama form. Even the expression, suffixes and gender were freely copied from Sanskrit in literary Malayalam and Sanskrit metres were adopted in poetical compositions. The extent to which the study of Sanskrit was pursued in Kerala and the degree to which its influence permeated the Malayalam literature could be gauged from the fact that Lilathilakam, the earliest known treatise on Malayalam grammar, believed to have been written in the 14 th : century, was composed entirely in Sanskrit.
418. Next to Chentamil and Sanskrit, the language which has most influenced the growth of Malayalam is English. Its literature has supplied ideas and sentiments, forms and devices to writers of both poetry and prose in Malayalam of recent times. Several English books have been translated into Malayalam and their model has been freely copied. The Malayalam vocabulary has been added to considerably by words taken bodily from the English language. Many terms connected with the administration of justice, such as court; judge, judgment, summons, warrant, etc., have become current in Malayalam, and so also words connected with general administration, e. g., police constable, excise, dispensary, doctors, etc. New industries and new articles introduced from foreign countries have brought in their train many new names, such as soap, brush, rubber, etc., which have been absorbed by the Malayalam language. The terms 'motor car' and ' motor bus,' the names of the parts of motor machinery and words connected with motor traffic, such as, speed, license, permit, reverse, etc., are now freely used by the man in the street and are not likely to be replaced by the Malayalam or Sanskrit equivalents which scholars may like to invent. Thus in diverse ways is Malayalam being enriched by the literature and vocabulary of the English language.
419. The Arabian, the Persian, the Portuguese, the Dutch and other foreign nations with whom the people of Kerala had had political and commercial relations in the past have also left their impress on Malayalam by importing into it many words of their own languages. Malayalam, in fact, has never hesitated to borrow words and ideas from other languages, with the result that it has built up an extensive vocabulary and a rich literature in the course of five or six centuries, an achievement which any language can justly be proud of.

SUBSIDIARY TABLES:

## SUBSIDIARY TABLE I

Distribution of total population by mother-tongue

B. VERNACULARS OF OTHER ASIATIC COUNTRIES AND AFRICA


## C: EUROPEAN LANGUAGES

| INDO-EUROPEAN FAMILY | Romance Group <br> Oeltic Group Teutonic Gronp | Italian 7 - |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{aligned} & \text { Itslian } \\ & \text { French } \\ & \text { Spanish } \\ & \text { R }\end{aligned}\right.$ | 7 2 22 | - |
|  |  |  | 88 |  |
|  |  | - English | 1,199 |  |
|  |  | - Flemish | ${ }^{1} 14$ |  |
|  |  | Norwegian | 2 |  |
|  |  | Total |  |  |
|  |  |  | 1,3/1 |  |

## SUBSIDIARY TABLE II

Distribution by language of the population of each division showing only the more important local languages


Note :-The projertions in column 3 have been calculated on the total pepulation while those in column 4 to 12 have been ealculated on the sfrength of the mother-tongue to which euch tangunge in subsidiary.

## CHAPTER XI

## RELIGION

420. Religion is the outward form or act by which man indicates his belief in the Inteodnctory existence of some superhuman power controlling his destiny. It is beyond the province remarks. of the census enumerator to probe into the inner thoughts of the individual and ascertain the exact nature of his faith. As Mr. J. T. Marten says, "The census is not concerned with personal religion but is an attempt to record religion in its communal aspect, merely distinguishing those who lay claim to one or other of the recognised sectional labels without looking too closely into the validity of their claims." * The instructions issued to the enumerators at the present census were:-
"Column 4 (Relipion). Enter here the religion which each person returns. as Hindu. Muelim, Sikh, Jain, Christian, Parsi, and the sect where necessary. In the case of the aboriginal tribes 'who are not Hindu, Buddhist, Christian, etc., the name of the tribe should be entered. in this column. Sect is in all cases required for Christians."

It will be noticed from the above that the enumerator was required to accept the religion which each person returned, without any further questioning about the tenability of the claim put forward. The wide differences that may exist in the faith and the outlook on life of different individuals professing the same religion are not recorded in the census schedules. As long as the census returns do not aim at distinguishing' such differences which concern the personal aspect of religion, they may be taken to be fairly correct except, probably, in the case of Hinduism and Tribal Religions between which the line of demarcation is not always easily recognizable.
421. The statistics presented in Imperial Tables are classified on the basis of religion. The value of such classification for demological purposes has been called into question, and rightly too, in a country like India where conversion from one faith to another is a common occurrence. Social customs, such as early marriage, treatment of women, etc.; do not change with the change of one's faith. We have already seen'a notable instance of this in the custom of early marriage still prevalent among Syrian Christians, In spite of the change of religion they have not discontinued the custom which they have - inherited from their Hindu ancestors. Even for political and administrative purposes the classifcation of population by religion is found to be inadequate to meet the present requirements. The backward classes among Christians are converts from the depressed or untouchable castes of Hindus: Though change of religion has freed them from certain social disabilities, 'it is doubful that it has contributed materially to the betterment of their economic condition and political status. There is a growing feeling among the Cbristian converts of the depressed classes that their political interests suffer by their inclusion with the more advanced sections of the Christian community. To this feeling is to be attributed the desire which these converts have manifested strongly at the present census to have their numbers shown under the specific castes to which they belonged before converision. For political purposes, caste or race is, therefore, more important under the present conditions than religion as the basis of classifying the population. But caste is in the melting pot. A section of the forward Hindus is agitating for its abolition altogether. They form only a microscopic minority and caste differentiation still continues to be a dominant factor in the Indian society. Under the conditions prevailing in India the most satisfactory method of dividing the people into groups for social, political. and economic purposes seems to be the one based on religion combined with race or caste. It is too premature to thint of cutting out the returns of religion altogether from the census.

[^36]General
religious distribation.
422. The statistics of religion are contained in Imperial Table XVI and the proportional figures in the four Subsidiary Tables given at the end of this chapter. The general distribution of the

|  | Religion | Number |
| :---: | :---: | :---: |
| Brahmanic Hindu | , | 3,134,837 |
| Arya |  |  |
| Brabmo |  | 19 |
| Total Hinds |  | 3,154,38S |
| Ohristian |  | 1,604,475 |
| Muslim |  | 353,274 |
| Tribal Religions |  | 2,907 |
| Jew |  | 298 |
| Buddhist |  | 64 |
| Jain | . . | 41 |
| Zorosstrian |  | 13 |
| Sikh |  | 12 |
| Unspecised |  | 1 |
|  | Total population | 6,095,978 | population by religion is shown in the marginal statement. It is remarkable that out of the total population of over five millions there is only one individual who has not specified his religion. Hindu, Christian, Muslim and Tribal Religions together constitute 9,999 out of every 10,000 of the population, which shows the insignificance of the other religions returned in this State. The three main religions in Travancore are Hinduism, Christianity and Islam. Out of every 1,000 of the population 615 are Hindus, 315 are Christians and 69 are Muslims. The very wide variations between the religious distribution of the population of this State and other parts of India can be seen from the figures given in the margin. Travancore and Cochin differ from the rest of India in having comparatively smaller proportions of Muslims and higher proportions of Christians, and of the two. Travancore contains a smaller proportion of Hindus and Muslims and a correspondingly higher proportion of Christians than Cochin. It is worthy of note that out of the total Christian population of $6,296,763$ in the whole of India, $3,820,625$ or about 60 per cent. reside in Southern India, and that more than one-fourth of the total is found in Travancore.


| Distribation of population by religion in administrative and natural divisions. | 423. The <br> State and Division | maps opposite this page show? the di <br> Number per cente of the population who are |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hindus | Christians | Muslims | Primitive Tribes |
|  | STATE | 61.0 | 31.5 | - $6 \cdot 9$ | $0 \cdot 6$ |
|  | Sonthern Division | 67.3 | $24 \cdot 9$ | $7 \cdot 1$ | 0.7 |
|  | Central $\quad$ \% | $66 \cdot 1$ | $25 \cdot 4$ | 8.0 | 0.5 |
|  | Northern $n$ | $49 \cdot 2$ | 44.4 | 6.0 | 0.4 |
|  | High Range | 72-6 | 21.8 | $2 \cdot 7$ | 8.4 |
|  |  |  | 23.6 | $8 \cdot 3$ | $\cdots$ |
|  | Midland ", | 54.6 | 39.8 | $5 \cdot 6$ | $\cdots$ |
|  | Highland " |  | $27 \cdot 6$ | 6.8 | $9 \cdot 0$ |

of the population by religion in the administrative and natural divisions of this State. The figures given therein are extracted in the margin. The figures for Hindus, it will be noticed, are slighly different from those given in column 2 of Subsidiary Table II at the end or this chapter. This is due to the fuct that the Primitive Tribes who returned Hinduism have been included under Hindus in that table, while in the maps they have been shown; along with the persons following Tribal Religions, separately from the Hindus. The High Range Division contains the highest proportion' of Hindus who are mostly immigrant coolies from Madras districtas. The Christians, are congregated mostly in the Northern Division. The Muslims are fairly well distributed in all the divisions except the High Range, and the


## THE SOCIAL MAP OF TRAVANCORE

## By Natural Division

Seattle 1 much $=16$ Miles





REFERENCE

- Natural Division Bonsidary
stare Boundary
Primitize-Tribes
Depressed Classes
Other Hindus
Muslims
Chrisilane
Owe aq. Fuck represents 500,000 persons.
N. B. Religions under one per cent. of the total population of each division are not shown.

Primitive Tribes are found mostly in the High Range Division. Of the natural divisions the Lowland contains the largest proportions of Hindus and Muslims, and the Micland the highest proportion of Christians, while the Primitive Tribes who live in forests are naturally confned entirely to the Highland Division. Trade which is the -chief occupation of the Muslims and cottage industries which employ more Hindus than other communities account for the presence of large numbers of Muslims and Hindus in the Lowland Division. The Christians, on the other hand, are more enterprising agriculturists and are, therefore, found in larger numbers in the Midland Division where there has been the greatest expansion of cultivation during the last decade. In the Highland Division the Hindus preponderate because of the immigrants to rubber and tea estates from British -districts who are generally Hindus.

| 424. The proportions of the differ |
| :--- |
| Number im different religions per 10,000 of |
| the urban and rucal population |

425. The first census in which the distribution of population by religion was Comparative recorded in Travancore was the one taken by Ward and Conner in 1816-1820. Though growth of two censuses were taken between that date and 1875 , statistics of religion were not collected, difirerent From 1875 onward the population of each main religion has been recorded at all the censuses. Up to 1901 the figures for Hindus included those for Tribal Religions also, and for purposes of comparison these religions are, therefore, treated together. The following statement shows the actual population and the percentage of each. religion to the -total population of the State at the different censuses.

| Year | Total popalation | Hindus and Tribal Religions |  | Christians |  | Muslims |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ${ }_{\text {a }}^{\substack{\text { Actual } \\ \text { number }}}$ | $\left\|\begin{array}{c} \text { Percentage of } \\ \text { total } \\ \text { population } \end{array}\right\|$ | Actual number | Percentage of total population | Actual namber | Percentage of total population |
| .1816-1820 | 906,587 | 752,371 | 83.0 | 112,158 | 12.4 | 42,058 | $4 \cdot 6$ |
| 1875 | 2,311,379 | 1,702,149 | 23-6 | 469,023 | 20.3 | 14r,056 | 6.1 |
| 1881 | 9,401,158 | 1,755,610 | 73-1 | 498,542 | 20.8 | 146,909 | 6-1 |
| 1891 | 2,557,736 | 1,871,864 | $73 \cdot 2$ | 526,911 | 20.6 | 158,823 | 6-2 |
| 190i | 2,952,157 | 2,063,798 | 69.9. | 697,387 | 23.6 | 190,566 | 6\% 5 |
| 1911 | 8,428,975 | 2,298,390 | $67 \cdot 0$ | 903,869 | 20.4 | 226,617 | 6.6 |
| 1921 | : 4,006,002 | 2,562,301 | 64-0 | 1,172,934 | $29 \cdot 3$ | 270,478 | $6 \cdot 7$ |
| 1931 | 5,095,973 | 3,137,795 | 61.6 | 1,604,475 | 31-5 | 353,274 | $6 \cdot 9$ |

In the course of a little more than a century the total population of the State :multiplied 5.6 times, the Hindus including Tribal Religions 4.2 times, the Christians 14.3 times and the Muslims 8.4 times. The largest increase among Christians is due mainly :to conversions andito some ertent to the high fertility of the Syrian Christians. The larger increase among Muslims than among Hindus is practically the result of the higher fertility of the former. Frow columns 4,6 and 8 of the above table it will be seen that in 1816-1820 the State population consisted of 83 per cent. Hindus, $12 \cdot 4$ per cent. Christians and 4.6 per cent. Muslims. In succeeding censuses the proportions of Hindus -gradually declined-and those of Christians and Muslims steadily rose, the former more -markedly than the latter, with the: result that in 193 I the proportion of Hindus dropped to
61.6 per cent. and those of Christians and Muslims rose to 31.5 per cent. and 6.9 per cent. respectively. These variations are shown graphically in the following diagram.

rribal Religion and Hinduism.
426. The religion of the Primitive Tribes has been described differently by various: authorities. By some it has been called Fetishism, which Sir Herbert Risley defines as. "the worship of tangible inanimate objects believed to possess in themselves some kind of mysterious power."* Some have called it Naturalism, which means the worship of natural phenomena. Others have called it Spiritism, according to which the natural phenomena are interpreted as the evidence of an underlying soul or spirit which is regarded as the controlling factor of the world order. Most Primitive Tribes have their medicine-man whose function it is to invoke these spirits "to intervene for good or evil in the affairs of the visble world." $\dagger$ The most common name by which the religion of the primitive man is known is Animism, which is considered by Sir Herbert Risley to be the best term available. The basic principle of Animism is the recognition and worship of some power or spirit which is supposed "to reside in the primeval forest, in the crumbling hills, in the rushing river, in the spreading tree, which gives its spring to the tiger, its venom to the snake, which generates jungle fever, and walks abroad in the terrible guise of cholera, small-pox or murrain.' $\ddagger$ Animism is more or less the same as Polytheism in its primitive form. From primitive Polytheism has arisen the refined Polytheism of Hinduism which regards the spirits. or deities associated with inanimate objects and natural phenomena as nothing more than the impersonations of the attributes of the one God. Out of such a conception of religion has the philosophic mind of the Hindu evolved his dualistic and monotheistic view of the world, which is the essence of real Hinduism. "From this point of view," says Sir Herbert Risley, "Hinduism may be described as Animism more or less transformed by philosophy, or, to condense the epigram sill further, as magic tempered by melaphysics."\$ The highly philosophical form of Hinduism, with its monotheistic idea of the world, is the refined product distilled out of the crude belief of the Primitive Tribes. But, such a conception of the manilestation of divine power is beyond the comprehension of the uncultured masses, and to them Hinduism appeals. in the form of Polytheism which is only a modifed form of Spiritism or Animism. From what has been said above it will be clear that the change from the primitive religion to the highest form of Hinduism is a gradual process of evolution, and that it is hardly possible todraw a clear-cut line of demarcation between the faith of the Primitive Tribes and that of the lowest section of the Hindus who are incapable of realizing the philosophical aspect of Hinduism. Among Hindus there are classes of people like the Pulayas and the Parayas: whose relggion is more akin to Animism than to Hinduism, while among the primitive.

[^37]people there are tribes whose Animism has been tempered by the influence of Hinduism. The influence of Hinduism is clearly perceptible in the religion of several Primitive Tribes in Travancore, such as the Muthuvan, the Malayatayan, the Mannän and the Känikkäran. The Muthuvans worship the Hindu God, Subrahmapya, and the Malayarayans, the Mannäns and the Kanikkärs worship Sásta, a god of the Hindu pantheon Sabarimala is a famous Sástha temple to which devotees even of highly educated Hindus make annual pilgrimages. The Malayarayans and the Mannăns, like the Hindus,. visit this temple once a year and make offerings to the deity. These instances show how the religion of the Primitive Tribes who come in contact with the people of the plains becomes modified by the influence of Hinduism. This process of Hinduization of the Primitive Tribes accounts for the gradual falling-off of the numbers returned under Tribal Religions from census to census, as we shall see presently.
427. Tribal Religions have been recorded separately in this State from 1901 census only and till then they were included with the Hindus. Converts to Christianity were not shown separately except at the present census. Both by Hinduization and by conversion to Christianity the followers of Tribal Religions have been steadily declining in numbers, but owing to the lack of necessary statistics it is not possible to measure accurately the extent of this decline. Whatever figures are available are set forth in Imperial Table XVIII, The accuracy of these figures, especially at the earlier censuses, appears to be doubtul. Fifteen tribes are shown in this table, and of these, a word of explanation is necessary about Kuravan and Vẽtan. Both these tribes consist of two sections, one living in the jungles and the other in the plains. . The former is generally distinguished from the latter by the addition of the prefix "Mala" to the tribal name; but the Malankuravan and the Malavetan, when they come down and settle in the plains, become the ordinary Kuravan or Vetan. From very early times there has been a constant migration of these tribes from the jungles to the plains and hence we find large numbers of them included under Hindus from the very first census at which Tribal Religions were recorded separately. Imperial Table XVIII will show that in the case of all the fifteen t tribes mentioned therein, the numbers returned under Tribal Religions have been falling and those returned under Hinduism rising steadily from census to census. The aggregate figures for all the

Primitive Triben returnad under Tribal Roligions and Hinduism

| Year | Tibal Religions |  | Hinduism |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Numbers returned | $\left.\begin{array}{\|c\|} \text { Decrease } \\ \text { frum previous } \\ \text { census } \end{array} \right\rvert\,$ | Numbers retarned | Increase from previous census |
| 1901 | 25,309 |  |  |  |
| 1911 | 15,214 | -10,095 | 67,314 | + B,027 $^{\text {, }}$ |
| 1921 | 11,518 | - 3,996 | 85,708 | +18,394 |
| 1931 | 2,904 | -8,611 | $11 \overline{6}, 151$ | +29,243 |
|  |  |  | . |  | clearly the gradual absorption of the tribes into Hinduism. how, the figures. indicate statistics a rough estimate may be made of the Humbuism. On the basis of the available for Hinduism since 1921. The population of numbers who have changed Tribal Religions Religions and Hinduism increased from 97,226 in 1921 to 118 the adherents of both Tribal rent. If this rate of increase is applied to the population of Trits in 1931, i. e., by 21 per number in 1931 should have been 13,985, but population of Tribal Religions in 1921, their and the remaining 11,078 persons should have, therefore, gone ourned is 2,907 only Religions into the fold of Hinduism. This change of religion is a over from the Tribal the contact of the hill tribes with the inhabitants of the plains, which hatural consequence of by the development of tea, cardamom and rubber cultivation in the forest rrought about were once the exclusive preserves of the hill tribes and the wild beasts. It must be noted that only those members of the tribes who believe in Hindu Gods have been shown under Hinduism. The census of the tribes was taken by the officers of the Forest Department, and being-well acquainted with their customs and mode of living they could not have made mistakes in this matter. They were instructed to make special enquiries into the faith of the tribes and record Hinduism as the religion of only such of them as believe in Hindu Pantheism. Though these persons may still retain their animistic tendency of worshipping crests of hills and other natural objects, their tribes together are given in the margin. The ins crease in the one case and the decrease in the other are not proportionate, because, in the first place, the figures do not include the converts to Christianity, and secondly; the numbers returned under Hinduism and Tribal Religions may not be strictly correct. Any-

acceptance and worship of Hindu Gods entitle them to be included within the lold of Hinduism as much as the lower castes of the plains who, though recognized as Hindus, are still found to propitiate the souls of ancestors and the spirits supposed to be residing in natural objects and phenomena, as the animistic tribes do.
428. An interesting note on "Hinduism in Travancore," prepared at my request by Mr. K. Padmanabhan Tampi, a devotee, is appended to this chapter. The reader will find in it a correct exposition of the underlying principles of Hinduism and an account of the various reform movements initiated by great religious teachers, especially in their relation to Travancore. I shall, therefore, content myself with giving here a brief summary of the salient points discussed by Mr. Tampi. Hinduism must have been brought to Kerala by the ancestors of the Nampütiri Brahmans, probably several centuries before Christ. The then inhabitants of the country, who were of Dravidian race, had their own form of religious worship. The Aryans came to the south in small numbers only and did not, therefore, attempt to subdue the Dravidians and impose upon them their religion by force. On the other hand, by gentle persuasion they succeeded in influencing the Dravidians to acknowledge the superiority of the Aryan religion, and thus by fusing together the fundamentals of the two religions a modified form of Vedic religion was brought into existence in Kertala. Nàga worship which is still prevalent among the Hindus of Travancore is an element of Dravidian religion which was absorbed in Hinduism, when the Aryans came in contact with the Dravidians. The ancient Aryan religion which is depicted in the Verdas was, in the words of R. C. Dutt, "pre-eminently the worship of nature in its sublime and imposing aspects," but from the earliest times the learned sages were able to visualise the existence of an all-pervading soul or Parabrahmam behind the diversities of nature. The one object of the ancient Rishis was to realize this ultimate truth and through their teachings to enable others to reach that goal. They chalked out different paths, known as yogas, suited to the bent of mind of the persons concerned, all aiming at the realization of the one Primal Cause, the Universal God. Thus we see that the Vẽdic religion, though apparently it was nature-worship, was in reality monotheism.
429. The only God of the strictly Vedic pantheon whose worship has been kept up in modern Hinduism is Sakti, the Goddess of Energy. The worship of this Goddess is universal in Travancore as in other parts of India. In most Hindu homes in Travancore the Goddess is installed and worshipped in one form or another. The famous temple at Cape Comorin (Kanniakumäri) which attracts (pilgrims from all parts of India is dedicated to Goddess Sakti. The worship of Siva, the God of Destruction (the destroyer of ignorance), and of Vishṇu, especially the avatärs of Rāma and Krishṇa, is also common in Travancore. The bitter antagonism between the worshippers of Siva and Vishnu found in other parts of India is, however, absent in this country.
430. The unwillingness or the inability of the ancient religious teachers in Northern India to admit into the pale of Hinduism large bodies of people who clamoured for admission, gave rise to the religious movements of Jainism and Buddhism, of which the latter soon spread throughout India and even beyond it, especially in the far East. In Travancore Buddhism secured a large following and became the prevailing religion from one end of the country'to the other during the time of Asoma. But it did not remain in that preeminent position for very long. It had to yield to the new Hinduism which was promulgated by Sankarāchārya. Travancore feels proud that the great Sankara was one nt her sons. His birthplace, Kalady, is a small village in North Travancore. Though Buddhism was ultimately crushed out of the country, it had left its impress upon Hinduism. Most of the appurtenances of modern Hinduism, such as temples, worship "of images, ulsavams and religious processions, were all borrowed from Buddhists. The doctrine of Ahimsa which was an essential feature of Buddhism was incorporated into Hinduism. Sästa, the name often given to Buddha in Buddhistic scriptures, was admitted into the Hindu Pantheon. The famous Sāsta temples now existing at Sabarimala, Thakali and other places in Travancore, were originally none other than temples dedicated to Buddha. Besides these temples, several remains of Buddhistic viharas and chailyas are still seen in different parts of this country. These are all indications of Buddhism having been once the common religion in Travancore. The teachings of Sankarāchärya, the greatest exponent of Advaita philosophy, appealed to the sentiments of the people. For sixteen years he wandered all over

India, preached his philosophy, won over the Buddhists to Hinduism, and thus re-established the supremacy of the Vedic religion. After Sankara came Rämānujächãri, the founder of the Sri Vaishnava sect, who, by his exposition of Visishtädvaita philosophy, removed the popular misconception about body and $\bar{A}$ tman and built up the qualified Advaita system. Though Rämānuja had not visited Travancore," his teachings became popular and secured a large number of adherents to the Vaishnavite creed throughout the country. There are several well-known temples dedicated to Vishṇu at Thiruvattär, Trivandrum, and other places and they are visited by Vaishnava pilgrims from all parts of India. Madhwächārya who preached the Dvaita system of philosophy in the 13hh century A. D. appears to have visited Trivandrum. His birthplace was in South Kanara and his followers include the Tulu Brahmans who are ordinarily the priests in most of the temples in Travancore. Chaitanya, the great religious teacher of Bengal, who lived in the 15th century, believed in the efficacy of chanting the holy names of God and his teachings naturally appealed more easily and effectively to the masses. He visited Travancore once, and the universal habit, even now prevalent, of repeating the name of Räma both in the early morning and at dusk in almost every Hindu household in Kérala is probably the result of his teaching. Though in Northern India other religious movements had sprung up, especially during the Muhammadan period, which aimed at introducing the democratic spirit of Islam into Hinduism, they had not in the least affected Travancore where the Muslim oppression was never felt and conversions to Islam were very rare. The Mahratta religious movements that emanated from the Pandarpur temple also had not had any influence on the Hindu population of Travancore. The Gauda Saraswath Brahmans who are the worshippers of the Pandarpur God migrated to Travancore during the Portuguese invasion They number a little over 9,000 at present. They have their own temples to winch other castes are not admitted. The Arya Samäj and the Brahmo Samāj have only very recently started work in Travancore and have not yet made any appreciable headway in securing recruits.
431. Of all modern religious movements, the Ramakrishna movement appears to have been the most successul in this State. It was started here in 1911 under the guidance of Swàmi Nirmalãnanda, a direct disciple of Sri Rämakrishṇa. The first Asramam was opened at Haripad in 1912, immediately followed by another at Thiruvella, the third and the most important one was established at Trivandrum in 1924, and since then eight more have been added at other centres. "The ideals of Sti Rāmakrishṇa and Swāmi Vivekānanda," says Mr. Padmanabhan Tampi, "have permeated the masses largely in Middle Travancore where they have become almost household objects of worship, and the influence is gradually spreading. A band of local Sannyasins and Brahmacharits in which all the commmities are represented have grown up...............No distinctions of caste are observed in the Asramas and members of different castes of Malabar can be seen living as members of one happy family in these Âsramas. At all important functions in these Asramas people of all castes up to the lowest Pulayas, Parayas, etc., take their food together and as the food served is invariably Prasäd, orthodox Hindu doctrine also supports this practice.........Philanthropical work is also undertaken whenever necessary in a spirit of pure service, the poor and the needy being treated in a spirit of worship.........The main object in all these Asramas is to train the Sannyasins and Brahmacharis to develop their personality and manifest the Lord within so that they could carry on the work of Swämi Vivekānanda for the spiritual regeneration of India." Swāmi Nirmalānanda visits the Asramas in Travancore once a year, gives the necessary training to the Sannyasins and Brahmachatis and guides the healthy development of the movement.
432. The only religious movement which originated in Travancore is the socioreligious revival started by Sri Naráyana Guru, the spiritual leader of the İlapas, about thirty-five years ago. He established several temples on the West Coast, intended primarily for the llavas, but open to all classes of people without distinction of caste or creed. He also trained a number of Sannyasins to carry on religious propaganda on the lines chalked out by him. When he found that some Ilavas, not satisfied with the progress of his new movement, showed a tendency to secede from Hinduism and embrace Buddhism, he proclaimed the doctrine, "One caste-one religion-one God for man." As a result of the Swami"s teachings the llavas have realized the iniquity of the treatment accorded to them and other Depressed Classes by the high-caste Hindus in the name of religion, and set on foot a movement to establish the right of all Hindus, irrespective of caste, to enter temples and worship God, a right now denied to the so-called untouchable castes.

Hindus-their number and yariations.

Dlatribution of
Hindus by taluk.
433. The Hindus, including Aryas and Brahmos, number 3,134,888 according in the present census, forming 61.5 per cent. of the aggregate population. As the Animists were included with the Hindus in the censuses prior to 1901 , I am confining my observations on the comparative growth of the Hindu population to the returns of 1901 and subsequent censuses. During this period of 30 years the Hindus have increased by 54 per cent., the decennial increase being $12 \cdot 1$ per cent. in 1901-1911, $11 \cdot 7$ per cent. in 1911-1921 and 23.0 per cent. in 1921-1931. In spite of this increase in the actual numbers of the Hindus their proportion to the total population has steadily fallen. In 1901 there were 6,895 Hindus per 10,000 of the population, but the proportion dropped to 6,657 in 1911, to 6,364 in 1921 and to 6,152 in 1931. This fall, as we shall see later, is due to the more rapid growth of the other religions. The rate of growth of the Hindus has always

| Demale | Kate of decennial increave per cent. |  |
| :---: | :---: | :---: |
|  | Aggregate population | Hindus |
| 1!01-1911 | $11 \cdot 2$ | $12 \cdot 1$ |
| 1911-1921 | 16.8 | 11.7 |
| 1921-1931 | $2 \mathrm{~F} \cdot 2$ | 23.0 | been less than that of the State population as can be seen from the marginal figures. Several factors have to be taken into consideration in explaining the cause of this difference. We shall examine them in detail in regard to the increase during the last decade. A population will increase naturally when birth exceeds deaths. This is a factor common to all communities. But the special factors which contribute to the increase of a particular community are conversions and immigration. We have already seen that the Primitive Tribes are gradually giving up their tribal religions and joining the ranks of the Hindus and that the number that has thus been added to the Hindu population during the past decade may be put down at 11,078 . We have also seen in paragraph 46 , Chapter I, that Travancore has gained by migration 45,302 persons during the decade. More than 75 per cent. of the immigrants are Hindus and it may be assumed that the addition to the Hindu population through migration during the decade is about 34,000 , persons. As against the increase by these two causes there is the decrease brought about by conversion of Hindus to other religions. In Travancore conversions to Islam are very rare; but conversions to Christianity take place freely, and the number converted during the last decade may be put down at 100,000 approximately. If there had been no addition by the absorption of Primitive Tribes or through migration, nor any depletion through conversion to Christianity, the population of the Hindus would have been $3,189,810$ in 1931 as compared with $2,549,664$ in 1921. In other words, the increase during the decade would have been 25.1 per cent. instead of the recorded increase of 23.0 per cent. $25 \cdot 1$ per cent. may, therefore, be regarded as the natural increase of the Hindu population when the aggregate State population has increased by $27 \cdot 2$ per cent. The natural increase of the Christians and Muslims, we shall see later, is greater than that of the Hindus and this accounts for the natural increase of the Hindus being smaller than that of the State population.

434. The map opposite shows the proportion of the Hindus to the total population of the three main religions (Hindu, Christian and Muslim) in each taluk. Since the tribal and other religions together account for only seven persons out of 10,000 of the population, they have been left out of account. Of all the taluks, Shenkotta contains the highest proportion of Hindus, viz., 89 per cent. and next to it comes Devikulam with 85 per cent. At the bottom of the scale stands Minachil with 37 per cent., and immediately above it are Thodupula and Muvattupula, each with 39 per cent. Changanachery contains 41 per cent. and Kottayam and Kunnathunad 45 per cent. each. Excepting these six taluks the population in all the other taluks consists of more than 50 per cent. Hindus.

4シ5. The Ārya Samajam commenced its activities in Travancore in 1922, with Trivandrum as its headquarters. It is a socio-religious body, working for the regeneration of the Hindu Society by preaching the message of the Vedas. It does not recognize caste by birth and its membership is open to

| Taluk | Pernena |
| :---: | :---: |
| Trivandrum | 1.094 |
| Negyattinkurs | 87 |
| Quilon | 350 |
| Mavelikara | 2,0 |
| Amprapuia | 825 |
| Changanahery Kotraram | 150 |
| Kotraym | 278 |
| Total | 2,734 | all persons regardless of caste, colour or nationality. In social matters the Samajam opposes early marriage and favours intermarriage as well as widow remarriage, while in theology it believes in the divinity of the Vedas. In Travancore the work of the Samajam is reported to be popular among the Ilavas and Pulayas. It claims to have as many as 2,734 members distributed as shown in the margin. But only 32 persons- 18 males and 14 females - have returned themselves as Arya Samajists at the present census, and none was returned at the previous one.

## MAP OF TRAVANCORE

Bhowing by Taldise the Distribution of Hindus
Scale 1 Juch = 16 Miles

436. The Brahmo Samajam began work in Travancore about the year 1915 Brahmos. and has since been carrying on propaganda, particularly in Ampalapula and Shertala taluks in North Travancore. The Samäjam owns a Mandir and a Sanskrit school at Alleppey. The Manager of the Mandir says that there are about 55 families in Ampalapula and 65 in Sherthala following the tenets of Brahmoism, but only 19 persons- 7 males and 12 females-have been returned as Brahmios at this census. The previous censuses recorded none. The Samajists do not believe in the divine origin or infallibility of the Vedas, nor in the doctrines of incarnation or revelation. They are opposed to idol worship and rituals and do not observe caste distinction.
437. The remarkable growth of Christianity in Travancore has been already referred Christiansto in paragraph 425 above. Tradition has it that Christianity was introduced into Kertala therl number by St. Thomas in the first century A. D. The authenticity of this tradition is now questioned by some authorities. Whatever it be, there seems to be no doubt that about the middle of the fourth century a Syrian merchant, Thomas of Cana, landed at Cranganore with a small colony of Syrians and obtained from the then ruler of Malabar a free grant of land and certain privileges. From that time onward Christianity grew rapidly on the Malabar Coast. It received a fresh stimulus by the advent of the Portuguese in the 16th century. Their bishops carried on vigorous proselytization and secured many converts to the Roman church. By 1787 the Christian population of the Malabar Coast, according to Bartolomeo, numbered 255,000, of whom Travancore had 100,000 . In another 30 years, i. e., by 1816-1820, when Ward and Conner made the survey of Travancore and Cochin, the number of Christians in Travancore was found to be 112,158 . In 1875 when the first regular census was taken in this State, their number stood at 469,023, and since then a steady increase has been recorded at each subsequent census, with the result that according to the present census their population is $1,604,475$. Between 1901 and 1931 when the Hindus have increased by 54 per cent., the Christians have shown an increase of 130 per cent. Their proportion per 10,000 of the population rose from 2,362 in 1901 to 2,636 in 1911, to 2,928 in 1921 and to 3,148 in 1931, whereas the proportion of the Hindus dropped from 6,895 in 1901 to 6,152 in 1931. The variations in the proportions of Hindus, Christians and other religions are exhibited in the marginal diagram. The decennial rate of increase among Christians has been higher thau that of the Hindus and also of the aggregate State population during the past several decades. The figues for the last three decades are given in the margin. Since 1921

| Decade | Bate of increase per cent. |  |  |
| :---: | :---: | :---: | :---: |
|  | Aggrexate population | Hindus | Christians |
| 1901-1911 | 16.2 | 12-1 | 29-6 |
| 1911-1921 | 16.8 | 11-7 | 29.8 |
| 1921-1931 | $27 \cdot 2$ | 23.0 | 36.8 | the Christians have increased by 36.8 per cent., the Hindus by 23.0 per cent. and the State population by 27.2 per cent. The larger increase in the Christian population is due mainly to conversions and their higher fertility. In considering the growth of the Hindu. population in paragraph 433 above we have seen that the number of converts from Hindus to Christianity during the last decennium may be taken to be, about 100,000 . Had it not been for the

addition of these converts the Christians would have numbered only $1,504,475$ in 193F showing an increase of 331,541 persons or 28.3 per cent. over the population of 1921, as: against the recorded increase of 36.8 per cent, We have also seen that the natural increase of the Hindus during the last decade would have been $25 \cdot 1$ per cent., if they had not gained by the absorption of Primitive Tribes or through migration and had not lost through conversions. The higher rate of natural increase of the Christians ( 28.3 per cent.) than that of the Hindus ( $25 \cdot 1$ per. cent.) is the result of the higher fertility of the former, and particularly of the Syrian Christians. This question has been fully discussed in Parts I and II of Chapter V dealing with sex and the enquiry regarding fertility and mortality, and it ! is, therefore, superfluous to say anything more about it here.

Distribution of Christians by taluk.

The sects of Christians.
438. The proportional distribution of the Christians in the different taluks of the State is shown in the map opposite. Minachil which has the lowest proportion of Hindus has the highest proportion of Christians, viz., 61 per cent. Besides Minachil, the taluks which contain more than 50 per cent. Christians are Changanachery, Kottayam, Muvattupula and Thodupula, and in all these the Hindus form less than one-half of the population. Kunnathunad is the only taluk in which both Hindus and Christians are less than 50 per cent., the population of this taluk being composed of 45 per cent. Hindus, 42 per cent. Christians and 13 per cent. Muslims. Of al the taluks in the State, Chirayinkil contains the least proportion of Christians, viz., 2 per cent. and next to it is Shenkotta with 4 per cent., followed by Karunagapally and Kar thikapally each with 11 per cent. and Trivandrum, with 15 per cent. A noteworthy feature of the distribution of Hindus and Christians is that the former are found in larger numbers in the Southern and Central Divisions, in the coastal taluks of the Northern Division and in the High Range Division, and the latter in the interior taluks of the Northern Division and in. Thiruvella and Pathanamthitta taluks of the Central Division. The Christians found in these parts are practically all Syrian Christians who constitute more than 59 per cent. of the total Christian population of the State.
439. The table showing the territorial distribution of the Christian population by sect and race corresponding to Imperial Table XV of 1921 census has not been compiled

Distribution of Christians by sect

| Scot | detunl dumber | Percentage of the total Christian population |
| :---: | :---: | :---: |
| Anglican Communion | 85, 261 | 0.3 |
| Jacobite Syrians | 337,872 | 210 |
| Dinr Thoma (Reformed) Syrians | 142,496 | 8.9 |
| Romo.Syrians | 449,173 | 28.0 |
| Roman Catholics | 360,217 | 224 |
| Salvationists | 58,991 | 8.7 |
| South India United Charch | 138,968 | 8.7 |
| Others, including other Syrinns | 31,617 | $2 \cdot 0$ | this time. As a measure of economy the Government of India have ordered its abandonment, and instead, the strength of the more important sects alone is shown on the fly leaf of Imperial Table XVI. The actual numbers returned under the various sects and their proportion to the total Christian population are: given in the margin. RomoSyrians and Roman Catholics, both of whom owe. allegiance to the Pope, number 809,390 and form more than 50 per cent. of the total. Christians. Next to them come the Jacobite Syrians who constitute 21 per cent. of the total, and all the other sects together form only about 29 per cent.

Anglican Comamunion.
440. The numbers returned under Anglican Communion have increased from 67,026. in 1921 to 85,261 in 1931, the percentage of increase being $27 \cdot 2$. There is nothing extraordinary in the rate of growth of this sect which is the same as the rate of increase of the aggregate State population.
441. The strength of the Jacobite Syrian sect has increased by $49 \cdot 6$ per cent. during the last decade, i. e., from 225,854 in 1921 to 337,872 in 1931. The general increase in the total Christian population is only 36.8 per cent. and no special reason can be assigned for a much larger increase among the Jacobite Syrians. There might have been some conversions, but they were comparatively fewer than the conversions to the Catholic sects and could not, therefore, account for such a large increase. The reccrded rate of increase of Jacobite Syrians in 1921 was 11.8 per cent. only, while that of the total Christian population in that year was as much as 29.8 per cent. No explanation was. given for this large disparity in the last Census Report. The Jacobite Syrians do not.

## MAP OF TRAVANCORE

Bhowing by Taluks the Distribution of Christian
Neald 1 huch $=16$ Niles

differ materially from other Syrians in respect of fertility or other factors contributing to their growth. It seems quite probable, therefore, that there was üder-enumeration among the Jacobites at the last census and to this must be attributed the abnormally high increase recorded at the present census.
442. The followers of Mar Thoma Syrian church do not like the designation Mar Thoma -Reformed Syrians.' They have all returned themselves as Mar Thoma Syrians, a name syrians. derived from the founder of the sect. The strength of this sect now stands at 142,486. In 1921 it was 107,862, and the increase during the last decade was, therefore, $32 \cdot 1$ per cent. which must be considered normal in view of the conversions that must have taken place during the decade and of the prevailing high fertility of the Syrian Christians in general.
443. The number of Romo-Syrians increased by as much as 58.5 per cent. from Romo-Syrians. 283,333 in 1921 to 449,173 . This large increase is due to the number returned at the last census being far below the actual strength of the community.' This is evident from the fact that the recorded population in 1921 showed a decrease of 3.4 per cent. from that of 1911. The mistake in the enumeration of Romo-Syrians in 1921 has been admitted by the then Census Commissioner. Special care was taken at the present census to avoid mistakes in their enumeration. Mistakes generally arise by not distinguishing between Romo-Syrians and Roman Catholics, both of whom are Catholics and are entered as such in the column for Religion in the census schedule. This confusion was avoided this time by instructing the enumerators to enter 'Syrian' in the column for Race, Tribe or Caste, against the Catholics who follow the Syriac rite. The number of Romo-Syrians returned at the present census may, therefore, be taken to be the correct strength of this sect.
444. The population of Roman Catholics has increased from 327,979 in 1921 to Roman 360,217 in 1931, i. e., by 9.8 per cent. only. The 1921 census recorded an increase of Catholios. 88.7 per cent. during the previous decade which, as has been already pointed out, was due to the inclusion of a large number of Romo-Syrians with the Roman Catholics. These two sects have been correctly recorded at the present census and the abnormal rise in the rate of increase of the Romo-Syrians and the equally abnormal fall in the rate of increase of the Roman Catholics are, therefore, only apparent and not real. These two sects together, shown under the common name 'Romanists' on the fly leaf of Imperial Table XVI, have increased from 611,312 to 809,390 , or by 32.4 per cent. during the last decade asagainst 30.8 per cent. in the previous decade. The slightly higher rate of growth during the past decade must be due to the increase in the number of conversions.
445. The Salvation Army has been very active in its proselytizing work and as a salvationists. result the strength of Salvationists has increased by 74.4 per cent. during the past decade, i. e. from 33,824 in 1921 to 58,991 in 1931. The number of converts secured by the Salvation Army during the decade is estimated to be about 18,000 . If this is deducted from the number recorded at the present census, the natural increase among the Salvationists during the decade comes to $21-2$ per cent. only.
446. The London Missionary Society is one of the constituent bodies of the South south-India India United Church. The followers of this Mission used to be returned as Congrega- United Charch. tionalists. In 1921 the large majority of them were returned under this denomination and only 2,548 were shown under South India United Church. But in accordance with the instructions issued by the Census Commissioner for India and the wishes of the London Mission Church Council in Travancore, all Congregationalists have been brought under the South India United Church at the present Census. The Secretary of the London Mission Church Council, Nagercoil, writes as follows:-"All the churches in Travancore connected with the London Missionary Society are integral parts of S. I. U. C. The people seem to take a pride in being a part of this larger body. All Congregationalists in Travancore connected with the London Missionary Society (and I do not know of any Congregationalist outside the L. M.S.) may be included in the S.I. U. C., whether they have returned themselves as such or not. At present there is no direct connection between the South India and North India United Churches. Both cannot be brought under one common heading, India United Church."" The combined strength of the Congregationalists and the S. I. U.C. in 1921 was 110,610 and the corresponding number in 1931 was 138,958, the increase during the decade being 25.6 per cent. which may be considered to be normal.
447. There are a number of minor Christian sects whose numbers have not been other Christian separately compiled this time. Their total strength almost doubled itself during the last sects. decade. It was 15,448 in 1921 and 30,894 in 1931. This large increase is undoubtedly due to conversions. The more important of these minor sects are Lutheran, Methodist, Baptist, and Brother Mission.

Malankara
Malankara
Syrian Catho-
Syri.
448. A new sect called "The Malankara Syrian Catholic" was formed in Travancore in September 1930. The Archbishop of Bethany who founded this sect has contributed the following description of it:-

The Syrian Christian community on the Malabar Coast was split into two in the 17 th century, atter the Koonen Cross incident when a section of them repudiated the authority of the Portuguese Prelates and separated themselves from the communion of the Pope. These were called the Puthenkoor (The new sect) while those who continued faithful to the Holy See were called the Pazhayatioor (The old sect). The Puthenkoor Syrians placed themselves under the jurisdiction of the Jacobite Patriarch of Antioch. This caused the introduction of the Syrian Rite of Antioch into Malabar for purposes of divine worship, while the Pazhasakoor Syrians continued the use of the Syro-Chaldean Rite as modified by the Western Prelates in the 16th century.

There have been further divisions among the Puthenkoor Syrians who all use with slight modifications in some cases, the Antiochian Syrian Rite. Ever since the separation of the Puthenkoor from the Pazhayakoor community attempts were made from several quarters to hoal the wounds in the Syrian community. Mar Dionisius I in the eighteenth contury and several other Metropolitans of the Jacobite church approached the Holy See with requests to receive them into the communion of the Pope. These attempts failed. At last the Most Rev. Mar Ivanios, the Metropolitan of Bethany, in consultation with some other Prelates of the Puthenkoor sect appealed to the Pope on behalf of re-union, and the Holy Father responded most sympathetically and assured that the Antiochian Syrian Rite would be allowed to continue and that the reuniting Bishops would be kept in their office and jurisdiction. Accordingly Archbishop Metropolitan Mar Ivanios and Bishop Mar Theophilos accepted the supremacy of the Pope and entered into the commanion of the Roman Catholic Church on the 20th Soptember 1930. In this manner a new Rite has been established in the Roman Catholic community on the Malabar coast. Tbe Church that is thus constituted is called the Malankara Syrian Catholic Church and the members of this body are known as the Malankara Syrian Catholice. Thus tiree differont Rites exist at present in the Roman Communion in Travancore.

1. The Roman Catholics of the Latin Rite.
2. The Roman Catholics of (Syro-Malankara) Cbaldean Rite.
3. The Roman Catholice of the Malankara Syrian Rite (Antiochian).

At the census of 1931 it was too early to submit speoific statemento rogarding the followers of this Rite who naturally described themselves as Catholic Syrians or Syrlan Christians. At present the followers of the Malankara Syrian Rite number as follows :-

| Archbishop Metropolitan | $\ldots$ | 1 |
| :--- | :--- | ---: |
| Bishop | $\ldots$ | 1 |
| Priests | $\ldots$. | 37 |
| Faithful | $\ldots$ | 7,660 |

Yuyomayam. 449. A Tamil Brahman, who later assumed the name Vidwānkutty, together with his wife and children, embraced Christianity in 1861, and after several years of active work as a Christian missionary he propounded certain new doctrines which were not accepted by the other missionaries. With a large body of followers he seceded from the Christian church in October 1875 and six years later founded a new sect called Yuyomayam which claims to have nothing in common with Christianity.";

The adherents of this sect were separately censused for the first time in 1901 when their number was found to be 1,051 . In $191 \mid$ they increased by 70 and were included under 'Indefinite belief.' In 1921 their number came down to 998 and they were treated as an independent sect of Christians. Only 623 persons- 293 males and 330 femaleshave been returned under this sect at the present census and they are included under other Syrians shown on the fy leaf of Imperial Table XVI. The members of this sect do not like to be included under Christians. The following are, among others, some of the essential points on which they differ from the latter:-

1. The Yuyomayans are pure vegetarians and total abstainers.
2. Both males and females are prohibited from wearing" ornaments of any kind.
3. They follow a new era which commenced on the 2nd October 1882, the months and the days of the week having separate names, and they have also a separate language known as Yuyomayam.
4. They have no churches ; they carry on worship and conduct marriage ceremonies in their own homes ; they do not bury their dead in cemeteries but use their own compounds for the purpose ; they do not observe Sunday as a holiday, all the days of the week being equally holy to them ; they neither interdine nor intermarry with the Christians, nor have they any faith in the resurrection, the millennium or the final day of judgment.
5. Unlike the Christians, the husband or wife is entitled to succeed to the property of the other and sons and daughters inherit in equal shares the property of the father and mother.

## MAP OF TRAVANCORE

Showing by Taluks the Distribution of Musims
Sonle 1 moh $=16$ Miles




450. Various missionary bodies are at work in Travancore. The London Missionary Chritian .Society commenced its activities in South Travancore in 1806 and the Church Missionary Society in North Travancore in 1816. The Salvation Army established its headquarters at Nagercoil in 1890, the Brother Mission started work in 1898 and the Lutheran Mission in 1907. The Orthodox Syrian Church organized the Servants of the Cross Society and the Sannyasi Mission in 1815 and the Mar Thoma Syrians started their Evangelistic Association in 1888. Among the Catholics, the Changanachery Diocese commenced its missionary work in 1831, the Quilon Diocese was formed in 1853, the Ernakulam Diocese in 1859, and the Verapoly Diocese in 1886. The Kottar Diocese was separated from the Quilon Diocese and was formed into a separate Bishopric in 1930 and so also was the Vijayapuram Diocese separated from the Verapoly Diocese in the same year. All these bodies are carrying on active proselytization work, mostly among the low caste Hindua. From the information furnished by most of them it is seen that the number of converts they secured during the last decade would be not less than 100;000, of whom the Roman Catholic and the Romo-Syrian churches could claim about 70,700 , the Salvation Army 18,000, the Church Missionary Society 6,000, the Lutheran Mission 4,000 and the Mar Thoma Syrian Evangelistic Association 1,300 . The London Missionary Society and the Brother Mission have not supplied the fgures.
451. I have already referred to the fact that it is the low caste Hindus that ordinarily contribute converts to Christianity. A comparison of the population of some of these castes in 1921 and 1931 will bear out this statement. Let us take for this purpose the four largest castes of the Depressed Classes, namely, Chännän (Nädär), Kuravan, Parayan (Sämbavar) and Pulayar: (Cheramar). The Hindu section of these castes numbered 535,405 in 1921 and 599,074 in 1931. We have seen that the natural increase of the Hindus during the last decade was $25 \cdot 1$ per cent. If there had been no conversion'the above castes would certainly have increased at least by the same percentage, and the addition during the decade would, therefore, have been 134,387 . But the actual increase is -only 63,669 . The difference between these two figures, viz., 70,000 in round number, represents the converts to Christianity from the four castes mentioned above. The other minor castes and the hill tribes must have contributed the remaining converts.
452. The Muslims have increased by 30.6 per cent. during the last decade, the Muslims-thele recorded population being 270,478 in 1921 and 353,274 in 1931. Conversions to number and Islam are very rare in Travancore, but the marriage customs and the economic condition of the Muslims are such as are conducive to a high fertility, and their rate of increase is, therefore, higher than that of the Hindus. Their fertility, however, is not so high as that of the Christians. We have seen in paragraph 437 above that the natural increase among Christians during the last decade was $28 \cdot 3$ per cent. A higher rate of increase among Muslims than among Christians is, therefore, inexplicable unless it be due to under-enumeration in 1921.
453. The distribution of the Muslims in different taluks is shown in the map opposite. Distribation of There is no taluk which contains more than 16 per cent. Muslims. Chirayinkil is the only Musilims by taluk containing 16 per cent. and next to it is Karunagapally with 15 per cent., followed by talak. Kunnathunad with 13 per cent. Devikulam has the smallest proportion of Muslims, viz., one per cent., and ten other taluks have less than five per cent. each. It is noteworthy that out of nine taluks whose population contains 10 per cent. or over of Muslims, six are :at the sea-coast and only three, namely, Nedumangad, Pathanapuram and Kunnathunad are in the interior.
454. The only Muslim sects represented in Travancore are Shiah and Sunni. Out The rects o :of the total Muslim population of 353,274 , as many as 351,955 belong to the Sunni sect Muslims. and only 1,319 to the Shiah. The sects of the Muslims were not recorded in 1921 and hence their variations during the decade could not be shown.
455. Jews have increased from 274 in 1921 to 298 in 1931. They are confined other relispractically to the taluk of Parur and are probably imingrants from Cochin where there is gions. an ancient Jewish colony. The number of Buddhists has increased from 36 to 64 during the decade, and they are all probably converts from the Ilava caste. The Jains number 41 now as against 33 in 1921 and the Zoroastrians 13 against 6 . There was no Sikh in Travancore in 1921, but at the present census 12 have been returned under this religion.

## SUBSIDIARY TABLE J

General distribution of the population by religion

| Religion and Locrity | Actual namber in 1931 | Proportion per 10, (W) of population in |  |  |  | Variation per cent. Increasel + ) Diercase( (-) |  |  | Percentationf net Variation latol to 1931 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1131 | 1921 | 1911 | 1901 | 1921 to 1931 | 1911 to 1021 | 1901 to 1011 |  |
| 1 | 2 | 3 |  | 5 | 6 | ! | 8 | $!$ | 10 |
| Findu |  |  |  |  |  |  |  |  |  |
| STATE | 3,134,888 | 6,152 | 6,364 | 6,657 | 6,895 | + 23.0 | + 11.7 | + 12.1 | + 54.0 |
| Lowland Division | 1,627,337 | 6.811 | 6.981 | 7.152 | 7,301 | + 22.1 | + 11.3 | + 10.9 | + 50.9 |
| $\begin{aligned} & \text { Lowind division } \\ & \text { Midlani. . } \end{aligned}$ | 1,318, 432 | 5,4,38 | 5,371 | 6.106 | 6,429 | a $+\quad 20.6$ + | + 10.9 $+\quad 23.0$ | + 12.3 | + 30.1 |
| Highland ", | 188,919 | 6,404 | 6,547 | 7.092 | $\therefore 239$ | $+53 \cdot 5$ | + 22.0 | + 27.5 | + 138.9 |
| Christian |  |  |  |  |  |  |  |  |  |
| STATE | 1,604,475 | 3,148 | 2,928 | 2,636 | 2,362 | + 36.8 | + 29.8 | + $29 \cdot 6$ | + $130 \cdot 1$ |
| Lowland Division | 563,343 | 2,357 | 2,265 | 2.1070 | 1,916 | + 29.3 | + 25.9 | + 22.3 | + 99.0 |
| Midlaut . | $96010,8 \times 5$ | 3.978 | 3,966 | 3.307 | 2.918 | + $38 \cdot 3$ | + 30.1 | + $33 \cdot 9$ | + $141 \cdot 1$ |
| Highland " | 80,217 | 2,758 | 2,270 | 1,684 | 1,451 | + 88.1 | + 78.2 | + $\mathbf{3 1} \cdot 0$ | $+406 \cdot 2$ |
| Muslim |  |  |  |  |  |  |  |  |  |
| STATE | 353,274 | 693 | 675 | 661 | 648 | $+30 \cdot 6$ | + $18 \cdot 4$ | + 18.8 | + 85.4 |
| Lowland Division | 108,280 | 830 | 799 |  | 757 | + 29.0 | + 18.4 | + 16.1 | + 77.2 |
| Midiand \#, | 135,371 | 561 | 543 | 537 | 522 | + $31 \cdot 7$ | + 18.7 | + 21.16 | + 90.0 |
| Highland ", | 19,643 | 675 | 741 | 712 | 684 | + 41.1 | + 37.4 | $+35 \%$ | + 163.0 |
| Tribal Religions |  |  |  |  |  |  |  |  |  |
| STATE | 2,807 | 6 | 32 | 46 | 96 | - $77 \cdot 0$ | $-18.9$ | - 44.0 | -89.7 |
| Lowland tivision | 21 |  | 3 | 2 | 25 | - $95 \cdot 7$ | + 34.7 | - 90.3 | - $99 \cdot 4$ |
| Mirland " | 796 | 3 | 20 | 50 | 131 | - 79.4 | - 52.6 | - 514.4 | - 95.5 |
| Highland " | 2,690 | 72 | 41 | 511 | 605 | - $74 \cdot 8$ | $+14 \cdot 1$ | + $10 \cdot 0$ | - 68.4 |
| Othere |  |  |  |  |  |  |  |  |  |
| STATE | 429 | 1 | 1 | $\cdots$ | 1 | $+22.9$ | +249.0 | $-75 \cdot 4$ | + 8.7 |
| Lowland Division | 388 | 2 | 2 | - | 1 | + 20.5 | + 288.0 | - 43.8 | $+163 \cdot 0$ |
| Midland " | 10 | . |  | $\because$ |  | $-16.7$ | $+500 \cdot 9$ | - $\quad 93.3$ | - 66.7 |
| Highiand " | 31 | 1 | i | ¢ | $2 i$ | $+106.7$ | + | - $\quad 33.4$ | - 86.5 |

SUBSIDIARY TABLE II
Distribution of the main religions by division

| Diviaion | Number per 10,000 of the population who are |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hindu |  |  |  | Christian |  |  |  | Muslim |  |  |  |
|  | 1931 | 1921 | 1911 | 1901 | 1031 | 11921 | 1911 | 1901 | 1931 | 1921 | 1011 | 1901 |
| 1 | 2 | 3 | $\pm$ | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| ETATE | 6,152 | 6,364 | 6,657 | 6.885 | 3,148 | 2,928 | 2,636 | 2,862 | 683 | 675 | 681 | 848. |
| Idministrative Division |  |  | . |  |  |  |  |  |  |  |  |  |
| Snuthern | 6,788 | 6,962 | 7,291 | 7,643 | 2,493 | 2,272 | 1,964 | 1,099 | 706 | 083 | 669 | 647 |
| Central | 6,1603 | 6,857 | 7,098 | 7.224 | 2,537 | 2,388 | 2,152 | 1,926 | 797 | 748 | 724 | 713. |
| Northen | 4,965 | 5,208 | 5,584 | 5,879 | 4,438 | 4,160 | 3,795 | 3519 | 585 | 602 | 697 | bsir |
| High Rango | 7,573 | $\mathbf{7 . 2 8 1}$ | 7,360 | 7,422 | 2.128 | 2,055 | 1,827 | 1,522 | 267 | 203 | 277 | 191 |
| Natural Diviaion |  |  |  |  |  |  |  |  |  |  |  |  |
| Lenwland | 6,811 | 6,931 | 7,152 | 7,301 | 2,957 | 2,265 | 2,070 | 1,916 | 830 | 790 | 776 | 757 |
| Midlame | 5,4:8 | 5,751 | 6,106 | 6,429 | 3,978 | 3,666 | 3,307 | 2,318 | 861 | 543 | 837 | 522 |
| Hiphland | 6.494 | 6,547 | 7,092 | 7.239 | 2758 | 2,270 | 1,684 | 1,451 | 636 | 743 | 712 | 6 ER |

SUBSIDIARY TABLE III A
Christians-Number and variations



SUBSIDIARY TABLE III B
Hindus-Number and variations


| Division | Varintion:--Increase |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1921 to 1931 |  | 1911 to 1921 , |  | 1901 to 1911 |  | 1901 to 1081 |  |
|  | Number | $\begin{array}{\|c} \text { Percent- } \\ \text { age } \\ \hline \end{array}$ | Number | $\begin{gathered} \text { Percent- } \\ \text { age } \end{gathered}$ | Number | $\begin{gathered} \text { Percent- } \\ \text { age } \end{gathered}$ | Number | $\begin{gathered} \text { Percent } \\ \text { agy } \end{gathered}$ |
| BRATE <br> Administrative Diyiaion | 685,223 | 788.0 | 8287,047 | $11 \cdot 7$ | 10 | 11 | 18 | 18. |
|  |  |  |  |  | 257,002 | $12 \cdot 1$ | 1,099,278 | B8.0 |
|  |  |  |  |  |  |  |  |  |
| Sonthern | 164,758 | $20 \cdot 4$ | 88,252 | $12 \cdot 3$ | 77,832 | $12 \cdot 1$ | 330,842 | 81.6 |
| Oontral | 220,509 | 21.6 | 117,809 | $18 \cdot 1$ | 104,850 ? | 18.8 | 448,208 | $85 \cdot 6$ |
| Northern | 161,716 | 28.8 | 48,967 | $7 \cdot 8$ | 60,841 | 8.8 | 261,514 | 48'1 |
| High Rang | 88,241 | 82-3 | 21,939 | 40.5 | 18,470 | 84.1 | 69,659 | 807-2 |
| Hatural Difision |  |  |  |  |  |  |  |  |
| Lowland | 294,311 | $22 \cdot 1$ | 187,234 | 11.5 | 117,889 | $10 \cdot 9$ | 849,184 | 50.9 |
| Midand | 225,046 | 20.6 | 107,618 | 10.9 | 107,638 | $12 \cdot 3$ | 440,207 | 80.1 |
| Highland | 65,867 | 53.5 | 22,200 | 22.0 | 21,775 | $27^{\circ} \mathrm{B}$ | 100,842 | 188.0 |

SUBSIDIARY TABLE IV
Religion of the arban and rural population


# APPENDIX TO CHAPTER XI 

## Hinduism in Traxancore

[Prepared by K. Padnanabhan Tampi, D. A., B. L., a devotee,
and revised by Swami Nirmalananda.]

Hinduism:
Three periods.

Conditions

Final result.
Two claseet of Rithis: Married and celibate.

Upanishad's teaching.

Duslim merging into
Adralta:
Mratration.

1. A briel account of Hinduism in Travancore, based on the available data, necessarily forms a part of the Census Report. Hinduism from a historical standpoint can be divided into three clear periods, viz., (1) the Vedic period, (2) the Buddhistic Reformation, and (3) the Post-Buddhistic Hinduism, or what is commonly called Purànic Hinduism.
2. The ancient Aryans seemed to have realized almost at the outset that the ultimate truth about the Soul and God and the relation between the two can never be got from a study, however, thorough, of external nature. Sir James Jeans in his recent book "The Universe Around Us" says, there is a "growing conviction that the ultimate realities of the Universe are at present quite beyond the reach of science and may be-and probably are-for ever beyond the comprehension of the human mind." The idea of turning their brilliant intellect into a study of what lay beyond their minds is, we find, as old as the Rig Veda. They followed the modern method of observation and experiment, which has been so fruitul in the West in the investigation of gross matter, in the study of mind and what lay beyond the mind. Their instrument of study was the mind, and their object of study was also the mind. It was found at the outset that calmness and steadiness of mind was an essential requisite; hence naturally followed the following moral conditions of all practical religious culture.
(i) Non-injury. A man cannot, retain his calmness of mind when he cultivates hatred or envy in his mind.
(ii) Truth. Only a lover of truth can preserve his calmness of mind. Without truth mind cannot be calm.
(iii) Brahmacharya or chastily. Nothing weakens the mind like indulgence in pleasures.
(iv) Non-covetousness and not receiving gifts from other people. They found by experience that when gifts were received, the result of the bad actions of the giver affected the calmness of their minds. They also found by experience that a student of practical religion had better follow regular habits; and the contentment at worldly prosperity one gets in the natural course of things is also clearly necessary.
3. Following this method they realized that the ultimate Truth is One. The Rig Veda states "एकं सत्र विशा बहुधा बदृन्ति" "That which exists is One. Sages call it by various names, Indra, Agni, Yama, etc." We find from the earliest times two classes of religious teachers, the married Rishis, and the Rishis who spent their whole life in the forest Asramas devoting their energies to the search after Truth. The married Rishis gradually elaborated ritual worship, while the latter ones discovered the Spiritual Truths. They also elaborated the practical methods for the realization of these Spiritual Truths. The conversations which these Rishis in the forests held with their disciples are found in the Upanishads or the philosophic portions of the Vedas. These form the ultimate basis of Hinduism alike of Vedic religion and of modern Hinduism. The Upanishads form the highest authority in Hindu Religion.
4. The main teachings of the Upanishads may be briefly summed up as follows: (i) "All Upanishads begin with Dualistic ideas, with worship, etc., and end with a grand llourish .of Advaitic ideas." (Swāmi Vivēkànanda's Works, Vol. III, Page 233)

> द्वा सुपर्णा सयुजा सख़ाया समानं चृष्षं परिपस्वजाते ।
> तयोरन्य: पिप्पछं स्वदूष्ष्यनभ्जन्यो अभिचाकचीतित। ।
> समाने षृषे पुरुपो निममोडनीशाया शोचति भुषमानः ।
> जुंट्टे यदा परयस्यन्यमीगामस्य महिमानमिति वीतझोक: ॥
"Upon the same tree there are two birds of beautiful plumage, most friendly to each other, one eating the fruits, the other sitting there calm and silent without eating; the one on the lower branch eating sweet and bitter fruits in turn and becoming happy and unhappy, but
the other one on the top, calm and majestic; he eats neither sweet nor bitter fruits, cares neither for happiness nor misery, immersed in his own glory. This is the picture of the human soul. Man is eating the sweet and bitter fruits of his life, pursuing gold, pursuing his senses, pursuing the vanities of life, hopelessly, madly careering he goes."............ "Yet in the life of every one there come golden moments; in the midst of the deepest sorrows, nay, of the deepest joys there come moments when a part of the cloud that hides the sunlight moves away as it were, and we catch a glimpse, in spite of ourselves, of something beyond;-away, away beyond the life of the senses; away, away beyond its vanities, its joys and its sorrows; away, away beyond nature, or our imaginations of happiness heré or hereafter ; away beyond all thirst for gold, or for fame, or for name or for posterity. Man stops for a moment at this glimpse, and sees the other bird calm and majestic, eating neither! sweet nor bitter fruits, but immersed in his own glory, self-content, self-satisfied... ... ... Man catches a glimpse, then again he forgets, and goes on eating the sweet and bitter fruits of life, and again he forgets; perhaps atter a time he catches another glimpse, and the lower bird goes nearer and nearer to the higher bird as blows after blows are received; if he be fortunate to receive hard knocks, then he comes nearer and nearer to his companion, the other bird, his life, his friend, and as he approaches him he finds that the light from the higher bird is playing round his own plumage, and as he comes nearer and nearer, lol the transformation is going on. The nearer and nearer he comes, he finds himself melting away, as it were, until he has entirely disappeared. He did not really exist ; it was but the refiection of the other bird, who was there calm and majestic amidst the moving leaves. It was all his glory, that upper bird's. He remains without fear; perfectly satisfied, calmly serene. In this figure, the Upanishads take you from the Dualistic to the utmost Advaitic conception." (Swāmi Vivēkānanda's Works Vol. III, Page 235).
(ii) The goal of the Upanishads is not salvation but Mukthi Freedom. "Be free Mnkthi. from the bonds of nature." The state of Jivan Multhi or the highest Samädhi is beautifully described as follows:-
"One that is present always as consciousness, the bliss absolute, beyond all bounds, Nirvikalpa beyond all compare, beyond all qualities, ever-free, limitless as the sky, without parts, the $\begin{gathered}\text { Bamadni- } \\ \text { Description }\end{gathered}$ absolute, the perfect, - such a Brahman, $O$ sage, $O$ learned one, shines in the heart of Jnänin, in Samädhi."
"Where all the changes of Nature cease for ever, thought beyond all thoughts, who is equal to all yet having no equal, immeasurable, whom the Vedas declare, who is the essence in what we call our existence, the perfect, - such a Brahman, O sage! O learned one, shines in the heart of Jnánin, in Samädhi."
"Beyond all birth and death, the Infinite One, incomparable, like the whole universe deluged in water in mahäpralaya, - water above, water beneath, water on all sides, and on the face of that water not a wave, not a ripple, - silent and calm, all visions have died out, all Gghts and quarrels and the war of fools and saints have ceased for ever;-such a Brahman, O sage, O learned one, shines in the heart of the Jnänin in Samädhi." Vol. III, Page 421;
"When all vain desires of the heart have been given up, then this very mortal becomes immortal, then he becomes one with God even here. When all the knots of the heart are cut asunder, then the mortal becomes immortal, and he enjoys Brahman here". (Swāmi Vivēkānanda's Works Vol. II, Page 185.)
(iii) The main theme of the Upanishads is "काल्मानं विजानय अन्या वाचो विमुस्यय" Knom the -"Know this Atman alone," they declared, "give up all other vain words, and hear no, ${ }^{\text {Etman. }}$ other." In the Atman they found the solution - the greatest of all Atmans, the God, the Lord of this Universe, His relation to the Atman of man, our duty to Him, and through that our relation to each other." (Vol. III, Page 331).
(iv) Even though the main theme is the Ätman or Impersonal God, worship of the worship of the personal God with qualities is also enjoined-

स तन्मयो क्षमृत ईशसंस्थो ₹ः सर्वगो भुवनस्यास्य गोस्ता ।
य हंद्रो अस्य जगतो नित्यमेव नान्यो हेतुर्विघत ईईनाय।।
यो वह्काणं विददधाति पूर्व यो है वेदांश्र प्रहिणोति तस्मै।

"He is the Soul of the Universe; He is immortal; His is the Rulership; $\mathrm{H}_{\mathcal{P}}$ is the All-knowing, the All-pervading, the Protector of the Universe, the Eterna! Ruler. None else is there efficient to govern the world eternally.
"He who at the beginning of creation projected Brahma (i.e., the universal consciousness), and who delivered the Vedas unto him - seeking liberation I go for refuge unto that Effulgent One, whose light turns the understanding towards the Atman." (Vol. III, Page 31.)
Realization.
(v) Religion is to be realized-"नायमार्मा प्रवचनेन लम्यो न मेषया न बहुना धुतेन" "This Atman is not to be reached by too much talking nor is it to be reached by the power of the intellect, nor by much study of the Vedas.
(vi) The Soul is by its very nature' perfect.

Sool by nature

## perfect

Daalistic and
Adyaitic yiezs
."The Dvaitist says that by its very nature the soul is perfect; only by certain actions 'of the soul has it become contracted. Indeed, Ramanuja's theory of contraction and expansion is exactly what the Evolutionists call Evolution and Atavism. The soul goes back, becomes contracted as it were, its powers become potential, and by good deeds and good thoughts it expands again and reveals its natural perfection. With the Advaitist the one difference is, that he admits evolution in nature and not in the soul. Suppose there is a screen, and Here is a small hole in the screen. I am a man standing behind the screen and looking at this grand assembly. I can only see very few faces here. Suppose the hole increases; as it increases more and more, all this assembly is revealed to me, until the hole has become identified with the screen. There is nothing between you and me in this case; neither you nor I changed; all the change was in the screen. You were the same from first to last; only the screen changed. This is the Advaitist's position in regard to Evolutionevolution of nature and manifestation of the Self within. Not that the Self can by any means be made to contract. It is unchangeable, the Inanite One. It was covered, as it were, with a veil, the veil of Mayya, and as this Maya veil becomes thinner and thinner, the inborn, natural glory of the Soul comes iout and ibecomes more mainfest." (Vol. III, Page 239). body, the mind, but there is something yet greater - for the body changes and so does the mind - something beyond, the Atman -that there is something beyond even this fine body, which is the Atman of man, which has neither beginning nor end, which knows not what death is. And then this peculiar idea different from that of all other races of men, that this Atman inhabits body after body until there is no more interest for it to continue to do so, and it becomes free, not torbe born again." This is the theory of Samsara. (Vol. III Page 374).
Srlahtl. (viii) Srishti, creation, or projection is without beginning and without end. "We believe in Nature being without beginning and without end, only at psychological periods this gross material of the outer universe goes back to its finer state, thus to remain for a certain period, again to be projected outside, to manifest all this infinite panorama we call Nature; this wave-like motion is going on even before time began, through eternity, and will remain for an infinite period of time." (Vol. III, Page 374).

Renonoiation
(ix) "Strength, strength" 1 is what the Upanishads speak in every page. "Strength, Oh man, strength, say the Upanishads, stand up and be strong; aye, it is the only literature in the world where you find the word, "Abhih." "fearless' used again and again. ... And the Upanishads are the great mine of strength." (Vol. III, Page 237).
(x) The Upanishads teach Unity, "The solidarity of the Universe." "Mentally speaking it is one universal ocean of thought, in which you and I are similar little whirlpools, and as spirit it moveth not, it changeth not. It is the One Unchangeable, Unbroken, Homogeneous Atman." (Vol. III, Page 241).
(xi) Renunciation is the one essential condition of all religious practice, vide the story of Nächi Ketas in the Katha Upanishads.
(xii) The Ätran cannot be attained by the weak, even the physically weak. "नायमारमा बलहीनेन लम्प:" The reaction of the forces roused by Yöga practices a weak body cannot stand.
The four pathnt 5. As all men are of different temperaments, the ancient Sages evolved four main paths to realize the ultimate truth, according to the different temperaments of their disciples.

## Karma Yoga.

 The man of action was recommended the method called Karma Yōga, the path of work. He was trained to do every kind of work which came in his way, in the natural course of things, in a spirit of non-attachment, that is, without desiring any particular result for himself and without liking one kind of work in preference to another, that is in an absolutely calm state of mind.The man of feeling, the man in whom the emotions are highly developed, was Bhatthl Yoga. given the path of Bhakthi or the path of love or devotion. The love that we ordinarily spend upon our wives and children and friends was to be directed towards God; to make this perfect, a particular relation was established between himself and Ishta Dëvatha, the form and person of God he chose to worship. The Sages in the Upanishads followed the relationship of Shänta, "Calm, commonplace love without the fire of love, without the Relationship to madness of intense active love." Later on other kinds of relationship developed according to individual needs. Some worshipped the personal God with the devotion of a servant to his master, as Hanumãn ; some, with the love of a lather to his child as Vasudevar; in all forms of devotion it.is necessary absolutely to get rid of the idea of fear, hence this particular form was enjoined; some with the devotion of the wife to her husband; and some with the devotion of a woman to her paramour, because the feeling in this case is exceedingly intense.

Then there are persons who find it easy to control their minds and concentrate it raja yoga. on any object they chose. Such people were given the method of Rāja Yöga or concentration. Then there is another class of people, highly intellectual and at the same time exceedingly bold, who are not afraid to look facts in the face and act boldly in the light of their knowledge. To these people was prescribed Gnāna Yöga or the method of discrimination. They have at every step to discriminate between the Real, what really Gnana Yoga. exists, and the Unreal and act accordingly: This method of Gnäna Yōga was considered exceedingly difficult for most persons. These four were the main methods prescribed for realizing the ultimate Truth, and disciples were also advised while concentrating on one particular method to follow partially other methods also, as far as possible, to prevent them from becoming one-sided and dogmatic. All the four paths alike lead to the same result. The Kundalini Sakthi, the power latent in the Mülädhära, the Solar plexus, is roused entering the sushumna, which is right in the interior of the spinal cord and which is ordinarily closed, and goes up to the brain. When it reaches there, the State of Samädhi or superconsciousness is produced. God realization takes place in this fpshion.

The only Vedic God of the strictly Vēdic Pantheon, whose worship has come down Goddess Sakthi. to us is Sakthi, Goddess of energy, Divine, Infinite Energy. The worship of the Goddess Sakthi in all forms is almost universal in Travancore. Brahmom is passive; when it is active, creating, protecting or destroying, it is Sakthi. "The serpent lying still, coiled up, is Brahmom and the very serpent in motion is Sakthi." The Vēdic Sages realized in their meditation this Divine Energy as having the female form and their expression - the Dēvi Suuktha - is one of the most soul stirring hymns in the.Rig Vēda. The Sages saw "the Sakthi was all power, all intelligence, all love.". The Tantràs (tantra way, way that leads men to the truth) deal with the worship of the Goddess in her various manifestations. These books contain all the practical directions regarding worship and practice of Yöga. The Mantras used in the worship of the Supreme Being in all its manifestations all over India, are here; the different ideals of worship for the householder and the Sannyasin, the particular paths prescribed for each person according to his samskära (sum total of his The Tantras, prior actions) are also found here. All the great religious teachers, Sankaía, Rämānuja, morship. Chaitanya, etc., worshipped Sakthi in one form or another. "Another feature of the Tantras is the higher standard to which they have raised womanhood. Salthi proclaims that in one sense she is manifested more in woman than in man. When women are approached with reverence and awe, purity and devotion, they raise men to the standard of Gods; but when looked down with inmoral and selfish ends, they bring men down to the level of the beasts." (Vide Säradànanda's Tantrās). All the castes in India have been worshippers of the Goddess, hence the worship of the Goddess is universal in Travancore. In most private houses the Deity installed is the Goddess in one form or another, and one of the great places of Hindu pilgrimage, the temple at Kanniakumäri, is dedicated to the Goddess.

The worship of Siva, the God of Destruction, the Destroyer of Ignorance, is also siva. very common, but the antagonism that we find in other parts of India between those who worship Vismnu and Siva is absolutely unknown in Travancore.
6. 1 might say a few words about the principle underlying the worship of images in temples. According to the Hindu Sästras, all the Pancha Bhüthas can be used for Torship of involing Gods and worshipping them. Thus in the Vedic Age, fire was universally used Images. for worship. The Vedic Gods were invoked through the Höma fire and offerings offered to them. And even now the Höma sacrifice holds an essential place in all the important socio-religious ceremonies, all over India.

The Buddhists first made use of the relics of Buddha for worship, later on followed by images, of course of Buddha. When a person worships a particular form of the Lord with imtense devotion, the Lord, who is present everywhere, manifests himself in that particular form in which He is worshipped. Sri Ràmakrishṇa says, water is present everywhere and is homogeneous; intense cold leads to the formation of lumps of ice in some places in this vast expanse of water. In the same way, the intense devotion of the worshipper leads to a special manifestation of God in the image. So, wherever the image is worshipped with intense devotion, the Lord manifests himself there, and Yögis, who have attained superconsciousness, see in the temples not the gross image but the resplendent figure of the deity of the temple.

Yedic Rellgion in Trayancore.

Ayatars -
Sri Rama

Sri Krishne.

Different
phases of
Krishna
woraihp.

Worshlp of
Bala Krishna.

Gopijana
Yallabha
7. The introduction of Vedic Religion into Travancore must have been made by the ancestors of the present Nampütiti Brahmans during the remote past, probably several centuries before the advent of Buddhism. Even the early Tamil literature is silent regarding this period. The superior culture of the Äryans gradually prevailed and the vast majority of the people in Travancore who must have been of Dravidian descent accepted the Védic Religion and were given a place within the Hindu-fold.
8. After the Verdic Sages, two great Kshatriya characters seemed to have impressed themselves on the imagination of India. Sri Räma, whose teaching comes down to us in the Adhyätma Rāmāyanam, lived an ideal Grahastha life, an ideal son, an ideal husband, and an ideal Ruler, forsaking even his wife to satisfy the clamour of his people. The Malayalam translation of the Adhyätma Rämãyanam by Thunjath Eluthacchan, the greatest of Malayalam poets, is the chief source, (almost the only source) in the case of the vast majority of people for their ideas of Hindu religion and Hindu culture. The ideal of Rama and Sitha is thus universally accepted all over Malabar, and though temples dedicated to him are comparatively few, the book is read by most orthodox persons almost every day.
W Long after Räma comes Sri:Krishna, who lived in the Age of the Mahà Bhäratha War. "While others are incarnations, Krishna is verily the Lord Himself." He was the ideal of non-attachment, and his "life was a unique combination of superconscious knowledge with constant performance of the duties of human life." He is worshipped in three aspects, namely, Baby Krishna of Brindhäban, Krishna the Beloved of the Göpis, and lastly Krishna the Parthasärathi, the Teacher of the Gita. In all these three aspects, the worship of Krishṇa has played an important part in the evolution of Hinduism. Worshipping God as child is necessary to remove all fear of God from the mind of the worshipper, so that the place of fear may be taken by love. There are many temples in Travancore dedicated to the Baby Krishṇa.

Krishna, the Beloved of the Göpis, is a phase of religious worship which a modern educated man finds it rather difficult to understand. The conception of the worship is this. Every worshipper is a Gōpi, all the worshippers are women, and there is only one man Lord Sri Krishṇa. Brindhâban is the centre of this kind of worship. It was a holy place dedicated to the worship of Sri Krishna, even in the days of Megasthenes. The intense love which Göpis felt for Krishṇa had made them give up their husbands and families, and even the sense of shame so deep-rooted in human nature, and this self-sacrifice raised them in a moment to the highest plane of super-consciousness. What the Yogis attain by years of strenucus effort the Göpis of Brindhabban attained in a trice. This kind of worship is practically unknown in Travancore, and I believe, there is no temple dedicated to Krishṇa, the Beloved of the Göpis.

Parthanarathl.
Krishna the Pärthasärathi, the Teacher of the Gita, holds a high place in the minds of all Hindus. Given on the battlefield on a memorable occasion to strengthen the mind of the great warrior who had suddenly become unnerved on seeing his relations and gutus arranged in battle array against him, it contains the essence of the Upanishads, it reconciles all the existing views on religion and religious practice current at the time recognizing even the sacrificial ceremonies, if done quite unselfishly, and holds a very high place among the scriptures of the world.

Mukthi, all can
Yukthi,
attaln.
Krishna is also exceedingly tolerant. He says in the most clear language that every human being, from the highest to the lowest, is entitled to attain final liberation in this birth, if he strives hard enough. Krishna's views on caste are almost modern. He
says, caste was created according to the differences we find in men, from their (Guna,) Caste, not a quality, and (Karma,) work. The work for which they have a natural bent of mind and reigious instlfor which they are drawn to shows what their Guna is, whether it is Sätvic, calm, naturally sooial. tending to meditation and a joyous religious life and including activity, absolutely free from selfishness, or Rajasvic, tending to constant activity, activity with common ambitions in life but not deviating from the ordinary moral code of society, or Tàmasic, ranging from activity purely selfish and untrammelled by principles down to dullness and inertness, pure and simple.

9: Several centuries after, large bodies of people in North lndia, outside the pale Jains. of Aryan society, were clamouring for admission within Hinduism, but the religious teachers of the time who, steeped in ritualism and not fully realizing the need of constant adjustment of the social body to the high ideals of the Hindu religion, had neither the vision nor the courage to solve the growing perplexities of the society, were averse to admit them. This gave rise to the two religious movements, namely, Jainism and Buddhism. Jains are practically non-existing in Travancore; and Buddhists have completely disappeared with the exception of a few recent converts to Buddhism, who number 64 only.
10. Buddha simply showed his disciples the paths to reach the ultimate truth, but sri Buddha. did not correlate what he realized with the realization of the ancient sages of the Upanishads. He gave an enlightened emphasis en morals and completely disowned all ritualism. So his followers gradually denied the Vedas. Buddha does not seem to have taught the path of love ; he did not preach a personal God. But, following the natural tendency of human nature, his followers made a personal God of him. The great contribution that Buddha made was this: "Intense desire to help the poor and the lowly and also the great monastic organization which he created for carrying out his work, and which according to a great authority was the greatest attempt ever made to better the condition of humanity as a whole".
11. In the days of Asioka, Buddhism spread throughout India, and the remains of Buddha and Buddhistic Viharas and Chaityas and temples, are found from one end of Travancore to the other ; from Thovala to Kunnathunad Buddhism flourished in this land in days of yore. Early Tamil Literature gives glimpses of Buddhistic life in Travancore (vide Manimékalai). Buddha himself threw open the highest of all positions, the position of Sannyasin, to every human being, irrespective of all distinctions of caste. The first recruit he thus made was a Chandaja woman. He admitted her into the ranks of Bikkunis most of whom were noble-born women of the Sakya clan. This mighty influence gradually destroyed the caste system among the people and large numbers of persons in all stages of culture freely entered their ranks ; and this led to a great religious and social revival and several centuries of greatness for India as a whole. Indian Buddhists went to Central Asia and far East and introduced Sanskrit culture and Indian civilization throughout Asia; but later Buddhist teachers were not able to raise these new peoples up to the. Aryan level of culture. The highly metaphysical doctrine he preached-the path of knowledge-was above the heads of the masses. Hence degeneration followed, and later Buddhism was a mass of degradation. Vegetarianism of the masses, which was compulsorily introduced by the Buddhist kings, led to physical enfeeblement and the Indians thus fell an easy prey to the Musalman invaders. To rescue the people from the mass of superstition, the revival of Vedic culture was found necessary, and in this revival Travancore played a prominent part.
12. The Vedannta Sütras are the systematization of the truths of thej Upanishads by Xedãnta the mighty intellect of Badarāayana Vyāsa. The six systems of philosophy culminate in the sutraac. Vyäsa Sürras.
13. The Great Sankara, who led this Hindu revival and restored the Vēdic religion; sri sanwas born in Kàladi in North Travancore, on the banks of the river Periyär, a few miles karäahārya. up from Alwaye. He was born in a family of Nampūtiri Brahmins. He finished his secular education almost in his early teens, and following the pilgrim's route, he reached the banks of the Narbada, where he met his Guru when he was but thirteen. $\cdots$ After realizing the ultimate Truth, he went to Benares where disciples gathered round him and then he went to the Himalayas, and in the cool shades of Badri wrote his three famous commentaries, the commentary on the Upanishads, on the Vēdānta Sütras, and also on the Bhagavad Gita. The intellectual and philosophical basis of Hinduism was thus firmly established for ever. The next sixteen years of his life he spent travelling all over India, defeating the Buddhists in. their subtle arguments, bringing them back into the

Hindu-fold, and thus re-established the Vedic religion, basing himself entirely on the Upanishads and Gnāna Kända, and practically throwing overboard the Karma Kända, the ritual portion, thus destroying at a stroke the attempt made by the Hindus at the time to restore the old Karma Kanda.
14. The local tradition that Sankara is responsible for the castes in Malabar does not seem to have any basis, and Sankara Smrithi cannot be attributed to him. It does not purport to be written by the great Āchărya, and Sankara, one of the mightiest intellects ever born in India, the Advaitist par excellence, could never have wasted his time in a compilation from Bhärgava Smrithi, dealing with the Karma Kànda. Sankara borrowed from the Buddhists their monastic organization and also their methods of popular temple worship; for the Hindu Sannyasins he founded four principal Mutts in the four corners of India, at Dwaráaka in the West, in the Himalayas in the North, at Puti or Jagannath in the East, and at Sringeri in the South. All the present day. Hindu Sannyasins trace their origin to these Mutts. The Namputiti Brahmans claim that two of Sankara's direct disciples belonged to their caste and the four principal Mutts in Trayancore now existing among the Nampūitis represent the four great Mutts founded by Sankara. All the present day paraphernalia of popular worship, the temples, images, processions, utsavams, etc., were borrowed straight from Buddhism, almost in an unchanged form, and it is well known that some of the great Hindu temples of our day were originally Buddhist shrines.

Ever since Buddha's time Sannyas has been thrown open practically to all classes of people. Though the Sankata Mutts in South India are exclusive and admit only Brahmans, all the Sankara Mutts in North India, even those founded by the disciples of the Sringeri Mutt, freely bestow Sannyas on non-Brahmans.

Sankara and his followers freely admitted non-Hindus, who took up their permanent abode in India, to Hinduism, and many Afghans and Baluchis thus became Kshatriyas.

Absorption of Buddhin and his rellgion.

Srí Rāmãnuja Achärya.
15. The passing away of Buddhism from India illustrates the Hindu method of dealing with great spiritual personalities and movements. The greatness of Buddha was frankly recognized and he was considered as an incarnation, " बुद्दो नाश्नाजिनसुत: कीकिसदु भावैष्यति" Bhägavatha. The main teachings of Buddhism were fully absorbed. Even the doctrine of Ahimsa which filled an important place in Buddhism was incorporated. Sastha, the name often given in Buddhist scriptures to the Great Teacher, was accepted and even now Buddha is worshipped as Sasstha and Dharma Sastha in several important temples in Travancore, as in Sabari Mala in the hills and Thakali in Kuttanad. The philanthropic motive which filled so important a place in Buddhism we find, though in attenuated form, in these temples even now.
16. After Sankara, the next great figure in the religious world is Síi Ramanuja, born in 1017 A. D. in a village a few miles from Madras. He is the founder of the present Visishtãdvaita philosophy, as well as of the Sri Vaishṇava caste. People at the time had mistaken notions of Advaita philosophy, and took the body for the Atman, and began to live a non-religious life. Sri Rāmänuja was exceedingly tolerant and large-hearted and freely permitted even Mohammedans to worship in his temples. A Mohammedan lady, daughter of a king of Delhi, is one of the Vaishnava Saints, and shrines dedicated to her are found even now in several Vaishnava temples. Sritangam was his main centre of work. Though he does not seem to have visited Travancore, the elements of Vaishnavism created by the former V'aishnava teachers and by himself have permeated the country from one end to the other. The Royal Saint Kula Sepkata Allwär was born at Thiruvanchikulam on the Cochin frontier, and Periya A! wār was born at Sri Villiputtor in the adjoining parts of the Tinnevelly District. Several temples in Travancore, Thiruvattār and Anantazayanam in the South, Thituvanvandür and Thirukodithänam in Central Travancore, and Tifumolikulam near the Cochin frontier, are all places of pilgrimage to the devout Vaishnavas from beyond the Ghats. A temple dedicated to Siri Ràmanuja himself exists inside the Fort at Trivandrum.
Gri Madhwa. charya.
17. The next great religious teacher is Madhvächärya, the founder of the Dvaitha philosophy, who was born about 1200 A. D. in South Kanara. He was also like Rāmänuja large hearted, and at Udippi, the centre of his influence, the temple Prasad is freely distributed to all persons, Brahmans and non-Brahmans alike, even to this day. The Tulu Brahmans who form the bulk of the priests in the temples of Travancore are his followers. He seems to have visited Trivandrum and defeated in a disputation held at Trivandrum the then occupant of the Sringéri Pitam.

## 18. The difference between the Advaitha Philosophy, Visistädvaitha Philosophy, and

 the Dvaitha Philosophy is beautifully explained in a parable of Sri Rämakrishna. A salt doll once went out to see the ocean. As snon as it saw the ocean, it was impressed with the majesty of the ocean and remained admiring it. This is the Dvaitha stand-point. It walked over to the sea, took a little water and tasted it. Then it found that the whole. ocean was made of the same substance as itself. This is the Visishtadvaitha stand-point. Then it walked into the sea with a plumb-line to measure the depth of the ocean. It was itself gradually dissolved in the immense ocean. This is the Advaitha stand-point. All the three viewpoints are correct, but they are visions seen from different stand-points, and all the three alike give Mukthi or Liberation.19. The next great religious teacher is Sri Chaitanya Déva, who taught the Nàma Samkirthanam and raised huge masses of people to the exalted religious state by chanting the Holy name. Though he was born in Bengal in the fifteenth century, he travelled all over India and preached his doctrine. He visited Travancore also and in his life, as well as in the notes of travels made by his servant, Govind Das, we find short notes describing Kanniäkumāti, Padmanäbhapứam, Thiruvattär and Anantasayanạam. The almost universal habit of repeating Rãma Nāmam, both in the morning and evening, all over Malabar, may probably be the result of his teaching. He was so tolerant that he freely admitted Mohammedans, and some of his great immediate disciples, were Mohammedan re-converts into Hinduism and non-Brahmans.
20. The influence of the religious teachers of North India during the Mohammedan North India period hardly reached Travancore and their names are practically unknown. These teachers, relisitious who tried to introduce the democratic spirit of Islam into Hinduism, naturally had no influence in Travancore, where Mohammedan oppression was never felt, and where conversions to Mohammedanism were exceedingly rare.
21. The wandering Sädhus, who travel across pilgrim routes all over India, kept Travancore and Malabar in close touch with the general Hindu religious world, and even now there is some provision for giving them a morsel of food at the expense of the State, all over the country. The name of Rāma Rāja, the Maharaja who died in. 1773 A. D., who seemed to have established this practice, is a name well-known to the Saddhu world all over India. Among the wandering Saadhus occasionally men of real spirituality came, and thus the little pittance given was more than amply repaid.
22. The Mahratta religious movement emanating from the Pandarpur temple in the South Mahratta country and which played a leading part in the rise of the. Mahratta nation has hardly had any influence in Travancore. The Konkanis who came to Travancore and Malabar to escape: the persecution by the Portuguese are devout.followers of the Pandarpur God. But they form a community living its religious life as it were, apart from the rest of the Hindu community. They have had no influence in the religious development of the country.
23. The only indigenous modern religious movement in Travancore is the religiosocial movement started by.Swàmi Năráyana, commonly known as Nârāyana Gứu. Born in Chingam 1032 (August 1856), in an Ilava family living about six miles from Trivandrum, Swāmi Nâtáyana showed signs of great promise from his early boyhood. He had the ordinary education in Malayalam and Sanskrit. In his twenty-first year he went to Karunagapally to learn Sanskrit from a well-known Nayar Pandit of the locality; returned home after a few years and was induced to marry and settle down attending to the routine work of cultivating his lands and using his spare time for teaching Sanskrit. He thus got the name of Nânu Âsian, the name by which he was generally known. Intense desire for religion soon developed, the death of his parents in 1884 gave him his freedom and we find him wandering for some years in quest of a genuine religious teacher in the adjoining taluks of Travancore and in parts of Tinnevelly and Madura. He seems to have met his Guru and got initiation; but from whom and when he got the living fire of Yoga, his biographers have not stated. He soon settled dows,at Aruvippuram, a quiet retired spot with small cascades and fine scenery on the banks of the Neyyar, a couple of miles north of the Taluk Station of Neyyattinkara. Here he spent several years in religious Sādhana and finally attained religious realization: A temple of.Siva was established by him on the spot, and the consecration ceremony performed on the Sivaräthri night in 1.887. His community, denied admission in the ordinary temples, welcomed the religious teacher born amongst them and he was soon able to coinsecrate several temples in Chirayinkil and Trivandrum taluks. In 1894 he went to Bangalore at the request of Dr. Palpu of the Mysore service who was devoting all his spare time and energy to the social
E. H. D. P. - Yogam.

Opening of tomples.

Social reform.

## "One caste,

 one Religion, one God."yahatamadhl.
hi.
Trivandrum in 1928 (1104.) The Swami's influence was not circumscribed within the limits of his community. Several of his leading Sannyasin disciples were Nayars; he had also several Grahastha disciples in the Nayar community who showed him the greatest regard and reverence.
24. I shall next speak of the religious movements of Modern India. The Brahmo

## Modern move-

Brahmo-Samaj.
and political uplift of his community in Travancore. Both joined forces and the Sri Natrayana Dharma Paripāana Yōgam, commonly known as S. N. D. P. Yögam, was organized and the Swami's activities took a more decided social turn. The main centre of work at Sivagiti Varkala was started in 1903 and several social reforms were introduced in the community. Temples were opened at Calicut, Tellichery and Mangalore. A Mutt and Sanskrit College was established at Alwaye. The Swàmi organized a band of Sannyasins. He gave higher forms of religious worship to his people who were sunk in ignorance and devil worship. In 1911 the temple of Särada at Sivagiti was consecrated. The Swāmi's activities stopped the tide of Christian conversion in the community and several who had become Christians were reconverted to Hinduism. Later on, the Swami was obliged to take a more decided and novel attitude in social matters. Several influential persons of the community, dissatisfied with the normal slow progress, became Buddhists believing they could attain social equality at once. The Swâmi soon after proclaimed his new doctrine
 and he advocated intermarriage between the various castes. Swàmi's health soon gave way and after a protracted illness of some years the Swàmi entered into Mahàsamädhi at
 teach movement founded by Raja Ram Mohan Roy, who based it on the monotheistic reaching of the Upanishads, was originally formed with the idea of checking the numerous conversions to Christianity which threatened Bengal with the advent of English education. It has had very little influence in Travancore. The number of Brahmo-Samajists in Travancore according to the census returns is 19. The Brahmo-Samaj movement has -virtually settled down elsewhere as a movement of social reform.
25. The Ārya Samäj movement founded by Swämi Dayănanda Saraswathi, à Brahman from Guzerat, which has so many followers in Pumjab and United Provinces, came to Malabar only in the wake of the recent Moplah riots. They are also making some attempts here to raise the Depressed Classes of Hindus. The number of Arya Samajists in Travancore according to the census returns is 32.

The Rama-
krishna moyement.

Sri Raman krishna at Dekshineswar.
26. The next great religious movement in India is the Rämakrishna movement, which rose in Bengal in the latter half of the nineteenth century. Unlike the other movements this does not endeavour to create a new sect, but it is an attempt to revivify Hinduism from within.

About the middle of the century a rich woman belonging to the Kaivartha (the fisherman) caste built a temple of the Goddess Jagadhatri (Supporter of the World) at Dekshinesiwar; a village on the bank of the Ganges, five miles north of Calcutta. A large hearted pandit who kept a Sanskrit school, or Pätasàa conducted on the old lines, became worshipper of the priest's Goddess in that temple, and Śi Raamakrishna, his younger brother, naturally took up his residence in the temple. He soon was appointed a priest in the temple to worship the Goddess and an intense desire to realize the personality of the Goddess rose in his mind. He spent his whole time in worship and Tapas and after a terrible struggle he realized the person of the Coddess. Later on, a Brahman Sannyasini came and initiated him into different kinds of Tantric Sadhana common in Bengal and under her guidance he easily attained perfection in all of them. As Dekshineziwar stood on the way to Jagannath and the liberality of the foundress had made ample provision for the feeding of the Sädhus, several Sádhás visited the temple on their. way to the famous shrine of Jagannäth. Later on, he had an intense desire to worship Sri Räma and a Sādhu who had realized Sri Räma came at that time and initiated him into the worship of Sri Rama, and he thus realized Sri Räma. Then he wauted to realize Sri Krishna, the Beloved : 'of the Göpis. For that purpose he dressed himself like a woman and lived with women so that he practically lost his consciousness of being a man and then realized Sri Krishpa as a Göpi.
The 8adhana
period.
Then a wandering Sadhu who had after forty years of strenuous effort attained the highest goal of Yöga, the Nirvikalpa Samãdhi, the Samädhi of Absolute merging into Brahmom, gave him Sannyas and taught him this method. This supreme state he attained to the astonishment of his Guru in three days. He remained in this Nirvikalpa Samadhi state, supremely unconscious of his body, for about six months. Then the desire arose in his mind of following the methods of religious practice recommended in other religions.

A Mohammedan Fakir came, and he practised Mohammedanreligious practices. In three days the attained the goal and had a vision of Allah. During this period he lived entirely like a Mohammedan and never once stepped into the temple. He had also a vision of Christ. Thus after following the paths of all these religions, he found all of them led to the same -zoal, and he boldly enunciated the doctrine that all religions are but paths to reach the Lord, and all if sincerely followed will lead one to the ultimate Truth.

Fourteen years of such single-hearted endeavour had made him a huge magazine sri Ramaof spirituality and he had the power of actually giving demonstrations of spiritual facts. krishnn as a The present age is a scientific age, which believes only in what is actually demonstrated. teacher giving Sri Rämakrishna was able according to the needs of the age, to give actual demonstrations spirituality. of spiritual truth. Moral qualifications are certainly necessary generally in the recipient, just as some intellectual training is necessary to enable one to understand the demonstrations in Physics or Chemistry.
27. The well-known Brahmo leader Keshub Chander Sen, . who was the idd of Keshab young Bengalis at the time, became one of his admirers and through Keshub's influence ehander Sen. people in Calcutta came to hear about the existence of a great Sage in the temple of Dekshineswar. Many Brahmos came to him, and later on a few well-to-do religious minded persons from Calcutta also came to him and became his disciples. Later came the young men who renounced everything for the religious life. Among these young men two swämi persons were prominent. Chief of them was Naréndranätha Dutta, son of a leading Xivekānanda. Attorney of the High Court of Bengal. He became later on Swämi Vivēkānanda. Another was Rakhal Chandra Chose, the only son of a rich Zamindar, and Sin Rämakrishṇa swàm! loved him like his own son and he stayed with the Sage most of the time. He later on Brahmãnandabecame Swāmi Brahmānanda. Swāmi Brahmānanda played an important part in the -development of the Rämakrishna movement.
28. As the fame of Śri Rämakrishṇa gradually spread through Calcutta, enormous Maỉà samãdh numbers of earnest minded seekers after Truth cameto him and he spent almost all his time in giving them religious -instruction. This constant effort led to the disease called clergyman's throat and he was taken to Calcutta for treatment. His boy disciples nursed him devotedly. When he came to Calcutta all people who found it difficult to go to Dekshinesiwar crowded around him and he freely taught them. :The disease grew in severity, the young boy disciples who remained with him and nursed him were given Sannyas by him and he passed into Mahā Samädhi in August 1886. Before his passing away, he transmitted all the power he had acquired by his fourteen years of Sadhana to :Swämi Vivakảnanda and asked him to do his work and to guide the other disciples. After the Mahā Samädhi some of his relics were collected around his remains and around that a new Âsrama or Mutt was formed. In this Mutt the young disciples, about twerity in number, performed intense Sädhana for some years under the guidance of Swämi Vivekānanda, some of them occasionally leaving the centre to lead the wandering life.
29. The desire for this life was felt by Vivēkänanda too, and he left the Āsrama and swāml travelled as a wandering Sannyasin through the length and breadth of India. He travelled in Trekazananda to Rajputana where he was the guest of Princes and Prime Ministers and at times the guest of the poorest of the poor. The. Raja of Kethri in Jaipur became his disciple. From there he went on to the States of Western India and thence came to Mysore, where he attracted the attention and became the guest of Sir K. Seshadri Iyer, the then Dewan. Sir K. Seshadri Iyer was so struck by his intelligence and his spirit of Thyäga that he introduced him to the late Maharaja of Mysore. After staying for some time in the Palace as the Maharaja's guest, he again took to his wandering life, came to Trichur, Ernakulam, and thence to Trivandrum, traveling straight on from Ernakulam. An officer in Cochin had given him an introduction letter to Professor Sumdararama Iyer, who was then living in Trivandrum as Tutor to His Highness, the First Prince Marthanda Varma. . This was in December 1892. At Sundararama Iyer's house and at the Union Club Swämiji met the leading gentlemen of Trivandrum and all were struck by his intelligence and profound scholarship and by his note of greatness. From Trivandrum he travelled via Nagercoil to $\frac{1}{t}$ cape the Cape. One of the main objects of this journey was to worship the Goddess at the Comorin. Cape. From the beach he swam over to the Mülasthānam Rock, some hundred yards away, and there he had one of his deep Samädhis. He had now understood what Sri Ramakrishna meant by the work he had to do. He realized that it was no less than the regeneration of the Indian communities and here he chalked out his main lines of work. From the Cape he travelled on to Ramesiwaram and thence to Madras where several -educated young men met him and were astonished and became his admirers.

## In Chicago.

Parliament of Religions.

The idea of going to Chicago to attend the Parliament of Religions had already dawned on his mind, and his admirers collected some money for his passage, and with the. help of the Raja of Kethri he sailed from Bombay to America via Japan. He had by thistime assumed the name of Vivékänanda, suggested to him by the Raja of Kethri. As he had no credentials from any accredited body in India, he lound some difficulty in getting admission into the Parliament of Religions. He met by chance Professor Wright, Professor of Greek at Harwad, who was astonished at the Swàmiji's mental equipment and at once gave him an introduction letter to the Parliament of Religions. He was accepted as a delegate and his speech on the first day of the Parliament of Religions expressed so well the broad spirit on which the Parliament was based that he became the foremost figure of the Parliament in no time, and he thus became at once a man of worldwide reputation. The moment this news reached Trivandrum Professor Sundararama lyer told his friends that this was undoubtedly his old Sannyasin guest. After four years of preaching work in America, he gathered a large number of admirers around him and was able to establish religious centres in New York and California.

In England

Indian Work. of his brother Sannyasins was also sent to Madras to start work there. Swämiji again
visited England and America, but in India he spent most of his time in training young of his brother Sannjasins was also sent to Madras to start work there. Swämiji again
visited England and America, but in India he spent most of his time in training young Sannyasins to continue the Work. The Advaithasramam at Benares was also started by him. Swämiji passed into Maha Samädhi in 1902.

The Ramakrishna moy ment in ment in

Swämiji had paid short visits to England also. Though there was not much popular response there, he was able to secure some of his greatest lieutenants in his work from Englishmen. An English journalistic stenographer who met him became his disciple and to him we owe most of Swàmiji's works. Captain Sevier, a retired army officer, and his wife also became his disciples. Miss Margaret Noble also joined him and accompanied by these, he came over to India in 1897. His journey from Colombo to Madras, Calcutta and Almora in the Himalayas, was like a royal procession, and the speeches he delivered in the course of his journey roused the whole of India into activity. With the help of his English friends, land on the bank of the Ganges was purchased and the Belur Mutt was. established for the spiritual training of young men who were to take up his work, young men who had embraced the life of renunciation. With the help of Captain and Mrs. Sevier he started another centre in the Himalayas on the heights of Mayauvathi, 7,000 ft. high, the Advaitassamam which later on became the chief publishing centre of the movement. One
30. The Rämakrishna movement was started in Travancore in 1911 when Swämi Nirmalănandaji, a direct disciple of Sri Rämakrishṇa, came to Haripad in Central Travancore on the invitation of a few earnest young men. He remained for about 9 days there and all people who met him were astonished. He visited Quilon and thus began the annual visits which had led to the development of the movement in Travancore. In 1912 the Swämiji visited Trivandrum and delivered a few lectures. In 1913 Sri Rämakrishna Asramam at Haripad was opened and a local Brahman young man who had given the land for the Asramam became a Brahmachārin and joined the movement. Soon after a centre was also opened at Thiruvella, and another local Brahmacharin took up the work. $\ln 1916$ a malayalam Magazine Prabudha Kéralam, was started to preach to the people the ideals of Sri Rāmakrishṇa and Swāmi Vivekānanda. advantage was taken of his presence and at the request of Swami Nirmalãnanda and the local devotees who had already acquired the site, Swämi Brahmannanda laid the foundation stone of the Asramam on the Thirukärthiga day in 1917. The Trivandrum Asramam was opened in 1924, in which year also Swāmi Nirmalānandaji gave Sannyas to several of his disciples. Other centres were soon opened at Alleppey, at Muttam, a place well-known for the well-to-do Ilavas living around it, at Kayankulam, at Kulathur in the interior of the Thiruvella taluk and at Minachil. Later on came centres at Muvattupula, Adur in Middle Travancore and Neyyur in South Travancore. The ideals of Sri Ramakrishna and Swämi Vivēkānanda have permeated the masses largely in Middle' Travancore where they have become almost household objects of worship and the influence is gradually spreadingA band of local Sannyasins and Brahmachartins in which all the communitics in Malabar are represented have grown up. Though the movement is entirely spiritual, it is having . indirect social effects also.
32. As Sannyasins are above caste, no distinctions of caste are observed in the Asramas and members of different castes of Malabar can be seen living as members of one happy family in these Âsramas. At all important functions in these Asramas people of all castes up to the lowest Pulayas, Parayas, etc., take their food together and as the food served is invariably Prasad, orthodox Hindu doctrine also supports this practice. The Sannyasins and Brahmachätins spend most of their time in meditation and in practical work, attending to the various needs of the Âsramas, the annual visits of Swàmi Nirmalānandaji giving them the requisite training. Philanthropical work is also undertaken whenever necessary in the spirit of pure service, the poor and the needy being treated in a spirit of worship. Just after the great flood of 1924 over Rs. 14,000 was distributed in the most inaccessible places in the interior by the Sannyasins. Centres of work have also been started at Cochin and Malabar, at Pudukat near Trichur in Cochin, and Quilandi, Ottapalam and Calicut in Malabar ; the main object in all these Âsramas is to train the Sannyasins and Brahmachärins to develop their personality and manifest the Lord within so that they could carry on the work of Swàmi Vivékānanda for the spiritual regeneration of India.
33. During the last two decades, great changes have taken place in the social institum Hindu Religion tions of the two leading Hindu communities in the State - the Nayars and Illavas-and both are gradually turning from the Marumakkathāyam system of inheritance to pure Makkathäyam: The Nayar Regulation is compelling by its indirect effects all the indigenous Hindu communities in the State to wake up and adjust their social institutions to the actual needs of the times. Hence in these days of transition when old values are apt to be lost sight of, it is a hopefil sign that all the various Hindu communities in the country have still an eye on the main note of Hindu life, the note of spirituality, that one-pointed devotion to religious practice and religious realization, which has enabled the Hindu race to live a continuous racial life for the last ten thousand years.

## CHAPTER XII

## CASTE, TRIBE AND RACE

Introductory remarks.

The origln of easte
456. The caste system, in the form in which it is found in India, does not exist in any other part of the world. The caste determines the position of an individual in Indian society. The people are divided into classes or groups, each of which has a hereditary occupation and is subject to certain restrictions on marriage, eating and drinking, and other social and religious customs. The nature of the occupation determines the order of social precedence of the caste. The recognition of difference in the status of the castes has resulted in the formation of rules prescribing varying degrees of pollution between them. These are the basic principles underlying the ideal caste system. But there is no authentic evidence that all these principles have at any time been strictly observed. In ancient India of the Vedic and post-Vẽdic periods, the caste rules were not inviolable. In recent times most of the rules are being freely violated and the caste fabric is threatened with disruption at several vital points. The orthodox pundits who claim to be the correct exponents of the caste system proclaim it as an ideal socioreligious institution, which in its glorious days fostered the growth of union and mutual help among the Indian people and made them happy and prosperous. None of them could, however, specify the period of this millennium. At no time in the history of India has she enjoyed a long spell of internal peace and freedom from foreign invasions. "A critical examination," says Govinda Das, "into the social history of ancient India, as far as the existing materials will allow, reveals to us an unhappy state of society depicted in Samhitas, Brāhmañās and Pứānas. We read the endless dynastic wars for purposes of self-aggrandisement turning the fair land of Bharat (India) into a cock-pit of contending chieftains, desolating peaceful home-steads, and turning the huge country into vast shambles.............. By these unending quarrels peaceful tillage and trade became impossible and the real breadwinners of the nation were starved and enslaved, and their decline ultimately reacted upon the two higher castes. This disorganization of civil life left the country open for wave after wave of foreign conquests to dash over it and submerge its independence finally and totally.' ${ }^{\text {'* }}$ The rise and fall of the Maurya, Sunga and Kanva dynasties, and of the Andhras and the Guptas, the invasions of the Greeks, the Turanians and the Huns, the rise to power of the Rajputs and their subsequent fall, and the invasions of the Muhammadans, the Portuguese, the Dutch and other Western nations, all bespeak not union and solidarity but dissension and unrest, not peace and prosperity but discontent and sufferings among the Indian people from very early times. Whatever might have been the advantages claimed for the caste system by its originators as a means of securing division of labour among the people and of making the "the body politic an organismal whole whose component parts are mutually interdependent," it cannot be denied that the system carried the seed of disunion from its very inception and that though the seed might have lain dormant for a while, it must have been stimulated into activity and growth by the slightest disturbance in the social equilibrium. The greatest evil of the caste system which began to manifest itself from the time when its rigidity was enforced, and which is clearly perceptible even to-day, is that it has created artificial barriers between man and man and prevented the formation of a united nation in India.


#### Abstract

457. No social question in India has had so much attention paid to it by savants, both oriental and occidental, and has given birth to so much literature as the origin of caste, and yet it can hardly be said that its true genesis has been unearthed. Numerous theories have been put forward from time to time by various scholars as to how caste arose in India and why it has lived through ages. One theory ascribes to it an occupational basis, another a racial basis, a third a family and tribal basis, and so on. Each theory, when examined on its own merits, may appear to be quite plausible, but it has not been established beyond doubt whether any one of them, and if 80 which, represents the truth and the whole truth. All that one can do is to speculate on the evidence gathered from ancient literature, correlating it with the existing state of affairs.


458. The word 'caste, meaning breed, race' or class, is of Latin origin and was used frst by the Portuguese who came to India. The Sanskrit equivalent for caste used in ancient Indian literature is 'varna.' It has two or even three meanings. The generally

[^38]zaccepted meaning is colour. In this sense it is derived from a root which means to depict.' A man can be. depicted either by his physical characters or by his mental -qualities. In the former sense the 'varna' of a man signifies his outward appearance, essentially colour, which is an index of the purity of breed; and in the latter sense 'varna' may represent a man's mental quality, or 'virtue' (guna).* 'The. word 'varna' has also -another root meaning, namely, 'choice,' derived from the root 'ori' 'to choose.' In this sense 'varna' means 'choice of profession or occupation.' $\dagger$ Thus it may be argued that the word 'varna,' the Áryan equivalent of the modern word 'caste,' may be said to connote colour or purity of breed, mental quality or guna, or choice of profession. All these three imports of the word may throw light on the origin of caste.
459. It is admitted on all hands that the Āryans of the Vedic period did not observe -caste distinction. The only reference to four varnas, (Brahman, Kshatriya, Vaisya, Sūdra) contained in the Vedic literature is what is found in Purushasükta. The words, 'Brahman' and 'Kshatriya,' do appear in earlier hymns, but are used in a sense entirely different from that in which they have subsequently been interpreted. Even in Purushasükta the meaning is not quite the same as that which has been accepted in modern times. Pưushasükla is a hymn dedicated to Virat or God personified as man.: In man the head may be said to represent his intellect, the arms his strength, the thighs his power of acquiring wealth, and the feet the means of doing service. The hymn only describes the Virat as a human body with these organs possessing similar atributes. Its face represents intellect, its arms power, its thighs wealth and its feet labour. Mankind can broadly be divided into four classes on the basis of the above differentiation of the parts of the human body, namely, the intellectual, the fighting, the wealth-producing and the labour classes. The functions of these classes are considered to be analogous to the functions of the corresponding parts of the human body. "The Mantra (Rig X, 90-11) in which it (the Vedic division of people into four classes) is described, has been misinterpreted in order to give countenance to the caste system. The orthodox version is:The Brahmans sprang from the head of Brahma, the Kshatriyas from his arms, the Jaisyas from his thighs and the Südras from his feet. But this interpretation involves several grave mistakes. The Mantra should be literally translated thus. Brahmans are the head of mankind (personified), Kshatriyas are made his arms,. Vaisyas are what are his thighs, and Südras are made his feet." $\ddagger$ The Vēdic Arryans were evidently acquainted with these functions and must have adopted the four-fold division of their society purely on this functional basis. But these occupational classes were far different from the castes which were subsequently evolved out of them. Neither Puriushasūkta nor any other hymn in the Vexdas prescribes any restriction on intermarriage or interdining, or recognizes any difference between man and man in his social status, either because of his birth or of his occupation.
460. The Védic period represents the time when the Āryans came to India and settled on the banks of the Indus after subjugating the aborigines. The Aryans were then a united community and were distinguished only from the aborigines. In the Epic. period, they crossed the Sutlei and colonized the valley of the Ganges. It was probably: in this period that the Vēdas were composed. The evidence in Purushasükta goes to, show that the Āryans then recognized the division of society into four classes purely on economic grounds, without any of the restrictions attached to the later caste system. The Brähmanås and the Upanishads which were composed after the Vēdas, probably in the latter part of the Epic period, also do not recognize the caste system in its present form.: On the other hand, they contain ample evidence to show that a man is regarded as a Brahman, Kshatriya, Vaisya or Sūdra, not because of his birth, but because of his qualities and occupation.
461. In the next period, the Philosophical period as R. C. Dutt designates it, the Āryans migrated southward and practically occupied the whole of India. It was in this period that Gautama Buddha was born, and preached his religion. Buddha made no distinction between man and man, and his work lay mostly among the humblest and the poorest. During this period caste system could not have assumed the rigidity which it since acquired.
462. In the Buddhistic period Buddhism spread far and wide in India and other Asiatic countries. The influence of Hinduism waned, but it was not extinguished. Both religions existed side by side and both had their ardent supporters and followers.

[^39]It was probably during this period that the Code of Manu was composed. But even inc Manu's time the people were not disunited and divided into the numerous castes ofmodern times. Manusmrithi recognizes the possibility of a man born in a lower caste being raised to a higher caste if he possesses the qualities and performs the duties of that caste, and similarly of one born in a higher caste being degraded to a lower caste by the non-performance of the duties of that caste. A sloka in Manusmrithi says:-"Thesuperiority of Brahmans rests on knowledge, of Kshatriyas on strength, of Vaisyas on: wealth, and of Südras alone on birth." *
463. It was probably in the post-Buddhistic or the Purānic period that the rigidityof the caste system began to be enforced. Even in the literature of that period, in the Bhagavat Gita, for example, there are indications that the sanctity of caste system was not established beyond dispute. The well-knownsloka in Gita, "Chaturvarnyam not estabished ${ }^{\text {masishtam gunakarma vibhagaasah " can be interpreted to mean that the four-fold classi- }}$ fication is based not on birth but on guna or the aptitude and functions of man. In this sloka Sri Krishna is made to say that the formation of four varnas as hereditary castes is. not a natural creation but an artificial arrangement made by man. Its original object was division of labour among the people, intended to promote their welfare in the most efficient manner possible. It was purely an economic organization, unconnected with social and religious matters. It did not prohibit intermarriage or interdining between the different classes of the people to whom different functions were allotted, nor did it recognize thesefunctions as the hereditary occupations of the particular classes. The conditions under which the Aryans found themselves when they came to India were such as would not admit of any restrictions being placed on their matrimonial and other social customs. The number of women who came with them being too few, they had to marry the women of theindigenous tribes. Free mingling of the two peoples and unrestricted intermarriage and inter-dining had perforce to be allowed. The conquerors and the conquered thus merged intoone united community. This happy state of affairs did not, however, last long. When the. numerical strength of the immigrants increased by the addition of the progeny of mixed marriages, racial prestige began to sassert itself and induced the fair-skinnedĀryans and their half-bred progeny to close their ranks against the further admission of dark-skinned aborigines into their society. In this mannermust have commenced the practice of endogamy and the seed of caste system, as we now know it, must have been sown. By this time numerous sub-divisions of people formed by the interbreeding af the fair Aryans and the dark aborigines and theirprogeny, must have come into existence, the number of occupations might have also multiplied to meet the growing needs of the people, and might have been distributed' among the sub-divisions according to their capacity and intelligence. Each of such sub-divisions must have ultimately formed an endogamous group, having a definite occupationwhich gradually became hereditary. Thus probably was the edifice of caste system completed in the course of several centuries. Once formed on these lines, the system found a fertile soil to grow on and it did grow vigorously and assumed the shape and size in which we find it to-day. The priestly class .who wielded tremendous influence over the masses in those ancient days, as in modern times, carefully nursed the tender plant of caste, invented methods and formulated rules for its protection, invested them with religious sanctity and codified them in smrithis as inviolable laws of God. Thus the original harmless division of the people into different classes on a purely occupational basis. necessitated by economic considerations, was later transformed, underthe influence of racial difference and the desire for the preservation of purity of breed. into the rigid caste system. R. C. Dutt attributes the creation and growth of caste to the influence of the priestly class. This is what he says. "Priestly supremacy threw its coils round and round the nation from its early youth, and the nation never attained that political and social freedom and strength which marked the ancient nationa of Europe. But he worst results of priestly supremacy were not brought in a day. We see the dark cloud forming itself at the close of the Vedic period. We see it increasing in strength and volume in the Epic period. But it is only in the Putannic period which followed the Buddhist era that it threw an utter impenetrable gloom over a gifted but ill-fated nation. The Kshatriyas mado a mighty attempt to throw Brahmanism overboard, and adopted Buddhist religion lll over the land. With the extinction of Buddhism such attempts seemed to end, and priestly supremacy became ten times worse than before. " $\dagger$

[^40]464. The extinction of Buddhism more or less coincided with the appearance of the Muhammadans on the scene. At the beginning of the eighth century Arabs from Bassrah crossed the Indus, overrav Sindh and advanced into Rajputana. Thougt they were defeated by young Bappa, the crescent of Islam had risen over India's horizon and marked the beginning of a new era. In the centuries that followed the first invasion of the Muhammadans, India witnessed an incessant struggle between the invading Muslims and the native Hindus, and in this struggle the necessity arose for making the caste rules more rigorous than ever to prevent the fusion of the two antagonistic elements in the population. Thus during the period of Muhammadan invasion which coincided with the overthrow of Buddhism and the revival of Hinduism which aimed at the consolidation and preservation of the ancient Hindu ideals and customs suitably modified to meet the changed conditions, the Indians must have been compelled by the force of circumstances to take measures to ensure their communal compactness and protect their religion. They must have, therefore, raised, in the words of Rabindranath Tagore, "those protective embankments round their marriage system" and enforced strict observance of the rules of the caste system and other socio-religious customs.
465. In any discussion of the caste system a few outstanding facts will force themselves on one's attention. First of all there is the fact that Chäthurvarnyam or the four-fold division of the people existed only in Âryävartha in the Vēdic age, when the division was based on occupation and not on birth. By the time the real caste system was established numerous sub-divisions, formed by the interbreeding of the Áryans and the aborigines and their progeny, had come into existence and each of them had had a separate occupation allotted to it. Thus, when caste system assumed its present form there were not the traditional four castes, but many times that number. Chathurvarna even in those days was only imaginary and not real. Till the caste rules were made rigorous during the Muhammadan invasion in the Puránicic period the raising of a man born in a lower caste to a higher caste, if he possessed the necessary aptitude and mental discipline, was possible. Each caste had no doubt a traditional occupation. But the economic laws of supply and demand must have always operated and the intrusion of one caste into the occupational sphere of another must have taken place whenever these laws were disturbed, as they must have been in the past as at present, by the increase of population and the multiplication of man's needs with the growth of civilization. It is well to remember these facts when we consider the question of the caste system in Southern India presently.
466. Āryāvartha was conquered by the Āryans, but Southern India was not." In caste in Northern India Âryan immigrants fought against the aborigines, subjugated them, colo- Bouthern India. nized their country, and imposed their religion on them. It was long after they settled in the north that they migrated to the south. They came in small numbers, and by peaceful persuasion penetrated into the territories occupied by the Dravidians. The Aryans did not attempt to conquer the Dravidians nor did they try to force their religion and culture on them. The two races exchanged their social and religious customs and practices and fused together.

The present population of Southern India contains three distinct racial types, the pre-Dravidian, the Dravidian and the Âryan. The remnants of the primitive tribes now found in the jungles are the nearest representatives of the pre-Dravidians. The Pulaya, the Paraya and other Depressed Classes, who are now grouped under the designation "Aिdi-Drâida," are predominantly pre-Dravidian in type but contain some Dravidian blood also. :The Nayar, the Vellạala and other clean castes represent as nearly as possible the true Dravidian type, no doubt with a large admixture of Aryan Blood. The Namputirí Brahman is the best available representative of the Âryan type. The origin of the pre-Dravidians is still a disputed question. Some anthropologists consider them as indigenous to Southern India, while others connect them with the Negritos of Malaysia who are supposed to have come over round the Bay of Bengal to the Himalayan slopes and gradually spread over the Peninsula. As regards the Dravidians it is held by some anthropologists that they migrated to India from some part of the Mediterranean basin in the remote past long before the Áryan invasion.
467. Dr. Gilbert Slater in his book called The Diavidian Element in Indian Culture says, "After much controversy it is now, I believe, generally agreed that the main racial element in the Dravidian population is a branch of the Mediterranean race,
if that term be understood in its most extended sense, or at least a closely allied race."* The question, by which route did the Dravidians come to India, is not of importance to our present discussion. It is quite immaterial to our purpose whether they came by the land route through Baluchistan to Northern India or by the Persian Gulf and the Red Sea to the mouth of the Indus and spread southwards. It will suffice for our purpose to remember that the Dravidians settled in Southern India and developed a civilization of their own long before the Äryans came to India. On this question of Dravidian civilization Dr. Gilbert Slater says:-

The following conclusions then appear torbe indicated by the evidence cited :-
(1) That there was in India at the time of the Aryan invasions a Dravidian civilization of a more elaborate and developed character than the civilization, if. civilization it can be called, of the Aryans.
(2) That in so far as this Dravidian civilization was derived from outaide sources its origin is to be traced to Egypt and Mesopotamia, linked up with India by sea commerce.
(3) That Dravidian (civilization resembled that of Egypt and Mesopotamia in the importance of the influence exerted in jts evolution by religious ideas, and in the dominance of a priestly class or caste.
(4) That the firat step towards the linking up of India with Egypt was accomplished when the Egyptians navigated the Red Sea, and reached the Land of Punt. The Dravidinns themselves were early navigators, though on a more modest scale, and, as Elliot Smith hre shown, their earliest boats were copied from Egyptian models. In this connection it should be noticed that the long chain of backwaters on the West Coast supply a sort of elementary achool of ravigation, and the steady wind from the shore during the period of the north-east monsoon is a strong encouragement to those who have learnt their first lessons in those backwaters to proceed to the second adventure on the open eea, which is further stimulated by the great abundance of excellent fish on that coast. $\dagger$
468. In pre-Āryan Dravidian India there was no caste system as it is understood now. There might have existed, as Dr . Slater thinks, a "priest-magician class" who performed the priestly functions and exercised considerable influence over the masses, but there is no ground to believe that this class was a hereditary caste like those which came into existence in the later periods of Aryan civilization. On the other hand, there is sufficient evidence in ancient Tamil literature to show that the Dravidians who occupied practically the whole of Southern India in ancient times were a homogeneous race, speaking a common language. They observed no caste distinction but divided themselves into groups according to the occupations they followed and suited to the conditions of the regions in which they lived. P. T. Srinivasa lyengar who made a careful study of the Tamils (Dravidians) says, "The ancient Tamils noted that the habitable parts of the earth's surface were divisible into five natural regions
The five regions were called (1) Kurinji, the hill country, (2) Palai, the dry waterless region, (3) Mullai, the wooded land between the high lands and the low lands, (4) Marudan, the lower courses of rivers, and (5) Neydal, the littoral tract, that which skirts the sea." $\ddagger$ Kurinji, the hilly region, was inhabited by the Kuravar (hunters), Palai, the desert, by the Maravar (fighting men) and Kaluar (thieves), Mullai, the forest land, by the Idayar and the Kurumbar (cowherds and shepherds), Marudan, the low lying regions, by the Ulavar, the Käralar and the Vellalar (agriculturists), and Neydal, the littoral area, by the Paradavar (fishermen). Thus, according to the occupations followed by the ancient Dravidians they were divided into hunters, fighting men, herdsmen, agriculturists, and fishermen. But there was no difference between them except in their occupations. They belonged to the same race and spoke the same language. In course of time the country of the Dravidians (Tamils), or Tamilakam as it was called in ancient Tamil literature, became divided into three separate kingdoms under the rulership of three dynasties, Chōlās, Chêrảs and Pandyās. Says Mr. P. T. Srinivasa Iyengar, "The Sölàs were an agricultural tribe (Vellalar) who lived in the valley of Kavirif and had the Alli (Bauhinea Racemosa), the characteristic flower of that region, as their emblem The Séràs were men of the hill region extending from the upper reaches of the tributaries of the Käviti to the west coast of South India, of which the palmyrah is the characteristic tree, and they had the palmyrah (leaf and flower) as their emblem. The Pändyà were the coast people (Paradavar) inhabiting the southernmost region of India, where the margosa

[^41]is the characteristic tree and fishing is the chief occupation, and the carp and the margosa were their emblems." ${ }^{*}$ It appears that intermarriage between these tribes was quite common in ancient times. Even the royal families are said to have had intermarriages.
469. Caste system was introduced in South India by the Äryans.. The date of their migration to the south is uncertain, but it was certainly long after the Dravidians had settled in the land and evolved their civilization. The Âryans came in small numbers; and the advance guard probably belonged to the priestly class. They tried to impose their religion on the native population, but meeting with opposition they compromised with the Dravidians, and incorporated into their religious worship some of the Dravidian forms. The Aggamika cult was substituted ior the Védic fire cult and Hinduism based on Ägamás was evolved. The Âryan method of making offerings to gods by repeating mantras appealed to the Dravidians, and the Arryan priests, therefore, found no difficulty in getting themselves recognized aa priests by the Dravidians. Thus arose a distinct priestly class in Dravidian India, the forerunners of the Brahmans.
470. We have seen that in Northern India Chathuroarna was a myth. When caste was begun to be shaped out of the nebulous state of society in that region the number of groups occupying different occupations were so many that numerous castes, instead of the traditional four, had to be recognized. When the Āryans came to the south they had already evolved a system of manifold caste divisions and, naturally, it was this system that the Dravidians copied from the Äryans. The division of the people of South India into four castes, Brahmans, Kshatriyas, Vaisyas and Sīidras, was never in vogue. Caste system was brought into existence here first by the formation of the Brahman caste and then the Kshatriyas, and lastly by recognizing each group of people following a specific occupation as a separate caste. The circumstances which led to the formation of the caste system does not warrant the inference of Chathuroarna having been found at any time in India either in the north or in the south. It existed only in law-books and other scriptures and not in practice. As in Northern India, so in Southern India also, caste rules were not enforced. strictly for a long time after its introduction. The fact that the mother of Shenkuttuvan, the Cherfa king who reigned in the sixth century A. D., was the daughter of a Cholla king shows that intertmarriages between tribes and castes were allowed in those days. Pathittippathu and Manimegalai, ancient Tamil works of the sixth and seventh centuries, speak of Chōla kings having fallen in love with Naga ladies. This would not have been possible if caste rules had been rigid then as they became later on. We have already seen that caste system acquired its rigidity in Northern India during the Pưậic period, with the commencement: of Muhammadan invasion. Probably about that time the South Indian people also began to enforce the strict observance of caste rules.
471. Ancient Tamil works speak of Southern India as Tamilakam (Dravidian or caste in Tamil country). The West Coast or Kérala, being generally a hilly region, was called ${ }^{\text {Kerula }}$ Kurinji and the people who inhabited it were the Kuravar who lived by hunting. Barricaded from the rest of the Dravidian stock by a long range of mountains, (the Western Chats) they in course of time developed a culture of their own. Like the collateral branches of the Dravidian race who occupied the territories beyond the Ghats, they too at frrst had no caste system. There was a priestly class to minister to their religious needs but it was not separated from the rest of the people and elevated to the position of a hereditary caste. The early Âryan immigrants to Kérala belonged to the priestly class now represented by the Nampatitis. They identified themselves with the local people and adopted many of their manners and imposed on them some of their own in turn. The two cultures fused together and formed a homogeneous whole. Socially, a distinction was maintained between the two sections of the population, and the Nampütitis, being the priestly order, wielded great influence over the masses. As in the rest of South India the kings were absorbed into the Kshatriya caste. The people were divided into groups according to the nature of the occupation they followed and each group was given a caste name. Thus the bulk of the population who originally formed one community was split up into a number of castes. It is significant that there is no Vaisya caste in Kérala. Genuine ancient literature makes no mention of castes in Kerala. Books treating of caste system are really productions of recent times dressed in the cloak of antiquity. These books, e. $g_{\text {; }}$, Kéralollpathi, "a work of comparatively recent date and of more than doubtful authority;, in the words of Mr. K. P. Padmanabha Menon, the author of The History of Kierala, refer to the existence in Keriala, besides the two small castes of Brahmans and Kshatriyas,

[^42]only of Südras. In other words, the large majority of the people, whatever be their occupation, were stamped as Südras. The so-called Südras of Kerfala do not consist of a single caste or even of a group of sub-castes, but of a number of distinct unconnected castes. Some of them, from the nature of their traditional occupations, could not possibly be brought under Súdras. The real position seems to be, as has already been observed in regard to the castes in Southern lndia, that the Chathurvarna system or the division of the people into four castes has never existed in Kerala. There are Brahmans and Kshatriyas, and a number of other castes, of whom some could certainly be included under Kshatriyas or Vaisyas and some others under Südras. The principle of treating each group following a particular occupation as a separate caste and of prohibiting intermarriage and interdining between different castes was introduced in Kétala by the Âryan immigrants. Once started the system developed on the usual lines and in course of time became an inseparable part of the social fabric.
472. Kērala is generally considered to be the most casteridden part of India. This inference is generally drawn by outside observers from the prevalence, in a more accentuated form in Kėrala a than elsewhere, of touch and distance pollution between higher and lower castes and from the denial to the polluting castes of the right of entering into and worshipping in the Hindu temples. It is true that in these two respects Ketala is a worse sinner than the rest of India ; but it must be remembered that the geographical position of this territory and the social structure of its people are such as have helped the perpetuation of these customs in all their rigidity. Hedged in between the sea on one side and the Western Ghats on the other Kerala was practically cut off from the rest of India till roads and railways were opened and other means of communication established under the British rule. Again, unlike the other parts of India, Kerala was more or less free from foreign invasions. Thus, the factors which contributed to the levelling up of differences between different sections of people did not operate in Kérala. The Nampotiti Brahmans, though comparatively few in number, are the most influential caste in Kerala. They are the highest authorities in all religious matters. They are mostly landlords, owners of extensive tracts of land which they lease out to tenants for cultivation. The relation between the landlord and the tenant is such that the former can domineer over the latter and enforce his will. The position of the tenant is somewhat better in Travancore than in "Malabar or Cochin, and yet he is not beyond the grip of the landlord. The Nampatitis who exercise such tremendous influence over the general masses in religious, social and economic spheres are, as a rule, conservative in their habits and orthodox in their religion. They are well educated in Sanskrit and the vernacular, but very few have taken to English education and come under the influence of Western civilization. It is no wonder that Kerala and its people, placed under such circumstances, have persisted in the preservation and protection of the ancient customs. But changes have now set in and are proceeding vigorously and rapidly. Caste barriers are breaking down. On public highways, in courts of law, and in representative institutions the highest Nampütiti Brahman mingles freely with the lowest of the Depressed Classes. Among the younger section of the Namputiris who have imbued the spirit of the times, the feeling is growing strong for the radical reform of their social and religious practices.
473. The social reform movement is now a common feature of all the castes and communities in Travancore. Most of them have organized associations on caste or communal basis and are carrying on vigorous propaganda for the betterment of their social, religious, economic and political conditions. The Nayars were the first to organize a caste associaton for these purposes. Following them the Namputitis, Kshatriyas, I lavas, Pulayas, and other castes, and Christians, Muslims and other communities have also formed associations, so that at present there is hardly any caste or community in this State without an association of its own for self-advancement in social and political spheres.

Fusion of sub-castes.
474. The fusion of sub-castes is a common creed of all caste associations and is the one subject which is engaging their most prominent attention. Fusion is advocated both on social and political grounds. Socially, it is considered desirable that all petty differences between sub-divisions should be wiped out and one common caste formed. Politically, such a fusion will increase the numerical strength of the caste and enhance its importance in the body politic. The Nayars were the first in the field of social reform. Their leaders have preached the fusion of sub-castes for well-nigh half a century and their efforts have now been crowned with success. In the census of 1901 as many as 116 sub-divisions of Nayars were recorded and in the present census only two have been returned. Similarly. among llavas and many other castes the numerous sub-divisions returned in 1901
census have all disappeared. The disappearance of these sub-divisions from the census schedules betokens corresponding changes in social customs also. Some of these castes who have made rapid progress in social reform, such as Nâyars and llavas, have removed all taboos on intermarriage and interdining between the sub-castes, which they punctiliously -observed some thirty years ago. Other castes like the Nampütiris and Kshatriyas who have been somewhat slow in their march towards social reform have also now become alive to the importance of the fusion of sub-castes, and their associations, e. g., the Nampütiri Yōgalshêma Sabha, are freely advocating the adoption of this reform. In whichever direction one may turn one hears the incessant cry for the fusion of sub-castes and among many castes it has already become a fait accompli, while among others the work has been commenced and before another census comes round the goal will have been reached. Travancore can rightly claim the proud position of being the vanguard in this field of social reform in India. This is but the beginning, and the next step will be the fusion of the allied castes. There are already indications that some sections of the people have begun to move forward in this direction also.
475. One notable example of a successful attempt towards the fusion of allied castes Fasion of castes following the same occupation has been noticed among the Hindu castes of the fishing foilowing the community. They are the Arayas, Marakkāns, Mukkuvas, Nulayas, and Vālas. The tion. traditional occupation of these castes is fishing, but they have all along been recognized as distinct castes with no intermarriage between them. The educated youth of these castes have recently started an agitation to unite them, perhaps for political purposes, into the Araya caste. They carried on vigorous propaganda before the present census to persuade the Marakkans, Mukkuvas, Nulayas and Vāas to state their caste name as Araya to the enumerators. The returns show that their attempts have been partially successful. The numbers of Marakkāns and Mukkuvas returned at this census are far less than those at the last, while the number of Arayas shows a proportionately larger increase. The fact that most of the Marakkäns and Mukkuvas have been returned under Aŕaya in the census schedules does not necessarily mean that the social fusion of these castes has been accomplished or is likely to be accomplished in the triear 'future. Social customs die hard. Union for political purposes may not, therefore, immediately lead to union for social purposes also. It, however, opens up the way to such a union :and indicates the possibility of its accomplishment if social reformers persist in their efforts. A similar move towards the amalgamation of some of the washermen castes, such as Vannān, Manṇān, Nêríyan, Paravan, etc., under a common caste called "Varnavar" was also made by some young members of these communities just before the present census, but it did not meet with success. Only 166 persons. have chosen to return themselves under this new caste name. Young people who have preached this reform are not likely to be dis-spirited. They aim at amalgamation mainly for political purposes and are, therefore, not likely to turn away from the path on which they have started. I can fully visualise the possibility of the spirit of the Araya and Varnava youth spreading to the younger generation of other castes and of their starting propaganda for the unification of the allied castes following the same occupation, initially for political purposes, which may probably lead ultimately to social fusion as well.
476. The people generally are not yet prepared to countenance the total abolition classifying of the caste system and accept an alternative classification either on occupational or any population by -other basis. Occupation is not a safe guide to determine the affnity of castes. There are ${ }^{\text {occupation. }}$ castes totally differing from one another ethnically and socially but following the same traditional occupation. Such castes, under the present conditions and perhaps for a long time to come, will not unite socially. For example, among the barbers and the washermen there are Tamilians and Malayalis. Their language, mode of living, system of inheritance and other social customs are so divergent that it is practically impossible for the two sections to unite into a common caste. They even resent the idea of such a grouping though it be only for census purposes. They know that the census report is the record on which government bases its future policy of social and political development and in such a record they want the strength and position of each caste which forms a social unit to be correctly recorded. Castes following the same occupation are found in different stages of advancement. Some are educationally very backward and have not had their due share of representation in government service and democratic institutions. If they are classed with the more advanced castes who occupy a position of vantage, simply on the ground of their following the same occupation, their interests will surely suffer and in the struggle for existence they may even be stamped out of existence. Such an apprehension does exist in the minds of the Backward and Depressed Classes. It will vanish only when the people as a whole have
been sufficiently educated to be able to forget their caste feelings and subordinate individual and communal interests to national welfare. Such a happy time has not yet come. Caste feelings are still rampant in spite of the stray streaks of social reform visible in some sections of the society. From the standpoint of the people the return of caste in census schedules is, therefore, essential. Census authorities cannot ignore existing facts and force upon an unwilling people a scheme of classification which is out of tune with the prevailing. conditions.

The practical difficulty of classifying population by occupation has also to be recognized. If the criterion is to be the traditional occupation, there are castes whose traditional occupation cannot be specified and others who have had a defnite traditional occupation have discarded it and taken to other occupations. If, on the other hand, classification is to be based on the present occupation, difficulty will arise on account of the changes taking place in occupations as necessity arises. Such a classification, even if it be possible, will exhibit the currious phenomenon of including under a group incompatible elements like a high-class Brahman and an untouchable Pulayan. Such a grouping will only create an atmosphere of unreality and is not going to do any good to anybody.

Substitution of nem cante ysmes for old.
477. The present census has witnessed a clear manifestation of a general desire among. the castes in the lower rungs of the social ladder to throw off their old names and assume new ones with a view to improve their position and status in society. This desire must have existed and manifested itself at the previous censuses also. Probably, it was not sointensive or insistent as at present and the then Census Commissioners found it possible to pay no heed to the claims put forward and adhere to a no-change policy. But at the: present census my experience has been quite different. Petition after petition was sent in by various castes setting forth what appeared to me to be cogent reasons for the change they advocated in their caste name. Traditions were recalled, puranas were quoted, opinions. of great men were ferretted out and judgments of the High Court were extracted, all purporting to justify the change and refute the arguments for no change. The clamour for change was so loud and persistent that I could not possibly adopt a non-possumus attitudein the matter. Some changes in names have, therefore, been adopted and this has been. done in accordance with the decision of the conference of Census Officers held at Delhi on the 7th and 8th of January 1931. The Conference recorded, "Many castes will be returned at this census under new names. Where it is merely a new name for a complete caste the name adopted by the caste as a whole may be given first with others, including the terms necessary for reference to previous figures, after it in brackets."

The motives which prompted the advocates of the change of caste names, when analysed, will be found to fall under one or other of the following categories. (1) The desire to rise in the social ladder. The artizan classes comprising the carpenters, blacksmiths, goldsmiths, and others who were included under the common name of Kammäa at the last census desired to have their name changed into Viswakarma or Viswabrahman. They wear the sacred thread and try to emulate the Brahmans in other respects as well. This is clearly an indication of the desire of the Kammàla community to raise themselves to the status of the Brahmans, though the latter do not admit them into their fold. (2) The desire to wash of the stigma attached to the old name. This is evidently the underlying motive of the Chānnān to change his name into Nädär, of the Parayan to assume the name of Sämbavar and of the Pulayan to become Cheramar. (3) The desire to be dissociated from the lower caste which has adopted the name of a higher caste. In South Travancore there are two castes by name Kāvathi and Chackaravar. The former are barbers by profession and the latter traders. At the last census a number of persons of the Kävathi caste returned themselves as Chackaravar which the Chackaravar caste resented. At this census the genuine Chackaravar wanted to be separated from the spurious variety and therefore adopted a new name, Keralamuthali. It remains to be seen what they will do at the next census if the intruders pursue their game and appear under Kefalamuthali in the census schedules. There is no doubt that it is the general wish of the genuine Chackaravar to change their caste name. This is evident from the fact that 3,005 persons have been returned under the new name at this census. (4). The desire to restore an ancient name which a caste has lost in course of time by fortuitous circumstances. This is really the cause of the appearance of the caste called "Velaakkithalanayar" at this census. This is a barber caste resembling the Nayars in all social and religious. customs. Tradition has it that this caste was originally part of the Nayar community and became separated from it and formed a distinct endogamous group on account of its. occupation. In the meanwhile, the barber caste of the Tamil country who went by the.
name of Ampattan migrated to Travancore and carried on their profession alongside the local barbers. The two communities, however, remained as separate entities, but in common parlance both of them came to be called Ampattan because of the identity of the occupation they followed. The Malayali barbers now want to resume their original name, "Velakkithalanayar." Practically all of them have been returned under this name at the present census.
478. Out of the total population of $3,134,837$ Brahmanic Hindus, 4,065 persons, or 13 per 10,000 , refused to return their caste. Though the proportion is small the fact that even such a small number professes to have given up caste is a significant and novel feature of this census. At none of the previous censuses was found a single. Hindu who did not consider himself or herself to be within the pale of the caste system, but at present 4,065 persons appear to have walked over the fence and shaken off the caste shackles. Sri Närâyana Guru, the spiritual leader of the Ilava community, was a powerful exponent of the doctrine "One caste-one religion-one God for man." He took into his Asramam men of all castes and admitted into his temples all persons without distinction of caste or creed. The llavas, as a class, having been influenced by his teachings, have greatly reformed their religious and social customs, but have remained within the fold of Hinduism subject to the limitations of the caste system. The younger generations have, however, begun to show signs of revolt. Some of them, at least, are giving expression to their desire to break away from the orthodox Hindu religion and the caste system which is inevitably associated with it. Even among the higher castes the tendency to annihilate caste distinction is making itself visible at times. At a conference of Nayars held about a year ago a proposition was moved to the effect that all persons who speak Malayalam and follow Malayali customs should be admitted into the Nayar community. But the opposition was so overwhelming that the mover was obliged to withdraw his proposition. At a similar conference of the Nayars held recently the same resolution was moved and carried by a large majority. Just before the present census some of these radical social reformers tried, through the columns of the local newspapers, to persuade the public to refrain from returning their caste. The response to their appeal was no doubt meagre, ${ }^{\text {, b but }}$ the fact that such an appeal was made shows that there are persons who are opposed to the caste system, and their number is likely to increase as time goes on. In spite of these various forces which.have been operating for the break-up of the citadel of caste, census operators did not find more than 13 persons in every 10,000 Hindus who were prepared to say that they had no caste. With the vast majority of them the caste is still a live question.
479. Caste system would not have given rise-to all the present polemics and bitterness of felings if it had remained as it was originally intended to ins in ment imposing certain restrictions on the selection of one's bride and the choice of persons ness. with whom one could eat and drink. It came into existence as a normal child, but unfortunately it soon developed some abnormal excrescences and became the monstrosity that we see to-day. The grading of castes according to an imaginary scale of social precedence, stamping one caste as high and another as low, declaring some castes as untouchable. and even as unapproachable and denying them the ordinary rights and privileges of citizens, these are the features which have brought the caste system into disrepute. The spread of education, instead of helping the break-up of the barriers separating one caste from another, has only strengthened them in some respects. Sub-castes' are no doubt getting fused into wider castes, but these latter show no signa yet of fusion. They remain as exclusive as ever. Education has aroused the civic consciousness of the people. The castes which have been kept suppressed have begun to assert their rights and press for their due share in the administration of the country. They are unwilling to coalesce with other castes for fear of being further suppressed and wiped out of existence. Each caste wants to continue as a separate unit of the body politic so that its interests may not suffer from want of advocacy. This desire is a natural instinct for self-preservation and self-advancement. Each individual possesses this instinct and the individuals constituting a caste exhibit it in a collective form. Individuals could unite into a nation without the intermediate agency of the caste, but only when the inequalities created by past action have been removed and opportunities for advancement are provided to all alike. The children of a father will feel happy and contented if the father gives equal opportunities to all to educate themselves and settle in life. If, on the other hand, the father confers special favour on one son and neglects another, the latter will naturally revoltagainst the father, ill-feeling will grow between the brothers, and a united family will become impossible. This is exactly the condition of the society in India at present. The people are divided into communities on the basis of religion and race, and in each religion they are again divided into castes. Christianity recognizes no caste distinction, and yet even among] Christians, especially in some
sections of them, in this State at any rate, caste rules are being observed. There is no intermarriage or interdining, for example, between Cherramar and Sämbavar Christians. To safeguard their political interests these Christians want their caste to be recognized by the authorities. Representatives of the Christian converts from Depressed Classes have sent up petitions requesting me to show their caste in the Census Report. The enumerators found no difficulty in recording the caste of the large majority of Christians. When questioned they readily mentioned the caste or tribe to which they belonged. Their object in returning he caste in the census is political rather than social. The backward Christians fear that they will be swamped by the advanced sections of the Christian community in the struggle for political privileges and proportionate representation in Government service, if they do not stand out as independent units. It is merely this feeling that keeps asunder the different castes of the Hindu community and the same feeling operates among the various sections of the Christians as well, especially among the Backward Classes, and prevents them from coalescing with the more advanced sections. Herein lies the root cause of the persistence of the caste system.

Number of cantes returne and number presented in
Table XYII.
480. Imperial Table XVII which deals with the caste, tribe, race and nationality of the population has been compiled from the entries in column 8 of the census schedule. The instructions to the enumerators for filling up this column were :- "For Indians enter caste as ordinarily understood, but for wide castes enter sub-castes also. The caste titles-Brahman, Kshatriya, Vaisya and Südra--are usually insufficient by themselves. For other subjects of the Empire and for foreigners, enter race, as "Anglo-Indian," "Canadian," "Goanese," "Turkish," etc. For Indians such as some Christians who have neither caste nor tribe, enter "Indian." The tendency for the fusion of sub-castes was clearly perceptible in this State and the enumerators were, therefore, specially instructed to note down the general caste as well as the particular sub-caste to which a person belonged if this information could be got, so that the figures for sub-castes might be compared with those of previous censuses if possible. The attempt, I must admit, has not been altogether successful. As has been observed in a previous paragraph, some castes have already accomplished the complete fusion of sub-castes and others have made considerable progress in this direction. The enumerators often found it diffcult to ascertain the exact sub-caste to which a person belonged and the figures for the sub-castes given in the table should not, therefore, be taken as absolutely correct. In regard to the main castes, however, there is no room to suspect the accuracy of the figures except in the case of a few castes whose number must have been swelled up by additions from other allied castes. These will be noticed when those specific castes are considered.

The total number of castes returned by the Hindus is nearly 500, and of these only 77 have been shown in the table. Others have been clubbed together and are shown under minor castes, the total strength of which, however, is only 3,831 . As a rule, only those castes whose population is less than 150 each have been included under this head. The numbers returned under some castes were so few that they could be counted on one's fingers. No useful purpose will be served by loading the table with separate figures for all these unimportant castes. Most of them are foreigners, mainly labourers who have come from the Tamil districts to the tea and rubber estates in the High Range for temporary employment. The ordinary Travancorean has no interest in them. Even their caste names will sound strange to him. Names like Daivathathikulam, Kuthukulasabbayär, Thäligōtram, etc., which have been found entered in the schedules are quite unknown in Travancore. In the case of Primitive Tribes figures are given for all of them by religion, however small their number be.

The castes, tribes and races are given in the table in their alphabetical order. In accordance with the instructions of the Census Commissioner for India the total of each caste or tribe is given first and below it the sub-totals by religion.

The variations in numbers of important castes since 1901 and the proportion of each to the population of the State are shown in Subsidiary Table I at the end of this chapter. In Subsidiary Table II are given the numbers of the different Hindu castes and tribes who follow makkathayam, !marumakkathayam, and mixed or doubful system of inheritance.
Deteription and attempted here. All that I propose to do is to give a brief account of the traditions relating to the origin and migration of important castes and their marriage customs as lar as it has been possible to gather them from personal enquiries and past records.
482. The Hindus may be broadly divided into three main classes, namely, Hinduk Brahmans, other Hindus, and Depressed Classes, as shown in State Table II given at the end of Imperial Tables Volume. Their numbers, according to the present census, are $68,072,1,279,436$ and $1,787,380$ respectively.
483. In the previous censuses Brahmans were classified by their mother-tongue. Brahman. At this census the Census Commissioner for India has prescribed a new method of classification, according to which Brahmans are divided into two primary classes, "Pancha Drävida" and "Pancha Gauda," and each of these is again sub-divided into groups and sub-groups. The Brahmans enumerated in Travancore have been brought under this new classification ; Maharäshtra, Ândhra, Drāvida and Karṇãtika Brahmans being included in Pancha Drävida class; Gauda Saraswath Brahmans under Pancha Gauda class; and Áryapattar, Nampatifi, Pötti and Tulu Brahmans who are of doubtful affinity being shown next to Pancha Drävida but not of it. The terms "Pancha Drāvida" and "Pancha Gauda" are applied to the Brahmans who were found originally to the south and north of the Vindhya Range respectively. The different groups of Pancha Drâvida Brahmans claim their descent from the Rishis of old. These groups are further divided into sub-groups -each having a common gölra. The groups differ from one another in religious sect, language and place of origin. On the basis of religious sect the Pancha Drāvida Brahmans are mainly divisible into Smarthas and Vaishnavas. The Smärthas who belong to the Advaitha school of pbilosophy of Sankaráchärya are found in all the groups. The Vaishnavas are divided into two sects, the Siri Vaishnavas or Iyengars who are the followers of Rämãnujächärya and the Mädhwas who follow the teachings of Mädhwāchärya. The Sri Vaishnavas are again sub-divided into Vadakalais and Thenkalais. Among all the groups of Brahmans the system of inheritance is makkathayam* and monogamy is the rule, though polygamy is allowed in special circumstances.

The total Brahman population at present is 68,072 , forming only 2.2 per cent. of the Hindus or 1.3 per cent. of the population of the State. At the previous censuses the Konkanis were shown separately from the Brahmans. They really' belong to the Gauda Sataswath caste and have, therefore, been shown under Brahmans at this census. Including the Konkanis the Brahmans have increased by 1,989, or 3 per cent- during the last decade, while the increase in the previous decade (1911-1921) was only about 0.3 per cent. The low rate of increase in the Brahman community in Travancore is mainly due to the fact that excepting the Nampütitis and small sections of the other classes. who have permanently settled in the country, the others are only birds of passage migrating temporarily from beyond the Ghats either for business or for educational purposes. - These temporary sojourners ordinarily leave their families in their native villages, and even those wha do bring their families invariably marry their daughters to men of their own kith and kin outside the State. Brahmans generally have small families, in fact the smallest among the different castes. In some parts of the State, e. g., in Shenkotta taluk, there is evidence -of the size of the family among Brahmans being intentionally kept small, either by the adoption of artificial methods of birth control or by the prudential restraint exercised by men. This may also be another cause of the low rate of increase in this caste.
484. Before considering the different groups of the Pancha Drāvida Brahmans, we Malayala shall deal with the Malayala Brahmans who include Äryapattars, Nampütiris, Pōttis and Brayman. Tulu Empräns, who are of doubtul affinity and are not included in Pancha Drāvida or Pancha Gauda division.
485. The first batch of Āryapattars are believed to have been brought into Kérala aryapattarby the Raja of Kodungallür (Cranganore). The only_ place in Travancore where this community is now found is Karunagapally taluk. The Aryapattars speak Malayalam and rescmble the other Malayala Brahmans in dress and personal habits, and interdine with the Nampütitis. Though the term A Aryapattar implies a superior status among the Brahmans, in practice they are assigned an inferior position owing to their officiating as priests to certain non-Brahman communities. The number of Âryapattars returned at this census is only 95.
486. Closely allied to the Āryapattars is another small sect of Brahmans found in Pattatyar. Thodupula taluk, known as Pattatyărs. There are only four illams of these people consisting of eleven members, who are not in a flourishing condition now. It is said that their :ancestors escaped from Calicut and took shelter in Travancore at the time of the invasion

[^43]of Malabar by Tippu. They were awarded a small pension by the Vadakumkir Raja. They resemble the Nampütitis in every respect except that their women who are married to the Brahmans of Mysore or of the East Coast do not go and live in their husbands. houses. Nor are their children entitled to any patrimony. There is no age restriction for marriage, but widow marriage is not allowed.

Kamputrid. and the true According to 'Keralamähatmyam' the Nampuints are the most ancient settlers Tradition says that the first comers, being frightened by the aboriginal Näga tribe, fled from the country and that Parasuràma brought another batch from Andhra Dessa and introduced certain changes in their dress and manners so that they might not be re-admitted into their original fold if they returned to their native land.

The Nampūtitis speak Malayalam, though certain inscriptions found in Travancore contain expressions like 'Sommu' (property), 'Illom' (house), etc., which make it probable that they might have spoken Telugu originally. In their habits and manners the Nampütiris differ considerably from the East Coast Brahmans. In the dress and the ornaments they wear and in being strictly gōsha the Nampūtiti women are in striking contrast with those of Pancha Drävida Brahmans. Being the origival Malabar Brahmans, Nampūtiris enjoy high privileges in the State religious functions.

Generally, the eldest son of a Nampūtiti alone marries in the caste, and only under exceptional circumstances does a second or other younger son marry a caste wife. The other members contract marital relations with the Kshatriya, Ampalavasi or Nayar women. A Nampâtiri, if he has no issue by one wife, may have a second and even a third wife but cannot have a fourth, and if the circumstances are such as to necessitate a fourth marriage he must get his younger brother to marry. Ante-puberty marriage is not compulsory and a woman can remain unmarried without any social stigma attaching to her.

The Nampūtiris are makkathāyis, the attempt of Parasuràma to introduce the matriarchal system among them having failed except in the case of a small section known as Payyannür Brahmans. Impartibility of property is the very essence of their system of inheritance. The Namputititis number only 8,481 at this census which is less than the number returned at the last census by 840 ; but it must be remembered that the increase in their number in 1921 was as much as 82.6 per cent. In view of their peculiar marriage custom such a large increase is quite improbable and the figure for 1921 cannot, therefore, be accepted as correct.

Potti. three classes of Pöttis according to the period of their settlement in the country, namely, (1) Sthänathil Pöttis or Pattillathu Pöttis who, like the Nampütiris, are the descendants of the earliest Brahman settlers, (2) Thiruvella Dẽsis who are later immigrants, and (3) the recent immigrants from Uppanangādi and Kasergode taluks in South Kanara, who are only Tulu Brahmans, but are also called Pöttis or Empräns. The first two groups have adopted the customs and manners of Nampütitis and have now been practically merged into that community. The number of Pottis returned at this census is 5,450 while their numbers in 1921 and 1911 were 5,322 and 5,220 respectively. The increase in different decades is not very appreciable. This is so, probably because the younger generation of the early settlers, actuated by social reform motives to abolish the distinction between these two sub-divisions, may have returned themselves as Namputitis and not as Pöttis, and also because the recent immigrants do not generally migrate with their families and settle in the country permanently.
Tuln Brabman. . 489. The Tulu Brahmans come in batches from South Kanara, stay here for some time and then go back. They generally officiate as priests in temples. They resemble the East Coast Brahmans in their customs, habits and system of inheritance. Their present population in Travancore is 2,843 as compared with 2,557 at the last census.

Pancha
Dravida
Brayida
490. The different groups of the Pancha Drāida Brahmans are immigrants from other parts of India who came to Travancore in different periods and under different circumstances. Various inscriptions show that from time immemorial the South Indian kings brought large bodies of Brahmans from the Gangetic plains and settled them on the banks of the Käverti and the Thämpravarni, making large gifts of lands to them. The Chéra kings were unsurpassed in their reputation for charities which attracted Brahmans from the north and cast even during very early ages. The rulers of Vénäd were as.
zealous as the other kings in encouraging the settlement of Brahmans, as is evidenced by the numerous inscriptions, copper plates and Dèva Sāsanams found in South Travancore. The impartible nature of the Nayyar tarwād was a handicap to all indigenous activities in commerce, and the want of local enterprise was another factor which facilitated the immigration of Brahmans from the neighbouring districts of Palghat, Coimbatore, Madura and Tinnevelly to Travancore in pursuit of trade, banking and other allied business.
491. In social matters and religious ceremonies the Ānchras do not differ materially Mndhra or from the Tamil Brahmans. They colonized different parts of South India and Travancore Brabima during the reign of the Vijayanagar kings who gave them land and settled them in the Chola and Pandiyan lingdoms. They were attracted to Travancore by the charity of its rulers and the facilities that existed for trade in the country. Their number at this census is 819 only.
492. The Drävidas are the largest section of the Pancha Drāvida Brabmans found Drayida in Travancore. They are divided into Smärthas and Vaishnavās, the former being the iTramil) followers of Sankarāchärya and the latter of Rāmānujā̄chärya. They are also classified according to the Vedas they follow. There are the Rig Vedis, the Yejur Vēdis, and the Säma Védis who differ from one another only in the forms of the rituals they observe. Again, territorially they are divided into several groups, such as, Vadamās, Brahacharanam, Ashtasahasram, Sankèthi, Vāddimas, etc. Each group is endogamous, but the members of the different groups are considered to be of the same social status and freely interdine. The Mukkāniers, Chōliers and Thalavakars who, unlike the other Tamil Brahmans, keep a tuft of hair on the froint of the head, also belong to the Drävida group. The total population of Drāvida Brahmans in Travancore now stands at 39,985 persons. The increase from the previous census is three per cent., which is the same as the increase recorded for the whole Brahman population.
493. The followers of Mädhwāchärya, who form the Karnātika Brahman population Karnatika of Travancore, are, like the Mahääāhtra Brahmans, the descendants and relations of persons Brabman. who held high positions of trust in the State service during the last century. Only 507 persons of this group have been returned at this census.
494. The Mahärāshtra Brahmans of Bombay, Mysore and Tanjore were appointed Maharashtra to high posts in the State service at different periods in her history and the present small Brahman. colony of 729 persons of this group of Brahmans found in the country consists practically of the descendants of those officials.
495. The only sub-division of Pancha Gauda Brahmans found in Travancore is the pancha gauda Saraswath or Konkanastha Brahmans. Their original home was Trihōtraputam or Brahman. Tirhut in Bihar. They are supposed to have been brought to Kerrala by Parasuŕāma and settled in Gomanchala (Goa), Panchakrósa and Kusasthali. It seems more probable that the original immigrants from Tirhut left their northern home after the rise of Buddhism. While they were enjoying lucrative trade in Goa the Portuguese commenced their religious persecutions which compelled these people to go further south and settle in Kanara and Calicut. But on account of the cold reception extended to them by the Zamorin they - proceeded to Cochin and Travancore where they flourish even to-day. In marriage customs they are like the Tamil Brahmans. Pre-puberty marriage is compulsory. widow remarriage and divorce are not permitted and the system of inheritance is makkathāyam. They have their own temples which are very richly endowed. One peculiar custom among them is that their women cannot enter the temples. The Gauda Saraswath Brahmans (including those returned as Konkanis at the previous census) have increased from 7,252 in 1921 to 9,163 in 1931, i. e., by $26 \cdot 4$ per cent.
496. Under other Hindus are included all the non-Brahman castes other than the other Bindur. Depressed Classes. Their number at this census is $1,279,436$ constituting 40.8 per cent. of the Hindus or 25.1 per cent. of the total population. The more important of these castes are dealt with below.
497. The term "Ampalavàsi" is a generic name applied to a number of sub-castes àmpalavasi. whose hereditary occupation is service in temples. Some of them wear the sacred thread and others do not. A few sections of them speak Tamil, follow Tamilian habits and customs and are makkathāyis, while the majority of them are Malayalis and are marumakkathayis. The chief sub-castes are Adikal, Chàkkyär, Kurukkal, Nampiyär, Pisharóoti, Pushpakan and Väriyar. Adikal, supposed to have been Brahmans originally, were degraded to Ampalvàsi for having officiated as priests in temples dedicated to Bhadrakali.

They wear the sacred thread and are makkathayis. Chakkyars are believed to be the descendants of a Kshatriya father by a Brahman woman. They wear the sacred thread and are marumakkathayis. Kurukkal consists of two sections, one speaking Malayalam aud the other Tamil. Both the sections, it is said, were originally of the Tamilian stock imported from the East Coast for temple service. The members of the Tamil section wear the sacred thread and are makkathâyis. The Malayalam-speaking section has adopted the Malayali habits and dress and follows marumakkathăyam. The Tamil Kurukkals are found in South Travancore and officiate as the priests of Vellàlars. Nampiyär also consists of Malayalam and Tamil-speaking sections. The former do not wear the sacred thread and are marumakkathayis. The Tamil section is known as Nampiyans. They are found in South Travancore and officiate as priests in Saivite temples. They are like the Tamil Brahmans in their marriage customs, but they are considered to have been degraded from the Brahman caste for having partaken of the offerings to Siva. They are also known as $\bar{A} d i S_{\text {aivas }}$ because they are believed to have settled in the Tamil land long before the advent of the other Brahmans. Pishäroti is a small Vaishnavite community not wearing the sacred thread. They generally follow marumakkathāyam, but also makkathayam at times by special contract. Pushpakan is found in Central Travancore and follows .marumakkathayam. Variyars are Saivites and do not wear the sacred thread. They are marumakkathayis. Among them there is the peculiar custom of 'kudivaiopu' by which the husband can absorb the wife and children into his own tarwäd. They will then inherit one-half of the properties of the husband's tarwàd, the other half going to his sisters and their children. Thus a makkathayam family is created in a marumakkathayam tarwad. The term "Vāriyar" or "Vātijar" has been interpreted to be a corruption of the Sanskrit word "Pärswaja" meaning the native of a neighbouring country which is believed to be - modern Persia. It is said that Parasuräma, in his campaigns against the Kshatriyas, sought the help of the warlike Persians, and that they came to Kerala and settled in the four kalakams as the armed protectors of the Namputitis. With the advent of the Cherraman Perumalls who brought with them well-disciplined forces, the help of the Päriwajas was no longer required and the latter had, therefore, taken to temple service. Another version is that the Variyar came to Kêrala from the Tamil country like the Kurukkal. Several Tamil inscriptions of the old Chola Empire show that the Vätiyars were engaged in the supervision and auditing of temple revenues.

Besides the above mentioned sub-castes of Ampalavàsi there are also some others who are found in Travancore in small numbers. Altogether there are only 8, 155 Ampalavasis according to the present census. At the last census their number was recorded as 9,409 , but the correctness of this figure is doubtul. because 807 persons of this caste have been shown to be in Devikulam taluk, a locality where there is not the slightest possibility of finding such a large number of them.
Chett. - 498. The name ' Chetti' is used to indicate a distinct caste, though it is adopted by certain communities, such as weavers and Vanigavaisyans (Vâniyans), as a title. The word means a trader and is one of those titular or occupational terms loosely employed as caste names. There are many sub-divisions of Chettis in Travancore, four of which, namely, Köttar Chettis, Parakka Chettis, Eiür Chettis and Ättingal Chettis, are referred to in the Travancore Census Report of 1911. Some of the other sub-divisions are PuthukkadaChettis, Iraniel Chettis, Peztürkada Chettis including Sri Pantāra Chettis, and Telunka Chettis. The sub-divisions usually take their names after the localities where they reside. They differ from one another in their tradition and origin so that one sub-division does not generally contract social alliances with another. The Chettis of Köttar, who are a well-to-do class, claim the ancient city of Kävéripümpattaṇam, the Chōla capital, as their original home, and those found in Sherthala are said to have migrated Grom Konkhan. Chetis are generally Tamilian in their manners and customs as well as in the dress and ornaments worn by their women, except in Quilon where they resemble the Malayalis. Among the Sri Pantära Chettis some are like Tamilians and others like Malayalis. As a rule, the Chettis are makkathäyis though some of the Sri Pantära Chettis follow marumakkathayam. Marriage is compulsory for women, but it can take place either before or after puberty. Remarriage of widows is not allowed in Kalkulam, Trivandrum and Shenkotta taluke, while it is common in Quilon, Changanachery and Sherthala. Trade and agriculture are the hereditary occupations of Chettis in all the taluks except in Sherthala where they have been the domestic servants of the Konkana Brahmans. The Iraniel Chettis are a wealthy class of traders and agriculturists. The Parakka Chettis are hawkers who travel on foot Irom place to place in rural parts carrying bags of rice and other provisions and sell them at house doors.

The number of Chettis returned at this census is 17,422 as against 17,436 at the last census. As was observed in the last Census Report, some of the Chettis, particularly the Sri Pantära Chettis who follow Malayali customs, might have returned themselves as Nayars and thus caused a slight fall, instead of the usual increase, in their numbers.
499. In Tamil literature the Ilavãniyan caste is referred] to as :Sēnai kodayãr,' Inazāpiyan meaning those who held the umbrellas when the army was moving. Another rendering of vellălar). the name is 'Sěnaikkutaiyān' which literally means the ownet of an army. This caste is now found in Thovala, Agasthiswaram and Shenkotta taluks. In Shenkotta they are called Sénakula Vellàlar. They are Tamilian in their language, dress, manners and customs and follow makkathayam law. Their number has increased from 4,669 in 1921 to 6,411 in 1931.
500. According to The Jathi Nirnayam and The Travancore State Manual, the Ilayatha Ilayathüs were once Brahmans of undoubted purity but became degraded on account of (Nampiyãth). the priestly service they rendered to the Nayars. They are now agitating for being classed with Nampatitis under Malayala Brahmans. It is argued that in regulating the functions of the members of a household of liayathu, the sazstras ordain that the eldest should attend to the duties of a grahastha, while the juniors may function as priests to nonBrahmans, and that it is thus that priesthood came to be associated with this caste. They now form a distinct caste, though in the matter of food, clothing, religious and social ceremonies there is hardly any difference between them and the Namputitis. In. Cochin they are treated as a sub-division of the Malayala Brahmans. Generally, the eldest male member of a family alone used to marry in the caste, the other male nembers forming marital relations with Nayar women. But after the passing of the Nayar Regulation the junior members have also begun to marry in their own caste. The women are married either before or after puberty. Neither widow marriage nor divorce is permitted. . Their system of inheritance is makkathāyam. Their number has decreased from 3,981 in the last census to $-2,383$ now. This decrease is apparently caused by some of them being returned as Malayala Brahmans and thus included under Nampütiris.'
501. Kammálas consist of two main classes-Pāndy Kammālas and Malayala Kammālan Kammälas. Each of them is further divided into five occupational castes, namely, (Yiswakarma) Kannān or Müsuàti (brazier), Kalthacchan or Kalläsáàrí (stone worker), Kollan (iron worker), Thacchan or Äsäti (carpenter) and Thattan (goldsmith). The different sections of Pândy Kammälas wear the sacred thread and interdine and intermarry with one another; but those of Malayala Kammāalas do not. The Pāndy Kammāas own Brahmanical götras and resemble Brahmans in their marriage rites. They have been agitating for being called Brahmans under the name of 'Viswa Brahman' or 'Viswakarma.' The latter name is now being adopted by both the Pändy and Malayala Kammàlas. They are all makkathâyis. Among the Malayala Kammalas there are also a few minor sub-castes besides those mentioned above, such as Vilkurups and Villäsāns. Vilkurups who used to make bows and arrows are the recognized priests of the Kammàlas. In Mavelikara taluk they also function as barbers to the Kammala community. Their system of inheritance is makkathay yam. Villazäns are sawyers by profession and are largely found in Nedumangad taluk. They speak Malayalam and are marumakkathayis.

Mr. M. Srinivasa Iyengar says, "The Kammalas of Malabar and the Tamil districts must have descended from the same stock of Naga-Dravidian artizans mentioned in early Tamil literature and inscriptions."* There is a tradition to the effect that one of the Perumäls who ruled over Kerala pressed a Kammālan to marry a woman of the washerman caste, which he refused to do. The Kammàlas then went away in disgust to Ceylon and refused to return in spite of repeated entreaties; but at last some Kammāalas were sent back to Kérala by the Il lava king of Ceylon.

The present population of Hindu Kammálas is 208,441 which shows an increase of 27.3 per cent. during the past decade. Besides these, 627 Christian Kammălas have also been returned in this census.
502. Tradition traces the origin of Krishnanvaka caste to Āmpädi, a place near Krishnanvaka. Murra, whence they are said to have migrated to Conjivaram and from there to Travancore. There is reason to believe that these people once belonged to the Yadava tribe, one of whose chiefs named $A y$ Andiran, the Aeoi of Ptolemy, is said to have ruled over a large portion of Travancore before the commencement of the Christian Era. The Krishnanvakakkar did not bring a sufficient number of women with them when they migrated to this

[^44]State and some of their men, therefore, married local women and, though originally makkathāyis, adopted marumakkathăyam. The rest married in their own community and followed makkathayam. Both these sections still exist, the marumakkathayis having adopted the Malayali habits and customs. Among the makkathāyam section post-puberty marriage is allowed, but marriage is compulsory. The dowry system prevails as among the Brahmans, and polygamy is permitted. When a man dies his younger brother takes his deceased brother's widow as his wife. No regular marriage ceremony is gone through, but they live as husband and wife. Even if the younger brother has already got a wife he accepts his brother's widow also as another wife. This generally happens, especially if the widow is young. The marumakkathayam section is in the minority. The two sections do not intermarry nor do their women interdine. The marumakkathayam section follows the Nayar Regulation in partitioning their tarwàd properties. There is a move on the part of the younger. generation of the two sections to bring about a fusion metween them. Their number has increased from 9,684 to 12,032 since 1921, i. e., by $24 \cdot 2$ per cent.

## Kshatriya,

503. Kshatriyas found in Travancore are divisible into two main sections, Malayala Kshatriyas and other Kshatriyas. The Malayala Kshatriyas comprise several groups. The sub-division is based on occupational and geographical distribution. The chiel groups are Rājas, Kōil Thampuràns, Thampāns and Thirumulpāds. Among the Rājas there are certain groups whose original home was in Kollathunād in North Malabar, while there are others, like the Pantalam and Pūnjar Rajas, who trace their descent from the Madura kings. There is one group near Kasergode who is even now Tulu in dress and habits. The Köil Thampurãns are the descendants of the Kshatriya families who .migrated from North Malabar in olden days. These Kshatriyas used to be known as Kövil adhikartis or masters of temples. It is interesting to note in this connection that there is a semi-sanyasi group of non-Brahmans in some parts of the Tamil country, known as Tambirans or masters of mutts. Their social status is more akin to that of Ampalavãsis than that of the Kshatriyas of Malabar. The Räjas, Kōil Thampuräns and Thampäns are considered to be higher in status than Thirumulpäds who are allowed to perform socioreligious functions for other Kshatriyas. The name, 'Thitumulpàd' means one in the front rank (of an army). Sämanthas are considered to be another class of Kshatriyas having a lower status than even the Thirumulpãds. They wear no sacred thread.

Among the younger generation of Malayàia Kshatriyas there is a move to bring about fusion of their sub-castes. The census figures show that they are succeeding in their attempt. A very large number of them have simply returned themselves as Malayala Kshatriyas without mentioning the sub-division to which they belong. At a recent conference of Malayala Kshatriyas held in North Malabar, the Kérala Sãmantha Mahā Sabha which was working for the advancement of Sämanthas was converted into Kerala Kshatriya Samajam for the purpose of uniting the different sub-castes and working for the common good of the whale community. The Malayala Kshatriyas are all matumakkathāyis. Their social customs and manners are like those of the Näyars, except that they have most of the mantra samskärås. They have, however, no Védic study, no yõga, nor other rites prescribed for Kshatriyas in Veddas. Non-Malayala Kshatriyas found in Travancore are chiefly the Rajputs and Rajūs. The former are said to have come from Rajputana. They speak Hindustāni and bear surnames like Rao, Singh, Rāja and Läl. The Räjūs are a Telugu speaking agricultural class whose ancestral home is said to be Cudappah and Bellary districts. Both the Rajputs and Rajos are makkathayis.

The present population of all the Kshatriyas tqgether is 3,673, of whom 2,936 are Malayala Kshatriyas. They have increased by nearly 75 per cent. during the last decade. The census of 1921 recorded a decrease of 18 per cent. from the number in 1911 which accounts parly for the present large increase. The addition of Sämanthas to Kshatriyas must have also swelled the latter's number. According to 1911 census there were 733 Sāmanthas, but their strength decreased to 134 at the last census and to 97 at the present.
504. Kudumis ?are Konkaṇa Súdras who are supposed to have accompanied the Saraswath or Konkanastha Brahmans from the banks of the Saraswathi as their servants. They perform accessory duties in the temples of Sataswath Brahmans. There are two sub-divisions among them-Müppans and Idiyans. Of late they have taken to trade and field labour. Their girls must be married, whether before or after puberty,
and widow remarriage is prohibited. Inheritance is in the male line. The increase in their population during the past decade has been normal. The present number is 9,610 .
505. It is said that before the Āryan migration to India the Dravidians lived in Thamulu in the Gangetic plain and that when driven by the Äryans they came south and settled at a place called Thonta. Agriculture was their main occupation. They were tnown as Vêlḷalar. Käràlar, Kärkadal and Karkattar. By agriculture, commerce and archery in which they were adepts some of them amassed immense wealth and were, therefore, called Muthalărs which in course of time became Muthaliyăr. There are two sections of the community-Saivites and Vaishnavites. Muthaly or Muthaliyār is also a title added to the names of Vellalalas, Kaikolars, etc. The number of Muthaliyars in Travancore is only 972 at present.
506. Müthathūs form a small community resembling the Namputiris in their customs, ceremonies and system of inheritance. The Nampötiris officiate as their- priests. Their hereditary occcupation is 'Sri Koil Pravithi,' i. e., duties inside the shrine of the temple, such as carrying the image of the deity for Sribali, lighting lamps, cleaning the portals and keeping watch over the keys of the temple, jewellery and other valuables. They are considered to be identical with the Siva Dwijas or Siva Brahmans of the East Coast. This is supported by a finding of the Travancore Sadar Court over half a century ago which says, "It is well known that the Müthathu performs these duties in the temple. This would seem to identify the Müthathu with the Siva Dwijas of the East Coast, who are said to have been sent for by Sri Parasuruàna for Vycome." The Travancore Law Journal, Vol. XIV. p. 549, also refers to certain letters of the Vaidikans (authorities on religious matters concerning the Nampūtiris) and ' Nitū̀s' (orders issued by the Maha Rajas) which go to show that the Müthathūs migrated to Travancore from the East Coast and probably belonged to the class of Siva Brahmans. The prominent members of the community contend that, as in Cochin, the Müthathūs in Travancore should be included as a sub-division of the Malayala Brahmans in the Census Report. The precedent of the previous censuses of treating them as as separate caste has, however, been adhered to now also. By custom only the eldest among the male members of a family is allowed to marry in the caste, while the younger members marry women of other castes. This practice is now condemned by the enlightened section of the community and attempts are being made to restrict marriage within the caste. They form only a very small community numbering 646.
507. The Nayyar belongs to the Dravidian race but contains a large admixture of Nàyar. Äryan blood. The Nampütiris who are supposed to be the descendants of the early Âryans who settled in Kērala have, from time immemorial, been marrying the Nayar women and it is no wonder that the Nayars are now a mixed race of Aryans and Dravidians. Before the advent of the Âryans to South India, the Dravidians, as we have seen in an earlier paragraph, were divided into five groups, and each of them occupied a separate region and developed a culture and mode of life suited to their environments. The group which occupied the Kurinji or the hill country on the West Coast were probably the forefathers of the present Nayar community. While living in the jungles they lived by hunting. Later on they migrated to the low country between the sea and the mountains and took to cultivation. The land there was very fertile and the climatic conditions were eminently favourable to agriculture. Cultivation in these circumstances was an easy task and it naturally became the occupation of women who remained at home. The men, on the other hand, had to guard their rich country against the intrusion of foreigners. Circumstances, therefore, compelled them to exercise and develop the martial qualities which they inherited from their ancestors. It was thus that the Nayars became a fighting class to whose bravery and skill in warfare many foreign travellers and chroniclers have borne testimony.
508. The word "" Nāar," accorcing to some scholars, is derived from "Nāyakan,". which means "a chief." This is supposed to signify the martial habit of the community. Another theory connects the origin of the Nayar with Näga (serpent) worship which is suggestive of the nature of the country in which the community lives. Serpent worship was quite common among the ancient Dravidians and is still prevalent in some parts, especially in South India. "The Naga Cult, i.e., the exclusive worship of the serpent;" says Mr. P. T. Srinivasa Iyengar, 'originally arose probably in the hilly tracts which man inhabited early in the course of his evolution ... .....................After the cults of Siva and Vishno arose, several people remained primarily Naga-worshippers without joining these other cults and were, therefore, distinguished from the rest -of the population by being specially called Nagas."* From 'Nägar' the word 'Nayar' is supposed to have been derived.

[^45]509. Ludovic de Varthema of Bologna who travelled in India in 1502 A. D. has recorded :-"The first class of pagans in Calicut are called Brahmans. The second are Neri (Nayars), who are the same as the gentle folks among us, 'and they are obliged to bear sword and shield or bows or lances." Duarte Barbosa in 1516 A. D. wrote :-"In these kingdoms of Malabar there is another sect of people called Nairs who are the gentry and have no other duty than to carry on war, and they continually carry their arms with them, which are swords, bows, arrows, bucklers, and lances."* Ralph Fitch, the "Pioneer Englishunan" who had journeyed to India in 1583 A. D. described the Nayars as having "their heads foel of haire, and bound up with a string, and good archers with a long bow and a long arrow, which is their best weapon." Stein Van Gollenesse, Governor of Dutch Malabar, in his "Memorandum on the Administration of the Malabar Coast, 1743 A. D." says :-"The fortress of the Hon'ble Company, likewise called Coilan (Quilon) lies within the lines of Signatty (Chingamanad) which are so manfully defended by the brave Nairs under the gallant old Rajadore Achuda Barier .(Achutha Warrier)." The Nayars in those days were not only great warriors but were the most influential community in Malabar who wielded great powers in temporal and spiritual affairs. Says Mr. Logan in his "Malabar Manual,". "I would specially call attention to the central point of interest as I look at it, in any descriptive and historical account of the Malayali race-the position, namely, which was occupied for centuries on centuries by the Nair caste in the civil and military organisation of the province." Ma Huan, a Chinese Muhammadan traveller in the beginning of the fifteenth century observed:-" The Nayars rank with the king." The position of the Nayars in spiritual matters is evidenced by the prominent part they played in the establishment and management of temples. Here is an example of it. At Suchindram there is a temple called Dwâraka Emperumal Kōil. On its stone wall there is an inscription in Tamil dated 400 M . E. ( 1225 A . D.). The following is a translation of the first sentence in this inscription. "On the 22nd day of the month of Makaram in the Kollam year 400, which was Wednesday with Uthirattathi Nakshatra, the Sabha and the Mahālökars together with Pallikkal Nàyar who is holding the office of Srikäryakāran, assembled in a meeting convened in the eastern portico of the temple of the God of Suchindram, represented that the lower body of a perpetual lamp endowed by Rangen Ganapathi long ago to the temple of Dwärakai Emperumãanar, had disappeared from the Devaswam store and that Ranamatha Thiruvaranka Adikal should be made to pay its value amounting to 10 achoos." (Achoo is an old gold coin.)

- The Nayars like the other Dravidians observed no caste system till they came under the influence of the Aryans. At the time of the Aryan migration to Karala the Nayars were following different occupations. The bulk of them formed the fighting and protecting class, some of whom became feudal chiefs or Naduvalis and others constituted their militia. Some sections of the people were engaged in other occupations, catering to the needs and convenience of the whole community. The few Âryans who came to Kertala were generally spiritual instructors and under their influence the occupational groups that were in existence at the time were turned into distinct castes on the model of the Aryan system. It must be remembered that long before the Äryans migrated southwards they had travelled far beyond the traditional Chathurvarna system and developed a multiplicity of castes: The native population of Kerrala copied from the Aryans not the imaginary Chathurvarna, but the expanded form of multiple castes, each having a definite occupation. In this manner the occupational castes like the weavers, barbera, and washermen, came into existence in Travancore, while the military section of the people constituted a separate caste. Though caste was thus introduced in Kerrala, caste rules were not made rigid for a long time after, not till Buddhism was stamped out and Hinduism was revived and re-established by Sri Sankarācharrya. The Nayyars who were once a single community were thus divided into a number of castes subject to various restrictions on marriage, food, worship in temples, and other social and religious customs which are associated with the rigid caste system.

511. In previous Census Reports of Travancore the Nãyars were classed as Sidras. The Census Report of 1901 says, "The Nayars form the bulk of the Sudra population of Malabar." The author of The Travancore State Manual goes further and declares, "The Näyars are the Südras par excellence of Malabar.' The caste now known as 'Nayar' stands quite apart from the occupational castes of weavers, barbers and washermen who originally formed part of the Nayar community. Its occupation was formerly military duty and now mostly agriculture, especially supervision and management. There is no evidence

[^46]whatever that till about the beginning of the eighteenth-century the name Südra was- ever applied to the Nayar. .In all the books written by foreign travellers and in inscriptions and other records maintained in the country till then, the. word 'Súdra' was not used at all with reference to the Nayar: The evidence furnished by ancient Smrithis and the existing social customs also point to the fact that the Nayars are not Suidras, whatever else they might be. Smrithis permit only marriages in which the wife is one grade below the husband.* There are texts in Manu forbidding the marriage of a Brahman and a Südra woman. In Kefala the Nampütiti Brahmans marry Nayyar women. Under certain circumstances they also interdine with the Näyars. The Kavalappära Müppil Nāyar, and the Thachudaya Kaimal, a born Nayar, who is installed as an important functionary in the temple at Irinjalakuda, enjoy the privilege of dining with the Nampatiris in the same room. During the period of pollution caused by child-birth Nampütiri women can eat the food served by Nayar women. In the face of such evidence it seems to be a travesty of facts to include Nâyars in the traditional Sudra caste. They form a community by themselves, sub-divided into a number of castes on the model of the Äryan system but not included in it.
512. The Nàyars till recently were pure marumakkathâyis. After the enactinent of the Nayyar Regulation in 1925 the tarwad, (Marumakkathayam family) is fast breaking up and the community 'is rapidly_ passing through the transitional $\mathrm{a}_{\mathrm{a}}$ stage to. ultimate makkathăyam.

In 1901 census 116 sub-castes were returned under Nāyar. In the next two censuses most of these disappeared, and only two sub-castes, namely; Chakkāla and Märän, were treated as separate castes. But even in regard to these sub-castes the correct numhers were not obtained. The heavy drop in the numbers of Chakkāa and Maŕän from 18,074 and 29,318 in 1911 to 9,696 and 11,581 in $1921^{1}$ must have been due to a large number of these sub-castes having returned themselves as Nayars in the census of 1921. This tendency was visible in 1931 also, but more reliable figures were obtained, because the enumerators were specially instructed to enter within brackets the sub-caste of the persons enumerated, if they were personally acquainted with them. Thus separate figures have been obtained for the sub-castes of Chakkāa and Märän, but their correctness cannot be vouched for. They are given below the totals for the whole Nayar caste in Imperial Table XVII.

The Nāyars including Chalkāala and Máràn have increased from 711,772 in 1921 to 868,411 in 1931, or by 22 per cent. The increase in the total population of the State in the decade is $27 \cdot 2$ per cent. The increase among Nayars has always been less than the general increase in population. During the decade 1901-1911. the general increase was 16.2 per cent., but the Nayars increased by 14 per cent: only, and in thet next decade the corresponding proportions were 16.8 per cent, and $11 \cdot 2$ per cent. respectively.
513. Reddis who are a Telugu-speaking community are found in some parts Reddr. of Travancore and are engaged in trade. They must have come to this country from the adjacent districts of Madura and Tinnevelly, especially the latter in which there are several villages containing wealthy cultivators belonging to this community. They are mostly Vaishnavites and follow makkathāyam law: 'Their number in Travancore is only ' 936.
514. The Saliyans are found in Agasthiswaram, Kalkulam, Neyyattinkara, Sherthala and Vaikom taluks. In the latter two taluks they are known as Pattaŕyas. Those living in the southern taluks speak Tamil while the Pattary yas speak Malayalam. The Saliyans

Sallyan (including Pattaryan). of the south trace their original home to Gujerat from where they migrated to South India during the time of the Muslim invasions, and after settling in Tanjore, Madura and Tinnevelly districts successively, came to South Travancore. The Pattaŕyas, on the other hand, trace their ancestral home to the Gangetic plain from where they migrated to Conjivaram and afterwards to Kumbakonam. They were brought to Kerala by one of the Perumals and settled at Thiruvanchikulam in Cochin, from where they gradually moved southward and established themselves in Vaikom and Sherthala taluks in Travancore. The Sáliyas and Pattäryas do not intermarry. The Sāliya women may be married beforé or after puberty, but among the Pattätyas of the north early marriage is more or less com, pulsory, and widow remarriage is not generally allowed. Most of the Saliyas follow their hereditary occupation of :weaving, but the Pattätyas have now taken to agriculture and trade also. Saliyas are generally makkathâyis, though amóng Pattätyas maŕumakkathayam is also followed.- The present-population of Suliya-caste- including Pattatyas, is

[^47]12,386 . The number recorded at the last census was 8,416 . The increase during the decade, viz., $47 \cdot 2$ per cent. is rather high, but it may be due to some members of other weaver castes, lower in status, having been returned as Saliyas.

Sauraehtra
(Pattanul)
515. Pattunül is a class of weavers who wear he sacred thread and claim to be Sultan Muhammad of Ghazni invaded it. At the time of Alaudin Khilji's invasion of the Deccan they fled again to Vijayanagar and from there drifted further south to Madura. They were brought to Travancore by Dewan Rāja Kesavava Dās during the reign of Räma Varma in the latter part of the eighteenth century and were housed at. Köttar under Royal patronage. They were originally weavers of silk but took to weaving of cotton cloths of finer counts after their migration to Travancore. They speak a foreign tongue which is a mixture of Hindi, Gujerati and Telugu. Their girls are married before puberty and widow remarriage is forbidden. They are makkathayys and their number is 1,397 which shows a small decrease since 1921 .

Yanlyan
$\underset{\substack{\text { Yanyan } \\ \text { Yapigarais- }}}{\substack{\text { and } \\ \hline}}$
yan.)
516. Vāniyans appear to have come from Kāvertipumpattanam, the capital of the Chola kingdom. They claim to be Vaisyas and style themselves as Chettiars. Tradition says that the Vanniyans are the descendants of 1,000 children created by Brahma after a yaga and nursed and taken care of by Goddess Vāni (Saraswathi). Being comprised of 1,000 gotras and having inhabited the Nagarams, they are also known as Áyitavar and Nagarathăr. The Tamil-speaking Vāniyans wear the sacred thread and have Brahmans to offciate as their priests. Widow remarriage is not allowed and makkathayam law of inheritance is followed. The Malayalam-speaking Vanpiyans do not wear the sacred thread and are like Malayalis in their manners and customs. Their present population is 22,527 which shows an increase of 21 per cent. during the past decade. 661 Vaṇiyans have been returned as Christians at this census.

Yolan (include
Yelan (includ-
ing Kusavan.)
517. Velăn is the Malayali section and Kuzavan the Tamil section of a caste whose traditional occupation is pottery making. The two sections neither intermarry nor interdine. As a rule, Vêlans are makkathayis, but matumakkathayyam is followed in Trivandrum taluk. In their manners and mode of dress they resemble the Näyars. The Kusavans are said to have migrated from Tinnevelly. They wear the sacred thread and resemble the Vellạars in their customs and manners and follow makkathayyam law of inheritance: Their widows are allowed to remarry.. Before the introduction of brass vessels the temples in South Travancore had each a Kusavan attached to it for the supply of pots. The Veläns and Kusavans together have increased from 8,857 in 1921 to 12,377 in 1931, or by nearly 40 per cent., but in 1921 the number recorded showed a fall of 2.6 per cent: from that of 1911 .
Tellalan.
518. Vellalas form an important major community in the Tamil districts. The Saiva Vellàalas, including the Saiva Muthaliyärs, Karaikattu Vellạas and other occupational sub-castes who are garland makers or Püjaris, claim the highest position among the different sections of the community. The Nānjānäd Vellalaas who were marumakkathäyis till very recently are found largely in Nânjanăd comprising Thovala and Agasthiswaram taluks.

The mother-tongue of the Vellalas is Tamil.` Evidence contained in ancient Tamil literature goes to show that the Nayars and the Vel!ajas were originally of the same tribe. According to Gopinatha Rao the word Venad is composed of $V$ el and nad, i, e., the land of veils or chiefs,* and the Sangam literature shows that the Velirs or Vels who were a fighting class were brought to the Dravidian land from Dwärasamudra. It is said that the word 'vel'" is only a Tamil synonym for "Nayakan" meaning "chief" and we have already seen that Nayyar is only a contracted form of Näyakan.' There is also evidence to show that the people of the Malai Mandala of the Sangam literature had taken up military service under the Cholas and Pändiyans and received distinguished titles from them and that in their origin they are, therefore, to be identified with the Vellirs or Vellajas.

The Vellajas of Nãnjanãd are said to have come from Madura in the first century A. D. and those in Shenkotta along with the Pandalam chiefs, while others found in Parur claim Valliyour and Palghat as their original homes. A large portion of Tinnevelly district once formed an integral part of Travancore and there is so much in common between Nängunerti and Nänjanàd that it is probable that most of the families of Nanjanâd Vellàlas came form Nängunerri. It is said that the inhabitants of Nänjanād adopted matumakkathay yam system

[^48]of inheritance in order to demonstrate their loyalty to the then ruler of Travancore who defeated the Pandiyan ling and prevented him from diverting the waters of the Parali river from Nänjanad to the other side of the Chats.

Among Vellịas marriage takes place before or after puberty and generally the parties are cross-cousins. Remarriage of widows is not allowed and divorce is not permitted among the Makkavali Vellaalas. Inheritance is in the male line except among the Nānjanàd Vellalalas. The total population of Hindu Vellalas according to the present census is 69,627 as compared with 57,997 at the last census, showing an increase of $20 \cdot 1$ per cent. The Nänjanäd Vel!ălas number 27,534 and others 42,093. Besides these, 1,078 Christian Vellạlas have also been returned in this census.
519. Virasaivas are stated to have been residing in Travancore from very early Yiracaivap times. They are the followers of the Sarankal Mutt of Kumbakonam which had its (Pantaram, representatives in various parts of Kerala, their descendants, called Matavathies, being found Yairañ, Yagan). in different parts of Travancore. The members of this community are known by different names, such as Pantäram, Sankham, Vair̄āgi or Vairiāi and Yōgisiwaran, the last two being the followers of the Murughi Mutt in Mysore. They wear 'Sivalingam' and bury the dead in a sitting posture. The Vairavis claim to have come to Suchindram from Madura about 500 years ago and migrated from there to the other taluks. Those living in South Travancore speak Tamil and the rest Malayalam. Some of the Vairāvis keep front tuft while others wear back tuft. In dress and ornaments the Vairāvi women resemble Pandy Vellàlas. The Yōgiswarans who are found in Nedumangad taluk claim to be the descendants of a yōgi or saint. Most of them are now agriculturists. Post-puberty marriage is the rule among the Virasaivas and they are all makkathayis. The Virasaivas who were returned under Pantäram or Vairãvi at the last census have increased from 15,354 in 1921 to 19,555 , or by 27.4 per cent. which is quite normal.
520. Who are the Depressed Classes? It is not possible to give an answer to this Depressed question which will be applicable to all parts of India. Even in a particular locality where clames. conditions are more or less uniform it is dificult to find a sure basis for distinguishing the Depressed Classes from other castes. According to the instructions issued by the Census Commissioner for India the Depressed Classes are the untouchables. But untouchabilityexists not only between the depressed and the non-depressed but also to a certain extent between the different castes of the latter. The right of entry into temples may be taken as the best criterion to distinguish between these two classes of Hindu population in Travancore. There are certain castes who are allowed to enter into the inner premises of the temple, others who could enter into the outer premises only and there are still others who could only remain outside the walls enclosing the precincts of the temples. These latter are generally called the Depressed Classes. A fuller descriptioniof this basis of division is given in Appendix II to this Report.

The definition of the term "Depressed Clasces" accepted by the Indian Franchise Committee is the same as the one prescribed by the Census Commissioner for India. The. latter says, "I have explained depressed castes as castes; contact with whom entails purification on the part of high-caste Hindus. It is not intended that the term should have any reference to occupation as such but to those castes which by reason of their traditional position in Hindu society are denied access to temples for instance, or have to use separate wells or are not allowed to sit inside a school house but have to remain outside or which suffer similar social disabilities...................It was decided that Muslims and Christians should be excluded from the term "depressed class" and that, generally speaking, hill and forest tribes who had not become Hindu but whose religion was returned as tribal, should also be excluded." Agreeing with the above views the Indian Franchise Committee say, "We consider, for reasons which we state below, that the term 'depressed classes' should not include primitive or aboriginal tribes, nor should it include those Hindus who are only economically poor and in other ways backward butare not regarded as untouchables. "We are of opinion that the term should be applied only to those who are untouchabler.": The tests of "untouchability" accepted by the Committee are :-
(I) Denial of access to the interior of ordinary Hindu templea.
(2) Causing pollution
(a) by touch
(b) within à certañ distance.

[^49]Aecording to the definition of the term and the tests of untouchability accepted by the Census Commissionet for India and the Indian Franchise Committee，the population of the Depressed Classes in Travancore may be put down at 1，787，380．They form 57 per cent．of the total Hindus or 35 per cent．of the aggregate population of the State．A brief description and the numerical strength of the more important depressed castes found in Trarancore are given below ：－

Adi－Drayida． 521：There is a move among the educated section of some of the Depressed Classes， Âdi－Dravida．By this means they hope to be able to bring about the fusion of the different castes and elevate themselves in social status．It is too early yet to say how far they will succeed in this attempt．The movement was started in Madras Presidency even before the last census；but it has spread to Travancore only recently and 966 persons have been recorded under Âdi－Drāvida at the present census in this State．

522．The word＂Aiyanavar＂＇appears to have been derived from＇Aiyan－Avar， meaning the worshippers or followers of．Aiyan or Aiyānanan（Siva，the five－faced）． Tradition，says that the Aiyanavar were originally the inhabitants of Alakanadu corres－ ponding to the present Tamil districts of Arcot．This is corroborated by the Madras Census Report of 1901 which states that the＇Eiyanar＇was a distinct sect of people who－ did not live in villages but in forts of their own at Ambur．Vellore and other places． After successive settlements in different parts of South India they are supposed to have－ migrated to South Travancore via Aramboly and lived for some time near Pannivaikal． They are now foumd mostly in Kalkulam，Vilavancode，Neyyattinkara and Nedumangad． taluks．During the last three generations an overwhelming majority of these people embraced＊ Christianity so much so that at the present census none has been returned as Hindu． The Christian population of this caste now stands at 6，414．Makkathâyam is their system： of inheritance．

523．Alavan is a small Tamil－speaking community found in Manakudi and Vatriyur in South Travancore．They are the descendants of the seven families of expert workers． in salt－pans brought from Madura three or four centuries ago．They have adopted the tite＂Chithira Villi＂and their salt－pans are called Chithira Villippanai．＂Their girls are married either before or after puberty．Inheritance is in the male line．Their number－ is only 734.

524．Ampattan is one of the barber castes．Among them there are two sections，one speaking Malayalam and following marumakkathayam and the other speaking Tamil and： following makkathayam．In all the previous Census Reports both the sections were shown． ünder Ampattan；a term now generally disliked by most of them except the Tamil speaking section in Soath．Travancore．＇These latter are known by different＇names，such as Kutimakkal，Nâvitan，Násuvan，Pränōpakāri，etc．．Among them marriage of girls takes place－ before or after puberty．A husband or wife desiring to effect a divorce has to pay a sum of Rs． 100 to the other party．Property descends from father to son．

The Malayalam－speaking barbers are generally found in Central and North Travancore and are known as Kshutakan，Velakkithalanäyar，etc．They are generally marumakkathayis．There is no intermarriage between them and the Tamil－speaking． barbers．In accordance with the general sense of the community of matumakkathayam． barbers they have been separately censused this time and shown under Velakkithalanayar， wiile the makkathayi section alone has been included under Ampattan．The latter －numbers only 742，of whom 437 are Christians and 305 are Hindus．＇

525．Arayans are fishermen by profession．There are various traditions as to their origin．One is that they are descendants of the sage Parásara and Malsyagandhi and that they came to Travancore from the banks of the Kaverti in South India．Another，accord－ ing to Dheeoarólpathi，is that they are the Âryan descendants of king Dushyantha of putanic fame and that they were brought to Travancore from the banks of the Krishna river by the Chempakaś⿱亠乂⿰丿丿⿱日十

The Arayans speak Malayalam and resemble the other Malayalis in their manners，customs and mode of dress，Their women may．be married either before or after puberty and a＇bride price is usually paid．Widow remarriage is permitted and polygamy is common．They are makkathayis．

Closely allied to the Arayans are the Marakkäns, Mukkuvans, Nulayans and Valans, who are also fishermen castes living in coastal area. Of late the educated younger generations of these castes have been carrying on propaganda to unite and bring them all moder the common name Arayan. Though there is as yet no social fusion of these castes the propagandists have succeeded to a considerable extent in getting some of them returned as Arayan at this census. Consequently, the number of Arayans has swelled up with a corresponding fall in the numbers returned under Marakkān, Mukkuvan and Nulayan; though not under Välan. The total number of Arayans now stands at 27,000 consisting of 23,380 Hindus and 3,620 Christians. The number of Hindu Arayans returned at the last census was 9,142 only.
526. Bharathar is a Tami-speaking community of fishermen found at Cape Comorin Bharathar. and the neighbouring coastal villages. They were also known as Paravans in earlier days. There is a tradition that the forefathers of these people came from the Tamil districts of South India whither they had gradually moved down from Ayodhia which was their original home. While living at Kumatimuttam they were baptized as Roman Catholics of Latin rite by the Rev. Vas and St. Francis Xavier. The converted Villavarayans of Cape Comorin trace their descent from Villavarayan, a great Parava king to whose position and power an inscription, about 800 years old, in the temple at Cape Comorin bears testimony. Bharathars are makkathayis. Their number is 8,944 of whom only 275 have been returned as Hindu and the remaining 8,669 are Christians.
527. Tradition has it that the Chackaravars originally came from Kävēripūmpattanam, Chackaravar. an emporium of trade in the Cholla kingdom, which comprised the modern districts of Trichinopoly. Tanjore and South Arcot, and that they were then known as Saiva Chetti Vellalas. One of the Chola kings having given a daughter of his in marriage to a son of his chief rinister (Kâvithi), their descendants were disowned by the Saiva Chetti community and the latter thus developed into a separate community called Kāvēripattanakkār or Kāvetiyär who in course of time migrated to the southern regions.

This community was shown under Kāvathi in the 191.1 censusus. ${ }^{\text {4 }}$ 'Kāvathi is a barber caste while Chackaravars are weavers and merchants and there is neither interdining nor intermarriage between them. Since 1911 Kävathis, with a view to raise their social status, have begun to adopt the name "Chackaravar." The latter, being anxious not to get mixed up wifh the intruders, have now changed their name to "Kéralamuthali'" and thus a new caste has sprung up at this census. It is a problem what the K.erralamuthalis will do when the Kävahis also follow suit and take on the name of Kéralamuthali at the next census.

Chackaravars are Tamilians and are makkathayis. The number returned atthis census is 5,644 of whom 3,536 are Hindus and 2,108 are Christians. As some. Chackaravars have been returned under Kéralamauthali and some Kãvathis under Chackaravar, there is no good in comparing the figures of this census with those of the last.
528. Chakkiliyans are probably immigrants from the Telugu districts. They Chakkilyan are more or less equal in status with the Parayans and are engaged as scavengers and street (indiduding sweepers in municipal towns. They speak Telugu and are supposed to be the progeny of the soldiers of the Vijayanagar lings. Their girls are married atter puberty, the bridegroom being sometimes younges than the bride. Widow remarriage and divorce are common. Their traditional occupation is worling in leather. The Chemmāns are an indigenous caste of leather workers. Both these classes of people speak Tamil and follow makkathayam law of inheritance. They number 6,328 of whom 6,188 are Hindus and 140 are Christians.
529. Chävalakkärans form a caste by themselves whose occupation is fishing and chaxalakkaran. fish trade. They carry on fishing chiefly in fresh water tanks and rivers. They also buy fish from the Paravans and Mukcirvans of the sea coast and sell it in markets. Many of them learn drumming and are engaged for this purpose by the low castes on marriage and other festive occasions. They speak Tamil and are makkathayis. The Chävalakkārans found in Shenkotta taluk have adopled the name "Vanniyans." Their number. is 2,561 comsisting of 1,730 Hindus and 831 Christians.
530. Chäyakkars are found chiefly in Central Travancore. . They are Chayakkaraa. Tamilian in manners and customs and follow makkathāyam law. Their girls are married before or after puberty. Polygamy and widow remarriage are common. Chāyakkars returned at this census mumber 2,168. According to the last census the number was only 521 ; but probably a good many of Chayalkars were then included under other wasberman castes.
531. Ilavas are a thriving community on the Malabar coast. They are also known as Chōvans in Central and North Travancore and as Tīyans in Malabar. They are supposed to have migrated to Keralala from Ceylon which was called Ilam in Tamil and Simhalam in Sanskrit literature. The ancient Tamil works as well as numerous inscriptions show that the Cholla and Pāndiyan kings who frequently invaded and conquered Ceylon had greatly encouraged the immigration of Ilavas to South India.

The local tradition regarding the immigration of llavas is as follows:- An Ilathunäd Raja who visited Kerfala found the land suitable for the cultivation of the coconut palm and requested the Kerala chief to give him some land for this purpose. This request was granted and four men were sent from Ceylon to cultivate the coconut palm in Kerala. They were bachelors and with the consent of the Raja they married local women. As the Raja of llathunãd did not get any return from the coconut gardens in Kérala; he recalled his men. Their wives and children were left behind and they came to be known as Ilavas. Some Tamil scholars fix Siam as the original home of the Tiyas on the analogy of the word "thiyan" which is the name given to a particular kind of ruby found in Siam. Dr. Caldwell says "It is tolerably certain that the llavas and Tiyans who cultivate the coconut palm of Travancore are the descendants of Shannar coolies from Ceylon" and this view is supported by Dr. Thurston.

The chief occupation of the llavas is the cultivation of the coconut palm and the manufacture of coconut products. But many of them have now taken to agriculture and commerce and are in a very flourishing condition.

Cross-cousin marriage prevails among them and thalikettukalydnam which was once very common is being replaced by the sambandham form of alliance. Their inheritance which was formerly a mixed system of makkathayam and marumakkathayam is now becoming more and more patrilineal, especially after the passing of the Ilava Regulation in 1925. There is a small section of llavas speaking Tamil and Tamilian in habits and dress. They are found in South Travancore. There are four clans among them. Marriage within each clan is prohibited. A woman retains her clan after marriage and the children take after her clan. Inheritance among them is in the male line. They bury their dead, while the Malayali Ilavas resort to cremation.

The total popluation of Hindu llavas now stands at 869,863 . They numbered 667,935 in 1921 and 546,265 in 1911. During the decade 1911-1921 they increased by 22.3 per cent. when the general increase in the population was 16.8 per cent., and by 30.2 per cent. in the decade 1921-1931 when the total population increased by 27.2 per cent. Besides the Hindu Ilavas, 2,311 Christian llavas have also been returned at this census.
532. Ilavathis are the barbers of llavas. Formerly they were also their priests. They follow the same law of inheritance as the llavas and have admission to their temples. The majority of them have, however, given up their traditional occupation and taken to medical and other professions. They claim to have belonged originally to the llava caste. Their present number is 6,955 .
533. Kaikolars are Tamil-speaking weavers allied to Saliyars. They are known also as Sanguntha Muthalis and are found largely in Tinnevelly and Chingleput districts of the Madras Presidency. There are about 150 families of these people at Köttar near Nagercoil. They follow makkathayam law of inheritance and do not permit widow marriage. Inscriptions found at Parakkai and other places in South Travancore show that the Kaikolars were once attached to temples. The title Muthalaly now assumed by these people has no special significance as to their caste. Theren are only 455 Kaikolars in Travancore.
534. According to the Travancore Census Report of 1911 the Käkkalan is the indigenous tailor caste of Malabar, who has now been reduced to the status of a wandering community. The members of this caste are divided into four exogamous clans, two of which only are found in Travancore. They are identical with the Kâka Kuravans of the Tamil country. Their traditional occupations are tattooing, boring the lobes of ears, and palmistry; but many of them have now taken to tailoring. Polygamy which was largely in vogue among them is being given up. Girls are married before puberty and bride's price is generally paid. Divorce is very common. Inheritance is in the male line. The younger generations of Kakkàlans wish to change their caste name to Siddhanar. Their number according to the present census is 1,666 .
535. Kaniyāns found in Travancore consist of two classes:- Kaṇiyăns Kaniyan. proper who follow the profession of astrology, and Thinta Kaniyanns whose occupation is umbrella making, exorcism, etc. The name 'Kaniyann' is said to be derived from 'Ganika' meaning astrology. Their girls are married before or after puberty and they observe both thäliketukalyänam and sambandham forms of marriage. Inheritance is in the male line. Their present population is 15,652 which is 24.6 per cent. more than that of the last census.
536. Kathikkäran is a small community—only 161 persons-of blacksmiths who Kathlkkaran. were formerly engaged in the smelting of iron ore and the manufacture of steel. The -ore was obtained from a mine which once existed at Vannäthumkulam, a place about two miles to the east of Suchindram. Wih the advent of steel articles from the West the mine was closed and the Kathikkars lost their profession. They are now, found at Marungür.

Kathikkars had their own barbers who were called Panisivan. A few families of them are now found at Kötar, their present occupation, however, being woodturning and lacquer work. They trace their origin to a poor blacksmith in Nānguneeri in Tinnevelly district who undertook to serve as barber to the blacksmiths at Marungür and settled there with his family about a century ago.
537. Kāvabhis are barbers of the Nādärs. They are divided into four clans, Kavathi. namely, Puluvankila, Pulakila, Nayinākila, and Valakila. A man cannot marry from his own clan. A woman retains her clan after marriage and her children belong to her clan. Inheritance is in the male line. The present population is 3,696 , of whom 2,293 are Hindus and 1,403 are Christians. At the last census the Hindu Kävathis alone numbered 3,124 . As has already been observed, some of them have been returned as Chackaravar :at this census.
538. When dealing with the Chackaravar caste I have pointed out the origin of the Keralamnthali Katralamuthali. The educated section of the Chackaravars has "carried out vigorous .propaganda to have the members of this community returned as Kéralamuthali. The -census has recorded 3,005 persons under this new name, of whom 1,423 are Hindus and 1,582 are Christians. One noteworthy feature of this community is that the Hindus and Christians stand united in all social and political matters notwithstanding their religious -differences.
539. Kuravas are a class of agricultural labourers found in different parts of Karavan the State. They are supposed to be allied to Kurumbas and Vētas. There are three sub-divisions among them, namely, Kunta Kuravan, Käkka Kuravan and Pändy Kuravan, the first being the most important. The Pāndy Kuravas are said to have migrated from the Tamil country and resemble the Tamilians in their customs and mode of dress, while the other Kuravas resemble the Malayalis. The Pändy Kuravas are makkathăyis and the others marumakkathäyis.

Kuravas were once a powerful and influential community. At the beginning of the twelfth century one of their chiefs, called Nanja Kuravan, took possession of Nānjanād (the southern part of Travancore) and established himself as the ruler thereof. He was ultimately subjugated by the Travancore ling and his territory annexed to this State. The Kuravas subsequently lost their influence and have now been reduced to the position of a very backward community of untouchables. There is a small section of them, still very primitive in their habits, living in the forests. They are called the Malankuravas or Malayadiyärs. Their strength, however, is gradually dwindling down, on account of such of them as come in contact with their kinsmen in the plains, giving up their tribal religion and customs and fusing with the Hindu section. The few who still retain their tribal religion have been returned under primitive tribes. The number of Kuravas returned as Hindu at this census is 87,071 as compared with 75,345 at the last. Besides these, 8,158 persons have been returned as Christians and 66 Malankuravas under Tribal Religion.
540. Marakkāns are fishermen by profession, mainly Hindu, found chiefly in marakkan. Karunagapally and Sherthala taluks. Their mother-tonge is Malayalam and they resemble the other Malayalis in their customs and mode of dress. The Marakkàns of Karunagapally are makkathayis, while those of Sherthala are marumakkathayis. Their number has decreased from 4,215 in 1921 to 353 in 1931. The reason for this decrease has :already been stated in paragraph 525 above. 1,301 Marakkāns have also been returned as -Christians at his census.
541. Maravas are natives of Tinnevelly district. Travancore has a smalf number of them scattered over the frontiers in the south, in the High Range, and in: Shenkotta taluk. The Maravas are also known as Thalavans, Thevans or Vanniyans. Most of them are agricultural labourers. Polygamy is common among them and widow marriage is allowed. They follow makkathäyam law of inheritance. It is said that there is a custom still extant in this community that when a girl is married the bride is given away to the bridegroom by her maternal uncle and not by her father. This is considered to be a relic of marumakkathayyam which once prevailed amohg them. According to the present census there are 14,399 Maravas in Travancore, whereas in 1921 their number was only 9,773 . This large increase of $47 \cdot 3$ per cent. is due to the migration of Marava, coolies from the Tamil districts of the Madras Presidency to the estates in the High. Range.
542. The term "Mukkuvan" is believed to be a corruption of "Mukthavar;' meaning a possessor of 'Muktham' or pearl, and indicates that the Mukkuvans were originally engaged in pearl fshing. They are found along the shores of the sea and backwaters. There is a tradition that they are immigrants from Ceylon. Marriage of girls takes place. before or after puberty, and divorce is allowed. They follow a mixed system of makkathayam and matumakkathayam. The number of Hindu Mukkuvans returned at this census is only 596 as compared with 3,739 returned at the last census. This decrease is due to the same reason as that which contributed to the fall in the number of Matakkans. 30,539 Mukkuvans have been returned as Christians at this census.
543. Nādärs form one of the major communities in South Travancore as well as in the neighbouring district of Tinnevelly. Formerly they were known as Channarar, à name which the community now dislikes. Dr. Caldwell considers that like the Ilavas the Nädärs were immigrants from the northern coast of Ceylon in very early times. The Nädärs are called Nädalvars in inscriptions, which shows that they were once great landlords. They now describe themselves in documents as 'Valamkai Uyarkonta Iravikula Kshatriyar,' meaning Kshatriyas of the Sōlär race belonging to the right hand faction. With regard to this question Mr. A. J. Stuart observes in the Tinnevelly District Manual that the Chännärs (Nädärs) "arrogate to themselves titles which imply a higher place in the social scale than that assigned to them by the general accord of other castes." Their girls are mairied after puberty. Polygamy which was prohibited formerly is now allowed, but not divorce. They follow makkathayam law of inheritance. A large section of thecommunity has embraced Christianity. The population of Hindu Nädărs now is 233,982 . as compared with 200,838 at the last census, the increase during the past decade being 16.5 per cent. only as against a general increase of 27.2 per cent. in the population of the. State. It must, however, be remembered that the Nädarrs are one of the chief communities which contribute converts to Christianity. Information is not available as to the numberof Christian Nādärs at the last census, but at this census 168,573 Christians have been. returned as belonging to the Nädar caste, so that the total Nàdarr population, Hindu and Christian together, stands at 402,555 .
544. Nulayan is a caste allied to the Arayan. Its traditional occupation is fishing, but many of the members have now taken to agriculture. They resemble the other Malayalis in habits and dress, but are makkathayis. Their number now is 3,129, which shows a slight fall since 1921. This was probably due to some of them having returned themselves as Arayain.
545. Pallars are foumd in South Travancore and in the High Range and arosupposed to have come from the Tamil districts of the Madras Presidency. The carly Tamil literature of the Sangam period refers to this sub-caste as Mailans, who were originally a fighting class. They are now mainly agricultural labourers; but some are also weavers, especially of a coarse kind of cloth. They generally assume the title Pandiyan or Nayakkan. They are makkathayis. The Hindu Pallars have increased from 16,004 in 1921 to 29,880. This large increase has been contributed by the cooly population of the estates in the High Range who are temporary immigrants from the Tamil country. Besides the Hindus, 2,225 Christian Pallars have also been returned at this census.
546. Pànan, a small community in Travancore, consists of Tamil and Malayali sections. The former are tailors by occupation and are found chiefly in Köttar and Trivandrum. They trace their descent from the Yälpānars (singers) whose original homewas Yàlpāna (Jaffna). The ancient Tamill literature refers to the Yâpānars as singing tothe accompaniment of an instrument called $Y a l$ and this art was greatly patronized by the:
old Tanil lings. . After the decline of these langs the Yälpānars put aside their .instrument and took to tailoring. They are,makkathayis. Widow marriage is not permitted. The Malayali Papars are divided into four. clans. A woman retains her clan after her marriage and her children also belong to her clan. They are also makkathâyis and were probably Tamilians originally. In North Travancore the Pannars are professional musicians, drummers and magicians, and follow umbrella-making as a subsidiary occupation. The total number of Panaars at present is 3,812 .
547. Paravars found in the southern taluks are Tamilians, while those in the Paravan. -other taluks are Malayalis. In Thiruvella taluk they are known as Chākämars, and they now wish to be designated Sāktars. The Paravars are makkathayis' except in Kalkulam and Vilavancode where they follow a mixed system of inheritance. Burning lime shells is the traditional occupation of this caste. In some places they are engaged in making rattan articles, while in North Travancore the men's occupation is tee-climbing and the women's is washing clothes. The population of this caste has increasad from 11,079 in 192J to 13,602 in 1931 .
548. Parayas (Sàmbavars) are a class of agricultural labourers found throughout the parayan -country. There are different local traditions about their origin. In Vaikom they are believed (8ambayar.) to be the descendants of a high class Hindu who suffered social degradation for eating meat, while in Kunnathunad and Muvattupula they are supposed to be the descendants of Päkkanär. Dr. Caldwell derives the word "Parayan" from "parai" meaning a drum. The Parayans of the southern taluks speak Tamil, while those in the north speak Malayalam. All of them are makkathayis. As a rule their girls must be married before puberty. Widow marriage is allowed except in the southern taluks. In Kottayam intermarriage takes place between Hindu Parayas and the Christian converts. The Hindu Parayas number 70,684 at this census showing an increase of 12.1 per cent. only during the past decade. This is one of the major communities from which converts to Christianity are drawn. The number of Christian Parayas returned at the census is 71,680 .
549. Pulayas (Chetamar) are mainly agricultural labourers ${ }^{\prime \prime}$ found mostly in the pulayan central and northern taluks of Travancore. According to one tradition they were an (Cheramar.) influential community during the time of Chēramān Perumāls, and on the fall of the Cheria dynasty the members of the ruling family became petty princes holding sway in different parts of the country, such as Pulayanärkotta in Trivandrum, Kokkōthamangalam and Ulamalakkal in Nedumangad, Chāthannữ in Quilon and Aikaranād in Kunnathunad. How this community came to be called Pulaya is not known. The use of this name is now disliked and even resented by a section of the community, particularly the Christian converts, who are adopting the name 'Cheriamar,', which means the ancient inhabitants of Chëtranàd; but a few other prominent members are anxious to retain the nane Pulaya only.

Pulayas are grouped into two main divisions, diz., the Kilakkan Pulayas and the Padinjäran Pulayas, the latter ranking above the former chiefly owing to their abstention from ealing beef. Their mother-tongue is Malayalam. There are many exogamous clanis :among them and a man cannot marry a woman of his own clan. A woman retains her -clan even after marriage and her children belong to her clan. The males generally marry after their twentieth year and girls either before or after puberty. Widow marriage is allowed and divorce is common. Inheritance is either makkathāyam or marumakka.thayam.

The population of Hindu Pulayas according to the present census is 207,337 which is only 5.7 per cent. more than that in 1921. This small increase is due to their strength being depleted by conversion to Christianity. The Christian converts returned at this census number 157,813, so that the total population of the community, Hindu and Christian together, is 365,150 .
550. Pulluvans are a Malayalam-speaking class of astrologers, medicine-men, priests, and simgers in serpent groves. Inheritance among them is in the male line. Their number is only 527.
551. Ufali is the name of this caste south of Quilon and Thantān is the name -commonly used north of Quilon. Thantän is believed to be a corruption of the Sanskrit word (Untan ${ }^{-}$Dandan, meaning a person employed to administer the punishments inflicted on delinquents. Thantäns speak Malayalam and resemble the other Malayalis in their habits and customs. Makkathayyam is followed in Quilon and Karthikapally, marumakkathāyam in Karunagapally, and the mixed system in the other taluks. Their traditional occupation is
tree-climbing. At the last census Thantāns and Utalis, though they are of the same tribe were censused separately. Their total number then was 31,352 and at this census it is41,214 , showing an increase of 31.5 per cent.

Yelakkithalaneyar.
Yettakaran.
552. Valan is a Hindu community of fishermen living on the sea-coast and the shores of the backwaters in North Travancore. It is believed that the Valas are so called because they were originally the court servants of the Rajja of Cochin. Another interpretation is that the word Valan means an owner of 'Vala ' or net. It is also ${ }^{\prime}$ probable that the community got this name from the particular way in which they use the net in catching fish. Tradition says that the Välas were Arayans and that they became a separate caste. after one of the Perumals selected some of them for rowing his boat and conferred special. privileges on them. There are several exogamous clans among them and marriage between, members of the same clan is prohibited. Girls are married before or after puberty. They follow the mixed system of makkathāyam and matumakkathayam. They have increased from 17,733 in 1921 to 21,172 in 1931.
553. Vapnañ is found both in the Tamil and Malayalam districtsi Vannann. is the Tamil name and Mannān the Malayalam name. In Thiruvella and Minachil taluks they are also known as Fathiyan. The traditional occupation of Vannäns is washing clothes. Among. Mannäns, females wash clothes while males are exorcists, devil-dancers. and physicians. Among the Pathiyans the occupation of females is washing clothes and that of males tree-climbing. The system of inheritance is makkathayam except in Karu-nagapally taluk where it is marumakkathāyam. At the last census Vannäns were included. with Veluthädans. Vapnāns are none other than Mannāns and should, therefore, have been. included with the latter. The total population of. Vapinàns including Mappans and Pathiyans is now 16,022 consisting of 13,433 Hindus and 2,589 Christians.
554. Varnavar is a new caste name which has recently been adopted by some advanced members of Vanṇāns, Mannaans, Pathiyans, Ettalis, Netriyans, and similar minorcastes who follow the traditional occupation of washing clothes and observe the same social customs. Their object is to unite these castes into one. Only 166 persons have been. returned under this new name. But if the idea of fusion catches their number is bound to increase at the next census.
555. Velan speaks Malayalam and resembles the other Malayalis in mannersand customs. There are several exogamous clans among them. A woman retainsher clan after marriage and her children belong to her clan. 'Girls are married before or after puberty. Makkathayam is followed in Kottayam, Muvattupula and Minachil, the mixed system in Chirayinkil, and marumakkathayam in the other taluks. Their traditional. occupations are sorcery in all the taluks, lime-shell burning in Kottayam, Vaikom and Minachil, umbrella-making and tree-climbing in Vaikom, Sherthala and Minachil, and washing clothes in Sherthala, Kunnathunad and Muvattupula. The population of Velan $h^{\text {as }}$ increased from 13,789 to 16,253 during the last decade.
556. Velakkithalanayyars are barbers. According to ancient literature they once belonged to the Nayar community but became separated from it and formed a distinct caste, neither intermarrying nor interdining with the Nayars proper on account- of their occupation. They are matumakkathäyis and are just like the Näyars in all their social customs, habits and ceremonies. By a recent judgment of the High Court of Travancore the NayarRegulation has been made applicable to the Velakkithalanãyar also.* This caste was shown. under Ampattan in the last Census Report ; but now it has beer separately censused and the number is 30,603 .
557. Veluthảdanayar is another caste which is believed to have once belonged tothe Nayar community. Its occupation is washing clothes. Like the Velakkithalanayyars, the Veluthàdanāyars also became a separate caste of inferior social status in course of time on account of their occupation. They are also marumakkathayis and do not differ from: the Nayars proper in their customs. They too have been brought within the scope of the Nayar Regulation by a judgment of the Travancore High Court in Criminal Revision: Petition No. 497 of 1105 . $\dagger$ Their number according to the present census is 14,878 .
558. Vettakarans are found near Thètor in Agasthiswaram taluk. They are supposed to have been hunters who worshipped Kannimar, a group of even female deities whose figures engraved in stones are found in the neighbourhood of their villages. They are makkathäyis and are distinct from Vellajars who neither interdine nor intermarry with. them. Their number is 498 only.

[^50]559. Yàdavas' or Idayas are a pastoral class of people found chielly in Thovala Agasthiswaram, Kalkulam and Shenkotta taluks. They are also known as Paundans in Thovala, Vadugidayar in Shenkotta, and Könär in some other taluks. The Yâdavas found in the southern taluks are supposed to have come from the Tamil districts of the Madras Presidency in very early times. Their mother-tongue is Tamil and they are mostly Tamilian in their manners and customs. In South Travancore marriage is compulsory for their girls, but it may take place before or after puberty. The. Yädavas are makkathayis and their traditicnal occupation is cattle breeding. The number returned at this census is 8,457 .
560. A detailed description of the physical characters and social customs of the primilize primitive tribes is given in Appendix I to this Report. Here I only wish to make a few Tribes general observations with special reference to their numbers. I must state at the outset that the primitive tribes are fast losing their primitive religion and customs. The opening of a large number of estates in forest regions has provided facilities for their coming in contact with the men of the plains. Some of the tribes are even deserting their habitations in the forests and coming down to the plains to earn their livelihood. In this way as well as by the penetration of the civilized man into the forests, the primitive tribes: are being brought under the influence of the Hindus and the Christian missionaries. Large numbers of them whose religion was originally tribal are now professing Hinduism or Christianity. In the previous censuses no attempt was made to record the numbers of the tribes who have been thus converted into Hindus or Christians. At this census, however, special instructions were issued to the enumerators to record these numbers separately and I think I may claim that the figures collected are fairly accurate. There are certain tribes which are now found both in the forests and in the plains, e. g. 3 Käpikkāran, Kuravan, Ullătan, and Vetan. The Känikkāran who has left his home in the jungles and begun to live in the plains has changed his name into Malavelan. In their social customs there is no difference between these two sections, and they could only be regarded as belonging to the same tribe. In the previous censuses the Malavelan might have been wrongly included under Velan, a tribe generally found in the plains and treated as one of the Depressed Classes. At this census the Malavelans have been included not under Velan but under Kañikkäran to which tribe they really belong. In the case of Kuravas, Ullatans and Vetans, those living in the jungles were treated separately from those found in the plains at the previous censuses, the former being designated Malankuravans, Mala-U!laztans and Malavètans and the latter simple Kuravans, Ullatans and Vetans. There is no difference in their customs and hence there is no justification to make this distinction. The distinction has, therefore, been abandoned and both sections of these tribes have been included under Kuravan, Ullatan or Vētan in this census.. Again, unlike in the previous censuses, the Christian converts from the primitive tribes have also been separately censused this time. The primitive tribe, known as Thantapulaya, who was formerly included with the Pulayas on a wrong analogy, is shown. separately in this census. For these various reasons it is not possible to institute a comparison between the numbers of the primitive tribes returned in this and in the previous census. This fact will be evident from Imperial Table XVIII which, as it stands, contains many inconsistent and inexplicable variations. In regard to Muthuvans it must be pointed out that the large increase in their numbers from 227 in 1921 to 1,301 in 1931 is probably due to more accurate enumeration this time. After the compilation of the caste table I had this fact verified by the Divisional Forest Officer who was in charge of the enumera: tion of this.tribe.
561. The numbers of the different primitive tribes returned at the present census are given in the statement below. The total population now stands at 128,838; of whom 115,151 are Hindus, 10,780 are Christians, and 2,907 belong to the Tribal Religions. As the numbers of the Hindu and Christian converts from the primitive tribes were not recorded at the previous censuses, it is not possible to say whether any tribe is declining or not.. A comparison of the figures at different censuses can, however, be made to demonstrate the process of rapid Hinduization that is taking place among these primitive tribes. The number of animists returned in 1901. . when they were separately censused for the first time was 28,193 . It decreased to 15,773 in 1911, to 12,637 . in 1921 and to 2,907 in 1931 . The only inference that can be drawn from these figures is that the Tribal Religions are getting depleted gradually and that the numbers they lose the Hindus gain largely and the Christians to a small extent. It may be noted that of the population of the primitive tribes shown in the table below, the Hindus, numbering 115,151 , have been included in the
figures of the Depressed Classes given in paragraph 520 above, and that the number of the Christian converts is included in the Indian Christians shown in paragraph 565 below,


Mindu castes sud tribes classified according to their system of inheritence.
562. The question of amending the Hindu law which governs the makkathayam communities is now being considered in some Indian States and Provinces. Mysore, for example, has introduced a Bill for the purpose in the Legislative Council and committed it to a Select Committee. Under the Hindu law the women are at a great disadvantage as compared with men in regard to the inheritance of property. The object of the reformers is to amend the law in such a way as to improve the status of women by conferring on them the rights now enjoyed by men only. It has been brought to my notice that sooner or later this question of amending the Hindu law in respect of the makkathayam communities in Travancore will come up for consideration and that it is desirable, therefore, to show in the Census. Report the number of persons likely to be affected by the amendment. I have accordingly shown in Subsidiary Table II at the end of this chapter the population of makkathayis, marumakkathāyis and the followers of mixed or doubful system of inheritance among the Hindu castes and tribes. Under this last class are included castes like the lilavas, Krishinanvaka and Nänjanād Vellălas who are partly makkathayis and partly marumakkathâyis and also tribes like the Pulayan and the Kuravan about whom it is difficult to say whether they are makkathayis or marumakkathäyis. According to this classification the total Hindu population of this State consists of 882,165 ( 28 per cent.) makkathāyis, 925,902 ( 30 per cent.) marumakkathayis, and $1,326,821$ ( 42 per cent.) followers of the mixed or doubful system of inheritance.
563. When enumeration was started there was some doubt as to who was an AngloIndian. It was decided at the conference of Census Offecrs held at Delhi early in January 1931 that the following definition of this term should be accepted for census purposes. - "An Anglo-Indian is a person whose father, grandfather or other progenitor in the male line was an European." According to this definition some of those who pass for Anglo-Indians will naturally drop out of the category. In the Census Report of 1921, my predecessor observes that the increase in the number of Anglo-Indians returned then is abnormal and that it "is evidently due to the inclusion among them of English speaking Indian Christians who adopted the European mode of dressing." By the application of the definition given above the numbers of Anglo-Indians have fallen from 3,82 in 1921 to 790 in this census. The largest number of them has been recorded in the Central Division, diz., 377, the Southern Division coming next with 286. Alleppey Kayankulam and Quilon in the Central Division, and Trivandrum in the Southern Division are the localitics where they are found in comparatively large numbers. The Northern Division contains only 41 Anglo-Indians and the High Range Division 86, most of whom are employed in tea and rubber estates.

[^51]564. The number of Eurropeans and allied races returned has increased from 389 to 587 since 1921. Most of them are engaged in rubber and tea cultivation, trade and other business. The increase in their numbers is due to the development that has taken place in these lines during the last decade. The High Range Division which contains the majority of the rubber and tea estates has the largest number (226) of Europeans. The Central Division in which are situated the commercial towns of Alleppey and Quilon contains the next highest number, oiz., 201, the Southern Division which can claim the greatest number of missionaries and nursing sisters has 138 Europeans and the Northern Division only 22 of them. Among the Europeans and allied races returned in this census: there are 456 British subjects and 131 others. There is no Armenian at all. At the last census there was one. Of the 456 British subjects, 290 are English, 77 are Scotch, 10 are Irish, 16 are Australian and two are Canadian.
565. The Christian population according to this census is $1,604,475$. Excluding, Indian from these the Europeans and Anglo-Indians who number 1,377 only, the remaining Christian, 1,603,098 are Indian Christians. The Indian Christiansmay be divided broadly into two classes, Syrian Christians and others.
r. 566. The expression "Syrian Christian," as it is now used, is not capable of a clear definition. It does not represent a race, because as Mr. William Crooke says, "They (the.Syrian and the other allied churches) have sprung from converts, as a rule, from the lower strata of the community, rather than from the higher classes, such as Brahmans and. Nayars, who are less susceptible of missionary efforts."* Nor does it refer to a particular Christian sect, because among the Syrian Christians there are some who owe allegiance to the Pope, others who are under the Patriarch of Antioch, other's again who are Protestants and still others who have their own Bishop and do not recognize any external spiritual head. Romo-Syrians do not intermarry with the members of other sects. Even in the same sect there is no intermarriage between the recent converts and others who embraced the faith in earlier generations. In spite of the vagueness and uncertainty attached to the definition of "Syrian Christian," a social convention has somehow grown up, by. which the community decides whether a person may be regarded as a Syrian Christian or not. Special instructions were issued to the enumerators to get as far as possible a correct return of. the Syrian Christians in this census. In spite of their best efforts some, whom the community. will not recognize as Syrian Christians, may have got into the fold, while others who should have been included with them may have been left out. Such discrepancies are inevitable and the numbers recorded should not, therefore, be taken as absolutely correct. The population of Syrian Christians, as returned in the census schedules, is 948,514 . In the last census their population was 617,049 which represented an increase of 8 per cent. only over the number returned in 1911 , though the Christians as a whole increased by $29 \cdot 8$ per cent. durring that decade. My predecessor has himself admitted the inaccuracy of the figure in 1921, but I think I may claim, that the present figure is more reliable.
567. : Indian Christians, other than those returned under Syrian Christians, number other Indian 654,584. Of these 151,197 persons have not returned their caste or tribe, but the remain- coristians.

Indian Christians by caste or tribo

tribes, whose individual strength is comparatively small.
ing 503,387, i. e.; 76.9 per cent: of the total, have done so. The instruction to the enumerators was that the caste or tribe of Indian Christians, in case they furnish the information, must be entered in column 8 of the schedule and otherwise they should be shown simply as "Indian Christian" in this column. The fact that $76 \cdot 9$ per cent. of the Indian Christians other than Syrians have given their caste or tribe, shows that the large majority of them desire to have this information recorded. The numbers of the important castes and tribes returned inder Indian Christians are given in the margin. Under "Others" are included the totals of the minor castes and

[^52]568. Strictly speaking, there is no caste among the Muslims, but there are a number of tribal, occupational or territorial groups. Theoretically, intermarriage and interdining between these groups are not prohibited, but in practice some of them do observe these restrictions. This is but natural, because the vast majority of the Muslims are only descendants of the converts from Hindu castes. Those of foreign origin are very few in number, almost negligible. Converts from the Hindus, living in the midst of Hindus, cannot but be influenced by the customs and practices prevalent among them. It is not, therefore, a matter for surprise that some of the Muslim groups observe social exclusiveness and restrictions on marriage like the Hindus. There is a small section of them, probably not more than about 7,000 found in some parts of Chirayinkil and Ouilon taluks, who follows marumakkathayam system of inheritance like the Nayars. A Bill to amend this system on the lines of the Muhammadan law has been introduced in the local Legislative Council by a Muslim representative. Restrictions on intermarriage and other social customs are also fast dying out and the educated members of the community are advocating their complete removal.

As it stands, the community is divided into a number of groups. The numbers returned under different groups are not, however, trustworthy. With the spread of education and the improvement in the economic condition of the community the members of one group sometimes adopt the name of another group considered to be of a higher social status. Thus a Thulukkan may become a Ravvuthar, and a Sheik a Saiyad. Some return themselves simply as Musalman without specifying the groups to which they belong. Owing to these causes of variations the numbers returned under each group at different censuses cannot be compared.

History tells us that Malabar had carried on trade with Egypt and Arabia from very early times. Bartholomeo speaks of the Musalmans who came to Malabar in the reign of Caliph Valid (A. D. 710), and various other travellers have recorded from time to time the advent of Egyptian and Arabian merchants and the formation of Muslim colonies at Quilon and other ports in Travancore. The descendants of these early settlers and of the converts they made are called Methans. Their mother-tongue is Malayalam. Their women do not generally observe purdah and in their habits and customs they are like the Malayalis. It is among these that we find the marumakkathăyam section. Some centuries back a small colony of Muhammadans came from Arabia and settled in Cranganore. Later on their descendants migrated to Travancore and are now found in Alleppey and other places in North Travancore. They belong to the group known as Thangal. During the invasion of Travancore by Tippu in the 18th century a number of Hindus in North Travancore were forcibly converted into Muslims and their descendants, now found mostly in Parur, Kunnathunad and Muvattupula taluks, are known as Jönakans. They correspond to the Mapillas of British Malabar, but unlike them they are a peaceful community and have not earned a notoriety for rebellion. During the reign of Räma Varma in the latter half of the 18th century, Dewan Raja Késiava Das, to whose foresight is due the development of the port of Alleppey, the most important commercial centre in Travancore, brought some Bora Musalmans and Kutch Memons from Sind, Kutch and Gujerat, settled them at Alleppey and encouraged them in opening trade with Bombay. The descendants of these settlers are still there carrying on trade with Bombay, Calcutta and other Indian and foreign ports. During the reign of Märtānda Varma, the maker of modern Travancore, in the earlier part of the eighteenth century the Nawab of Carnatic sent an army of Muhammadans to help the Raja to crush internal rebellion. They belonged to the group of Dakhäni Musalmans. Their descendants are still here engaged in trade, Government service and other occupations. Their numbers have increased in recent years by fresh arrivals from Bombay and other places. Travancore has had commercial and political relations with the adjoining Tamil country from very early times and consequently there have been constant streams of migration of Tamilians to this country. Among them there were large numbers of Muslims also who came for purposes of trade. Some entered the country through Âramboly and settled in the southern parts of the State. Their descendants are known as Thulukkans, while others came through Âriefnkāvu and other mountain passes further north. Their descendants who are now found in Shenkotta, Pathanapuram, Minachil and other places are called Ravuthars. Both the Thulukkans and Ravuthars speak Tamil and are Tamilian in their habits and dress. Labbai is another group of Tamilspeaking Muslims. Originally the name "Labbai" was a title given to the persons who served in mosques and presided over religious ceremonies. Latterly, others have also adopted this title and thus a separate group has been formed.
69. The total Muslim population, according to the present census, is 353,274 which shows an increase of 30.6 per cent. during the last decade against the general

Olastification of Muslims

Kutch Memon .
1,319
Dakhsni Musalman . (i) Moghal (ii) Patthīn (iii) Salyad (iv) Sheik

| 31 |  |
| :---: | :---: |
| 5,033 |  |
| 858 |  |
| 1,266 |  |
|  | 249,685 |
| 114,005 |  |
| 134,746 |  |
| 914 | 91,109 |
|  |  |
| 10,421 |  |
| 40,210 |  |
| 40,478 |  |
| 3,645 |  |
|  | 888,274 | increase of 27.2 per cent. in the total population. In the previous decade they increased by 19.4 per cent., while the increase in the aggregate population was $16 \cdot 8$ per cent. only. The numbers returned under different groups, unreliable as they are, are given in the margin. It will be seen therefrom that the bulk of the Muslim population of this State belongs to the Sunni sect, those belonging to Shia sect numbering only 1,319 out of a total of 353,274 . The Sunnis are again divided into four sub-classes and each of these again into a number of groups. It will be noticed that the Malabar and Tamil Musalmans together constitute as much as 96.5 per cent.

of the Muslim 'population.
570. Of the other races found in Travancore there are 298 Jews and 13 Parsis. other The Jews are found mostly in Parur taluk adjoining Cochin where there is an raoes. important colony of this community. Of the Parsis there is only one family in Alleppey consisting of 11 members, of whom one wae enumerated at Trivandrum and the remaining ten at Alleppey. Two Parsis were also enumerated on a steamer in the Port of Alleppey.

## SUBSIDIARY TABLE I

Variation in caste, tribe and race since 1901

| Caste, tribe or race | Petsona |  |  |  | Percentage of variation Increase ( + ) Ihecrease ( - ) |  |  | Proportion of each cante. tribe or rame per 10,000 of the State population in 1931 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - 1881 | 1921 | - 1911 | 1901 | 1921 to 1931 | 1911 to 1931 | 1901 to 1931 |  |
| 1 | 2 | 3 | 4 | Б | 6 | 7 | 8 | 9 |
| Hindu | 3,133,888 | 2,549,684 | 2,288,617 | 2,085,615 | + 93.0 | + $37 \cdot 3$ | + 58.0 | 6,189 |
| Ampalaval | 8.155 | 9,409 | 10,297 | 6,848 | $-13 \cdot 3$ | $-20.3$ | + 19.2 | 16 |
| Aiaran (including Matakkan, Mukhavar and Nolayan) | 27,488 | 20,268 | 10,739 | 15,174 | + 35.5 | + 39.1 | $+81 \cdot 0$ | 54 |
| Brabman-(Malayala) Nampūtiri and Potti | 13,991 | 14,643 | 10,325 | 9,475 | 4.9 | $+34.9$ | + 47.0 | 27 |
| Brahroan-(others) including Konkani | 6t,141 | 51,440 | 55,668 | 44,210 | 5.3 $+\quad 16.4$ | - 296 | $+\quad 22.5$ | 106 |
| Chakkiligap (including Chemmsin). | 6,188 | 5,318 | 2,609 | 1,503 | + 16.4 | + 197.2 | + 311.7 | 13 |
| Cheth - | 17,422 | 17,436 | 20,881 | 16,321 | - 0.1 | $-16.0$ | + 6.7 | 31 |
| Maviniyan | -6,411 | 1,669 68,995 | 6,116 | 3,897 | $+\quad 37.8$ $+\quad 30.8$ | + 4.8 | + 64.5 | 13 |
| Ihavan | 869.863 | 667, ${ }^{635}$ | 546,268 | 491,774 | $+\quad 30.2$ $+\quad 97.8$ | $+\quad 80.2$ $+\quad 7.4$ | + 76.9 | 1,707 |
| Kamanalan Kanigan | 208.441 15,602 | 163,724 12,557 | 111,390 11,987 | 119,617 10,340 | a $+\quad 27.8$ $+\quad 24.6$ | $+\quad 774$ $+\quad 30.6$ | $+\quad 74 \cdot 3$ $+\quad 81 \cdot 4$ | 400 31 |
| Erisbuanvaka | 12,032 | 9,684 | 10,429 | 8;999 | + 24.2 | + $15 \cdot 4$ | + 33.7 | 24 |
| Kehatriga (Malayaln) | 2,936 | 1,661 | 2,025 | 1,575 | + 76.8 | + 48.0 | + 86.4 | 6 |
| Kudumi | 9,610 | 7,778 | 8,207 | 7.276 | + 23.6 | + 17.1 | + 321 | 10 |
| Koravan | 87,071 | 75,345 | 61,827 | 54,584 | + 15.8 | + 40.8 | + 62.8 | 171 |
| Maravan | 14,399 | 9,773 | 8,376 | 7,079 | + 47.3 | + 71.9 | + 108.4 | 28 |
| Niddāt | 233,082 | 200,898 | 166,105 | 155,864 | + 16.5 | + 40.8 | + 50.1 | 459 |
| Nayar (including Chakkåla and Mårản) | 868,411 | 711,772 | 639,881 | 561,100 | + 22.0 | + 88.7 | + 54.8 | 1,704 |
| Palian | 29.880 | 16,004 | 11,222 | 8,520 | +88.7 $+\quad 82$. | $+160 \cdot 3$ | $\pm 250.7$ | 180 |
| Patavan | 13,602 | 11,079 | 9,313 | 8,072 | + 22.8 | + 46.1 | + 68.5 | 27 |
| Prayan (Simbavar) <br> Palayan (Chētamar) inciuding | 170,684 | 63,038 | 70,554 | 69,974 | + 12.1 | + 0.8 | + 1.0 | 189 |
| Thantapulayan | 208,132 | 196,184 | 185,314 | 200,503 | + 8.1 | + 12.8 | + 0.8 | 408 |
| Śkjigyan (Pattiryan) | 12,386 | 8,416 | 9,919 | 8.818 | + 47.2 | + 24.8 | + 40.8 | 24 |
| Thantán (Ưtäli) | +1,214 | 31,352 | 27,399 | 22,618 | + 81.8 | + 80.4 | + 82.2 | 81 |
| Vhlan | 21,172 | 17,733 | 16,748 | 14,664 | + 19.4 | + 26.4 | + 44.4 | +2 |
| Yanilyan (Vanigavaiajan) Vèlan Vela | 22,627 16,263 | 18,615 | 16,235 | 18,929 | + 21.0 | $+\quad 38.8$ $+\quad 85$ | + 81.7 | 14 |
| Velakkithalanăyar (including Ampattan) | 16,263 30,008 | 18,789 $\mathbf{2 7 , 2 7 6}$ | 12,957 21,826 | 11,679 17,542 | +17.8 $+\quad 13.3$ | $+\quad 96.4$ $+\quad 41.6$ | $+\quad 30 \cdot 2$ $+\quad 77.1$ | 32 81 |
| Velan (inclading Kusavan) | 12,377 | 8,857 | 9,089 | 17,198 | + 39.7 | + 86.2 | + 72.0 | 24 |
| Voplatan | 69,627 | 67,997 | 49,479 | 48.972 | + $20 \cdot 1$ | $+\quad 40.7$ | + +8.2 | 137 |
| Vejuthädanãyar (inclading Maṇṇant <br> Pathiyan and Vagnảnn $^{2}$ ) <br> VItasairar (bicluding Pantatam, | 28,311 | 23,826 | 24,008 | 19,162 | + 18.8 | + 17.0 | + 17.7 | 85 |
| Vaithwl and Yoglswaran) | 19,555 | 15,354 | 15,239 |  | + 27.4 | + 28.8 | + 62.8 | 3 R |
| Yädaran (ldayan) | 8,457 | 7,751 | 7,008 | 6,20t | +.011 | + 11.8 | +36.8 | 17 |
| Ohristian | 1,604,475 | 1,172,933 | 908,888 | 687,387 | + 86•8 | + 77. 6 | $+130 \cdot 1$ | 8,148 |
| Anglo-Indian | 790 | 3,821 | 1,750 | 1,489 | - 79.8 | - 84.9 | - 16.9 | 1 |
| Europenn | 087 | 389 | 1,789 | 884 | + 80.9 | + 47.1 | + 0.0 | 1 |
| (a) Britioh subjects <br> (b) Others | 456 | 209 | 320 | 504 | + 118.2 | + 42.8 | - 0.8 | 1 |
| (b) Others Indiad Ohrisciana | 131 $1,603.098$ | 180 | 79 | 80 | + 27.2 | + 65.8 | + 386.7 |  |
| Indad Ohriblian | 1,603.098 | 1,168,724 | 901,719 | 695,364 | + 37.2 | + 77.8 | $+130 \cdot \%$ | 3,146 |
| Mualim | 858,274 | 270,378 | 226,617 | 180,568 | + $80 \cdot 6$ | + 65.8 | + 88.4 | 698 |
| Jonakan Labbai | 114,005 | 76,643 | 61,671 | 82,003 | + 48.7 | + 84.0 | + 118.2 | 224 |
| Methan | 10,421 | 13,433 | 14,604 | 12,090 | $\underline{+} 22.4$ | $\pm 20.1$ | $\pm \quad 18.8$ | 20 |
| Patthán | 134,746 | 90,510 | 67,893 | 56,104 | $+\quad 38.9$ | + 98.5 | + 140.2 | 2 A 4 |
| RSvathar | 6,093 | 6,198 | 4,169 | 8,765 | - 18.8 | + 20.7 | + 33.7 | 10 |
| Thulatian | $40,21 \mathrm{C}$ $\mathbf{4 0 , 9 7 8}$ | 19,496 $\mathbf{6 3 , 0 3 9}$ | 1,202 61,098 | 1,200 $\mathbf{6 2 , 2 0 8}$ | (10.2 <br> $+\begin{array}{c}1067\end{array}$ | $+8,240 \cdot 8$ $+\quad 38.7$ | $\begin{array}{r} 8,250 \cdot 8 \\ -\quad 22.4 \end{array}$ | 79 79 |
| Tribal Relitions | 2,907 | 12,637 | 15,778 | 28,188 | -77.0 | $-81 \cdot 6$ | - 89.7 | 6 |
| Others | 429 | 348 | 100 | 408 | + 22.8 | +329'0 | + $5 \cdot 7$ | 1 |

SUBSIDIARY TABLE II
Hindu castes and tribes classified according to the system of inheritance followed


## MAP OF TRAVANCORE

Showing the Geographical Distribntion and the Past Higration of Primitive Tribes
Seale 1 lweh = 16 Mices


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## APPENDIXI

## THE PRIMITIVE TRIBES

The population of Travancore, like that of the rest of Southern India, is predo- Introdnctory minantly Dravidian. Whether the Dravidians were the earliest inhabitants of India or remarkk. whether there was a pre-Dravidian race of Negroid type is still a disputed question. Sir Herbert Risley holds the former view, while Mr. A. H. Keane supports the latter. In his Introduction to The Cochin Tribes and Casles, Vol. I, by Rao Bahadur L.K. Ananthakrushna lyer, Mr. Keane says "that in India there is no fundamental racial unity............ that, in the present amalgam, are represented five primary stocks; a submerged Negrito probably from Malaysia; Kolarian, Dravidian and Aryan who arrived in the order mentioned from beyond the Hindu Kush and the Himalayas; lastly, the Mongol mainly confined to the Himalayarr slopes.". Mr. Keane's theory is that the Negritos, whom he calls the "submerged element," came from Malaysia round the Bay of Bengal to the Himalayan slopes and gradually spread over the Peninsula, probably in the early palaeolithic times, and that in course of time they lost their original Negrito speech and became merged in the surrounding Kolarian and Dravidian populations. He holds that the Kolarian is a distinct race from the Dravidian and came to India before the latter, probably from the north or north-east, that the Dravidians came from the north-west, and that "beyond the Vindhyan Range they have nearly everywhere absorbed or replaced both the Negrito substratum and the Kolarian indigenes." From these premises Mr . Keane concludes that the low caste aborigines now found in Southern India "were not originally Dravidians but a blend in diverse proportion of superimposed, Negrito, Kolarian and Dravidian racial strata."
2. It must be said in favour of Mr. Keane's view that the low caste Pulayas, Parayas, Kuravas, and Vetas living in the plains, and the aboriginal tribes foum in the forests of Travancore show traits of Negroid character, unlike the Nayars, Vellatas and other high-caste Dravidians. It is not improbable that the earliest inhabitants of the country were the. Negritos and that the Dravidians who came in subsequently conquered the aborigines, established their rule in the land and developed their own civilization. In the process of conquest some of the aborigines might have been subjugated and made serfs, while others might have receded into the hills and forests. The former, having been in close contact with their masters, might have received an admixture of the Dravidian blood; but as they were not admitted into the Dravidian society they remained as distinct classes of a lower order. These probably are the Pulayas, Parayas, Kuravas, and Vetas, the most depressed of the different classes of the present population. The aborigines who receded into the hills and forests lived in complete isolation from the rest of the people. They had no settled home ; they were mostly nomadic hunters living on wild beasts, natural roots and berries; some took to agriculture and raised food grains by cultivating forest lands. Till recently they had not come in contact with the people of the plains and had, therefore, preserved their primitive customs and habits more or less intact. But this is all fast changing. The civilized man has penetrated into their province, opened up forests and established plantations. The Forest Department has imposed restrictions on their movements and their methods of cultivation. These intrusions into their primitive life are bringing about rapid changes in their physical character, their economic condition, their social customs and religious ideas. By coming in contact with civilized people they are themselves getting civilized, but in this process they are degenerating in bodily vigour and are fast dwindling down in number. The progress of civilization has not yet gone far enough to make then extinct. They are still there and many of them even now exhibit, in a marked degree, some of the primitive characteristics of the aborigines.

Distribation of the teribes.
3. The Tribes now met with in Travancore are :-

1. Malapantäram
2. Muthuvan
3. Mannān
4. Úrali
5. Paliyan
6. Malapulayan
(a) Kurumbapulayan
(b) Karavalipulayan
(c) Pämbupulayan
7. Vêtuvan (Malavetan)
(a) Valiyavetan
(b) Cheruvêtan
(c) Chīnkanni-Vêtan
(d) Elichathi-Vextan
8. Malankuravan (Malayadiyār)
9. Malayarayan
10. Ulḷătan
11. Känikkāran
12. Thantapulayan
13. Viẓhavan (Malankudi)

Travancore is cut off from the rest of Southern India by the Western Chats. This lofty mountain range contains peaks of varying heights and shapes, and from there the country slopes gradually towards the west down to the flat coastal plain bounded by the Arabian Sea. The highest point in the Western Ghats is Anamudi, being 8,837 feet above sea-level. The northern portion of this mountainous tract is the High Range Division. The lower slopes and the foot of the mountains are covered by rich virgin forests, from where emerge several rivers which forcing their way across the country fow into the sea. It is within these forests that the primitive tribes are chiefly met with.
4. Malapantaram, the most primitive of the primitive tribes of Travancore, lives scattered in the higher reaches of the Pampa and the Achankōil rivers and at "Thalappāra and Karumpalli in the forests of Shenkotta taluk. Muthuvan is found on the Kannan Dexvan hills in the High Range Division Mannān in the Cardamom hills to the south of the Panniyār river, Úrāli in the forests of the Periyār, Vandanmét and Thodupula Ranges, and Paliyan in the Vandanmet Range. Of the three groups of Malapulayan, Kurumbapulayan lives at Pampar, Alampatti, Karumutti and Pälampatti; Karavalipulayan at Kumpittänkuli, Pattatholivu, Pulikaravayal and Nāchivayal ; and Pämbupulayan in the forests to the east of Chinnär. Vizhavan lives in the Idiyara valley in North Travancore, Vẽtuvan in the forests near Vadaserikara, and Malankuravan in various parts of the State. Malayadiyàr, found in Koni Reserve, is identical with Malankuravan. Malayarayan is found in the forests of Changanachery, Minachil, and Thodupula taluks; Ullatan in the reserves of the Manimala Range; Känikkaran in the forests of Vilavancode, Neyyattinkara and Nedumangad taluks; Malavélan, the low-country Kaninikaaran, in the interior parts of Neyyattinkara taluk; and Thantapulayan on the coastal area in Sherthala taluk.

Physical charactern.
5. The segregation of a tribe from other people tends to preserve and intensify its natural characteristics. The geographical conditions of Travancore are such that the primitive tribes have had to live in isolation in "regions of poverty to-day and anxiety for the morrow." Of all the tribes, Malapantátam, Muthuvan and Uráli have been least affected by outside influences. The other tribes have been subjected to extraneous influences and have, therefore, received an infusion of iresh blood and new ideas from the more civilized people with whom they have come in contact. This is seen clearly in the Vizhavan, Paḷyan, Ullaatan, Malayarayan, Mannȧn, and Känikkäran. Owing to the admixture of foreign blood these tribes are now approaching the composite type of civilized humanity.
6. Climate determines the limits of the habitable area of a country. The influence of climate is seen in the irregular distribution of the population of Travancore and in the congregation of the people in the littoral area where the struggle for existence has become keen and intensive. While the density of population is 1,743 per square mile on the seacoast, it is only 82 per square mile in the Highland accarding to the present census. Climate is also the deciding factor in determining the crops that man can grow in a locality. Mannān, Muthuvan, Paliyan, and Kurumbapulayan, who are found at an altitude of 2,000 to 5,000 feet above sea-level, cultivate ragi, while Känikkäran, Malayarayan, Ullãtan, Vichavan, and others who live at lower elevations cultivate rice and tapioca. Where climate favours the growth of forests, there it prolongs the hunter stage of human development and retards advance to agriculture. This fact is amply borne out by the Malapantäram, who is the only nomadic tribe in the hunter stage existing in this State.

The salubrity of high altitudes is favourable to human development. We see it exemplified in the Muthuvan, Mannān, Paliyan and Úrāli. Their well-developed lungs, massive chests, and large torsos are due to the influence of the rarefied air at the thigh altitude at which tiney live. They evince, however, an aversion to muscular effort.

PLATE 1 -Malapantäráam Male


PLATE II—Malapantã́am Female

P. Vidal Dé Blache says:- "As atmospheric pressure diminishes perceptibly at high altitudes, atmospheric oxygen combines with blood corpuscles in the lungs more slowly. According to trustworthy observations, sluggishness and dislike of prolonged effort, muscular or otherwise, is the consequence of the slowing down of the physiological processes which act on the nervous system by means of the blood." (1). The backwardness of tropical countries is said to be due to excessive heat. "The actinic rays of the sum are believed to stimulate the cells to greater activity when they fall on the human body. At first it is beneficial. If it goes to excess, the cells apparently break down." (2) Intense heat of long duration, combined with a high degree of humidity, is unfavourable to human development. It causes enervation, creates a craving for stimulants and induces habits of alcoholism. Kānikkāran, Malayarayan, U!llatan, Malavêtan and Vizhavan are good examples of devitalisation caused by tropical climate.
7. Malaria is a disease of the tropical and sub-tropical countries, whose climate is characterised by alternate wet and dry seasons. A people devitalised by this disease cannot be expected to be energetic and active. The sluggishness of the Känikkarran, Malapantaram, Vizhavan, Ullatan and others who live in malaria-stricken areas, is due to the baneful effect of this discase.
8. It is said that the colouration of the skin is the conjoint effect of a number of environmental factors working through physiological processes. The pigment of the skin is foumd in the epidermis, and the influence of light favours its formation. In a cold climate, where the thermal action is weak, a discolouration of the pigment in the skin and other parts of the body produces a kind of albinism. Kānikkāran, Ul!̣atan, Malayarayan, and Thantapulayan who live at low elevations in the plains are darker than Muthurvan, Mannān, and Paliyan of the High Range. Blondness increases appreciably on high hills. "Waitz long ago affrmed his tendency of mountaineers to lighter colouring from his study of primifive peoples. This may not be entirely due to climatic contrast between mountain and plain. Economic poverty of the environment and poor food supply have also a hand." (3)
9. "Darwin holds that changes, such as size, colour, thickness of skin, and hair, have been produced through food sipply and climate from the external conditions in which the forms lived". (t) "Stature", according to Semple, "is partly a matter of feeding, :and hence of geographic condition." In Travancore, the primitive peoples of the hills are generally shorter than those of the plains; but within the hilly regions stature is often larger at high than at moderate altitudes, which is ascribed to "the influence of a rigorous climate in tilling off all but vigorous individuals." (i) Sir Arthur Keith says "that the greater activity of the pituitary gland gives the Caucasian his height of stature, bulk of body, prominent chin, strong eyebrow ridges, and pronounced nasalization." (6) The greater height of the Muthuran, Malapulayan, Paliyan and Úrali may be due to the more vigorous functioning of the pituitary gland at higher elevations. The effect of a scanty and amcertain food supply is seen on Malapantäram and Vizhavan, who are shorter im stature than others. The groups classified as short are between 581 inches and 624 inches. The average height of Malapantäram is 61 inches, of Vizhavan $61 \cdot 16$ inches, of Muthuvan 62 inches, of Malapulayan $62 \cdot 5$ inches, of Paliyan 62 inches, and of Ûtalli $62 \cdot 8$ inches.
10. The shape of the head is regarded by most anthropologists as a constant Head and persistent character. According to the Frankfort Agreement of 1882, heads, with a cephalic index not exceeding 74•9, are now classified as dolichocephalic ( 70 to $74 \cdot 9$ ). Deniker says dolichocephaly is almost exclusively located at Melanesia, Australia, India, and Africa According to Risley, the prevalent type in Peninsular India seems to be long-headed or medium-headed. The primitive peoples of Travancore are the modern representatives of the pre-Dravidians. Ufiali is the most dolichocephalic of the hill tribes with a cephalic index of 70.6 . Muthuvan has a cephalic index of 70.9, Malankuravan 73.7. Malayarayan 72.1, Vīhavan 72.6, Käṇikkäran 71-5, Malavētan 74-4, Ul!ătan 73-9, and Paliyan 743. Dolichocephaly of the primitive peoples is of a very primitive type, for the vault of the head is low and the direction of the brain backward. They occasionally shew a prognathic face, but ordinarily they are orthognathic.

[^53]11. The nasal index is claimed by some to be the surest method of distinguishing: racial types. "The broad type of nose," according to Risley, "is found in Madras the Central Provinces, and Chota Nagpur." * The broad nose of the pre-Dravidian is his striking feature. The physical configuration of the country, the vast stretches of fever. haunted jungles, the absence of roads, and the compact social organization of the primitive tribes protect them from the intrusion of foreign influence. All the pre-Dravidian tribes of Travancore are mostly platyrhine. The average nasal index of Vizhavan is 88.05 , of Muthuvan $91 \cdot 05$, of Malavetan 86.6 , of Malayadiyär $84 \cdot 6$, of Úàli 84.6 , of Paliyan 86.5, of Ullätan $85 \cdot 4$, of Malayarayan 83.1, and of Känikkaran 89.1. Vizhavan, Muthuvan, Malavêtan, Paliyan, Kānikkäran, and Ullătan are platyrhine, while Ứặi, Malayarayan and Malayadiyarr.are bordering on platyrhiny.

To sum up, short stature, low forehead, flat face and nose, and dark complexion are the characteristic features of the primitive peoples of Travancore. The following tables give the head measurements, the stature and the nasal measurements of some primitive tribes. in Travancore:-
Hfad menswrements of aome Primutior Tribra

Stature and nasal mpasurementa of some Primitive Tribes

| Tribe | Namber mosared | Stature c. m. |  |  | Namal Index |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average | Mrximum | Min!mum | Average | Maximum | Minimum |
| Vizhapan (Malaokudi) | 25 | 152-3 | 163 | 144 | 88.05 | 100 | $66^{\circ} 0$ |
| UHztan | 22 | 182.8 | $168 \cdot 1$ | 146.5 | 85.4 | $97 \cdot 2$ | 73.1 |
|  | 25 | 153.0 | 163 | $141^{\circ} \mathrm{C}$ | $89^{\prime \prime} 1$ | 100 | 75.0 |
| Malavétan (Cheruvēran). | 22 | 153.7 | 163 | $144 \cdot 2$ | $86^{\prime} 6$ | 100 | 68.7 |
| Malayatayan | 58 | $155 \cdot 2$ | 173.5 | 146.1 | $88 \cdot 1$ | 100 | $62 \cdot 0$ |
| Mathaven | 6 | 156.4 | $168 \cdot 3$ | 147 -3 | 91.05 | 100 | $84^{\prime 2}$ |
| Malnnkuravan (Malayadiyār). | 12 | 156.6 | 162 | 149•3 | $84 \cdot 6$ | 90. 5 | 72.9 |
| Otali | 36 | 157.0 | 169.0 | $187 \cdot 6$ | 84.6 . | 118.5 | 710 0 |
| Palijan | 11 | 157-6 | 167.0 | 145.2 | 86.5 | $97 \cdot 2$ | $73 \cdot 1$ |
| Thantapclayan |  | $152 \cdot 3$ | 161 | 189 | $78 \cdot 1$ | 01.4 | 67.4 |
|  |  |  |  |  |  |  |  |

[^54]PLATE [:I-Muthuvan Ma.e


12. Malapantatams are found in regions where they are unaffected by the competition and influence of other people and, therefore, enjoy full freedom for the continuance of a nomadic life. Gregariousness would be a positive disadvantage to them under such conditions. Being nomadic hunters they have no permanent habitations. Their family seldom consists of more than two or three members. Their huts are of the simplest pattern, built of junglewood posts with a lean-to roof thatched with plantain leaves. A fire is | is |
| :--- |
| od | kept going at all times to keep them warm. They make fire by the fint and sted method (Chakmuk in their language). Their clothes are scanty. They are dark-brown in complecion and short in stature. The nose is depressed at the root in those living in Rani Reserve and leptorrhine, in those living at Pathanapuram and Thalappära owing to miscegenation. Their eye ridges are prominent and hair is black and curly. The hard life they lead in jungle has made them strong and sturdy. Nevertheless, many fall victims to diseases like small-pox and malaria, and their number is fast going down:

Girls are married both before and after puberty. Marriage is generally contracted between cross-cousins. The exchange of sisters in marriage is also practised. Marriage is celebrated at the bride's house. On the appointed day, the bridegroom is presented with a pair of cloths. The bride's father then places the right hand of the bride on the left hand of the bridegroom and says, "I hand over my daughter to you. Take care of her." The couple are then seated on a mat and four balls of rice are brought on a leaf. The bride hands over two balls to the husband who eats them. He then gives two balls to the wife and she also eats them. This completes the marriage ceremony.

When a girl attains puberty, she remains in a small shed about a hundred yards away from the hut. Pollution lasts for sixteen days. When she goes out she must cover ber head with a cloth and walk with her face turned down, led by an elderly woman. It is believed that evil will befall her if this injunction is not adhered to. When a woman is in menses, pollution lasts for seven days. During this period the husband should not ascend a hill or climb a tree. He should remain indoors and should not handle any implement. To the primitive man, menstruous women are dangerous, and seclusion is intended to -afford protection from the dreaded spirit. When 'a woman is about to become a mother, she remains in a separate shed about 200 yards away from the hut. Pollution lasts for 16 days. During this period the husband should not go out for hunting, for gathering food, or for any other purpose. The mother continues to be under a taboo for three to five months if the child is a male, and for four to six months if it is a female. She should not even touch the cooking vessels during this period. The husband abstains from having intercourse with his wife from the seventh month of pregnancy and for six months after delivery.

The dead are buried. After burial the tribe deserts the locality and moves on to another place. Death pollution lasts for eight days. On the ninth day, the chief mourner gives a feast to the villagers in honour of the dead. The sons succeed to the property of the father, if any. Malapantärams dread the jumgle deities. Those at Āriencaru worship crests of hillis. The deities whom they generally worship are Sástha and his satellite, Karuppuswàmi.
13. Muthuvans live at high elevations and consequently look hale and hearty. muthuyan. Their villages have no permanency owing to the system of shifting cultivation they follow. The huts are small, rectangular, and one-roomed with a single door in front. Their only furniture is a mat or two, woven out of reeds. The fire which occupies the corner of the hut represents "that most precious luxury, the sum total of their creature comforts."

Sexual license before marriage is neither recognized nor tolerated. Unmarried young people are subjected to strict discipline. All unmarried males above ten years of age are confined to the "Bachelor-hall" at night. The unmarried girls sleep in a separate hut under the care of an elderly woman. The orthodox marriage is between cross-cousins, $i$. e., the children of brothers and sisters. The marriage ceremony takes place in the evening after 6 p . m . The bridegroom, with his best man and the bride's maid, goes to the bride's hut. The parents of the bride will then be absent from there. They should not be spectators of the ceremonial. The brijegroom presents the bride with ear-rings, glass bangles, chnths, and a comb of golden bamboo which he himself has made. The presentation of the comb forms the essential part of the ceremony and it is always worn by the bride on the back of the head above the lnotted hair. After the ceremony, all the guests are treated to a feast. A relic of marriage by capture exists in this tribe. Polygamy is allowed. The second wife must carry out the orders of the frist. If they are friendly, they live in the same
house. Among Muthuvans of the low country polyandry is also permitted, but it has become very rare in these days. Fraternal polyandry does not exist at all. Muthuvans of the Cardamom Hills are monogamous. Re-marriage of widows is allowed, but not by the brother of the deceased husband.

When a gurl attains puberty, she is lodged in a separate shed so that she might be beyond the gaze of men. Pollution lasts for three days. When a woman is about to become a mother, she is also lodged in a "seclusion hut." All the married women of the village assist in the delivery. Pollution lasts for thirty days. The child belongs to the mother's clan and is named after the uncle or the maternal grandparent. Inheritance is matrilineal. A man's property goes to his sister's sons after his demise.

Muthurans in the, Cardamom Hills worship the forest deities, Kotlamala Sioami and Vadaganätha Swämi, who are supposed to be residing on the crests of hills. They also worship malevolent deities, Karuppu, Märiamma and Kali. But they have been greatly influenced by Hinduism and, like the Hindus, worship the Sun, God Subrahmonia, and Goddess Mināakshi Amma (Sokuru).

Muthuvans are nomadic agriculturists. Ragi is their staple food. Their environment has made them hunters and trappers. They eat fish and the flesh of sambur, ibex, monkey, and jungle-sheep. The flesh of black monkey is greately relished by them. They do not kill the bison. The wealth of Muthuvans is locked up in their cattle which consist mostly of buffaloes. They drink milk and will offer it to the visitors also.

Men wear a loin cloth kept in its place by a string tied round the waist, and also a turban. A Kambli or blanket is tied up and carried on the back. It serves as a holdall. Women wear a coloured cloth about 16 to 18 cubits long. Men wear ear-rings, silver and brass rings on the fourth finger of the right hand, and sometimes a bracelet on each arm. Muthuvans living in the Cardamom Hills speak Tamil, and those found near Puyamkuty Malayalam. The average Muthuvan enjoys a better physique than most other tribes. He is tall and has an aquiline nose depressed at the root. With a dark-brown skin, black and wavy hair, and a retreating forehead, his simplicity of life, his cheerfulness and healthy look give him the appearance of a good personality. Sturdy in limbs and erect in bearing, he can endure great fatigue and carry heavy loads at ease. His economic condition is better than that of the other hill tribes.
14. Mannans are found mostly in the Cardamom Hills to the south of the Panniyar river up to the south of the tract of land now submerged by the Periyär reservoir. This locality has a salubrious climate and enjoys the benefit of both the monsoons. The influence of the geographical environment on the Mannann is seen in his physical and mental characters, his economic.condition, and his religious beliefs. The pigmentation of his skin is brown-black. The cool climate has made him hardy. and longlived, and has also imbued him with a gay and vivacious temperament. He has a long head, a flat nose, and thick lips. The hamlets of Mannāns are situated on high grounds where there is a perennial supply of water and plenty of land for cultivation. Each. hamlet contains five to fifteen huts. The headman alone is privileged to sit and sleep on a bamboo thatly (a ministure cot.) All the rest sit and sleep on the floor.

Girls are married after they attain puberty. The marriageable age is between 16 and 20 for males and over 14 for females. Marriage takes place between the children of brother and sister. Before the marriage is solemnized the bridegroom goes and remains in the bride's house for a period not exceeding one year. The ceremony is conducted in the bride's house. The bridegroom bows to his parents and elders, and the bride to her parents. The couple are then seated on a mat. The thali is tied round the bride's neck by the bridegroom's sister. The visitors are treated to a feast. Marriage by capture is also in vogue among Mannāns.. Should a woman refuse to return the love of a man, he forcibly takes her away and they live together in the forest for ten or twelve days. They are then searched for and taken to the hamlet. The offence is condoned and they are allowed to remain as husband and wife. Elopement is also a recognized institution and takes place if parents object to the union of a man and woman. A man marries a second wife if his frst wife is sterile. Polyandry is rare, but is not altogether extinct. Widows are allowed to remarty. A man may marry the wife of his deceased brother.

## PLATE IV - Mannân Male



PLATE IV-Mannān Female


When a girl attains puberty, she is lodged in a seclusion hut for four days. On the fifth day, she returns home after a bath and wears a new cloth When a woman is in menses, pollution lasts for four days, and during the period she remains in a separate shed. On the fifth day she bathes, but remains in seclusion for another four days. When a woman is about to become a mother, she is lodged in a separate hut. After delivery she continues to be there for twenty days, the period of pollution. On the 21st day, she goes to the house, but remains in a separate room.

Mannangs are fast giving up their tribal religion and becoming Hindus. They worship God Sastha. Traces of animism still exist among them. For example, it is believed that the clearing of jungle disturbs the spirits residing there. A portion of the primitive forests is dedicated to them and is preserved as a sacred place.

Mannāns are nomadic agriculturists. Ragi is their staple food. In times of scarcity they eat wild fruits and roots. Fish is a delicacy to them and they also eat crabs, the flesh of black monkey, sambur, and rats. Bison lesh is tabooed.
15. Útālis used to be scantily clad, but owing to their contact with the Urall planters they are becoming civilized and now wear a loin cloth, four cubits long and two cubits wide, shirts, coats, and turbans. When they go out a blanket serves as a hold-all to carry their necessaries of life. They have a long head, a flat nose, a retreating forchead, and moderately thick lips. They are somewhat fair in complexion and have dark and wavy hair.

When a girl attains puberty she is placed under a rigorous taboo. She is lodged in a treohouse reserved for the purpose. Pollution lasts for seven days. On the eighth day she bathes and moves to another tree-house wheré she remains for two days. On the third day she bathes and goes home, when seven jack-leaf-spoonfuls of cow-dung water and oil are poured on her head by her uncle or brother to purify her, after which she enters the hut. Similarly, a woman in menstruation is confined to a distant tree-house for a few days. Afterwards she bathes and goes to the tree-house for two days. On the third day she bathes and goes home. Marriage of girls takes place both before and after puberty. Sisters are exchanged in marriage, and a man who has no sisters has only a very remote chance of getting married. Formerly an Úrali married as many women as he had sisters, but now he does not marry more than two. Polyandry is very rare among this tribe. The marriage ceremony is simple. The bridegroom and his father go to the bride's hut and escort her to their home, where the bride's party is fed. Her dowry consists of bill-hooks, clothes and vessels.

When a woman is about to become a mother, she goes to a tree-house. She is not given any assistance in delivery. Women stand at a distance and give instructions. Even after delivery they do not approach her and render her any help. Pollution lasts for 21 days. During this period the husband refrains from doing any work. She bathes on the 22nd day and enters home.

Nomadic agriculture is the occupation of this tribe. Rice is their staple food. Men avoid intercourse with women for three days after clearing the jungle lest harm should befall them and their crop. Utàlis worship crests of hills which are supposed to be haunted by evil spirits. The ancestor-spirits are propitiated during agricultural ceremonies. There is a medicine-man called Pläthi, who cures all diseases. Û́ălis are very orthodox and do not interdine with Paliyans or Mannäns.
16. Paliyans are found in the Vandanmet Range. Living as they are in the Paliyan. midst of cardamom ryots, they have been influenced by their contact with the low-country people in their customs and manners. They have a long head, a flat nose, a retreating forehead, and moderately thick lips. They are brown-black in complexion.

When a girl attains puberty, she remains in the seclusion shed for 15 days. She returns home on the 16th day after bathing, carrying a pot of water on her head. She then cooks rice and serves it to other women. Then alone is she free from pollution. During menses, she remains in the seclusion shed for five days. Marriage takes place after a girl attains puberty. Cross-cousin marriage is in vogue. Before marriage, a man serves his uncle who is his would-be father-in-law for sir months. Marriage is thus one of service and there is no dowry attached to it The ceremony is conducted in the house of the bridegroom at night and lasts for one day only. The clothes of the couple are immersed in saffron water on the third day. They then bathe in a stream and return home. A man is allowed to marry the wife of his deceased elder or younger brother.

Polygamy is practised when the first wife is barren, and the second wife is invariably the sister of the frst. Younger brothers are said to have intercourse with the wite of the eldest brother. Women enjoy great freedom and are of loose morality. When a woman is about to become a mother, she is sent to the seclusion shed where she remains for six days after child-birth. On the seventh day she bathes and comes home, when a hammock made of new cloth is provided by the uncle for the baby. The son inherits the property of the father. Paliyans are migratory agriculturists practising shitting cultivation. During sowing and harvesting they abstain from intercourse with their wives. They believe that cultivation will fail if they are not pure. Paliyans worship crests of hills, and also Sästha, Karuppuswămi, and Märiamma. Ancestor-spirits are also propikated. Men wear loin cloths, 4 cubits by $2 \frac{1}{2}$ cubits, and also shirts, coats and turbans. Women wear coloured cloth 12 cubits by $2 \frac{1}{2}$ cubits. They have also begun to wear jackets

Malapulayan.
17. Malapulayas are divided into three endogamous septs, namely, Kurumbapulaya, Karavalipulaya, and Pämbupulaya, in the descending order of their social status. The higher septs do not intermarry or interdine with the lower ones. Kurumbapulayas are nomadic agriculturists. Karavalipulayas are dependants of the Vel!alas. Ragi is the staple food of the former, while the latter live on rice which they get in the shape of wages from their masters.

A girl, on attainng puberty, remains in the seclusion shed for 30 days, during which period she should not see any man. On the 31 st day she bathes and returns home, when all the villagers are treated to a feast. Marriage takes place after a girl attains puberty. Cross-cousin marriage is prevalent. Marriage ceremony is conducted at the bride's hut and lasts for three days.

Among Karavalipulayas, the boy's parents give a bride-price of forty vallams of paddy and a coloured cloth to the bride and her mother. Marriage takes place at night. The bride and the bridegroom are seated on a mat, facing east. The bridegroom ties a necklace of beads round the bride'si neck. They take food from the same leaf, each giving a ball of rice to the other. All the guests are then feasted and the married couple are taken to the bridegroom's house.

Among Kurumbapulayas bride-price is not given. A cloth is presented to the bride and a string dipped in saffron water is tied round her neck. The guests are then treated to a feast. An elder brother may marry the wife of his deceased younger brother and become the guardian of his children. Polygamy is practised, and a man may marry the sister of his first wife. Polyandry is prevalent and even promiscuity is. not uncommon. Sons inherit the father's property.

Malapulayas worship Käli, Mariamma, Chdplamma, and Katlaparamma. Men abstain from intercourse with their wives for ten days prior to any religious ceremony they have to perform. Man wears a cloth, 6 cubits by $2 \frac{1}{2}$ cubits, and woman a coloured cloth, 16 cubits long. The diminished vitality of this tribe is due to the unhealthy environment in which it lives.
18. Vizhavans are found in the Idiyara valley in North Travancore. Among them when a girl attains puberty she is confined to a seclusion shed for seven days during which period she should not see any man. A breach of this taboo would bring harm to the hamlet. On the eighth day she bathes and goes home. A woman is not allowed to take any animal food until she is married. Pre-marital chastity is rare. A man may clandestinely cohabit with any woman. In the event of conception before marriage, no attempt is made to cause miscarriage. Every effort will be made to legalise such unions. Marriage generally takes place before a girl attains puberty. A man must marry outside his clan. Cross-cousin marriage is tabooed among them. Marriage lasts for one day and takes place in the bride's house. It consists merely in the presentation of cloths to the bride and her mother. Sisters are exchanged in marriage if they are of different clans. Free divorce is allowed. Child-birth takes place in an isolated shed and no male can go near it. The mother and the baby remain there for fifteen days. On the 16th day she bathes and enters home.

[^55]
## PLATE VI-Ūrálại Male



PLATE VII—Ũ̌āḷi Female

cultivated. Men wear a loin cloth, 4 cubits by 2 cubits, and also a small upper cloth. Women wear a loin cloth, 10 cubits long. They are dark in complexion, have a long head, a flat nose, a receding forehead and moderately thick lips. Eyebrows are prominent.
19. Vettuvans are found scattered throughout the State. They are otherwise known Petturan. as Kanakapētan, Vëtar, or Malavètan.

There are four classes of Malavetans:-

1. Valiyavetan,
2. Cheruvetan,
3. Chinkanṇi-vettan,
4. Elichathi-vetan.

The Cheruvetans do not interdine or intermarry with the Valiyavetans, but may interdine with the Chinkanni-vetans and marry their women, but the latter are not allowed to interdine with the women of the former. If the husband dies, the wife and her children go back to her home. The Chervvetans neither interdine nor intermarry with the Elichathi-vztans. The Chinkaṇi-vetans stand at a distance of 18 feet from the Cheruvetans and the latter stand 8 feet away from the other Vetans.

Marriage is between cross-cousins. Sisters are exchanged in marriage by men belonging to different clans. Marriage takes place both before and after a girl attains puberty. It is conducted in the bride's house and lasts for one day. It consists in the presentation of a cloth by the bridegroom to the bride and the tying of thali round her neck Among Chinkanmi-vetans, the married couple are seated on a mat, cooked rice is placed on a plantain leaf and is eaten by both. Polygamy is prevalent among this tribe. A man does not marry the wife of his deceased brother or the sister of his deceased wife. Divorce is allowed. A girl, on attaining puberty, remains in the seclusion shed for nine days. On the tenth day she bathes and goes home. She then makes a horizontal mark with cow-dung on the forehead of all the guests present, and gives a bowl of rice gruel to each. Pollution then ceases. When a woman is about to become a mother, she is confined to a room in the hut. After delivery, a decoction of medicinal herbs and charcoal powder is made in the husband's urine and administered to her by the husband.

Among Chünkanni-vevtans, sons inherit two-thirds and nephews (sister's sons) onethird of a man's property on his demise. It is divided equally between the sons and the nephews among Cheruvetans. Chinkaṇi-vētans are dark in complexion and short in stature. They have a long head, and a flat nose depressed at the root. The hair is dark and curly. They have a poor physique, due to adverse circumstances. Cheruvetans differ from them in having prominent brow-ridges. Cheravetans are migratory agriculturists. They live on rice, wild roots and berries.
20. Malankuravans are foumd in Nedumangad, Pathanapurams, Thiruvella, and Malankoravan. Quilon taluks. Malayadiyărs, who are found in the Koni Reserve, sesemble Malan- (Malayadigar)kuravans in their exogamous clan system and other customs.

Marriage takes place only after a girl has attained puberty. Formerly they used to perform kettukalyänam (thali-tying ceremony) for girls between the ages of 5 and 8 , but it has now been given up. Among Malankuravans a man marries the daughter of his maternal uncle. He cannot marry the daughter of his father's sister. This prohibition does not exist among Malayadiyärs. Among Malankuravans, marriage lasts for a day and takes place in the house of the bride. It consists in the presentation of a pair of cloths to the bride. The bridegroom's father gives Rs. 2-8 annas to the bride's father. Without the payment of his amount, the girl is not sent to her husband's home. Among Malayadiyărs, marriage lasts for two days and there is no payment of bride-price. Polygamy is practised by them. A man can marry the sister of his first wife.

Malankuravans propitiate the hills wherein spirits are supposed to reside, such as, Thalapäramala, Udumpăramala, and Thevalapāramala, before they commence clearing the jungle for cultivation. Offerings are again made to them after the seed is sown.
21. Malayatayans are found in the forests of Thodupula, Minachil, and Changana- Kalayarayan. chery taluks. As the name suggests, they were once lords of the hills. They claim superiority over all the other tribes. Ullatans used to call them Vallianmärs (those who rule), which evidently points to their former greatness.

On attaining puberty a girl is confined to a seclusion shed for a day. The next day she bathes and goes to the main hut. On the eighth day she again bathes in a stream, plunging three times. After the third dip she looks at the thali-tier. The girl and the thali-tier are taken home in procession, and there they are seated on a mat and treated
to a feast. Before girls attain puberty a thali-tying ceremony is performed, generally for a number of girls together at the age of 3,5,7 or 9. Marriage takes place after they have attained puberty. Marriage ceremony is conducted in the evening or at night. The bridegroom's father gives presents to the couple. They are seated on a mat, facing east. The bride's brother hands her a betel leaf which she tears off into two halves. She gives one half to her husband to chew, and she herself chews the other half, and both spit in the same spittoon. All the guests then chew betel-leaf. Polygamy is resorted to if the first wife is barren. Fraternal polyandry occurs rarely. Widows remarry. Sons inherit father's property, and in their absence it devolves on the daughters. If a man dies childless, his property goes to his brothers and, in their absence, to his sisters.

Malayarayans are spirit worshippers. Ancestor-worship is common among themThe spinits of the dead are worshipped, because it is believed that they are capable of influencing the welfare of the living persons in a mysterious manner. The Malayarayans worship five hills which are believed to possess supernatural powers, but they do not distinguish the spirit from the matter. They also worship Sástha. Malayatayans are nomadic agriculturists. They are dark in complexion, having a long head and a flat nose, depressed at the root. Brow ridges are prominent and the forehead is receding. Many of them have become converts to Christianity.

## UHatan.

22. Ullatans are found in the reserved forests in the Manimala Range. There is no difference between them and the Kocchuvelans. They are also known as Kättalans.

An Ullatan generally marries the daughter of his paternal uncle. Marriage takes place before the girl attains puberty. A preliminary thalikettukalydnam is celebrated when the girl is seven years old. On the fourth day of the ceremony the thati-tier and the girl bathe in a stream and return home in procession. If he so desires, he can marry her after she has attained puberty. The marriage is conducted in the bride's house. The couple stand in the marriage booth and the bridegroom presents to the bride a bundle of clothes, which she wears. The guests are given betel-leaf to chew, and the married couple then depart for the husband's house. At the latter place the guests are treated to a feast at night, and in the next morning after another feast, the bride's party goes back. Polygamy is prevalent among this tribe. A man may marry the wife of his deceased brother. Fraternal polyandry is also said to exist rarely.

On a man's demise, one-half of his property goes to his sister's sons, and the other half to his own sons. In the absence of nephews the whole property goes to his sons. Ullatans are nomadic agriculturists. Rice is their staple food. Kocchuvelan is the head of the Ullatans and he receives the offerings of coconuts, ghee, and cash made by devotees of God Ayyappan at Thalapāra on their way to Sabatimala during the Makaravilakku festival. U\Jatans make offerings to Thalapăramala, Udumpäramala, and Chakipäramala annually on a Friday. They believe that they are able to live in the forest without molestation from wild animals under the protection they receive from the spirits residing on these hills. Ullatans lead a celibate life from the beginning of Dhanu to Medam (December to April), when they clear the jungle and cultivate the land. They do so becauso they are then in the domain of the hill deities whose wrath they should not provoke. If a pure life is not led, Sästha and other deities will be offended. It is said that a man who touched his wife during menses lost his eye-sight when he went to hoe the soil.

Ullätans are dark in complexion, having a long head, a flat nose, depressed at the root, and a receding forehead. Their hair is wavy or curly.

Kanikkaran.
23. Känikkār are a wild but inoffensive jungle tribe, inhabiting the wilds of South Travancore. According to Bourdillon, those who live in the interior are called Kánikkàr while those living at the outskirts are called Velanmarr.

In this tribe marriage takes place both before and after a girl attains puberty. In South Travancore, marriage before puberty is not favoured because the girl will not then be in a position to assume the responsibilities of a housewife. In the Shenkotta Forest Division, infant marriage is in vogue and is becoming common for want of mature women. Marriage is celebrated in the bridegroom's house in daytime. A necklace of beads is tied round the neck of the bride by the bridegroom. The assembled guests are treated to a feast. The married couple sit on a mat and take food from the same leaf. The next morning all depart, leaving the bride with the bridegroom in his house. In Kottur, the husband ties the thali round the neck of the bride if she is an infant. His sister does it if she is grown up. A plantain leaf is placed in front of the couple, and rice and curry are served. Two women hold the bride's head and press it on the bridegroom's shoulder seven times.

PLATE VIII—Paliyan Male


PLATE IX-Paliyan Female


The bridegroom then puts small quantities of rice and curry into the mouth of the bride seven times. South of the Kothayär, marriage is celebrated in the bride's house. The bridegroom ties the thali round the neck of the bride. Känikkär are generally monogamous, but if a man marries more than once his second wife is usually the sister of the first. Adultery is viewed with great abhorrence, and punishment for this ofence varies in different localities. At Kulathopula the following is the punishment inflicted on the adulterer. His legs are tied to the branch of a tree with the head hanging downi. Straw strewn with chillies is spread on the ground and burned. The body of the culprit is then swung to and fro, and he is in the meanwhile given 25 lashes with a cane on the buttocks. The guilty woman is given 15 lashes by the man who marries her, evep though he may have been already married.

In Vilavancode taluk a girl on attaining puberty is allowed to remain in the hut itself, but further north she is kept in a separate shed situated about 100 feet away from the hut. Pollution lasts for six days. On the seventh day the girl bathes and goes home, when the modicine-man gives her some holy ash which she smears on the forehead. During the seventh month of pregnancy there is a ceremony called Vayaru pongal, when offerings are made to the sun. Confinement takes place in the house itself. Pollution lasts for 16 days. Abortion is common among the Kānikkār women, probably due to malaria. A man's property devolves equally on his sons and sister's sons. In the absence of nephews, the sons get the whole property. Descent is reckoned through the female line and children belong to the clan of the mother. In Cherukara of Pathanapuram taluk, inheritance is through the male line.

Kanikikar's god is legion. Spirits of diverse kinds are supposed to haunt houses and villages. They are malevolent spirits able to damage crops and cause epidemics and famine. The propitiation of these spirits is the essence of the religion of the Kanikikar. They worship Agastya and also ancestor-spirits. When frightened by wild animals, they go to the plathi (medicine-man) to ascertain which ancestor-spirit has been annoyed. The plathi takes some small pebbles and places five of them in. a row in honour of GanapathyHe then holds some pebbles in his right hand and drops them in pairs into the left. If after dropping four pairs of pebbles, an even number remains in the right hand, the plathi concludes that Exchamuthan is responsible for the incident. If an odd number be left behind, he repeats the process to find out whether Pulichävu is responsible for it. In Kulathüpula paddy grains are used instead of pebbles and the operation is conducted on a wooden board. The offended spirit is propitiated by making suitable offerings.

The musical instrument of the Känilkār is the Kokra. It is used in all religious ceremonies. It is a cylindrical tube 9 inches long, made of sheet iron, the lateral edges of which are serrated. A man holds it in his left hand and draws an iron rod over the serrated edges to and fro quickly. The sound thus produced is not very agreeable, but it suits the songs of the Kanikkär. The villages are rarely situated on crests of hills. They are usually built in places where there is a convenient water-supply. The huts are constructed in rows, leaving only a small space between the rows. A village is abandoned as soon as the soil there ceases to be productive. The 'Bachelor-hall' is prominent in. Mïthitamala, Chembikunnu and Köttür. It is the home of the unmarried youth of the village, and women are not allowed access into it. Bachelors remain there day and night and go to their huts only for meals. Unmarried girls remain in a separate shed. Among the Kanikkar at Arippu, Madathura and other places there is no separate shed for unmarried girls.

Känikkär make fire by friction in the following manner. A small slot, half an inch deep, is made in the centre of a piece of soft wood. A man keeps the piece in position under his big toe, takes a round stick of hard wood 18 inches long, holds it in a vertical position keeping one end of it in the slot and turns it quickly backward and forward with both his hands. A portion of the wood dust produced in this process remains in the slot and the heat generated by friction ignites it. Kannikkär also make free by the ""flint and steel method"" which they call "chakku mukki." It may be a comparatively recent invention. Pieces of fint and steel and some floss of Careya urens are the materials required. The floss is held near the fint and the latter is struck with the steel. The friction produces sparks which ignite the floss. This process is resorted to in cold weather only. . The use of safety matches is now ceming into vogue.

Känikkär are nomadic agriculturists. Rice is their staple food and they cultivate it permanently on flats inside the reserved forests. The dress of the Känikkär living to the north of the Karamana river and to the south of Chembikunnu is very scanty. It consists
of an under-cloth held in position by a string tied round the loins. Over this is suspended an apron $2 \frac{1}{2}$ Feet long and $1 \frac{1}{2}$ inches wide, the loose end of which is tucked up into a girdle tied tightly round the loins. The girdle is made on the lakli by women out of 17 strands of yarn or twist. A woman takes three to four days to make a girdle. The Kānikkar living in places where they come in contact with the people of the plains are better clad. The Kānikkär of Nedumangad tatoo their body to enhance personal beauty.

## Thantapulayan

24. Thantapulayas live in the coastal tract in Sherthala taluk. Among them girls are married after puberty, but betrothal takes place when they are seven to eight years old. Betrothal is effected by the boy's maternal uncle giving the girl's maternal uncle three times 32 chackrams plus 5 ll chackrams. The marriage ceremony consists in the bridegroom presenting a pair of cloths to the bride and tying a necklace of beads round her neck. Formerly, a thanda (a kind of grass) garment was presented instead of cloths. Marriage takes place in the bride's house. Five men accompany the bridegroom. They are feasted and are given pansupari, with which the marriage ceremony is concluded. Immediately afterwards the married couple go to the husband's house. On the third day they go back to the girl's house where they are given a feast by the girl's parents.

A man may marry more than one woman, generally on economic grounds. Women work and provide food to their husbands also. Widow remarriage is allowed. Thantapulayas are matrilineal. A man succeeds to the property of his mother's brother. If there is no nephew the property goes to the son. They worship the sun early in the morning and in the evening. They are also serpent worshippers. On account of their hard life, the men have a sturdy constitution. They have a long head, a flat nose, and a receding forehead. The vault of the head is low They are dark in complexion and have well-developed chests. Brow ridges are prominent.

Clans and exogamy
25. The social organization of the hill-tribes of Travancore is built on the loundation of exogamy. Primitive peoples attached the greatest importance to the rules of exogamy, and the punishments inflicted for any breach thereof were very severe. The tribe forms the outer circle within which a man must marry. But within the circle there are sub-divisions, and persons belonging to each of these sub-divisions are prohibited from marrying. These are called exogamous groups or clans. The theory is that members of a clan are descended from the same male ancestor, and are, therefore, related. Marriage is not allowed within the clan. The clan does not prohibit marriage of persons related on the mother's side, but permits the union of first cousins, provided they are not children of brothers.
26. Malapantarams are the least modified descendants of the pre-Dravidian race. They have no clan system, but there are two groups among them consisting of three or four families, having no distinct names. Each group is exogamous. A man marries the daughter of his maternal uncle or of his fathers' sister. Thus double cross-cousin marriage is practised. The exchange of sisters in marriage is also in vogue.
27. The Kānikkär of Soulh Travancore have a more highly developed system of exogamous clans than those in Quilon and Shenkotta Divisions. There are two clans in the hamlets of Cherukata, Madathura, Arippu, and Villimala of Shenkotta and Quilon Divisions, and are known as Müttillom and Meni-illom. They trace the origin of the clans to the carcase of an elephant. The man who saw the haunches and hind-limbs of the carcase belonged to Mütillom, and he who saw its tuunk to the Meni-illom. The Kannikkär of the present day claim to be the descendants of these two ancestors. There are four clans among the Kannikkär at Naraveli in Nedumangad taluk. They are Mütlillom, Mëni-illom, Kayyillom, and Palillom, aud all are exogamous. • Members of Müllillom and Meni-illom; considered to be superior to the other two clans, intermarry. There is neither intermarriage nor interdining between these and the other clans. The members of the two inferior clans are not even invited to the marriage ceremonies of the superior clans, and if they attend the ceremonies uninvited, they are fed only after the superior clans have had their feast. Amiong the Kanpikkär of Neyyattinkara Range, there are two distinct divisions, or Phratries, Anṇanthambi Phratry, and Macchambi Phratry. Annanthambt -Phralry includes the clans of Mêni-illom, Périnchillom, and Kayyillom; and Macchambl Phratry the clans of Müttillom, Velanat illom, and Kurumillom. Intermarriage between the members of the different clans of the same Phratry is prohibited.
28. Interesting stories are current among the Känikkar as to the origin of their clans. The ancestors of the Kanikkär of Möthiramala felt an abhorrence to the promiscuous life they led in the past. With a view to evolve order out of this chaotic social

PLATE X—Malapulayan Male


PLATE XI-Malapulayan Female

condition, Illampalli Müthan and Thiruvampalli Müthan decided that there should be a -dual organization of the Känikkărs, namely Annanthambi illakkärs and Macchambi illakkars. Each division was further sub-divided into five clans, and the Känikkär of the present day are said to be their descendants.

The Kaniukkar of Mankulty have invented a very ingenious story about the origin of the clan system. The story is that a sambur once did great havoc to their crops and the man who shot an arrow at the animal and killed it became Kurumillom. The man who sat on the hedge and saw the incident became Vèlillom and another who watched the fun at a distance Velanät-illom. The man who removed the sambur's head became Müttillom and one who carried the fore-limbs Kayyillom. Another who bundled up a -small quantity of flesh in leaves, which swelled its appearance, belonged to Periman-illom. The man who removed the bowels became Mangötillom, and one who removed the udder of the carcase Palamala illom. Lastly, a man who left a python in water belonged to Përinchillom.

In the hamlets in the vicinity of Kallar in Nedumangad taluk, the clans are known by other names, and the origin of the clan system is said to be different. Annanthambi Phratry includes Vellayillom, Mannati-illom, Thumbra-illom, Velanàt-illom, Mülai-konath-illom and Müttillom. Macchambi Phrairy includes Mēni-illom, Patikayillom, Erumbiyat-illom, Päramala-illom and Pothottillom. Rezarding the origin of these clans, it is said that once a wild elephant lay dead in the jungle, and that different parts of its carcase were appropriated by different men, from whom onginated the various clans. The man who got only the earth where the carcase lay belonged to Mannati-illom. One who carried away the genital organ became Thumbara-illom. He who removed the heart belonged to Vellayillom. The man who got the lion's share of the flesh belonged to Meiniillom. One who got only the ants that swarmed here belonged to Erumbiyat-illom. Mülaikonath, Patika, and Pothode illoms are named after the places called Mülaikōnam. Patika, and Pothode. As regards Pâramala illon, it is said that a Kānikkār boy and sirl were found hiding in a rock cave called Paramala and they' were removed to the -nearest hamlet and brought up. The children of the girl belonged to Paramala illom. Those who saw and enjoyed all the fun belonged to Velanãtillom. Dr. Edgar Thurston gives currency to the theory that clans are named atter mountains and places, such as Pälamala, Thalamala, etc. This view is not correct as regards Kānịkkär of the present day.

The system of tracing kinship through the mother is not altogether extinct among :the hill-tribes of Travancore. Among Kannitkär, the children of a man of Kurumillom .clan by his wife of Perinchillom clan belong to the latter clan. According to the rules of .exogamy, no man is allowed to marry a woman of his own clan. As a woman's children belong to a clan different from that of her broher's children, it follows that these children who are cross-cousins can intermarry according to the rule of exogamy. On the other Thand, children of brothers or of sisters belong to the same exogamous clan and cannot, : therefore, intermarry. Though double crpss-cousin marriage is permissible, a man generally marries the daughter of his maternaluncle. A child is generally named after :a member of the mother's clan, a maternal nncle, an aunt, or a maternal grandparent. Scholars, like Sir Henry Maine and M. Fustd De Coulanges, did not recognize the system -of female descent and thought that the exogamous clan with male descent was an extension - of patriarchal family which was the original unit of society. The wide distribution of exogamy and the probable priority of matriarchy to patriarchy were first brought prominently to notice by McLennan.* Under the system of female descent, there was no transfer of clanship among Kannikkär. The children belonged to the mother's clan. With the introduction of the system of male kinship came the practice of transferring a woman from her own clan to that of her husband.
29. Muthuvans of Neriamangalam Range are divided into a number of exogamous - clans, such as Mëlēküttam, Kānaküttam, Thüshaniküttam, Püthānikūttam, Känayathukültam, Ellikütlam. Members of Känaküttam and Mëlëküttam clans consider themselves to be superior to the remaming four clans, and do not intermarry with them.

Mëlēküttam includes the V̈äkàs or chieftains of Muthuvans. This clan is said to be superior to all the other clans, and members of this clan intermarry only with those of Känakültam clan. Kanaküttän is inferior to Mëlekūttam, but its members alone enjoy sthe privilege of marriage with the members of the latter. The members of Thüshani. küllam are also the vassals of the Vaka. Their functions are the same as those of

[^56]Thüshanikütlam, but they enjoy the special privilege of putting up a thatti (elevated seat) for the Väka to sit on. The members of Elliküttam have their own Väka at Kiliparambu_ Among Muthuvans at Pūpära, there are only three clans, Thüshanikütlam, Känayathukütlam, and Elliküttami The Mël-Vaka of Mëlèkütlam clan is recognized as their chief, and he still receives the fines inficted on delinquents. The Muthuvans of Kadakàd in Anjanad valley have only two clans, Süryanayar and Aryanayar, and they are: exogamous. Tbey do not recognize the Mel-Väka as their chief.

Like the Känikkar of South Travancore, the children of a Muthuvan family belong to the clan of the mother. The husband is responsible for the maintenance of his wife and children. The debts of children are a charge not on the father but on the maternal uncle, and a man's debts devolve on his nephews (sister's sons). Male children are named aftertheir maternal uncle or grandfather, and daughters after their maternal grandmother or aunt. A man invariably marrier the daughter of his maternal uncle.
30. Vizhavans of Idiyara valley are divided into eight clans :-

| Kunnikār | 5. Ponneyankâ |
| :---: | :---: |
| 2. Alappankār | 6. Pelatikar |
| 3. Maringâtukār | 7. Pökkankār |
| 4. Thōnnikär | 8. Kräplikàr |

Sir Herbert Risley classes the names of exogamous divisions as eponymous, territorial, or local, titular and totemistic.* The clans of Vizhavans are territorial. They arenamed after some village in which the members of the clan originally resided. ThusMaringätukär are those who came from Maringath. Kräplikars are those who camefrom Kräpli. Groups of Vizhavans occupied different parts of the Idiyara valley, and came to be known by the name of the locality where they lived. Pélatikdr are said to be indigenous. When they began to decline in numbers, they contracted alliances with the Muthuvans in Cochin State, and these came over and settled in some, parts of the Idiyara valley.

P'elatikār and Pökkankar consider themselves to be superior to the other clansand the headman is selected from there clans. This superiority does not, however, operate as a bar to intermarriage. The first three clans regard themselves as belonging to onestock and so no intermarriage is allowed among them, but they can intermarry with the remaining five clans. Marriage between cross-cousins is prohibited among Muthuvans.. A man is free to marry any woman outside his clan and has thus a wider choice of a mate.
31. Malayarayans of Central Travancore are divided into six clans :-

Vala-illom are the descendants of the man who presented bangles to the Ampala-pula Chief (Vala means bangle); Enna-illom, of the man who presented oil to the Chief (Enna means oil) ; Mundillom, of the man who presented cloth to the Chief (Mundu means cloth); and Püthani-illom, of the ran who presented flowers to the Chief (Püvumeans flower). Besides these four, there are also the Korangani-illom and Panthirdyitaillom. The first two clans claim superiority over the others. Mundilla $k k d r s$ and Püthaniillakkars are Macchambi (brother-in-law) ilakkars to the members of the first two clans.. The last two clans are the lowest in social satus.

Formely men of Vala-illom married the women of Püthani-illom, but did not: give their women in marriage to the latter. Members of Püthant-illom are not allowed toserve food to those of Vala-illom_because of their lower status. These differences are now vanishing.

A Malayarayan is forbidden from marrying a woman of his own clan. A man's. children belong to his wife's clan, and they are named lafter the maternal grandparent, uncle or aunt. One of the traces of the old solidarity of the clan exists in the recognition by every member of the clan of his duty to welcome any other member, however unrelated, as. his brother.
32. Malavetans are divided into three endogamous sections, Cheruvètan, ChinkanniVêtan, and Elivêtan. Cheruvêtans, otherwise known as Veittuvans, are found in and out-side the Kumaranperur Reserve of the Rani Range. They comprise four exogamous. clans :-

1. Veñătan-illom,
2. Véndiri-illom,
3. Churalayär-illom,
4. Modanähan-illom.

Marriage between members of the same clan is prohibited. A man is free tomarry a woman of the other three clans. A woman after marriage continues to be of herown clan and the children belong to her clan.

## PLATE VIII—Paliyan Male



PLATE IX-Paliyan Female

33. Malankuravans are divided into eight exogamous clans :-

1. Mẽnati-illom,
2. Thechira-illom,
3. Kara-illom,
4. Vayana-illom,
5. Kuruntadi-illom,
6. Venni-illom,
7. Pallikal-illom,
8. Onthi-illom.

Menati-illakkărs consider themselves to be superior to the other clans. Men of this clan take wives only from Thechira, Venni, Kuruntadi, Pallikal and Kara clans, and not from the other two clans. Marriage within the clan is forbidden. A man marries the daughter of his maternal uncle, but not the daugther of his father's sister, as she is considered to be his sister.

Malayadiyärs of Ullinkal and Kottampära in the Rani Range have the following clans :-

1. Kata-illom, $\quad$ 4. Venni-illom,
2. Mênati-illom; - 5. Plākāt-illom,
3. Pallikal-illom,
4. Vayana-illom.

The clans are exogamous. A woman continues to be of her own clan even after marriage, and her children belong to her clan. Owing to the similarity of their clans, Malayadiyärs appear to be an early offshoot of Malankuravans.
34. Ullatans have four exogamous clans :-

1. Kärànchèin-illom,
2. Mādapal!̣i-illom,
3. Kānat-illom,
4. Perakala-illom.

A woman even after marriage belongs to her clan. Children belong to the mothers's clan and are named after a maternal grandparent, uncle or aunt. Cross-cousin marriage is common in this tribe.

Û́àlis of Periyăr and Vandanmet are divided into eight exogamous clans :-

1. Kānakūttam,
2. Eṇịīărkūttam,
3. Vettikūttam,
4. Periyilakōttam,'
5. Onakūttam,
6. Kodiyarikūtam,
7. Thürivakūttam,
8. Vayanavarkūttam.

There is a fanciful story of the origin of these clans. The men who went trudging in the Känam (high forest) belonged to Känakültam; those who went clearing the way belonged to Vettiküttam; those who went easing themselves on the way belonged to Thüriyaküttam; those who swept away the refuse belonged to Periyilaküttam ; those who numbered the cut stumps on the way belonged to Enniyärküttam; and lastly, those who attended a feast on Onam day belonged to O $\bar{O}$ nakūtlam. The clans are exogamous and children belong to the clan of the mother. Marriage generally takes place by the exchange of sisters. No man can get a wife, unless he has a sister whom he can give in exchange, with the result that a number of young men remain unmarried. A man used to have more than one wife formerly, but now the scarcity of women has made monogamy obligatory.
35. Mannāns of Vandanmet have eleven clans :-

1. Aravankudi-kāni,
2. Nätumannän-kāni,
3. Ứālian-kāni,
4. Ânakādan-kāni,
5. Maniyāran-kāṇ,
6. Thōprän-kạ̄ại,
7. Kumblan-kāni,
8. Edākan-kặị,
9. Panikan-kāni,
10. Muthukōran-kāṇ,
11. Kalkündal-kāṇi.

The clans are named after the localities where they live. They are exogamous and children belong to the clan of the mother.
36. Sir James Frazer calls Southern India." the classic home of cousin marriage." cousin "The marriage of cross-cousins appears to originate in the simplest of economic motives, the wish and necessity to pay for a woman in kind. Formerly, the match between a brother's daughter and sister's son was most common. This is said to be a survival of the matriarchate, when a man's sister's son was his heir. "* Marriage between a man and the daughter of his maternal uncle is prevalent among Muthuvans, Mamaans, and Malankuravans; but marriage with the daughter of his fathers' sister is prohibited. Marriage between ortho-cousins is also tabooed. Among the above mentioned tribes as well as among Malapantärfams, Malavetans, and Malayarayans, a father desires and claims the marriage of his son

[^57]with his sister's daughter. The desire is probably based on the economic motive of reducing the marriage expenses and of keeping the family property intact. The father encourages one form of cross-cousin marriage, namely, the marriage of his son with his sister's daughter, while the mother encourages the other form of cross-cousin marriage, namely, the marriage of her son with her brother's daughter, so that similar motives pulling brother and sister in opposite directions balance each other and tend to produce an equilibrium between the two forms of cross-cousin marriage.
37. Of the two forms of marriage by barter, the exchange of sisters was earlier than the exchange of daughters by their fathers.: The form of marriage considered to be quite proper by primitive tribes is that between cross-cousins. A man marries a woman who is the daughter of his father's sister or his mother's brother, and a woman marries a man who is the son of her mother's brother or her father's sister. Husband and wife in such cases are double cross-cousins. This double relationship by blood between the pair arises from the interchange of sisters. The practice of exchanging sisters in marriage coeexists with cross-cousin marriage among Ưālis, Muthuvans, Känikkär, Malavetans and Ullàtans. It is probable that the practice of exchanging daughters or sisters in marriage was at first a simple case of barter and originated in a low stage of savagery, when women had high economic value as labourers.
38. The classificatory system of relationship does not appear to have been affected by the divisions of a community into exogamous clans. The successive division of a community into two, four, or eight exogamous groups seems to have been intended to prevent the marriage of relatives of various degrees. The division of the clan into two was adopted for the purpose of preventing the marriage of brothers and sisters. Brothers and sisters belonged to the same clan, and marriage between the members of the same clan was tabooed. Under the two clan division the exchange of sisters became the regular mode of obtaining wives. Among Vizhavans of Idiyara valley the number of exogamous groups increased to eight, and this'was probably done to prevent the marriage of cross-cousins.
39. The wide distribution of exogamy and the probable priority of the system of female descent to that of male descent were pointed out by McLennan. The relationship found to exist between a man and his sister's children among Muthuvans and Mannāns may be a survival of the ancient system of matriarchy, under which a woman's children belonged to her family, and her husband had no proprietory right or authority over them. Under the system of female kinship, there was no change of clanship after marriage and both the husband and the wife retained their own clans, and the children belonged to the mother's clan. This is the case among Känikkär, Muthuvans, Malayarayans and others. With the introduction of the system of male kinship came the practice of transferring a woman from her clan to that of her husband.
40. Westermarck is of the opinion that the custom of naming the child after the mother is capable of widely different interpretations. "Among savages," he writes, "the tie between mother and child is much stronger than that which binds a child to the father $\qquad$ Moreover, in cases of separation, occurring frequently at the lower stages of civilization, the infant children always foilow the mother, and so, very often, do children more advanced in years... ......No wonder, then, if a child takes its name after the mother rather than after the father. "* In Malapantārams Travancore still possesses a primitive tribe in the hunting stage of civilization, among whom children are named after the father and descent is patrilineal.

Olans from which chlefs are drayn.
41. The existence of separate clans from which chiefs are drawn is a distinguishing feature of a few hill-tribes. There are six clans among Muthuvans. The Mêlêküllam clan is considered to be superior to all the others, and the headman, Mel-Vaka, is chosen from this clan. The members of this clan are allowed to intermarry only with those of Känakūtlam clan. The Miel-Vāka is the supreme lord of Muthuvans. In the case of Vizhavans of Idiyara valley the headman is chosen from the Pélatikhar and Pokkankar who are superior to the other clans, but unlike among Muthuvans intermarriage is allowed between these and other clans. Among Malayarayans of Central Travancore, Ennaillakkars and Vala-illakars are considered to be superior to the other clans, and from these their chiefs are chosen. There is no bar against intermarriage betwen the different clans. Kannikkàr generally have no particular clan from which the chiefs are chosen. Among the Kânikkär of Naraveli alone there exist two clans, Müttillakkars and Méni-illakkdrs, who are supposed to be superior to the other clans, and they choose their chiefs from these two superior clans. The members of the superior and inferior clans neither intermarry nor

[^58]PLATE XIV-Malavētan Male


PLATE XV—Malavêten Female

interdine. Among Thantapulayas chieftainship is confined to a particular family. The eldest male member of this family is acknowledged as the chief. On his death the office falls on his younger brother and in the absence of brothers on the oldest son of his sisters.
42. It was Vitruvius who said of pre-historic architecture that "the savage man Dwellungs and took shelter in nature's places of refuge or built his own in imitation of birds' nests and matorials ased the lairs of beasts. The earliest dwellings have been built under three types according to occupation of residents. The hunters and fishermen live in caves or rocks. The agriculturists build their huts of mud, poles, and straw, and shepherds live in old tents." The primitive tribes of Travancore are found in the region of the bamboo and the reed. These materials are used for a variety of purposes. There is a family likeness among all articles made by tropical peoples, and this is accounted for by the uniformity of climate and environments in which they live. The rectangular type of hut is the most common among most of the tribes. Malapantärams make the simplest of dwellings. They live either in rockshelters, or under breakwinds resting on junglewood posts and thatched with wild plantain leaves, which will accommodate two or three persons. Children over ten years of age sleep in separate dormitories. The huts are almost circular in shape.
43. According to Lord Avebury the Garos of Upper India and the Kānikkär live in dwellings built 8 to 10 feet above the ground, as a protection from man and wild animals. Two such pile-dwellings exist in the Kâni settlement at Möthiramala near Péchiparra. Each building is rectangular in shape, 20 feet long and 15 feet broad, built on posts of wood, 3 feet above the ground. There are eight posts on each side and eight in the middle. The flooring is made of bamboo thatly resting on bamboo cross-pieces. These two buildings are far more sanitary than other huts in which Kāṇikkär generally live. They have given up this type of dwelling as it is too difficult and costly to make. The ordinary hut is a simple one. It is 15 feet by 12 feet and contains only one room. It is made of junglewood, reeds and bamboos. The roof is thatched with the leaves of reeds and the side walls are also covered with them. The huts are situated close to one another in a row in Vilavancode and Kalkulam Ranges, but wider apart in regions to the north of Nedumangad. The floor is on a level with the ground; in some cases the side walls are made of mud to a height of two feet from the ground. These huts are very insanitary.
44. Muthuvan's huts are neater in appearance, but are huddled together. The floor is on a level with the ground. The huts are made of junglewood and reeds, and are thatched with grass. In Anjanãd Range, the walls are made of plaited bamboo and plastered with clay. Each hut has only one door in the front and is not provided with windows, as a protection against cold. The dwellings of Malayarayans and Ullatans are of an improved pattern. They are built wider apart with junglewood, bamboos and reeds and are thatched with grass. They have invariably a verandah in the front. The walls are made of plaited bamboo. The floor is about $2 \frac{1}{2}$ feet above the ground.

[^59]the soil for cultivation, for cutting firewood, and for various other purposes. They are adepts in the usc of the pellet-bow, the ordinary bow and arrow and the gun. The pellet-bow is made for the use of pellets of stone which are flung with great force. The stave is made of bamboo and is wider at the centre than at the ends. Two strings made of Slerculia fibre are tied on notches at the ends of the stave ; they are kept one inch apart by a piece of reed, with a socket in the centre, one inch square, also made of Slerculia fibre. The stone is held in the socket by the thumb and the forefinger: A stone could be flung from the pellet-bow over a distance of 100 yards. It is used in killing small game and in driving away monkeys from the crops. Boys are taught the use of it from very early in life and by the tenth year they become adepts. Men use it till they are 40 years old, when they give it up owing to failing eye-sight. Kärikkär use the plain bow also. It consists of a single stave made of the stem of Poliyalthia fragrans. The string is made of the fibre of the adventitious roots of Ficus, and is tied on notches at the ends of the stave. The arrow is made of reed, and the pointed end, made of Acacia catechu, is fixed to it by means of wax. To steady the flight of the arrow three rows of fowl's feathers are stuck into it with gum. Local blacksmiths make guns for Kannikkàr with the timber of Careya arborea supplied by Kaninkar themselves and the barrels of old unlicensed guns which the smiths manage to procure. These guns cost trom ten to thirty rupees. A Kannikkäran begiss the use of the gun by his 15th year and kills with it the bison, the wild boar, the sambur, the barking deer, the porcupine, the monkey, the jungle squirrel and other animals.
47. Muthuvans of the High Range use neither the pellet bow, nor the plain bow; but those at Puyamkutty use the plain bow, but not the pellet-bow. The stave of the bow is made of bamboo, and the arrow of reed. The string is made of the fibre of Ficus. Children are taught the use of the bow and arrow by the elders from their tenth year. The enthusiasm for the use of this weapon is dying out after the introduction of the gun. Boys are allowed to handle a gun from the 18 th year.
48. Ūrālis use the pellet-bow and the muzzle-loading gun. The chief weapuns of the other tribes are the digging spud and the bill-hook.

System of agriculture.

Nomadle agriculture. society. They ignore the land basis of society. The anthropogeographer recognizes all the social forces, economic and psychologic, which sociologists regard as the cement of societies. He sees in the land occupied by a primitive tribe a highly organized state, the material bond holding saciety together, the ultimate basis of their social activities, which are, therefore, derivatives from the land. He sees the common territory exercising an integrating force, weak in primitive communities, where the group has established a few and temporary relations with the soil, so that their low social complex breaks up rcadily." *
50. The primitive peoples of Travancore have a clear conception of tribal lands. The idea is of very early origin and arises out of the association of a group with its habitat whose food-supply they regard as their monopoly. Malapantârams are a small nomadic hunting tribe. They generally live in families of two or three for a week in one locality and move on to another when the food-supply is exhausted. There is an understanding among them that the groups living at Achencoil shall not roam over the domain of those at Thalapāra in quest of food. Each group has its own tract for its food-supply, and, on an average, it comes to about two square miles of land per head. "Since quantity must compensate for quality, it follows that the poorest groups usually require most space." $\dagger$
51. Agriculture is resorted to at first as an adjunct to the chase. Muthuvans, Mannanns, Paḷiyans, Utặils, and Vizhavans clear the land by burning the jungle, sow the seed, rake up the soil, and reep a fairly good harvest. Shifting cultivation is the common practice, and each group takes possession of three times the area required for food production and cultivates one third of it every yerr. Känikkär, Malayarayans, and Ullatans follow a slightly different system of cultivation. They cultivate a block of land for two or three years, and then take up another blcck, but do not change their habitation. Sedentary life adds stability to the occupation of the land. Agriculture alone enables them to live together in one place and collect the necessaries of life.
52. Muthuvans of Anjanād Valley are the only primitive people who have resorted to terraced agriculture from remote times. The Anjanād Valley is about five miles long and two to three miles broad. Ward and Conner speak of "numberless little glades; some

[^60]PLATE XVI—Malavētan chipping the incisor

adapted to rice cultivation, scattered along the hilly table that overlooks the valley, whose inhabitants are never tempted to settle within this space."* Semple states that a mountain environment often occasions a forced development in the form of agriculture among people who otherwise still linger on the outskirts of civilization. This is true of the Muthuvans of Anjanaid Valley who have been there from the second century A. D. Mountain agriculture is necessarily laborious and the paucity of arable land precludes the possibility of allowing felds to lie fallow. Soil fertility depleted by denudation is replenished by the addition of cow-dung. In Anjanäd the rainfall is low and the soil clayey, so that the soil wash is not appreciable and parallel walls of stone have not been found necessary. At Marayūr and Nāchivayal, there is a vast expanse of terraced cultivation of rice. Hill slopes are cut down and made into terraces, from 10 to 30 feet broad. The terraces are irrigated by channels which carry water from the Pämbanär over a distance of several miles. The terraces are so arranged that the water flows from terrace to terrace. The terraced fields are owned by individuals. The Muthuvans of Küdakād divert the waters of the Manalar to irrigate their fields. The Government of Travancore have extended the scope of terraced cultivation in this area by constructing a channel called the Thalayär right-bank channel, about 4 miles long, along the slope of the hill, at a cost of over a lakh of rupees, thus ensuring a regular supply of water to about 1,000 acres of this area.
53. Terraced agriculture is commonly practised by literate peoples of Travancore in the mountainous tracts of Minachil, Thodupula, Manimala, and Pirmede. When food. supply becomes inadequate for the growing population, artificial methods are employed to extend the area of arable land. In Europe, terraced agriculture exists in Germany and Italy. In India, it is foumd in the Himalayan uplands, in Kashmir, Bhutan, 'and Assam, and outside India, in Tibet, China and Peru. It is also highly developed in Sumatra, Java, Lambok, Luzon, Formosa, and Japan. According to Jenks, "the terrace-building culture of the Asiatic islands has drawn its inspiration from one source. It is considered to be a survial of a very early culture which spread from the nest of the primitive Malayan stock and left its marks all along the way." $\dagger$
54. The rigidity of the village organization of the primitive tribes is due to their long isolation, their narrow outlook on life, and close intermarriage for countless generations. They generally live in small groups of families called Kudi (village). Each village is. -even now an independent unit, and consists on an average of from 10 to 15 families, bound together by the idea of self-protection.
55. Among Muthuvans each village has its own headman and the village affairs -are conducted by a council of elders. The village chiefs are called the Kularan and the Sundarapändi. Above them there is the Thalayäri who exercises jurisdiction over a group of two or three villages. The supreme chief of all the villages is called the Mel-Väka and under him there is another dignitary called the Müppan. All matters which could not be settled by the village councils and by the headman of the villages or groups of villages, are first referred to the Müppan and on his decisions appeals are preferred to the Mel-Väka whose decisions are final. The offces of the Mél-Väka and the, Müppan are hereditary and descend from the uncle to the nephew (sister's son). When a man commits an offence, a panchayat (Orumura) is held in the village chãoadi. If he is not amenable to the discipline of the village chief, the Thalayari is invited. The Kularan or Sundarapändi (the village chief) spreads a mat and over it is placed a blanket covered by a white cloth for the Thalayäri to sit on. The Thalayäri and the village headman take their seats on the white cloth, while the other villagers sit at a respectable distance from them. The accused stands with folded hands before this council of village worthies. The complainants and the accused then state their case and after reviewing the arguments on both sides the Kularan and the Sundarapandi ask the Thalayari what punishment should be inflicted on the accused. He orders the imposition of a Gine, which does not exceed ten rupees. The authority of the panchayat now extends over breaches of marriage laws, disputes about inheritance, and petty thefts.
56. Muthuvans of Neriamangalam have at simpler organization. There the Mel-Väka alone counts. He has nominal jurisdiction over the villages in Pūpăra and Anjanād also. There are two Väkās, called the Mêl-Väka and the Müthäkka. The latter is inferior in rank to the former. When a fine of Rs.2-8-0 is inficted,

[^61]Rs.1-8-0 goes to the Mēl-Väka and one rupee to the Müthäkka. The Mel-Vaker appears in all his grandeur, when he heads the procession annually for founding a new hamlet. Other Muthuvans clear the jungle, cultivate the soil, sow the seed and carry out the orders of the Më-Väka, in return for which he feeds them. The Väkas of Ellikütlamare called the Pälithraka and the Valathrakka and they enjoy the same status as the $V a ̈ k a ̈ s$ of the other Muthuvan villages.
57. Among Mannăns, village affairs are regulated by a council of elders with a headman chosen by the villagers. Chieftainship is hereditary and the nephew (sister's son) succeeds the uncle. The chief has a lieutenant called Rajkshasan, and under him there are other dignitaries, known as Valia Elandäri, Elandäri, Thandakăran, and Thannipätla in the order of their rank. Mannans build huts, cultivate the land, harvest the crops, and store them in tree-houses for their village headman. These privileges are to some extent shared by Rakshasan and Valia Elandari also If any work has to be done, the order is. issued through Rakshasan and Elandari who get it executed through Thandakaran. The jurisdiction of the village council extends over petty offences which are punishable with a fine. If a man is not amenable to the decision of the council, the matter goes on. appeal to Varayilkilu Mannan whose decision is final. The system of village government among Mannāns is gradually breaking down.
58. Malayarayans have also their councils of elders to look after their common interests. Ponamban and Panikkan, having equal status, are the main limbs of the councils. The office of Ponamban was first conferred on a deserving member by the Pünjar Chief, and it is not hereditary. The office of Panikkan is hereditary and descends. from the father to the oldest son. The headman is responsible for the well-being of the people in his care. When a man commits an offence, the council meets. Ponambar reviews the offence and awards punishment which is generally a fine ranging from 10 to 101 chackrams (A chackram is a Travancore coin equivalent to about 7 pies) The headman and the councils meet once a month, discuss village affairs and depart after feasting. Each village has a common fund which is held by the headman. Loans are given to the needy and the amount is recovered in instalments. The influence of village government is weakening since the tribe has come under the control of the ForestDepartment.
59. The Kānikkär living in a village are knit together by social, religious and political ties. The village is the unit in all matters and there is no room for the play of individualistic tendencies. The villagers work jointly in clearing the jungle, in burning the debris and in all religio-magical ceremonies performed for securing a bountiful harvest. The headman (Müttakäni) used to wield considerable influence over his men and enjoy various perquisites. The office is hereditary and the oldest son of the sisters succeeds the uncle. The headman settles all disputes and is the final authority in matters social, religious and agricultural. He presides over the meeting of the council of elders, of which five members form the quorum. All social questions relating to marriage and divorce arediscussed and settled by the council and their decision is final. Any fine inficted on delinquents is spent in propitiating gods. Formerly, punishment consisted in caning and excommunication, but these are not now resorted to.
60. Each Ullatan hamlet has a chieftain called Kanikkaran. This office is hereditary and descends from the father to the son. The villagers build the hut and cultivate the land for their chief. Towards the end of every month, the villagers meet in a house and settle all village affairs. The head of the household treats them to a feast. Each house has its turn. When petty cases of assault arise, the culprits are fined 10 chackrams, with. which pansupari is purchased and distributed. In case of adultery the hands of the culprits are tied to a tree, and the man is given 12 lashes by his brother-in-law and the woman 16 lashes by her husband's brother. The supreme head of the U\|llatans is called the Kocchuvèlan, a tite said to have been conferred by the Pantalam Raja. He is the final authority in all matters concerning the welfare of the tribe, and he alone presides over meetings of the council when the offence of incest is under trial.
61. Kurumbapulayas of Anjanād Valley have no separate chief for each hamlet. There is a common chief called Araian for all the hamlets together. On his demise the office devolves on his eldest son. The Arasan has an assistant called $V$ driyan, and a Kölkaran to execute his orders.
62. Among Karavalipulayas the headman is called Kudumban. He has under hima Variyan and a Kölkäran to assist him in his duties. Kudumban and Variyan sit on a

PLATE XVII—Malankuravan Male


PLATE XVIII—Malankuravan Female

mat when the coumcil meets and Kölkāran stands close by. Cases of adultery and other offences are tried by them, and the man and the woman are fined from Rs. 1-12-0 to Rs. 3 each.
63. The Ūtălis of Periyär and Vandanmeth have a headman called Känikkāran for a group of hamlets. Each hamlet has a Plathi or medicine-man and he is responsible for the good conduct of the men therein. When a dispute arises in a hamlet, the Plathi informs the Kanikkdran of it and the lattra goes there, presides over the meeting of the village coumcil and settles the dispute. No fine is inflicted on the delinquents.
64. Paliyans have a Känikkaran (headman) for each hamlet. He is assisted by a Valia Elandäri, a Veena Mariya and a Thandakkāran. The first two are in charge of all unmarried boys and girls and are responsible for their good behaviour. They help the unemployed by finding work for them. When any dispute arises in a hamlet, the village council meets and discusses the matter. The parties are admonished and the dispute is settled amicably. If a man commits incest, he is kept in stocks for a day and then let off.
65. Malankuravans have a village rouncil presided over iby an Úiáli (headmanj. He is also the medicine-man who cures all maladies.
66. Malavttans have a headman called Stani in eacl hamlet, and he settles all their disputes. The office is hereditary and descends from the uncle to the nephew (sister's son). His influence is waning.
67. Thantapulayas have a chief who settles all petty dispules among them* Offences are inquired into and the culprits are punished by the levy of fines and by exposing them to ridicule. When they are unable to settle any dispute among themselves they take the matter to their Nayar master whose decision they all implicity obey.
68. The long chain of wooded hills of the Western Chats forms the home of the Traditions of hill-ribes of Travancore. How they came to occupy these hills is shrouded in obscurity. Some of them claim to be autochthonous. For example, Malayatayans believe that their original home was in Chingampära near Karimala in the Rari Reserve, and Ullatans think that theirs was in Kottathatti. Malapantärams also claim to be of indigenous origin.
69. Känikkār, Muthuvans, Marnāns, Ūrālis, and Vizhavans entertain traditions of having come from the adjoining district of Madura or Tinnevelly. No tribe has such a wealth of traditions of origin as the Kanikkär of South Travancore. These have been handed down from generation to generation in popular songs which they sing even now. The Käpikkâr of Köttür in Neyyattinkara Taluk sing a chättu song about their past history. It recounts that they formerly settled in Kalakād and Kallidakurichi in Tinnevelly District. There were 72 Käni hamlets under three chieftains, Viriappen Arayan of Viŕanelli Kōtta, Sithangan Arayan of Chennalür Kōtta, and Ādichan Arayan, of Ālanthara Kötta. In olden times the Âttingal Räja possersed rights over 'Kalakàd and Kallidakurichi.' The failure of the Kánikkàr to appear before the Rāja (Ponnum Perumäl) for three years led to the despatch of his minister, Mäthutti Pil! ai, to Kalakād with a royal command, directing the appearance of the three hill-chieftains before him. In obedience to the command the three chieftains went to Attingal and made presents of honey, ivory, tiger-skin, leopardskin, bamboo seeds, and other things to the Rāja, and the litter conferred on Viřappen Arayan the title of Viriamãrthāndan Arayan. It was also ordered that Viriamärthändan Arayan may collect a tax from the Kāp̣ikkär of 72 hamlets. His Highness was about to arrange for feeding the hill-chieftains and their followers, when Viriamärthändan Arayan informed him that they would themselves cook their food and that they would be satisfied if they were given provisions. While they were on their way to the river to cook their food, they were accosted by Chènnan and Chakki (Chännāns by caste), who invited them to their home. There they ate the food given by Chakki. The Raja who was informed
 " By your association with Chännäns, you have fallen in my estimation. You deserve to be only Malayarayan or lord of the hills." Virramärthāndan Arayan reached Kalakād, and collected and enjoyed the tax from 72 Kāni hamlets as ordered by the Âttingal Rāja. $H_{e}$ then decided to celebrate his installation ceremony as Chief of the Kānikkär, and invited Adi-Pändi Pändiyan, Mid-Pāndi Pāndiyan, and Thala-Pändi Pändiyan and others to the ceremony. Âdi-Pāndi Pāndiyan scoffed at the invitation and jeeringly sent word that he would go to the ceremony if Viramàrthāndan Arayan's sister were given him in marriage. This reply so provoked Viŕamarthändan that he could not take the insult lying down. $H_{e}$, therefore, decided to divert the waters of the Köthayär, the Parliyär, the Manimutharr, and the Chembarunthar from fowing into Ādi-Pändy by constructing a dam
across them. Some water still trickled down to Ādi-Pandy. The medicine-man (Pläthi) told Viriamärhandan that, if the dam were besmeared with the blood of his sister, Karimpadi, no water would flow to Adi-Pāndy. No greater sacrifice was demanded of Viramarthandan, but he did not flinch from carrying out the suggestion of the medicine-man. The blood of his sister was accordingly poured on the dam, and no water trickled down eastward thereafter. This brought famine to Ādi-Pändy. After ascertaining the cause, the Pändiyan Chief repaired to the Âttingal Ràja and sought relief. Mathutti Pilllai was sent to Kalakād to break the dam with an elephant and allow water to fow eastward. Virramarthandan dissuaded him from doing it, but his words were not heeded. When Mâthutti Pillai proceeded to break the dam with the elephant, Viriamãrthăndan discharged an arrow and killed the elephant. Mâthutti Pillai committed suicide saying, "You have killed your sister and my elephant. I too shail end my life here." This tragic event enraged the Ādi-Pāndy P.andiyan and he declared war against the Känikkar. They were defeated and their chieftains committed suicide. But, some of the Kanikkar escaped to Travancore and they are said to be the earliest Kanni settlers in this country. This is the tradition current among Kannikkàr about their immigration to Travancore. The memory of Mathutti P illaj is enshrined in their religious songs, and offerings are made to him even to-day.
70. Muthuvans of the Cardamom Hills ibelieve that they came from Madura on account of internal dissensions in their native land. It might possibly have been at the time when the Telugu Naickans took possession of Bodinaickanur in the fourteenth century A. D. The Muthuvans who came to the High Range in Travancore via Bodinaickanur carried their children on their tack when they climbed up the Chats, and hence they have come to be known as Muthuvans ('Muthuku' means 'the back'). This is one version. -Another version is that, when they left Madura, they carried on their back Goddess Minakkshi and are, therefore, called Muthuvans. Their males even now carry loads and females their babies on their back.
71. Mannāns also claim to have come from Madura. Being fond of animal food, they thought that they could live comfortably on the Travancore hills which abounded in sambur, black monkey, and other wild animals. The quest for food is, therefore, said to be the cause of their imnigration. Another version is that they were formerly dependants of the king of Madura. Owing to internecine dissensions, they were obliged to leave Madura under the leadership of a chief known as Pänjar Rāja. They entered the hills via Cumbummettu and settled in various parts of the Cardamom Hills. They also installed their deity, Chokkanädar, on the Chokkanād peak, and Chanthiyat Amma at Ayyappancöil. It is said that they once owned a small tract of land near Cumbum. It was leased to the people of that place and the produce realised was used for temple service by the Varayilkilu Mannān. This land was lost through litigation. Tradition has it that one of the former Rajas of Pūnjär nominated three Mlannäns as his agents for the management of his dominion. One of then was installed at Talliäramalai with a silver sword as his badge ; the second, Gōpura Mannān was installed at Mannänkandam with a silver bracelet as his badge ; and the third, the Talamala Mannan, who had a silver cane as badge, was installed at Udumbanchōla. After the Government of Travancore have taken possession of the Cardamom Hills, Mannäns owe only a nominal allegiance to the Pünjär Chief who is still held in veneration by them.
72. Úralis believe that they were dependants of the king of Madura. Their duty was to carry umbrellas during State procession. "In ancient times many of the parts included in the Thodupula taluk belonged to the king of Madura. Once when the king came to Neriamangalam, the ancestors of Úralis are said to have accompanied him and were probably left there to rule that locality."* ( $\bar{U} r^{\prime}$ means locality and d $l i=$ means to rule). Mannäns are said to have held sway over Úralis in former times. They were a source of terror to the Úălis, and any Uràli who remained in a tree-house on the arrival of the Rāja Mannän was caught and chastised. The Rāja Mannàn used to be the arbiter of their disputes, and they paid him four chackrams and one para of paddy annually, but, since they passed into the tutelage of the Government of Travancore, they stopped this payment.
73. Paliyans of Vandanmet say that, when they were living in Madura, a Pantàram told them that they would find it congenial to go and live on the Cardamom Hills in Travancore which were uninhabited and that accordingly they came and settled at Vandanmet. Another tradition current among Paliyans is that a Kallar of Madura had two wives, and that when some dissensions arose, his children by the second wife fled to Sankurandamalai, fearing molestation. Those who did not fall a victim to the marauders

[^62]PLATE XIX—Malayarayan Male


PLATE XX—Malayarayan Female

came to be known as Paliyans. They came to the Cardamom Hills dia Bodinaickanur. ln memory of this connection, the Kallars of Madura refrain from doing any harm to the Paliyans. These two tribes interdine but do not intermarry. A Kallar will not allow a Paliyan guest to depart without being fed. The Paliyans pride themselves in being called Kältuke!lars. The Kal!ars proper are known as Náttukallars.
74. Vizhavans seem to think that they are autochthonous,' but the names of some of their exogamous clans indicate that they might have come from Adirapalli in the Cochin State; for example, the Maringathukars are those who came from Maringath near Aditapalli.
75. Thantapulayas have a curious tradition about their origin. The region where they are now found was once a marshy swamp covered by scrub jungle. The owner of this land, an influential and rich Nayar landlord of the locality, attempted to cultivate this land with paddy. The land was cleared and sown. But most of the seed grains used to disappear and the cultivation was never a success. To find out how the grains disappeared the Nayar gentleman kept watch over his fields one night and found that at dead of night a band of naked men and women appeared on the fields and picked up the grains. He succeeded in catching hold of a man and a woman of this party and the rest escaped. To the man the Nayar gave his upper cloth and the woman made a garment out of the thanta (reed grass) which grew there and wore it round her waist. Thantapulayas believe that they are the descendants of this couple.
76. The traditions current among some of the primitive tribes as to their origin and their migration to Travancore hills have been described in the foregoing paragraphs; but the people of the plains generally ascribe the colonization of the hills with primitive tribes to sage Agastya who came from the north. It is said "that sage Agastya repaired tod Dwätaka (Tamil Tuvarupatti), and, taking with him eighteen kings of the line of Sri Krishna, eighteen families of Véls or Velirs, and others, moved to the south with the Aruvalar tribes, who appear to have been the ancestors of the Kurumbas." * "The Kurumbas, according to Dr. Keane, appear to be the remnants of a great - and widespread people, who erected the dolmens, and form one of the pre-Dravidian tribes of South India." $\dagger$ Agastya had the forests cleared and built up kingdoms setling there the people he brought with him. This migration is said to have taker place about 1075 B . C. Popular tradition supports the theory of Agastya's conquest of Southern India. The foot prints of Agastya are said to be visible at several places in his adventurous journey to the south, and the stages of his travels are marked by the little $\bar{A}$ sramäs (hermitages) he set up on the way. The Travancorean holds in great veneration the Agastyar Peak, the highest peak of the Western Ghats, where Agastya is believed to live even to-day and his image is installed and worshipped at the Olakarivu waterfall on the Asambu hills in the Kalkulam Range, at Matutuàmala near Cape Comorin, at Nagercoil, and other places. The adventures of Agastya are relevant to the extent that he is said to have played a conspicuous part in reclaiming primaeval forests in Southern India and making them fit for human habitation. Even to this day the Kanikikaar of South Travancore curse their enemies by swearing by Agastya, and make annual offerings to him at Agastyar Peak
77. The Epic and the Puranic legends contain traditions relating to the physical characters of the aborigines (Nishadas): "The Bhagavatha Purāna describes Nishada as black, like crows, very low-statured, short-armed, having high cheek bones, low topped nose, red eyes, and copper coloured hair." $\ddagger$ His descendants are distributed over the hills and forests. The Änamalai hills in Southern India form the refuge of a whole series of broken tribes. They are characterised by dark hair, short stature, and broad nose. Since these physical features of the Puränic Nishadàs indicate their affinities to the so-called pre-Dravidians, Mr. Chanda considers the dark short-statured and broad-nosed jungle tribes as the modern Nishadās representing the old Nishada race. At present, there are no distinctly Negrito communities in India, but in the opinion of Dr. Keane, distinctly Negrito features (dark skin, short stature, and broad nose) not only crop up continually in the uplands from the Himalayan slopes to Cape Comorin, bnt these uplands abound in great megalithic monuments which will enable us to unravel the history of their remote past.§

[^63]The disposal of the dema.
78. Burial and cremation are two common nethods of disposing of the dead bodies. They are very ancient customs and there is evidence to show that both methods were practised in the Vedic period in India. "The epithet 'agnidagdhah,' according to Macdonell and Keith, applies to the dead who were burnt in a funeral pyre; the other custom being burial, 'anagnidagdhah,' not burnt with fire. They also refer to "paropiah' or 'casting out,' and 'uddhitha' or 'exposure of the dead.' They add that burial was not rare in the Rig-Vẽdic period. In the Verdic period both customs appear in a modified form. A stone is set up between the dead and the living to separate them." ${ }^{*}$

Tamil works, such as Manimègalai, Tolkāppiam, and Poruladigāaram written about the second century A. D., refer to the following methods of disposing of the dead in preBrahmanic period:-

1. Exposure in an open space to be eaten by jackals.
2. Cremation.
3. Throwing the corpse into natural pits.
4. Covering the corpse with big earthen jars.
5. Burial. $\dagger$

Most of the primitive people of Travancore bury the dead.
79. Malapantartams of Central Travancore adopt the simplest from of burial. The dead are buried where they die. After burial the tribe leaves the locality and will never again gothere. Muthuvans bury the dead about a mile away from the hamlet. The grave is dug waist-deep for men and breast-deep for women, the reason being that men are brave and free from danger, while women will be free from danger only if the corpse is buried deeper in the ground. The corpse is covered by a now cloth purchased by the son or the sister's son, and after it is lowered into the grave, the Chakmuk (firemaking apparatus) and the turban are placed by its side. The grave is covered with earth and a small stone is planted at the head and the feet. A thatched shed $6^{\prime} \times 2^{\prime}$ is erected over it. Urallis also bury the dead about a furlong from the hut. The depth of the grave is about the same as a man's height for men, and a woman's height up to the breast for women. The chief mourner is the nephew (sister's son). The corpse is bathed and covered in a new cloth. It is then placed over a reed mat, tied with Kaivan fibre (Helicleres Isora) and carried to the grave. Billets of wood are placed in the pit and covered by a plaited bamboo mat. The sides of the grave are also coveredby similar mats. The corpse is then lowered in the grave and covered by a mat. The bill-hook and chewing materials of the deceased are placed in the right arm-pit. The grave is then filled with earth and a stone two feet long and one foot broad is planted at the head, fee, and on one side.
80. Ullatans bury the dead. The deceased's brother-in-law digs the grave. Before the corpse is removed from the hat the floor is swept and the sweepings are thrown on the bier to drive away the spirit of the dead. After burial a stone is planted at the head of the corpse. Malapulayas bury the dead and place a stone at the head, breast and feet. Malayarayans of Central Travancore inter the dead about twenty to forty yards to the south of their habitation. The eldest son and the oldest nephew (sister's son) of the deceased go round the site selected for the burial three times, strewing rice and fried paddy. They then remove three shovels of earth from there, turning their back to the spot. The grave is then dug four feet deep. The grave diggers are not allowed to carry the corpse. Wrapt in a new cloth the corpse is lowered into the grave. All the mourners then throw earth into the grave three times, standing with their back turned to the corpse, then wheel round and fill the grave with earth. Small pebbles are placed at the sides of the grave and a big stone is planted at the head and feet vertically. Mannäns bury the dead. The corpse is wrapt in a new cloth purchased by the nephew and carried to the burial ground on a bier. The grave is hip-deep in the case of men and not so deep in the case of women. The corpse is lowered into the grave with the head turned towards the south. The grave is filled up with earth and a thatched shed is erected over it to protect it from rain.

Paliyans bury the dead about a mile from the hamlet. The grave is breast-deep for women and loin-deep for men. The corpse is placed in the grave on a reed mat and is covered by it. The grave is then filled with earth. Vizhavans adopt a simple form of burial. The grave is about a mile away from the hamlet and is in the east to

[^64]PLATE XXI—U!!̣atan Male


PLATE XXII-U!̣àan Female

west direction. The corpse is placed on a new mat, tied up, and carried to the grave suspended on a pole. The corpse is laid on its back in the grave, the head being at the western end and the feet at the eastern end of the grave, and the head is propped up so that its back is turned to the west and the face looks eastward. A bamboo mat is placed over the corpse and the pit is filled with earth.
81. Känikkär living on the northern side of the Köthayär bury the dead. The. grave diggers besmear their foreheads with holy ashes given by the medicine-man to ward off evil spirits. The son and the nephew (sister's son) are the chief mourners. After the corpse is lowered into the grave, the earthly belongings of the deceased are placed by the side. The grave is then filled with earth by the son and nephew. The wife plays an important part in the funeral ceremony among the Känikkär of Köttür. She accompanies the corpse to the grave with a dishful of rice gruel, a spoon and a sieve. As soon as the corpse is lowered into the grave and covered with earth, she comes forward and deposits the above articles at the feet of the corpse. Death pollution lasts for sixteen days among the Känikkär in the regions of the Köthayär, for nine days at Köttorr, and for seven days in Kulathupula. Those who carry the corpse have to observe pollution for twelve days. Känikkär living on the southern side of the Köthayär cremate their dead. A pit, $6^{\prime}$ by $2^{\prime}$ by $2^{\prime \prime}$ is dug in north to south direction and is packed with billets of fuel over which the corpse is laid with the head at the southern end of the grave. Fuel is again placed over it and lighted at the head and feet. After the body is burned small pieces of bones are collected from the grave and thrown into a stream. The nephew, (the deceased man's sister's son) conducts these funeral rites. After throwing the bones into the stream he bathes and goes back to the grave with a bill-hook in one hand and lighted faggots in the other. The son of the deceased goes with him carrying a pot of water over his shoulders.: They go round the grave thrice and then the nephew hits the pot gently with a bill-hook thrice and the son throws the pot backward.
82. Malauztans bury the dead about a mile away from their habitation. Betore removing the corpse from the hut, the floor is swept and the sweepings and the broom are placed on the bier to drive away the spirit of the deceased from they house. The son and the nephew (the deceased man's sister's son) are the chief mourners. After bathing, all the mourners make a mark on their foreheads with cow-dung paste.
83. Thantapulayans used to bury the dead formerly, but now, being influenced by the custom prevalent among the Hindus, they have also begun to cremate the dead bodies. The grave is dug in north to south direction and the dead body wrapped up in a mat is laid on its back in the grave, the head being at the southern end and the feet at the northern end of the grave. The funeral rites are performed by the oldest nephew (sister's son) and the eldest son under the direction of a karmi. This office is hereditary and descends on the matrilineal heirs. Death pollution lasts for 16, days. During this period the karmi who has to perform certain rites daily is fed, and after the purification ceremony on the 16th day he gets a money present.
84. Respect for the dead appears to have been a prominent characteristic of man megaltsbic during Paleolithic and Neolithic epochs. It implied a belief in after-life. In Neolithic monuments. period the observance of rituals for the dead was a common phenomenon. The primitive people believed that the spirit of the dead should be given a habitation like living men, that the chamber for the dead should be similar to that of the living, and that the grave should be the prototype of the home. They apprehended "that, unless the departed spirit had a home and other things as in life, it would hover restless and troublesome around its old abode doing thereby harm to the living,"* and to accommodate the spirit they constructed various megalithic monuments, which were rude structures built of large pieces of stones. They consisted of single upright stones fixed in the ground, or of rows of such stones, or of large flat stones supported on a number of smaller uprights. Megaliths belong to the Neolithic period and also to a part of the Copper and Bronze Ages. "Until recently megalithic remains were thought to be the burial places of the mighty chiefs or temples used by the Druids." $\dagger$
85. Dolmens are rude structures consisting of a large unhewn stone resting on two or more others placed erect. They are found scattered on the long chain of wooded hills in Travancore. They are generally considered to be "stones of the monkeys in India," but most of the primitive people of Travancore have no knowledge of them nor do they evidence any interest in them: The people of Anjanàd alone call them Var lividās or

[^65]abodes of monkeys. Ūràlịis call them Pändukulies, pits made by the Pāndüs or Pândavās, to whom ancient mysterions structures all over India are generally ascribed. They are looked upon by the credulous as sacred and dangerous. It is said that peasants in France will not take sheiter under them nor go near them at night, but the Vellajas and the Malapulayas of Anjanâd have no such fear. They sit under them when they graze their cattle. "A. dolmen in Finistiere is said to cure rheumatism in any one who rubs against the loftiest of its stones and another heals fever patients who sleep under it."* There is a miniature menhir, three feet high, at Marayū, called Vathamkolli. It is believed that any rheumatic patient who rubs his knee against this stone will be cured of rheumatism, but no one ventures to do so at present. Dr. Borlase thinks that dolmens were connected with the activities of a shady priesthood. Professor J. Dubriel has tried to connect many of the Deccan megaliths with sacrificial houses mentioned in later Vadic literature.
86. The earliest record of dolmens in Travancore was by Ward and Conner in 1852. They state that "the pändukulies or barrows, those remains of primaeval customs so common throughout the Peninsula are also found here, though they are not so numerous:" Úralis believe that dolmens are places where treasure is hidden, but no such treasure has been found in any of the dolmens excavated. Dolmens are chambers in which people of late Neolithic times buried the dead bodies of important persons. In Travancore they are invariably found on the crests of hills in the Rani Reserve, and they are built of unhewn blocks of stone. In the erection of the dolmens, the ancients observed certain architectural methods and principles. By the use of orthostatic block, the maximum of wall area was provided with the minimum of thickness. With the upright wall-technique went hand in hand the roofing of narrow spaces by means of horizontal slabs laid across on the top of the uprights. The second feature of megalithic architecture was coarse masonry, without the use of mortar, each block of stone placed on its side and not on its edge. Such combinations are quite typical of megalithic works. In other cases "a series of uprights is first put in position and over those are laid several honimontal courses of rather smaller stone." $\dagger$ A variant of the latter form ic found in the Anjanad Valley.
87. According to Colonel Meadows Taylor, the dolmens are of two kind, those consisting of four stones, three supporting stones and one cap stone, leaving one side open ; and those in which the chamber is closed by a fourth stone. In the latter case, the fourth stone has invariably a circular opening in it. Both these types of dolmens are found in Travancore. The dolmen at Kadukuthi in the Rani Reserve is rectangular and the portion above ground is $8^{\prime}$ by $2 \jmath^{\prime}$ ' in dimensions. It has only one gallery. Lengthwise it has one single upright on one side, and two others on the opposite side. Sideways, there is one on each side. The floor is paved with a single stone slab. The cap stone is $7^{\prime}$ by $7^{\prime}$ by $8^{\prime \prime}$, and is rudely triangular. This dolmen is situated on the crest of a hill. It appears to have been a dolmen of the earliest times, as it is built of unhewn blocks of stone. The presence of boulders lying scattered round the dolmen shows that it might have been covered over with them. The dolmen appears to have been ransacked, but excavation has cvidently yielded no result.
88. Rev. Mateer found another type of dolmens on the hills inhabited by Malayatayans. They stand in north to south direction with the circular opening facing the south. A round stone is fitted to this aperture, with another acting as a support to keep it in position. The side stone as well as the stones at the top and bottom are single slabs. Rev. Mateer observes:-" To this day the Arayans make similar little cells of stone, the whole formirg a box, a few inches square." $\ddagger$ The Malayarayans of the present day do not erect dolmens. The art has been forgotten.
89. Dolmens are also found at Perunthalpära on both banks of the Thalayăr or Pämbanār river, a small tributary of the Amarävathi which flows into the Cauvery. Here, on flat level rocky tableland are seen a larger number of dolmens in groups of three, four or five. Around each group is a circular packing of roughly hewn stones or boulders. These groups of dolmens are found distributed in a circle. The disposition of the majority of the dolmens is in east to west direction. A few are also in north to south direction. The upright stones are rectangular in shape, and are about 10 feet long, 5 feet broad, and 7 feet high. The cover-slab is $17^{\prime}$ by $7^{\prime}$ by $6^{\prime \prime}$. The floor is paved with a flat stone slab $9^{\prime}$ by $4^{\prime}$ by $6^{\prime \prime}$. The inner chamber is $9^{\prime}$ by $4^{\prime}$. Over some of the cover-slabs are found remnants of rubble stone packing. There is a semi-circular entrance to the

[^66]
## PLATE XXIII—Kâṛikkōran Male



PLATE XXIV-Kāṇikkāran Female

dolmen on one side. Most of these dolmens have four uprights, but one dolmen in some. groups has only three uprights and one cap-stone, thus leaving one side open. The local people call them Valioidüs and believe them to have been the abode of Valis or monkeys of the days of the Rämăyana. Monuments of this kind are also found in the Bison Valley in the Cardamom Hills. At Vadattupāra in the Malayattur Reserve there is a dolmen consisting of four uprights, but it is smaller and cruder than those found in the Anjanäd Valley.
90. Another type of dolmen is found on the Cardamom Hills near Mattupatti. Here the chamber is formed as described above, but is buried in the earth shewing only the-cap-stone above the ground. Dolmens of this type are said to be found on the Nilgiris and throughout Malabar. About 15 yards to the west of the above mentioned dolmen was found an alignment of monoliths or menhirs planted in the earth at almost equal distances, some small, and some very big and impressive.
91. Perry observes that the reality of a movement of stone-using people is evidenced by the use of stones for graves by the hill-tribes. In Watubela the dead are buried and a stone is placed at the head and foot of the grave. This practice is prevalent among the Kabni Nāgàs of Assam and also among the Muthuvans and Urạlis of Travancore. Utalis plant a stone not only at the head and foot of the grave, but also on either side of it. The survival of this custom among the primitive peoples of Assam and Travancore lends. support to the theory that there mitht have been a movement of stone-using people, not only throughout Indonesia as far as Assam, but also through Assam to Cape Comorin.
92. Antiquarians, after careful researches, have been able to divide megalithic monuments into three classes according to their contents. (1) The tumuli of the Stone Age are considered to be the most ancient. They are often of great size and are distinguished by circles of stones and stone chambers in which are found the remains of unburnt body with objects of stone and amber: The dolmen opened by Ward and Conner at Chokkanad contained no implement and probably belonged to the Stone Age. This represents the lowest state of civilization before the introduction of metals. (2) The tumuli of the Bronze Age contain relics of burnt bodies, vessels, and implements and ornaments of bronze, which indicate that the people were in a more advanced eivilization. Tumuli of this kind are rare in Kefrala, but it appears that Mr. Bourdillon once picked up a bronze lamp which probably belonged to one such tumulus. (3) The tumuli of the Iron Age are the most recent and represent a comparatively advanced state of civilization. Iron implements, swords, spear-heads and highly polished vessels are found in them. In the Cochin State, all the tumuli that have been found appear to be of the Iron Age, while in Travancore there are some that are of even an earlier period as was revealed by the excavations of Ward and Conner.
93. Megalithic monuments in different parts of the world present such a uniformity of structure that it is hardly compatible with the theory of their independent origin. Montelius focuses attention on the continuous influence of the East on the West from remote pre-historic times. Fergusson thinks that the dolmen builders were Dravidian in origin. Ruggeri strikes a different note and opines that they are Vetaic or Australoid in origin and that between the Mundas of the north and the Vetas of the south there intervene the Kurumbăs, Itulasas, Muthuvans, and Úralis, representing the pre-Dravidians who once extended over the whole of India and later came under the influence of the Dravidians and the Aryans. According to Flinders Petrie, the date of the pre-Dravidian culture is about 2,500 B. C. This view is confirmed by Perry who holds that, "all the world over, the dolmens present such similarities of structure that they must have been the work of a people shewing a common culture"'. Beyond Indonesia which includes, among others, Assam and Burma, megalithic monuments are in evidence in the region of the Mundas of Chota Nagpur, the Todas of the Nilgiris and the hill tribes of Cochin and Travancore. Palæontological evidence also supports the theory of the common origin of megalithic monuments. Two fossil remains have recently been found in India, the Bayana Cranium and the Sailkot Cranium. Dr. Keith is of the opinion that they are of a Vetaic type which represents the pre-Dravidian (a dolichocephalic) people. There is a remarkable similarity between these and the skeletons found in the tumuli of Great Britain, France, and Germany, which exhibit features of a dolichocephalic people.| Thus the uniformity in the structure of the monuments is marked by a uniformity in structure of the contained skeletons which belong to a dolichocephalic people. $\dagger$

[^67]Civilization is fast destroying the primitive peoples. Most. of the tribes who are believed to have erected dolmens and menhirs are being so rapidly civilized that their primitive beliefs and institutions are becoming extinct under the changed environments.

Ideas as to the sun and the moon. about the objects they see around them in nature. Kanikkāran calls the sun Bhagavend Iswaran and worships him on Fridays. Early at sunrise he places in front of his hut a lighted lamp, fruits, beaten and fried rice, and prays, "Ohl God, pray accept what is offered to you." He and his family then partake of the offerings. The sun is looked upon as the creator and is treated as a female. To the Kanikkarran the moon is a male and he makes his offerings to the moon on full-moon days. A lighted lamp and a quarter measure of rice are placed in front of the hut. The rice is cooked just when the moon rises and then he prays, "Oh! Moon, pray accept this offering." The worship of the moon is intended to cure whooping cough. The mark on the moon is said to be that of the hare. The story goes that when a Kānikkaran and his wife were roaming in the jungle, they found the moon hiding in a stump of grass. Finding that it would make an excellent thali (a neck ornament) for his wife, he made an attempt to seize it. The mark of charcoal dust on his hand left an impression on the moon who fled away to the sky.
95. The Muthuvan worships the sun both in the morning and in the evening. He prays in the open in the morning in some such manner-"We are in the jungle. We are ignorant. Pray guard us from mishaps". The same prayer is made at night before going to bed. Uràlis recognize the sun as the creator of the universe and the father of all souls, and the moon as the mother. The legend current among them regarding the mark on the moon is that once when the moon was serving food to the sum an altercation arose between them, and the sun, getting wild, smeared remnants of rice on the face of the moon. The result is that she has a spotted face. The new-moon day is believed to be the day when the moon is in menses and hides herself in the clouds. The Malayarayan regards the sun and the moon as children of one god, the sun being the natural son born of the mother Goddess, and the moon being the adopted son. It is said that their mother once sent them to a feast with'instructions that they should bring remnants of food served. The moon brought something of every dish, but the sun failed to do so. The mother got angry and cursed

 refreshing light.

## Earthquake.

Eclipse.

Thander and lightning.
96. The Kānikkär think that the earth rests on one of the horns of an ox. When the ox feels restive on account of the heaviness of the earth, it is shifted to the other horn, when earthquake arises. Muthuvans believe that the earthquake is caused when the Goddess who bears the earth shifts it from one shoulder to the other. Utälis thiok that the earth is borne by two gigantic demi-gods, (Bhimas), by turn. When one Bhima retires, he hands it over to the other, and then the earthquake occurs. Malayarayans consider that the earth rests on a serpent of five heads, and that the earthquake is caused when it moves one of its heads.
97. The Kannikkār believe that the serpent is the parent of the moon. The moon, it seems, once refused to give pan to the serpent and consequently the serpent shrouds the moon with its hood occasionally. This is said to be the cause of the lunar eclipse, and the solar eclipse is also explained similarly. The legend among Úralis is that, for default in payment of old debts, a serpent attacks the sun and the moon from time to time. It encircles them and attempts to swallow them up, when a part of the debt is paid and a temporary relief obtained. According to Malayatayans a hare takes shelter behind the moon when it is pursued by a serpent. The serpent gets over the moon, when the lunar eclipse is caused.
98. To the Känikkarr of Kallarr thunder, is known as Kattalantdt or the blows" of the Rakshasa. The Rakshasa is supposed to have a stone tied round his loins and when he sees a maruti tree (Terminalia paniculata) he strikes it with the stone, and the noise thus produced is thunder. They distinguish two kinds of thunder, Achiyidi and Kuliridt. The former destroys trees and grass and the latter severs the bark of trees without destroying them. Lightning is the flash of light seen when the giant strikes a tree with the stone. According to Muthuvans, thunder is caused by the Dèvas (gods) rolling a stone. Utralis believe that thunder, lightning, and rain are caused by the duels between Bhimas in heaven. The duel takes place on a plank laid on the ground. Two Bhimas stand at the extremities of the plank, and in measured steps walk towards the centre and attempt to strike each other

PLATE XXV-Thantapulayan Male


PLATE XXVI-Thantapulayan Female

$\because$
with their swords. The rubbing of the swords causes lighning; the sound of treading on the plank is the thunder; and the sweat of the duellists trickler down as rain. Malayarayans think that Paramesiwata, the god of the earth, has a famous bow with which he keeps his enemies at bay. When he bends his bow it appears in different colours. Lightning is caused by the reflection of this bow. Thunder occurs when Dēoàs fight against one another.
99. With the Kāñikkär, the rainbow is the bone of a Rakshasa. They -distinguish two linds of raimbow, "palayavillu" or dd bow and "puthiyavillu" or new bow. The former is said to be faint, and the latter bright. Muthuvans identify the rainbow with Arjuna's bow. The red line is the string and the blue is the stave. Utalis regard the rainbow as the bow of Rama, one end of which is said to touch the earth. Malapantartams bclieve that rain is regulated by the rainbow. If a rainbow appears when there is no rain, copious rainfall is expected, and if it appears when it rains, the rain will cease. They also believe that excessive ran causes thumder and lightning.
100. "Culture is that complex whole which indludes knowledge, art, morals, Jaw, custom and any other capabilities and habits acquired by man as a member of society."* Environment played an important part in the cultural traits of very early and pre-literate peoples. "Life was then, as it is now, and ever must be, eternal adjustment to environment. The history of human culture is the story of that adjustment." $\dagger$ The pre-literate peoples of Travancore are found in the recesses of hills. Isolation, according to Duncan, is the cause of the backwardness of such people in the race for advancement. Excessive heat in the summer burns out the energy of Känikkär, Malayarayan, Ullatan, Malavetan and others who live in forests of low elevation, and makes them slothful. In fact, the debilitating effect of heat and humidity, aided by diseases, has reduced them to the dead level of economic inefficiency. These conditions have been aggravated by another important factor. Kānikkär, Malayarayans, Ullätans, and Malavêtans have been dispossessed of their former lands which were fertile and healthy and driven to more inhospitable regions. They could not.compete with the organized capitalists, and were forced into the background in most uncongenial areas. In spite of their receding into the interior forests the hill-tribes have been brought into contact with the people of higher culture, firstly on account of the improvement of communications and method of travelling, secondly through the influence of markets, and thirdly through the work of the missionaries. In the markets representatives of different groups meet to exchange their wares. This kind of trade is advantageous to all of them and they become hospitable to one another. The social environment is bereft of any other stimulation.
101. Sanitation is badly wanting in the hamlets of the hill-tribes. Kāṇikkär, Mannäns, Muthuvans, Paliyans, and Vizhavans do not raise the floor of the huts above athe ground level. Drainage is defective and the hats are over-crowded and ill-ventilated. Living under insanitary conditions is one of the causes of the decline of the tribes. In : this respect Malayarayans, Ullatans and Malapulayas stand on a higher level as the floor of their huts is raised above the surrounding ground. Kaniikkär and Malayarayans, bury their dead only about a hundred yards from their hut, but Muthuvans, Mannäns, Paliyans, and Vizhavans do it far away from their habitations.
102. Of all the evil customs introduced by crivization, the wearing of clothes is said to be the worst. The trader and the missionary are the two chief agents in modifying the conditions of existence of the hill-rribes. Their influence first becomes visible in creating among the tribes the flesh consciousness and the virtues of concealment, the two sign-posts of high civilization. "It is not an innate feeling of modesty that has produced clothing, but clothing which is responsible for the feeling of modesty in men.' $\ddagger$ The trader creates in them fresh tastes and wants and is thereby able to sell his wares and make profits for himself. Muthuvans, Mannāns, Palịyans, Úrälis, and Kānịkkār purchase second-hand clothes and wear them until they rot to pieces. The Kànikkar of Kallar wear the scantiest of garments, only a front apron to cover their genital organs. Thantapulaya women used to wear only a garment made of thanta (a reed called Isolepis articulata, Nees), but now it has been replaced by a loin cloth.
103. The problem of education of the hill-tribes is being tackled both by the Government and the missionaries. The Government have estallished schools for

Drens.

[^68]the Kānikkär, Malayarayans and Ürālis. The London Missionary Society has opened aschool for Paliyans at Anakara in the Vandanmet Range, and a Roman Catholic Mission has opened another school at Thicchamala in the Virtapuli Reserve for the education of the Kañikkar. The mission school for the Paliyans at Anakara was established about 10 . years ago. Though a large number of Paliyans joined the school at frrst, the proselytizing. zeal of the mission and the absence $\alpha=$ other allurements have reduced the number to about 25 at present. Education undermines superstition and causes the disorganization of primitive tribes. The boys who atted the school despise manual labour. The present. system of education is purely literary and not vocational. It tends to produce idlers and. non-producers, and theofby causes economic waste.

## Improved

 fmplements and atenalls.Diet

Hables and customs.
104. One of the causes of deterioration of the primitive tribeo is said to be the advent of modern implements and methods. The improved implements havo anabled them to save manual labour in their ayocations. Kannikkär, Muthuvans, and others, whohave been using a wooden hoe for hoeing the soil and the digging spud for digging upwild tubers and roots, have taken to the use of the axe, pick-axe, and mammatty. Again, Kāpikkar and Muthuvans, who were formerly adepts at the use of the bow, have now become the proud possessors of fre-arms. They will give anything to procure a gur which has now become an indispensable necessity to them. All the tribes except Malapantärams have discarded their crude utensils in favour of factory-made articles and: indigenous brass vessels. Kerosene lamps are driving out the reed torch which was in vogue formerly. Swedish, Japanese, and indigenous safety matches are displacing the primitive methods of making fire by friction and with the fint and stecl. Malapantàrams and Vizhavans along are following the old methods.
105. Chgnges have also come about in the food of the hill-tribes. Among. Kāpikkär and Üralis, there bas been an age-long taboo against the use of milk. A. Känikkäran used to vomit and get head-ache if he drank milk. This is the case evennow with the Kanikkär of Kallär and the Urallis of Pirmede taluk. Muthuvans, Mannāns, and Kinikkär have taken to coffee-drinking, and tea has become- indispensable to Ưalalis. Changed ways of lifeand thought have led to the unsettling of the mind of the primitive man. To procure fanciful articles, he has bartered away his heritage and retreated to more inhospitable lands. This has changed his former mode of life and deprived him of all incentive for work.
106. Custom das a unifying hacror among the primitive peoples. It regulated all details of existence, and governed politics, economics, and society. But contact with the people of the plains destroyed the complex web of customs and institutions which made upthe tribal life, and in this process of disintegration the weaker went to the wall. The. control of the hill-tribes by the Forest Department has tended to the diminution of the infuence and importance of the village chieftains who are now only mere shadows of their former selves, and this has endangered the maintenance of discipline. Frequent access to the people of the plains has weakened the taboos and the social solidarity. It has undermined the clan system and lessened the regard and respect the people had fortheir headman. In the words of Dudley Kidd, "We are undermining the clan system rightand left, and have riddled its defences through and through with explosive shells of civi-. lization. All old restraints are removed and they have disistegrated religion and made it useless."*
107. The Bachelor-hall, which used to be a bulwark against malpractices, is now. dwindling in importance. It has been the custom that no woman could enter this hall and that all unmarried men should sleep there till ihey get married. This custom is still enforced among Muthuvans, but it is indergoing a slow progress of silent decay among. other primitive peoples of the State.
108. The habit of toddy and arrack drinking among Kanjikkär, Muthuvans, and Mannäns, of opium eating among Vizhavans and of ganja smoking among Paliyans is becoming a serious menace. On weekly market days they buy these injurious intoxicanto, and sometimes even at their very doors through the clandestine practices of unscrupulous. merchants.
109. The improvement of communications has brought the primitive tribes intocontact with the dregs of low-country people, with the result that their morals have beenaffected. Lethal diseases have penetrated into the villages of hill-men. Leprosy is now found among the Kānikkār of Köttur and Arippa, the Muthuvans of Nertiamangalam and


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## PLATE XXVII—Ūrāli’s Tree-house



Madathura ; and syphilis among Paliyans. Small-pox is a dreadful disease among Muthuvans, Mannäns and others. When a case of small-pox appears in a hamlet, the people desert it leaving the patients to themselves. Vizhavans, Paliyans, and Känikkăr do not dread this disease so much. Barring the Muthuvans, Mannäns, Palịyans and Uúrạis who live above fever-level, all the other hill-tribes are subjected to malaria to which many fall victims. There is no doubt that these deadly diseases have contributed to the decline in the population of the hill-tribes. The birth-rate has decreased and the death-rate has increased. It is seen that more children are born among the Känikkar living in the interior than among those living in hamlets more accessible. Progress in civilization has resulted in increased facilities for immorality. Opportunities to earn money by working in estates . are making them less industrious and their own agriculture is consequently deteriorating.
110. Pitt-Rivers speaks of the enormous influence of mind on body arising out of despair among lowly people, and says, "it is the basic cause of depopulation." By the - deatruction of interest in life, the hill-tribes are cut off from their old moorings and being ill-adapted to the new surroundings and circumstances they naturally decline. Where there have been fewer changes there the decline is not so rapid. In Travancore the Käniktär have changed most and the decline amongst them is the greatest, while Muthuvans have -changed least.
111. Cross-cousin marriage is characteristic of all the primitive peoples of Travancore except Vizhavans. Westermarck and Dumcan hold that consanguineous marriages are harmful, while Pitt-Rivers and Carr-Saunders take the opposite view. The enquiry im Travancore has revealed the fact that the existence of cross-cousin marriage among Kānikkar and Muthuvans has not decreased the birth-rate and the survival rate among them to a greater extent than among Vizhavans who forbid cross-cousin marriage.
112. Copulation after marriage, but before the girl attains puberty, is common among Kämikkar, Vizhavans, and Malapulayas of Anjanād Valley. Early coition is believed to be detrimental to health and fecundity. Marriage before puberty, which is an ancient Aryan custom, has been adopted by some of the primitive tribes of Travancore. Early intercourse is injurious to the general health of the mother and the child. It will weaken the reproductive functions and cause abortion. This is probably one of the causes of the prevalence -of abortion among Kānikkar.
113. Traces of polyandry are seen among Malayarayans, U!!ātans, Paliyans, Muthuvans, Utalis and Malapulayas, probably due to the shortage of women. If polyandry is an indication of shortage of women, and if a progressive disturbance in the balance of the sexes in the direction of an ever-increasing deficit of womer is an index of declining popula:tion, the polyandrous communities should have disappeared long ago. According to Westermarck, intercourse between one woman and several men is unfavourable to repro--duction, because of the counteracting effect on each other of the spermatozoa of different individuals. Rockhill and Sherring have shown that polyandry results in small families. A surplus of adult females over males is a necessary condition of the stabilization and continued vigour of human races.- Among the primitive tribes of Travancore, Paliyans, Uralis, and Karavalipulayas have a shortage of women. Among the polygamous groups,' females show a higher survival rate than males, while among polyandrous groups the reverse is the case. Polygamous marriages produce a larger number of children than monogamous ones. According to Pitt-Rivers, "the maintenance of polygynous institutions in an aboriginal race is one of the best indications of its preservation as a race."* The primitive peoples of Travancore are mostly monogamous.
114. By the operation of the various causes mentioned above the fertility of the primitive tribes of Travancore is declining and their numbers are decreasing. Most primitive tribes have but small families, the number of children ranging from one to three per family. The average survival rate of children is found to be 1.7 per family among Kāṇikkär, 1.4 among Malavetans, 1.2 among Kurumbapulayas, 1.9 among Vizhavans, 1.5 among Malayatayans, and 1.4 among Ullatans. Owing to better climatic conditions in the High Range the number of children per family is found to be 2.5 among Muthuvans, 2.3 among Karavalipulayas, and $2 \cdot 2$ among Cheruvetans.
115. The only way to study the problem of the hill-tribes,is to examine their customs Remedies for -and discover their bearing on the social organization and the communal life of the tribes, depopulation and to view their morality from the standpoint of their own thoughts, without desiring to

[^70]substitute something not suited to their life. According to Dr. Hutton, "the customs and sanctions that held society together are powerless to bind the intruders, their value is not realized and they are too lightly cast away. The result is a physical and a moral decline. Civilization is, as it were, a drug which, however harmess or even beneficial to the bardened and immune, is a rapid poison to those unaccustomed to its use. "" This view is confirmed by Spencer and Gillen, and it finds ample support in Travancore. Old customs are forsaken or modified out of recognition, and beliefs which have been firmly held are quietly dropped, because the young people think that they are not worthy of credence.
116. In attempting to improve the condition of the primitive peoples, we must build on the tribal past through the agency of the tribes themselves. The attempt to aid and foster their development should be the concern of the Government and should not be delegated to other agencies like the missionaries. The tribes must be enabled to control their own destiny. The advantage of this system is that it permits of unlimited growth without a break from the past. As Roberts states, "it should be embedded on the native past, and should be by natives through native institutions." $\dagger$. This provides openings for the bulk of the people and gives them something to occupy their minds. MacGregor insists on looking at things "as the natives visioned them themselves." The material and moral welfare of the tribes must be the aim, and this can best be accomplished under the guidance of the Government. The scheme formulated by MacGregor in regard to the tribes of Melanesia fulfils this condition and may, therefore, be considered in this connection. It contains the following provisions :-

1. "CCertain are as are set aside and are divided into small allotmente, each of which becomes the freehold property of an individual. Communism, the enemy of initiative, has no place in the scheme.
2. Each landowner is to pay a fixed rental and a certain duty on holdings over four mortgues in extent.
3. The control of the native affairs of ench Reserve is in the hands of local boards, and councils, but is directed by an European adviser."
4. The Government of Travancore have framed a set of rules for the treatment and management of the hill-tribes, but they do not come up to the level of the scheme evolved by MacGregor, inasmuch as they do not provide for the individual ownership of land and for the levy of tax on it, which alone will create in man the incentive to work and to put the land to the best possible use. Segregation in reserved forests, individual ownership of property; and local self-government are the principles which should underlie the scheme intended for the uplift of the hill-tribes. The rules in force in Travancore which are given at the end of this Appendix require revision. If the welfare of the hill-tribes is to be safeguarded efficiently, they should contain the following provisions :-
5. The areas in Reserves should be divided into small blocks and nasigned to individuals separately, conferring on them the ownership. Communism which kills. all initiative must be shut out.
6. Each hillman to whom land is given sbould pay a fixed rental to the Governmont.
7. Village councils or local boards should be constituled for each settloment.
8. The spread of education is the next most important step for the regeneration of the bill-tribes. Education should be such as will be of practical use to them and will at the same time enable them to preserve their heritage and develop their racial qualities. Education should be vocational, agriculture and cottage industries being taught to boys and domestic science to girls. The only way to save the hillman is to make him work and improve his economic condition. The Government should shoulder this responsibility instead of leaving it to private agencies.
9. Most of the hill-tribes are heavily involved in debts which they will never be able to discharge if they remain in their present economic condition. The low-country people who advance loans to them realize an exorbitant rate of interest, often two paras of paddy and more for a loan of ten paras for a period of six months or so. To improve their material condition, they should be prevented from incurring debts. Further, nomadic agriculture being their basic industry, improvidence and laziness intensify their indebtedncss. It, therefore, seems desirable that adequate credit facilities should be created so that they may stand on their own legs. Co-operative credit societies should be organized for thispurpose under the initiative and guidance of Government agencies.
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## PLATE XXVIII

## Kāṇikkäran using bow and arrow

Kāṇikkäran using pellet bow


## PLATE XXIX

Kāñikkäran making fire by fint and steel. Kāṛikkäran making fire by friction

120. Well regulated markets create in the minds of the purchasers and sellers a Marketing of feeling of confidence towards each other. Markets have been established in the vicinity produce of the Reserves for the benefit of the hill-tribes. They sell their hill-produce and purchase their necessaries at these markets. But the unscrupulous low country trader often dupes the ignorant hillman. A Kannikkāran seldom gets more than 7 to 12 chackrams ( 4 to 7 annas) for the produce , which he sells once a week. This is hardly sufficient to meet his wants and he is, therefore, forced to lead a life of poverty. It will be a great boon to the hill-tribes if proper arrangements could be made for marketing their produce, so that they may obtain proper value for their articles. The Agricultural Department could give a lead in both these directions for the uplift of the hill-tribes.
121. It is said that the provision of new interests is the antidote against racial and concludion personal despair. But the future must be built on the past. Old institutions and ancient traditions must be maintained as far as possible and development must be made in consonance with the physical environments and the mental qualities of the tribes concerned. Much damage has been done to primitive peoples by reformers who are ignorant of their life and customs. A knowledge of anthropology will be a useful handmaid to social reformers and administrators. It will enable them to ward off the evil effects that will naturally result from the contact between a lower and higher culture. The most important thing to do is to regulate the contact between the civilized and the primitive man, so that the progress of civilizing the primitive may be slow and general, and that he may have sufficient time to adapt himself to changed conditions.

In the interests of the welfare of the primitive peoples, it may be necessary for the Government, as has been pointed out by Dr. Hutton, to follow the example of Australia, which has gone so far as even to prohibit the entry of any person into the Reserve except occasional scientists and the administrator of the tribes. Even the opening of schools and the carrying on of missionary work among the tribes are prohibited there in order to preserve them from extermination. Dr. Hutton would welcome similar legislation in India. The problem is easier of solution in Travancore, where the Forest Department is the custodian of the primitive peoples in the Reserves.

## Rules for the Treatment and Management of Hillmen

Revised rules for the treatment and management of hillmen in Government Forests and Reserves, passed under Clause ( $e$ ), Section 60 of the Forest Regulation II of 1068, as amended by Regulations IV of 1071 and IX of 1085, with the sanction of His Highness the Mahs Raja in supersession of those passed on 23rd September 1903/7th Kanni 1079, and published on pages 789 and 790 of the Government Gazette, dated 6th October 1803/20th Kanni 1079.

1. The term "Hillmen" in these Rules means and includes only the following tribes who have been living in the hills from time immemorial and does not juclude any others:-
(1) Kanikkars residing in the hills of the Southern, Trivandrom and Quilon Tand Revenue Divisions extending up to and inclusive of the Shendurni valley.
(2) Palliyars residing on the banks of the Kallada and Achencoil rivers.
(3) Malayadiyars on the banks of the Kakkad river.
(4) Malapantarams along the banks of the Pambayar river up to Perinthenaravl.
(5) Kochu-velans on the banks of the Pambayar river.
(6) Ullatans on the banks of the Palaiyar river.
(7) Malayarayane living along the foot of the hilla between Pambayar and Thodupala.
(8) Vizhavans at the foot of the hills on the Periyar.
(9) Uralis on the hills to the west of the Periyar.
(10) Palliyans on the Cardamom Hille near Vandanmettu.
(1i) Mannans on the Cardamom Hills east of the Periyar up to the foot of the High Range.
(12) Muthuvans on the Cariamom Hills, High Range and Anjanad.
(13) Mannans in the Deviar valley.
(14) Muthuvans in the Malayattur Reserved Forest.
(15) Hill Pulayas of Anjanad.
2. Hillmen residing in Government Forests and Reserves shall be under the control of the Forest Department.
3. Each settlement will have a headman, who has attained that position either by hereditary right or by selection or election by the members of the settlement, in conformity with the existing practice:

Provided that when a headman fails to oarry out any of the duties, as hareinafter atated, the Divisional Forest Officer may call upon the adult male members to depose him and elect another competent man to take his place.
4. Hillmen residing in Government Forests and Reserves shall have their numbera registered in the office of each Forest Division, and for this purpose the headman of each settlement shall report to the Range Officer concerned, once a year or whenever called on to do Bo, the name of his settlement or Kani, the number of males and females composing $\mathrm{it}^{2}$ adults and children, children below three years being classed as under age.
5. No hillman can leave his settlement or kani or migrate to another without the permission of his headman. Appeals from the headman's decision shall lie to the Divisional Forest Officer, whose decision shall be final.
6. The settlements of hillmen residing in a Government Forest or Reserve shall be permanently fixed and they shall not be permitted to shift them from place to place, except temporarily with the special written permission of the Divisional Forest Offioer in cases of scarcity of water, outbreak of epidemics, such as small-pox, etc.
7. The hillmen shall enjoy the concession of cultivating land free of tax in the Government Forests and Reserves in which they live, to the extent of $5 / 8$ of an acre per head for every member of a settlement above three years of age. 1
(i) A compact block of land, comprising eeven times the total area required for each settlement in a year, deducting the area of wet lande permanently under cultivation, shall be demarcated by the Forest Department (the hillmen concerned providing the labour free of payment) and $1 / 7$ of that area shall be cultivated in any one year, so that the cultivation may be carried on permanently in that block on a rotation of seven years.
(ii) lt shall be the duty of the headman to apportion the area among the several families of his settlement, subject to an appeal to the Divisional Forest Officer, whose decision thall be final.
(iii) In cases of trespass or encroachment in a settlement, the headman shall decide such disputes subject to an appeal to the Divisional Forest Officer, whose decialon shall be final.
8. No hillman shall be entitled to the grant of patta for any land cultivated in a Government Forest or Reserve, however long his occupation of such land may be.
9. All produce of the land cultivated by hillmen in accordance with the foregoing Rulee shall be the property of the hillmen and may be disposed of as they think fit, except food-grains and tobacco which shall not be sold or taken out of the Government Forest Reserve, without the written permisaion of the Divisional Forest Officer.

Proviso. The ${ }^{\circ}$ Divisional Forest Officer may delegate this power to such of bis Range Officers as he thinks fit.
10. The hillmen may fell and use any timber (other than of Royal or Reserved trees) and firewood. bamboos, reeds, and canes, free of charge, for their bona fide domestic and agricultural purposes, and the last three, viz., bamboos, reeds and canes, may be used by them in the manufacture of petty articles for sale, provided, however, that the Government may at any time restrict or prohibit the trade or charge a fee on the produce.

PLATE XXX-A typical dolmen at Perunthalpāra in Anjanād


PLATE XXXI-A group of dolmens at Perunthalpāra

¡PLATE XXXII-Another group of dolmens at Perunthalpāra

11. The hillmen may collect and use, for their own consumption or for sale or for both. any minor forest produce not collected by the Government or leaped by the Government to conhractors or lessees, but the sale of minor forest produce for which seigniorage has been, or may hereafter be, fixed by the Government shall not be permitted.
12. The hillmen may ghoot game in wet weather from the 15th Vykasi to the 30th Karthigay except such animals and birds as may be prohibited by the Government from time to time, and they may catch fish, provided that the poisoning of water or the use of dynamite or gunpowder for the purpose is not resorted to. For the purposes of this rule and for the protection of person and property. each settlement may keep one gun ordinarily in the custody of the headman. The Government may, from time to time, lay down any restrictions in respect of these privileges.

Proviso. In exceptional cases, the Government may anthorise more than one gun being kept in a settlement.
(i) Licenses to deal with the hillmen living within the Government Forests and Reserves will be granted by the Divisional Forest Officer to respectable traders, who undertake to supply articles of daily use to them at reasonsble rates provided that they bind themselves to the following among other terms by executing formal written agreements:-
(a) not to enter into any credit transactions or to lend them money.
(b) not to sell any intoxiaating liquors or druge to them,
(c) not to quarral with or illtrest the hillmen.
(d) not to bay grain or other articles, the sale or removal of which is prohibited by the preceding Rules or by the Forest Regulation and rules already in force or that may hereafter come into force, and
(e) to keep proper and clear accnunts of all their transactions with the hillmen which accounte ghall be open for inspection by the respective Range Officer or Divisional Forest Officer.
(ii) Licenses shall be lisble to be revoked, withdrawn or cancelled tor breach of any of the conditions of the agreement, the trader being rendered liable besides to the pensitios prescribed therein.
(iii) Such licensed traders shall acquire no title whatever to lands occupied or cultivated by the hillmen under these rules.
18. The billmen shall work for the Forest Department, whenever called upon to do so, at preecribed rates of wages, sach rates being fixed by the Divisional Forest Officer with the previous eanction of the Conservator, for three years at a time calculated with reference to the wagee paid during the preceding three years and the current market rates.
14. The hillmen shall not set fire to the Forests and they shall'tske'all possible care and precsution to prevent fires occurring in the Goverament Forests and Reserves. They shall assist the Forest Officers in preventing the occurrence or commission of offences and the occurrence of fires and in extinguishing such fires.
15. All hillmen shall assist the Police, Revenue or other officers of the Government in preventing crimes, or in detecting offenders who may have sought shelter or refuge in the Government Forests or Reserves.
16. Hillmen shall not harbour, or allow to remain in their settlements, any lowland criminals or persons likely to commit any breaches of the Forest or other laws of the country, nor shall they take into partnership any outsiders, in their cultivations within the Government Forests or Reserves.or in their honting or shooting excursions.
17. They shall be further bound to deliver to the Forest Départment any ivory, elephant teeth, cardamoms, wax, dammar and lac collected by them, as well as honey or any other forest produce which they may be called upon to collect and deliver to the Forest Department, in return for which they will be paid at the rates fixed in the following schedule:-

| Number | Producs | Rates |
| :---: | :---: | :---: |
| 1 | Ivory | 1st class (weighing $18 \mathrm{lbs}$. and above per tusk), 7 fanamm per lb. |
|  | Ditto | 2nd class (weighing below 18 lbs. but above 13 lbs. per task), $5\}$ fanams per lb. |
|  | Ditto | 3rd class (weighing below $13 \mathrm{lbs}{ }^{\circ}$ but above $\left.7 \mathrm{lbs}, ~ p e r ~ t u s k\right), ~$ 31 fansms per lb. |
|  | Ditto | 4th class (weighing below 7 lbs.) 18 fanams per 1 lb . |
| 2 | Cardamom | with husk, 35 lanams per thulam |
|  | Ditto | seeds, 26 fannms, 3 chs., 4 cash per thulam |
|  | Ditto | chaff with huek, 6 tanams per thulam |
| 3 | Wax | 45 tanams per thalam |
|  | Dammar | 6 .. $\quad 1$ |
|  | Honey | 171 $\frac{1}{2}$. per parah |

For articles for which rates are not prescribed in the above schedule, the hillmen will be paid an amount not exceeding one-half of the sale proceeds of such articles, with the sanction of the Conservator of Forests.
18. Any hillman found to wilfolly violate, or act in contravention of these Rules, or of the Forest Regulations and Roles, shall be liable to be expelled from his settlement in 9 Govermment Forest or Reserve, temporarily, or permanently, with the previous sanction of the Conservator, besides being sabjected to the penalties prescribed in the Forest Laws.

## APPENDIX 11

## THE DEPRESSED AND THE BACKWARD CLASSES

Introductory remaris.

India is the only country where a rigorous caste system prevails, and she is the only country which has to face the problem of the 'untonchables." Distinction in society exists in other countries as well, but nowhere is one's birth the criterion to determine one's position in society. However low be the social status of the family in which a man is born in other countries, he can by his own merit and ability rise to the highest rung in the social ladder. In India the rigid caste rules prevent one from doing this. A man born in a cobbler's family is regarded as a cobbler even if he does not do the cobbler's work, and he is subject to all the social disabilities which the caste system has imposed on the cobbler caste. The existence of such a social custom is looked upon by other nations as a blot on the Hindu civilization. It had its origin in the remotest past, but it still persists, though in a very much attenuated form, despite the attempts of great religious and social reformers for its removal. Those who condemn the caste system do so, not because of the division of the society into numerous water-light compartments, preventing the intermingling and interdining of the different sections, but because of the superiority and inferiority complex which has been foisted upon it. The division of labour and the formation of an orderly society, which were the objects of its originators, were in course of time lost sight of and a new principle was imported into it, namely, that a man's purity of mind and body should be judged by the nature of the occupation which his forefathers had followed. It is this later interpolation into the fabric of the caste system that has been the cause of all the trouble which it has created in India. The stamping of different castes with varying degrees of social superiority or inferiority alone accounts for the existence of those unfortunate classes of people who, though included within the fold of the Hindu society, are yet denied the rights and privileges which their brethren higher up in the social organization enjoy. These are the people who are known by the familiar, but unhappy, name of the "Depressed Classes."

Difference
between the
Depressed and
the Backward
Clasmes.
2. In a country where nearly five hundred castes have been returned at the census it is difficult to draw a clear line of demarcation either between the Depressed and the Backward Classes, or between these and the other classes. The Government of Travancore have declared certain communities to be depressed or backward for purposes of assignment of lands, award of fee concessions in schools, and representation in public service and political bodies; but beyond this there has been no order of Government recognizing any particular community as depressed or backward. According to the instructions issued by the Census Commissioner for India, the Hindu castes which are treated as untouchables, irrespective of the degree of untouchability and unapproachability subsisting between them and the higher castes, are to be regarded as "Depressed Classes," and the criminal and the hill tribes and other communities which are backward in modern education as "Backward Classes." The social disabilities imposed by the caste system, such as untouchability, unapproachability, and prohibition of entry into temples, should, therefore, be taken as the criteria to determine whether a caste is 'depressed' or not. These tests have been accepted by the Indian Franchise Committee also. As far as Travancore is concerned-probably this will apply to Cochin and British Malabar also-it is not possible to divide the Hindus into two clear-cut sections, "depressed" and "non-depressed," on the basis of untouchability. Even among the high-caste Hindus there is a certain degree of untouchability and unapproachability between caste and caste. For example, a Brahman, according to strict caste rules, should not take his food before having a plunge bath if he touches a Nayar, though both of them are considered to be high-caste Hindus. Similarly, the different sections of the Depressed Classes themselves observe certain degrees of untouchability and unapproachability. No doubt, the rules of the caste system have lost a great deal of their rigour as a result of the spread of modern education and Western civilization, and it is no uncommon sight now to see the different castes, high and low, depressed and non-depressed, mingling freely on highways, in courts and public offices, and at meetings of representative bodies, without observing pollution; but in rural parts where the light of education and civilization has not yet penetrated, caste rules are still observed, and untouchability and unapproachability between castes even now persist. The only sure basis on which the Hindu castes of Travancore can be divided into depressed and non-depressed classes is the right of entry into the
temples. To make this point clear it is necessary to give a description of a temple and its premises.
3. The following diagram shows the principal parts of a typical temple and its precincts:-

A. Srikotl-The building inside which the idol is kept.
B. Nalampalam-Buildings containing the kitchen, store-room, etc., attached to the temple.
C. Pradakshinavithi or the Thalakkal-The foot-path paved with granite slabs for the idol to be taken round and for the worshippers to go round the Nalampalam.
D. The outer wall enclosing the entire temple precincts.

Based on the right of entry into temples the Hindu castes may be divided into three broad classes:--
(i) Those who can enter into the 'Nalampalam,' and the inner premises of the temple, and worship from the sides of the 'sōpanam,' the steps leading to the 'Srikoil' (the sanctum sanctorum). They are the high-caste Hindus.
(ii) Those who can enter into the outer premises of the temple, i. e., the portion between the outer enclosure and the 'Pradakshinavithi,' or the 'Nälampalam' in some cases. These may be treated as partially depressed or backward classes.
(iii) Those who are not allowed to enter even into the outer premises, but can only remain outside the walls enclosing the precincts of the temple. These are the real Depressed Classes.

The Depressed Classes, according to the present census, number $1,787,380$. The chief castes included in them are the following :-

| 1. | Ādi-Drāvida, | 23. | Mukkuvan, |
| :---: | :---: | :---: | :---: |
| 2. | Alavan, | 24. | Nâdar, |
| 3. | Ampattan, | 25. | Nulayan, |
| 4. | Arayan, | 26. | Palan, |
| 5. | Bavuri, | 27. | Pänan, |
| 6. | Bharathar, | 28. | Panikkan |
| 7. | Chackaravar, | 29. | Paravan, |
| 8. | Chakkiliyan, | 30. | Parayan (Sàmbavar). |
| 9. | Chavalakkāran, | 31. | Pulayan (Chèramar), |
| 10. | Cháyakkäran, | 32. | Pulluvan, |
| 11. | Ilavan, | 33. | Thantān, |
| 12. | tliavâthi, | 34. | Thantapulayan, |
| 13. | Kaikolan, | 35. | Thontamān, |
| 14. | Käkkālan, | 36. | Vālan, |
| 15. | Kaniyan, | 37. | Vaṇ̣ăn, |
| 16. | Kathikkäran, | 38. | Varnavar, |
| 17. | Kävath, | 39. | Velakkithalanăyar, |
| 18. | Keralamuthali, | 40. | Vėlan, |
| 19. | Kıravan, | 41. | Veluthādanȧyar, |
| 20. | Matakkān, | 42. | Vétan, |
| 21. | Maravan, | 43. | $V e ̄ t a k k a ̄ r a n$, |
| 22. | Medara, | 44. | Yadavan (Idayan). |

The Backward Classes include certain Hindu castes, the Muslims, the Christian converts from the Depressed Classes and the hill-tribes. One common feature of these castes and communities is their backwardness in education. In paragraph 371, Chapter IX, castes and communities have been divided into "Advanced," "Intermediate" and "Illiterate" according as they contain more than 50 per cent., 10 to 50 per cent. or less than 10 per cent. of literates in the male population of 7 years and over. Those castes and communities other than the Depressed Classes which fall into the category of 'Intermediate" and 'Illiterate" are treated as Backward Classes. Their number is about $1,272,000$, consisting of (1) the Muslims, (2) the Christian converts from the Depressed Classes, (3) the following Hindu castes, and (4) the hill-tribes.

|  | Hindu castes. |
| :---: | :---: |
| (i) | Chetti, |
| (ii) | Ilavạ̄iyan, |
| (iii) | Kammàlan, |
| (iv) | Krishnanvaka, |
| (v) | Kudumi, |
| (vi) | Saliyan, |
| (vii) | Saưảshtra, |
| (viii) | Vâniyan, |
| (x) | Víasaivar. |

Hill-tribes.
(i) Kànikkàran,
(ii) Malankuravan (Malayadiyar),
(iii) Malapantataram,
(iv) Malapulayan,
(v) Mala-Ürạạ,
(vi) Malavetan,
(vii) Malayarayan,
(viii) Mannän,
(ix) Muthuvan,
(x) Paliyan,
(xi) Ulịàan,
(xii) Vëtuvan,
(xiii) Vizhavan (Malankudi).
4. The Government of Travancore have declared Chakkiliyan, Kuravan, Pallan, Parayan, Pulayan, Vêtan, Christian converts of Sāmbavar and Aiyanavar, and the hilltribes to be ' Depressed Classes ' for the purpose of assigning Government land at concessional rates. According to the classification adopted for the census the Sambavar and Aiyanavar converts are included in the Backward Classes and not in the Depressed Classes. Many of the castes included in the Depressed Classes are treated by the Travancore Government as Backward Classes for the grant of fee concessions in schools, some being backward in English and Vernacular education and others in English education only.
5. The treatment which the Depressed Classes had received at the hands of highcaste Hindus from very early times was unsympathetic and even inhuman. But they did not resent it, and on the other hand, they willingly bore it with a servile mentality. Some of them, such as the Pulayan, Parayan and Veztan, used to be bought and sold like cattle and disposed of along with the land on which they worked. They were not allowed to use the highways, public conveyances, hospitals, and common wells or to enter or even go near the temples. They had no access to the bazaars and markets even to purchase their necessaries. They were not allowed to wear any valuable ornaments nor even use upper garments to cover their nakedness. They had to live in mud huts erected by the side of the paddy fields which they had to watch for their masters. They could not educate their children nor even give them names which were usually borne by members of the higher castes.
6. It was not until the Christian missionaries came to Travancore and started evangelical and social work among these people that they were able to appreciate the advantages of social elevation and material advancement. They saw that the moment they embraced Christianity they were accorded better treatment by the higher castes and were no longer treated as untouchable or unapproachable. This remarkable change in the attitude of the caste Hindus towards the Depressed Classes, when they became converts to Christianity, induced an increasing number of them, year after year, to desert the Hindu society and embrace the Cross. The process of conversion has gone on for several years without any attempt being made by the Hindus themselves to arrest it. But at last they realized that the depletion of the Hindu community could only be checked by reforming their own social and religious customs, so as to afford equal opportunities and give equal treatment to all within fhe fold of Hinduism. It was this feeling that led to the organization of the Arya Samäj, the Brahmo Samāj, the Prârthana Samajam and similar institutions in British India. A general awakening among the Hindus for the elevation of the Depressed Classes became perceptible only from the beginning of the present century, but
the activities that followed were so vigorous and widespread that now the Depressed Classes themselves are vying with one another in their attempts at social and material improvement.
7. In an article published in the Indian Review in $1909 \mathrm{H} . \mathrm{H}$. the Gaekwar of Baroda said, "A Government within easy reach of the latest thought, with unlimited moral and material resources, such as there is in India, should not remain content with simply asserting the equality of all men under the common law, and maintaining order, but must .sympathetically see from time to time that the different sections of its subject are provided with ample means of progress and that they are allowed to and do use all possible facilities -afforded to them for bettering themselves.". The sovereigns of Travancore have always been characterised by a genuine desire to improve the condition of the Depressed Classes among their subjects. More than a century ago the Rulers of the State issued a series of proclamations, intended to elevate these people socially and materially. Several obnoxious taxes, such as, 'Talayara,' 'Valayara,' etc.,' that had been imposed on these castes were abolished by a proclamation of 990 M. E ( 1815 A. D.), By another proclamation -of the same year the sale or purchase of Kuravas, Pulayas, Parayas, and other low castes was prohibited except in places where it was allowed by local customs for agricultural -purposes. By yet another proclamation of that year the taboo imposed on the Ilavas and other low castes in carrying umbrellas, lights, and knives inlaid with gold, and in wearing ear-rings, was removed. By a proclamation of 1818 the lower castes were permitted to wear gold and silver ornaments in the same manner as the higher castes, and by another proclamation of the same year markets and bazaars were thrown open to all classes of people. The restrictions imposed on the women of the lower castes in wearing uppert garments were also removed. Later on, by two proclamations issued in 1853 and 1855 the Government of Travancore abolished all linds of slavery in the State. Public roads were thrown open to all people without distinction of caste. About a quarter of a century back members of the Depressed Classes walking on public roads had to move out of the way to allow the high-caste Hindus to proceed unpolluted, but this has now become a thing of the past. Well-to-do members of the Depressed Classes who can afford to maintain their own conveyances are no longer precluded from using them as they like. All walks of life are now open to them as much as to the higher castes; and all the State departments and public schools, with a very few exceptions, have been thrown open to them.
8. In an article contributed to the Indian Review in 1909, Dr. Annie Besant has. pointed out that "the children of the depressed classes need, first of all, to be taught cleanliness, outside decency of behaviour and the earliest rudiments of education, religion or morality." In this matter also the Travancore Government had done much even before the movement was started in British India. The Grant-id-aid Education Code of 1895 provided, for the first time, funds for the establishment of schools for the Backward Classes. In the next two years the Government established thirty schools for the benefit of these people and in another couple of years the number increased to 150 . 185 scholarships were also granted to pupils belonging to the Backward Classes. Finally, in 1904 the Government accepted the responsibility of imparting free primary education to all classes of people, irrespective of caste, creed or race.
9. The endeavours made towards the uplift of the Depressed and the Backward Later attempts Classes in recent years may be considered under three heads :-
(1) Measures adopted by the Government.
(2) Steps taken by external private organizations,
(3) Attempts to improve the condition of the Depressed and the Backward Classes.
(3) Attempts made by the communities themselves.
10. The committee appointed by the Bombay Government to report on the Depressed Measures Classes and aboriginal tribes in that presidency have observed:-"The depressed classes adopted by the . would gain economic independence earlier if more of them were landholders, and it is of Goxernment. great importance that attention should be paid to the problem of obtaining more land fo them." That this has been thelavowed policy of the Travancore Government in recent years will be evident from what is stated below.

The revised Puduval Rules, dated the 31 st March 1921, provided for the assig- Assignment of mient of land on concessional terns to members of the depressed communities. As mum ${ }^{\text {land. }}$ area of the land available in each locality as was considered necessary for the requirements of these communities, was ordered to be ear-marked for assignment to them. G. O. Dis. No. 92/22/Rev., dated 20-1-1922 has laid down the following rules:- (1) Poramboke lands available for registry on the edges of backwaters or on the sea coast should be assigned, without auction, if otherwise unobjectionable, to Valans and Arayans. (2) Area not exceeding 10 cents per each Vala or Araya family may be assigned free of tharavila (land value) but subject to ground rent, and free of thadivila (timber value), provided the
value of trees standing thereon, if any, does not exceed Rs. 10 per acre. (3) Back ar rcars of rent may be remitted in the case of occupied lands. (4) Alienation of such lands by the assignees to persons other than members of their own community has been declared void, and it will render the land liable to resumption without payment of compensation for improvements. (5) Lands available for assignment to Depressed Classes are to be earmarked for the purpose and should not be assigned to other people. As per the above G. O. a total area of 15,280 acres was ear-marked for assignment to the Depressed Classes and 4,775 acres have already been assigned to them.
G. O. R. O. C. No. 1566 of $23 /$ Rev., dated 23-9-1924, sanctioned the appointment of a Protector of the Depressed Classes and entrusted to him the duty of lanking after the interests of these communities, and he is actively helping them to get land registered. Notification Dis. No. 1140 of 24/Rev., dated 2-8-1924, grants concessions to the members of families belonging to the Depressed Classes and to co-operative socicties consisting exclusively of the members of such classes, in the matter of assignment of Government lands. Each family is allowed not more than 3 acres and each society not more than 30 acres free of tharavila. The Division Peishkars have been instructed to give full effect to these concessions in consultation with the Director of Agriculture, the Director of Industries and the Registrar of Comoperative societies. Notification Dis. No. 1777 /26/Rev., dated 2-12-1926, exempts applications from members of the Depressed Classes for the registry of Government land from payment of the prescribed court fees.
Organization of
Co-operative Co-operative
Societies. Societies.
11. The co-operative movement was started in Travancore in 1916, when a department was created by the Government to develop and guide the movement. From the very commencement the department devoted special attention to the organization of co-operative societies among the Depressed Classes. The progress made in this direction during the last decade can be gauged from the figures given in the following table :--


Deyelopment of communications and supply of drinking water.
12. By G. O. D. Dis. No. 859/23/P. W., dated 15-6-1923, a committee consisting of official and non-official members was constituted to advise Government on the construction of roads and the sinking of wells for the benefit of the Sambavars of Nanjanäd and Edanād in the Nagercoil P. W. D. Division. As a result of the labours of this Sàmbavar Elevation Committee, a large number of wells have been dug and several approach roads to Sambavar villages constructed in the taluks of Thovala, Agasthiswaram, and Kalkulam. Although no specific requisitions for opening roads and sinking wells have been made by the Depressed Classes living in the Trivandrum P. W. D. Division since 1921, a few wells have been dug in this division also for the use of the Nädars, the coast fishermen and others. There are no separate villages occupied by the Depressed Classes in most of the taluks of the Quilon P. W. Division and consequently there is no necessity to construct roads specially for their use. Some wells have been dug and some others repaired in certain villages in Shenkotta taluk and in the coastal villages of Thrikkunnapula for the bencfit of the Depressed Classes residing in those localities. As in the Quilon P. W. Division the Depressed Classes of the Kottayam and Alwaye Divisions do not reside in separate villages, and no concessions by way of roads or wells have been deemed necessary for them, nor has any such concession been pressed for.
13. The Sämbavars in Shenkotta and South Travancore and the fishermen in the Sanitation. coast villages live in insanitary quarters, more or less over-crowded and often subject to serious epidemics. To improve sanitation, conservancy stations have been opened inseveral of these villages and tube wells have been provided for the supply of good drinking water. The sanitation in other villages, where a full-time staff is not necessary, is being attended to by a temporary ambulant staff entertained for certain months in the year. ct,
14. The Depressed and Backward Classes are both backward in education. The Education latter can be divided into those backward in Vernacular and English education and 'those backward in English education only. The Depressed Classes who are backward both cducationally and economically, are allowed remission of full fees in the Vernacular and English schools. Pupils belonging to the other communities, backward in Vernacular and English education, are allowed remission of half the fees in both the Vernacular and English schools, while those backward in English education only are allowed similar concession in the English schools.

In G. O. D. Dis. No. $\mathbf{+ 2 2 7 / E d n . , ~ d a t e d ~ 2 - 1 2 - 1 9 2 3 , ~ r u l e s ~ h a v e ~ b e e n ~ f o r m u l a t e d ~ f o r ~}$ the organization of night schools for adults by private agencies with Government help. G. O.D. Dis. No. 463 of 24/Legis., dated 15-5-1924, has restricted the grant of hall-fee concessions to deserving poor pupils. In addition to these freeships and half-freeships, G. O. D. Dis. No. 426 of $25 / \mathrm{Leg}-\mathrm{E}$. , dated 21-4-1925, has sanctioned a number of close scholarships in Colleges and English High Schools. G. O. D. Dis. No. 173 of 27/Edn., dated 11-3-1927, has exempted candidates belonging to the Depressed Classes from payment of fees for public examinations for five years from 1927-28. Government are also rendering pecuniary aid to deserving pupils of the Depressed Classes for the purchase of books and clothing.

In the year 1920-21 the Inspecting Officers of the Vernacular branch of the Education Department were specially instructed to meet the Depressed and Backward Classes at important centres and advise them on the necessity and value of education'. This had a significant effect on the Pulayas and Parayas. The policy of throwing open as many schools as possible to the Depressed Classes was enforced by the Government, and the number of schools not open to such communities at the end of the year 1920-21 was only 34. There were 28 rural schools, specially intended for the Pulayas and Parayas, as well as 11 night schools (one departmental and 10 aided) for the spread of education among the adults. More schools were thrown open to these communities in 1921-22. Since the rural schools, which were started mainly for the benefit of the Backward Classes, had turned out to be only ordinary schools, not providing any vocational instruction as was originally intended, several of them were converted into ordinary schools. There was, on the other hand, an increased demand for night schools which also were originally intended for the benefit of the Backward Classes, particularly Pulayas and Parayas. In 1922-23 part-time schools, intended to take the place of rural schools which had been abolished, were opened in the interior parts of the State, for the benefit of those to whom the ordinary schools were either inaccessible or unsuited. The policy of throwing open more schools to the Depressed Classes was continued vigorously, and at the end of the school year 1929-30 there were only twelve schools in the State not open to them, out of a total number of 3,641 recognized institutions.
15. The education of the Muslims always received the special consideration of the Travancore Government. The ordinary schiools in the State are open to them, but till about a few years ago very few of them availed themselves of this privilege. Special efforts were, therefore, made during the last decade to spread education among the Muslims. In 1920-21 one departmental and four private schools were opened exclusively for them. Arabic and Koran were taught in these schools by trained munshis and teachers. In 1924-25 six more schools were opened and since 1925 vigorous propaganda was carried on by Government officials and private agencies to stimulate interest in education among the Muslims. The result of this propaganda is seen in the large increase in the number of Muslim pupils in the schools. It rose from 10,380 in 1918-19 to 19,269 in 1929-30.
16. The hill-tribes, living as they are in forests and jungles, cut of from all civilizing influences, are educationally, and in other respects as well, the most backward communities in the State. The education of these tribes has also been engaging the attention of the Government as well as of the missionaries. For the education of the hill-tribes special schools are being conducted by the Government and by some Christian missionaries, and wherever convenient they are also admitted to the ordinary schools. In the year 1929-30

17 boys of these tribes attended the English schools and 922 boys attended the Vernacular schools, and these were distributed among the different tribes as shown below:-


The progress of education among the Depressed and the Backward Classes during the past decade will be evident from the following statement:-

| Number of pupile who attended sehools |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| . . . i |  | In 1020-21 | In 1029-80. | Increaso per ceat |
| Depressed-Hindu Caste\# |  | 96,009 | 102,095 | 58 |
| Backward Hindu Oastes |  | 16,569 | 28,685 | 72 |
| Muslims |  | 11,986 | 19,260 | 61 |
| Hill-tribes |  | 241 | 939 | 200 |
| - . . | Total | 123,805 | 200,778 | 61 |

17. English education has not made such striking progress among the Depressed and Backward Classes as Vernacular education. During the past decade only 1,089 persons among them obtained the English School Leaving Certificate, and of these 627 were Ilavas and 158 were Muslims. The desire for English education is, however, growing in all the communities. The number of boys and girls of the Depressed and Backward Classes who attended the colleges increased from 81 in 1920-21 to 314 in 1929-30 and the number that attended the English schools from 5,674 to 9,640 . The bulk of them belonged to the llava community. The colleges had 181 and the English schools 4,977 Ilavas in 1929-30. Next to them come the Muslims whose strength in the colleges was 52 and in the English schools 1,272 in 1929-30. The Nädars and Pulayas, two of the most Depressed Classes, have shown appreciable progress in English education. The number of Nadar boys in the colleges increased from 3 in 1920-21 to 19 in 1929-30 and in the English schools from 287 to 623 , while of the Pulayas there were none in the College and only 50 in the English schools in 1920-21, but in 1929-30 there were one in the College and 423 in the English schools

As a result of the concessions granted by the Government from time to time education has made rapid progress among the Depressed and Backward Classes, especially among ilavas, Pulayas, Parayas and Muslims. Barring the Ilavas, Pulayas have made the best use of the concessions. The general desire on the part of the average Pulayan to rise to the level of the other communities is growing; his stubborn adherence to slavish habits and his narrow outlook on life are fast disappearing; and he is now evincing a keen interest to learn and to put into practice new methods of social and moral improvement.

## Representation

 on popalar bodien.18. The Legislative Council and the Sri Molam Popular Assembly are the two most important representative institutions in the State, composed of elected and nominated members. The Legislative Council was started in 1888 and was then composed of nominated official and non-official members with an official majority. The Council was since reformed three times, and on the last occasion, in 1921, it was enlarged on a wider basis, invested with more powers and given a non-official majority, of whom 28 members are elected and seven are nominated by the Government. On the first reformed council a Hindu Arayan was nominated as the representative of the Depressed Classes, and on subsequent councils Christian converts of the Sämbavar; coast fishermen, and Chëramar communities were nominated to represent these classes. Each Council had two llava and two Miuslim members either nominated or elected.

The Śri Mülam Popular Assembly which is composed entirely of people's representatives, elected and nominated, was started in 1904. It holds its session once a year when the members express direct to Government their wants and wishes and their views on the administrative measures of Government. The first representative of the Depressed Classes was nominated to this Assembly in 1905; and he was a Nãdar. Subseqently, their representation was enlarged and now not less them 13 members of the different Depressed Classes are being nominated to the Assembly every year. The llavas and the Muslims have had adequate representation from the very commencement either by election or nomination.
19. There was a time when the Depressed and Backward Classes were practically Representation shut out of the Government service. The largest and most important department of Govern- mapablio tervice ment, namely, the Revenue Department was not open to them because of its association with the temples. In 1922 the management of the temples was separated from the Revenue Department and entrusted to a newly created Desvaswam Department, and with this separation the Revenue Department was thrown open to all classes of people To-day there is no department of Government, except the Devaswam and the Nayar Brigade, which is not open even to the members of the most depressed community, and as education advances and qualified persons of the Depressed and Backward Classes become ayailable, they are being absorbed in the State service, sometimes even in preference tojegually qualified members of the more advanced communities.
20. From about the beginning of the nineteenh century various Christian missionary bodies came to Travancore and started their religious and social work among the Depressed Classes. Prominent among these are the London Missionary Society, The Church Missionary Society, the Salvation Army, the Brother Mission, and the Lutheran Mission. Besides these, the Servants of the Cross Society and the Sanyasi Mission of the Orthodox Syrian Church, the Evangelistic Association of the Mar Thoma Syrians, and the Catholic Dioceses of Kōtar, Quilon, Changanachery, Kottayam, Vijayapuram, Verapoly and Ernakulam are also carrying on missionary work in different parts of the State. At present there is hardly any part of Travancore where one mission or another is not at worls and in several taluks different missions are carrying on their work side by side with great success.
21. The converts to Christianity are drawn mostly from the Nädarrs, Pulayas, Parayas Kuravas and other low-caste Hindus who are treated as untouchables by their co-religionists. The higher castes have not been influenced to any appreciable extent till recently by the activities of the missionaries, but it seems doubtul whether, when untouchability and other social barriers are removed as a result of the efforts that are now being made in that direction by the high-caste Hindus, the missionaries will be able to draw away large numbers of even the low castes, as they have been able to do till now. Be that as it may, in the circunstances in which the Pulayas, Parayas, Kuravas, and other low-caste Hindus have been placed from very early times, both socially and economically, it is not surprising that they are easily moved by the offer of freedom from social servility and better prospects made by the Christian missionaries.
22. It must be said to the credit of the missionaries that they are doing not only evangelical propaganda but also social work among the Depressed Classes. It is they who opened the eyes of these people to their deplorable condition and the necessity to improve it, and it is their work that brought home to the higher castes the consequences of the past neglect of their unfortunate brethren in the lower strata of society. The first and the most important step the missionaries took for the uplift of the Depressed Classes was the starting of schools. To the Christian missionaries belongs the credit of having opened the first English School in the State. In the years 1816-1819 the London Missionary Society started an English School at Nagercoil and the Church Missionary Society started another at Kottayam. These societies and various other missionary bodies are actively engaged in the spread of education in the country. They are maintaining a large number of schools which are resorted to not only by the Christians but by other communities as well. They are rendering fnancial help to poor and deserving Christian pupils for the prosecution of their zudies and are encouraging those who pass out by entertaining them as teachers in their own schools. The achievements of the missionaries in the field of education can well be
judged from the number of institutions maintained by them and the number of pupils attending these institutions. In the year 1929-30 there were 122 English schools with 16,978 students, 2,015 Vernacular schools with 137,288 students, and 17 orphanages and boarding houses with 398 inmates.
23. The education that is imparted in these schools aims not only at the spread of literacy and culture, but also at equipping the pupils for some useful vocation in life. Besides the three R's, the boys in primary schools are taught carpentry, weaving, tailoring and other cottage industries, while girls are given training in needle. work, lacemaking and embroidery. As a result of the philanthropic labours of the missionaries a perceptible improvement has been effected in the moral and social condition of the Depressed Classes who have come under their influence. Their mode of living has changed, their standard of life has improved, they are giving up insanitary habits, are learning cleanliness and thrift, and are being weaned from the drink evil. There is as yet no marked improvement in the economic condition of these people. Most of them are field labourers dependent on others and are disinclined to leave their home and seek occupations in distant places. A slow but steady change for the better is, however, becoming visible. Some of them are making small savings from their daily income, poor as it is, with which they are purchasing small plots of ground to build houses on and to cultivate.

The Homani-
The Homani.
tarian Society.
24. The Travancore Humanitarian Society was organized in 1920, and since then it has been devoting special attention to the improvement of the social, moral and material condition of the depressed communities in the State. The society is carrying on propaganda by organizing lectures and distributing pamphlets to remove their ignorance, illiteracy and poverty, and to instil into them a healthy outlook on life, habits of cleanliness and thrift, and ideas of sell-respect and self-reliance. At times the society also renders them pecuniary help. The work of the society has undoubtedly been fruitful. Many a member of the Depressed Classes have been weaned from their addiction to intoxicants, unclean habits and improvident mode of life. Untouchability and unapproachability have been banished from among those who have been thus reformed. The value of education has been brought home to them and they are being prevailed upon to send their children to the school. Ideas of true Hinduism and the propar method of worship are being spread among them. Animal sacrifice and other superstitious customs are being given up. Habits of thrit, selfhelp and co-operation are being promoted and they are being instructed to retain and improve upon, as far as possible, their traditional callings. In these ways the Humanitarian Society has done and is doing commendable work among the Depressed Classes, and in this work it is being ably assisted by the Arya \Samàj and the Hindu Sabha.
Attempts at
self-improye-
ment.
$\rightarrow$ 25. Swàmi Vivèkānanda said in one of his addresses:- I know of no greater service that the better class can render to the Depressed Classes in the land than to 'educate them and to develop in them the sense of their lost individuality in order that they may rise to a better conception of their own dignity as human beings and a better knowledge of the conditions of their existence." About two decades ago, when the question of the amelioration of the Depressed Classes was engaging the attention of the leading men in all parts of India, the Rev. C. F. Andrews wrote:- "Education is not pauperising, but, on the contrary, leads one to greater sell-respect. It makes those who are educated feel their own advance and it creates in them a desire to help themselves and raise themselves. It opens to them new ideas of the value and possibility of the progress, and enables them to 'take part in their own uplifting." Travancore amply bears out the truth so happily expressed in the above quotations. We have seen what the Government of Travancore and the nonofficial agencies, like the missionaries and the Humanitarian Society, have done to spread education among the Depressed and Backward Classes and to improve their social, moral, and material conditions. Reforms introduced in their habits and mode of life have generated in them a desire to mix freely with the highest castes and to emulate them in their habits and customs. The opportunities created for them to conmand better conveniences and lead better lives have naturally induced those who have been benefited thereby to work for the elevation of their own brethren. Through their influence internal organizations have been brought into existence among many depressed communities to work for self-protection and self-improvement. The activities of a few of these are described below.
The B N. D. P.
Yogam.
26. The llavas took the lead in organizing an internal association, called the S . N. D. P. Yögam, for their own improvement. They were soon followed by other communities, such as Pulayas (Chèramar), Parayas (Sämbavar), Muslims and others. As could naturally be expected the early attempts of the llavas at self-improvement were looked upon with disfavour by the members of the orthodox Hindu community, and they at first
-threw obstructions in the way. But the persistent and selfess efforts of Sri Nâtāyana Gutu Swämi, the spiritual leader of the İlavas, coupled with his great organizung capacity, enabled him and his disciples to overcome all initial difficulties and pave the way for the establishment of the S. N. D. P. Yogam which, with its numerous branches working in different parts of the State, watches the interests of the Ilava community and works for their social, moral, educational, material and political advancement. The 1lavas have now their own schools, temples, factories and workshops. They have gained access to most of the departments of Government service, and many of them are holding high positions in the State service.
27. Guided by the example of the Ilavas the Pulayas also began to work for their -own amelioration. The first centre of their activity was Neyyattinkara taluk. As in the case of the Ilavas they too had to contend against great opposition from the orthodox Hindus, but there were several prominent men among the higher castes who sympathised with their aspirations and helped them in all possible ways. The Government also evinced interest in their attempts at self-improvement and encouraged them by the grant of land at concessional rates and by giving them representation in the Śri Mülam Popular Assembly. The Sádhu Jana Paripalana Sangham was formed for the improvement of the condition of the Pulayas in Neyyatinkara taluk. This was followed by the organization of the Central Travancore Pulaya Samājam about 20 year's ago, and the Chēramar Mahājana :Sangham which, includes within its fold both Hindu and Christian Pulayas. This Sangham has been persistently agitating to have the caste name 'Pulayan' changed into ${ }^{4}$ Cheramar.' Under its auspices more than 700 Karayögams (Village Associations) have been formed and over 120 co-operative socielies established in different parts of the country. This Sangham has had the warm support of the Christian missionaries:
28. The South Travancore Sāmbavar Mahäjana Sangham has established several branches in South Travancore and is working successfully for the advancement of the Sämbavars (Parayas), both Hindus as well as Christian converts. Like the Chetamors this community also has had strong support from the Christian missionaries.
29. The South Travancore Aiyanavar Samajam is working for the "improvement of The South the Aiyanavars, Hindu as well as Christian, residing in Kalkulam, Vilavancode, Neyyattin- Travancore kara and Nedumangad taluks. The Samajam has organized seven co-operative societies Asamajamar. among the community.
30. The South Travancore Chackaravar Samajam works for the elevation of the The South Chackaravar community in Agasthiswaram, Kalkulam, and Vilavancode taluks. The Travanacore South Travancore Keralamuthali Samajam is another association working independently of samajamar. the Chackaravar Samajam for the uplift of the Kéralamuthalis, a section of the Chackaravars.
31. The Kertala Ādimajana Sabha has been organized recently for the common good of the Kurravas, Pulayas, Parayas, Vetas, and other communities in the lowest social strata. The Sabha aims at bringing about a fusion of these classes under a general name "- Âdimass," and is carrying on active propaganda in this direction.
32. The All-Kérala Araya Mahājana Yōgam is working for the amelioration of the The:All-Kerala Arayas and has established several branches in different parts of the country. Vigorous Mraya Manaja attempts are being made to secure due representation for the community in Government Yogam. service and on political institutions.
33. The All-Travancore Varnavar Samājam is an association of Varnavas com- The allprising the Pathiyan, Vannän, Ettàli, Purathōn, Vēlan, Nēriyan and Paravan, whose Travancore occupation is washing clothes. The Samājam has 56 branch associations and publishes a samajam. vernacular journal of its own. Several Nayar and Christian associations are actively supporting this Samäjam.
34. The Yögisiwara Mahäjana Sangham in Nedumangad taluk and the Travancore Virasaiva Samajam in South Travancore are working for the benefit of the respective sections of the community generally known as Pantarams.

The Yogismara Mahajanas sangham and The Travancora Travancor Yirasajva
Bamajam.
35. The Kêralīya Pānar Samājam has been working for the past thirteen years for $\begin{gathered}\text { Samajam. } \\ \text { The Kerallya }\end{gathered}$ the uplift of the Panar community and has five branch associations in Central Travancore. Its activities are encouraged by the Nayars, Christians and Ilavas.
36. There are numerous associations working in different parts of the State for the Maslim social, moral and material advancement of the Muslims. The Lajnathul Mohamadiya Associations. Sabha, Alleppey, is the oldest of them, having been started sixteen years ago, and it has
done substantial work for the education of the Muslims. Guided by the example of their co-religoonists in British India, the Muslims of Travancore have been agitating for special treatment in the matter of educational facilities, appointments in public service and representation on political bodies and all their legitimate demands are being sympathetically considered and complied with by the Government.

The list of associations given above is not exhaustive. Suffice it to say that the spirit of self-improvement is all-pervading and that every community, depressed or backward, and however small numerically, has been making organized attempts for the betterment of their own condition.

Conclusion.
37. The combined efforts of the Government, the Christian missionaries and other Christian associations, philanthropic bodies like the Humanitarian Society, and associations of high-caste Hindus, particularly Nayars, and the active support and co-operation of a very large section of the individual members of the Nayar and other caste Hindu communities, have brought about radical changes in the habits, customs and the mental outlook of the Depressed Classes. The wholesome influence of these changes has awakened in the members of these communities a self-consciousness of their own faults and weaknesses and stimulated in them the desire to work for their salvation through their own internal organizations pari passu with the activities of the external agencies. As a result of these external and internal forces at work, a marked improvement has become visible in the life and condition of the Depressed Classes in the State. Untouchability and unapproachability havepractically disappeared from the urban areas and are fast disappearing from rural parts as well ; the Depressed Classes have now free access to the schools, courts and other public institutions and sit with high-caste Hindus in popular institutions; education is making rapid progress among them and they are putting forth their best efforts to make up the leeway caused by their past neglect; their economic condition is improving with the advance that is being made in other directions ; the educated among them are entering Government service, the wages of labourers are increasing, and the landless classes arc getting Government lands at concessional rates. If the progress that has been made in these directions during the last two decades or so is sustained-there is no reason to suspect that it will not be-we can look forward to the time, not very distant, when Travancore will have obliterated the blot caused by the existence of the so-called ' Depressed Classes.'


N. B. Girls belonging to commanities enjoying the half.fee concessions pay only $\ddagger$ of the standard rates.

## APPENDIX III

## THE DECLINING INDUSTRIES

## I. Silk Weaving

Introductory. Of the many industries and handicratts which flourished in India from time immemorial the textile industry was one that elicited the wonder and admiration of the other nations of the world. The fineness of Indian muslin was world famous. Marco Polo described it as "threads of woven wind." "The skill of Indians," says Professor Weber, "in the production of delicate woven fabrics and the mixing of colours has from early times enjoyed a world-wide celebrity." "Mummies in Egyptian tombs have been found wrapped in Indian muslin of the finest quality. The muslins of Dacca were known to the Greeks under the name of Gangetika. In India the art of cotton spinning and weaving was in a high state of proficiency two thousand years ago." (Imperial Gazetteer of India, Vol. III). About the Indian fabrics, Murray says in his History of India, "Its fabrics, the most beautiful that human art has anywhere produced, were sought by merchants at the expense of the greatest toils and adventures." These fabrics of exquisite beauty and fineness were not manufactured as curios or rare exhibition specimens, but were produced on a large commercial scale. "At the end of the seventeenth century," says Leckey in his History of England in the Eighteenth Century, "great quantities of cheap and graceful Indian calicoes, muslins and chintzes were imported into England; and they found such favour that the woollen and silk manufacturers were greatly alarmed."
2. The textile industry was not confined to Northern India alone. In the Deccan the largest cottage industry was, and still is, handloom weaving. While the Northern Indian weavers developed the manufacture of delicate muslins, chintzes and shawls, their brethren in the south specialized in weaving silk fabrics of exquisite designs, embroidered with gold and silver threads. Their descendants are still carrying on this industry on a limited scale at Devagiri, Salem, Kumbakonam and other places, but in Northern India the marvellous art of manufacturing the "threads of woven wind " has become extinct.
3. About three hundred years ago, about half a dozen families of silk weavers, Saurāshtra by caste, were brought down from Devagiri by the then Raja of Travancore and settled at Köttār near Nagercoil, for making silk garments for the Royal family. They were given land free of tax and other conveniences to make them feel at home. These weavers got enough work to do and prospered. Seeing their prosperity more families came from Devagiri and in a couple of decades Köttär became a thriving village of silk weavers This small community continued to increase in population, while the demand for their silk fabrics began to decline, as very few people except the Royal family and a limited number of rich nobles could afford to buy costly silk and gold-thread fabrics. The weavers had, therefore, to resort to weaving coarser cloths to earn their livelihood. In the meanwhile, the English spinners introduced into the Indian markets fine counts of cotton yarn which ultimately replaced the expensive silk yarn in the manufacture of fabrics.
4. Imported cotton yarn was as fine as silk and was about five times cheaper than the latter. The low cost of cotton goods made it possible even for ordinary people to buy them. The Royalty and the noblemen who were once the sole patronizers of the silk brocades, also took to the use of fabrics of fine cotton. The demand for these articles increased rapidly and the weaving of cotton of fine counts became the prominent and flourishing industry of the silk weaving community of Köttarr. When it was found that fine cotton weaving was a profitable occupation, many people other than the professional weavers who learnt the art and the secrets of manufacture from the Sauràshtras, set up independent weaving establishments in their own homes. The Sáliyas, the Pattatyas, and even the Muslims of South Travancore became weavers in this manner.
5. The fine counts of cotton yarn which replaced silk are now being seriously menaced by the competition of artificial silk. It is only a couple of decades since the production of artificial silk has become a commercial success, but during this short period it has established its popularity. Its gloss, lustre and feel are so like those of natural silk that it is often difficult to distinguish one from the other. It takes dyes in any grade and shade ; it can be bleached and washed; and it is very cheap, being about 50 per cent. cheaper than fine cotton yarn and as much as eight times cheaper than natural silk.
6. The weavers of Köttar used to get their silk from Kollegal in Madras Presidency, Mysore, Bengal and even from far-of China, but gold and silver threads used in silk weaving were made locally. Unfortunately, this industry has become practically extinct as a result of the competition of cheap gold and silver threads imported from France and Surat. There are still a few families who know the secret of making these threads and they do make them occasionally when necessary.
7. Silver thread is made out of silver and lead. These metals in the proper proportions manufaoture are melted together in a crucible and solidified into rods as thin as possible. The rods of oiliger and are drawn out into wires by pulling them through holes of different sizes punched into a gold threads. steel plate, the smallest hole being so small as to admit only a hair to pass through. This process is repeated until the wires assume the shape of fine threads. They are then beaten out into flat tape-like filaments, and are wound spirally round the silk or cotton yarn. The silver thread thus prepared is subjected to the action of saffron fume when it takes the golden yellow colour. The quality of the thread depends upon the proportion of lead and silver used. The larger the quantity of lead, the poorer is the quality of the thread and the cheaper is its price. In no case will lead exceed 40 per cent. by weight of silver. The lace borders of cheap cloths often lose their colour and even turn black after washing. This is due to the large proportion of lead contained in the thread which after some time undergoes chemical changes.
8. Gold thread is also made in the same manner as the silver thread, but without lead. Silver is melted and converted into thin rods, about one foot long and a quarter of an inch thick. They are then covered with thin gold leaves and drawn out. into wires on a special appliance described below.


Two wooden rollers, six to eight inches in diameter and eight to twelve inches long, fitted with handles at one end, are mounted on a frame, one foot apart. At the centre of the space between the rollers is fixed a metal plate containing a row of holes, called 'eyes,' of varying sizes. The gold coated silver rod is wound round one roller and the outer end of it is passed through the largest 'eye' on the plate and tied to the other roller. The latter is turned gently until the whole length of the rod passes through the 'eye' and is transferred from the first roller to the second. 'Again, the thread is passed through the next smaller 'eye' and transferred back to the firstoroler. This process is repeated forward and backward alternately until the thread gets the required fineness. To make very fine threads, metal plates containing holes set with tiny pieces of precious stones, are used. Such plates are imported from France at a cost varying from Re. 1-8 as. to R. 25 each, according to the fineness of the 'eye' and the kind of precious stones used.
9. The thread is beaten out gently into a flat tape-like filament. This is wound on a small drum called the "Switt."


The axle of the 'Swift' projects out on either side, one end of it is fixed in the ground and the other end is turned by hand. The final process consists in covering the yarn with the gold thread, and this is done on a spindle made of bamboo pole as shown in the following;picture.


The bobbin on which the yarn is wound is fixed at one end of the pole and the one on which the gold tape is wound is fixed at the other end. The outer ends of the yarn and the gold tape are attached to a takli-like spindle, and when this is turned by hand the yarn gets covered by the gold tape. The thread thus formed is rewound on a swift, or a board of lathes, and again on a reeler.
10. The thread is then subjected to the action of saffron fume to improve its colour and lustre. A mixture of saftron powder and a kind of red earth called 'Kdol,' which is a hydro-silicate of aluminium and iron, is sprinkled on a small heap of rice husk, which is burned slowly so as to produce copious fumes. The burning rice husk is covered with a perforated earthen pot and the thread is exposed to the fume emerging from inside the pot until it gets the desired colour and lustre.
11. Silk yarn is first boiled in water to improve its colour, and, if coloured yarn is required, it is also dyed. Formerly, indigenous vegetable dyes were used, bul now aniline dyes have replaced them.

Prepared silk warp is now imported from Kumbakonam and other places. It is boiled in a solution containing

| Washing Soda | $\ldots$ | 15 tolas |
| :--- | :--- | :---: |
| Alum | $\cdots$. | 15 |
| Lime | $\cdots$ | 2 |
| Water | $\cdots$ | 6 gallons. |

These are the quantities required for one pound of silk yarn. The solution, after it is made, is kept in shallow pans in open air for about eight days, when by the action of
the carbonic acid gas of the atmosphere the lime in the solution is converted into chalk and precipitated. The clear liquid is decanted into another vessel and more water added to make up the loss by evaporation. The silk yarn is boiled in this solution for a couple of hours, washed well with water and dried in the shade.
12. The method of warping adopted by the silk weavers is ingenious, and the warping implements used, though crude, are well suited to the handling of such delicate materials as silk yarn and gold thread. The silk hank is held stretched on two bamboo pieces mounted on stands. The distance could be adjusted to suit the loop-length of the hank by shifting the stands.


The outer end of the yarn is passed through a small tube of reed. , The openings at the ends of this tube are made smooth by being set with glass beads. The warping frame consists of a rectangular board with five or six rows of wooden spikes, ${ }^{5}$, six to eight inches long, fixed at right angles to it. The reed tube containing the gold thread is drawn along the board, passing it above and below every alternate spike. When the last spike on the board is reached the process is reversed, and this is repeated as many times as the number of threads the warp should contain. The warp is taken out of the frame by transferring it from the spikes to the lease rods, of which as many are inserted as there are spikes. It is then rolled into a ball warp and gaited on the loom.
13. Silk is woven on ordinary pit looms. The loom accessories,, such as reeds, wearing shafts, shuttles, etc., are made by the weavers themselves. The reed is made of thin bamboo. The shuttle is made out of the stem of a reed grass locally known as iral, and its two ends are plugged with pieces of light wood. The shutle is also provided with a spindle to take the weft pirns. The thread guide, or the 'eye,' is made of glass beads inserted into the side of the shuttle.
14. In weaving fabrics with designs of gold lace borders, a contrivance somewhat similar to the Jacquard machine is used.

(a) Herness.
(b) Mail eyes.
(c) Weights to keep the
harness atraight and vertical.
(d) Handlf for pulling
up the mail ejes.

The border threads are passed through the 'maileyes' on the harness threads .The warp threads, at the ends of which weights are attached, are connected with the harness threads, so that when the weights are pulled dowit the corresponding harness threads
are raised. The weaver keeps in mind the particular design to be worked in and as per his instructions a boy pulls down the particular warp thread for every pick or throw of the shuttle. In this manner the design in worked into the fabric. The Jacquard machine of the present day is only an improvement on this crude contrivance.

The economic aspect of the industry.
15. The loose ends of the threads of woven fabrics are frilled into some artistic forms. The type of frills depends upon the quality of the fabric. A few common types of frills are shown below.

16. Silk yarn, dressed and prepared for the warp, costs from Rs. 13 to Rs. 17 per pound, cotton-yarn of equal fineness ( 140 counts) Rs. $3-8-0$ per pound and artificial silk from Rs. 1-8-0 to Rs. 2 per pound. As could be seen from the comparative figures given below, the net profit from weaving silk is four to nine annas per yard, fine cotton one and a half annas per yard and artificial silk nine pies per yard. A skilled weaver will weave one and a half yards of silk, three yards of cotton or four yards of artificial silk in a day of eight working hours and his daily income will, therefore, amount to six to thirteen and a half annas from silk, four and a half annas from cotton, and three annas from artificial silk.


From the data given above it will be seen that silk weaving is more profitable than cotton or artificial silk weaving, and yet the silk weaving industry has declined, mainly because of the lack of organization among the weavers in advertising and marketing their soods and their inability to find the capitil required for the investment, which is considerably more than what is necessary for the other weaving industries. The silk weaving industry may be revived and developed by the organization of weavers' co-operative unions to import yarn, to stock weaving accessories such as healds, reeds; shutles, etc. and supply them on credit to members, and to take over their finished articles and sell them in the best market.

## II. The Bell-metal Industry

Introdicotory.
17. Although bell-metal is a special alloy of copper and tin, the name is popularly and loosely used to represent all non-malleable alloys of copper with tin or zinc or boh. Brass and brooze casting is of very great antiquity and is universal in India. The elaborately worked images kept in temples, the decorations on temple doors, puija
pathrams or vesseds used in religious cremonies, different kinds of standing and hanging lamps, sword hilts, and the method of fixing the steel blades into them, the complicated locks, and a variety of other articles bear eloquent testimony to the remarkable degree of perfection attained in India even in very ancient times. It is difficult to determine the age of some of them, but it is admitted that India possessed the art from a remote past. It is more ancient than even the Grecian and the Roman art. It is believed that Phoenician traders or adventurous Greeks took the art from the East to Europe.
18. In the temples of Travancore may be found bronze works which are unmistakable proof of the antiquity of the art in the State, though it is difficult to determine the period. There are several images made of copper, brass and bromze throughout the State which are excellent in conception and execution. In making utensils of large dimensions none can excel the Travancore craftsman. The " $V_{a ̈ r p u ̈ s " ~(s h a l l o w ~ b a s i n s ~ o f ~ h e m i s p h e-~}^{\text {an }}$ rical shape), remarkable for their large size, available in the temples of Trivandrum, Ampalapula, Vaikom and other places, and the beautifully worked images seen in some temples point to the high degree of perfection which the art has attained in Travancore.
19. The workers make several grades of the alloy, according to the proportions of copper and zinc, or copper and tin used. The alloy of copper and rinc is known locally as "Picchala" or brass, and the alloy of copper and tin as "Vellödu" or bronze. There are several grades of "Picchala" and "Vellodu." The.difference between the two and their exact composition are sufficiently well-known to the workers, though the grades of brass are not distinguished by such nomenclature as "Alpha brass" or "Beta brass". as. in the West.

Both brass and bronze casting is carried on by men of the same caste who live scattered throughout the State. The principal centres, however, are Nagercoil, Valapally (Changanachery Taluk), Männär (Thiruvella Taluk) and Muvattupula.
20. Before the importation of brass sheets from the West, malleable brass used to Brass casting. be manufactured here; but it is no longer done unless specially ordered. All hollow brassware and domestic utensils are now manufactured out of imported brass sheets. But even this industry has suffered by the competition of articles imported from British India, where the manulacture of brassware is fourishing better than in Travancore, and also by the introduction of cheap enamelled iron and aluminium utensils which are rapidly taking the place of brass vessels. The only place in Travancore where articles are manufactured out of sheet brass is Köttar near Nagercoil. About 15 to 20 families are engaged in this work. The artizans here knew the proportions of "solid solutions" of copper and zinc to be used to produce malleable brass. But it is no longer needed because of the importation of brass plates ; nor could it compete with the machine-made brass sheets. Brass casting for the purpose of making sheets has, therefore, practically died out.
21. Casting of non-malleable brass for the manufacture of oil lamps, domestic utensils, etc., still lingers, though it is rapidly declining on account of the cheaper imported articles and substitutes. As brass vessels are easily attacked by weak acids, the inside of the domestic utensils has to be tinned before they could be used, and few people care to have them now when they can have bronze utensils which are better able to resist the action of weak acids.

Brass hinges, locks and a variety of other goods which used to be manufactured locally, are imported in large quantities, and the local manufacturers find it well nigh impossible to produce articles that can compete with them. The uniformity and finish of the machine-made articles cannot be expected in hand-made ones, unless a considerable amount of labour is spent on them, which will never pay. The non-malleable brass casting industry is also, therefore, declining. The purpose for which brass is now cast, though rarely, is for making oil lamps, images, toys, spittoons, etc.
22. The alloys of copper and zinc result in a remarkable series of colours, the most notable being the one that simulates gold. The naked flame dancing on burnished brass lamps has its picturesqueness and fascination even in these days of electric lights. But it is only on festive and ceremonial occasions and in temples that these lamps are now used. However, it cannot be said that brass casting thrives, or is likely to thrive, unless there is a growing demand for hand-made articles, the industry is suitably organized to withstand the competition from outside and the manufacturers are instructed to make articles to suit modern tastes.

Bronse cating. 23. The use of bronze in Travancore dates from very remote times. It was largely used in the manufacture of domestic utensils, bells, lamps, plates, etc. Some of the more common domestic utensils of bronze which are now seen in ancient lamilies are lamps, lotās (cups), kindies (spouted pots), thalikas and kinnams (dining plates), pidi montha (narrow-mouthed jugs), urulies (basins), pansupari (betel nut) plates, sandal vases, ladles, etc. They are made in several shapes according to the fancy of the manufacturer or the buyer. Such utensils are still largely used, but a change in their shape is perceptible. Remarkably large värpüs (basins) are used commonly in temples, but as there is little demand for such large vessels except for festive occasions in temples, they are not usually made and the methods are being forgotten. Only very few families of smiths are now able to cast them. Some of the largest specimens of !such! värpüs are to be seen in the temples of Trivandrum, Vaikom, and Ampalapula.
24. There are also to be seen in temples large bells, and statuettes posed conformably with the sästraic principles forming a religious genre. Decorated lamps, chandeliers and lamps like coniferous trees are also common. Beyond these, it does not appear that fine art in bronze casting was developed to a high degree. One does not ordinarily meet with elaborate decorations in bronzeware or fine art independent of religious motives.

Process of
manufacture.
25. Bronze is an alloy of copper and tin, the proportions varying according to the nature of the articles to be manufactured; but ordinarily it consists of ten parts copper and two parts tin for domestic utensils, and ten and five for Aranmula Kannadi (the metalmirror). This alloy has a rich golden colour and is capable of being worked by a process not applicable to the component parts. The density and hardness are such that it will take even delicate impressions from a mould.
26. The process of manufacture is known in Europe as cIRE pradits. It is of high antiquity and has been employed in this country for centuries. Each family engaged in it has its secrets, some of which have perhaps been already lost. The basic principle is, however, well-known.

A "core" representing the form as well as the size of the article to be manufactured is frrst made in clay. Wax is overlaid on it, and on the wax are worked the required designs. The wax is then covered with soft clay in several layers. This is the mould. Through an opening provided in the outer wall, the wax is drained out by heating the mould, and it is then filled with the molten metal. The details of the process, as it is practised locally, are described below.

The core.
27. Fine sticky clay is used in making the "core." The grit and stone pieces are either removed by sedimentation or are ground into powder in a stone mortar. The clay is then mixed with rice husk and arecanut fibre or pieces of old gunnies which serve as binding material; and is well kneaded. This work is generally done by women and children.

An approximate model of the intended article is made of this prepared clay by hand and allowed to dry in the sun. When well dried, it is put in a horizontal hand lathe and the desired shape is worked out. The outside is made smooth on the lathe by rubbing it with a polished flat end of some soft wood.

Waxing.
28. Moulding wax is prepared by melting together bee's wax, castor oil and resin (kunthirikkam or kungilyam) in the proportion of 1: 1: 2. The mixture hardens on cooling, and while still pliable, it is rolled into pencil-like sticks for convenient handling. About one pound of prepared wax is required for ten pounds of metal to make hollow-ware.

The polished core is turned on the lathe and the prepared wax stick is gently applied to its surface. Due to the frictional heat, the wax melts and overlays itself on the core. The whole surface of the core, excepting the mouth portion, is thus covered with wax to the required thickness, i. e., a little thicker than the wall thickness of the article to be made, and it is then allowed to cool and harden. With a piece of hot iron the wax surface is again made smooth, even, and uniform. The decorative lines, etc., are also worked in with the hot iron. The waxed model now resembles the intended article in every detail.

The modelling being completed, the outer covering which forms the mould has to be put on. This is a liquid made of prepared clay, sufficiently thin to find its way into every detail of the wax model, and is applied as evenly as possible by gently turning the model on the lathe. Several such coatings are applied so that, when dry, there is a thick

PLATE XXXIII-A hanging brass lamp

outer coating and a solid inner core held together at the mouth, with the wax model inbetween. An opening, called "Anthrakkall" is provided in the outer shell for drawing the wax out by melting it and for filling the cavity with the molten metal.
29. The mould is covered by several layers of clay until the smith is satisfied that it The outer shallis strong enough to withstand the pressure of the molten metal inside. It is dried in the sun after each coating, and after the last coating is applied broken pieces of tiles and pots are stuck on the outside to give it extra strength. It is then heated to dull redness. The wax inside melts and is poured out through the clay jet (Ānthrakkal). The mould is now ready.

For casting heavier and broader articles like cooling vessels, such as oārpu, ufuli, etc., the mould is made on a huge potter's wheel. Unlike in the case of smaller articles, the core is frrst made hollow and is subsequently filled with materials of all sorts.

To one who has not seen a mould, the refill of the now familiar thermos flask with its inner and outer walls, the space between them and the sealing jet, will present a somewhat clear picture, the shape, of course, being different for different articles.
30. The metals are cut into small pieces and placed in a crucible or cauldron casting. made of clay, which is generally ten to eighteen inches high and about eight to twelve inches in diameter with a hemispherical bottom; and the mouth of the crucible is covered with clay. The mould and the crucible are heated. Coconut-shell charcoal and rice husk are generally used as fuel. The womenfolk or children work the bellows. The smith knows by experience when the metal is ready for casting. On the average it requires six to eight hours of heating. The molten metal is then slowly poured into the mould through the jet ( $\bar{A} n t h r a k k a l$ ). It finds its way into the empty space previously occupied by the wax. The mould with its contents is covered with earth and it lies buried for one or two days when it cools down slowly. When it has sufficiently cooled, the outer covering is carefully broken, the core raked out as far as possible, the projecting metal rod formed in the jet is filed away and the object modelled in wax appears in bronze. At this stage, it is very brittle and requires annealing.
31. The article is heated to dull red in a furnace and suddenly immersed in luke- Annealing warm or hot water, and is then taken out and allowed to cool. Costly articles, especially those that are very thin, are tempered in sesame oil. Considerable experience and skill are required for annealing; otherwise the articles may break when immersed in water or oil which is much colder than the red-hot metal. Care should also be taken to see that the oil does not catch fire.
32. After tempering, the article is put on the lathe and the outside is roughly polished Polithing. with a sted chisel. The roughly polished surface is besmeared with a paste prepared by mixing Kãi earth and fine rice bran in laurel (Calophyllum inophyllum) oil and is polished again on the lathe, frrst with hessian and then with soft cloth. The article is now ready for use. Large vessels, like oarpu, urululi, cooking pots, etc., are seldom polished.
33. Bronze of a certain composition is malleable when hot, and this property is Beation ont taken advantage of in beating out dinner plates, trays, etc. The metals in the required plites and proportions-generally 80 per cent. copper and 20 per cent. tin-are melted in earthen dishes. crucibles and poured into small round pits. The dimensions of the pit vary according to the size of the plates required, but generally they are one to one and a half inches deep and two to three inches in diameter. The round blocks thus obtained are taken out after cooling and examined if there are any air bubbles, breakages, or any other defects. If there is any defect, the alloy is again melted and treated in a similar manner. Perfectly moulded discs are heated in a furnace of charcoal fire blown with bellows. When redhot they are taken out, and while one man dexterously turns it round and round with a pair of forceps, four others beat hard on it with heavy hammers as long as the discs remain red-hot. They are again heated and beaten and this process is repeated until the required shape and size are obtained. The skill in bringing out the particular shape and dimensions depends upon the desterity of the man who turns the disc. Generally eight men work in a batch; one man to melt and mould the metal into discs, one to work the bellows, another to turn the disc, four men for beating and one for polishing. The polishing is done either on the lathe or with the hand according to the nature of the article. Dinner plates are generally polished only on the inside. The outer surface is made rough to afford a good grip while handling.
34. There is a series of alloys of copper and tin or zinc or both, which are com- Composition of monly classed as bronze or brass, but some of them contain other metals also, namely, alloyn antimony, lead, silver, etc. In Travancore there are four varieties in use, classified
according to their composition and commercial value, although slight alterations are made sometimes in the composition according to the requirements of the customers. In speaking of bronze and brass, the proportion of the alloy is generally expressed in quantity of tin or zinc utilized with ten parts of copper taken as a constant.
(1) First quality.-This is locally known as "Vellodu." The alloy contains two and a half to three parts tin and ten parts copper. This is generally used in casting household utensils like kindies, coffee pots, tumblers, etc. This alloy is more or less proof to weak acids, such as those contained in butter-milk, tamarind, lime juice, etc.
(2) Second quality-This is only a sub-division of the frst quality and the difference is in the manufacturing process. It is worked when red hot, $i$. e., in the malleable stage, for beating out plates, trays, etc. The composition is ten parts copper and two and a half parts tin. This is also proof to weak acids.
(3) Third quality.- This is generally mistaken for bronze and it often goes by the common name "odu," although in reality it is unmalleable brass (Picchala). The alloy contains ten parts copper and five parts zinc and is not generally used in casting cooking vessels. Lamps, spittoons, images, locks, toys, betel-nut plates, trays, decorative articles, etc., are cast in this alloy. Sheet brass also could be beaten out of it at a particular temperature for manufacturing cooking pans which could be used only after the inside is tinned.
(4) Fourth quality. - The proportion of this alloy is ten of copper and two of tin. Common cooking vessels, frying pans, ladles, etc., which are of very large dimensions, such as värpu, uruli, venkalapäna, etc., are cast in this alloy.

Bronze blocks and pieces of similar composition are now imported from Europe. This meterial is locally known as "Kappal $\overline{0}$ du," meaning literally "shipped-bronze," i. e., imported bronze. It is nothing but parts of machinery, such as bearings, bushes, valves, etc., which get broken or become defective when they are cast in foundries in Europe. Imported bronze is considerably cheaper and is better liked by the smiths as it is readymade metal.

The economic aspect of ithe industry.
35. According to the present market rates, the prices of the different metals and other materials used are as follow:-

| Copper | $\ldots$ | 7 annas per lb. |
| :--- | :--- | :--- |
| Tin | $\ldots$ | Re. $1-4$ as. per lb. |
| Zinc | $\ldots$ | 2 as. 8 pies per lb. |
| Wax | $\ldots$ | Rs. 7 per lb. |
| Resin | $\ldots$ | 3 annas per lb. |

Working on these data, we getthe following cost for alloys of different qualities:-

|  |  | Rs. | as. | p. |
| :---: | :---: | :---: | :---: | :---: |
| First quality (copper 10 : tin 3) | per lb. | 0 | 10 | 0 |
| Second quality (copper 10 : tin $2 \frac{1}{2}$ ) | per lb. | 0 | 9 | 3 |
| Third quality (copper 10: zinc 5) | per lb. | 0 | 5 | 6 |
| Fourth quality (copper $10:$ tin 2 ) | per lb. | 0 | 9 | 0 |
| Imported brass | per lb. | 0 | 4 | 6 |

The above figures do not include the melting charges. The usual practice is to: give the charges, including the cost of labour, in a lump sum.

If properly and systematically carried out, the bronze and brass industry is a paying one. At present most of the profit goes to the middlemen or shop-keepers. On examining the accounts of one of the bronze merchants at Valappal!y (Changanachery) it was found that brass and bronze utensils worth about Rs. 40,000 were sold last year, out of which the net profit was about Rs. 4,000 , $i$. e., an average net proft of 10 per cent. The sales in the shop are comparatively poor, but large sales are effected at fairs and festivals to which the shop-keeper carries his goods. All his expenses are also found, and if this also is taken into account he may be making roughly from 15 to 20 per cent. profit.
36. However, the workmen only get their labour charges. They are generally engaged on daily wages and paid at the rate of 8 to 12 annas per day according to their ability and skill.। But in some cases, i. e., in plate-beating, they are engaged on contract basis.

PLATE XXXIV—A coniferous brass lamp


PLATE XXXV—Brass images in the Suchindram temple


The following are the usual charges for working one thulam or 18 lbs . of the metal :-
(1) For plate-beating and other rough casting work with
Rs. as. p.
(2) For finer casting with both sides polished, e. g., coffee pots, lamps, spittoons, etc. ${ }^{\circ}$... 7 0
(3) For rough and heavy castings without polish, e. g., odrpu, ufuli, pots, etc.
00
37. In the contract system all the expenses except the actual cost of the metal have to be met by the workmen. They are allowed to use the smithy and are also supplied with working tools, such as bellows, anvil, hammers and the like. They get a rebate of 10 per cent. of the weight of metal to allow for wastage.

A batch of six men will beat about twenty thuläms or 360 lbs . of metal in a month. When the work is done on contract they try to economize as much as possible, the children are put to work the bellows, and the polishing is done during spare hours.

|  | Rs. | as. | p. |
| :---: | :---: | :---: | :---: |
| Total income per mensem of six persons at Rs. 5-4-0 |  |  |  |
| per thulam for twenty thulams | 105 | 0 | 0 |
| One man's monthly income | 17 | '8 | 0 |
| One man's contribution for friewood, modelling, etc. | 1 | 0 | 0 |
| One man's net income per mensem | 16 | 8 | 0 |

Contract system is more profitable to workmen than working on daily wages at the rate of 8 annas per day. On the average a smith works only for 25 days in a month and if engaged on daily wages his income would only be Rs. 12-8 as. whereas on contract system he earns Rs. 16-8 as., i. e., he earns about 32 per cent. more than by the daily wage system. Besides this he gets the benefit of ten per cent. rebate-allowed for wastage. In worling twenty thulams there is a rebate of two thulams of the metal, the price of which is about Rs. 10. Generally, the smiths make plates out of this waste material and sell them either to shop-keepers or agents of contractors and thereby realize more value than by selling the waste as metal scraps.
38. The middleman's or agent's profits are, however, nearly double the income of the workers.

|  | Rs | as. p. |  |
| :---: | :---: | :---: | :---: |
| Price of one thuläm of metal ( 10 of copper: 2.25 of tin) at $9 \frac{1}{2}$ annas per lb . | 10 | 11 | 0 |
| Labour charges to work one thulam | 5 | 4 | 0 |
| Total cost | 15 | 15 | 0 |
| Selling price of one thuläm at 1i4 fanäms per $\text { palam }\left(\begin{array}{l} 1 \text { palam }=1 / 100 \text { of thuläm }=9 / 50 \mathrm{lb} . \\ 1 \text { fanām=2 as. } 3 \text { pies }) \end{array}\right.$ | 17 | 9 | 0 |
| Net profit from one thulam | 1 | 10 | 0 |
| Net profit from one batch of six workers turning |  |  |  |
| out twenty thuldms per month | 32 | 8 | 0 |

The agent may employ several batches of workers according to the capital at his command and the equipment of his workshop.
39. While the labour charges are more per unit for the first quality, i. e.; for fine casting with both sides polished (Rs. 7 per thulam), the output is smaller and the risks due to breakages, faulty casting, etc., are greater, and hence the income of the worker remains more or less the same. Same is the case with casting heavy articles like oarpu or uruli which do not require polishing. One man will work about fifteen thulams of metal in a month. The cost of labour for the same, due to the present dullness of the market, is only Rs. 3-8-0, although it was Rs. 4 some time back This rate is lower than that shown in the table below, and that is because the workmen are supplied with fuel or its value in money. Generally they are given Rs. 5 per mensem for fuel.

Cost, profit, etc., if smiths are engaged on the above system :-
Output per month is fifteen thulams or 270 lbs .
Rs. as. p.
Price of metal at the rate of $4 \frac{1}{2}$ as. per lb . or
Rs. 5-1-0 per thuläm

| $\ldots$. | 76 | 0 | 0 |
| :--- | ---: | :--- | :--- |
| $\ldots$. | 52 | 8 | 0 |
| $\cdots$ | 5 | 0 | 0 |
| $\ldots$ | 133 | 8 | 0 |

Selling price at Rs. 10-8-0 per thulam for fifteen thulams

Net profit

| $\ldots$ | 157 | 8 | 0 |
| :--- | ---: | ---: | ---: |
| $\ldots$ | 24 | 0 | 0 |

A rebate of 10 per cent. as already mentioned
is allowed for wastage and the worker gets
the waste material. This will fetch, at the
rate of Rs. 5-1-0 per thulam, for one
and a half thuläms

| $\cdots$ | 7 | 8 | 0 |
| :--- | ---: | ---: | ---: |
| $\cdots$ | 31 | 8 | 0 |
|  | 2 | 1 | 6 |

Table showing the price of metal, labour charges, profits and other data for articlea made of
alloys of the four qualitied


| Quality | Oost price | Selling price | Net proft of merchant or agent par. Ib . | Remarks, |
| :---: | :---: | :---: | :---: | :---: |
| 1at quality | $\begin{array}{cc}\text { Res } & \text { as. } \\ 1 & \text { P. } \\ 1 & 11\end{array}$ | $\begin{array}{ccc}\text { Re. } & \text { as. } & \text { p. } \\ 1 & 14 & 0\end{array}$ | $\begin{array}{ccc}\text { Rr. } & \text { as. } & \text { p. } \\ 0 & 2 & \mathbf{6} \\ 0 & \text { to } & 0\end{array}$ | Old and broken warce of this quallty aro bought at 12 nc . per lb . If workmau are supplied with such metal the working chargo is Ro. 1 per pound. |
| 2nd quality | 0 0 16 0 | 40 | $\begin{array}{lll} 0 & 4 & 0 \\ 0 & \text { to } & \\ 0 & 0 \end{array}$ | Profit ls inore, but demand la very limitod. Also there is moch wastago. |
| 3nd quality | $0 \quad 100$ | 0120 | $\begin{array}{lll} 0 & 1 & 6 \\ 0 & \text { to } & \\ 0 & 2 & \end{array}$ | Old broken wares dro bought at 6 annas por pound. |
| 1th quallity | 0 g 0 | 0110 | $0 \quad 20$ | Old broken wares are bought at $\delta$ annas per pound. |

* Labour charges inciude the price of the wax used for moulding.

40. From the facts given above the inference that the bronze and brass industry in Conclusion. the State is declining, is almost irresistible. It is within the experience of every customer that it is well nigh impossible to get articles, common enough before two or three generations, made by the present-day smiths. The process and the skill which formed the heritage of particular families and which were transmitted from father to son are fast disappearing and there are not many families of these workmen who could even attempt to manufacture images according to Sástraic principles, or utensils like "Changalavatta" (chain hand-lamp), or "Pidi month"" (narrow-mouthed jug) which are now found in aristocratic Hindu families as relics of the past. The articles now manufactured are mostly according to some set designs for household purposes, which do not ordinarily call forth any superior skill or ingenuity on the part of the workmen. The artistic side of the manufacture is seldom cared for and the manufactured goods are mostly of a humdrum, monotonous type, not pleasing to the eye.

The causes of the decline of this artistic industry are many; some of which have already been indicated in the previous paragraphs. The principal causes are, however, the changed taste of the people, their diminished purchasing power, the competition of imported articles, and the growing poverty and ignorance of the workmen. Hardly any one would purchase now a Pidi montha or Changalavatta except for its value as ancient art which interests only the curio collectors and foreign tourists.

The introduction of kerosene lamps and electric lights has rendered the use of bronze oil lamps useless. The foreign kerosene table lamp and the cheap Dietz lantern and the cheaper German lanterns which have penetrated even the remote corners of villages have swept out of use all indigenous oil lamps. Though domestic utensils of bronze are still in use, cheap Chinaware and enamelled ron and aluminium vessels are gradually replacing them.

As the taste of the people is changing, so also are their manners and customs. Large scale feasts which were once common have now become somewhat rare, and there is, therefore, no necessity for making large varpūs and urulies. These circumstances have contributed to the growing poverty of the workmen and the decline of their industry, They are ignorant of the changes taking place in the tastes of the consumers'and, therefore, continue to make their wares on traditional lines only. They are also often the victims of alcohol, and what more is needed to bring about the degradation of the industry ?

The industry, however, lingers on, though feebly, through the activities of middlemen to whom the workmen are oftēn financially indebted. The independent cottage worker has become a wage-earner in the work-houses (locally called " $\overline{A l a s s}$ ") of the capitalist middlemen. If the middlemen at least would study the market conditions and influence the manufacturers to change their patterns to suit modern requirements and thereby enable them to earn higher wages, they would be rendering a great service to the workmen and their industry, besides making larger profits themselves, But they are also equally conservative like the workers and are naturally timid to introduce any change in the patterns of the articles.
41. It cannot, however, be said that the industry has no chance of revival. There is still demand for bronzeware ; only the type of the articles in demand has changed. Any attempt to put the industry again on its legs should be based on a thorough study of the market and the requirements of the consumers on the one hand, and the proper organization and the education of the workers on the other. Even as curios there is a large demand for bronze articles. But the market where they could be sold has to be found and the articles should be properly advertised. New designs in domestic utensils to suit the changed taste of the people could well be tried in bronze. But the workmen are ignorant and poor and can. in their present condition only look to the State for suitably organizing the industry. Co-operation is a panacea too readily suggested for all the present, ills; but without a leading hand it. cannot be expected that the poor workmen will truly be benefited by the movement. There is already a co-operative society of the bronzesmiths at Mānnär (near Thiruvella) called "Viswabrahma Co-operative Society "" This organization is a pathetic instance of failure. The members of the society have all taken loans from the society, but there is no corresponding improvement in their material prosperity. Easy means of getting loans will benefit only those who could withstand the temptation to squander, and who possess the determination and strength to make proper use of the loans. Until the members are in a position to manage their affairs, closer Government supervision is necessary. Mere provision of funds is, therefore, useless, and is in some cases positively harmful. Finance is only a handmaid and can be of assistance only when the industry is
properly organized and placed on secure foundations. What is required in the present state of the industry is, therefore, proper organization to study the condition of markets and the taste of the consumers and to produce and market articles suited to the requirements of the people.

## III. The Metal-mirror <br> (Āranmula Kanṇdi)

Introductory.
42. Āranmula is an ancient village in Thiruvella Taluk on the left bank of the river Pamba, noted for its metal-mirror. It is about 92 miles from Trivandrum, and till recently it was inaccessible to wheeled traffic. The ancient temple and palaces situated there point to the antiquity and prosperity of the place. This temple is one of the most famous in Travancore. The water in the Pamba river is believed to possess healing properties and hence Áranmula is also used as a health resort in the summer.

Āranmula Kannädi is a unique example of bell-metal casting. Among the many curios in the world, it deserves a high place. The foreign travellers who see it would be prepared to pay any price to procure one. The process of manufacturing the mirror is an art, perhaps as wonderful as mummification in Egypt. Fortunately it has not become totally extinct, though it lingers on only as a curiosity having no commercial importance whatever. The Aranmula mirror has gathered round it a tradition and sanctity, quite natural to works of art, but its ancient history is lost in obscurity. What information one has been able to gather from the old people now living at Áranmula is given below.
43. About 300 to 400 years ago the Āranmula temple was managed by a committee of the villagers called "Uranmakar," of which the then ruling Chief of the locality was the head. The Chief was also a patron of arts and crafts. To cast ceremonial utensils, decorative lamps, bells, etc., required for the temple, he brought down a few families of Kannāns (the caste whose profession is bronze casting), settled them in his territory and granted them lands and special privileges. The Kannans failed several times in their attempt to cast these articles. Thercupon the Chief became angry, and threatened to withdraw the privileges and evict them from his territory. The men and women of the families prayed to the deity to protect them and make their work successful; and they offered to sacrifice all their ornaments to make a makudam (crown) for the deity. To make the crown, the smiths used the usual quantity of copper and tin, and as a sacrifice the women threw into the melting pot all their ornaments which were made of pure tin. They were quite unaware of the proportion of the two metals, but, the product was a wonder to them and to their patron Chief. It was silverlike in colour, and when polished, it acquired the quality of reflection like the mirror. Even now this makudam is kept in the temple and worshipped. It is known as "Kannadi Bimbom" (Mirror idol).

The. Chief and the smiths were, however, not slow to take advantage of this fortuitous invention. The smiths worked out the proper proportion of the different metals and made mirrors successfully, and the Chief assisted them in developing the industry. The means adopted by the Chief was ingenious and was well suited to the unsophisticated faith of the ancients. He proclaimed that it was a gift of God and that in every Hindu rite the metal-mirror should form part of "Ashtamangalyam" (the eight auspicious articles used in religious ceremonies). He observed this rule himself in all the ceremonies he conducted and his followers and the well-to-do villagers followed suit. Thus the Aranmula Kannādi (the metal-mirror of Âranmula) became an article of household use, with a halo of sanctity attached to it. We know that Queen Elizabeth encouraged the development of the woollen industry in England by inviting Flemish weavers to settle in that country and by granting them several privileges. It is not improbable, therefore, that the tradition regarding the origin and development of the metal mitror industry in Travancore might have a sub-stratum of truth. Cunningham in his Growth of English Industries and Commerce says, "Inventions and discoveries often seem to be merely fortuitous. Men are apt to regard the new machinery as the outcome of a special and unaccountable burst of inventive genius."
44. The metal-mirror is made of an alloy of copper and tin, the proportions of which are kept secret by the only two surviving families at Aranmula who know the process of making the mirror. The highest grade of bell-metal vessel is an alloy of ten parts of copper and three or three and a quarter purts of tin. Thia is perhaps the maximum proportion of tin that can be used in casting domestic utensils, even by highly
skilled workmen. The proporion of copper and tin in the Aranmula mitror is ten to five and a quarter: An alloy of this composition is exceedingly. brittle-even more brittle than glass of the same thickness - and when polished, it has a surface as bright as that of a cut glass mirror.
45. The metal-mirror is usually oval in shape, six inches by four inches and about Preparation one-fifth of an inch thick. The face has to be perfectly plain, and the greatest atten- of the moild tion is, therefore, paid to the evenness and the perfectness of the plane of the mould.


The mould consists of two plates of the required shape of the finished mirror, and is made of fine clay. The preparation of the plates requires great care and patience on the part of the workmen. Clay should be entirely free from grit, and should not crack when drying. The surfaces of the plates should be very smooth. After two such plates are made with meticulous care, and probably with incidental casualties from breakage, one plate is placed over the other with an oval ring of prepared wax, sandwiched :between them along the edge.

The wax is made up of lour ingredients in the following proportion :-

| Bee's wax | $\ldots$ | 1 lb |
| :--- | :---: | :---: |
| Resin | $\ldots$ | 2 lbs. |
| Castor oil | $\ldots$ | 4 ozs. |
| Coconut oil | $\ldots$ | 4 ozs. |

These are melted together and allowed to cool.
The thickness of the was ring is a litle more than that of the required mirror, say by about one quarter of an inch. In this way an oval cavity is obtained between the two plates of clay. An opening is provided for this cavity by means of a clay jet called "Ānthrak $k$ ăl." The mould is then strengthened by putting on several layers of clay on the outside until the smith is satisfied that it will stand the high pressure and heat which it will be subjected to. The mould, with these coatings of clay will be about a foot and a half long and one foot thick. It is then heated and the wax ring inside is drained out completely. Now the mould has assumed its final form. The smith then places at the open end of the jet, "Ānthrakkäl", a crucible with an opening at the bottom, which serves the purpose of both the crucible and the funnel.
46. The alloy is purified by a process which, for its scientific skill and simplicity, Casting will elicit the admiration even of the modern metallurgist. The copper and tin of the required proportions are melted together in a crucible and the molten mass is slowly poured into a bamboo or wooden cylinder filled with rice bran. The hot liquid chars the bran as it passes through and solidifies into a rod. The impurities in the alloy disappear during the carbonization of the bran. The rod is again melted, and the process of purification repeated four or five times, until the rod looks as bright as a glass tube filled with mercury.

The purifed alloy is then broken up and put into the crucible attached to the mould and is covered with clay, and the mould is heated over a fire. Coconut shell and paddy husk are the fuel used, perhaps because the calorific value of these is higher than that of other fuels available in the locality. By about eight hours' continuous heating the alloy will melt completely and find its way into the inside of the mould. The smiths know by experience the time when the fire should be put out and then earth is thrown over the oven and the mould, and the fire is extinguished. In this condition the mould is left undisturbed for two or three days and allowed to cool. Afterwards it is taken out -and the layers of burnt clay are removed carefully from the mirror plate.

Polishing.

The economic sspect of the industry.
47. The plate which, as has already been observed, is even more brittle than glassof the same thickness, has to be polished. The polish used consists of a paste made of rice bran and the oil extracted from the seed of laurel (Calophyllum inophyllum) or maröi (Hydnocarpus $W$ ightiana). The greatest skill and the utmost patience are required in polishing the plate. It is by the process of polishing that the crude plate is converted into the mirror. Polishing is always done in one direction only, and never either in the opposite or any other direction. The mirror thus obtained is fxed on an artistically engraved brass frame with a mixture of lac and wax.
48. It can easily be inferred from the description given above of the processes that the cost of the materials is small compared with that of the highly skilled labour required to make the mirror. The clay is brought and prepared by women who are assisted by their children. The master-craftsman prepares the mould, the alloy and the wax, does the casting and polishing, and in fact every item of work requiring skill. The making of a mirror involves. the hard work of a whole family for four or five days, if nothing untoward happens. The chance of breakages are many and a smith will consider himself lucky if out of ten mirrors he makes he gets at least four intact. Labour is provided by the whole family and the only expense to be incurred in cash is the cost of the fuel and the metals which will not exceed two rupees for a mirror of ordinary size. Mirrors are sold at Rs. $2 / 14$ per unit of threefourths of a square inch up to the size of six inches by four inches, and at Rs. 5 per unit beyond that size up to the maximum size of twelve inches by nine inches. At these rates. the price of an ordinary hand mirror will be about Rs. 15.

Being shut out from the rest of India by the Western Ghats, Travancore remained: for a long time unaffected by the modernizing forces at work elsewhere in India and continued to preserve and cherish her old traditions and ancient customs and institutions. But these forces have now crossed the Ghats and effected radical changes in the habits and customs of the people of Kérala. Their tastes are changing rapidly. Cheap articles and glittering trifles produced in the factories in the West are usurping the place of the more substantial indigenous goods. No doubt, it is an economic waste to buy a hand mirror for Rs. 15 when one which will serve the purpose equally well can be had for a fraction of the amount. It may be that the purchasing power of the Travancoreans has appreciably gone down and that they can but ill afford to pay for art. But even the well-to-do who can really be the patrons of art, would rather go in for a costly mantle-piece or a flower vase imported from foreign countries than buy the local Âranmula metal-mirror. But times are changing and signs are visible at present of a desire on the part of the people of India for the revival and development of indigenous arts and crafts. However strong this desire be and whatever be the steps taken to accomplish it, the demand that can be created locally for articles like the Aranmula mirror can only be very limited. There is, however, a wide market for it in foreign countries. What is wanted is organization organization not only in its production, but also in its marketing. The existence of the industry must be advertised through exhibitions and fairs in different parts of the world. In countries like America, there are philatelists and curio collectors who will give anything for a rare postage stamp or a rare specimen of art. It is to such people that we have to introduce our metal-mirror. In the present stage of our economic and industrial development, the State should take the initiative in this matter and shoulder the responsibility for some time to come. The Department of Industries should, in the first instance, kecp. stock of these mirrors and send them to foreign exhibitions. It should secure orders and pass them on to the workmen, and see that the orders are executed correctly and promptly. In fact the department should act for the time being as an intermediary between the producer and the purchaser. The Indian Famine Commission of 1877 have observed:"To whatever extent it is possible, the Government should give assistance to the development of industry in a legitimate manner and without interfering with the free action of the general trading community, it being recognized that every new opening thus created attracts labour which would otherwise be employed to comparatively little purpose on the land, and thus set up a new bulwark against the total prostration of the labour market." It is only in this way that we will be able to keep alive the beautiful indigenous. arts and crafts and hand them down to posterity.

## IV. The Steel Industry

49. Like muslin weaving bell-metal casting and other important cottage industries, Introductorythe steel industry also flourished in India in early times. The Iron Pillar at Delhi, the manufacture of which would not have been possible even in up to-date foundries in Europe till a few years ago, and other specimens of the work of art in steel still existing in many parts of India, point to the advancement the industry made in the country in bygone days; but it began to decline after the Bessemer process of smelting iron ores was invented and adopted in Europe and the tactory-made articles were imported into India.

Travancore had also her own steel industry; both the smelting of iron ores and the manufacture of steel articles were being carried on here. There is evidence to show that swords, lances, cutlery, agricultural implements, and even cannons and balls, were manufactured in the country. Defore the reign of Märtānda Varma Maharajah, the founder of modern Travancore, (1729-1758 A. D.), the country was divided into a number of small feudatory States, each having its own ruler. These rulers maintained a militia of Nayars and constantly waged war against one another. The soldiers were armed with swords, lances, cutlasses and guns, all made locally. Each State manufactured its own arms and implements. Even to-day vestiges of this ancient industry are seen in well-to-do Nayar houses in the shape of swords, lances and other weapons preserved as heirlooms. A sample of iron ore and an axe made of the iron smelted out of the ore are exhibited in the State Museum at Trivandrum. The label shows that they were obtained from a place called Vattiyürkävu, a village not far from Trivandrum. This place was once noted for ito sted industry, but the present generation neither know the processes, nor could they give any information as to when the industry flourished.

Another place where the industry was being carried on is Marungür, a village about five miles east of Suchindram in South Travancore. It was in existence there till about sixty years ago and there are some old men still living who remember to have seen in their boyhood the smelting of the ore and the manufacture of agricultural implements. The information given below has bean gathered from them.
50. Iron ore was collected from deep pits dug on the slopes of the hill called Preparation Paroathamala. Even now there exist some pits containing the ore mixed with earth. of the ore. The crude ore was washed with water to separate it from clayey earth and was, then dried and winnowed to remove the grit.
51. A cylindrical kiln, four to five feet in height and three feet in diameter with a smelting the wall two feet thick, was made with clay, and pieces of broken tiles were stuck to the ore. outside of the wall to strengthen it. The kiln was provided with two openings at the base, one for the molten metal to flow out into an adjoining pit and the other for air to be blown in by bellows. The kiln was filled up with alternate layers of wood charcoal and the ore, each charcoal layer being as much as one foot thick and only a handtul of the ore being spread over it in a very thin layer. The bottom layer of charcioal was then lighted and air blown in by the bellows. This was generally done at night. After five to six hours the molten metal would begin to flow out and in another three hours the process would be completed. After the metal which collected in the pit solidified into a block, it was removed from there and further cooled in the air.
52. Marungür, where the smelting of iron ore was being carried on, was in those Mannfacture days a prosperous village of blacksmiths. They made all the agricultural implements and of steel weapons required for the local people out of the steel prepared in the indigenous foundries. Even now the blacksmiths are there, but they are making the implements out of imported steel. The most dificult process in the manufacture of steel articles is that of tempering, by which different grades of hardness are obtained. Thearticle to be tempered is heated in a furnace until it becomes red-hot. The degree to which it should be heated depends upon the nature of tempering required. Local blacksmiths decide it from the glowing colour of the red-hot article which they know by experience. When the article has been heated to the proper degree, it is taken out of the furnace with a pair of tongs and one end of it is dipped in cold water and kept there until the whole article is cooled down to the required degree. The smiths know this from the change in the colour of the steel. The whole article is then immersed in cold water suddenly and taken out immediately or after some time according to the nature of tempering required. Delicate and costly articles like thin sword blades are tempered by dipping the ends first in water and then immersing the whole article in thick oils, such as castor and sesame oils. Tempering the steel is a special art calling for great skill and practice on the part of the workmen. There still live a few smiths who
have acquired the skill from their ancestors and are adepts in tempering even the finest of blades. There is a family of blacksmiths at Kättuvalli in Mavelikara Taluk and another at Varkala who are able to make razors, scissors, surgical instruments and other delicate instruments which will compare favourably with the machine-made articles imported from Western countries.

## Y. Sorew-pine Mat Weaving

Introductory

Yarieties of screx-pine.

Bleaching and seasoning the leaf.

Dressing the
leaf.
53. The weaving of mats, bags, cushions, etc., out of screw-pine leaves is one of the oldest cottage industries of the State, and almust all varieties of these goods were once indispensable to an ordinary household in Travancore. Before the introduction of chairs, rugs, jamkals, bags, and mattresses, suitable substitutes made of the screw-pine leaves were meeting the local requirements, and even to-day these articles are being used to some extent in Travancore, Cochin and Malabar.
54. The screw-pine plant grows best in Central Travancore, Sherthala and Vaikomr. where the soil is a loose sandy loam. There are three varieties of it :-

One is known as Kadakailha or Penkaitha (Female screw-pine). It grows to a height of two to three feet and has narrow leaves of light green colour about three feet in length. Its leaves can easily be bleached and dyed. This variety is largely found in Central Travancore, especially at Thalava and its vicinity where fine screw-pine mats are woven. It is also found abundantly in Ampalapula and Sherthala, but there its leaves are not used for weaving mats, because they are thick and cannot be bleached.

The second variety is known as Ānkailha (Male screw-pine). It grows much taller than the first variety and has a pithy stem. It throws out aerial roots which are used for making baskets and palm umbrellas. The leaves are thick, are of a dark green colour and are about four to six feet long. They cannot be bleached. This variety grows generally on the banks of lagoons and tidal rivers. They are mainly used for making large trough mats for drying grains.

The third variety of screw-pine is known as Pükaitha. It grows to a height of twelve- to fifteen feet. The leaves are not generally used for making mats. The calyx covering the flower has a sweet smell and the women wear it on their hair.
55. After removing the thorns the leaves are rolled up like a tape and boiled in water. For making costly mats it is said that the leaves are boiled in milk to impart to them the necessary white colour and gloss. After boiling they are dried in the sun, taking particular care that they are not over-dried lest they become brittle.
56. 'Dressing' means the splitting of the leaves into narrow strips. The width of the strips will vary according to the fineness of the mat required. For ordinary mats the strips will be from one-eighth to one-tenth of an inch broad. The implement used in splitting the leaves is a bamboo splinter, about four inches long, shaped like a paper-cutter. For making very narrow strips for weaving fine mats, a small splitting frame is used. It is a rectangular frame two inches by one inch, made of bamboo sticks with coir fibres fixed across it, the space between two consecutive fibres being the same as the width of the strips required.


Leaves are puiled through this frarre, when the coir fibres cut them into small strips like a battery of circular saws cutting a plank into thin reapers.
57. The dyed leaves are used only for making the borders of mats, or for working Dyeing the in ornamental designs: Usually it is the pink colour that is used. The roots of the plant called "Chappangam" (Caesalpinia Sappan) and the tender leaves of another plant called "Kasavu" (Medenilla edule) are boiled together in water for about half an hour and then the prepared screw-pine leaves are immersed in it, and again boiled for about one or two hours. The leaves will then have acquired an agreeable pink colour. The depth of the shade will depend upon the time taken for boiling. The leaves are then taken out and dried in the sun. After the introduction of aniline dyes, several other colours, such as green, blue, rose, etc., are also used.
58. The only implement used by the weavers is what is locally called "Pottakôlu." This is a bamboo splinter, about four inches long, shaped like a paper-cutter, to straighten the longitudinal sides of the strip which curl up while drying. For weaving very fine mats the workers use their thumb nails to do this work Fine bleached mats are woven diagonally. Two strips are straightened and held together under the toe of the weaver, and two other strips are then inserted crosswise interlacing the first two. Again another strand is placed lengthwise and one more is inserted crosswise, imterlacing the straight strip as in an -ordinary weave. Thus a fresh strip is inserted lengthwise and crosswise alternately until the required dimensions are obtained.

For weaving coarse mats, the unbleached leaves of Ankaitha are used. The weave is "plain." Several strips are placed in parallel lines and the cross strips are then inserted until one sidet of the long edge of the mat is completed. Weaving is continued until the required width is reached, and then the edges are bound by interlacing.
59. The fine varieties of mats are made in two separate pieces; one is placed over Edging. the other and the two are edged together. The sides of the pieces are first cut evenly and then edged with thin strands of screw-pine leaves dyed red.
60. The industry is declining and the chief causes of the decline are summarised below.
(i) Absence of transport facilities in localities where the industry is carried on:
(ii) The existence of a large number of middlemen who swallow the major portion of the profits.
(iii) The importation of cheaper and more attractive and handy articles like jamkals, carpets, printed mats, rugs, and the consequent decrease in demand for screw-pine articles.
(iv) The change in the taste of the public. Modern articles of furniture have replaced the time-honoured screw-pine mats and cushions. Till about fifty years ago they were used in almost all public offices of the State instead of chairs and benches.
(v) Lack of organization among the producers and the traders.
61. Now that the taste of the people has changed, the only means of developing the scope for the industry is to manufacture articles suited to the new taste for local consumption and for export to foreign countries. Hats, belts, writing pads, cigarette cases, vanity boxes, marketing bags, etc., could be made out of screw-pine leaves. Jaya, Indo-China, China and Japan are making these articles and exporting them to Western countries. Hats and bags to the value of several lakhs of rupees are exported from Java alone every year. There is no reason why such a thriving industry could not be established here also. Raw material is available and there is plenty of cheap labour. The only thing required is to teach the people the proper methods of making articles suited to modern taste and to organize the industry both as regards the production and the marketing of the finished goods,

## YI. Wood Seasoning

62. Seasoning of light and soft woods is an ancient industry in Central Travancore, which is fast dying out. Boxes made of soft woods are ordinarily used for carrying the theatrical equipment of pantomimic players. To improve the keeping quality and prevent insect attacks the wood out of which the boxes are made is seasoned by a special process. Boxes made of unseasoned wood will not last for more than a year or two; but if made of seasoned wood they will last for several years. It is said that there are boxes more than a
hundred years old, still in good condition. The process of scasoning, though simple, is ingenious. The gummy juice of the fruit of Diospyros embryopleris is squeezed out and strained through a cloth, and a small quantity of copper sulphate is dissolved in it. The planks which have been previously sawn to the required thickness, usually a quarter to half an inch, are coated with this solution and dried in the sun. Generally two or three coatings are given and after each coating the planks are dried. Boxes are made of these planks in a rectangular shape with a convex top. Nails are not used in fastening the planks. Joints are dovetailed and made firm by the application of copper sulphate solution in the above-mentioned juice.
63. The outside and inside of the box are then covered with specially prepared cloth. The juice of the same fruit is mixed with the bran of unboiled rice and made into a paste. Saffron or antimony sulphide is added to the paste to give it a yellow or red colour. The paste thus prepared is smeared on a piece of cambric cloth and with it the outer and inner sides of the box are completely covered. After the gum has dried the box is fitted with hinges, corner plates and lock, all made of copper or brass, but never of iron. The box is now ready for use.

Boxes of this kind are not much in demand at present, frotly because cheap steel trunks are flooding the market, and secondly because local carpenters do not change the old stereotyped pattern and make boxes of the shape and size suited to modern tastes and requirements.

## VII. Palm-leaf Umbrella Making

64. Before the introduction of umbrellas from the West the local demand used to be met entirely by indigenous palm-leaf umbrellas. Even to-day; only these umbrellas are being used in religious processions in which Royalties take part, gosha women of the Nampatiti and other communities use them as a sort of purdah when they go out of their houses, and in country parts many people, particularly the farmers and field labourers, ordinarily use them.

Different types of umbrellas are made for different purposes. Those used by the labourers have no handles, but are only provided with caps at the centre of the inside $s o$ that they can be placed on the head. They look like Siamese hats. The type of umbrella commonly used has a handle, three to four feet long. The umbrellas used in temples have handles, about ten to fifteen feet in length, so that they may be held over the idol placed on elephant's back when taken in procession. A rare type is one used by gosha women. It is very broad, about five to six feet in diameter, and is provided with a short handle.
65. The process of making these umbrellas is quite simple. It is a specialty of a class of people called Kaniyans who are also the indigenous astrologers and physicians.

The handle is made of a straight hard bamboo stick. Holes are made round the thicker end of the stick, and the mid ribs of the sago-palm leaves, after they have been cleaned, dried and polished, are inserted radially into these holes and are kept in position by tying them to a ring made of the same mid ribs. This is the frame-work of the umbrella. The fan-like leaves of the sago-palm are prepared by removing the stalk and mid ribs and by clipping off the tapering ends. They are dried in the sun and soaked in water just before they are required for use, to make them pliable. The frame work is covered by two or more layers of these prepared leaves and they are fastened to it by pins made of the mid ribs of the same palm leaf. The umbrella is then dried in the sun until it assumes a light khaki colour.
66. Palm-leaf umbrellas are going out of fashion because of the inconvenience in handling them. They could not be folded like the umbrellas made of cloth and the local industry is, therefore, dying out. It could, however, be revived if new uses could be found for them. Recently the traffic constables on duty at road junctions in the town of Trivandrum have been supplied with these umbrellas of a fairly large size, mounted on stands, so that they can stand under them, protected from the sun and the rain. If this system is introduced throughout the State some demand will be created for these umbrellas. Again, if the pattern could be altered so as to make these umbrellas compact and foldable, the difficulty of handling them would be removed and they could then be exported to Western countries where they would replace the costly sun shades now used at bathing places and health resorts. These are the only means to create a demand for this article and orve an ancient indigenous cottage industry.

## YIII. Preparation of Coconat Jaggery

67. Jaggery is one of the many products of the coconut palm which grows luxuriantly Introdactors in Travancore and which gives the country its beauty and wealth. Copra, coconut oil and coir yarn which are the other chief products of this palm owe their importance to foreign - demand. They form the bulk of the export trade of the country. But jaggery is an article of local consumption. Coconut jaggery is the unrefined sugar manufactured from the sweet juice drawn from the flower shoot of the coconut palm. It is usually sold in cakes, resembling a segment of a sphere and weighing ordinarily about two ounces each.

The manufacture of coconut jaggery is now confined to three localities in Travancore, namely, Tanni (near Paravur) in Quilon Taluk, Elukone in Kottarakkara Taluk and Parur in North Travancore. There are altogether only about fifty families engaged in this industry at present.

The main uses of coconut jaggery are for making sweets and for condimenting tobacco. On a limited scale it is still largely in demand in the neighbourhood of the localities where it is made, chielly by the Muslims for preparing sweets for their festivals. There was a time when molasses (Sarkara) prepared from sugarcane in North Travancore, coconut jaggery made in Central Travancore, and palmyra jaggery made in South Travancore, were universally used by the people of this country instead of refined sugar. Unfortunately, slatistics of the quantity of sugar imported into Travancore years ago are not available, but there is no doubt that the requirements of the people in those days were met chiefly by the local products.
68. The manufacture of jaggery used to be entirely in the hands of the Ilavas who Processes of from time immemorial have been intimately connected with the growing of the coconut palm mandeacture. as well as with the industries connected with its produce: There are three processes in the manufacture of coconut jaggery, namely, tapping and drawing of sweet toddy from -the palm, boiling of the sweet toddy, and moulding of jaggery cakes. Each of these is :an art in itself, though the latter two are comparatively simple. These processes are kept : more or less as family secrets.
69. It is not possible to say with any degree of definiteness when tapping for toddy Tapping. was introduced here. It is at least as old as the drink habit of the people. The llavas are the class of people who have been carrying on this profession from very early times. Tapping is a somewhat complicated process requiring great skill and practice on the part of :the tapper. The time for tapping is when the flower shoot of the coconut palm is tender. At this stage the sheath is gently tapped in the morning, noon and evening for four to six days from top to bottom in a spiral direction, and never in the reverse direction. Special -care is taken not to reduce the lower-buds inside the sheath to a pulpy condition, in which ccase the shoot becomes useless.


In. the process of tapping, the thickly packed buds inside the sheath get loosened, a certain amount of heat is generated and the flow of the juice is stimulated. After tapping for five to ten minutes, according to the size of the shoot, it is tied up at three or four places by the leaflets of the coconut frond, to prevent the sheath from bursting open, either due to the pressure of the juice inside or the heat of the sun. After four or five days the
tip of the shoot is cut flat and besmeared with perpared clay. In two to five days more. the toddy begins to ooze out. The tapper knows the appropriate time, but the appearance of bees, gnats, and flies hovering round the cut portion of the shoot and the sour smell of alcohol are the surest indications of the exudation of toddy. The tapper thenplaces an earthen pot on the shoot and provides a duct made of the leaflet of the coconut frond for the flow of the juice into the pot. Even after the juice has begun to ooze out, the shoot has to be cut afresh every morning, noon and evening and smeared with fresh clay, which not only assists the capillary action and draws up the toddy, but also prevents the shoot from drying up.

70. The implements required for tapping are :-
(1) A tapping bone.
(2) The tapper's knife.
(3) Two brushes.
(4) A bamboo tube containing powdered rock for sharpening the knife.
(5) An earthen pot to gather the toddy from the shoot.
(6) Another light vessel made of the leaf-sheath of the areca-palm or any other light material to collect the toddy as the tapper moves from tree to tree.
The tapping bone is about twelve to sixteen inches in length and about two inches in diameter. It is usually the fore-arm bone of either the bison or the sambur that is used. In exceptionally rare cases, sticks of hard and heavy wood, such as the heart-wood of tamarind or ebony tree, are also used. Traders in touch with the hill districts bring the bones from the forest and sell them to the tappers. They are first cleaned and cured, and the cleaned marrow hole is filled with an oil, the preparation of which is a specialty known only to a few people even among the tappers. A unit of oil contains

> 4 ozs. of cow's ghee, 1 oz. of pig's fat, $\frac{1}{4}$ oz of peacock's fat and,

This mixture is boiled over a slow fire till it turns brown, "the colour of the cobra's eye," to put it in the tapper's language. Much superstitious veneration is attached to this oil and it is still regarded as a sacred thing. The object of filling such a heavy oil in the bone appears to be to improve its keeping quality and to produce a lubricating effect in the course of tapping, when tiny particles. of the oil may ooze out through the pores of the bone. In the case of wooden tapping sticks, holes are bored in the centre and filled with oil. Whatever may be the scientific effect of the oil on the tapping, it is a firm conviction of the tappers that without it toddy could not be drawn out fully and the flower shoot would wither up. Once a month the oil in the bone is changed.

The tapper's knife which resembles the butcher's chopping knife in shape, is about six inches long and four inches broad and has a short handle. The blade is made of tempered steel and is very sharp. It is with this knife that the flower shoot is cut. As only a tiny portion of the shoot (about two m.m. thick) has to be sliced off every time, the kmife must be very sharp. It must be sharpened after every time it is used, and for this:
purpose the tapper carries with him some rock powder. The stalk of the coconut frond is his whetting stone and he does the sharpening when he is at the top of the tree just before. he begins his operations.

Clay for smearing on the cut surface is prepared by grinding it and sometimes even by sedimenting it to remove all grit. Great care is taken to keep it wet always. The tapper carries a small quantity of it in a clean coconut shell which forms part of his kit.

Brushes are made of the stalks of the coconut frond. Two of them are generally required, one for smearing the clay on the shoot, and the other for smearing the lime in the pot in which the toddy is collected. The object of smearing lime is to prevent the fermentation of the juice.
71. After the toddy is drawn it is boiled and allowed to cool, when all the Bolling and suspended particles settle down. The clear liquid is decanted into another vessel and monlding. the sediment is thrown away. In this condition the liquid is non-intoxicating and is an excellent beverage, sweet and pleasant smelling, known locally as "Akkāni." It is from this liquid that jaggery is manufactured. For this purpose it is further boiled in large earthen pots over a slow fire, until the liquid becomes viscous, something like honey. At this stage, it is known as "Päni" and is used for preparing sweets, pudding, etc. $P a ̈ n i$ is a delicacy especially at Syrian Christian feasts.

The pani is further boiled down until it assumes the form of treacle, and then it is poured into small moulds made of coconut shell. The time when the substance is ripe for moulding is best known to the housewives who prepare the jaggery. If too early it will not form a mould, and if too late it will become too hard. The arrangement for moulding the cake is very simple, though primitive, but is singularly natural and practical. The upper half of the coconut shell which contains the 'eye' through which the embryo sprouts, is used for making the mould. The 'eye' is bored through and temporarily closed with dry leaves. The treacle-like jaggery is poured into the shell and when it has cooled and solidified, it is pushed out by pressing it through the hole.,
72. The industry, as already stated, is carried on by the Ilavas. The male The economic members of the family tap the palms and collect the toddy, and theit ${ }^{\circ}$ womenfolk, assisted appect of the by the children, convert it into akkäni, päni and jaggery.

The tapper's kit and the utensils for preparing jaggery are all the equipment required for this industry. The tapper's bone and knife are the only things which cost some money, say about Rs. 10 at the most, and all told the whole investment will not exceed Rs. 15. What is most important is that every member of the family contributes his or her share of the labour required. The only article of value required for the manufacture is the fuel. But one who lives in the midst of coconut palms can get enough fuel almost for nothing. The dried sheaths, stalks and fronds of the palm and the coconut husk are excellent fuel for the manufacture of jaggery. If these are found insufficient or unobtainable, the boys and girls will collect in a couple of hours as much dry leaves as may be needed for the fuel. Conditions, however, are rapidly changing and every article has now to be paid for. Hence the cost of fuel has also to be taken into account in calculating the cost of manufacture.

A tapper will tap fifteen palms in a day and for these the owner of the palms has to, be paid a rent of Rs. 20 per mensem. On an average a palm will yield nearly eight ounces of sweet toddy per day from which half a pound of jaggery can be manufactured. On this basis, a man tapping fifteen palms for sweet toddy will be able to produce 225 pounds of jaggery per month which at the present price would fetch about Rs. 48. If the rent paid to the owner is deducted from this amount, the tapper is left with a balance of Rs. 28 which is the monthly income for his and his family's labour.

No information is available as to the exact quantity of jaggery produced in the country. What is produced is partly consumed locally and partly exported. The jaggery manufactured by each family is sold either to the consumers directly or to petty shopkeepers in the vicinity in exchange for their daily necessaries of rice, oil and condiments. The sale of jaggery cannot be said to suffer from the interference of a multiplicity of middlemen. The demand for it is limited and correspondingly also is its, production. But the trade suffers from other causes also. It has, however, to be noted that the producers, being mostly illiterate and unambitious, are content to sell their product. in the nearest locality at a price which is governed more by custom. This is seen from. the fact that, however much the price of sugar or other substitutes may vary, the price of, coconut jaggery remains almost stationary.

The present condition of the induatry.
73. The industry has declined and its present condition is far from satisfactory. At Tanni there are now only twelve families engaged in this industry as part-time occupation and they are the descendants of the families who settled in the estate of the late Mr. Rama Rao, Dewan of Travancore, six decades ago. Other tappers in the locality who were carrying on this industry till about two years ago gave it up and took to the more lucrative business of tapping for fermented toddy, for which they are paid monthly wages of Rs. 30 to Rs. 45 by toddy-shop contractors. At Elukone and Parur also the jaggery industry is declining, while the fermented toddy industry is flourishing.

As has already been pointed out many of the indigenous sweets in Travancore were, and are to a great extent still, made with molasses or jaggery, but they are being steadily ousted by cheap imported sugar. In 1921-1930 Travancore imported 148,757 cwts. of sugar to the value of Rs. $21,78,401$. The price of jaggery at present is three and a half annas per pound which is higher than that of sugar, and it cannot, therefore, compete successfully with the latter.

Rapid changes are taking place in the habits and tastes of the people. Coffee and tea have become houschold beverages, many of the preparations in which jaggery is used are slowly going out of fashion, and sweets prepared with refined sugar are taking their place. Some people also consider it beneath their dignity to use jaggery and even seem to detest its flavour. It is as much the change in the taste of the people as the competition of cheap imported sugar that has affected the local coconut jaggery industry and contributed to its decline.

Education, if it is to have beneficial effects upon society, must become universal and practical. As at present imparted, it makes the youth look down upon manual labour and detest the profession of his parents. The social changes which are being brought about by the present system of education have resulted in the dislocation of the tapping industry. The situation has been further aggravated by the propaganda carried on against tapping by prohibitionists. The teachings of Sri Näräyana Guru Swämi, the greatest social and spiritual leader of modern times in Travancore, have stirred up the ilava community and made them feel that tapping for toddy is a great social evil. These influences have, therefore, turned many away from this profession. Unfortunately, tapping for sweet toddy has also suffered in this movement.

Tapping, however, is still being continued for the preparation of fermented toddy and arrack. The contractors who carry on this trade pay the tappers handsome wages and the latter have not to bother about the irksome business of obtaining licenses from the Excise Department. Tapping for fermented toddy is more remunerative and less troublesome than tapping for sweet toddy. This is another cause that has contributed to the decline of the jaggery industry.
Reyiral of the industry.
74. In view of the fact that the industry is not paying, the tastes of the people have changed, and consequently the demand for the product is limited, is it possible to revive the industry? Though there is only a limited market for jaggery in its present form, it is possible to create a large demand for th by placing it in the market in forms suited to modern tastes and requirements of the people. Jaggery converted into caramels, sprucely trimmed and well dressed, will find a sale in fashionable circles. If jaggery as such cannot compete with sugar, in the form of caramels it certainly can with caramels imported from outside. What has to be done for the rejuvenation of the industry is to organize it on modern lines and place the article in the market in suitable forms. This can best be done through co-operative organization.

## IX. Preparation of Palmyra Sugar-oandy

Introductory.
75. The palmyra sugar-candy is the brown crystallized sugar of the sweet juice of the flower shoot of the palmyra palm, much in demand for preparing sweet foods for children and Ayurvédic drugs. It is generally believed that it has none of the defects of refined cane or beet-root sugar; and that, on the other hand, it has exceptional cooling properties. It is largely used in the diet of small-pox patients. The manufacture of sugar-candy, locally known as "Panam-kalkandu" was once a flourishing industry in South Travancore, especially in Agasthiswaram and Rajajakkamangalam, but is now practically extinct. It is still being carried on in the adjoining Timevelly District, and Trevancore obtains its supplies from there.

Sugar-candy is manufactured from the sweet toddy of the palmyra palm. The process of the extraction of toddy is slightly different from that of the coconut toddy. The palmyra palm flower shoot is harder than that of the coconut palm and the juice has to be squeezed out of it by wooden clamps. In all other respects the method of extracting sweet toddy from the palmyra palm and the coconut palm is practically the same.
76. Three kinds of clamps or squeezers, as shown in the picture below, are generally Tapping. used. The smallest of these marked (a) is used first and then either of the two, of which one marked (b) is used on the female palm and the other marked (c) on the male palm. The knife used in slicing of the flower shoot resembles the pruning knife with a curved beak.

77. Toddy is first boiled, and when it reaches a certain stage it becomes a thick Manufactore. viscous brown liquid. This is called "Padini". The sugar in the sweet toddy or in the padini is not crystallizable. The stage at which boiled sweet toddy will form crystals is when it obtains the viscosity of the ordinary syrup. Then it is poured into new earthen pots, and an indigenous plant known by the name of Sivanär Korandi (Indigofera aspalathoidas) is placed in the liquid to serve as a nucleus for the formation of crystas. It is interesting to note that, without putting this shrub into the liquid, the crystals will not be formed, however long it may be kept. The plant also prevents the fermentation of the liquid. It was in places, such as Räjakkamangalam, Agasthiswaram, etc., where the plant thrives well, that the manufacture of palmyra sugar-candy was being carried on. It is remarkable that the people, though uneducated in the modern sense, knew the principle of crystallization. Generally, the manufacturers, whose dwellings, are only small huts with no storage room or cellar, bury the pots with their contents in the ground for keeping them undisturbed. In the course of five to six months crystals will be formed round the plant. They are then shaken down, gathered, washed in sweet toddy, dried in the sun, and packed in earthen pots.
78. Various causes have contributed to the decline of this industry. First and causes of foremost, the demand for palmyra sugar-candy is very limited. Though it fetches a higher iecline of the price than palmyra jaggery, the manufacturer is not sure of the market, and, on the other hand, jaggery is so much in demand both in and outside Travancore that there is no difficulty in selling any quantity of it.

Secondly, the formation of crystals takes five to six months, and the poor labourer who, in the large majority of cases, lives a hand to mouth life, cannot afford to wait for such a long period for a return for his labour. The remedy for this difficulty lies in organizing a co-operative marketing society, which will buy over from him his produce and finance him according to necessity.

A third reason is that in South Travancore where there are facilities for the manufacture of sugar-candy and where it was being carried on formerly, wages of labourers have increased and the labourers find it more remunerative to work in the salt-pans at Thàmarakulan and other places than to engage themselves in the manufacture of sugar-candy.

The fore-going are the principal causes that have contributed to the decadence of this cottage industry. Apart from helping the small group of manufacturers who still follow the profession as a part-time employment by organizing the co-operative marketing of their product, it seems futile to attempt the development of this industry on an extensive scale.

## APPENDIX IV

## THE ECONOMIC CONDITION OF THE PEOPLE

## I. Introduction

Scope of the enquiry.

The question of conducting an economic survey of the State has been engaging the attention of the Government of Travancore for some years past. It was first considered as early as in 1905. In 1907 the Government decided to make a beginning by conducting an industrial survey of the Southern Division of the State; but subsequently the proposal was dropped. In the years 1917-1918 Dr. S. G. Barker, the then Director of Industries, made a general industrial survey of the State and published a report. The problem of the economic survey was, however, left untouched; but it continued to be pressed upon the attention of Government by the members of the Sri Mulam Popular Assembly and the Legislative Council. A resolution recommending the appointment of a committee to conduct an economic and industrial survey of the State was discussed in the local Legislative Council in 1925 and was lost by a narrow majority. In the course of the discussion the Government expressed their sympathy with the object of the motion, but did not promise to give effect to it immediately on account of the enormous cost required to conduct a reliable and comprehensive economic survey. Though the motion in the Council was lost, it was not the intention of Government to shelve the question indefinitely. The necessity of collecting some statistics which would throw light on the economic condition of the people was ever before their mind, and they decided to take the first step in this direction along with the population census in 1931. It was not proposed to undertake an intensive economic survey like the village surveys conducted by Dr. Harold Mann in Bombay, by Dr.Gilbert Slater in Madras, by Mr. S. Kesava Iyengar in Hyderabad, and by the Board of Economic Enquiry in the Punjab. Such a survey could only be undertaken in small units by expert economists and has not, therefore, been attempted here. Elsewhere in India attempts have been made at times towards the computation of national wealth and income, notably by Messrs. Shah and Khambatta in their book called Wealth and Taxable Capacity of India. But such computations are only estimations and necessarily involve many assumptions. The direct method of ascertaining the wealth and income by a census is undoubtedly the most satisfactory method of enquiring into the economic condition of a people, provided the persons questioned could be relied upon to furnish correct information. This is the method adopted in the present enquiry in Travancore; but being the first of its kind it can certainly not be expected to yield results free from inaccuracies and omissions.
2. The ordinary census operations in all countries have assumed such gigantic dimensions that a tendency is visible in most of them to transfer the more important and dificult portion of vhe work to inter-census period. In the United States a permanent Bureau of Census attends to this work. In the absence of a bureau or other special agency for the collection, compilation and publication of statistics during inter-census periods the proposed economic census in Travancore had to be taken along with the population census. This arrangement has no doubt saved much expenditure, but it cannot be denied that the results have on that account been affected adversely both in quantity and quality. Nowhere else in India has a census of wealth been taken so far and there is no material for guidance in the task that has been attempted in this State for the first time. In a novel venture of this kind many difficulties will naturally crop, up, and they could only be solved in the future by the experience gained at present. Bearing in mind these defects and limitations of the enquiry we shall examine its salient features and try to draw some broad and general conclusions therefrom.
3. A proper economic survey consists in the analysis and scientific study of the methods of production, distribution and consumption of wealth. Such a survey was beyond the scope of the present enquiry. It was intended only to ascertain the total wealth, income and indebtedness of the earners at the time of the census. The conditions under which wealth is produced or consumed, and the causes and consequences of the indebtedness of the people have not been brought under enquiry and will not, therefore, be discussed. Even the problem of the distribution of wealth will only be dealt with in a
-general way. The data collected will also not allow of a detailed examination of the economic condition by age, sex or caste. The margin of error in the figures collected is discussed at the appropriate places wherever possible. The qualitative aspect of the study has been entirely left out of consideration for want of sufficient accurate details, and even been possible to adopt an elaborate scheme of tabulation within for; secondly, it has not and thirdly, the individual earner and not the family has been the limited time available; and information has not been recorded as to the number of dependants of each earic unit,
4. We may now briefly consider the nature of the data collected in the enquiry. Nature of the As has been already stated, particulars have been ascertained only as regards the earners. retorm. An earner is one who actually does work or carries on business whether personally or by means of servants, or who lives on house-rent, pension, etc.

A special schedule was prepared for this enquiry and particulars of each earner were recorded therein by the enumerators at the preliminary counting of the population.

| Serial No. of colamn | Description of the column |
| :---: | :---: |
| 1 | House number |
| 2 | Names of persons who are earners |
| 344 | Extent and value of wet land owned |
| 586 | Frtent and value of dry land owned |
| 7 | Value of baildings |
| 8 | Value of cattle and agricultural;implements <br> Value of other movables |
| 10 | Investmenta in banks, chitties, etc. |
| 11 | Land cultivated by owner |
| 12 | Land lensed ont for calcivation |
| 13 | Land taken on lease and cultivated |
| 14 | Rent from land |
| 16\% ${ }^{15}$ | Value of cropa raised Description of, and income from, other oecapations |
| 18 | Income from other monrces |
| 19 | Savings per annum |
| 20 | Defiuit per annum |
| $22 \times 21$ | Mortgage debt |
| $\begin{aligned} & 22 \& 23 \\ & 24 \& 20 \end{aligned}$ | Hypothecation debt and interest thereon Other debts and interest thereon | The various heads under which data were collected are given in the margin. Columns 3 to 10 will show the total wealth of an individual, columns 11, 12 and 13 the extent of land cultivated. by the owner, the extent leased out to tenants and the extent cultivated by tenants, columns 14 to 18 the total income, columns 19 and 20 the annual savings or deficit, and columns 21 to 25 the total debts and the interest paid thereon. The totals of columns. 3 to 10 will represent the aggregate private wealth of the people. Properties owned by the Government, such as reserved forests, poramboke, lands, unassigned wastes, public institutions, etc., have not been included. in the enquiry. The quasi-private forms of wealth, such as those belonging to associations, churches, temples, etc., though entered in the schedules, have been left out in compilation. Wealth owned by foreigners has also been omitted. On the other hand, certain items of wealth, such as mortgages and other monetary transactions between individual citizens which are generally excluded from the calculation of national wealth, have been taken into account in this enquiry. Wealth, as the term is used here, therefore, represents only the private wealth which includes "all external, material, transferable (though not transportable) goods that have some value in exchange." It does not represent the national wealth which is -4the aggregate of wealth of the individual citizens of the State as well as the corporate or communal wealth represented by such assets as railways and municipal water works."* This distinction has to be borne in mind when we compare the wealth of Travancore calculated from this census with that of the other countries.

5. The accuracy of the return will depend mainly on the attitude of the people towards Accuracy or the census and the agency employed for enumeration. Even as regards the population the return. census, it is a well-known fact that though the people generally are accustomed to it, there are still persons who display lamentable ignorance of its object and uility. It is no wonder, therefore, if the attitude of the general public towards the economic census has been cynical and often hostile. Notwithstanding the elaborate propaganda that was undertaken in connection with this census, it was not altogether possible to remove the misplaced apprehension of the public about the purpose for which the enquiry was undertaken. They feared that it was only a preliminary to the imposition of fresh taxes or the enhancement of the existing ones like the income-tax. It may, therefore, be presumed that the figures relating to income contain no overstatement and probably only understatement. The figures relating to wealth and indebtedness have also to be accepted with caution. Many people feared that the information they furnished might be utilized as judicial evidence and, therefore, tried to epade the census. The returns have revealed the fact that the rich are more averse to disclose their true economic condition than the poor.
6. The enumerators engaged for the econamic census were the same as those employed for enumerating the population. They were educated and intelligent men selected mostly from among the teachers in vernacular schools. The definitions of units are generally more complex and difficull to understand in the economic than in the. population census. No pains were spared to make the instructione as full and clear as possible. As. the economic census was taken during the , preliminary enumeration of the population, the enumerators were able to do the work leisurely and carcefully. In the population census, only the personal attributes of the enumerated, such as sex, age, caste, etc., have to be recorded, whereas the economic census deals mainly with fgures representing the money valuations of wealth possessed by the people, their income and indebtedness. In making these valuations there is the possibility of personal prepossessions vitiating the results of calculation. The error due to this cause may, however, be negligible, because over-estimations on the one hand are likely to be counteracted by under-estimations on the other. Large figures have great stability and so also the averages derived from them. The accidental errors may, therefore, be ignored, but not so the systematic errors. Though we are aware of their existence, it is not possible to estimate their volume, and all that we can do to minimize the effect of such errors is to make ample allowance for them.
7. One who is acquainted with the ordinary census operations knows full well that the greatest care has to be bestowed upon every stage of the work from start to finish, from the preliminary enumeration to the final printing of the figures, it serious absurdities are to be avoided. If the counting and classification of a population are difficult tasks, the counting of their wealth is even more so. To attain mathematical exactitude in either case is practically impossible; but in the economic census which involves more of estimation than of counting, the margin of error will certainly be greater than that in the population census. In stating the value of his possessions a person could ordinarily make only a rough estimate, which might differ from the truth by as much as 10 to 20 per cent. even if he were not actuated by any false motive to conceal the truth. Omissions are possible, nay even unavoidable, especially because the economic census was not continued beyond the stage of the preliminary enumeration of the population census, which naturally resulted in the exclusion of the floating population. On account of this exclusion and other accidental omissions entries have been made in the economic census schedules only about $1,354,000$ persons as against $1,477,000$ returned as earners in the population census schedules. There is thus an omission of 8.3 per cent. of the actual number of earners. Part of this omission may be due to the fact that temporarily unemployed persons, such as coolies in estates, who were included as earnere in the population census were not so included in the economic census as there was nothing to be recorded about their income or wealth at the time of the. census. This inference gains support from the circumstance that the proportion of omissions is the highest in the High Range Division where the population consisted mostly of estate coolies and where there was temporary unemployment among them at the time of the census on account of the economic depression. Again, in the case of properties. owned jointly by the members of a family the chief member alone might have been included in the economic census, while all the owners might have been shown as earners in the population census schedule. These are the main factors which may have contributed to the omission of earners from the economic census; but it is difficult to estimate the extent to which each of them has operated.' The effect of the omission of earners on the calculation of total wealth could, however, be eliminated if the omissions were spread uniformly over all classes of people. In that case an omission of 8 per cent. of earners will result in the omission of 8 per cent. of the total wealth also. But there are reasons to believe that the omissions in the present enquiry were mostly among the labourer classes and females, while, on the. other hand, understatements were generally among the rich. Errors may have also occurred in the transcription and compilation of data. They are unavoidable when one has to deal with a mass of figures as in this fase.
8. In view of the many possible sources of errors described above, it has been considered inadvisable to convey a false impression of accuracy by the publication of lengthy tables giving figures to the last digit. Figures are usually quoted without reference to the context from which they are taken and without regard to their limitations. The totals obtained have, therefore, been given in round numbers only in the following discussion. By this method the treatment of the subject has been simplified considerably wilhout unduly increasing the margin of error. It is well to remember in this connection that. "the primary value of statistics is due to relative rather than to absolute accuracy."
9. At first it was thought desirable to classify the figures under each head into Method of finely graded frequency groups and ascertain the total number of persons and their wealth, tabolationincome and debt in each group. But when attempted, this work, it was found in actual practice, would require considerably longer time than was available. If the enumeration had been done on slips instead of on schedules, the procedure could have been simplified and time saved in compilation. Further, the returns were not reliable enough for a detailed investigation of the economic question by caste, sex or age of the enumerated. Such an elaborate treatment was, therefore, abandoned and it was considered sufficient to work out the totals of the different items of wealth, income and debt. In regard to income alone a grouping was made according to the nature of the occupation. Each item of wealth was dealt with singly and no attempt was made to treat of the combinations or correlation of the different items. The number of earners and the amount of their wealth; income and debt under each head were obtained by actual counting and from the totals of these figures the averages were struck. Neither the totals nor the averages would, it must be admitted, give any idea of the distribution of wealth. For the study of this specific problem data were collected and tabulated for a sample population selected at random from the schedules of a few typical taluks of the State. The particulars recorded in these schedules of one in every ten persons were first transferred to slips. * The caste or religion to which each person belonged was also ascertained from the population census schedule and entered on the slips. Data relating to 55,803 persons were thus abstracted and sorted into frequency groups, from which one could obtain a general idea of the distribution of wealth in the different communities. The sample population was divided into eight communities, namely, Brahmans including Nampütitits, Nāyars, İlavas, depressed Hindus, other Hindus, Syrian Christians, other Christians, and Muslims. The depressed Hindus consisted chiefly of the Pulayan, Parayan, Vetan, Kuravan, and Pallan. This is the classification adopted by the Government of Travancore for certain administrative purposes. The same classification has been followed in the special enquiry regarding ferility and mortality; but it is slightly diferent from the grouping of the depressed Hindus based on social distinctions, which has been adopted in other parts of this Report.
10. The marginal statement shows the distribution of earners by community in the Treatment of
 random sample. The different communities, the subject. except the Brahmans, are represented more or less in proportion to their numerical strength and importance. The schedules of the towns have not been included in the selection of the random sample, and Brahmans being fouind mostly in towns the exclusion of town schedules has naturally resulted in the omission of a large proportion of this caste from the sample.

In discussing each item of wealth the whole State has been treated as a single unit, without any distinction being made between rural and urban areas or other territorial divisions. This procedure is justified inasmuch as we are concerned mainly with the wealth of the earners within a territory and not with the total wealtik of that territory. In the latter case the question of internal migration has also to be considered, for which the necessary data have not been collected and compiled. That internal migration does affect the distribution of wealth can be seen from the statement given in the margin: The excess of the area ownied by earners over that given in

| Division | Wet land owned by earuers (From census) <br> Actes | Wet land ander cultivation (From The statistics of Travancore) Acres |
| :---: | :---: | :---: |
| Southern Contral Northern figh Ragge | 128,000 224,300 $.246,300$ 4,100 | 100,578 230,763 269,738 8,888 |
| - Total | 697,700 | 604,977 | The Statistics of Travancore in the Southern and High Range Divisions may be due to the earners residing in these divisions owning lands in other divisions. Migration between natural divisions and taluks is more - pronounced than that between. administrative divisions, and consequently the problem of distribution of wealth in the former territorial units is even more complicated than that in the latter. For this reason the distribution in smaller units than the State will be examined only in respect of the total wealth, income and indebtedness and not in respect of the different items constituting them.

[^72]Censas of Tages.

The total income will be considered from the standpoint of the public as well as of the individual citizens. An attempt will also be made to calculate the national income from the subsidiary data collected from the estates, the statistics published by the Government annually and the results of the wages census.
11. Correct statistics regarding the wages of workmen have not yet been compiled in this State. The statements of wages published by the Government annually are incomplete and cannot be used for preparing the index numbers. It was, therefore, decided toconduct a census of wages along with the present population census. Two schedules were prepared for this purpose, one to be filled up by the employers in regard to agricultural, lactory and estate wages, and the other by the enumerators as regards the wages of artizans, such as carpenters, blacksmiths, etc. The schedules together with instructions as to the method of filling them up were distributed among the village and municipal stafs. They were required to include as many persons as possible in the census. The data collected in municipal towns were found to be meagre and were, therefore, rejected. Even in the case of rural areas the maximum and minimum wages and the number of days. in the year devoted to each agricultural occupation, like ploughing, sowing, etc., were not quite reliable and were consequently discarded. The rest of the figures has been abstracted and presented in State Table VI given at the end of Part II (Imperial Tables).

## II. Wealth (Capital)

Definition of mealth.
12. By 'capital' is meant not only the business capital which, as generally understood, is an aid to production, but all stock of goods in the possession of a person, including land, whether they be the agents or the results of production. All external, material, transferable goods which have exchange value and which yield income to the owner in the shape of money or utilities are taken into account in the calculation of wealth or capital. We are concerned here only with the money value of wealth and not with its quality or volume and shall confine ourselves to private and not public or socio-private wealth.

The distribution of wealth is not necessarily correlated to income. Though from the economic standpoint a steady income is more desirable than the possession of wealth, the latter by itself is covetable for many reasons. It brings ease and luxury to the owner and enables him to maintain his self-respect when his income suddenly drops or when he becomes disabled for work by old age. A wealthy man is in a position to choose an occupation suited to his own taste. The owner of property is generally a law-abiding citizen and helps to maintain the stability of society. Last but not the least, it is the mar of wealth who can afford to encourage culture and foster arts which are essential to the progress of society. Hence, in any economic study the capital wealth of the people must naturally receive the most prominent consideration.
Classification ar of mealth.
13. Capital wealth may be divided into the following five categories : -
(1) Land including trees standing on it.
(2) Houses.
(3) Agricultural implements and cattle.
(4) Other movable properties such as furniture, jewellery, etc.
(5) Money investments.

In agricultural countries, the first and the third are the direct agents of production. while the others are the results of production. We shall consider each item separately and calculate the total and per capita wealth of the individual citizens.
Land.
14. Land is par excellence the most important form of wealth in Travancore. We shall consider it in two aspects, namely, land owned and land cultivated. The latter has to be correlated with income, and will, therefore, be dealt with under that head. In regard to land in its relation to ownership a distinction is made between wet and dry lands, the extent and value of which have been separately recorded in the schedules. The owners of land may be divided into three classes:-(1) those who have mortgaged their landsand are thus deprived of possession, (2) those who have not mortgaged their lands but have borrowed money on their security, and (3) those who have neither mortgaged nor hypothecated them. The question of debts as a charge on wealth will have to be considered separately.

In regard to the lands which have been mortgaged we are confronted with a practical difficulty in including its full value in wealth. Lands are generatly mortgaged only for a portion of their value. The mortgagee can claim only the amount he paid as his wealth. The balance of the value really belongs to the mortgagor though he is not in possession of the land. He could exchange his right for money; but he does not actually get any income from this wealth either in the form of money or utilities. For this reason such rights have not been taken into account in calculating a person's wealth. The mortgagee, though he enjoys the benefit of ownership, would not get more than the mortgage amount plus the yalue of the improvements effected by him, and hence these alone have been considered as his wealth. The total value obtained from the schedules will, therefore, be somewhat less than the real value of land as it is generally understood.
15. The number of persons returned as earners in the economic census is $1,354,383$, Extent and and of these, the number returned as possessing wet land is 275,126 which is about $20 \cdot 3^{3}$ ralue of land. per cent. of the total. The total area of wet land returned being 598,000 acres and the value thereof Rs. 5,136 lakhs, the average extent of wet land per owner is 2.17 acres and the carresponding value Rs. 1;867. From'The Statistics of Travancore, 1930, it is seen that the wet land under occupation is 605,000 acres. Thus there is an omission of $1 \cdot 1$ per cent. of wet lands in the economic census, as against an omission of 8.3 per cent. of the earners. As wet lands owned by socio-private bodies have been excluded from the economic census, it may be concluded that very few of the omitted earners possess wet land, that the margin of error in the total is negligible and that, as far as the ownership of

|  | Wet land per head |  |
| :--- | :--- | :--- |
|  | Area in acres | Value in rapees |
|  |  |  |


| Taluk | Oents |
| :---: | :---: |
| Shenkotta | 28 |
| Thovala | 27 |
| Kunnathunad | 18 |
| Quilon | 8 |
| Trivandrum | 7 |
| Minachil | 6 |
| Vilavancode | -4. |
| Total axerase | 14 | wet land is concerned, there has practically been no understatement. In view of the fact that possession of land, especially wet land, is regarded as a mark of distinction it is natural that there is yery litte error in the return of this item of wealth. The. average extent of wet land and its value per head of owners, earners and total population, obtained from the economic census, are given in the margin. The average extent of wet land per head of total population is. only 12 cents. The averages obtained by the Travancore Banking Enquiry Committee for certain villages in some taluks are also shown in the lower marginal statement.

16. The number of persons returned as owning dry land is 621,324 which is 45.9 per cent. of the total earners, the area owned being $1,599,000$ acres and the value Re. 8,963 lakhs. The dry land under occupation as per The Statistics of Travancore is $1,928,000$ acres. The difference is, therefore, about 17 per cent. The estates owned by foreigners and the dry lands belonging to public institutions have been excluded from the calculation. The area of these may be put down at 200,000 acres, and, if allowance is madefor the same, the margin of error*

|  | Dry land per head |  |
| :---: | :---: | :---: |
|  | Aren in acres | Value in rupees |
| Owners Eamers | 2. 67 1.18 | 1,443 662 |
| Total population | 0.81 . | 176 |

in the margin. An area of 31 cents per head of the population has been figures are given making allowance for 8 per cent. error. If this is also included been obtained without 33 cents per head.

[^73]17. The statement below shows the average extent of dry land per head of the population in certain taluks calculated by the Banking Enquiry Committee. The number of persons who own either wet or dy land has not been ascertained by separate counting. It is, however, a matter of experience that except in Nänjanäd and Kuttanâd there is hardly any person who owns wet land without at the same time possessing some dry land. The total number of landowners cannot, therefore, be much higher than the number that owns
dry land.
18. . The total wealth of individuals accruing from the ownership of land, as calculated from the figures given above, is given in the margin. The margin of error being 6 per cent. for the whole. the total value will be about 150 crores of rupees. The average extent and value of total land, including wet and dry, per earner are 1.62 acres and Rs. 1,041, and the corresponding figures per head of the population are 0.43 acre and Rs. 277. As there is an error of six per cent. in the latter; the correct averages may be taken to be 0.45 acre and Rs, 294 respectively.

Distribution of land.
19. The averages do not give any idea of the distribution of land among the owners. It is quite possible that the major portion of it may be in the possession of a comparatively few persons. The distribution of land, as it exists now, is mainly the result of social customs; the laws of inheritance and the legislative enactments made from time to time. The Nāyar, Ilava, and Nānjanād Ve!!ăala Regulations passed during the last decade have brought about a complete disintegration of the properties belonging to these communities. The effect of these Regulations on the distribution of land will be dealt with in a later paragraph: In the meanwhile, let us consider the general distribution as has been observed from the statistics in the random sample which has been specially abstracted and tabulated. The following table shows the distribution of wet land among the different communities :-


SOTE:-In thin table and other similar tables valuee corresponding to the apper limit of cach group aro inciaded in the nost higher gronp.
20. The ratio of the owners of wet lands to the total earners varies between different communities, and these variations are shown in the following diagram. It will be seen therefrom that among
 Nayars 51.2 per cent. of the total earners possess wet land, and this is the highest proportion. Next to Nayars come the Syrian Christians with 26.3 per cent. and then in order Muslims, other Hindus, Ilavas, other Christians and lastly, the depressed Hindus among whom only 3 per cent. of the earners can claim to have any wet land. It has been pointed out in paragraph 15 above that persons who own wet land form $20 \cdot 3$ per cent. of the total earners, and according to the figures in the random sample the proportion for all the communities together is 20.8 . The small difference between the two proportions, in spite of the fact that towns have been omitted from the sample, justifies the adequacy of the sample to represent the distribution of wet land in the State. The table in paragraph 19 shows that the mode of the distribution is in the group 20-40 cents.
21. The following table exhibits the nature of the distribution of wet land among the owners of different communities.

| Oommunity | Lower quartité (Acres) | Median * (Acres) | Opper quartilg (Acres) |
| :---: | :---: | :---: | :---: |
| Brabman | $1 \cdot 85$ | $4 \cdot 69$ | 13.48 |
| Nayar | 0.38 | $0 \cdot 66$ | 1.70 |
| Ilava | $0 \cdot 28$ | $0 \cdot 12$ | $1 \cdot 20$ |
| Depressod Hindu | $0 \cdot 23$ | 0.44 | $0 \cdot 93$ |
| Other Hindus | $0 \cdot 24$ | 0.46 | $1 \cdot 03$ |
| Byrian Obristian | 0.45 | $1 \cdot 02$ | $2 \cdot 26$ |
| Other Ciaristians | 0.23 | 0.44 | $1 \cdot 14$ |
| Muslim | $0 \cdot 36$ | $0 \cdot 68$ | 1.74 |

To ascertain the actual position of each community with regard to the ownership of wet land we have to correlate the results with the pro-: portion of earners possessing the same. In the case of owners it is seen from the median figures in the table that the distribution is most favourable among Brahmans, and next to them among Syrian Christians, and is least favourable among the depressed Hindus and other Christians.
22. The table below shows that among Nâyars and Muslims more than 60 per

| Community | Proporition per cent, of ownurs having wet land |  |  |
| :---: | :---: | :---: | :---: |
|  | Below 1 acre | 1.10 acres | 10 acres And orer ores |
| Nsyyr | ${ }^{62.0}$ | ${ }^{35} 7$ | $2 \cdot 3$ |
| Depresead Eindu | ${ }_{77} 7.7$ | - 22.6 |  |
| Syrian Christian | ${ }_{49}{ }^{19}$ | 22.0 46.3 | $0 \cdot 6$ |
| Hastim | 61.6 | ${ }_{36}{ }^{46.8}$ | $\stackrel{+1}{2 \cdot 6}$ | cent. of the owners have below one acre of wet land, the corresponding proportion among Illavas being more than 70 per cent., and among the depressed Hindus nearly ${ }^{-} 80^{\circ}$ per cent, while among Syrian Christians it is only less than 50 per cent. If we consider the giroup, 10 acres and above, the Syrian Christians have the highest proportion.

23. The average area of wet land owned by the earners of each community may be calculated on the assumption that the average for each group is the central value of the group. The group 10 to 100 acres was divided into sub-groups of 10 acres at the sorting stage and

[^74]in calculating the averages the distribution thus obtained was made use of. An average of 150 acres has been taken for the group 100 acres and above. The results thus obtained will only be approximate, because there are only very few persons in the higher groups. It is possible that the average for Brahmans is somewhat underestimated and that for the depressed Hindus overestimated. The figures given in the margin show that the average

| Commanity | Average extent of wet land (acres) |  |
| :---: | :---: | :---: |
|  | per owner | per earnur |
| Brahman | $15 \cdot 60$ | 6.59 |
| Nayar | 1*72 | $0 \cdot 88$ |
| Ilava | 1•11 | $0 \cdot 15$ |
| Depressed Hindu | 1.08 | $0 \cdot 03$ |
| Other Hindus | 1.85 | $0 \cdot 28$ |
| Syrian Christian | $2 \cdot 69$ | $0 \cdot 71$ |
| Other Christinns | 1.07 | 0.09 |
| Muslim | 1•78 | 0.85 | extent of wet land is the largest among Brahmans, while among the other communities Syrian Christians stand first. The depressed Hindus are at the bottom of the scale. As the arithmetical average is materially affected by very high or low values, the real economic condition of a community can more correctly be gauged from the median and the mode. The mode cannot be located exactly, but the frequency distribution shows hat it is between 20 and 40 cents for all communities, except the Syrian Christians in whose case it is above 40 cents.

-24. If the wet land were distributed equally among the owners, and if the owners were arranged in the order of their wealth, beginning from the poorest, 20 per cent. of the owners would possess 20 per cent. of the wealth and 40 per cent. of the owners 40 per cent. of the wealth and so on. The following table and diagram show that this is not actually the case :-

Distribution of uet land ainong owners

| Extent of land |  | Percentage of owners | $\begin{gathered} \text { Pereentage } \\ \text { of } \\ \text { wet land } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| $\begin{array}{ccc} \text { Below } & 20 & \text { cents } \\ " & 40 & " \\ " & 60 & " \\ " & 80 & " \\ " & 1 & \text { acre } \end{array}$ |  | $13 \cdot 3$ | 0.7 |
|  |  | $32 \cdot 7$ | $3 \cdot 7$ |
|  |  | $48 \cdot 4$ | 78 |
|  |  | $57 \cdot 9$ | 11.8 |
|  |  | $62 \cdot 5$ | $13 \cdot 5$ |
|  | 2 ncres | 80.6 | 27.7 |
| $\because$ | 3 " | $87 \cdot 8$ | 37.1 |
| $\because$ | 4 " | $91 \cdot 9$ | 43.6 |
|  | ${ }_{6}$ | $93 \cdot 6$ 94.9 | 49.0 52.7 |
|  | 6 | 94.9 | $52 \cdot 7$ |
|  |  | 95.6 | 85.1 |
|  | 8 | 96.5 | 58.5 |
|  | ${ }^{9}$ | $97 \cdot 1$ | 181.1 |
|  | 10 | $97 \cdot+$ | $62 \cdot 5$ |
| All earners |  | 100:0 | 100.0 |
|  |  |  |  |



The more the curve bends away from the line of equal distribution, the more unequal is the distribution of land. A comparison of this diagram with similar diagrams given in Wealth and Income of the People of the United States by King leads to the inference that though Travancore is much poorer than the United States, the wealth is more evenly distributed here than there. From the above table we see that 62.5 per cent. of the persons owning less than one acre each possess only $13 \cdot 5$ per cent. of the total wet land, while 2.6 per cent of the persons owning 10 acres and over each possess 37.5 per cent. of the total area. In countries like England and the United States the richest forming 2 per cent. of the owners possess 90 per cent. or more of the total wealth.
25. The distribution of dry land may be studied on exactly the same lines as that of wet land. The distribution among the various communities according to the sample is given below:-

Fumber of peraone of eack aommanity in the randum sample orming dry land

| Extent of dry land owned | All commnnitifs | Brahman | SIyar | İava | Depressed Hindo | Other Hindus | Syrian Christian | Other Ohriatians | Muslim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Below 20 cents | 2382 | 9 | 498 | 433 | 132 | 561 | 279 | 308 | 162. |
| 20-40 \% | 3,2:4 | 6 | 774 | 661 | 168 | 687 | 426 | 361 | 191 |
| 40-60 n | 3,602 | 15 | 944 | 630 | 210 | 714 | 501 | 850 | 233 |
| 60-80 | 2,343 | 6 | 643 | 419 | 127 | 420 | 366 | 200 | 162. |
| 80-100 ${ }_{\text {\% }}$ | 1,049 | 5 | 813 | 236 | 44 | 118 | 213 | 71 | 31 |
| $1 \text { mare }$ | 18,650 | 41 | 8,172 | 2.377 | 686 | 2,500 | 1,785. | 1,290 | 789 |
| 1-2 acres | 6,773 | 34 | 1,864 | 1,153 | 359 | 1,073 | 1,304 | 546 | 440 |
| 2-3 | 3,330 | 17 | 951 | 488 | 130 | 456 | 801 | 319 | 168 |
| 3-4. | 1,778 | 13 | 518 | 225 | 63 | 238 | 473 | 161 | 97 |
| $4-5$. | 1,150 | 10 | 353 | 155 | 28 | 130 | 313 | 85 | 76 |
| 5-6. | 775 | 9 | 244 | 102 | 12 | 84 | 215 | 02 | 47 |
| 6-7 | 435 | 8 | 130 | 52 | 3 | 38 | 137 | 46 | 21 |
| 7-8 | 284 | $\cdots$ | 74 | 27 | 9 | 24 | 110 | 27 | 13 |
| $8-9$ ¢ | 280 | 4 | 84 | 34 | 7 | 28 | 93 | 17 | 13 ' |
| 9-10 \% | 115 | 3 | 40 | 10 | $\bullet$ | 14 | $1+86.1$ | . 8 | 4. |
| Total below 10 acres | 27,570 | 139 | 7,430 | 4,623 | 1,287 | 4,585 | 5,26T | 2,561 | -1,678 |
| 10-100 acres | 1,065 | 31 | 327 | 101 | 8 | 92 | 372 | 80 | 54. |
| 100 acres and above. | 38 | 7 | 10 |  | - | 5 | 13 | 1 | ** |
| Total ommere | 28,673 | 177 | 7,787 | 4,726 | 1,295 | 4,882 | 5,652 | 2,682 | 1,732 |
| Total earnere . | 55,803 | 296 | 8,910 | 10,418 | 6,219 | 8,864 | 8,363 | 7,501 | 3,237 |

In paragraph 16 above it has been pointed out that the proportions of earners owning dry land is 45.9 per cent., but as per the sample this proportion is found to be 51.4 per cent. There is less likelihood of the sample representing the actual condition of the State in regard to dry land than in regard to wet land, because the owners of dry lands in the towns and the High Range Division have not been included in the sample. The diagram below shows the proportions of the earners in each community who have been returned as owning dry land.


As in the case of wet land the percentage is the highest among Nayars. Among them 73.4 per cent. of earners possess dry land. Among Syrian Christians the proportion is 67.6 per cent. and the depressed Hindus have the lowest proportion, viz., 20.8 per cent. The highest ratio among Nayars is probably due to the wholesale partition of tarwàd properties under the Nayar Regulation.

| Community | Lower quartile (acres) | Median (ncres | Cpper quartile (acrey) |
| :---: | :---: | :---: | :---: |
| Bmiman | $1 \cdot 10$ | $2 \cdot 79$ | $7 \cdot 00$ |
| Nàyar | $0 \cdot 54$ | $1 \cdot 38$ | $2 \cdot 83$ |
| Inver | $0 \cdot 43$ | $0 \cdot 49$ | 3.03 |
| Depressed Hindu | 0.42 | $0 \cdot 82$ | $1 \cdot 79$ |
| Other Hindus | $0 \cdot 38$ | 0.78 | 1.94 |
| Syrian Christian | 071 | 1.80 | 3.74 |
| Other Ohristians | 0.39 | $2 \cdot 06$ | $2 \cdot 46$ |
| Muslim | $0 \cdot 47$ | $1 \cdot 15$ | $2 \cdot 35$ |

26. The median and the quartiles have been calculated as in the case of the wet land and are shown in the marginal table. The different communities occupy more or less the same rank in the ownership of dry land as in that of wet land. The mode is generally between 40 and 60 cents except among $I$ lavas and other Christians among whom it is less than 40 cents.
27. The average area of dry land owned by different communities is given in the margin. The Namputiti Brahmans being big landlords, the Brahman community shows the highest averages per owner and carner. The average per carner is the lowest for the depressed Hindus, viz., 30 cents. Nayars have nearly 3 acres per owner and $2 \xi$ acres per earner, while the corresponding areas for Syrian Christians are nearly 4 acres and over $2 \downarrow$ acres respectively.

| Community | Average area of dry land (acres) |  |
| :---: | :---: | :---: |
|  | per owner | per earner |
| Brahman | 12.89 | 7.70 |
| Nsyar | $2 \cdot 95$ | $2 \cdot 91$ |
| shava | 1.05 | $0 \cdot 80$ |
| Depresed Hindu | $1 \cdot 43$ | $0 \cdot 30$ |
| Other Hindus | $1 \cdot 42$ | $0 \cdot 67$ |
| Sytinn Christian | $3 \cdot 90$ | $2 \cdot 64$ |
| Other Ctristians | $2 \cdot 28$ | $0 \cdot 79$ |
| Mnalim | $2 \cdot 69$ | $1 \cdot 44$ |

28. The following statement and diagram show the general features of the distribug tion of dry land among owners :-

Dixtribution of dry land anong ouncr*


Dlagram 76 - Lorenz curve showing the distribution of dry land among owners.


A comparison of the above diagram with that given in paragraph 24 supra will show that the distribution of dry land is as uneven as that of wet land. $44 \cdot 2$ per cent. of the persons owning less than one acre of dry land each possess only 7.2 per cent. of the total area, while 3.8 per cent. of owners possessing 10 acres and over each hold 37.5 per cent. of the total area
29. Nowhere else in India has the sub-division of land been carried to such an Effeet of the extent as in Travancore. The process must have been considerably accelerated during partition of the latter half of the past decade when Regulations providing for the partition of tarwād tians on the properties of chree important marumakkathayam communities, namely, Nayar; Illava and distribution of Nanjanad Vellala, were passed. The number of partition deeds executed, the total extent Nayara and of land partitioned and the number of shares into which it has been divided, compiled from $\mathbf{I}$ lavas the figures supplied by the Registration Department, are shown in State Table $V$ included in Part II (Imperial Tables).
30. The following statement gives a summary of the figures contained in that table:-

Partionlare of the partition deede enecrted by Nayart, Ilavas, and Nanjanad Vollalas in the yeara1101-1105 M. E. (1026-1830 A. D.)


The above statement shows that Nāyars have executed 32;903 partition deeds covering an area of 334,300 acres of land which has been distributed among 400,864 individuals, that llavas have executed 13,076 deeds distributing 59,636 acres among 153,556 persons, and that Nãnjanād Vellăalas have partitioned 6,658 , acres among 5,389 shareholders by executing 665 partition deeds. The extent of each share worked out from the above figures comes to 83 cents for Nāyars, 39 cents lor Ilavas and 123 cents for Nänjanad Vellàaas. These figures do not, however, show the extent to which land has been sub-divided. This can be seen from the proportions given in the margin for Nayyars and
 İlavas. Among Nayars 16 per cent. of the lands partitioned have been divided into individual shares of 50 cents or less, while the corresponding proportion among llavas is 35 per cent. The proportion of shares up to 1 acre each is about 34 per cent. among Nayars and more than 60 per cent. among llavas. We have seen in paragraph 72, Chapter I, that a family consisting of five miembers should have at least 10 acres of land to maintain a minimum standard of living. Each member should thus have at least two acres. From the above table it will be seen that of the total extent of land partitioned by Nayars, only

44 per cent. have been divided into shares of 2 acres or ahove and that in the case of llavas this proportion is not more than 20 per cent. In other words, 56 per cent. of the land in the case of Nayars and 80 per cent. in the case of llavas have been divided in such a way that it will not provide a fair means of subsistence to the holders thereof.

We have already seen that the number of shareholders in 32,903 partition deeds executed by Nayars is 400,864 and that the number in 13,076 partition deeds executed by llavas is 153,556. The proportionate distribution of these shareholders according to the extent of each individual share is shown in the marginal statement. Among Nayars $5 \cdot 3$ per cent. of the shareholders got less than 5 cents of land each, $32 \cdot 2$ per cent. 25 cents or less, 57.5 per cent. 50 cents or less, 91.6 per cent. 2 acres or less and only 8.4 per cent. got over 2 acres each. If two acres of land is the minimum required for a person to subsist upon, only 8.4 per cent. of the shareholders among Näyars and $2 \cdot 2$ per cent. of the shareholders among Ilavas have received this minimum by the partition of their tarwad properties. But 44 per cent. of the land partitioned by Nayars is held by 8.4 per cent. of the shareholders and 20 per cent. of the land partitioned by llavas by 2.2 per cent. of the shareholders.
31. The above figures indicate clearly the extent to which land has been sub-divided and how unequally it has been distributed as a result of the partition of the tarwàd properties of Nayars and llavas. It must, however, be remembered that partition has been effected in many cases only on paper and that many shares, particularly those of a mother and her minor children, are still held jointly, so that the sub-division has not been carried to that extent which the figures given above would seem to indicate. The average area of land owned by a tarwäd was 10.2 acres in the case of Nayars and 4.6 acres in the case of Ilavas before the partition of their properties, and it stands at 4 acres and 2.2 acres respectively per owner after the partition. These latter are, however, much larger than the average extent of each individual share which, when calculated on the total land and the aggregate shareholders, is only 83 cents among Nayars and 39 cents among llavas. This disparity is certainly due to many individuals holding their shares jointly even after the partition. But the shares have been defined and it is only a question of time before they are actually separated and the disintegration of the propertics is completed.
32. Next to land the most important item of wealth among one's per sonal possessions is the house. The enumerators were instructed to note down the value of the house or houses owned by every person. The returns of houses in the economic census are not strictly comparable with those of the general census for the following reasons. Two houses situated in a compound and belonging to the same owner, in which different families live, have been treated as two houses in the population census, but in the economic census schedule only their total value has been entered. Public institutions, such as schools, hospitals, etc., have not been included in the economic census.

The number of persons returned in the economic census as possessing houses is 724,160 or 53.5 per cent. of the earners. It is possible to under-rate or over-estimate the value of a house, but it may be assumed that, as far as the number is concerned, the omission is only the same as the omission of earners, namely, 8 per cent. The number of persons owning houses is considerably more than the number owning dry land. This is due to the fact that some members of a family construct houses of their own on jointly owned lands and that the Depressed Classes generally have their huts constructed on their masters' holdings.
33. The total value of the houses and the average value per owner, earner and head of the population are given in the margin. If allowance is made for an error of about 8 per cent., the total value and the average per capita value will be Rs. 1,990 lakhs and Rs. 39 respectively. Though the construction of houses is mainly affected by natural and social environments, the value of houses may be regarded as a good index of the economic condition of the people. The large majority of houses in India except in cities are small huts only. The per capila value, according to the Travancore Banking Enquiry Committee, varies from Rs. 16 to Rs. 71 in certain taluks and from Rs. 76 to Rs. 124 in Thovala and Shenkotta.

The following table prepared from the random sample gives a rough idea of the distribution of houses on the basis of their value among the owners:-


The averages calculated from the above table for communities other than Brahmans, Nayars, Syrian Christians and Muslims may not be reliable, since the majority of their houses are worth less than Rs. 100 and the assumption of an average value of Rs. 50 per house in this group may be too high. From a special enquiry made in the case of the depressed Hindus it is seen that most of their huts are hardly worth more than Rs. 5 each and that the average value is only between Rs. 8 and Rs. 9. The averages for three major communities. given in the margin may be regarded as fairlycorrect. Syrian Christians show the highest average, next to them come the Nayars and

| - Oommunity | Percentage of owners whose houses are of value |  |  | Proportion per cent. of ownerato earners |
| :---: | :---: | :---: | :---: | :---: |
|  | Below <br> B. 100 | Rs. 100-1,000 | Rs. 1,000 \& above. |  |
| Brahman | $9 \cdot 1$ | \$2•6 |  |  |
| NSyar | 49•7 | 43.9 | 48.3 6.4 | 59.5 66.8 |
| Ilava | 73.8 | 24.4 | 6.4 .1 .8 | 66.8 |
| Depressed Hindu | 93.9 | $5 \cdot 9$ | - 18 | 58.4 40.5 |
| Other Hindus | $75 \cdot 6$ | $22 \cdot 7$ | 1.7 | 40.5 60.8 |
| Gyrian Christian | 50.7 | $41 \cdot 7$ | $7 \cdot 6$ | $60 \cdot 8$ $75 \cdot 1$ |
| Other Christians | $7{ }^{79} 6$ | 18.8 | 1.7 | $75 \cdot 1$ $58 \cdot 1$ |
| Muslim |  | $31 \cdot 2$ | 3.8 | $68 \cdot 1$ 61.9 |
|  |  |  |  |  | then the Muslims. It may further be noted from the marginal statement that the proportion of owners of houses to total earners does not vary so widely as that of other items of wealth. This is only natural because a house is an absolute necessity to every family.

Agricaltural implements.

Moyeable properties.
34. Agricultural implements, though they form only a small proportion of the total wealth, are nevertheless important from the point of view of agricultural production. The total number of earners returned as having agricultural implements is 392,023 , but the number of persons receiving income by direct cultivation of land is more than 620,000 . It would appear, therefore, that a large number of cultivators have no agricultural implements. But actually it cannot be so. On scrutinising the schedules it has been found that several agriculturists, especially small cultivators, have returned no implements. The number of implements they possess being few and their value insignificant, they might have thought it not worth the while to return the implements in their possession. Such omissions can be the only cause of the difference between the number returned as possessing implements and the number of cultivators.

The total value of the agricultural implements returned is Rs. 205 lakhs and the average per owner works out to Rs. 52. To make up for the omissions a margin of error of 10 per cent. may be assumed in this case. The error may be more, but since agricultural implements form only a small portion of the total wealth, a larger error in this item will not materially increase the error in the total wealh.
35. The term "movable properties" includes a variety of things, such as cooking utensils, livestock not used for agricultural purposes, stocks held by traders, jewellery, etc. There are very few persons who do not possess some moveble property or other, and yet the number of earners returned as having such properties is only 673,498 which is about 50 per cent. of the total earners. Evidently, persons possessing movable properties of insignificant values have not returned them. Probably also, this form of wealth owned by working or non-working dependants may not have Rs. been returned. For these reasons a wide margin Total valuo of posesessions . Gify lakhs. of error, say 30 per cent., may be assumed in this $\begin{aligned} & \begin{array}{l}\text { Average per owner } \\ \text { Arcrage per earner }\end{array}\end{aligned}: \quad{ }_{99}^{99} \quad$ item. The total value obtained from the census and A rerage per earner margin above. The average per owner may be taken to be correct, and the total and the average per earner will have to be increased by 30 per cent.
36. The distribution of this item of wealth among the different communities according to the random sample is shown below :-

Number of persums in each community ouning mozable properties accorilng to the random sample

| Value | All rom manitics | Brahman | Nayar | Ilava | Depressed Hindu | Other Hindas | Syrian Cliristian | Other Chriatians | Mualim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rs. |  |  |  |  |  |  |  |  |  |
| Below 100 | 23,628 | 46 | 4,878 | 4,371 | 1,238 | 4,461 | 1,4,40 | 2,681 | 1,313 |
| 100-200 | 3,007 | 85 | 868 | $3!0$ | 86 | 440 | fis! | 333 | 216 |
| 200-800 | 1,015 | 38 | 260 | 141 | 4 | 110 | $2 \times 1$ | 96 | Ni |
| 300-400 | 476 | 23 | 158 | 40 | 7 | 50 | 123 | 41 | 31 |
| 400-560 | 121 | 7 | 30 | 12 | 2 | 13 | H7 | 9 | 11 |
| $500-600$ | 294 | 21 | 69 | 37 | 3 | 31 | 76 | 20 | 21 |
| $600-700$ | 59 | 5 | 20 | 5 | . | 0 | 13 | 6 | 5 |
| $700-800$ | 62 | \% | 15 | 3 | . | 12 | 1: | 8 | 4 |
| $800-900$ | 36 | 4 | 8 | 1 |  | 8 | 13 | 2 | 8 |
| $900-1,900$ | 10 | $\cdots$ | 2 | $\ldots$ | $\cdots$ |  | 8 |  |  |
| 1,660-?,060 | 230 | 20 | 49 | $\dot{3} \dot{i}$ | $\stackrel{\square}{8}$ | 20 | 74 | 20 | 13 |
| $3,(1001-5,(100$ | 17 | 2 | 4 | 1 | $\ldots$ | 2 | 6 | 2 | : |
| 6,000 and above | 21 | 6 | 2 | . | $\ldots$ | 5 | 7 | $\cdots$ | 1 |
| Total ownera | 28,976 | 212 | 6,362 | 6,232 | 1,298 | 6,162 | 5,782 | 3.227 | 1.706 |
| Total earnera | 55,803 | 298 | 9,810 | 10,413 | 8.219 | 0,884 | 8,363 | 7,501 | 3,237 |

37. The following table shows the proportion of owners

| Commonity | Percentage of owners possessing movable properties |  |  | 'Percentage of owners having morable properties to earners |
| :---: | :---: | :---: | :---: | :---: |
|  | Below <br> Bs. 100 | $\underset{100-1,000}{\mathrm{Ba}}$ | Above <br> Be. $\mathbf{1 . 0 0 0}$ |  |
| Bralman | 21.7 | 65.1 | 13.2 | 71.6 |
| Nayar | 76.7 | 22.4 | 0.9 | 64.2 50.2 |
| Ijari | 87.4 | $12 \cdot 0$ | $0 \cdot 6$ | $50 \cdot 2$ 20.8 |
| Depressed Hindu | 95.8 | 10.0 10.1 | 0.2 | 52.3 |
| Other Hindus. | 96.4 | $\xrightarrow{15 \cdot 1}$ | 1.5 | $62 \cdot 1$ |
| Syrian Chriatian | 76.8 | 21.7 16.2 | 0.7 | 43.0 |
| Other Christians | $883 \cdot 1$ | $\stackrel{162.2}{22.2}$ | 0.8 | $52 \cdot 7$ |
| Muslim |  |  |  |  |

who possess movable properties of different values and the percentage of earners having such possessions in. different communities. Excepting Brahmans more than 70 per cent. of the owners in other communities have movable properties worth less than Rs. 100, which probably consist of necessities and not luxuries.
38. By "investment" is meant cash investment in banks, chitties, etc., and money Investments lent out on interest with or without security. It is ordinarily the rich and the middle classes who will have this form of wealth. Only those who can save will be able to invest. There may be some who will even starve to save money. But they are only exceptions. The amount of investments, together with the value of hoarded luxuries, such as jewels, etc., represent the total capital available in the country for the development of her economic resources. Even if jewels be left out as a conventional necessity, the volume of investments is a good index of the material prosperity of the people.

The total number of persons returned as having money investments is 226,279 which is about 16.7 per cent. of the earners. In an agricultural country like Travancore where people are leading a hand-to-mouth existence the large majority of the people cannot be expected to make much savings. The investments of small amounts by the working and non-working dependants may not have been included in the returns. The total volume of investments according to the economic census is Rs. 1,068 lakhs, giving in average of Rs. 472 per investor and Rs. 79 per earner. There is no means oftohecking the accuracy of these figures. It may, however, be assumed that if people had returned their debts and investments correctly the total debts would be equal to the total investments minus the reserve funds in banks which have not been lent out. The total debts excluding mortgages as shown by the returns amount to Rs. 1,206 lakhs and even this may be appreciably below the actuals. Omissions in investments, therefore, seem to be much more than those in debts. A margin of error of 30 per cent. may, however, be assumed to exist in investments.
39. The following table shows the distribution of investors in the various communities according to the value of investment as per the random sample :-

| Value of investments | All communities | Braluman | Náyar | Insva | Depressed Hindu | Other Hindus | Syrian Christian | Other Christians | Mrusilim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\mathbf{R e}_{\mathrm{s}}}{\mathrm{pelnw}_{100}}$ | 4,132 | 15 | 884 | 860 | 41 | 647 |  | 434 |  |
| $100-200$ | 1,735 | 18 | 475 | 294 | 39 | 215 | 1,103 482 | 140 | 148 72 |
| 200-3.0 | 937 | 12 | 267 | 133 | 25 | 112 | 268 | 64 | 5i |
| $300-400$ | 693 | 11 | 185 | 81 | 13 | 54 | 184 | 38 | 27 |
| 400- 500 | 328 | 3 | 85 | 49 | 8 | 87 | 111 | 20 | 15 |
|  | 897 | 7 | 115 | 54 | 5 | 87 | 132 | 29 | 18 |
| 6010- 700 | 168 | 2 | 50 | 19 | 5 | 12 | 58 | 12 | 10 |
| 700-800 | 153 | 3 | 68 | 19 | 1 | 10 | 48 | 11 |  |
| 800-900 | 111 |  | 31 | 16 | 1 | 11 |  |  |  |
| 900-1.000 | 64 | 3 | 23 | 2 | 1 | 3 | 22 | 5 | 5 |
| 1,000-8,003 | 748 | 40 | 218 | 98 | 1 | 61 | 264 | 59 |  |
| 3.000-5.000 | 153 | 12 | 31 | 18 | 1 | 8 | ${ }^{264}$ | 11 | ${ }_{6}$ |
| 5,000 and above | 114 | 14 | 22 | 4 |  |  | 86 | 6 | 8 |
| Total inyestor | 8,638 | 144 | 2,544 | ,647 | 141 | 1,211 | 2,838 | 814 | 399 |
| Total earnexs | 55,803 | 298 | 9,910 | 10,418 | 6,219 | 9,864 | 8,368 | 7,501 | 8,287 |


| Community | Average per invertor | A rerage per earner |
| :---: | :---: | :---: |
|  | Hs | Rs. |
| Nāyar | 431 | 106 |
| Ilava | 311 | 48 |
| Lepressed Hindu | 217 | 38 |
| Other Hindas | 273 | 33 |
| Syrian Chzistian | 51. | 174 |
| Other Christians | 311 | 34 |
| Muslim | +5l | 36 |

The averages calculated from the above table are given in the margin. The depressed Hindus occupy the lowest and the Syrian Christians the highest position among the major communities.
The following diagram shows the percentages of earners in different communities having investments below certain amounts. The lower the curve, the better is the condition of the community concerned. The percentage of earners having no investment at all is 98 among depressed Hindus, 89 among other Christians, 88 among other Hindus and Muslims, 84 among Ilavas, 75 among Nayyars and 66 among Syrian Christians. The above is the order in which the communities may be arranged in regard to their economic prosperity on the basis of their investments.

40. From the foregoing discussion it will be seen that in regard to the possession of wealth, Nayars and Syrian Christians can be included in one group and llavas, other Hindus and other Christians in another. Muslims show variations between different items of wealth. Brahmans and the Depressed Classes stand at the two extremes, the former at the top and the latter at the bottom. These results are more or less in conformity with one's experience of the conditions of the different communities in this State.
Total wealth
41. We may now summarise the total wealth of the people and indicate the approxi-

| Class of wealth | Value in lakhs of supees | Margin of error per cemt. |
| :---: | :---: | :---: |
| Wet land | -1,136 |  |
| Dry land and treen | 8,968 | ${ }^{*}$ |
| Houses | 1,843 | $\cdots$ |
| Agricultural implementa | 205 | 10 |
| Other mavables | fi64 | 36 |
| Inveruments | 1, (MGS | 30 |
| Total | 17.878 | 8 | mate margin of error in it. These are given in the marginal statement. The average wealth per earner and per head of the population can be worked out from these figures. About 79 per cent. of the total wealth consists of land, 10 per cent. of houses, 5 per cent. of movable properties and livestock and 6 per cent. of investments. The average wealth per earner is Rs. 1,320 and that per head of the population is Rs. 351 with a possible error of 8 per cent. If allowance is made for this error, the per capila average will stand at Rs. 379. Thir may be

compared with the wealth estimates in certain other countries. The following figures for 1921 were taken from an address delivered by Sir M. Visveswaraya in December 1930.* Sir M. Visveswaraya thinks that the estimate for India is not correct, but that it is sufficiently dependable to show how low is the position which India occupies in all such comparisons. The figure for Travancore is not strictly comparable with those for other countries, because the former represents the private wealth and the latter the national wealth. In paragraph 4 above we have seen the difference between private and national wealth. It must also be remembered that the value of therights of owners in lands which have been mortgaged have not been taken into account in the calculation of total wealth in Travancore and that, on the other hand, in the case of mortgages only the mortgage amounts and the value of improvements, which together may not exceed 75 per cent. of the actual value of the land, have been included. In spite of these differences in the method of estimating the wealth, the figures enable us to see clearly the low fosition which Travancore occupies as compared with Western countries and Japan.
42. In considering the wealth of earners in smaller units, such as the administrative Distribation divisions and taluks, only totals have been taken into account and these as well as the of divisionth and average per earner are given in the following statement :-

Distribution of weallh by division and taluk


The estates owned by foreigners have been excluded from the calculation. Both in the total wealth and the average per earner the Northern Division stands first and the High Range last. The average wealth per earner is Rs. 1,759 in the Northern Division, Rs. 1,260 in the Central, Rs. 1,097 in the Southern, and Rs. 239 in the High Range. Of the taluks, Minachil appears to be the richest; indeed all the taluks where Syrian Christians preponderate have comparatively higher averages. In the Central Division Ampalapula takes the lead in regard to average wealth per earner, though in point of total wealth Thiruvella stands first. In the Southern Division Agasthiswaram has the highest average. If Pirmede and Devikulam are left out of consideration, Nedumangad appears to be the poorest of all the taluks.

## III. Debt

Classification of debts.

## Mortgages.

Hypothecatlons
43. Debts can be classified into,
(1) Mortgage of land in which the possession of the property is transferred to the mortgagee,
(2) Hypothecation of land in which the debtor retains possession of the property but pays interest to the creditor,
(3) Other debts, mostly unsecured.
44. The total number of persons returned as having mortgaged their lands is 72,398 or 5.3 per cent. of the total earners. The proportion of mortgagors to owners of dry land is 11.7 per cent. and the proportion to total landowners may also be about the same. The total mortgage amount works out to Rs. $437 \cdot 7$ lakhs, the averages per mortgagor and per earner being Rs. 605 and Rs. 32 respectively. There are no statistics to test the accuracy of these figures. A statement has been prepared from the figures supplied by the Registration Department showing the sales, mortgages and hypothecations executed and claimed by the major communities of the State during the last decade and is giveṇ as State Table IV in Part II (Imperial Tables). This table shows the rate of alienation or purchase of property by the four important communities (Nâyars, Îlavas, Nānjanād Vellạas and Christians) during the two halves of the last decade, but gives no indication of the mortgage debts as they stood at the time of the census. Mortgaging and redeeming are both continuous processes and the total mortgage debt is the combined result of these two processes. The figures will be discussed in detail separately.
45. Debt obtained on the security of land is what is known as the hypothecation debt. When land is hypothecated it often passes ultimately into the hands of the creditor on account of the debtor's inability to repay the debt. The number of persons returned as having debts of this form is 147,718 which is 10.9 per cent. of the earners. These figures are higher than those for the mortgage debt which is an indication of the fact that landowners try to retain possession of the land as far as possible. The total value of the debts is Rs. 705.0 lakhs, and the averages per debtor and carner are Rs. 477 and Rs. 52 respectively.
46. Both mortgage and hypothecation debts may be examined together in the random sample for which figures have been specially abstracted. The debts of each person in the sample were first added up, these totals were transferred to the slips and a special sort was made. The frequency distribution for the different communities is given below:-
 to the random sample

| Value of debt | All communities | Brahman | Nayar | Ifava | Itpremerl Hindu | Ollar <br> Jindus | Grinn Chaintiall | Othor Chrintiman | M Inslim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 |  |  |  |  |  |  |
| $\begin{gathered} \text { Ks. } \\ \text { Below } 100 \end{gathered}$ | 1198 | 13 | 4 41 | 336 | \% | 3183 | 3.9 | 214 | ! 11 |
| 1(N)-2(x) | 1.975 | 18 | 626 | 314 | SH | 313 | 4.3 | 164 | $!11$ |
| 2100-300 | 1,3107 | 7 | 303 | 210 | 31 | 213 | 318 | 011 | in |
| 300- 400 | 88.5 | 6 | 274 | 125 | 12 | 120 | 20.2 | ii] | $2:$ |
| 400- $\mathrm{S}(\mathrm{K})$ | 477 | \% | 140 | 7 | 12 | 85 | 13* | :11 | 1: |
| 500- till | 585 | 7 | $17 \%$ | 93 | 1 | S1\% | 1.22 | 316 | 12 |
| 600- 600 | $2: 12$ | 1 | N1) | $\therefore 2$ | 2 | 31 | 71 | 27 | 17 |
| 700- Ru0 | 292 | 1 | 87 | 43 | 3 | i3 | $\cdots 1$ | $11:$ | 14 |
| S(K)- 900 | 17: | 2 | 59 | 20 | 2 | $11 ;$ | Hi; | I* | J0 |
| 514--1, 600 | 4! |  | 2 N | 11 | 1 | 7 | $3 ;$ | : | 1 |
| $1,600-3,1000$ |  | 21 | $2!15$ | $11 \%$ | * | 11. | $29:$ | シ1 | 61 |
| $3,1+(x)-5,1600$ | 1515 | 2 | 12 | 23 |  | 14 | i2 | 12 | 7 |
| $5,1 \mathrm{M})$ and almove | $8!$ | 3 | 34 | if | . | 1:\% | $1 \%$ | $\therefore$ | N |
| Debtora | 9,287 | 89 | 2,597 | 1,482 | 225 | 1.409 | 2.288 | 798 | 441 |
| Earners | 55,803 | 286 | 9.910 | 10.413 | 6.219 | 8,884 | 8,363 | 7,601 | 3,237 |

The proportions of total earners in some communities having debts below certain amounts are shown in the following diagram. A comparison of this diagram with the one showing investments given in paragraph 39 above brings out the fact that there is a close correlation between prosperity and indebtedness. Debt is based on credit and indebtedness may, therefore, be an index of prosperity. This apparent paradox is explained in Chapter XI of The Punjab Peasant in Debt and Prosperity by Mr M. L. Darling. After examining the causes of debt in the Punjab he concludes that "debt was allied to prosperity and poverty alike and that while its existence was due to poverty its oolume was due to prosperity.'

47. The percentages given in the following table show that there is little overlapping in

| Communities | Percentage of earnere who are debtors | Average debt per debtor | A serage debt per earner |
| :---: | :---: | :---: | :---: |
| Ell communitias | 16.6 | Rs. 515 | Rs. |
| Brahman | 30.1 | 892 | 268 |
| Nayar | 26.2 | 570 | 149 |
| Inara | $14 \cdot 0$ | 452 | 63 |
| Depresied Hindu | $3 \cdot 6$ | 235 | 8 |
| Other Hindus | $14 \cdot 3$ | 450 | 64 |
| Syrian Christian | $27 \cdot 1$ | 596 | 161 |
| Othar Christians | $10 \cdot 6$ | 446 | 47 |
| Muslim | 13.6 | 610 | 83 | mortgage and hypothecation debts. That is to say, very few who have mortgaged their land have also borrowed by hypothecating their property. The percentage of debtors to earners in regard to these two forms of debt being 5.3 and 10.9 per cent. respectively, the percentage in regard to the two combined can never be greater than $16 \cdot 2$. The percentage obtained from the sample is $16.6^{\circ}$ as can be seen from the marginal table. The difference is negligible. Brahmans stand first in indebtedness as they do in wealth. In the case of Muslims, though the proportion of the indebted is small, the average debt per debtor is rather high.

48. Unsecured debts, unlike those already dealt with, are incurred solely on the Unsecared basis of the borrower's credit and the rate of interest paid is generally higher. The debts. margin of error in the returns of these debts is likely to be greater than that in other debts. The number of earners returned as having unsecured debts is 258,605 which is $19 \cdot 1$ per cent. of the earners. Even if this be exclusive of persons having secured debts, who form $16 \cdot 2$ per cent. of the earners, it is seen that $64 \cdot 7$ per cent. of the earners have no debtsat all. The unsecured debts, according to the census amount to Rs. $501 \cdot 8$ lekhs, the average per debtor being Rs. 194 and per earner Rs. 37. The
following statement shows the frequency distribution of these debts among the different communities as per the random sample :-

Fimber of persons hating wnsecnred drbt: in differrnt communitien acrifding to the rondom sumple

| Value of debt | All cum. munities | Brahman | Nāyar | Idavn | $\begin{gathered} \text { D.preseet } \\ \text { Hiudu } \end{gathered}$ | Other <br> Hindus | Syrian <br> Christian | (1ther Chmintians | Muslim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rs. |  |  |  |  |  |  |  |  |  |
| Below 100 | 6,738 | 14 | 1,026 | 1,425 | 233 | 1.037 | 1,427 | N92 | $2!2$ |
| 100-200 | 1,803 | 21 | \$25 | 243 | 37 | 236 | 394 | isior | $\cdots$ |
| $200-300$ | 751 | 7 | 175 | 113 | 14 | 71 | 270 | is | 16 |
| $300-400$ | $\underline{+10}$ | 7 | 95 | 50 | 10 | 41 | 145 | 37 | -8 |
| +100 - 500 | 190 | 6 | 42 | 32 | 1 | 10 | it | $i$ | 13 |
| W00 - 600 | 294 | 9 | 63 | 26 | 5 | 92 | 74 | $i$ | 21 |
| 50n - 700 | 70 | 4 | 16 | 5 | - | $\square$ | 94 | $1:$ | $\because$ |
| $700-800$ | 88 | 2 | 18 | 11 | 1 | 7 | 32 | 12 | $\bar{\square}$ |
| $8(0)-900$ | 44 | 2 | 10 | 3 | , | $t$ | 17 | 6 | $\stackrel{3}{1}$ |
| 900-1,010 | 14 | i | 5 | $\bigcirc$ | $\cdots$ | $\cdots$ | is | 1 | 1 |
| 1.000-5,000 | 299 | 19 | 58 | 3 N | 1 | 33 | 111 | $11 i$ | 1.15 |
| 5,000 and abyve | 35 | 3 | 3 | 3 | $\bullet$, | 3 | 17 | 3 | $\cdots$ |
|  |  |  |  |  |  |  |  |  |  |
| Debtors | 10,686 | 94 | 1,988 | 1,983 | 60¢ | 1,474 | 8,805 | 1,208 | 512 |
| Eanners | 55,803 | 298 | 8.910 | 10,413 | 6,219 | 8,864 | 8,363 | 7,501 | 3.237 |
|  |  |  |  |  |  |  |  |  |  |

Taking all communities together, 63.2 per cent. of the debtors are found to have debts below Rs. 100 , and only 3.1 per cent. above Rs. 1,000 , whereas the corresponding proportions in the secured debts are $21 \cdot 4$ per cent. and $13 \cdot 2$ per cent. respectively. The figures in the margin

| Commurity |  |  |  | Percentage a debtars toearncrs |
| :---: | :---: | :---: | :---: | :---: |
|  | (elow | $1(0)-\frac{\mathrm{Re}}{1, v n}$ | $\xrightarrow{\text { Rs. } 1.00 w}$ nuil niore |  |
| Brabman | $14 \cdot 9$ | 61.7 | 23.4 | $31 \cdot 8$ |
| Yivyr |  | +12.3 | ${ }^{3.1}$ | $\stackrel{21.1}{19.1}$ |
| hepresesed Hindu | ${ }_{88} 8.6$ | 11.2 | $\cdots$ | 19.7 |
| Other Hindus | 70.4 | $\stackrel{27.2}{ }$ | $2 \cdot 4$ | $12 \cdot 9$ |
|  | $c509 i+0$ | - | 1.8 1.6 | 边 |
| Mustim | 55.0 | ${ }_{34} 5$ | 3.5 | $15 \cdot 8$ | bring out the difference between the various communities in this respect. Of all the communities, Brahmans show the highest proportion in the group Rs. 1,000 and above and the depressed Hindus the lowest. The proportions of debtors to earners given in the last column of the table show the correlation between debt and credit. Among the richer communities like Syrian Christians, Brahmans and Nayars the proportion varies from 20 per cent. to 33 per cent., while among the Depressed Classes it is hardly 10 per cent.

Total debt.
49. The lollowing marginal statement gives a summary of the debts of different classes
 and the average per earner. The total debt according to the census is about Rs. $16 \cdot 4$ crores and the average per earner is Rs. 121. The average debt per capila on the basis of the above figures is Rs. 32, but actually it will be more. We have already seen that there is an omission of 8 per cent. of the earncrs in the returns. It will be shown later that there is a margin of error of 25 per cent. in the total income returned, and if it is assumed that the same marginal error exists in debt also, the actual per capila debt will be Rs. 40 and the total debt Rs. 20 crores.
50. The Travancore Banking Enquiry Committee who conducted their enquiry in 1930 estimated the total rural debt of the State at about Rs. 25 crores, and the average per head of the rural population on the basis of 1921 census at Rs. 68.* If calculated on the rural population in 1931 census, their estimate per head would drop to Rs. 55 , as against a debt of Rs. 40 estimated from the results of the economic census. There is no means of testing the accuracy of either of these estimates. But when compared with similar estimates in British India formed by the Provincial Banking Enquiry Committees, the estimate based on the economic census in Travancore seems to be more near the mark. Paragraph 77 of the Indian Central Banking Enquiry Committee contains the estimates of rural debts in India and the Provinces on the basis of the figures furnished by the Provincial Banking Enquiry Committees, and these, when divided by the respective rural population of 1931 census, give the following per capila rates:-

|  |  | Rs. |  |  | Rs. |
| :--- | ---: | ---: | :--- | :--- | ---: |
| India | $\ldots$ | 37 | Bihar and Orissa | $\ldots$ | 43 |
| Bengal | $\ldots$. | 21 | Burma | $\ldots$ | 45 |
| Assam | $\ldots$ | 26 | Bombay | $\ldots$ | 49 |
| Madras | $\ldots$ | 36 | Punjab | $\ldots$ | 66 |

The Punjab is the most heavily indebted Province in India. The average debt per head in India as a whole is Rs. 37 and in the Province of Madras it is Rs. 36. Indebtedness in Travancore may be a little more than that in India or in the neighbouring Madras Presidency, and hence an average debt of Rs. 40 per head in this State may be taken to be a fair estimate. Whatever be the average, the fact to be remembered is that the total indebtedness in the State is not less than Rs. 20 crores, which in itself is a colossal figure.
51. The rates of interest paid for debts are more or less uniform in a great majority of cases. They are as a rule 9 per cent., per annum for the secured and 12 per cent. per annum for the unsecured debts. Probably in the case of debts in lind, such as paddy loaned for immediate use and returned at the next harvest, the rates are much higher. But these rates have not been recorded in the census and correct information about them can be obtained only by intensive surveys.
52. The marginal statement shows the distribution of different forms of debts in the Distribution of State and the three main administrative divisions. Mortgages form 26.6 per cent of the and taluk.

Percentage of diffrent forma of debts to iatal debles

| Division | Mortgage | Hypothe cation | Cusecared |
| :---: | :---: | :---: | :---: |
| STATE | $28 \cdot 6$ | 48.9 | $80 \cdot 5$ |
| Southern Division | 50.8 | 28.6 | 20.6 |
| Central | 22.9 | $45 \cdot 3$ | $31 \cdot 8$ |
| Norchers | $15 \cdot 9$ | $50 \cdot 2$ | $33 \cdot 9$ |

Rates of interest. total debts in the State, and hypothecations 42.9 per cent. Thus 69.5 per cent. of the debts are secured on land. Among the administrative divisions, it is seen that the proportion of mortgages is the highest in the Southern Division and the least in the Northern Division, while just the opposite condition prevails with regard to unsecured debts. The variations in the proportions of mortgage debts are perhaps due to the differences in the value of land in the three divisions. As the value of land increases the facility to borrow by mortgage also naturally increases.
53. Considering the total debts in the various taluks withoutreference to the omissions' that may exist, it is seen from the statement below that the average debt per earner is the highest in Minachil, Diz., Rs. 283. These figures again illustrate the correlation between debt and credit. Certain taluks, though camparatively not rich, show a high indebtedness. Trivandrum, though comparatively rich, shows a low indebtedness.

[^75]Tstal indebtedinese by cirioive and caluh


Sales, mort
gages and
gages and
hypothecations hypothe of land claimed by certain communities.
54. The year 1100 M. E. ( 1925 A. D.) was a turning point in the history of the Nayars and llavas. In that year the Regulations providing for the partition of tarwad properties of these two communities were passed. Similarly, in the next year another Regulation conferring the same right on the Nānjanád Vellạalas was also passed. It is generally believed that after the partition of tarwad properties individual shares are being sold away, mortgaged or hypothecated more extensively than before the partition. State Table IV included in Part II (Imperial Tables) has been prepared with a view to throw light on this question. For purposes of comparison the figures relating to Christians, the most important makkathay yam community in the State, are also given in the table. This table has been compiled from the figures furnished by the Registration Department. The following statement which summarises the main featurcs of the above table shows the average annual value of sales, mortgages and hypothecations executed or claimed by Nayars, Ilavas, Nänjanād Vellạas and Christians during the quinquenniums 1095 M. E.- 1099 M. E. and 1100 M. E.- 1104 M. E. It will be seen from the statement that the Nayars are playing a losing game. Their average sales per year increased ftom Rs. 57.2 lakhs to Rs. $83 \cdot 4$ lakhs, while their annual outright purchase increased only from Rs. $25 \cdot 1$ lakhs to Rs. $34 \cdot 7$ lakks. That is to say, when the former rose by 46 per cent. the latter rose only by 38 per cent. In sales the Nayars lost Rs. 32.I lakhs per year in the first quinquennium and Rs. 48.7 lakhs per year in the second. In mortgages their annual loss increased from Rs. $15 \cdot 4$ lakhs to Rs. $16 \cdot 4$ lakhs and in hypothecations from Rs. $22 \cdot 5$ lakhs to Rs. $32 \cdot 9$ lakhs. The Christizns, on the other hand, have uniformly gained. Their gain in sales increased from Rs. 13.7 lakhs per year in the first quinquennium to Rs. 33.5 lakhs per year in the second, in mortgages from Rs. 9.8 lakhs to Rs. 28.4 lakhs and in hypothecations from

Rs. $13 \cdot 7$ lakhs to Rs. 22.3 lakhs. In sales the llavas had gained in the first quinquennium -and had neither gained nor lost in the second. In mortgages they had gained almost to the -same extent in both the periods, but in hypothecations there was neither gain nor loss in the first quinquennium, while there was an annual loss of Rs. 3 lakhs in the second. The Nānjanad Vellạalas, like the Nāyars, had lost more heavily in the second quinquennium than in the first in all the three kinds of transactions. The increase in the sales, mortgages and hypothecations executed over those claimed by the Nayyars, llavas and Nānjänād Vel!alaas during the second quinquennium can only be put down as the immediate result ofithe passing of the Regulations already referred to.

| Community | Sales per annum |  | Mortgages with possession per annum |  | Mortgages without possession per annum |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1095-1009 M K. | $\begin{gathered} \mathbf{1 1 0 0 - 1 1 0 4} \\ \mathbf{M L} . \end{gathered}$ | $\begin{gathered} 1095-1099 \\ \text { M. E. } \end{gathered}$ | $\begin{gathered} 1100-1104 \\ \text { M. E. } \end{gathered}$ | $\begin{gathered} 1095-1099 \\ \text { M. F. } \end{gathered}$ | $\begin{gathered} 1100-1104 \\ \text { M. E. } \end{gathered}$ |
| - | Rs. in lakhs | Rs. in lakhs | Bs. in lakhs | Rss in lakhs | He. in likhs | Hs. in lakhs |
| $\int$ Executed | 67.2 | 83.4 | $38 \cdot 6$ | $42 \cdot 0$ | $63 \cdot 7$ | 73-4 |
| yar $\{$ Claimed | 20.1 | $34 \cdot 7$ | $23 \cdot 2$ | 25*6 | 41/2 | 40.5 |
| Execated | 21.4 | 20.5 | . 18.9 | $17 \cdot 8$ | $27 \cdot 8$ | $32 \cdot 3$ |
| $\{$ Claimed | 25.9 | 29.5 | $20 \cdot 4$ | $19 \cdot 4$ | $27 \cdot 9$ | $29 \cdot 3$ |
| Nanjanax $\{$ Execated | $5 \cdot 4$ | $8 \cdot 3$ | $5 \cdot 2$ | $4 \cdot 6$ | 8.0 | 6.4 |
| Veplija $\quad$ Olaimed | $5 \cdot 5$ | $4 \cdot 2$ | 4.4 | $2 \cdot 9$ | 6.2 | 3•7 |
| Erecuted | $33 \cdot 4$ | 43.7 | 22.2 | 24.9 | 48.4 | 69•3 |
| Claristan Claimed | $47 \cdot 1$ | $77 \cdot 2$ | 32.0 | 53.3 | 62'1 | $91^{*} 6$ |

IV. Income being the money value of the possessions at any instant, while the latter is a flow and method
involves the element of time. In computing the total income of the people we may income.

Definition and method of computation of adopt the conventional method and obtain it by adding the income of the individuals. This total will, therefore, comprise not only the value of the material commodities produced by the people of the country, iucluding the wages paid for the production of such commodities, but also the value of paid services. In the computation of national income, the income from services is excluded, because it is not possible to take into account the value of unpaid services, such as domestic service rendered by women, and because the value of intellectual or professional services can be fixed only arbitrarily on account of the subjective element involved therein. Whatever be the advantages in excluding personal services from the calculation of national income, it will be convenient to include them in the income of individuals. The total obtained will not, therefore, represent the productivity of the country as generally understood. Again, certain artificial restrictions have been imposed on the calculation of private income, not on principle but of necessity. Thus a person living in his own house will get no income from the house, but, if he lets it out he will earn some income. The same is the case with articles of personal use, such as furniture. It may be assumed, however, that the theoretical income that may be obtained in such cases will be counterbalanced by the repairing charges that will have to be met periodically and the depreciation in the value of the articles. For our present purpose we may take it that the total income obtained from the census will represent the income of individual earners, whatever the means adopted, for one year at the time of the census. This will not give the normal income of the people which is the average income for a series of years. Since in valuing the commodities the prices current in 1931 have been used, the figures that have been obtained must only be taken as the income for that particular year.
56. Income may be divided into two classes, agricultural and non-agricultural. The classification former represents the value of all crops produced by individuals excluding the price of seeds, of income. but including wages paid to agricultural labourers and rents paid to landlords who have leased out their lands. Non-agricultural income is the income from all other occupations, -industrial, commercial or professional.

Agriealtaral earners.

Size of
agricultural holdinge.
57. Agriculturists may be divided into three groups, namely, rent receivers, cultivating owners including cultivating tenants, and labourers. The total number of persons returned as receiving rent from land, according to the economic census, is 69,638 . The number of non-cultivating proprietors who receive rent, according to Imperial Table $X$ of the population census, is 23,518 including working dependants and subsidiary earners. The difference between the two figures is due to the fact that a number of persons receiving rent may also be cultivating their own lands. The number of persons who have taken lands on lease, according to the economic census, is 144,194, while as per Imperial Table X the number of tenant cultivators is 74,462 . Evidently, a number of persons who cultivate their own lands, also take lands on lease and cultivate. This tendency to equalise the holdings, by the large landowners leasing out part of their land and small cultivators taking it on lease. is no doubt beneficial. But we will see presently that the holdings have been so minutely sub-divided, that in spite of the natural consolidation that is taking place on a limited scale as stated above, the large majority of them are too small to be economic. The total area under tenancy, according to the economic census, is 296,000 acres, so that the average area of land leased out by the owners is about 4.25 acres each, while the average area taken on lease by tenant cultivators is about 2.05 acres each. The area cultivated by the owners is $1,354,000$ acres so that the total cultivated land including the land under tenancy is $1,650,000$ acres. As per The Statistics of Travancore the actual cultivated arca in the State is about 2,201,000 acres. Even if we exclude the land cultivated by for eigners, the actual area cultivated could not be less than $2,100,000$ acres. Since the area cultivated is closely correlated to income, there is the probability of understating the cultivated area in order to show a reduced income. It is also likely that the area omitted is the less fertile. portion of the holdings so that the omission of income from land may not correspond to. the omission of cultivated area. The margin of error in the area cultivated being about 27 'per cent., we may assume that the error in the total agricultural income is at least about 25 per cent.
58. According to the returns of the economic census the area cultivated is $1,650,000$ acres and the number of cultivators 629,887 . The number of holdings may be taken to be the same as the number of cultivators, and in that case the average size of a holding is 2.62 acres. "Holding" here means only the total area cultivated by an individual, irrespective of its being in one compact block or in scattered bits. Information has not been collected: on this point and it is, therefore, not possible to examine the question of fragmentation of holdings. The average size of the holdings, obtained by dividing the total area by the number of holdings, gives no clue whatsoever to the extent to which holdings have been sub-divided. An approximate idea of it can, however, be formed by classifying the holdinge into groups on the basis of their size and finding the proportion in each group to the total number of holdings. These proportions worked out from the figures recorded in the economic census are given below:-

| Size of bolding | Percentage of the number in each groap to the total number of holdings. | Size of holding | Percentnge of the number fa ench $\mu$ rous to the total number of holdings |
| :---: | :---: | :---: | :---: |
| Below 20 cents | 6. 94 | 8- 6 neres | $3 \cdot 13$ |
| 20-40 | $9 \cdot 67$ | 6-7 | $2 \cdot 00$ |
| 40-60 ${ }^{\text {40 }}$ | 10.67 | 7-8 | $1 \cdot 30$ |
| 60- 80 | $7 \cdot 76$ | $8-9$ | 1.11 |
| 80-100 n | $4 \cdot 08$ | 9-10 | $0 \cdot 64$ |
| 0-1 acre | $88 \cdot 12$ | 0-10 acras | 95.53 |
| 1-2 acres | 24.32 |  |  |
| 2-3 " | 12.70 | 10-100 acres | $4 \cdot 40$ |
| 4-4 | $7 \cdot 34$ 4.78 | 100 acres and above | 0.07 |
| 0-5 acres | $87 \cdot 28$ |  |  |

It will be seen from the above statement that about 38 per cent. of the holdings are below the size of one acre. In this group between one-third and one-half of the number is less than 40 cents and nearly two-thirds are less than 60 cents. Of the total number of holdings more than 87 per cent, are below five acres and as much as 95.5 per cent. below ten acres. In paragraph 72, Chapter I of the Report, we have seen that an economic holding in Travancore should at least be 10 acres, and, if so, more than 95 per cent. of the holdings in the State are uneconomic.
59. The following table shows the distribution of $/$ holdings according to size in different communities as per the random sample :-

| Sixe of holding | All commanities | Brahman | Näyar | Elava | Depressed Hindu | Other <br> Hindus | Syrian Christian | Other Ohristians | Maslim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Below 20 cents | 1,776 | 8 | 340 | 388 | 122 | 388 | 194 | 217 | 124 |
| 20-40 | 2,892 | 5 | 633 | 608 | 153 | 628 | 341 | 344 | 160 |
| 40-60 | 3,190 | 12 | 719 | 559 | 241 | 663 | 454 | - 347 | 195 |
| 60-80 " | 23320 | 4 | 575 | 448 | 137 | 452 | 327 | 221 | 156 |
| 80-100 | 1,221 | 2 | 370 | 241 | 53 | 155 | 220 | 109 | 71 |
| Baloy 1 acre | 11,399 | 81 | 8,637 | 2,238 | 726 | 2,286 | 1,536 | 1,238 | 708 |
| 1-2 scres | 7,271 | 24 | 1,970 | 1,279 | 391 | 1,148 | 1,284 | 738 | 437 |
| 2-3 ${ }^{1}$ | 3.797 | 28 | 1,075 | 581 | 166 | 490 | 851 | 356 | 250 |
| 3-4 $\quad$ \% | 2.195 | 15 | 635 | 312 | 66 | 256 | 573 | 203 | 135 |
| $4-5 \quad n$ | 1,423 | 9 | 415 | 219 | 34 | 156 | 416 | 103 | 76 |
| 5-6." | 936 | 8 | 268 | 138 | 16 | 100 | 261 | 81 | 64 |
| 6-7 | 624 | 3 | 184 | 77 | 7 | 59 | 210 | 51 | 33 |
| 7-8 | 3.90 | 4 | 117 | 48 | 10 | 22 | 1.31 | 27 | 31 |
| 8-9 9 | 334 | 1 | 98 | 44 | 5 | 31 | 120 | 20 | 15 |
| 9-10 | 191 | 4 | 54 | 19 | 3 | 25 | 62 | 19 | 5 |
| 10-100 | 1,317 | 22 | 367 | 140 | 9 | 109 | 606 | 96 | 68 |
| 100 acres and above | 21 | . | 4 | 3 | $\bullet$ | 3 | 10 | 1 |  |
| Total holders | 29,808 | 149 | 7,824 | 5,099 | 1,433 | 4,685 | 6,960 | -2,988 | 1,820 |
| Total earners | 55,803 | 298 | 9,910 | 10,413 | 8,219 | 9,883 | 8,868 | 7,501 | 3,287 |

60. The percentage of earners who have agricultural holdings in the different

| Oommunity | Average size of holding acres | Percentage of earbers having holdings |
| :---: | :---: | :---: |
| Brahman | $5 \cdot 91$ | 50.3 |
| Niyar | 3.12 | $79 \cdot 0$ |
| Ifnve | . $2 \cdot 29$ | $49 \cdot 0$ |
| Depressed Hindu | $1 \cdot 93$ | $23 \cdot 2$ |
| Other Hiodus | $1 \cdot 93$ | 47.5 |
| Syrian Curistian | 4.46 | 71.3 |
| Other Christiads | $2 \cdot 00$ | $39 \cdot 1$ |
| Muslim | $2 \cdot 68$ | $56 \cdot 2$ |

lowest proportion ( 23 per cent.) communities and the average size of holdings are given in the margin. Brahmans have the largest average holdings and the Depressed Classes and other Hindus the smallest. Next to Brahmans the Syrian Christians have the largest holdings and then come the Näyars. On the other hand, the highest proportion of earners having agricultural holdings is found among Nayars (79 per cent.), Syrian Christians coming next with $71 \cdot 3$ per cent., and as usual the Depressed Classes have the
61. The number of rent receivers, according to the economic census, is 69,638 and Rent from land. the total rent received by them is Rs. $117 \cdot 1$ lakhs. The average per lessor is, therefore, Rs. 168 per year, while the average paid by each lessee will be a little more than half the above amount. The area under tenancy being 296,000 acres, the average rent per acre comes to Rs. 40 and the average production per acre including the wages of labourers must, therefore, be higher. Few tenants will perhaps pay wages to cultivate the lands taken on lease. It is only those who are keen on cultivation will take land on
lease and they will naturally cultivate it more intensively than the proprietors. The average production per acre under tenancy will, therefore, be larger than the average yield per acre of the land cultivated by owners.

Out of the sample of 55,803 earners the number of rent receivers of each community has been sorted separately. The marginal statement shows the number of rent receivers and dry land owners and the proportion of the former to 100 of the latter in different communities. The corresponding proportion to the total landowners will perhaps be slighty lower. It will be seen from the statement that the habit of letting out land is most prevalent among Brahmans. The proportion is comparatively high among Nayars even though their chief occupation is agriculture.
 This is probably due to the excessive sub-division and fragmentation of holdings on account of the partition of tarwād properties. The frequency distribution according to the amount of rent received by lessors supports the above inference. It will be seen from the table in the margin that about 47 per cent. of the rent receivers get below Rs. 50 each which shows that a large number of the owners of small plots of land lease them out.

Income from cultixation.

Income from
other occupa-
tions.
62. The number of persons who receive income from cultivation, according to the economic census, is 629,887 . Income here means the net income, i. e., gross income minus cost of cultivation. The total net income of cultivators is Rs. $713 \cdot 1$ lakhs which gives an average of Rs. 113 per cultivator. The area cultivated being $1,650,000$ acres, the income per acre is Rs. 43 excluding rents and wages. The amount of rent paid by tenants is Rs. 11711 lakhs and, if this is also included in the income from cultivation, the average per acre comes to Rs. 50 excluding wages. Strictly speaking, the wages of agricultural labourers should also be included in the agricultural income. But this is not possible, because income from agricultural labour was entered in the column for "income from other occupations" in the economic census schedule. In view of the fact that the average rent paid per acre has been found to be Rs. 40, an income of Rs. 50 per acre from cultivation excluding wages appears to be reasonable at the present time when the prices of commodities have fallen heavily.
63. Income from other occupations may be considered as a whole. As the wages of agricutural labourers and estate coolies are included in this item, a substantial portion of the total income under this head is really agricultural income. The rest consists of the wages of industrial labourers and fishermen, the profits of business and commerce, the earnings of professional men and public servants, and of all others who are engaged in unproductive employment, such as domestic service, begging, etc. Income from subsidiary occupations is also included in this head. Occupations have been divided into broad groups and the total number of earners and their income in each group ascertained. The total income under this item may fall short of the actual annount by a wide margin. The total number of persons returned as deriving income under this head is 955,298 and the total income Rs. $1,167 \cdot 8$ lakhs. The average per worker is Rs. 122 and the average per head of total earners Rs. 86. The proportion of earners who follow occupations other than cultivation is nearly 701 per cent.
64. The figures in the margin show the proportion of earners of each community having occupations other than agri-

| Commanity | Percentage of earners of each community following other occupations |
| :---: | :---: |
| Brahrasn | $65 \cdot 2$ |
| Najyar | $37 \cdot 2$ |
| Ilava | 48.6 |
| Depresed Hindu | $93 \cdot 5$ |
| Other Hindos | $65 \cdot 2$ |
| Syrian Ohristian | $55 \cdot 1$ |
| Ohher Ohristians | 88.1 |
| Muslim | $40 \cdot 0$ | culture, according to the random sample. The sample represents rural conditions only, but it is in towns that persons following nonagricultural occupations preponderate, and all towns have been omitted from the sample. The high proportions among depressed and other Hindus and other Christians may be due to the fact that they are mostly labourers. The proportion is least among Nāyars. We have already seen that the proportion of land holders is highest among them. The inverse relation between these two proportions leads to the inference that Nayar landholders do not generally take to subsidiary occupations as much as the other communities.

65. One more item of income has to be considered which, however, forms only a Inoome from small proportion of the total income. If income had been viewed from the national stand- investments. point, the interest on capital would have been excluded from it. In the present discussion interest has to be considered as a charge on the income just as debt has been considered as a charge on wealth. The number of persons deriving income from investments is 109,460, while the number having investments is 226,279 . It follows, therefore, that more than half the investments do not yield interest. Investments in the form of chitties will not yield interest periodically and many other small investments also may. not yield interest at all. Total income in the shape of interest is found to be Rs. 91.9 lakhs according to the economic census and the average per earner is Rs. 7. Since an error of 30 per cent. has been assumed in the case of total investments, the same error may be assumed to exist in interest also. The frequency distribution according to the amount of interest received. by investors is shown in the margin above. It is seen that 60 per cent. of the investors get below Rs. 50 , while the proportion getting above Rs. 1,000 is only $1 \cdot 2$ per cent. Out of 55,803 earners the number that receives income in the form of interest on investments is 5,097 . or about 9 per cent.
66. The results described in the foregoing paragraphs may now be summarised. Total income. The total income of the people

| Item of income | Income in lakhs of rupees |
| :---: | :---: |
| Rent from land | $117 \cdot 1$ |
| Net income from cultivation | $713 \cdot 1$ |
| Income from other oecupations | 1,167.8* |
| Intenest on investmerits | 1,91.9 |
| Total | 2,089•9 | works out to about Rs. 20.9 crores. The average per earner is Rs. 154, while the average per head of total population is Rs. 41 per year. The real per capita income will, however, be higher. The total area cultivated, according to the economic census, is $1,650,000$ acres, while according to The Statistics of Travancore it is nearly $2,201,000$ acres. The error is about 33 per cent. Part of the omissions may be explained by the fact that the area of estates cultivated by foreign planters has been excluded from the calculation. The net omission of cultivated area may, however, be taken to be about 27 per cent. Since the area omitted may consist of less fertile tracts and lands less intensively cultivated, an error of 25 per cent. with regard to income may be a reasonable extimate. There is no means of testing the accuracy of the figures regarding the income from non-agricultural occupations; but an error of 25 per cent. may

[^76]safely be assumed to exist in this item also. The per capila income of Rs. 41 arrived at from the returns of the economic census may, therefore, be increased by 25 per cent. and the average annual income per head of the population put down at Rs. 51 at the time of the census. As a result of the economic depression the prices of commodities dropped by 40 per cent. or even more at the beginning of 1931 from what they were before the commencement of the depression. Wages had also fallen though not to the same extent. There was an all-round shrinkage in the income of agriculturists, industrialists, traders and other businessmen. In view of these circumstances it may not be far wrong to assume a reduction of 40 per cent. in the aggregate income of the people on account of the economic depression. The estimate of Rs. 51 given above might, therefore, be taken to be about 60 per cent. of the per capita income under normal conditions. In other words, if there had been no economic depression the average income of the people would have stood at Rs. 85 per head per annum. That this is an approximately correct estimate will be evident from the fact that similar estimates for British India made in recent years are not far out from the one given above. The poverty of India as compared with Western countries like Great Britain has been forcibly pointed out by the Simon Commission in the following passage.
"The low standard of living to which the mass of India's population attain is one of the first thinge that strike a Westerm visitor. Wants are few, diet is simple, climate is ueually kind, and a deep-rooted tradition tende to make the countryman content with things as they are. But the depth of poverty, the presence of which camot escape notice, is not so easily realised. .. Since the War, cortain Indian and European professors of economics attached to Indian universities have, by different statistical methods. attempted to measure the total income of the country in particular years. One of them has estimated the income per hoad of British India at Rs. 107 in 1920-21 and at Rs. 116 in 1921-22, a second hus artivod at a figure for the whole of India of Rs. 74; while a third, confuing himeelf to tho province of Madras, has for the year 1919-20 calculated the average income per hond at Rs, 102. Such estimntge are necessarily based on inadequate data, for the unsatisfactory nature of the statistical materials has been the subject of comment by every commlttee or commission that has enquired into the economic alfairs of Indin .................... ........Even if the most optimistic of the above estimates is adopted, the result is that the average income of India per head in 1928 was equivalont. at the prevailing rate of exchange, to less than £ 8, while the corresponding figure for Grent Britain was $£ 95$. The contrast remains gtartling, even after allowing for the difforonco between the range of needs to be satisfied." ${ }^{*}$

What is true of India is equally true of Travancore also.
Income by commanity.
67. The following statement shows the proportion per mille of earners of different communities having income of different values:-

| Income | Nayar | ILava | Depremad Hindu | Other Hindus | Syrinn Ohristian | Other Chrixtiana | Mualin. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R.s. |  |  |  |  |  |  |  |
| Below 50 | 282.8 | 332.6 | 552.6 | 291.4 | 115\%'6 | 30\% 010 | 170.4 |
| 50-100 | 274-1 | $360 \cdot 4$ | 342.13 | 351.9 | $315 \cdot 0$ | $3 \times 1 \cdot 5$ | 32.4.6 |
| 1(H)-150 | 165.8 | 15\% ${ }^{3}$ | \%9.0 | 186.9 | 175.4 | $123 \cdot 1$ | 1:1.7 |
| 150-200 | $91 \cdot 3$ | 6.4.0 | 18.0 | 83.5 | \% $6 \cdot 3$ | $3 b^{\prime} 1$ | 915. H |
| 200-250 | 53.1 |  | $7 \cdot 1$ | $34 \cdot 7$ | 57.0 | $19 \cdot 3$ | 18. $\cdot 1 ;$ |
| $250-300$ | $84 \cdot 1$ | $15 \cdot 0$ | 2.8 | $16^{\prime \prime}$ | 319 | 12.4 | $14 \cdot 3$ |
| 300-350 | $24 \cdot 4$ | $9 \cdot 0$ | 1-6 | $9 \cdot 2$ | 2N.! | (1) ${ }^{\text {( }}$ | 1!'2 |
| $350-400$ | $14 \cdot 3$ | $\pi \cdot 9$ | $1 \cdot 9$ | 4.5 | 17.6 | 6.9 | 21.1 |
| $400-450$ | $11 \cdot 7$ | $0 \cdot 9$ | $0 \cdot 4$ | $3 \cdot 3$ | 11.6 | $3 \cdot 1$ | 14. ${ }^{\text {H }}$ |
| $4.00-50$ | $7 \cdot 8$ | $2 \cdot 0$ | 9'3 | $2 \cdot 10$ | $7 \cdot 6$ | 1.8 | 13.4 |
| 500-1,0100 | 29.0 | $9 \cdot 8$ | $1 \cdot 0$ | $8 \cdot 9$ | (1).2 | K. 6 | 42.6 |
| 1,(0) -3,000 | 10.3 | $3 \cdot 9$ | $0 \cdot 4$ | $8 \cdot 6$ | 14.1 | 3.6 | $10 \cdot 6$ |
| 3,600 and above | $1 \cdot 6$ | $0 \cdot 3$ | , | $0 \cdot 1$ | $3 \cdot 8$ | $1 \cdot 1$ | . |
| Total | 1,000.0 | $1000^{\circ}$ | 1,000 0 | 1,000.0 | 1,000 0 | 1,000 0 | 1,000'0 |

[^77]It has been already pointed out that there is practically no earner in any community. without any income. The diagram below. represents graphically the condition of the communities in respect of their income. All curves start from the same point. The lower the curve, the better is the economic condition of the community concerned. Among the major communities Syrian Christians take the lead. The case of Brahmans is exceptional as will be seen from the marginal figures below. This is probably due to the exclusion of towns where the majority of Brahmans reside. The percentage of earners with an income of more than Rs. 1,000 is the highest in this community. The mode in their case is in the group Rs. $100-200$, whereas in the case of Nayars, depressed Hindus and other Christians it is below Rs. 50 and in the case of the other communities it is between Rs. 50 and 100. The average income per earner in communities other than the Brahman is given in the following marginal statement. The Syrian Christians have the highest average, oiz., Rs. 275 per earner, then come the Muslims with Rs. 210 and only then the Nayars with Rs. 147. The depressed Hindus have the smallest income, viz.,

| Community | Average income per esrner |
| :---: | :---: |
| NByar | K8. |
| Ihave | 109 |
| Depressed Hinda | 57 |
| Other Hindus | 104 |
| Sytian Christian | 275 |
| Other Charistinns | 110 |
| Maslim | 210 | Rs. 57 per earner. It may be noted that the above figures represent the income per earner and not per head of the population. The latter will be considerably less than the former, because only about 27 per cent. of the population are actual earners.


68. The method followed in studying the distribution of wet and dry lands in Distribution of paragraphs 24 and 28 above may be used in examining the distribution of income alsu. The income among
following diagram and table prepared on the same lines as those given in the previons paragraphs show the correlation between the proportions of earners and their income.


| Percentage <br> of earners <br> having <br> income | Percentage <br> of income <br> carned |
| :---: | ---: |
|  |  |
|  |  |
| 31.8 | 8.1 |
| 65.4 | 28.7 |
| 87.7 | 64.7 |
| 93.6 | 66.6 |
| 96.1 | 73.9 |
| 97.3 | 78.4 |
| 98.1 | 89.1 |
| 98.8 | 84.4 |
| 99.0 | 87.8 |
| 99.1 | 89.9 |
|  |  |
| 100.0 | 100.0 |
|  |  |
|  |  |

Income by talak.

It is seen that the distribution of income is not so unequal as that of land. Beginning from the poorest, 31.8 per cent. of the earners get 8.1 per cent. of the total income; 65.4 per cent. get 28.7 per cent. ; and only one per cent. of the richest enjoy 12 per ceat. of the income.
69. The distribution of income by taluk is shown in the following table:-


Generally spealing, taluks which are rich in point of wealth have also high income. Ampalapula shows the highest

| Town | A verage income per carner per annam |
| :---: | :---: |
|  | H8. |
| Trivandram | 404 |
| Alleppey | 544 360 |
| Quilon | 278 |
| Nagerconl | 278 |
| grxte | 183 | average income, because the commercial town of Alleppey is situated in that taluk. The average income in Trivandrum taluk is also high because of the presence of the capital of the State in that taluk. The income per earner is naturally very much higher in towns than in rural parts, as can be seen from the marginal figures.

70. The income from different classes of occupations as per economic census has been Income by separately totalled for the State and urban areas and the figures obtained are given below: - occupation

| Occupation | Number of persons following occupation | Total income in lakhs of rupees | Average income per head in the State R. | Average income per head in the urben ares Rs. |
| :---: | :---: | :---: | :---: | :---: |
| Agricultural labourest | 269,385 | 160.9 | - 61 | 84 |
| Estate coolics | 46,128 | $5{ }^{5} 8$ | 119 | $\because$ |
| Unakilled labourers | 87,165 | $70 \cdot 1$ | 80 | 167 |
| Fishing | 29,597 | $38 \cdot 5$ | 130 | 140 |
| Fish trade | 14,725 | 18.7 | - 127 | 195 |
| Exploitation of minerala | 2,056 | $2 \cdot 9$ | - 141 | $\cdots$ |
| Textile industry | 88,132 | 78.2 | 89 | 248 |
| Wood industry | 41,145 | $43 \cdot 9$ | 107 | 164 |
| Metal industry | 11.514 | $17 \cdot 4$ | 151 | 189 |
| Ceramica | . 5,353 | $8 \cdot 6$ | 161 | 248 |
| Food Industry | 39,632 | $29 \cdot 3$ | 74 | 99 |
| Other industries | 55,615 | 74.4 | 134 | 208 |
| Transport | -32,742 | $49 \cdot 7$ | - 152 | 260 |
| Trade | 120,293 | $235 \cdot 4$ | - 196 | 357 |
| Public administration | 17,710 | 58.8 | 332 | 440 |
| Proicmions and liberal arts | 66,465 | $139 \cdot 4$ | 247 | 353 |
| Miscellaneous occupations | 43,751 | 86.8 | 198 | 256 |

It will be seen from the above table that public service, trade, professions and liberal arts, transport, and especially motor transport, are the most paying occupations. In the case of agricultural and industrial workers the annual income will vary with the number of working days. If it is assumed that agricultural occupation lasts for about six months in the year, the average daily income of a labourer, on the basis of the annual income given in the above table, is about 10 chackrams (one chackram is equal to seven pies). We will see when we deal with the wages census in the next section that the average daily wage of an agricultural labourer is about 10 chackrams. The close agreement between the two censuses may be regarded as an indication of their reliability.
71. So far, we have dealt with private income or incomé of the individuals, and National we have seen that this income, as it was in 1931, stood at Rs. 51 per head. National income. income, as defined in paragraph 55 above, is different from private income and will certainly be less than the latter. National income, represents the total production of commodities in the country in a year. The value of production, on the basis of the prices that prevailed at the beginning of 1931, may be estimated approximately as shown in the margin. Total production in 1931 amounted to Rs. 2,241 lakhs. This would give a national income of Rs. 44 per head, as against Rs. 51 the per capita private income, in 1931.

## 7. Wages

72. The results of the census of wages by taluk and occupation are set forth in State Table VI included in Part II (Imperial Tables). A census of wages has not been taken in this State till now, and it is not, therefore, possible to compare the present wages with those that prevailed at any time in the past. The results obtained at the present census are described briefy below.

Agricultaral Fages.

| Oecupation |  | Wages per dasy in chackrams <br> (One chackram=7 pies) |
| :---: | :---: | :---: |
| Plougbing | Men | 104 |
| Trimming bund | Men | 104 |
| Manaring | $\left\{\begin{array}{l}\text { Men } \\ \text { Women }\end{array}\right.$ | 104 |
| Manaring | $\{$ Boye | bl |
|  | Girls | $8 t$ |
| Bailing water | Men | 04 |
| Sowing | Men | 9 |
|  | $\left\{\begin{array}{l}\text { Men } \\ \text { Woman }\end{array}\right.$ | 8 |
| Transplanting | $\left\{\begin{array}{l}\text { Woman } \\ \text { Girls }\end{array}\right.$ | 71 41 |
| Weeding | $\{$ Women | 7 |
| Weeding | \{ Girls | +1 |
| Harvesting paddy | Men | 114 |
| Threshing paddy | Men | 111 |
| Making pits for planting coconut palm | Men | 11 |
| Irrigating coconat palm | Men | ${ }^{7}$ |
| Harvesting coonut | Jen | 171 |

rations, as worked out from the census returns, are given in the margin. The wages vary according to the sex and age of the workers. The average for all persons and all occupations is about $10 \ddagger$ chackrams or 6 annas per day. In the cultivation of the coconut palm higher wages are paid for making pits and digging round the palm, and the highest wage. ( $17 \frac{1}{2}$ chackrams) for harvesting nuts. These wages do not include the value of presents given to labourers during festive occasions or the rent of land utilised by them for dwelling purposes. The period of work varies from 5 hours to 8 hours a day according to the nature of the work.

Wages of artizans.

Wages in organized industries.
74. Artizans, such as carpenters, goldsmiths, blacksmiths and other workers in cottage industries, are generally paid higher wages than field labourers. The daily average wages: obtained from the census are given in the margin. The llow wage paid to potters isprobably due to the fact that in many places it is given in kind, especially paddy, immediately after harvest, and its equivalent in money varies with the fuctuations in the price of paddy. The working period of industrial labourers: varies generally from 7 hours to 8 hours a day and from 250 days to 300 days in the year.

| Clase of worker | Daily wages in <br> chackrams |
| :--- | :--- |
|  |  |
| Goldsmith | 181 |
| Blacksmith | $:$ |
| Copper and brass smith. | 10 |
| Oarpenter | 154 |
| Sawyer | 164 |
| Mason | 17 |
| Poter | $:$ |
| Tailor | 18 |
| Washerman | 8 |

75. The wages prevalent in important organized industries in the State are shown in the marginal statement. The working period in most of the industries is 8 hours a day and about 300 days in the year. There are some occupations in which work lasts throughoutthe year and for 9 or even 10 hours a day. These, however, areexceptions. The average wages given in the statementinclude those of akilled and unskilled labourers. Skilled: labour is naturally more costly than unskilled labour, and thehigh rates . prevalent in certain industries, e. g., motor repairs, are due to. the preponderance of skilled. labour.

## APPENDIX V

## THE CATTLE CENSUS

In a country like Travancore, where nearly $54 \cdot 3$ per cent. of the population Introdnctory subsist by agriculture, the importance of.cattle cannot be too strongly emphasized. remarkt. Machine-farming is unknown in this country, and as long as holdings continue to be small and fragmentary as at present, the introduction of machinery in agriculture is practically impossible. Cattle, therefore, are and will continue to be for a long time to come the only source of draught power available for all agticultural operations. Their droppings are the most valuable manure to the cultivator. He is only just beginning to use chemical manures. The vast majority of the farmers in the State still depend upon cattle dung, green leaves and other organic manures to fertilize their soil. The question, therefore how far the numbers of cattle in the country satisfy the requirements of the cultivators for their tillage operations and for the supply of manure, is one that should engage the serious attention of all interested in the welfare of the agriculturists. In considering this question it is an essential prerequisite to have correct data of the number and quality of the different classes of agricultural livesistock, and it is for this purpose that periodical censuses of the cattle population are being taken in all civilized countries.
2. The first census of cattle in Travancore of which there is a record was taken so Previous far back as in the years 1816-1820 A. D. Lieutenants Ward and Conner who conducted ${ }^{\text {consaseas. }}$ a survey of Travancore and Cochin States in that period have recorded that Travancore had then 382,360 cattle and buffaloes, 195,349 agricultural implements and 27,360 sheep and goats.* There is no information as to the methods and the agency employed in taking that census, and it is difficult to vouch for the accuracy of the figures recorded. In recent years the first systematic census of cattle was taken in 1911 along ${ }^{4}$ with the population census of that year, and a second one at the time of the census ' in 1921. The present is, therefore, the third systematic census of the agricultural live-stock of the country.
3. At the two previous censuses no distinction was made between bulls and seope of the bullocks. For the purpose of cattle breeding it is necessary to know the number of stud preseant consus. bulls available in the country, and hence a separate column was opened in the schedule for the present census to record the number of bulls as distinguished from the bullocks employed for draught. Again, no attempt was made at the previous censuses to ascertain the number of cows and cow buffaloes that were being milked and the number that was dry, or to estimate their average daily yield of milk. With a view to record information on these points, necessary columns were opened in the schedule this time. The average yield of mill recorded may not be quite coritect, but it is auficiently accurate to show the poor quality of the milk-producing cattle of thi State: In 1911 the number of ploughs and carts was recorded, but they were omited from the census in 1921, and they were included in the present census. Thus in several important respects the scope of the present census was enlarged from that of the previous ones.
4. A special schedule containing seventeen columns was prepared for this census method of the and a sufficient number of copies were printed in Malayalam and supplied to the Tahsildars censuma. of taluks and Presidents of Municipal Councils. The census was taken in the taluks by the village staff of the Revenue Department and in the municipal towns by the subordinate officers of the Municipalities, during the house-numbering operation which lasted from the 16th Chingam, 1106 (1st September, 1930) till the 15th Kanni, 1106 (30th September, 1930). In connection with house-numbering the officers had to visit every house and had, therefore, the convenience to ascertain the particulars of the live-stock, ploughs and carts contained in each house and record them in the schedule. The information collected was abstracted for the taluks and towns separately in the offices of the Tahsildars and Municipal Presidents, and these abstracts together with the filled-up schedules were sent to the central Census Office where they were scrutinized and corrected and the final statement was compiled.

* Wasd and Gonner, Momoir of the Swrwey of the Tharancore and Ocehin States, vol. 1, p. 47.

Rearlta of the cenalis forth in State Table VII included in Part II (Imperial Tables). A summary of the same and the corresponding ligures for the last two censuses are given below:-

|  | Name |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |

In the 1921 census the figures recorded showed a decrease from those of the previous census in 1911 in most classes of live-stock. This is rather surprising, for during the decade 1911-1920 there was no extraordinary circumstance to account for a general decrease in cattle. There was no unusual outbreak of contagious diseases during that period and there was a perceptible increase in the area under cultivation. Under these conditions one would naturally have expected an increase and not a decrease in the number of cattle. The figures collected at the last census are, therefore, left out of consideration, and the results of the present census are compared only with those of the 1911 census. During this period of twenty years the bovine cattle (oxen and buffaloes) increased from about 900,000 to $1,057,000$, i. e., an increase of 157,000 or nearly 17.5 per cent. The whole of this increase is accounted for by the oxen which numbered about 964,000 at this census as compared with 806,000 in 1911, whereas the number of buffaloes was practically the same in both the censuses, viz., a little over 93,000 . Among the different classes of oxen it must be noted that there is a small decrease in the number of bulls and bullocks, but there is a very large increase in the young stock, as much as 120,600 or nearly 62 per cent. Probably at the 1911 census the animals on the borderland between the young stock and the grown-up bullocks were included in the latter class, but at the present census they were brought under the former. This may be the cause of the apparent fall in the number of bulls and bullocks and the rise in the number of young stock at the present census. Cows have increased by about 43,000 or nearly 13.6 per cent. The total number of buffaloes has practically not changed between 1911 and 1931, the number at both the censuses being a little over 93,000 . The male buffaloes show a decrease of 3,368 ; but this is made good by the increase in the young stock, while the number of cow buffaloes remains unchanged. Sheep and goats have increased by about 45,000 or nearly 22 per cent. Ploughs and carts show an increase of 16,726 and 3,656 or 9 per cent. and 30 per cent. respectively.

Comparisod with Britith India.
6. It is interesting to compare Travancore with British Indian provinces in respect of the number of cattle, their proportion to the human population and the number maintained per one hundred acres of net sown area. The latest figures for British India are not available and the figures given below for the provinces in India are for the year 1924-1925,
taken from the Report of the Royal Commission on Agriculture in India.* The figures, for Travancore are those for 1931.

| Province | Nut arem sown | fotal number of cattle and buffaloen in the Province | Percentage of cattle and buffaloes to popalation | Per 100 acres of net sown area |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Estimated } \\ \text { grazing } \\ \text { land } \end{gathered}$ | Cattle | 3uffaloes | Cattle and buffaloes |
|  | $\underset{\left(\mathrm{in} \mathrm{OOOF}_{\mathrm{s}}\right)}{\text { Acres }}$ | (in $000{ }^{\prime} \mathrm{s}$ ) |  | Acres | Number | Number | Number |
| Asmam | 8,975 | 6,785 | $76 \cdot 1$ | 212 | 87 | 10 | 97 |
| Bengal | 23,528 | 25,491 | 54.6 | 38 | 104 | 4 | 108 |
| Bihar and Oringe | 25,269 | 20,728 | 610 | 56 | 69 | 13 | 82. |
| Pomay Preeidency Proper . | 27,492 | 8,480 | 53.0 | 83 | 24 | 7 | 31 |
| Bombay ${ }^{\text {Sind }}$ Sren | 4, 426 | 2,326 | $70 \cdot 9$ | 195 | 42 | 11 | 58 |
| Burma | 17,046 | 6,267 | $47 \cdot 4$ | 374 | 30 |  | 37 |
| tentral Provinces and Berar. | 24,895 | 11,671 | $83 \cdot 9$ | 107 | 39 | 8 | 47 |
| Madram | 83,339 | 22.111 | $52 \cdot 2$ | 79 | 49 | 17 | 66 |
| Paujab | 26,940 | 15,237 | $73 \cdot 7$ | 62 | 37 | 19 | 66 |
| United Prorincea | 35,121 | 31,046 | 684 | 52 | 64 | 24 | 88 |
| British India Trayancore | $\begin{array}{r} 226,980 \\ 2,201 \end{array}$ | $\begin{array}{r} 150,978 \\ 1,057 \end{array}$ | $61 \cdot 1$ 20.7 | 92 88 | 53 | 11 | 67 48 |

The area of grazing land in Travancore has been calculated on the basis laid down by the Royal Commission, namely, by adding to the area of forest land open to cattle grazing ( $1,385,600$ acres) three-fourths of the area of cultural waste ( 454,110 acres), and one-fourth of the area of uncultivable waste ( 83,445 acres). To the above has also been added an extent of 10,167 acres of grazing land which is under the control of the Revenue Department of the State. The total area of land available for grazing is, therefore, 1,934,000 acres, but more than 70 per cent. of this area is reserved forest and this is practically out of the reach of the large majority of the cattle. The grazing area which is ordinarily used for- the purpose is, therefore, much less than the total extent shown above.
7. On comparing the figures in the statement above, the feature that strikes one most is the very low proportion of cattle and buffaloes to the population in Travancore. This is due to the higher density of population in the State than in British India. According to the present census the density in British India is 248 persons per square mile as compared with 668 in Travancore. In other words, in Travancore 269 persons live in the same area in which 100 persons live in British India. When the net sown area is taken as the basis for consideration, Travancore does not compare unfavourably with British Indian provinces, the number of cattle in Travancore per one hundred acres being 44 as against 53 in Brtish India as a whole and only 24 in Bombay Presidency proper, 30 in Burma, 37 in the Punjab, and 39 in the Central Provinces and Berar. The position of buffaloes is, however, different. Travancore has the smallest number per one hundred acres of net sown area. It is only 4 as compared with 14 for the whole of British India. Bengal is the only province which has the same number as Travancore, but it has more than double the number of cattle that Travancore has.
8. The total area available for graziag is 88 acres per 100 acres of net sown area in Travancore. Besides this, there is an extent of 194,000 acres of current fallows which works out to nearly 9 acres per 100 acres of net sown area. The number of cattle and buffaloes per 100 acres of nel sown area in Travancore is 48 and the total area on which they are supported is 197 acres ( 100 acres net sown area, together with 9 acres current fallow and 88 acres grazing land). The corresponding figures for British India are 67 cattle and 213 acres of grazing land. "This number of cattle", say the Royal Commission on Agriculture in India, "is a heavy stock for land to carry." In Travancore the stock which the land carries appears to be lighter, but in reality it is not so because the major portion of the grazing land within the reserved forest, as has already been mentioned, is not accessible to cattle, and the grazing areas outside the reserves are much poorer in quality in Travancore than in British: India. It is no exaggeration, therefore, to say that the number of cattle in Travancore is too heavy a stock for the grazing that is available. This fact will be evident when Travancore is compared with some foreign countries. According to the Royal Commission the number of cattle kept per 100 acres of cultivated area is 38 in Holland and 25 in Egypt, whereas in Travancore it is 48. The solution of the cattle problem in Travancore, therefore, consists in providing additional facilities for grazing, in increasing the fodder supply and in reducing the number of cattle and at the same time improving

[^78]their efficiency by better breeding. In the opinion of Mr. William Smith who was tilr. recently the Imperial Dairy Expert under the Government of India, "India owns morecatle than any country in the world, and she maintains more cattle per 100 acres of cultivated land than any other country in the world."

## Dranght cattic.

9. The draught catte consist of bullocks and male buffaloes. They number, according to the present census, 344,588 . This includes also the cart bullocks numbering about 31,400 . The number of carts returned is 15,863 . At the rate of one pair for each cart the number of bullocks required for the carts is 31,726 . The very small difference between this and the actual number recorded may be taken as proof of the correctness of the figures. Most of the cart bullocks are also employed in agriculture and it may not be wrong to assume that at least 75 per cent. of them are so employed. Deducting one-fourth of the cart builocks $(7,850)$ from the total number of draught cattle mentioned above, we get 336,738 as the number of cattle employed in agriculture. The net area sown is $2,201,295$ acres so that the average area cultivated per yoke is $13 \cdot 1$ acres. In British India the lowest average is in Bengal where it is only 5.6 acres per yoke and the highest is in Bombay (including Sind) where it is as much as 20 acres. Unlike in British India where cattle are employed in the cultivation of various crops, like rice, cotton, sugarcane, etc., in Travancore their work is confined almost entirely to rice lands. Travancore should, therefore, be compared with a British Indian district where rice occupies the major portion of the cultivated area. Tanjore is one such district, where more than 77 per cent. of the cultivated area (nearly 860,000 acres) is under rice. The number of draught cattle in Tanjore is 32 per 100 acres of cultivated area or about 42 per 100 acres of rice land. In Travancore the gross area under rice cultivation, according to the latest statistics, is 665,000 acres. A small portion of this area, comprising. the recent reclamations from the Vembanad lake, is hardly ploughed at all. Cattle are, however, employed occasionally in ploughing dry lands for the cultivation of pulses, gingelly and other minor crops, and the one can, therefore, be offset against the other. About one-third of the rice land in Travancore is cropped twice a year; but the two cropping seasons being in different periods of the year, the same cattle are employed in. both the seasons. In view of these circumstances the proportion of draught cattle to the total area cultivated with rice in Travancore may be compared with the corresponding number in Tanjore. We have seen that in Tanjore the number of draught catte per 100 acres of rice land is 42 . In Travancore it is 48 . In other words, the average area of rice land cultivated per yoke is 4.8 acres in Tanjore and 4.1 acres in Travancore. The Travancore rice cultivator is thus using more cattle power than his confrére in Tanjore and yet his cultivation cannot be said to be as efficient as that of the Tanjore farmer. This is due to the small size and the poor quality of the draught cattle in Travancore as compared with those in Tanjore. There is no doubt that if the quality of the cattle here is improved, their number can be reduced without impairing the efficiency of the cultural operations. Speaking of India as a whole the Royal Commission have emphasized the necessity of decreasing the number of bullocks required for cultivation by adopting, among other things, "measures aiming at, an increase in the strength of the bullocks themselves." They conclude thus:-"India must endeavour to effect a reduction in the numbers and an increase in the efficiency of its plough cattle." If such is the position in British India, much more is it so in Travancore where the number of cattle employed in agriculture is even more than that in British India. But it must not be forgotten that efficiency of cultivation will suffer if the number of plough cattle is reduced before improving their breed.
10. The cow and the she-buffalo are the milk producing animals in India. In: Travancore the cow is preferred to the she-buffalo, though in other parts of India the reverse is the case. The majority of the people of this State have a prejudice against buffalo's milk though it is richer in butter-fat than cow's milk. The great disparity between the numbers of cows and she-buffaloes kept in Travaicore bears out this attitude of the people. Whereas the total number of she-buffaloes, according to the present census, is only 20,711, the number of cows is as many as 357,779 . As has already been mentioned an attempt was made at this census to ascertain the numbers of cows and cow-buffaloes that were actually giving milk and the numbers that were dry at the time of the census, and the information collected shows that out of a total number of 357,779 cows, 265,287 or nearly 74 per cent., and in the case of she-buffaloes 15,539 out of a total of 20,711 or 75 per cent. were dry. If these animals had been properly fed and looked after, they would have calved once a year as do the cows.in Europe, or at any rate at least once in eighteen months. Even on the latter basis the proportion of dry to
milling animals should be one to two, but the existing proportion in Travancore is about three to one. That is to say, out of every three cows or cow-buffaloes two ought to be yielding milk and one dry; but actually. out of four only one is yielding milk and three are dy. This is the result of the bad management of cattle. The cost, however small it be, of maintaining three out of four cows and she-buffaloes (in all 146,000 cows and 8,600 she-buffaloes) is really wasted, and it could be avoided by paying proper attention. to their feeding and management so as to make them calve at least once in eighteen months instead of once in three to four years as at present.
11. On the basis of the information collected in the census the 'milk-yielding cows milk supplyand cow-buffaloes in the State could be divided into different classes according to. their average daily yield of milk. A cow which does not yield at least 3 lbs. of milk
 a day or a she-buffalo which does not yield 5 lbs . of milk a day is not worth keeping. On this basis it will be seen from the figures given in the marginal table that about 73 per cent. of the cows and 88 per cent." of the she-buffaloes now existing in the country do not deserve to be kept at all. In consequence of keeping animals of such poor milking qualities the people are not getting enough milk for their consumption. The consumption of milk per head of population in British lndia is in itself much less than in Western countries, and in Travancore it is hardly one-third of what it is in British India. The total yield of milk from 92,492 cows and 5,172 she-buffaloes in Travancore, on the basis of the information collected at the census, is estimated to be 18,885 gallons a day or about $6,893,000$ gallons in a year. This, when distributed among the present population, comes to, on an average, $1 \cdot 3$ gallons per head per annum. This is the average for the whole State; but in towns like Trivandrum the position is somewhat better. Trivandrum gets about onethird of its milk supply from the suburbs and the balance is produced in the town itself. The total supply is about 670 gallons: a day or 244,550 gallons in a year and the average consumption per head of population is 2.5 gallons per annum. In Bombay the supply of milk is estimated to be about seven gallons and in Calcutta about eight gallons per head per annum. Even in the capital of the State the average consumption is hardly one-third of what it is in Calcutta or Bombay, and no wonder that the average for the whole State is one-half of that for Trivandrum.
12. The disparity between British India and Travancore in the matter of milk supply can be brought out by examining the question from another standpoint. According to the latest figures the total number of cows and cow-buffaloes in British India is $53,570,000$ and the present population of British India is $271,527,000$. The, number of milk producing animals per 1,000 of the population in British India is, therefore, 197, while the corresponding figure for Travancore is 74. Owing to the better feeding and management of cattle in British India one-third of the numbers of cows and cow-buffaloes may be taken to be milling and their number per 1,000 of the population is 66 , while in Travancore where only one-fourth is found to be milking the number per 1,000 of the population is as low as 19. With. such a small number of milking cattle whose yielding capacity is decidedly less than that of the cattle in British India it is not surprising that the supply of milk per head of population in Travancore is nothing like what it is inBritish India.
13. A special column was opened in the schedule for the present cattle census for Breeding bullsrecording the number of bulls used for breeding. The number recorded is 2,717. It is very probable that the enumerator has included under "young stock" a number of bulls which should have been brought under the class of "breeding bulls," and hence the number of stud bulls recorded at the census may not be quite correct. However, taking the figure as it stands, one cannot but conclude that the number of bulls available in the country is far too insufficient for the service of the existing number of cows. For every. bull there are as many as 132 cows in the country. In Madras, according to the Royal

Commission, there- are $5,500,000$ cows and 65,663 bulls, i. e., 84 cows for every bull; but in their opinion Madras should have at least 100,000 bulls, or one bull for every 55 cows. On this basis Travancore should have 6,500 bulls, as against 2,717 which she has. Absence of a sufficient number of bulls is probably one of the causes of a large proportion of cows (three out of four) remaining dry Not only is the number of buils insufficient, but their quality is also very inferior. Very few people bestow any attention on the selection of proper bulls for breeding purposes.

Improvement of cattio.
14. "The number of cattle within a district depends upon, and is regulated by, the demand for bullocks. The worse the conditions for rearing efficient cattle are the grenter the numbers kept tend to be. Cows become lees fertile, and their calves become undersized and do not batisfy cultivators, who in the attempt to secure usaful bullocks, breed more and more cattle. As numbers increase, or as the incre tse of tillage encroachee on the better grazing land, the pressure on the available supply of food leads to atill further poverty in the cowb, and a stage is reached when oxen from other provinces or male buffaloes are brought in to assist in cultivation. As cattle grow smaller in size and greater in number, the rate at which conditions become worse for breeding good live-stook is accelerated. For it must not be supposed that the food required by a hundred emall cattle is the same in quantity as that needed by fifty of double the size. As cattle become smaller, the amount of fond needed in proportion to their size increases. Thus, if a certain woight of fodder maintained one hundred cattle weighing 5 owte. ench for a year, the eame supply would last two hundred cattle weighing 5 cwts . each only for eight months. Large numbers of diminutive cattle are, therefore. a serious drain on a country in which the fodder supply is so scarce at cortain seasons of the year as it is in India.
"The process has gone so far, India has acquired so large a cattle population and the size of the animals in many tracta is so small, that the task of reversing the process of deterioration and of improving the live-stock of the country is now a gigantio one ; but on improvement in cattle depends to a degree that is little understood the prosperity of agriculture, and the task must be frced. ${ }^{\prime \prime}$
The above are extracts from the Report of the Royal Commission on Agriculture in India. The remarks contained therein about the cattle in India apply with greater force and intensity to Travancore. Unlike the major portion of India, Travancore, on account of its heavy rainfall and the comparative poverty and [insufficiency of its pasture lands, is particularly unsuited to the breeding of good cattle. The unfavourable conditions in this State for cattle breeding were noticed even as early as in 1816 by Ward and Conner. They say: - "The black cattle, like most of the animals of the country, are, diminutive; indeed the climate would appear unfavourable to the better kind of the other coast".+ The improvement of cattle in Travancore is, therefore, not an easy task. The cattle breeder has to fight against nature and surmount insuperable difficulties. But the task must be faced as the Royal Commission say, for on cattle depends the prosperity of the agricultural population who forms more than half the inhabitants of the country.
15. The attempt at the improvement of cattle must, however, be preceded by measures for increasing the quantity and quality of the fodder supply. Any good breed of live-stock which may be raised by selection and crossing will soon deteriorate if it is not properly fed; and the energy and money spent on improving the breed will only be wasted if measures are not taken at the same time to provide an adequate supply of suitable fodder. But it is the fodder problem that is the most difficult to solve in Travancore. It may sound paradoxical to say that in a country with a heavy rainfall, enjoying the benefits of both the monsoons, with nearly a third of its area covered by forests, and with a large extent of culturable and unculturable waste lands, it is difficult to find sufficient fodder for its cattle population. But it is a fact; during more than six months of the year when there is hardly any rain, the grazing problem in Travancore is even more acute than in other parts of India which do not enjoy such an abundant rainfall. The land here is undulating and the soil is laterite and porous; consequently the rain water either quickly flows off into streams and rivers or sinks deep into the ground, so that during the rainless months the soil is so dry that it is difficult to see many green blades of grass itt most parts of the country. Irrigation is impracticable and even where it is practicable the cost will be too high to make the growing of grass under irrigation proftable. Forests, especially those which are not too thickly wooded, contain a luxuriant growth of grass, but generally they are so tar removed from inhabited villages that they are ordinarily not accessible to the large majority of cattle. As for growing grasses and fodder crops on the cultivators' holdings there is very little prospect in Travancore where the population is already pressing hard on the arable land. The density of population in the State is 668 to the square mile, which is but a trifle less than that of England and Wales. On the coastal area where there is hardly any uncultivated land the density is as high as 1,743 . The land under

[^79]cultivation in Travancore comes to only less than half an acre per head of population. The only other country where the cultivated land per head is less than this is probably Japan. Under the conditions obtaining in Travancore no portion of the cultivated land can, therefore, be used for the growing of fodder unless some of the people are driven out of it. There are no large industrial establishments which will absorb this surplus population and consequently there is no immediate possibility of depopulating the rural parts to make room for the cattle. The prospects of increasing the fodder supply under these conditions are not very bright. The only hope lies in finding ways and means of stimulating the growth of grass on the uncultivated waste lands during the monsoon period and preserving this grass as well as what is available in the forests by converting it into hay or silage when climatic conditions are favourable, and utilising it during times of scarcity. This is what the Royal Commission have recommended for British India and it can undoubledly be practised in Travancore also.
16. Along with increasing the supply of fodder, the improvement of the breed of cattle must also be effected, both by the selection and the 'grading up. of the local cattle, and by crossing them with superior strains imported from outside. Bulls for breeding must be selected carefully and attention must be paid to the elimination of all worthless buils by castrating them at an early age. The veterinary officers must carry on intensive propaganda and persuade the cultivators to agree to the castration of their useless bulls. The Royal Commission do not view with favour the resort to compulsory measures; but compulsion has been recommended and introduced in some European countries. "The Irish Free State's Commission on Agriculture recommends that after a short interval, all bulls not licensed by the Ministry of Agriculture be compulsorily destroyed or castrated at the owner's expense, and the possession of such a bull be made a penal offence. Northern Ireland has actually passed an Act to compel licensing, and some prosecutions have taken place; the complaints are of leniency in the matter rather than of severity. "* When the wholesale castration of useless bulls is undertaken with or without compulsion, provision must be made for the supply of a sufficient number of good buils. It is the duty of the Department of Agriculture to do this by producing sufficient bulls in its breeding farms, supplementing this number, if necessary, with bulls imported from outside, and by selling them to the cultivators at reasonable prices.
17. In breeding better types of animals the requirements of towrs where the problem is mainly one of milk supply, and of rural parts where the necessity is for a dual purpose animal suitable for draught and milk production, must be kept in view. For the rural area the aim should be to produce a type of cow which will give a strong calf and supply at the same time a moderate quantity of milk, say, 1,000 to $1,500 \mathrm{lbs}$. per lactation, whereas the cow for the towns must be one capable of yielding at least about $3,000 \mathrm{lbs}$. of milk per annum. From what has been stated in paragraph 11 above it is evident that not more than 25 per cent. of the existing cows give the standard yield of milk specified for the rural area and that there is hardly any cow which comes up to the standard laid down for towns. This phenomenon is not peculiar to Travancore alone. Mr. William Smith says that at least 90 per cent. of the cows in India do not produce enough milk and that 80 per cent. of the oxen do not give a return in work.
18. The work to be done for the improvement of cattle in Travancore is stupendous. Something is being attempted by the Agricultural Department ; but it does not go far enough. If its work is to produce any tangible result it must extend its breeding operations considerably and also take in hand intensive breeding work in a limited area which can easily be controlled. The town of Trivandrum is a suitable place to begin this intensive operation. It contains about 2,500 cows, the average yield of which is only about 2 lbs . of milk a day. The objective of the stock breeder must be to weed out, in course of time, all cows whose milk yield does not average at least 7 to 8 lbs . a day. Bulls of superior milking strain, such as the Scindhi or the Ongole breed, must be stationed in sufficient numbers in the town. About 40 bulls may meet the present requirements, and all useless bulls must be castrated at the same time. If this work is continued for some years under the guidance and supervision of veterinary and agricultural officers, each successive generation of cows will show an increasing capacity for milk production and when a sufficient number of cows giving the required standard of milk yield has been obtained it will not be difficult to eliminate, even by resort to compalsory measures if necessary, all poor milkers. Along with this work of improving the milking capacity of cows it would be desirable to organize the supply of milk in the town on co-operative basis as has been done successfully in the city of Calculta. Under such an organization the milk supply can be controlled and the production and sale of pure milk under hygienic conditions ensured. The goal can, however, be reached only by the co-operation and joint action of the agricullural and co-operative departments, the municipality and the public.

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## SUMMARY

The Report consists of twelve chapters and five appendices. The first chapter Chapter I deals with the distribution and movement of the population of the State as a whole; its instrfirution administrative and natural divisions and taluks.
of population.
There has been no change in the area of the State or in the number of divisions or taluks, though the boumdaries of the natural divisions have been suitably altered at the present census. The de facto population of Travancore, according to the present census, is $5,095,973$. The State holds the 19th place in size and the third in population among the Indian States, the only ones having a larger population being Hyderabad and Mysore. Travancore has a mean density of 668 persons per square mile which, when calculated on the cultivable land and the land actually cultivated, rises to 1,072 and 1,482 respectively, each person having three-fifths of an acre of cultivable land and two-fifths of an acre of cultivated land. In India Cochin alone, and outside India only Java and Madura, England and Wales, and Belgium, have slightly higher densities than Travancore.

The recorded increase in the population in the last decade is 27.2 per cent. But it has been proved that there was under-enumeration in the census of 1921 and if allowance is made for this under-enumeration, the increase in the actual population would drop to 24.8 per cent. Of this increase, 1.1 per cent. has been caused by the balance of migration so that the increase in the natural population may be taken to be 23.7 per cent. In the adjoining State of Cochin the increase is $23 \cdot 1$ per cent. The decennial growth of the population has always been greater in Travancore than in India as a whole and in most Provinces and States, the peculiar physical and economic conditions of this State naturally favouring a high birth-rate and a low death-rate.


#### Abstract

Agriculture being the main source of wealth in the State at present, the pressure of population on the means of subsistence is determined by the condition of agriculture and the possibilities of its further developmeat, both extensively and intensively. Under the existing conditions extension of cultivation, though possible to some extent, cannot afford much relief if the present rate of growth of the population continues. The extreme subdivision and fragmentation of agricultural holdings, 95 per cent. of which are already uneconomic, and the chronic indebtedness of the cultivators render progress in revolutionizing the methods of agriculture slow, and even any increase in production that may be brought about by improved methods of cultivation is not likely to keep pace with the growth of the population. 54.3 per cent. of the total population is supported by agriculture, but their standard of life is very low, and to raise this standard what is really necessary is to draw away from agriculture a portion of the population now depending on it. This could only be done by the development of industry, and commerce. Over-population is the combined effect of a falling death-rate and a rising birth-rate. The question of controlling the growth of population by prudential or birth-preventing checks deserves consideration.


The number of occupied houses has increased by 22 per cent. during the last decade, the increase being shared by all the divisions. The average number of persons per family is $5 \cdot 46$ and that per house is $5 \cdot 48$. It is noteworthy that as a result of the partition of the matriarchal tarwäds of Nâyars, Illavas and Nānjanäd Vellạ!as many joint families have been broken up in the latter half of the last decade

The number of towns separately censused this time is 46 consisting of 19 mumicipal town as in 1921 and 27 census towns. Hapsifed 11 their population, their historical associr classined according to the chief occupations of Population of their population, their historical associations and other important factors, 23 towns are towns and agricultural and distributive, sine are industrial and commercial, two are mariket towns, two villages are hitorically important and eight are temple towns. Trivandrum, the capital of the State, and Alwaye a health resort, stand by themselves.

The urban population has grown from 404,654 to 551,788 (an increase of $25 \cdot 1$ per cent.) during the last decade, but the proportion of urban to total population has risen only from 10.1 per cent. in 1921 to 10.8 per cent. in 1931. About 74 per cent. of the urban population live in municipal towns, as much as 50 per cent. being congregated in the capital of the State and the nine industrial and commercial towns. The average population of a town (taking all towns together) has increased from 10,648 in 1921 to 11,995 in 1931 and that of a municipal town from 17,098 to 21,498 . Barring the capital of the State, the industrial and commercial towns have the largest average population $(20,030)$ and the temple towns the lowest (6,912). The natural growth of the urban population has been less than the increase in the general population of the State, and a more rapid urbanization of Travancore will only follow in the wake of an equally rapid industrialization of the country.

The average density of population in urban area now stands at 3.649 persons per square mile as against 2,952 in 1921. The average density in municipal towns has increased from 3,820 to 4,720 during the decade. Of all the towns, Shenkotta is the most densely populated ( 17,464 persons per square mile), next to it come Alleppey with a density of 9,656 , Nagercoil with 9,586 , and Trivandrum with 8,505 . The least populous town is Altingal which has only a density of 816 persons per square mile which is less than even the density of the taluk in which it is situated.

A large majority of the population in towns consists of persons born in the taluks in which the towns are situated. The capital contains the highest proportion of persons born in the other taluks of the State and the industrial and commercial towns the highest proportion of persons born outside Travancore. 19 per cent. of the Muslims in the State, if per cent. of the Hindus and 8 per cent. of the Christians live in towns.

The kata or the residential village, and not the pakuthi or the revenue village, has been adopted as the territorial unit for the census. The average population of the kara has increased from 929 to 1,155 and that of the pakuthi from 8,337 to 10,494 during the decade.

Chapter III
Birthplace and migeration.

The volume of external migration during the last decade has not been considerable, the total number of emigrants and immigrants together constituting only 38 per mille of the aggregate population. Internal migration was confined to 1.8 per mille of the State population of whom 89 per cent. moved only between contiguous divisions. The largest volume of immigration and the smallest volume of emigration are seen in localities of low density. The general proposition that immigration decreases and emigration increases as the denity of population increases holds good in Travancore.

The immigrants from outside the State number 135,103 as against 73,591 in 1921. The tea, rubber and cardamom plantations alone contain 79,433 immigrants. About 81 per cent. of the immigrants are from the adjacent State of Cochin and the contiguous districts of the Madras Presidency, about 16 per cent. from the non-contiguous districts of the same Presidency, nearly two per cent. from the other parts of India and only one per cent. from countries outside India. The sexes are almost equal among Hindu immigrants, females preponderate among Christians and males among Muslims. Except in the case of immigrants from outside India the sex ratio is found to decrease as the distance between the place of birth and the place of enumeration increases. The immigrants in the tea, rubber and cardamom estates represent 59 per cent. of the aggregate immigrant population of the State, which shows that most of the immigrants in the State are labourers in the estates and are temporary or semi-permanent sojourners.

The number of emigrants from the State has increased from 30,260 in 1921 to 58,466 in 1931. The balance of external migration has always been in favour of the State. Nearly 86 per cent. of the emigrants are found in other parts of India, the largest numbers in Cochin State and the Madras Presidency. The emigrants to foreign countries number 8,482. If conditions of setdement are congenial, distance and other disadvantages do not deter the educated youth of Travancore from migrating to any country to earn a decent living, though such migration will naturally be of a temporary or vemi-permanent type only.

The tea and cardamom plantations in the State employ mostly foreign labour. If they would recruit all their labour from the State itself, more than 75,000 local persons could find work there under the present conditions and to that extent the volume of unemployment in the State would be reduced.

Of the aggregate population more than 17 per cent. are under five years of age, 30 chapter IX por cent. under ten years, more than 42 per cent. under 15 , about 48 per cent. between 15-50 and a little over 9 per cent. above 50 years. There is a remarkable rise in the proportions of children under ten years and of persons over 50 to the total population, coupled with a similar fall in those of persons aged $10-15$ and $15-50$. The proportion of children is highest in the Midland Division, while that of adults aged 15-40 is highest in the Highland and lowest in the Midland. All the municipal towns generally disclose a higher proportion of adults. The proportion of children is higher among Christians and Muslims than among Hindus.

The mean age as well as the median age of the population has been gradually: decreasing as a result of the increasing proportion of children. It is highest among Hindus. and lowest among Muslims, and Christans occupy an intermediate position. Though there is a decrease in the proportion of adults which may cause a decline in the birth-rate, the increasing proportion of married females at the earlier child-bearing ages and the present. high proportion of children will result in an increase in the number of adults in the next generation, probably leading to a rise in the birth-rate. The future growth of the population is, therefore, not likely to be affected so much by the yariations of birth and death rates brought about by changes in the age constitution as by the economic and public health. conditions. The proportion of children below ten years of age to married females aged 15-40, which under certain conditions indicates fertility; has also increased during the last decade. The average death-rate for females has been lower than that of males throughout. the decade, female mortality being higher at the ages 15-35 and male mortality at all other ages. The crude death-rate for the two sexes together is practically 20 per mille per annum.

Although thirty persons have returned their ages as 100 and over, subsequent local ohapter $\mathbf{y}$ enquiries have shown that their number is not more than 15 of whom six are males and nine females. All of them belong to the Depressed or Backward Classes and are illiterate.

Though there has always been an excess of males over females in Travancore as a whole, as in other parts of India, females outnumber males in eleven taluks. In seven of these taluks most of which lie at the sea-coast, the preponderance of females has been almost a permanent feature, while in the remaining four taluks it has been observed for the first time only at the present census. The sex ratio, or the proportion of females to 1,000 males, of the actual population is highest in the Southern Division and lowest in the: High Range. Hindus show the highest sex ratio and Muslims the least, Christians holding an intermediate position. The marumakkathayam communities have generally a higher sex ratio than makkathāyis, probably on account of the difference in their social customs.

Female deaths are lower than male deaths in the ages up to 15 , they exceed male deaths in the age-periods 15-20 and 20-30, show a steady fall between 30 and 60 and perceptibly increase after 60.

The following are some of the inferences drawn from the special enquiry regarding the fertility of women which was conducted at the present census:-
(i) Masculinity is slightly higher in first births than in subsequent births and it is highest in the Highland Division which is most rural, and lowest in the Lowland which is most urbanized. The proportion of families in which the first-born is a male and which have a preponderance of male children is higher than that of families in which the first-born is a female and which have a preponderance of females.
(ii) The 'mode.' or size of family most favoured in Travancore is five for the towns and seven for the State. 14 per cent. of the 18,456 families of completed marriages brought under enquiry have seven children each. A single family has 19 children, a little Iess than one per cent. have more than 12 children each, about 98 per cent. have one child to 12 children each, 53 per cent. have 5 to 8 children each and a little more than one per cent, have no children at all.
(iii) The most favoured combination of children is that of three males and two females in towns as against four males and three females in the State. The proportion of female children tends to increase with the increase in the number of children born, the highest proportion being reached in families having 13 children of both sexes.
(iv) Based on the occupation of the husband, the agriculturists have the largest families and the Government officers the smallest, but, unlike in Western countries, the industrialists and unskilled labourers have smaller families than the small cultivators and petty merchants. Of the different communities, Brahmans have the smallest families, and of the other communities, Indian Christians, particularly Syrians, show the highest fertility as well as the largest survival ratio. Llavas come next, then Nayars and lastly Muslims.
(v) The age of marriage is lowest among Brahmans and highest among Nayars. The majority of the women in the State marry between the ages of 15 and 20 and the mean effective fertility for all ages is 4.9 .
(vi) Irrespective of the duration of marriage Brahmans have the lowest fertility Ilavas have a slightly higher fertility than Nayars throughout their married life, and Christians have a lower fertility than Nayars, Muslims and llavas during the first ten years. of married life, more or less the same fertility as these latter in the next ten years and the highest fertility after that. The rate of increase in the size of the family in Travancore shows a rythmic variation during the first 15 years of marriage and a sudden fall thereafter as in Scotland, while in Baroda there is a continuous fall.
(vii) There is a tendency for the interval between the date of marriage and the date of first confinement to decrease as the age of marriage advances. The proportion of sterile to fertile marriages decreases as the duration of marriage increases. There is no difference in the proportion of. still-born to quick-born children in the case of women marrying up to the age of 25 , but there is perceptible increase in the case of women married at later ages.
(viii) The net reproduction rate in Travancore is higher than that in most European countries. The net fertility of 1,000 women is found to be 3,867 children, of whom the number of girls who will be future mothers and who thus represent the net reproduction rate is 1,815 . The population will hold its own if 1,000 girls born now live up to the end of the child-bearing period and give birth to 1,000 future mothers and it will increase or die out according as the number is above or below 1,000 . Tested by this method the population of Travancore is a highly progressive one.
chapter yI Marriage by capture is practically extinct in Travancore, though a relic of the custom is seen among Muthuvans and Mannâns in the High Range Division. Marriage by purchase, with its earlier form of marriage by service, and exchange marriage prevail among the Primitive Tribes found in the State. Dowry marriage which is universal among Brahmans also prevails among Christians and is becoming prevalent among Nayars, Ilavas. and Nānjanàd Vellạalas as well. Of the two forms of marriage, Thalikettukalyanam and Sambandham, which prevailed among the major marumakkathayam communities, the former has degenerated into a mock marriage and has been practically given up or is being combined with the latter which is the true wedlock now. Polygamy which is a sign of plenty has been allowed and indulged in by the hill-tribes and a few other communities, wherever economic conditions permitted it, but with the spread of education among all classes of people it is practically dying out. Polyandry is tabooed by all communities in the State and hypergamy or the system of securing husbands from higher castes is dying out and may probably become altogether extinct before long. Cousin marriage between the children of brothers and sisters is common both among civilized marumakkathayam communities like Nayars and among most of the Primitive Tribes found in the State:

In Travancore, the marumakkathayam system has always recognized the supremacy of the woman, though in recent times her influence has waned on account of the unauthorised assertion of authority by the man and the mismanagement of the common properties by the käranavan of the tarwãd While these-disintegrating causes are contributing to the break-up of the marumakkathayam system, the woman, especially of the educated communities, is gaining her economic independence as in the West. The high degree of education attained by the women of Travancore and the liberal policy pursued by the Government in the matter of appointments to State service and representation in political institutions without distinction of sex, have made women self-reliant and selfdependent. Many educated young women have already begun to disclose a desire to avoid the matrimonial bondage and, if the future progress is as rapid as in the immediate. past, the next census is likely to record a shrinkage in the number of marriages contracted.

The bulk of the population being Dravidian, marriage is not so universal in the State as in other parts of India, although it is more common than in Western countries. The proportion of women of the child-bearing period is greater in Travancore than ini

Western countries, but it is distinctly less than in India as a whole. The smallest proportions of unmarried males and females are found among Primitive Tribes, the largest proportion of unmarried males among Muslims and of unmarried females among Christians. The highest proportion of married women in the early ages of $5-15$ is found among Brahmans and the Primitive Tribes and next to them among Christians, particularly Syrian Christians. Early marriage prevails least among Hindus as a whole and Muslims.

Among adult men towe life in Travancore, as in the West, discourages marciage.
The proportion of the widowed to the population of each sex in Travancore is much less than that in India, but the proportion of widows to widowers is much higher; thereby showing that the remarriage of widowers is more common than that of widows in this State. The smallest proportions of widows to the female population in all ages taken together and at different age-periods are seen among Christians. The rate of marriage of widowers after the 45th year is lowest among Syrian Christians. Except in the case of Muslim widows in 1931, all the religions shaw a decrease in the proportions of widows between the ages of 15 and 40 from census to census, and the fall in this proportion, combined with a rise in that of married women of the child-bearing ages, mainly accounts for the high rate of increase of the population in the last decade.

Child marriage is not a serious problem in this State, the numbers getting married up to the age of 15 being considerably less than in India. Comparatively, it is more common among the Primitive. Tribes than among civilized communties, Christians are more addicted to the practice than Muslims or Hindus and it is least common among. Hindus taken as a whole. Early marriage of boys is most common among Syrian Cbristians and that of girls among Brahmans and next to them among Syrian Christians, though both these communities are educationally more advanced than the others.

As in the previous censuses separate statistics were collected for five' infirmities, Ghaptar YII namely, insanity, dead-mutism, blindness, leprosy and elephantiasis, the first four only being included in the enquiry in other parts of India. For every 100 persons afflicted with each infirmity in 1901 there are, according to the present census, 411 persons suffering from insanity, 356 from deal-mutism, 306 from blindness, 197 from leprosy and 248 from elephantiasis, The total number of all the afflicted persons has increased by more than $2 \frac{1}{2}$ times during the last 30 years. During the decade 1921-1930 the insane have increased by 62.7 per. cent., the deaf-mutes by 32.9 per cent., the blind by 89.9 per cent., the lepers by $35 \cdot 5$ per cent. and the persons afflicted with elephantiasis by $26 \cdot 4$ per cent. Insanity and leprosy appear to be more prevalent in Travancore than in India as a whole, while in deaf-mutism and blindness India beats Travancore. Elephantiasis is essentially a disease of the lowlands, especially of the coastal tract, but all the other infirmities are fairly well distributed in the plains divisions. Males more than females are subject to the attack of these infirmities and the grown-ups more than young persons. The incidence of these infirmities is generally slightly less in municipal towns than in the other parts of the State. The number of persons afflicted with more than one infrmity is only 63, the combination of leprosy and elephantiasis affecting the largest number and that of deaf-mutism and blindness the next largest.
r..... The net increase in the number of insane persons during the last fifty years is $424 \cdot 9$ per cent. and that of persons afflicted with elephantiasis during the last thirty years is 148.3 per cent. A much larger proportion of children is afficted with deaf-mutism than with any other infrmity. The number of blind persons has been increasing from census to census and this infirmity is spreading faster among females than among males:

Of the total population, 29 per cent. have been returned as earners, 18.2 per cent.' Chapter XIII as working dependants and 52.8 per cent. as non-working dependants. The earners and working dependants. form the working population and their proportion is $47 \cdot 2$ per cent, of occapation. the total population. In 1921 the proportion was 37 per cent. only.. The increase in. 1931 is mainly due to the inclusion of women doing. manual work at house-keeping among working dependants which was not the case in 1921. The largest proportion of the working population, viz., 39 per cent., is engaged in agriculture and allied occupations. Taking the earners and working dependants separately, $5.5 \cdot 5$ per cent. of the former are engaged in agriculture and allied occupations, 18.6 per cent. in industry and only $1 \cdot 1$ per cent. in public administration, while of the working dependants 75 per cent. are engaged. in domestic service, 13 per cent. in agriculture, 8 per cent. in industry and the remaining four per cent. in other occupations. Of the total number of earners with a subsidiary occupation, 54 per cent. have agriculture as a subsidiary field of employment; the next most favoured subsidiary occupation being domestic service in which there are roughly 41 women for every man.

Unemployment both among males and females appears to be greater in Travancore than in other Indian States and Provinces except Bengal. The rapid growth of the population which has strained to the utmost the resources of agriculture, the chief occupation of the people, is the primary cause of unemployment in this State. Leaving aside children below 15 years, all women engaged in house-keeping and all boys and girls at school or college, it is seen that roughly 179,000 males and 321,000 females or in all 500,000 persons of 15 years and over are entirely unemployed, of whom 152,000 are literate and 348,000 illiterate. Generally, unemployment increases with literacy, though there are some exceptions, and it is lowest among the labourer classes who have the least number of literates among them.

Under the stress of economic necessity the Hindu castes generally disclose a rapidly growing tendency to give up their traditional occupations, the tendency being more pronounced among the educationally advanced castes, except Näyars and Nanjanăd Vellalas, than among the backward and illiterate castes.

If females below 10 years and above 55 years are excluded as being incapable of work and also those who are house-keepers doing actual manual work, the number of females engaged in other occupations both as earners and working dependants is 280 per 1,000 of the female population of the ages $10-55$. The largest number of women is employed in agriculture and the next largest in industries. The proportion of female to male earners in the different castes varies according to their social status. :The lower the status, the greater is the number of women working for their livelihood.

The number of persons returned as workers (earners and working dependants) under the various groups constituting agriculture is a little over 893,000 . The corresponding number in 1921 was 627,000 and the increase during the decade is 42 per cent. This large increase is due to the natural development of cultivation, particularly of special crops like tea and rubber, and also to the partition of tarwaid properties of the matumakkathayam families of Nāyars, Ilavas and Nānjanàd Vellàlas. The population supported by agriculture which includes non-working dependants also comes to about $2,768,000$ which is equal to $54 \cdot 3$ per cent. of the aggregate population. In 1921 this proportion was $51 \cdot 7$ per cent. only. In spite of this increase in the agricultural population during the decade it has not come to the proportion in India as a whole where it was 71 per cent. in 1921. Twenty per cent. of the land transferred in a year passes from agriculturists to non-agriculturists, naturally leading to an increase in the number of non-cultivating proprietors as well as a proportionate increase in the number of tenant cultivators. The area under cultivation, excluding land under rubber and tea, has not increased proportionately to the growth of the agricultural'population and the holdings are, therefore, getting sub-divided into small fragments. Of the total holdings in the 'State about 6 per cent. are less than 20 cents in extent, about 26 per cent. less than 60 cents, 38 per cent. less than one acre, 62 per cent. less than 2 acres, 87 per cent. less than 5 acres, 95.5 per cent. less than 10 acres and 4.5 per cent. 10 actes and 'over. If ten acres is considered to be the minimum size of an economic holding, only less than five per cent. of the holdings are economic.

Excepting Madras and the Central Provinces and Berar, Travancore has a higher proportion of agricultural labourers than any other Indian Province, evidently due to even the small cultivators here leaving the cultural operations to the Depressed Classes. The workers in tea and rubber estates have increased from 16,786 in 1921 to 71,159 in 1931. This abnormal increase is due partly to the enormous development of tea and rubber cultivation during the last decade and partly also to under-enumeration in 1921.

Fishing gives employment to over 39,000 persons showing an increase of 17 per cent. over the number in 1921. Fishing has great possibilities of development by the improvement of the methods of catching and curing fish and by the exploitation of the still untouched deep-sea fisheries. So also is the newly organized cashew-nut industry in which more than 8,000 persons are now engaged. Coir yarn industry is the most important cottage industry in the State and more than 126,000 persons are employed in it either as full-time or part-time workers. The number in 1921 was 102,634, the increase in the decade being 23 per cent. Of the workers, more than two-thirds are females. Rice husking is another favourite occupation of the females. Over 18,000 persons have been returned at workers under this occupation and of them more than 17,000 are women. The total number of persons engaged in industries according to the present census is about 351,000 which is equal to $6 \cdot 9$ per cent. of the aggregate population. The industrial population has
increased only by 7 per cent. as against an increase of $\mathbf{2 7 . 2}$ per cent. in the total population during the decade. Of 351,000 workers in industry, as many as 326,500 persons are engaged in cottage industries, and only the remaining 24,500 or 7 per cent. are factory workers.

Transport employs about 38,000 persons now as against 32,000 in 1921. In regard to transport the most noteworthy fact is the rapid development of motor transport. The number of persons employed in this occupation according to the present census is nearly 6,500 as against 925 im 1921. Traders, including earners and worling dependants, have increased from about 157,000 in 1921 to 177,000 in 1931, showing an increase of 12 per cent. during the decade. The number of persons engaged in public administration has increased from 12,800 to 16,700, and of these 411 are females, while in 1921 there was no female employé in public administration. Under professions and liberal arts, which include religion, law, medicine, instruction, letters, arts and sciences, the number returmed at the present census is 64,270 and at the last it was 56,800 , the increase during the decade being 13 per cent. The number engaged in instruction alone has increased by 47 per cent. from 14,400 in 1921 to 21,200 in 1931. The teaching profession now employs 3,272 women as against 1,819 in 1921 .

Twenty-mine per cent. of the total population aged five years and over are literate, Chapter $\mathbf{x}$ the percentage of literacy among males being 41 and among females 17 . In male literacy Literncy. Travancore ranks third among the Provinces and States in India, the first place being held by Burma and the second by Cochin State, while in female literacy Cochin stands first and next to it comes Travancore. The literates among males and females of five years and over have increased by 102 per cent. and 318 per cent. respectively during the last twenty years. The literacy figures of 1921 have been left out of consideration because of the patent inaccuracies in them. Of the urban population of five years and over 41 per cent. and of the rural population of the same ages 28 per cent. are literate. The highest proportions of literates arefound among the population 15-20 years of age- 53 per cent. among males and 27 per cent among females. Christians have the highest proportion of literates, viz, 36 per cent. of the population of five years and over, Hindus 27 per cent. and Muslims 14 per cent. Literacy is generally greater in places where. Syrian Christians preponderate than in other localities and it is least prevalent in taluks where the estate coolies form the bulk of the population. Female literacy is less in localities where the population is predominantly Tamilian than in places where Malayalis preponderate. There has been such a progressive increase in the proportion of female to male literates at the younger ages during the last twenty years that the Hindus and Christians have doubled their propartions of female literates, though the proportion of Muslim female literates has increased by only 57 per cenl.

If the different castes and communities are divided into three categories, namely, -Advanced', 'Intermediate' and 'lliterate', according as they contain more than 50 per cent., $10-50$ per cent. or less than ten per cent. of literates in the male population of seven years and over, it is seen that 33.7 per cent. of the Hindu population are "Advanced', 52.6 per cent. 'Intermediate' and 13.7 per cent. 'Illiterate', while in the case of Christians 59.9 per cent, are 'Advanced' and the rest 'Intermediate', and the Muslims are' entirely in the 'Intermediate' class. If female literates are classified on the same basis, 66.0 per cent. of Hindu females are 'Intermediate' and $33-9$ per cent. 'Illiterate', and the corresponding percentages among Clristian females are 96.3 and 3.7 respectively, while Muslim females are entirely "Illiterate': Of the total literate males 91.3 per cent. are literate in Malayalam and 8.7 per cent in Tamil, while the corresponding proportions of literate females are 93.6 per cent. and 64 per ceat. respectively.

English literates per mille of the population aged 5 years and over have increased from 15 in 1921 to 19 in 1931. 31 per 1,000 males of 5 years and over and 7 per 1,000 females of the same ages are now able to read and write English Cochin. Bengal and Bombay alone have a higher proportion of English literacy among males and Cochin alone has a higher proportion among lemales than Travancore. Of the different religions the Christians have the highest poportions of English literates, 41 per 1,000 males and 15 28 and 4 females of 5 years and over, the corresponding proportions among Hindus being 28 and 4. Aniong Muslims che male proportion is 11 and among females it is practically nil. Among Christians the Mar Thoma Syrians have the highest proportions, namely, 59 per 1,050 of both sexes, and 87 per 1,000 males.

Excluding the forest regions which are practically uninhabited, the average area and population served by each primary school in 1930 were $1 \cdot 7$ square miles and 1,704 respectively as against $3 \cdot 7$ square miles and 2,393 in 1911. The greatest progress in literacy is seen in the Northern Division and the least in the High Range. Male and female literates of the ages 15-20 have increased by 253 per cent. and 742 per cent. respectively during the last thirty years and the ratio of female to 100 male literates of the same ages has increased from 23 to 54 during the last two decades.

Under the conditions obtaining in Travancore all boys and girls of five to ten years of age may be treated as the population of school-going age that ought to be receiving primary education, and instruction in five classes (four classes in the Vernacular Primary School and Class 5 in the Vernacular Middle School or Preparatory Class in the English School) as the minimum required to acquire permanent literacy. In view of the higher proportion of children in this State than in British India 16 per cent. of the total population may be taken to be the correct proportion of the population of school-going age in Travancore as against 14 per cent. adopted elsewhere in India. On the above basis 26 per cent. of the boys and 50 per cent. of the girls of school-going age do not appear to have been attending school in 1930. It is also seen that only about 31 per cent. of the children of school-going age are likely to acquire literacy, the remaining 69 per cent. either not attending school at all or leaving school before they become effectively literate.

Obapter $X$ Lauguage.

Chapter XI Rellglon.

On the whole 29 languages have been returned, of which Malayalam is spoken by 84 per cent. and Tamil by 15 per cent. of the entire population. The increase in the Malayalam-speaking population during the last decade is equal to the recorded increase in the aggregate population, namely, $27 \cdot 2$ per cent., that of the Tamil-speaking population is 26.2 per cent. and that of persons speaking the other languages 48.7 per cent., the difference between the rate of increase of the persons speaking Tamil and other languages and that of the aggregate population being due probably to migration. The hill-tribes in Travancore seem to have no separate language of their own, but the words they use are of Malayalam or Tamil origin, though their endings are different and the pronunciation uncouth. About 80 per cent. of the Malayalam-speaking population are found in the Central and Northern Divisions and about 74 per cent. of the Tamil-speaking population in the Southern Division. The speakers of the other 27 languages constitute only a little below one per cent. in each of the Southern, Central and Northern Divisions and over five per cent. in the High Range. 99.4 per cent. of the aggregate population speak languages of the Dravidian family, those speaking Malayalam and Tamil constituting 99 per cent and the others, namely, speakers of Kanarese, Tulu and Telugu forming only 0.4 per cent. Nine of the vernacular languages included in the Indo-A Aryan Branch of the Indo-European Family are represented in this State and are spoken by 26,683 persons, and nine European languages have been returned by 1,371 persons.

Though there are 185 Tamil speakers for every 1,000 Malayalam speakers, there are only 87 Tamil literates to. 1,000 Malayalam literates, the disparity between the proportions of speakers and literates being due to Malayalis taking to education more largely than the Tamilians and to some of the latter learning Malayalam instead of Tamil at school.

Considering bi-lingualism in respect of Malayalam and Tamil, it is seen that where the preponderating mother-tongue is Malayalam, the proportion of Malayalis who could speak Tamil is very small and that the Tamilians who are in the minority acquire the habit of speaking Malayalam in much larger proportions. But where the preponderating mothertongue is Tamil the reverse order holds good. That is to say, the proportion of Tamilians who speak Malayalam is much smaller than that of Malayalis able to speak Tamil. With regard to other languages, Tulu, Konkani, Marāthi, and Western Hindi are combined more largely with Malayalam than with Tamil, Telugu with Tamil more than with Malayalam, and Kanarese more or less equally with either of them.

Hinduism, Christianity and Islam are the three main religions in Travancore. Of the aggregate population 61.5 per cent. are Hindus, 31.5 per cent. are Christians and 6.9 per cent. are Muslims. Travancore and Cochin differ from other parts of India in having comparatively smaller proportions of Muslims and higher proportions of Christians, and of the two, Travancore contains a smaller proportion of Hindus and a correspondingly higher proportion of Christians than Cochin. More than a fourth of the total Christian population of India is found in this State.

In the case of Muslims who are mostly traders, the proportion in the urban populatien is about double that in the rural population, while the Christians, who are generally agriculturists, are found in larger proportion in rural than in urban areas.

In the course of a little more than a century the Hindus including Tribal Religions have increased more than four times, the Christians more than fourteen times and the Muslims more than eight times, the largest increase among Christians being due mainly to conversions and to some extent to the high fertility of the Syriaa Christians, and the larger increase among Musims than among Hindus being practically the result of the higher fertility of the former.

The religion of the Primitive Tribes who come in contact with the people of the plains naturally becomes modified by the influence of Hinduism, and this process of Hinduization of the Primitive Tribes, coupled with conversions to Christianity, accounts for the gradual fallingoof of the numbers returned under Tribal Religions. In spite of the increase in the actual numbers of Hindus from census to census their proportion to the total population has been steadily falling due to the rapid growth of the other religions. Shenkotta and next to it Devikulam contain the highest proportions of Hindus, and excepting six taluks-all in the Northern Division - the population in the other taluks consists of more than 50 per cent. Himdus.

Christianity has made remarkable progress in Travancore. During the last 30 years Christians have increased by 130 per cent, and the Hindus by 54 per cent. only, and in the last decade the increase has been 36.8 per cent. in the case of Christians and 23.0 per cent. in the case of Hindus. The Syrian Christians who form 59 per cent. of the total Christian population of the State are found in larger numbers in the interior taluks of the Northern Division and in Thiruvella and Pathanamthitta taluks of the Central Division, while Hindus preponderate in the Southern and Central Divisions, in the, coastal taluks of the Northern Division and in the High Range. Various missionary bodies are at work in Travancore and are carrying on active proselytization mostly among low-caste Hindus. According to the figures supplied by the missionaries, the converts to Christianity during the last decade total not less than 100,000 . From the census-returns it is seen that the Nädär, Pulaya, Paraya (Sảmbavar) and Kurava castes have contributed about 70,000 of these converts, and the remaining 30,000 must have come from the Primitive Tribes and other low castes.

Muslims have increased by 30.6 per cent. in the last decade, the rate of increase in natural population being higher than among Hindus or Christians, but in no taluk do they constitute more than 16 per cent. of the population, and in as many as eleven taluks they constitute less than five per cent.

After dealing at length with the origin and development of caste in Northern Chapter XII and Southern India in general, the chapter proceeds to consider the origir and history of caste, Tribe the caste system in Keftala in particular.

Kersala which once formed part of the ancient Tamilakam was originally inhabited by a branch of the Dravidian stock Being cut off from the rest of the Dravidians by the Western Ghats, the inhabitants of Kerala developed a culture of their own. There was no caste system among them, though there was a priestly class to minister to their religious needs. The early Âryan immigrants to Kérala adopted many of the manners and customs of the local people, imposing on them some of their own in turn. The people were divided into groups on an occupational basis and each group subsequently developed imto a distinct caste on the analogy of the Āryan system. Whatever might have been the condition in the early past, Ketrala including Travancore is considered to be the most caste-ridden part of India at present. It is probably due to her peculiar geographical position and the comparative freedom she enjoyed from foreign invasions unlike other parts of India, so that the factors which contributed to the levelling up of differences between sections of the people did not operate freely in Kétalal. But changes have now set in and are proceeding vigorously and rapidly, and caste barriers are breaking down under the influence of the social reform movement which is now a common feature of all the castes and communities in Travancore. There is hardly any caste or community in the State without an association of its own for self-advancement in social and political spheres, and the fusion of sub-castes is a common creed of all such associations. Almost all the numerous sub-divisions that existed
among the major communities like Nayars and llavas in 1901 have disappeared. Though long-established social customs die hard and union for political purposes may not immediately lead to union for social purposes also, the fusion of sub-castes may very probably be followed by the fusion of the allied castes as evidenced by the attempts of the Hindu castes of the fishermen communities to unite themselves, perhaps for political purposes, into the Araya caste, and by the move towards the amalgamation of the washermen castes under the common name 'Varnavar.' The time, however, has not yet arrived when the people will be prepared to abolish the caste system altogether and accept an alternative classification either on an occupational or any other basis. Further, it is not feasible to adopt a system of classifying population by occupation, for, if the criterion be traditional occupation there are castes whose traditional occupation cannot be specifed and there are others who have discarded it ; and if, on the other hand, the classification is to be based on the present occupation, it will, even if it be possible, only create an atmosphere of urreality.

The castes in the lower rungs of the social ladder have begun to manifest a general desire to assume new names, and the motives that actuate them in this, when analysed, seem to be one or other of the following:-(1) The desire to rise in the social ladder. (2) The desire to remove the stigma attached to the old name. (3) The desire to be differentiated from a lower caste which has adopted the name of the higher caste. (4) The desire to restore an ancient name lost in course of time by fortuitous circumstances. Over 4,000 Hindus have refused to return their caste, but the proportion is only 13 in 10,000 . With the vast majority of the Hindus caste is still a live question.

Nearly 500 Hindu castes have been returned, of which only 77 have been shown separately, the others being clubbed together and shown under minor castes. Hindus have been broadly divided into three main castes, namely, Brahmans, other Hindus and Depressed Classes, these constituting respectively a little over 2 per cent., 41 per cent. and 57 per cent. of the total Hindu population. Unlike in the previous censuses when Brahmans were classified by their mother-tongue, they have been divided in the present census, as in other parts of India, into two primary classes, namely, Pancha Drâvida and Pancha Gauda. Maharāshtra, Ändhra, Drâvida and Karnâtika Brahmans are included in the former class and Gauda Saraswath Brahmans in the latter, while Âryapattar, Nampūtifi, Pōtti and Tulu Brahmans who are of doubtful affinity are shown next to Pancha Drâvida but not of it.

The Depressed Classes, according to the definition prescribed by the Census Commissioner for India and accepted by the Indian Franchise Committee, are the untouchables who are denied access to the Hindu temples and who are supposed to cause pollution by touch or within a certain distance. The numbers of the Depressed Classes in Travancore who come under the above category constitute 57 per cent. of the Hindus or 35 per cent. of the aggregate population of the State.

Thé Primitive Tribes are fast losing their primitive religion and customs. The opening of a large number of estates in forest regions has provided facilities for the tribes to come in contact with the men of the plains. Some of them are even deserting their habitations in the forests and are migrating to the plains to earn their livelihood and are thus brought under the influence of the Hindus and the Christian missionaries.

28 per cent. of the Hindu population of the State are makkathayis, 30 per cent. are marumakkathayis and 42 per cent. including llavas, Krishnanvaka and Nánjanid Vellalalas are followers of mixed or doubtful system of inheritance.

Excluding Europeans and Anglo-Indians who together number 1,377, the population of Indian Christians is $1,603,098$ of whom 948,514 are Syrian Christians. About 77 per cent. of the Indian Christians other than Syrians have given their caste or tribe, which shows that the large majority of them desire to have this information recorded.

Though, strictly speaking, there is no caste among the Muslims, there are a number of tribal, occupational or territorial groups who observe certain restrictions on intermarriage. These restrictions are, however, dying out as a result of the propaganda carried on by the educated members of the community.

In Appendix I is given a description of the Primitive Tribes found in Travancore, Appendir I their social and religious customs, and the effect of their contact with civilization. It first The Primitive deals with the geographical distribution of the tribes and their peculiar physical characters, Tribet such as colour of the skin, stature, head, nose, etc. The manners and customs of the tribes are then described. The various clans found in different tribes and the system of cousin marriage prevalent amongst them are next dealt with. The types of buildings and the materials used in their construction, the weapons used by the tribes, the systems of agriculture followed by them, their village organizations, the various traditions of origin current amongst them, the methods of disposing of the dead, the megalithic monuments erected by their ancestors, their ideas as to the sun, the moon and the natural phenomena, like earthquake, eclipse, thunder, lightning, rainbow, etc., are also described. Lastly, the disintegrating influence of civilization on their primitive life and customs, the causes of their decline in numbers and the possible remedies for depopulation are set forth as briefly as possible.

The Depressed and the Backward Classes are specially treated in Appendix IL. Ippendix II The distinguishing features of these two classes and their disabilities, social, educational and The Depresesed political, are dealt with. The early attempts made by the Government of Travancore and and the Backthe measures adopted by them in recent times to ameliorate the condition of the depressed ward clamsea. and the backward communities, the work of the non-official agencies, like the missionaries and the Humanitarian Society, in the same direction and the efforts made by the internal organizations of the communities, such as the S. N. D. F. Yogam, the Saddhu Jana Paripalana Sangham, etc., towards self-advancement are all described briefly.

In Appendix III are described the processes, the present condition and the economic Ippendx IIII aspect of some important industries of the State, which are declining chiefly on account of The dealining the advent of cheap machine-made articles from the West, and the ignorance, poverty and industrica. lack of organization of the local craftsmen. The industries dealt with are silk weaving, bell-metal casting, metal-mirror (Áranmula kannādi) making, steel industry, screw-pine mat weaving, wood seasoning, palm-leaf umbrella making, preparation of coconut-jaggery and palmyrah sugar-candy.

The present census of wealth, the first of its kind conducted in Travancore, and appendix Iy perhaps in India, is not as comprehensive as intensive economic surveys of typical villages. The per sons who enumerated the population took also the ceasus of wealth of the principal condition of earners in the State. The census covered a wide range of questions regarding the capital the people. wealth, size of holdings, income and indebtedness. The figures collected and tabulated give only the private wealth, income and indebtedness of the people of the State. All public and socio-private wealth has been excluded from the enquiry. The number of earners in the economic census falls short of that returned at the population census by 8 per cent. The margin of error in the capital wealth is about 8 per cent., while that in income and indebtedness may be about 25 per cent. A detailed analysis by caste, age or sex has not been attempted owing to the want of accurate data. The distribution of wealth among the major communities has, however, been discussed with the help of the figures collected from a random sample of the earners selected on a mathematical basis.

The total value of the possessions of the people of the State, if necessary allowance is made for omissions, is Rs. 193 crores, giving an average per cabita wealth of Rs. 379. About 79 per cent. of this wealth consist of land, 10 per cent. of houses, 5 per cent. of movable properties and live-stock and 6 per cent. of investments. The distribution of wealth is not so unequal in Travancore as in foreign countries. As regards the ownership of wet and dry lands the highest proportion of earners who own them is found among Nayars, though the average extent of land owned by them is small owing to the disintegration of tarwad properties. In all the separate items of capital wealth Brahmans occupy the highest and the depressed Hindus the lowest rank. The Syrian Christians and Nayars form a similar group, and the Ilavas and other Hindus another similar group. The position of the Muslims varies in regard to different items of wealth. Of the administrative divisions, the Northern Division is the richest in point of wealth, and of the taluks Minachil is the richest and Nedumangad the poorest. The average size of agricultural holdings in the State is 2.62 acres. About 38 per cent. of the holdings are below one acre, 87 per cent. below five acres and 95.5 per cent. below 10 acres. Ten acres is the minimum size of an economic holding in this State and more than 95 per cent. of the holdings are, therefore, uneconomic. The proportion of agriculturists to earners is the highest among Nayars. A very large majority of Brahman land-owners have leased out heir lands. Though the
passing of the Nāyar and Ilava Regulations has led to an excessive sub-division of holdings, it is probable that many, especially minor children of the same parents, still hold their shares together.

The total debt according to the census is Rs. 16 crores and. if allowance is made for omissions, it will stand at Rs. 20 crores. $69 \cdot 5$ per cent. of the debt is secured on land. 26.6 per cent. being mortgages with possession. The average per capila debt comes to Rs. 40. It is seen that there is a close correlation between debt and prosperity. The average debt is the highest among Brahmans and least among the depressed Hindus. From the figures furnished by the Registration Department regarding alienation of land, it is seen that Nayars are losing and the Christians are gaining land steadily.

The total private income per annum according to the census is about Rs. 20.9 crores and, if allowance is made for an error of 25 per cent., the total income will amount to Rs. 26 crores and the per capita income will then be Rs. 51 . This income is based on the prices current in the year 1931 when the economic depression practically reached the climax, causing a decline of not less than 40 per cent. generally in the prices of commodities. If normal conditions had prevailed, the per capila income would have been Rs. 85. The distribution of income among the earners is not as unequal as that of capital. Of the different communities, it is seen that Brahmans, Syrian Christians and Muslims have high incomes, while the depressed Hindus have the lowest, Nayars, Ilavas and other Hindus occupying an intermediate position. The proportion of earners following occupations other than agriculture is least among Nayars. Of the divisions and taluks, places having more wealth generally have higher income with one or two exceptions caused by the presence of large towns.

The average daily wage of an agricultural labourer is 6 annas and the average working period per day varies from 5 to 8 hours. The wages of industrial and skilled labourers are higher than those of agricultural and unskilled labourers.

Appendiz Y
The cattle ceanous.

The results of the cattle census are set forth in Appendix V. Bovine cattle in the State have increased by 17.5 per cent. during the last twenty years, the whole increase being accounted for by young oxen. Cows have increased by 13.6 per cent., male buffaloes have decreased slightly, but the young stock have increased so that there is very little variation in the total number of buffaloes. Sheep and goats have increased by 22 per cent., ploughs by 9 per cent. and carts by 30 per cent. The number of cattle per 100 acres of net sown area is 48 and the total area on which they are supported is 197 acres as against 67 cattle and 213 acres in British India. More than 70 per cent. of the available grazing land, being reserved forest, is practically out of the reach of the ordinary cattle, and the number of cattle in the State is thus too heavy a stock for the grazing that is available.

The average area of rice land cultivated per yoke is $4 \cdot 1$ acres in Travancore as against $4 \cdot 8$ acres in Tanjore where rice is the principal crop as in this State.

74 per cent. of the cows and 75 per cent. of the she-buffaloes returned were dry at the time of the census, the proportion of dry to milking animals being about three to one. The normal proportion should be one dry to two milking cattle. About 73 per cent, of the cows and 88 per cent. of the she-bufaboes now existing in the State are of such poor milking quality that they do not deserve to be kept at all. The consumption of milk per head of population is hardly one-third of what it is in British India which in itself is much less than that in Western countries. It is only $1 \cdot 3$ gallons per head per annum, though the position is slighty better in towns like Trivandrum.

The number of cows per breeding bull is 132 in this State as against 84 in Madras. The proper ratio being one bull for every 55 cows, Travancore should have 6,500 bulls as against 2,717 which she has. Not only is the number of bulls insufficient but their quality also is very inferior.

On account of natural difficulties, such as a heavy rainfall and the comparative poverty and insufficiency of pasture lands, Travancore is unsuited to the breeding of good cattle, and the task of improving them is consequently not easy. It has nevertheless to be faced, for on cattle depends the prosperity of the agricultural population who forms more than half the inhabitants of the State.

## INDEX








[^0]:    - Travancore Censas Beport for 1901, Part I, p. 63.

[^1]:    * From the speech of Bir George Schnater at the Legislative Ansombly in introulucing the Indian Budget for 1931-82.
    t Travancore Administration Report for 1106 M. E. (1930-1931 A. D.) p. 170.

[^2]:    - Vide paragraph 140, Cuapter IV.

[^3]:    * If $f_{1}$ be the number of ohildren born to 1,000 wompn aged $17 \cdot 5$ in one year., it is nssumed to be the fartility rate at the ages 15-16, 16-17.........19-20 also. If fa be the fertility rate at $22-5$ it is regarded as the fertility rate at $20-21,21-22 . \ldots . . \ldots . . .24-25$. Similarly $f 3$ is the fertility rate at the different ages in 25-30 group, $f_{4}$ for $30-35$ groap, ts for $35-40$ groap and fs for $40-45$ group. If 1,000 women atart their married lifo to-day they will have 5 , $t_{1}$ childran in the first five yoars, $5 \in$ childrea in the nert five yearamo.........es ........ 5 fs children in the last five years.
    t Nemaholme, Fital Statiatica, Now Edition p. 101.

[^4]:    - Whipple-Tital Slatistics, p. 410.

[^5]:    * A. M. Carr-Saunders, The Population Problam, p. 104.
    t. H. G. Duncan, Race and Population Problem; p. 304.

[^6]:    - Carr-Sannders, loc. cit. p. 103,
    $\pm$ N. S. Phadke, Sox Problem in Indla; p. 208.
    $\ddagger$ Mid p. 298.

[^7]:    - Instructions for the preparation of Chapter I of the Census Beport, 1931.
    $\ddagger$ Joseph Tenenbsum, The Ridule of $86 x, \mathrm{p}, 92$.
    $\ddagger$ Edrard M. East, Llankind al the Croseroods. p. 70.

[^8]:    - Beport of the Tramanoce Banking Buquiry Oommittee p. 13.

[^9]:    1. The figures given in columns 2 to $i$ were fornished by the Lend Bevenue Department
[^10]:    Wore:-Since the boondaries of the natural divisions have been altered at chis censos, figures showing the natoral poperation

[^11]:    * The Census Report of Bebgal, 1921, p. 126.

[^12]:    - As the table showing distribition by aonual age-periods has not been compiled for the present oensus, I have ntilised Sobsidiary Tsble i to Chapter V of 1921 Report for the estimation of accidental errors.
    $\dagger$ The order of preference for Indis is gived at page of the Actuariel Report for 1921.
    \$ Whipple's Vital Statistics, p. 180.

[^13]:    - The Addandam to the Fifth Note on the Census of 1901 issued by Sir Herbert Risley describéa
    the mathod of working ont the mean age as follows:-
    "In order to ascortain the number of years lived by the afgregate population we muat firat determine the total number of perwons living at the close of esoh age period. The gum of these totals multiplied by 5, the differenoe of the age dirisions, and raised by 21 times the number of pereuns in that sex or oivil condition gives the number of years lived. The mean age is obtained by dividing this last number by the number of persons living."
    Another method which gives practically identical resulte consista in multiplying the middle value of the groups $0-6,5-10,10-15$, eto. by the numbers in eaoh group, adding the producte and dividing the result by the total population dealt with. The oaloulation in this oase can be implitied by taking some arbitrary point, say $22-5$ as origin and multiplying the duriaticns of ths middle points of the above groups (after redacing the scale by $1 / 5$ ) by the numbers in each group, tsking into oongideration the sigas of the deviations. For details of this method refer to Chapter YII in "A First Courne in Statistics". by Jones.

[^14]:    * Newsholmes, Fital Syafintics, (New Editions p. 245.

    ب Report of the Fourteenth Geveas of the Cnited States, Vol. 11 p. 148
    TThe mothod of calculating the median age is described in Jones' A Firut Crurte in Btatistics p. 24.

[^15]:    * The figures for India and the United Kingdom are those of 1991 censua and the figurea for othar countrien are those given at p. 253 of The Mechanism and Physiology of Sex Detrmination by Richard Goldechmidt, (Tradalated lig William J. Dakin.)

[^16]:    *The figures for Englend were taken from the zeturns of the Begistrat-General tor 1918 quoted

[^17]:    * Richard Goldsohmidh The Mechanism and Physiology of Sean Determination, translated by William .T. Dakin, p. 252.
    $\dagger$ Ibid p. 253 .

[^18]:    - Richard Goldschmidt loc. cif. p. 217.

[^19]:    *This does not include $\mathbf{2 4 0}$ married women retarned as having given birth to still-born children only.

[^20]:    Rabindranath Tagore-"The Indian Ideal of Marriagen in The Book of Marriage, edited by Count Hermana Keysering. p. 113.
    $\dagger$ Travincore Oensü Report 1901, p. 350.

[^21]:    - F. Maller-Lyer. translation by Isaballa C. Wigglesworth, The E'rolution of Modern Marriage, p. 128.
    $\dagger$ Trarancoro Census Report, 1901, pp. 328-330.

[^22]:    - Joseph Tenenbaum, The Riddle of Nex, p. 150.
    † E. A. Giait, India Cenem Report, 1911, p. 243 .

[^23]:    * E. A. Galt, India Oensue Report, 1011, p. 239
    †J. D. Mayne, $A$ Traatise un Hindy Lavo and Uange, p. 127

[^24]:    - R. A. Gait, loc. cit. p. 255.

[^25]:    " Leo Frobenius "Marriage and Matriarchy," in The Booh of Marriage, edited by Ount Knymuling, p. 00.

    + Gilbert Slater, The Dravidian Element in Indian Cullura, pp. 182 and 188.
    IF. Muller Lyer, loc. cit. p. 166.
    H. N. Dickson, Olimate and Weather (Hiome Univenity Library Bericn) pp. 232-234.

[^26]:    * Rdward Syron Reuter and Jesple Bidway Runner, The Eamily, p. 87.

[^27]:    Among marumakkathāyam communities divorce was once common but is now becoming rare. Among other communities it has always been exceptionally rare or almost nonexistent. There is no separate column in the schedule to record the number of divorced persons and they are, therefore, included with the widowed.

[^28]:    - Travancore Ocnsus Report, 1901, p. 179.

[^29]:    * J. D. Mayue, A Treatise on Hindu Lauc and Urctge, p. 83.

[^30]:    - Ccnsus Report, India, 1921; p. 154.

[^31]:    N. S. Phodke, Sex Problem'in India, p. 77.
    † Ibid, p. 82.
    $\ddagger$ India Cenigus Refort, 1911, p. 270.

[^32]:    E. (j. Younker, Insanify in Every-Day Prartier, Fourth Fdition, p. t.
    † J. T. Marten, Oenava Iteport of India, 102I, paragrajia 170.

[^33]:    - E. G. Younger lar. rit. pp. 6-7
    + Census Heprat of India for 1 g21, paragraph 172.
    

[^34]:    NOTE :-The percentages of ifternter and literates in Engliel to the total population are given in ifalica below the alrolute figures.

[^35]:    NOTI $:-T h e ~ G i g a r e s ~ f o r ~ t h i s ~ t a b l e ~ w e r e ~ t a k e n ~ f r o m ~ t h e ~ T r a v a n c o r e ~ A d m i n i s t r a t i o n ~ B e p o r t s ~ a n d ~ t h e ~ A d m i n i s t r a t i o n ~ R e p o r t s ~ o f ~$

[^36]:    * J. T. Marten, The Report on the'Comous of India, 1921, p, 108.

[^37]:    * Sir Herbert Risley; The Peuple of India, p. 220.
    f Ibid p. 221
    I 1bd p. 224.
    g lbid p. 223 ?

[^38]:    *Govinda Das, Hindwism, Pp, 78-78.

[^39]:    - Chinth mani Thirthuknr, Oaxfe Systean axd Vodinta.
    + fianga Prasid, The Oaste Syptem.
    $\$$ Mid pp. 1 and 2.

[^40]:    * Ganga Prasac, loc. लifo p. 8.
    $\uparrow$ R. O. Dutt, A Hitory of Oiritization in Ancient India, vol. J. p, 220.

[^41]:    Gilbert Blater, The Draridian Element in Indian Owlure, pe 10.
    $\dagger$ 1bid pp. 79-81
    $\pm$ P. T. Srinivasa Iyengar, History of the Tamils, p. 3.

[^42]:    - 1bid, p. 139.

[^43]:    - Hakkathdyam or patrianchy is the syatem under which descent is reckoupd in the male line and a man's property is inherited by his sons. Vatumakhathayam or matriarcky is the system under which descent is reckoned in the femsle line and a man's property is inherited not by his sons but by his giater's children.

[^44]:    ${ }^{-}$M. Srinivasa Iyengar, Tamil Studiet, p. 87.

[^45]:    * P. T. Srinivasa Iyengar, loc. ciu, p. 91.

[^46]:    4. Dasrte Barbosa, $A$ Description of the Ooasts of East Africa and Mababar in tho Brginning of the Sirtecwit Contury, Translated by Stanloy; p. 124.
[^47]:    * Sir Herlert Bisloy, The People of India, P. 163.

[^48]:    *Gupinatha HaO, Trarancore Archacological Series, vol. II, p. ${ }^{2} 3$.

[^49]:    * Beport of the Indisa Franchise Oommittee, vol. I, pp. 110-111.

[^50]:    *Judgment of the High Oourt of Travancore in Sceond Appeal No. 70 of 1103, Travancore Lavo Journal. Vol XIX, p-30.
    | Trarancore Lasp Jowrnal Vol. XXI, pp. 851-854.

[^51]:    - Travancore Ocnaus Report, 1921, p. 89.

[^52]:    William Crooke, Introduction to, Ankhrpology.sf the Syrian Ohriatians by Rao Bahadur I. K. Anantha-
    krishna Iyer.

[^53]:    (1) 3. Vidal De Blache, the Princoples of Hwman Geography, p. 173.
    (2) E. O. Semple, The Infleence of Geagraphical Enciromenent, p. 626
    (3) E. O. Serople, loc. eit., p. 39.
    (4) E. O. Semple, loce eit, p. 34.
    (5) Sir Herbert Risley, The People of India, p. 31.
    (6) H. G. Demenn, Race and Population Probleme, p. 35.

[^54]:    - Sir Herbert Risley, loo. cit., p. 23.

[^55]:    A man's property goes to his sister's sons. Women do not inherit property. Vizhavans are nomadic agriculturists and shift their cultivation annually. Rice is their staple food, but they supplement it with wild roots and tubers which they dig out with their digging spud. They are experts at spearing fish. Vizhavans worship Sástha and make offerings to the spirits of ancestors, before abandoning the land which they have

[^56]:    * R. V. Ransel, The Tribes and Oastes of Oentral Procinces, Vol I, P. 144

[^57]:    E. Fracer, Polklore in the OUd Testament, Vol. I. p. 120.

[^58]:    - Westermarck, E. Tho IVistory of Human Marriage, Dp. 107-103.

[^59]:    Malapulayan's huts are 15 feet.by 12 feet in dimensions and are two-roomed without windows. They are made of junglewood, bamboos and potha grass. - Bambootrellis forms the wall which is plastered with mud. The floor is raised, and the huts face east. The summer encampments of Vizhavans are on the banks of the Idiyara river and are of a temporary nature. They have merely a lean-to-roof, one side of which touches the ground and the other is raised by reed-stakes. Here they remain from November to March, when they move on to their new clearings and put up more substantial buildings. These are two-roomed and are 20 feet long and 15 feet broad. They are made of junglewood and reeds and are thatched with reed leaves. The dwellings of Úălis are of the same pattern as those of Kañikkàr and Muthuvans, but, as they live in high jungle, they have also tree-houses where they spend the night for fear of wild elephants. They are built upon trees at a height of about 50 feet from the ground A bamboo whose side shoots have been cut of serves as a ladder. The roof is thatched with reed leaves and the walls are made of bamboo thatties.
    45. Malapantarams, being in the hunting stage of civilization, are the poorest in meapons used their equipment of weapons. Those living in Rani and Manimala Ranges ordinarily by the Rrimitive possess only a wooden digging spud. By their contact with low-country men, some of Tribes. posems only a wooden digging spud. By their contact with low-country men, some of animals and are helpful to them for their existence in the jungle.
    46. Känikkarr, in common with other hill-tribes, use the bill-hook for a variety of purposes. It is sharpened on one surface of its cutting edge. The handle is made of wood and is fastened to the blade by means of a pin. Kinikkar use the bill-hook for loosening

[^60]:    * E. C. Semple, tor, cil., p. $\mathbf{5 3}$.
    + P. Vidul De Blache. loc, cil., p. 62.

[^61]:    Ward and Conner, Memoir of the Surrey of the Trucancore and Cuchin States, Vol, Y, p. 41.
    个 W. O. Smith, The Ao Nage Tribe of Assam, P. 158

[^62]:    * N. Subramony Aiyer, The Traerncore Ocnous Repert, 1501, p. 3:0.

[^63]:    - M. Srinivasa Iyengar, The Tamil Studies, pp. 45-46.
    †4. H. Keane, Man, Past and Pretont, p. 169.
    IR. P. Chunde, The Indo-Iryan Race. Part I, p. 5.
    §4. H. Keane Introduction to tha Oochin Tribes and Cautes:

[^64]:    - D. A. Maciedizle, Indian Mutheand Legends, Invoduction pp, xxxil-xxxill,
    | M. Brinifasa Iyengar, luc. cul., po 89.

[^65]:    * V. Ragachari, Prehioturic Iudia, p. I11.
    + E. C. Jamer, An Introduction to Anthropology, p. 148.

[^66]:    * E. O. James, loc. cit., p. 149.
    $\dagger$ Fergusson, Rough Slowe Monumenta, po 465.
    $\ddagger$ Bers Mateer-Natire Lifo in Iravancoro.

[^67]:    © T. Penry - Mfagalithic Oulture of Indonasia:

    + Mewbigin-Mrodern Geograghy, pp. 203-204.

[^68]:    * E. B. Tylor, Primitise Oultwre, Vol L, po 1.
    $\dagger$ G. A. Dorsec, The Nature of Mam, p. 83.
    IT. A. Jogce and N. W. Thomas, Wormen of $1 \dot{l}$ Nations, p. 8.

[^69]:    - W. O. Smith, loc. sit, pp. 20t-205.

[^70]:    ? Pitt-Bivers, The Olash of Owliwre and the Contact of Races, p. 268.

[^71]:    * J. H. Hutton, Presidential Address to the Sretion of Anthropology, Indian Sicirnce Ounyrema, 10a7.
    † S. H. Doberts, Population Problene of the Pacific, p. 103.

[^72]:    ${ }^{\text {-F Por the mathematical juatification of this method see Bowley's Elements of Blatistich p. } 332 .}$

[^73]:    - The error is the ratio of the difference between the obtained and true values to the obtained value.

[^74]:    * If the owners are arranged in the ascending order of the area of the land in their possession, the extent owner by the persof nt the middle point is called the median, that owned by the persun midway between the lower limit and the median is called the lower quartile, and that owned by the
    persos midway beween the median and the opper limit is called the upper quartle persos midway beween the median and the opper limit is called the upper quartile.

[^75]:    * Beport of the Travancore Banting Rnquiry Committee, p. 46.

[^76]:    This includea the wages of agricultoral labourers also which should, strictly speakisg, go under income
    from caltivation.

[^77]:    * Keport of the Indian Statutory Comuisajon, Vol. I, jarn 374.

[^78]:    

[^79]:    * Report of the Royal Ommisolon on Agriculture in India, p. 101.

    1 Ward and Oonner, loo. ait, p. 80.

[^80]:    * Report of the Royal Commission on Agriculture in Ivdia, p. 239.1

