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**NATIONAL SYSTEM
OF
INDIAN ECONOMICS**

**(With a Foreword from Sir Provash Chunder
Mitter, Kt., C. I. E., M. L. C., Ex-minister
to the Government of Bengal)**

Jatindra Nath Mitra M. A.

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Author's Preface

In this book nothing original has been attempted. I have tried to collect some facts together to make a full analysis of present Economic condition of our Country with a view to ascertain the future attitude to be pursued by the nation. I shall consider my labour well spent if the book serves this original purpose in any way. Want of time and leisure did not allow me to go through the proofs very carefully, so some printing mistakes have crept into. I hope the Public will excuse me for this fault of mine. My best thanks are due to my friends Lieutenant Bijay Prosad Singh Ray M.A., B.L. of Chakdighi and Babu Krishna Chandra Seal of Serampore, who helped me with valuable suggestions.

20th Feb, 1926

Jatindra Nath Mitra.

To

**The Hon'ble Sir Bijay Chand Mahtab, G. C. I. E.,
K. C. S. I., I. O. M.,**

Maharajadhiraja Bahadur of Burdwan

This humble book

IS

Most respectfully and gratefully dedicated

by

the Author

FOREWORD

I have perused with great interest Mr. Jatindra Nath Mitra's book on "National System of Indian Economics." It gives me genuine pleasure to respond to his request to write a short Foreword to his book. Sound and informed opinion on Economic questions is always desirable for all countries. Such opinion is specially important for the welfare of India at the present moment and the importance, I am sure, will grow from more to more as public life in India develops and as power of the representatives of the people increases as I hope it will at no distant time. Members of our legislatures as also of other local bodies have often come to decisions on important Economic questions. Many of these gentlemen are busy men. Some of them have their special interest in particular subjects and they may not have the time or the inclination to study economic problems by an examination from independent sources. Then again we have a rapidly increasing section of the public who are taking a keen interest in economic questions affecting public weal. To men of these classes and others a handy book like this is sure to prove useful.

There is yet another aspect. Due to a variety of reasons Indian economic problems have many points of difference from those of other countries and deserve a separate consideration. India is mainly an agricultural country but unlike some other agricultural countries her density of population in rural areas is high. The problem in some of these other agricultural countries is to find men to develop their agricultural resources, whereas the problem in this ancient land of ours more often than not is to find means of subsistence for our dense and vast population from our limited agricultural output. India is a land of small holdings with poor ignorant cultivators who lack in organisation whereas some of the modern agricultural countries like Canada, Australia, the United States of America or Argentina have agricultural farms on a generous scale run by individuals of education who do not lack in capital and having education and capital at their back have little difficulty in organising themselves. Economic problem in such countries stand on a footing greatly different from those of India. Increase in the density of population in some modern countries has led to the establishment of large industrial towns and increase in trade and commerce which follow in the wake of the establishment of such towns

whereas in India such increase in the density of population in vast areas has led to a further subdivision of her small original holdings and in many cases to sub-infeudation on a large scale. There are yet considerable localities in India where exchange of commodities and bartering on a limited scale is more often the rule than the exception and where payment of cash as price for commodities is not wholly universal. Due partially to want of organisation, partially to force of tradition and usage and also to other causes competitive price and even competitive rent are unknown commodities in many parts of India. The present political constitution of the land, the racial issues, the structure of society including caste system and caste occupations in various stages of disintegration and want of any organised banking for internal trade and commerce have all contributed to the difficulties of the study of economic problems of India in her present transitional stage and have all tended to accentuate the difference between India and other modern countries. As economics is a science depending largely on observations and inferences from facts and conditions obtaining in a particular country I always held to the views that perhaps in our studies of Indian economic problems we have been

too much obsessed with ready-made and convenient theories based on observation and facts obtaining in other countries with conditions fundamentally different from those of our own and have often paid too little attention to a study and consideration of our own condition. From these points of view a book on Indian Economics based on observations of conditions obtaining in India ought to prove useful.

In all countries economic problems should be approached from the dispassionate point of view of a student and a seeker after truth and the student of economics should struggle against mixing up, however natural it may be to do so, economics and politics. If this is true of all the countries it is all the more true of India specially in her present stage of development. Unfortunately we find in India a tendency both amongst European and Indian writers on Indian economics to mix up politics and economics and unfortunately also racial issues. In the very interest of sound economics as also of politics it is very desirable that the study of these important sciences should be kept as distinct as possible although it is undoubtedly true that they are intimately inter-connected.

Mr. Mitra has approached his subject with

commendable industry, has discussed questions with skill and marshalled his results in an interesting form. The great merit of his book lies in his attempt to bring together within a short compass many important and some well-known facts about Indian economics. I hope his book will be studied by a large circle of readers and that others will come forward to supplement his work. I trust it will have the effect of stimulating interest in India economic questions and will spread more widely a knowledge of this all-important subject. To my mind Indian economics is a subject which deserves the careful study of quite a large number of seekers after truth and when such workers have finished their spade work I trust some master mind at a later stage will evolve principles and deductions which will leave an enduring mark in the study of world economics.

It is but natural that I find in places views expressed in his book with which I do not agree yet what I like in the book is the earnest efforts of the author to marshal his facts dispassionately and with the spirit of a true student.

Provash Chunder Mitter

INTRODUCTION

Separation of Economics from Politics. It has been generally a common practice with us not to set any boundary marks between the two branches of sociology—economics and politics. The boundaries of each, it is true, overlap those of the other and in fact, each of them, to a great extent, is dependent upon the other ; but for practical purposes, the aims of the two sciences must be kept distinct only to avoid confusion and side issues. When we make a demand for a system of progressive self-government on the colonial pattern in India, this demand falls, of course, within the jurisdiction of politics ; but all questions relating to tariff-board, currency and exchange fall undoubtedly under economics ; but there are

some subjects like economic production and consumption, national growth and well-being, the treatment of which must be made from economic point pure and simple, but for argument's sake, a tinge of politics is generally mixed up with and thus the whole subject is rendered controversial from end to end.

Economics generally deals with the well-being of a nation and politics with the constitution. The two are dependent upon each other as in a well-constituted state, the well-being of the nation is easily attained ; so conversely, when the national prosperity is got, the constitution then needs to be re-shaped for the further advancement of the community. Thus Politics helps Economics and Economics also helps Politics ; the effect of one upon the other is reciprocal.

For practical purposes therefore when dealing with economical matter pure and simple, it is better to keep in view the economic theories separately as politics involves many psychological and controversial matters because the science of Politics is still in infancy, whereas the surmises of Economics have become more scientific and less controversial and very often economic truths in exactitude resemble to mathematical formulas and that is why if these economic truths can be

treated separately, the subjects thereof will be rendered consequently less debatable and more convincing. As for example, if we can prove economically that the growing of cotton in India is an economic necessity and though the cotton industry has passed its infancy yet, it requires protection; the side issues will be less confusing and more convincing and the foreigners who would admit the logic of our arguments would, no doubt, make no hesitation to accept our statements also. But if this question be made a racial one that we should buy no fabric from outside India, the question of race prejudice will come foremost and as a result of which much misunderstandings and heart-burnings would creep into our politics and which would ultimately end in our national boycott and mutual hatred.

Is India a continent ? A favourite maxim has been with the foreigners to prove that India is not a country but a continent. They assert that diversity of races and languages in India is immense and the country is also physically so shaped that it could not but be a continent. The similarities which are found they say are only broad generalisations and very common to any continent. The type of Hinduism which binds the different provinces together is like

Christianity which supplies all Europe a common platform to meet and act together and in fact, the Crusade of the Middle Ages was organised and conducted on this bond only and as a consequence, Europe was able to rise up as a man and fight against Turkey for centuries as India did when Mahomed of Ghajni or Mahomed of Ghorî invaded her. Customs and manners differ from one province to another, till they come to differ in a diametrically opposite manner in two provinces situated in two extreme borders. To all this, the philosophical historian of India says that despite all these disunions and discords ; unity still exists and it is the bond of religion. This religious bond is all-permeating and not a superficial one like that which exists in Christian Europe. He further adds that though the language differs from province to province but one day all India had a common language in Sanskrit ; the Prakits or the provincial tongues were only the off-springs of that mighty language now dead. But apart from all these considerations, it is an admitted fact that India is a completely separate geographical entity. Physically, it is a self-sufficient country, and in fact, a continent ; as it can produce within its borders all the articles which its inhabitants may require either for

necessary or conventional purposes. Continent in fact, that here we have extremes of climate ranging from the Artic coolness down to African heat and so the composition of soils also naturally differs. The English fruits like apples, oranges, black-berries etc, grow amply in the Himalayan orchards and the produce of the tropics is grown profusely in the Rajputana deserts. If, under all these considerations, India be considered a continent, I see no reason why not to accept the assertion only with a limitation to the fact that the continent of Indis is a separate physical entity and its natural boundaries are so distinct and clear as no where to be found in the world.

This separate entity has been a source of weakness to India in former times. As it was completely able to depend upon itself without any help from outside,—nay, its isolation proved a source of its unmeasurable material prosperity which tempted nations in a less favoured country situated near it to invade only to partake a share in its well-being. This fact is so predominant in history that though India was conquered several times by the tribes from the Central Asia, it, in fact, rarely became subjugated; rather, more properly speaking it subjugated its conquerors in spirit. The victors as soon as

they settled in India, became conscious of its fullness of material resources and therefore, thinking any connection outside unnecessary became mixed up with the sons of the soils, gradually allowing themselves to be Indianised.

This permanent truth is still true to-day. India can be united and made materially strong if all India can be brought together economically.

Every Province should be treated separately as a separate economic entity. History shows that each province of India excelled in some agricultural produce or handicrafts; the demand of which all over the country was universal. Dacca muslin was manufactured only in Dacca while the fabrics of Kashmere were never attempted in Bengal. In produce of soils also, the same remark holds good. The produce of Bengal and those of her surrounding districts were peculiar in sense that they could not be raised in any other province in India. Likewise, the produce of the Punjab or of the Deccan, had certain natural peculiarities about them which were never attempted in other provinces with artificial means. Thus the demand for the produce of Indian provinces was monopolistic in nature and had a market all over India.

The theory of the division of labour has been carried further by economists to apply it to International Division of Labour and the consequent maxim has been that some countries are specially fitted by nature for agricultural pursuits and some for industrial purposes only. This theory is now the back-bone in International Trade and demands free-ports in every country and condemns the raising of any sort of tariff wall. But this theory is still a disputed one and its universality of application has not yet been accepted by all the European nations. But in India, this theory of Division of Labour was in fact carried to an extreme degree. The Hindu Castes or the Mahomedan Guilds in the villages were the producers of different articles, the demand of which was common within the locality. Outside this local division of labour in villages lay the provincial division of labour in provinces. The whole country was divided and subdivided into separate economic entities, each dependent upon the other, each supplementing the other, each helping the other and thus the whole of India was bound together, though not in strict sense by the bond of nationality as it is now defined, but by the bond of economic unity which is slowly being perceived in Europe.

The bond of national unity in fact is an artificial one, its very foundation lies deep in economic causes. In Europe, during the middle ages, the burghers united themselves and fought together against the tyrants who wanted to molest them ; they did so only because they wanted to protect their industries and merchandise. The religious wars of the Middle Ages can, also to a certain extent, be explained to this instinct of loss and gain ; though, of course religious bigotry had some share in them. The Napoleonic war or the last European war was undoubtedly an economic war, the nations grouped together on one side or the other either to preserve their separate economic entities or to aggrandise themselves at the expense of others. This universal truth in political history was long ago perceived by the Indians and they therefore carried it to a nice finish.

The utility of division of labour. In human beings we find variety of types and so in different Indian nations we do find different capacities. If those different particular types are adhered to and attention is paid for their development, attainment of happiness is easily achieved. But, if instead of doing that, if we all attempt at one and the same thing, however, laudable it

may be, the result is bound to end in discord and mutual misunderstandings. The much talked of provincial or communal jealousies in India can easily be wiped off, if only particular attention is paid to particular provinces and communities for which they are specially fitted.

How National unity can be achieved. The common bond of economic union which we had in ancient India to such a nice finish was modified to a certain extent with the introduction of the Mahomedan Rule in India with a view to suit the changed conditions occasioned by the Moslem occupation but with the advent of the British Raj in India came very many puzzling theories which totally destroyed that union.

Man is selfish by nature and this animality of man within the memory of recorded history has always been predominant in politics. You cannot win a man permanently to your side if you appeal to him through his sentiment only and not through his sense of self-interest. The inter-provincial and inter-communal jealousies have raised their hydra-head all over India, because, we have come to think that we have only one object in view, viz., Government services, or some position at the bar or some career in medicine.

In fact, the decay of Indian industries has

been so rapidly complete, only because, we forgot the fact that economics permeate through the depth of our social organisation and failed to realise that the dazzling truths, namely, equality, fraternity and liberty are only truths in semblance and transplanted in Indian soils become meaningless.

Time has now come for a survey to be made to ascertain special aptitude of different provinces and communities and thus to devise means to provide them with special economic works to which they are fitted by nature. This will economise all our surplus energies and every one being in his own element, it is naturally presumed that the sum total of national wage-fund will also be increased. The political effect of this will also be very satisfactory. The different provinces will be knit together by the bonds of unity and each of them will begin to realise the importance of the other and as a result of which will come in the mutual respect for one another and with it will ultimately come the national bond of unity.

I

ENVIRONMENT AND ANTECEDENTS

Physical features. Nature has endowed India with special physical features. Practically speaking, it is a country surrounded on all sides by natural obstructions rendering foreign invasion difficult and dangerous. The Himalayan region which extends over the whole of Northern Border is sometimes as deep as one hundred miles, contains all the peculiarities of the Frigid Zone and the Temperate Zone combined. Just below this extend the laughing fields of Northern India which remained a bone of contention for centuries, because, its high fertility of soils rendered the whole portion able to maintain a large population and consequently, here civilization flourished and declined. Next is the Deccan tableland which sometimes breaks into valleys and hills and is in many places inaccessible and solitary and thus supplied the refuge to the races who were driven from the Gangetic plains of the North. The Sind deserts, with its horrid climate, remained uncovered and like the Deccan

became a shelter in historic times to those races who were defeated but not subjugated. India is also favoured with coast lines. On Bombay side, though this portion is great in length, but its breadth is only a small strip of land between the Ghats and the Sea. But on Madras side, the breadth is considerable and so nearly, all the rivers of the Deccan flowing through it, renders the low-lying portions of the country highly fertile.

Movement of civilization. History dawns on the plains of the Punjab. Here the first Aryan settlement was established and hence their influence was extended first all over the Northern India and then along the Madras coast up to Ceylon. The Vindhya mountain served as a barrier and consequently the Bombay Presidency and the interior of the Deccan table land received Aryan civilization at a much later date. Thus the Deccan, the Sind deserts in historic times, became the home of the conquered races.

Aryan Settlements and their peculiarities.—

When the Aryans entered India, they then just stepped into the agricultural state from the nomadic condition ; but they were not still able to shake off the nomadic habits altogether. The fertility of the Punjab attracted their attention

and they therefore discovered to their utter glee that agriculture is less strenuous than herding of cattle and so they gave up their nomadic habits and began to settle down. Aryan settlements, consequently, extended along the banks of the rivers where the soils were fertile and communication easy. That is why the importance of rivers has been so gratefully acknowledged.

But the Aryan civilization was essentially an agricultural civilization. Men knew nothing of industry save and except only those as accessories to agriculture and consequently mines remained undiscovered and undeveloped. Communication between distant countries was never desired, on the other hand, restrictions were enjoined, so that the people might not leave the place of their birth. The reasons were obvious, because, in those days of increasing returns, for the development of agriculture, population was a necessary factor.

Later Hindu Civilization. The Vedic simplicity or purity disappears with the Pouranic age. The Non-Aryans who allowed themselves to be ruled became a stratum of the Hindu Caste and in fact became Hinduised. Kingship either on hereditary or on elective basis came to exist. To further the cause of humanity, division of labour was invented and hereditary castes were

accordingly formed. Industry, in its modern sense, no doubt, remained unknown ; but to satisfy the cravings of the leisured classes which came to exist with the introduction of monarchy or established form of government, certain amount of arts were invented. Mines remained neglected and fine arts uncared for ; only some quarries were worked up. Maritime trade was never practised in modern sense though occasionally stories of sea-voyages were heard.

Moslem India. Moslems brought into India the spirit of equality and fervour of religion, a respect for past ages and consequently a habit for recording events, the habit of taking sea-voyages and some form of inter-national trade. The system of barter which prevailed so widely gave place to money and capital strictly in modern sense appeared for the first time. Communication excepting through rivers was practically nil in ancient and medieval India, began to be developed. The next great factor was the centralisation in politics which gradually drew the people together, and thus helped to form to a certain extent, a federation of nations.

India on the eve of the British Rule. Before the advent of the British, India was a self-

sufficient country, she consumed what she produced. Her industries were limited in sense that they were either accessories to agriculture or some fine arts which were specially favoured by the Courts. Population did not overtrip production, soils were far below the point of increasing returns ; waste-lands or forests were in abundance. Modes of communication were developed, no doubt, but still remained primitive in shape and to trade in bulky articles was an impossibility.

Economic effects of antecedents. The origin and history of castes is now forgotten in India. When the Aryan settled themselves down in the Punjab, necessity arose for groupings of people who would help each other in producing the national food on an efficient basis. Thus blacksmiths and potters etc., the original castes were all mere professions, adjuncts to an agricultural state. These castes were made hereditary with a view to secure assured skill and regular habits which were indispensable concomitants for national production, when no public school could be thought of to impart those knowledge and skill. Later on, when civilization developed, caste-system became stereotyped, because the people who were denied the liberal education could not easily adopt themselves to changing circumstances and consequently

remained chained up in their own conditions to which they were born.

At last, the higher and leisured classes realised their enviable position, because with no labour or very small labour, they were able to get all the amenities of life and so they began to guard their position very jealously ; and in the case of the artisans, just the reverse happened. With their means limited, increasing population threw them into poverty and indigence and they also slowly began to regard themselves as low in comparison with the favoured classes and hence arose the superiority of one caste over the other. Born and doomed to poverty, without any liberal education to enlighten them, without any sympathetic hand from the ruler to uplift them ; the artisans of India daily sank into the rank of cattle and thus a great portion of the Hindu race, became highly susperstitious, immobile, ignorant. The political effects of this are written large in the history where it has been shown how easy it was to conquer and subdue a country over-flowing with a teeming population with a handful of followers only.

Ultimate effects of Caste system. Caste system as I have remarked before secured hereditary skill, but it jealously guarded its

own knowledge and could not be prevailed upon to give its publicity ; the reason is very easy to ascertain as it was a question of bread and so they naturally wanted to limit the supply only with a view to ensure an appreciation and consequently an increase in demand. Thus fine arts in course of time either altogether vanished or began to exist in a very mutilated condition with the extinct of those families versed in those arts. With the introduction of modern science, our rude handicrafts became totally insufficient to compete with the machine-made articles of the west and the reason has been that to-day, we are without any industry of our own properly speaking.

(ii) Religion. The Indian system of religion, which always enjoins a man to live for the next world in total disregard of the present, produced bad economic results as the people were led to value leisure and dignity more than the acquirement of material resources which are the *somnum bonum* of life of the people of the west. Where satisfaction reigned and no keen desire to get over others prevailed, the natural consequences had therefore been the absence of competition which is now the key to modern science of economics.

(iii) Administration. The Indian system of administration was extremely paternal. The monarchs were the assured heads of the societies and their chief aim was to guarantee peace and tranquility so that the members might pursue their peaceful vocations. Rebellion, in the true sense of the word, was unknown. Though change of rulers often followed, either on account of dynastic changes or on account of unsatisfactory conduct of a ruler who failed to satisfy the people.

(iv) Invasion. In India, only the fighting classes were responsible for any foreign invasion and conquest meant the subjugation of one particular ruling dynasty only. This change of rulers did not affect the people who lived in their villages and had no concern whatsoever with the metropolitan politics.

Why the Progress in India has been static ?

The old world has changed, other circumstances have arisen all the world over ; but in India, the things are still the same and the people are still in the same place where they were some hundreds of years before. Why India did not move in response to the movement of the world ?

India could not move as she set out some boundary marks within which she meant to live.

Her agricultural population could not multiply sooner as the law of diminishing returns threatened her isolated provinces with famines from time to time, and that is why we so much hear of periodical famines of very devastating nature. With practically no means of intercourse, the provinces lived independently as distinct separate nations and so the spirit of federation could not be reared up. Again, the Indian system of religion which developed theology and philosophy to such a nice finish, acted as a strong anti-dote to material progress. To crown all these, invasions were chronic and consequently uncertainty was universal. Some one thousand miles in the west and one thousand and five hundred miles along the sea-coast were the scenes of perpetual devastation and the people of those places for ever lived in terror. The inhabitants of the interior did not fare better. The constant change of dynasties or change of rulers always produced chronic disorder or anarchy and consequently respect for property was unknown and therefore, capital could not be accumulated, the little the people saved hid under the grounds.

II LANDS

National Resources of India. The national resources of our country would, at the first glance, appear very great. The British India alone has an area of 222, 825, 487 acres of land available for cultivation and nearly 88, 323, 320 acres of forests. The mineral resources of India are also considerable. Coal-fields occur in north-east Assam, in the valley of the Damodar, in the high lands of Chota Nagpur, in the valleys of the Narmada and the Godavery. Iron is found in Bengal, Orissa and Chota Nagpur. The Mysore gold mines are well-known. Silver, copper and lead also exist in large quantity. Saltpetre, Manganese ore and tungsten are also profusely found. Precious stones of large value exist in the Deccan, marble and red stones are also found in large quantity in Joypore. Deposits of salt are found in the Rajputana deserts or in the salt rocks of the Punjab.

Are these Resources Sufficient? A glance at the statistics will tell us that the resources

under our control are not sufficient for the maintenance of the people inhabiting the country. British India produces annually on an average rice weighing seventy five crores of maunds, wheat eighteen crores of maunds, and thus the total amounts to ninety-three crores. Taking the fact into consideration that the people living in British India is 24 crores, the amount of national food per head then falls under four maunds a year including altogether the export factor. To this I know maize, bazra etc., are to be added. But even admitting this fact, it becomes plain that the agricultural resources of India are such at present as many people do not get as food what they should have got as being a human being.

That the natural resources of India as at present are not very great for the population would also appear very clear from another fact. If we make a rough estimate of the annual value of agriculture produce of British India, the amount reaches only as high as six hundred crores of rupees. To this, twenty-two crores of rupees minerals is to be added. Thus the national income derived from the natural resources, assuming all this portion belongs to the nation, does not amount to more than six hundred and twenty-five crores of rupees or twenty-six rupees per head annually.

Of course, this calculation includes the incomes derived from the mineral resources of Native States and excludes incomes from industry and similiary does not take into account of the shares of foreigners who own mines etc., and whose profits therefore need to be subtracted.

In what state the natural resources are.

Nature plays an important part in all extractive industries. After a certain limit, the laws of diminishing returns come to operate. But this can be averted with the help of discoveries and inventions. In our modern age, the European and the American countries have effected immense increase in their production having a recourse to these scientific methods. In India, indeed, the laws of diminishing returns loom large on the horizon. The out-turn does not increase in proportion of labour and capital spent. In many parts, the state of stationary returns has become clearly visible. The annual out-put in rice varies from seventy-five crores of maunds to eighty-six crores ; in wheat from eighteen crores to twenty-seven crores. The out-turn of commercial produce is also equally discouraging. British India annually produces thirty two lacs to fifty-two lacs of bales in cotton and in jute from sixty lacs to one crore. This production of commercial produce varies

according to the demand which exists in foreign countries.

The Contributory causes. The causes which are responsible for this state of our agricultural resources are many and varied. The chief among them are (1) our system of land-tenure, (2) our mode of living, (3) want of education, (4) want of organisation, (5) paucity of urban population and (6) our insufficient agricultural implements.

Our system of land tenure is really unique in its nature. The land belongs theoretically to the State and the State consequently enjoys a monopoly and therefore levies a tribute on the people by mere arbitrary measures quite irrespective of the nature of rent. There has indeed been much written on this subject whether Indian land revenue is a rent or a tax. Mill has quite rightly argued that in all oriental countries rent is confused with taxation as the amount exacted is generally settled by the officials who fix the amount on mere assumption or guess only without making any scientific enquiry whether the amount fixed exceeds rent. In permanently settled areas, the zamindars of course now enjoy a certain amount of economic rent and the State gets a fraction. But in the temporarily settled Zamindari tracts, the annual rent is fifty per cent of the

assumed rental and in the raiyatari tracts the case is still worse as the peasants are made to pay from one-fourth to one-fifth of the gross produce.

The extreme smallness of agricultural holdings is another of its drawback. Both in the zamindari and in the raiyatary tracts, the holdings of a peasant never exceed five acres in area. The laws of inheritance in India connive at extreme partitions and sub-infeudations and lands held in one generation become divided into several portions in two or three. The sense of insecurity is another cause which produces blighting effects upon the Indian peasantry. In temporarily settled areas, the peasants are always in fear of ejection and therefore makes every hesitation to make any improvement in the soils. In permanently settled areas, the peasants are to a certain extent better no doubt.

Our mode of living is equally discouraging. To live better, to try to enjoy the amenities of life, are the determining factors in the life of the western people. But the Indian outlook of life is not only gloomy but the individual inclinations are also so shaped by the surroundings that one could never hope to get more than what is necessary to eke out one's existence.

Indeed it is really an uphill work to make one think otherwise even when one's own self-interest is concerned.

This drawback is no doubt is to a great extent due to illiteracy. Liberal education quickens one's imagination, enables to get information and sharpens intellect enabling to understand one's own self-interest and thus to turn favourable circumstances to good account. The proverbial illiteracy of the Indian peasants is indeed appalling. In these days of science and inventions, in these days of dynamic forces, the illiteracy of the Indian peasants has stood greatly on the way of increasing returns in agricultural produce.

Poverty, illiteracy, sense of insecurity have culminated in producing an economic drawback in our national production and specially in agriculture. There are many extractive industries which could be well developed and good returns obtained, but could not be done so only on account of proper organisation. One such industry is fishery. The Indian fisheries are really very rich. Immense prospect lies along the Madras coast but very little has yet been done. The forest areas are also great in extent. The commercial products of the forests can easily be increased if the industry could only be pushed on on a more scientific basis.

Another industry of some considerable importance is dairying. Upon it depends, the meat portion of our diet. But unfortunately, it is still in the same neglected condition and is not practised on the western model only with some exceptions.

The next factor is the paucity of towns and cities. A growing and thrifty population by the side of agricultural areas stimulates production and that is why agricultural industry in the west has always been intensified with the growth of cities and towns. In the Middle Ages, when there were few cities, agricultural improvements of modern age were unknown. But India is still under the medieval influence, her towns and cities are very few in number, the few stimulants which she is now enjoying are due to the opening out of the international trade. History shows that urbanisation of India in the Mahomedan period was out of the question and during the English period though there have grown up commercial cities due to the activities of the European merchants but the growth of smaller towns which are very earnestly desired in India is on the decline.

To crown all this, our agricultural implements are still rude and primitive. The mode of manuring is insufficient. Our soils are also rendered less fertile by the exportation of raw materials. It

is necessary that at least a first process should be applied to agricultural produce before exportation ; because, bran and cakes are important manures and soils are, therefore, permanently being starved for the want of them.

How the laws of Increasing returns can be made operative ? Yet, the case of India is not hopeless. The circumstances which are acting adversely and retarding the increase of agricultural produce must be boldly met with and averted. The first difficulty is the system of land tenure which can be got off if lands are permanently settled and peasants are assured that on no accounts lands would be taken away from them. A further legislation will also become necessary restricting partitions or sub-infeudations. To remove illeteracy and ignorance, village schools should be started and night schools be opened for the workers who labour during the day time. With education, liberal ideas will spread and with it the mode of living will also be changed to suit the modern conditions.

The Indian system of division of labour has highly been effective in the past due to which India became immensely rich and her fine arts attracted the attention of the world. At the basis of

this greatness was the extreme ruralisation of India. All the nations, with some exceptions only, lived in the villages and the food necessary for them was raised on local fields. The village black-smiths made the agricultural tools and re-repaired them, the weavers spun the cloth for local consumption.

Big towns in the shape of metropolis existed where the grandees lived and to carter their tastes some arts flourished. But the introduction of machinery disturbed the socio-economic equilibrium which existed in India. The rice milling machinery has thrown out of work those who used to husk with the help of native implements. But co-operation is a great necessary factor in production. Small firms need to be reared up either to husk rice or to mill oil seeds with a view to make provision for some of the people used to do the work before, or they would remain unemployed with the growth of small towns ; credit facilities may be enhanced and thus a system of co-operative ownership in improved agricultural machineries and in irrigation may be made possible.

All these again depend upon individual tact and initiative. Individual resourcefulness is also a great factor in production and this lies dormant in Indian peasants which need to be quickened up

with the introduction and spread of liberal education, with the sense of security, with the hope of better income, easy access to capital and improved system of transportation and creation of markets.

India and other Countries. European and American countries within the course of a century have achieved immense agricultural improvements which were again intensified by the growth of industry, trade and commerce. In the last century, the case of America was just like ours, the rural population formed the majority of the population. Industries were few and machine-made articles were unknown. Hand-made cloth was the chief source of supply. Village black-smiths made the necessary agricultural implements and the village potters and other village artisans nearly made all the articles for the self-containing villages. The same was also true of Germany even before the Franco-German war.

But when other countries have advanced, India has slept. Almost all the methods which were used one thousand years before are still to be seen to be practised by the Indian peasantry. The softening influence of the tropical climate,

the general sense of insecurity, conservative mode of living and thinking, illiteracy and lack of initiation have all combined to produce resultant effects upon the Indian peasantry and thus have been able to settle the inert and inexpansive state of Indian rural life.

Material advancement without any improvement in agriculture is impossible. All the resources of every country ultimately depend upon agriculture. Agriculture is the mainstay of national wealth. It chiefly contributes towards the national dividend which falls high or low as the state of national agriculture is. Again, if the national dividend be small due to the deplorable state of agriculture, the share which will fall to the lot of other producers will consequently shrink, and specially wages will be every small. This fact will be evinced from the low scale of wages which exist in India.

Influence of science and machinery upon agriculture. It cannot be gainsaid that the influence of science and machinery upon agriculture is immense. Practical demonstrations have been made in America and it has been clearly proved that the cost of production by machine is much lower. In wheat and rice, the cost of

production by machine is $\frac{1}{3}$, in sugar-cane $\frac{2}{3}$ and in cotton $\frac{2}{3}$.

National loss due to Ignorance. The above figures will clearly demonstrate the fact that in India the loss we annually sustain due to our primitive method and ignorance is indeed tremendous. This loss can be stopped or counteracted if we can adopt, to a certain extent, improved machinery and scientific system of agriculture. Again, the agriculture history of the world shows that an effective improvement in agriculture can be made possible only if towns on a moderate scale grow up to consume the excess produce of the rural areas. The Indian agricultural indebtedness is proverbial and the peasants generally live on the verge of starvation. To ease their condition agricultural banks need to be started and the habit of thrift is to be infused among them.

Provincial Survey-Bombay. The Presidency of Bombay contains the rich plains of Gujarat better known as the "Garden of India". North to the Gujarat lies the deserts of India. The lowlying-tracts along the sea-coast are fertile and grow rice and the Deccan table-land is very poor in its soil. The surveyed area in the Presidency is 119,737,650 acres of which 30,916,407

acres are actually sown and 11,766,020 acres are current fallows. 19,914,960 acres of land are not available for cultivation. The forest area is 9,251,722 acres. The principal crops and food grains of the Presidency are wheat, millet, rice, gram, sugar-cane and cotton. The soil of the Presidency is specially fitted for producing cotton. The population of the surveyed area in raiyatitard tracts is 15,133,597 and the surveyed area under the raiyatari system is 44,732,430 acres i. e. the people have land on an average three acres per head. Though this is very small, the space for expansion is indeed great as the total surveyed area is nearly 120 million acres and the population is only 20 million and therefore the average acres available per head will be six.

II. Madras. The presidency of Madras contains the deltas of the three important rivers and a plateau from 1,000 to 3000 feet in height. The extensive tracts on the sea-coast are highly fertile. The surveyed area in the Madras Presidency is 97,851,028 acres of which 33,065,577 acres are actually sown and the current fallows are 9,758,275 acres. 21,934,515 acres of land are not available for cultivation. The forest area is 12,970,827 acres. The principal crops of the Presidency are rice, millet, cotton, sugar-cane, ground-nut, tea and

coffee. The population of the surveyed area is 41, 405,404 and the net surveyed area is 91,048,225 or a little over two acres per head. The space for expansion is very small as the total area is only 97, 851, 028.

III. Bengal. The Presidency of Bengal contains the valleys and deltas of the Ganges and the Brahmaputra, the submontane tracts in the Himalayan region of the north in the districts of Darjeeling and Jalpaiguri and a section of the Chota Nagpur plateau in the districts of Burdwan, Bankura, Birbhum and Midnapore. The soils of Bengal are very fertile. The total surveyed area of the Presidency is 53, 824, 158 acres of which 24, 469, 800 acres of land are actually sown and the current fallows are 4,850,638 acres. 11,064,766 acres of land are not available for cultivation. The net forest area is 4,272,411 acres of land. The principal crops and food grains of the presidency are rice, wheat, tobacco and tea. Jute and tea in commercial products and rice in food grains are the principal factors. The population of the surveyed area is 44, 588, 115 and the surveyed area is 50,454,866 i. e., the people have on an average a little over one acre per head. The space for expansion is also very small as the total surveyed area is only 53,824,158 acres.

IV. United Provinces. The United Provinces contain the unfertile region of the Hymalayas and a section of the Central Indian plateau and the rich Gangetic plains which remained for centuries a bone of contention to the Indian invaders. The surveyed area of the provinces is 72, 648, 741 acres of which 35,563,247 acres are actually sown and the current fallows are 3,217,589 acres. 9, 932, 169 acres of land are not available for cultivation. The forest area is 9,303,797 acres.

The Principal crops and food grains of the provinces are rice, millet, maize, pulses, wheat, sugar-cane, oil-seeds, barley and poppy. Wheat, sugar-cane and poppy are the important factors. The population of the provinces is 47,171,799. Thus the land which is actually sown is less than an acre per head and the area available is about $1\frac{1}{2}$ acres and thus the space for expansion is very small.

V. The Punjab. One vast alluvial tract traverses the province from one end to the other. But on the Northern boundary in the east lies the Himalayas and on the west the Salt Range. The province is amply irrigated and extremely suited for agriculture. The principal crops and food grains are wheat, gram, barley, maize, oil-

seeds, cotton and sugar-cane. The total surveyed area of the province is 86,367, 319 acres and of this 25, 676, 854 acres are actually sown and the current fallows are 3, 883, 985 acres and the area of the forest land is 2, 197 160 acres. 12, 498, 705 acres are not available for cultivation. The total population of the province in the surveyed area is 19, 549, 599 and therefore, the land available for cultivation is only $1\frac{1}{4}$ acres per head. But here there is space for expansion as the land available per head according to total area is about $4\frac{1}{2}$ acres.

VI. Bihar and Orissa. The province contains the rich valleys of the Ganges and the deltas of the Mahanadi. It also contains a portion of the Central Indian Plateau. The soils of Bihar are highly fertile. The chief food grains and commercial products are rice, wheat, oil-seeds, pulses, maize, indigo, tobacco and sugar-cane. The soils are specially fitted for growing indigo, tobacco and wheat. The total surveyed area of the province is 71, 184, 523 acres. Of this only 25, 616, 000 acres are actually sown and the current fallows are 5,192,194 acres and the area of the forest is 7,110,631 acres. 8,127,226 acres are not available for cultivation. The total population of the province in the surveyed

area is 34, 490, 038. Thus the land which is cultivated per head is less than an acre and the land available is a little over 2 acres per head and thus the space for expansion is very small.

VII. The Central Provinces. The provinces contain the rich valley of the Nerbudda, the Nagpur plain Vindhya plateau and the Wainganga valley.

The principal crops and food grains are rice, wheat, maize, cotton. Cotton is the important factor. The surveyed area of the Central Provinces is 72,552,216 acres. The current fallows are 3,338,312 acres and 16,930,849 acres are actually sown. The area of the forest land is 14,723,614 acres. 3,941,818 acres are not available for cultivation. The population is 10,872,772. The area actually sown is about $1\frac{1}{2}$ acres per head and the area available is about 7 acres per head and therefore the space for expansion is very large here.

VIII. Assam. The Province contains two important valleys,—Assam and Surma. The soils are fertile and the chief crops and food grains are rice, wheat, tobacco, jute and tea. Jute and tea are the principal factors. The total surveyed area of the province is 39,300,454 acres. Of this, 5,640,616 acres are actually sown and the current

fallows are 2,898,300 acres. The area of the forest land is 3,518,960 acres and 5,510,500 acres are not available for cultivation. Thus the area actually sown per head is less than 1 acre as its population is 6,713,635 in the surveyed area. But the land which may be available is more than six acres per head and therefore the space for expansion is very great here.

IX. Burma. The province contains rich plains, highly fertile and irrigated by mighty rivers. The chief crops and food grains are rice and teak. The soils of Burma are specially fitted for the growing of rice and teak. The total surveyed area of the province is 118,345,866 acres and the current fallows are 4,987,184 acres. 15,189,497 acres are actually sown. The area of forest land is 22,006,144 acres. The population of the province is 10,584,171. Therefore, the land which is actually cultivated per head is on an average $1\frac{1}{2}$ acres. The land which may be available is more than 11 acres and therefore the space for expansion is immense.

Commercial Crops and Food grains. Thus the Indian agricultural produce can be divided into two heads commercial crops and food grains. Most of the commercial crops are exported as

payment for foreign goods imported and only a part of it is locally consumed. But in case of the food grains, a considerable portion of them are locally consumed and only a fraction is exported. The following table will indicate the yield and the value of export.

Chief Food Grains. 1922-23.

	Total Yield Tons.	Values of export. £
Rice,	33,135,000	23,133,212
Wheat.	10,704,000	3,222,941

Thus we grew wheat and rice combined 43,839,000 tons or 188,36,53,000 maunds. From this we exported food grains worth £26,356,153 or Rs. 39,53,42 295. Roughly we exported wheat and rice weighing 8 crores of maunds. Thus only 110 crores of maunds remained within the country for national consumption which is nearly $4\frac{1}{2}$ maunds per head in a prosperous year. On other occasions, we have seen that this figure goes down under 4 maunds per head. Certainly this is very discouraging and amply shows that for our national consumption alone we have to sufficiently raise the annual production in agricultural produce.

Chief Commercial Crops. 1922-23

	Total yield	Values of export. Rs.
Jute (Bales)	4,237,000	63,02,28,153
Cotton (Bales)	3,556,000	84,03,65,250
Tea (lbs)	316,431,000	22,04,00,385

III

MINERALS & OTHER RESOURCES

Definition of Land. The word land is very comprehensive in its meaning. It means economically all the natural resources of a country, fertility of its soils, mines, fisheries, forests and even water power i. e. all things over the creation of which man has no control, and which exist either in abundance and therefore directly possess no economic value or the supply of which is limited by nature and the controlling agencies of man regulate them.

In the last chapter, we have seen the productive power of Indian soils under the natural conditions which prevail here, the different crops and food grains which are produced, the limit up to which the agricultural industry might be pushed on and the particular areas where particular varieties can best be grown. In the present chapter, we propose to deal with minerals and other natural resources which also contribute greatly to the national wealth. In short, all extractive industries are divided into the following, (1). Agriculture,

(2). Mining, (3). Fisheries, (4). Forestry, and Dairying.

Mines. Regarding the Indian minerals the Indian Industrial Commission made the following remark. "The nature and extent of the mineral deposits of India have been systematically examined by the Geological Survey Department, although it has been impossible for it, with limited funds for establishment and prospecting equipment, to carry its investigations, except in very special cases, to a point which would warrant commercial exploitation without further enquiry. The mineral deposits of the country are sufficient to maintain most of the so-called 'key' industries, except those that require vanadium, nickel and possibly molybdenum."

Mineral Deposits. The Indian Industrial Commission surveyed the field and embodied the following in their report. "Indian coal is very unevenly distributed and generally poor in quality. The deficiency is specially noteworthy in case of Madras and Bombay. Iron ore is found in many parts of the Indian continent, but instances in which iron ore of good quality exists in suitable proximity to satisfactory coal supplies are not very numerous, though sufficient in all probability

to warrant large extensions of the existing iron and steel works. A rich deposit of lead and zinc exist in Shan States of Burma, but, although the mine is in active operation, no attempt has hitherto been made to smelt the latter metal in India. The copper ores of Singhbhum, a district of Chota Nagpur, have as yet been scarcely exploited, although a mine has been developed and smelting works have been erected and have already started operations. High Grade Chromite is produced in large quantities in Beluchistan. The bauxite deposits of India, the best and the largest of which are found in the Central Provinces have not yet been used as a source of aluminium. Manganese ore is extracted in very large quantities in the Central Provinces and to a less extent in Chota Nagpur, Bombay, Mysore and Madras".

"South Burma is one of the richest resources in the world of tungsten ores, occurring in the form of wolframite, the best known ore of this metal, which has now become almost indispensable to mechanical engineering as an ingredient in 'high speed' steel. Tin is also found there and in other parts of Lower Burma, and successful dredging operations are carried on in Tavoy. Ores of antimony are found in the Shan States,

in Tanasserim and in Mysore, but none of these has yet been successfully exploited."

"India also takes the first place among the mica producing countries of the world. The Bihar mica is of the highest grade so far raised in large quantities. The mineral was, until recently, won almost entirely by small workings but some of the larger firms interested are now beginning to apply more scientific methods. Micanite has already been made experimentally at Kodarma ; it is also worked in the East Indian Railway Workshops at Jamalpur."

"India possessed at one time a practical monopoly of saltpre, which is found in the plains of Bihar, the United Provinces and the Punjab, and was extracted and refined by indigenous methods. Sand and lime suitable for the manufacture of glass occur in many parts of India, but hitherto only partial success has attended the working of the few Glass factories that have been established, while failures have been frequent ; but it by no means follows that glass cannot successfully be made in India. Cement works have been started in Madras, Bundi, Porbandar and Katni. They are, however, only able to meet a part of the Indian demand, and though the cost of manufacture is believed

to be low, the price of this commodity to the public is still controlled by the rates at which it can be imported. A sufficient reduction in the price of cement would lead to a great extension of its use, specially in lining irrigation canals and chanel with the object of preventing waste of water."

Future possibility of development. From the above survey, it becomes clear that Indian resources in minerals are immense and if the workings of them can be organised efficiently on a scientific basis with modern equipments, the output will certainly in proportion be increased. Though this industry obeys the laws of diminishing returns but it can be made for a long time to come to obey the laws of increasing returns because many of the virgin mines of India still await discovery and exploitation. Again economic management will lessen the cost of production and with the lessening in prices the increase in demand will follow which will lead to further discoveries in mines and improved and efficient method of raising. Mineral resources are the national assets and therefore legislation is necessary restricting undue exploitation or against reckless methods of working out mines.

Forests. Though the science of forestry is

comparatively a new one but the uses of forests, to a certain extent, were known even to the ancient. The modern discoveries in science show that the forests are the great preservers of heat in a country and a certain amount of rainfall is retained by the forests causing perpetual swamp and moisture in the soils. The economic value of the forest produce is also immense. Thus forests in every country are coming into prominence to play an important part in national welfare and progress.

Nature of Indian Forests. The Indian forests are vast and extensive extending from the Hymalayas to the Cape Comorin and from the Arabian Sea to the other side of Burma. The total forest area is 88, 323, 320 acres or nearly one-ninth of the surveyed area of India. Or, it is 250,473 square miles or 23.1 of the total area of India. The Indian forests can be divided into the following natural divisions.

(1). Forests of the mountains. These extend over the Eastern Hymalayas, Assam and Burma.
 (2). Deciduous and Evergreen forests occur in the Deccan Peninsula and in the Sub-Himalayan tracts. (3). Rajputana, British Beluchistan, Sind and the Southern Punjab contain dry forests in which the varieties are very small

and the height of the tree is also not very high.

The official divisions of the Indian forest are into reserved, protected and unclassified. In the reserved areas, the right of use is strictly limited ; in the protected areas, records are being collected and consequently the rights of use are not strictly restricted ; in the unclassified areas, the control is nominal. The following table shows the extent of the three classes of forests in 1920-21.

Reserved Forests.	103,491	square miles.
Protected Forests.	7,516	" "
Unclassed forests.	139,466	" "

Forest Revenue. The total out-turn in major produce in 1920-21 was 90,702,430 cubic feet timber and 207,969,559 cubic feet fuel or more than 298 million cubic feet of timber and fuel. The value of minor produce (bamboo, grass etc.) was in the same year 1, 36, 00, 627 rupees. In 1920-21, the net revenue derived from the forest areas was 3, 64, 19, 907 rupees i. e. per acre the income is about $\frac{1}{2}$ of a rupee. From the above figure, it will become plainly clear that the resources of the forests have not yet been fully utilised. To derive full benefit, it is necessary that transport facilities should be greatly developed and the future ex-

ploitation of forest areas must be made on commercial lines only. The next thing we have to do is to inquire and investigate the commercial value of the different forest produce.

Economic Aspects of Forests. The economic effects of forests are really very great ; but, this depends upon research and investigation. There are many forest produce, the uses of which are unknown to-day, but if they could be dictated, they will be of immense value. Recommendations have been made as to suitability of Bamboos for the manufacture of paper pulp, and excellent paper has been made from such pulp. Discoveries have also shown that resin can be extracted from the pine along the foot of the Himalayas or first class wood for the manufacture of match boxes can be had among the forests.

Up to this time, the development of forests has entirely been left in the hands of the Government. But time has now come to hand over to the hands of the Indians and so where forests are a reserved subject they need to be converted into a transferred one.

Fisheries. The next important extractive industry about which we have to consider and upon which the meat portion of our diet depends

is fisheries. But it is really a misfortune that in India this industry is neglected. A few illeterate men without any scientific skill or knowledge, with the help of decreasing hereditary instinct pursues the calling with the result of advancing decreasing returns in this which is clearly evinced from the high prices prevailing in towns and cities. In 1905 in Madras and in 1906 in Bengal, investigations on scientific lines were launched but no appreciable practical results were achieved. Apart from the consideration that the Hindu section of the Indian population depends upon it as a substitute of meat, the industry of fishing can also further be used in making greases, in tempering steel and making rope. There are vast possibilities for Bombay; extension of this industry in India, specially, in Bengal and Madras is also possible. Madras possesses coast-lines as much as 1,750 miles. The industry of ocean fisheries can be started here on improved scientific lines. Bengal is specially fitted for the development of fresh water fish. Like Madras, Bombay can equally develop fisheries as its coast-line abounds with excellent harbours. Burma like Bengal is specially fitted for fisheries of inland waters.

Domestic Cattle and dairying. The live-stock in British India in 1920-21 was the follow-

-ing :—oxen—116,736,000. Buffaloes—28,367,000, Sheep—22,075,000 Goats—24,294,000, Horses and Ponies,—1,677,000, Mules—76,000 Donkeys—1,371,000 and Camels—410,000. Thus the domestic cattle under all grades falls a little over one per head. The average number of oxen per head is only a little over two.

The number in domestic cattle or specially in oxen owned by the people of this country appears to be small and for the betterment of the nation, it is useless to remark that particular attention should be paid to increase the number of domestic cattle and specially the oxen.

The dairy produce of India is very poor. This industry is still left in the hands of illiterate people who pursue the calling without any national consideration. Co-operative dairy farms need to be started in the suburban areas with up-to-date scientific equipments. Thus two things are necessary in this industry. (1). To increase the number of cattle, (2). and to increase the amount of production following the methods adopted by the advanced countries of the world.

IV

POPULATION

Man is an essential factor in production. The different stages of civilization at different times have clearly demonstrated the fact that of all instruments of production, human agency is an important factor. The introduction of machinery and science has not altered the condition, it has only changed some aspects of facts. Quality in man is now more appreciated than quantity in population and therefore, an intelligent and physically sound population is really a good asset to any country. Though mere number is no longer counted, it is to be borne in mind that number still is a sure index to the strength and growth of a nation. Small population for a vigorous and thriving people is certainly not its weakness ; the number there is a minor fact ; but, when a country loses increasing returns in its population in every census or its population remains in stationary condition for some years together, or whose population increases but very unsatisfactorily at a small rate, the prospect for that country is surely not very bright.

The natural causes which generally lead to a diminution in population is want of subsistence. When a nation fails to provide food for all, a weaker section dies out and consequently the population shrinks. Epidemic and unsanitary condition of the country are the other factors. Temporary havocs which are generally made by epidemics or endemics tell very heavily upon the rising generation in more than one way. (1). There may be among the victims bread-winners of families, death of them means poverty and starvation to the members of those families and consequent economic paralysis to the society to which they are born. (2). There may be among them many renowned arts or crafts men, death of them means a lull on the onward march of industry. (3). There may be among them able financiers, death of them means a stand-still in country's finance.

The stunting of population may be also a resultant fact of a high standard of living which comes generally to prevail with the growth of civilization. In this case, births will be less than the natural deaths and consequently in course of time, the population will dwindle. But this is an ideal conception as it presupposes prudential restraint without which the rate of births cannot be controll-

ed. It also presupposes quick understanding and power of adaptability in citizens, bent upon increasing their material happiness and worldly prosperity at a cost of certain amount of animality which though can be warded off but to which man is a natural prey from time immemorial.

What sort of population is necessary ? The history of the advanced countries shows that millions are no longer counted ; but some qualities in human beings as education, smartness, quick understanding and sound physique are by far the most important factors and those countries are powerful and advancing whose citizens possess those virtues in high degrees. In this scientific age of ours, the old barriers have been demolished, local patriotism has altogether vanished. Labour always seeks the best market and the employers also in like manner are on the look out to find efficient and cheap labour in the long run. Customary wages have lost place in modern industrialised societies. Hereditary skill though still valued is losing its importance fast with the introduction of standardisation in production.

Still the number is something and this fact should not be ignored. Number is the muscle of the nation as education etc, are the brain power. Dwindling of population on any account is

alarming. Stationary rate is also not very satisfactory; a certain increase both in population and in longevity in individuals is the thing which should be aimed at.

How the world's population is progressing?

In all the advanced countries, both the number in population and the longevity of individual members have been increased. Messrs. Marshall, Wright and Field remarked in their well-known book called, the **MATERIALS FOR THE STUDY OF ELEMENTARY ECONOMICS**—'Making every allowance for inadequacies of statistics, we have strong reason to believe that life is twice as long as three or four centuries ago and the modern records show that the average rate of improvement for all countries excepting India, is about 15 years per century. The estimate of Finkelnburg shows that the lengthening of life during the interval between the sixteenth century and the eighteenth century was from 18 to 20 years to a little over 30, shows a rate of increase of about 4 years a century'.

The Rate of Growth of Population in India.

The real scientific system of taking census was introduced only in the seventies of the last century. Since then, there have been five censuses

and a table is given below to note the improvement India has been able to make during the course of last 49 years. A primary mistake is generally made in taking the rude figures of one census to compare with those of another. But the fact is that British India has made some progress in areas in every decade and that immense improvement has been effected in the system of taking census and therefore, at the time of comparison, these facts need to be taken into consideration and the following table has been accordingly arranged to make out the real increase in population.

Period.	Increase due to inclusion of new areas.	Increase due to improvement in taking census	Real increase.	Rate of P. C. of real increase.
	millions.	millions.	millions.	
1872-81	33.0	12.0	48.0	1.5
1881-91	5.7	3.5	33.5	9.6
1891-01	2.7	.2	7.0	1.4
1901-11	1.8	..	20.5	6.4
1911-21	.1	..	3.8	1.2
Total	43.3	15.7	112.8	20.1

Thus the census returns of 1921 indicate only an increase of 1.2 per cent during the decade which is indeed very poor when we compare the

figures of annual increase in population of some advanced countries.

Countries.	Average annual increase.
United States.	1.49
Germany	1.36
Bavaria.	1.12
Japan.	1.27

That the rate of progress in number of the population in India has not been much is also proved from the following cautious remarks made in the census report of 1921 ; 'that the rate of increase of population between 1872-1911 was equivalent to about 19 per cent and that at this rate the population would double itself in about a century and a half. The real increase in the last fifty years has been 20 per cent. At this rate, doubling would take another 190 years. But calculation of this kind, though of interest, can hardly be taken into consideration seriously. Famines and epidemics check the growth'. Mr. Middleton in his report states:— 'It comes as a shock to the imagination to compare the mortality directly caused by the war with that due to natural causes ; though war casualties were amongst the prick of population, they were numerically insufficient when contrasted with the death-roll caused by epidemics.

The other side of the picture is equally gloomy. Longevity in India instead of having been increased has fallen off and though figures are not available to prove this assertion; country literature and history will bear ample testimony to the fact. Average life of the Indian people according to the latest census report is only 25. Again the census report of advanced European countries shows that 40 per cent increase in population has been effected in 40-50 years; whereas in the same period, the increase in India has been 20 per cent i. e. only one half.

Thus considered from all points, the increase in Indian population has not at all been satisfactory. Longevity of Indian people has decreased within the course of two or three centuries.

Why the increase in population in India has not been satisfactory? There are many contributory causes which are standing on the way of increase and the chief of them are enumerated below :—(1). Unhealthy state of country, (2). Uneconomical distribution of population (3). Want of diversity of occupation, (4). Child marriage, (5). National superstition and immobility, (6). Low standard of living.

(1). Unhealthy state of our country. The census report of 1921 states that malaria, epidemic and endemic are the chief agents of mortality in India. Almost all the districts of west Bengal, the hills and the forest portions of the Southern and the central India and the Submontane tracts of Northern India are permanently subject to malaria. How the epidemics and endemics levy a heavy death-roll will clearly be brought to mind from the following statement made in the census report of 1921.

Apart from the normal causes of mortality, the distinctive feature of the decade 1901-11 had been the progress through India of the Plague and the mortality which it caused. The recorded number of deaths from plague was about $6\frac{1}{2}$ millions. In the recent decade, the deaths recorded is less than half the number. Plague is the favourite disease of the United Provinces, the Punjab and Bombay ; cholera of East Bengal and Assam. By far the largest number of deaths in India are entered under the category of 'fever', and allowing for inaccuracy in diagnosis, it has usually been assumed that about two-thirds of the deaths so recorded may be ascribed to malaria.

To quote more figures and authorities to prove

that the rate of mortality in India is very high due to the unhealthy state of this country is useless. This calamitous fact not only raises the level in death rate, it also permanently lowers the vitality of the nation with the consequent decrease in power of earning and in its trail, it brings about starvation, poverty, stunted growth of our future population ; the economic effects of which are now every year being cruelly perceived.

(2). Uneconomic distribution of population. The spread of population in India has always been in one line, namely, where food can be grown easily, population has accumulated there. Thus the valleys of the Sind, of the Ganges and of the Brahmaputra from time immemorial have been the principal habitats and these valleys are still the most densely populated portions of our country. Thus the density of population in East Bengal rises as high as 1,000 per square mile, in Gujarat 300, in Kaira district 445, in the Godavari district 578 and in Cochin 662.

This spread of population over the districts where the means of subsistence are easily available was only natural without any forethought and the consequent result has been that the fertile districts have been over-tenanted and to find food for increasing mouths, intensive

system of cultivation has been resorted to with the result of diminishing returns or stationary returns. Time has now come for the redistribution of population from the congested areas. Immense fields for expansion can be found in the Central Provinces, Assam and Burma ; a part of superfluous population from the the over-populated districts might be taken there and chances should be given to them to settle as agriculturists. This will not only release congestion in over-populated areas with the removal of economic pressure ; but it will also open out fresh fields for production and thus increasing returns in agriculture can easily be brought about.

(3). Want of diversity of occupation. In India, the openings in life are very few ; at least a major portion of the population i. e. 71 per cent live on agriculture alone directly or indirectly.

It is useless here to compare the condition of India with that of the advanced countries of Europe and America where science and machineries have totally changed the circumstances. But it is a fact that no country can for over support an increasing population with agriculture alone. There must be trade, industry and commerce ready with their increasing returns to meet the increase in population.

(4). Child-Marriage. The Indian system of Child-marriage when the people knew no competition and lived in villages in abundance was in fact a necessary factor as the girl-wives were brought up as the adopted daughters of of the families and they in fact very easily adapted themselves to their new surroundings. This was possible then because food was not scarce and division in patrimony was unthinkable. But in the present day, when competition is becoming keen, sub-infeudations and partitions are becoming the fashion, child marriage must be avoided as an evil, because it unnecessarily puts pressure upon green youths and with some cases of exceptions, the power of earning is seriously retarded. Again, infant marriages or early marriages create child or girl widows and thus causes a decrease in number of potential mothers which may also be cited as a cause for a decrease in population.

(5). National superstition and immobility. Due to illiteracy and ignorant, national superstition for a change of residence and consequently immobility of our population is indeed very appalling. In the last census, 90 per cent of the people were enumerated in their own native

districts. "To release the pressure on the populated areas, migration within a country," remarks Prof. Marshall, "is fruitful and its adjustments are rendered efficient by various influences, which do not favour immigration beyond its boundaies in like degree".

(6). Low Standard of Living. The Indian standard of living is really very low without any margin to fall back upon. One or two pieces of cloth and two meals a day are considered as sufficient for a man. Thus a major portion of the Indian population always lives on the verge of starvation and consequently a failure in monsoon or some unexpected demand in food grains in foreign countries offer opportunities to famine to visit. It is an eternal truth in economics that demand creates activities and activities create demands; the effect of one upon the other is reciprocal. In fact, each is a motive force to the other. Therefore, the mode of living is to be raised a little high so that in times of famine or scarcity, the people might live having fallen on bare necessities of life restricting their superfluous demands.

Quality of the population. Now, we have to examine the quality of the Indian people. The

first distinctive features which strike the attention is education and the second is heredity. Higher education in recent years in the middle and in the upper classes has made some considerable progress no doubt but the mass education in the true sense of the word is still unknown and in the whole population only 222 persons per mille are literate. The standard of literacy has improved and it must of course be admitted that opportunities and facilities for receiving education are daily increasing but what we lament is that the standard of efficiency which we urgently require in India is far below our expectation.

The necessity for mass education in ancient or medieval India was not sincerely felt. People were grouped into villages and villages contained some groupings of castes, each dependent upon the other. Whatever the village produced was locally consumed. Religious instructions were stereotyped and ready made dogmas and current formulas of religious truths met the demands of the spiritual cravings of the people. Noblesse in India consisted in blood and so free inter-mixture in social circles on national holidays was universal and the people therefore were never in want of good societies. In short, education among artisans and craftsmen was considered

as waste of time, the middle classes or the upper classes worked for them and secured to them all the blessings of higher education without requiring least exertion on their part. This was also an essential feature of the division of labour. The higher classes who monopolised learning did it not out of any selfish motive but only as a matter of expediency ; because, in those days worldly education for the unfolding of the inner virtues of a man was unthinkable and learning was deemed necessary only as an inseparable adjunct to one's spiritual life. As the aquirement of this high standard required study and research so some highly gifted people whose families made intellectual culture as their profession took the burden upon themselves and they were responsible for the people. The utility of labour here also is to be seen. Each occupied himself busily for one particular profession but worked for the common good of the whole society and the society in its turn was bound to meet the demands of its individuals.

But the modern age has totally changed those aspects. Quickening of communication and shortening of distances has brought the remotest parts of the country into close alliance, the old petty barriers and provincial prejudices can no

longer stand on the way of inter-provincial migration or groupings as the interests of the country as a whole stand more prominent than petty provincial squabbles, because, economically when a demand is considered from the point of view of the whole country becomes more profitable in the long run ; economic effects become not only less effective but also less remunerative if they be treated provincially. Consequently, education has become a necessary factor in our national life. General education quickens one's understanding and it helps a man to gather informations and thus to augment his own knowledge. It also helps to adjust one self to modern circumstances transmitting smartness, power of bargaining, instinct of his own self-preservation and other necessary attributes which have become indispensable concomitants in modern industrial life. In this age, the market extends all over the country and the demand for labour is therefore universal within the country. The upper and the middle classes of our modern age are as busily engaged in their pursuit of their own advancement as the labourers. The common people have to meet their employers who are bent upon exploiting them and consequently the labour must have that amount of conscience which would help him to make the best of the

bargain at the time of employment. Again, it is the national interests to see that the natural equilibrium between the antagonistic interests of the different classes of people are maintained. The complete subjugation of one class by the other will mean economic deterioration and consequently it will entail national loss and setback.

Besides general education, a certain amount of technical education has also now-a-days become indispensable. Hand-loom has given place to power-loom and cottage industries to machine made articles. Producers and consumers are now totally unknown to each other and 'made to order' has given place to standardisation. The question of course here arises, how far we can discard machineries and how far we can still retain our primitive method of home industries. This is certainly a debatable one, but there can be no gain-say, if I make the assertion that India as it is to-day, cannot altogether discard machineries and can thrive only with the help of agriculture and rude village craftsmanship. Fortunately or unfortunately, India has been brought face to face with the world's movements and the effects thereof are being found daily to increase on Indian soils.

The attempt which has up to this time been

made in imparting technical education to our boys has altogether been along the wrong line. The question for the technical education was first raised by the Indian Famine Commission in 1880, who admitted the necessity of a diversity of employment for the Indian people. In the mean time, textile and engineering industries reached a standard of efficiency and to get people to work in those factories, public efforts in Bombay led to the establishment of the Victoria Jubilee Technical Institute. The teaching of sciences in the affiliated colleges of the universities was also introduced. Lord Curzon's new University scheme enhanced the activities of the universities in the teaching of physical sciences. Calcutta also saw in 1904, the establishment of an Association for the Advancement of Science and Industry. Since then, some attempts have been made almost in every province to train some portions of their youths scientifically or industrially but the modern system of education is still literary in sense that those who receive them like best to work as teachers or instructors instead of as actual workers. The fact is this, India has made some progress in some industries, but as the management does not lie with them in majority of cases, so the chance for admission into practical

fields for higher classes of mechanics or engineers is extremely limited. But technical education for the mass has not still been thought of in India. What we need in India is like an establishment of the Institute of City and Guilds of London which will train up through night-schools masons, carpenters, black-smiths, plumbers, tailors, brick-layers and other crafts-men who are daily wanted in every society. A little lift in these classes of people will greatly contribute to the national efficiency and for the higher classes, specialisation leading to research and discoveries may be reserved.

Heridity. The next important factor in population is heridity. India contains variety of races and tribes, some of whom have reached the climax of civilization and some of whom are still on the opposite scale i. e. they still lead the life of barbarians. Thus all stages of civilization are to be found in India. The reason for this is that in India various races and tribes have migrated from time to time and the vastness and inaccessible nature of the country enabled them to preserve their native specialities. According to Sir Henry Risely, there are seven different physical types among the tribes and races of India. They are the following :—the Turko-Iranian, the Indo-Aryan, the Scytho-Dravidian, the Aryo-

Dravidian, the Mongolo-Dravidian, the Dravidian and the Mongoloid types proper.

The Turko-Iranians are generally found in Beluchistan and in the North-Western Frontier Province. Their sound physique and stalwart figure entitle them to become soldiers and if a national division of labour be made, these people may be reserved for the national defence of India. The Indo-Aryans are found in Rajputana and in the Punjab. They also like the Indo-Aryans are strongly built and able to bear any exertion. All kinds of hard works, both of body and mind are meant for them. The Scytho-Dravidians are found in Merhatta country and in the South. They are highly intellectual people. The Indo-Dravidians are found in Bihar and in the United Provinces, and in some parts of Rajputana. Their prudence, sagacity, thrift are so proverbial as one is apt to conclude that their proper field of activities is business. The Mongolo-Dravidians are found in Bengal and Orissa. Their natural aptitude for clerical pursuits is universally accepted. The pure Mongoloid type is found in the Himalayan kingdoms of Nepal, Sikim, Bhutan and also to a certain extent in Assam. Their natural aptitudes vary according to the different stages of civilization they live in. The pure Dravidian type

is found in the Madras Presidency, in the Central Provinces and also along the eastern coast. As there are different stages in this type, so the natural aptitudes vary according to the amount of civilization received.

The Influence of the modern Age on Indian population. The spirit of the modern age is competition and centralisation. The influences which played an important part in ancient or medieval India have become archaic and any depending upon them is fraught with danger. Since the seventies of the last century, with the establishment of factories and quickening of distances, competition is daily becoming an important factor in the life of an Indian and with the growth of cities and towns, centralisation in production and distribution is becoming an established fact. Though heredity is of some consideration and antecedents still exercise some influence on human conduct; but now education and environment dominate our action in everyday life. From the estimate given above, it will become clear that certain Indian nations have certain natural peculiarities which their heredity endows them with, but with the help of liberal and scientific education and with the vast possibilities

of the whole country before them, an Indian of to-day has got ample opportunities to go against his nature, if his inclination or self-interest leads him to do so, and yet to derive benefits. Competition has really become a crucial test of a nation's life, it enervates the muscles, enriches the latest faculties of brain, brings out rarest parts which ordinarily lie dormant in human beings or in one word develops all the fine fibres of humanity.

The Asiatics generally dislike the theory of competition as they think it was evolved out of the theory of the 'survival of the fittest'. But though it bears some analogy to it, but in essence, it differs as it means a man who benefits his surroundings most is entitled to enjoy a major portion of the benefits of the surroundings. A labourer who labours hard and economically is entitled to a higher wage than one who has not that qualification. Similarly, a producer who produces most efficiently is economically likewise entitled to a greater amount of advantages. It is competition which has led to the creation of the modern world. Again, the ultimate effect of competition is centralisation. This, to a certain extent, is no doubt is conducive to well-being, but, when carried to an extreme degree by selfish

motives it becomes worse than the old condition of things.

Though competition has been introduced into India and factory system of production has raised its head in certain parts ; yet India has not yet been able to adapt herself to the modern requirements and this proves the fact that Indian mission to the world is to bring a spiritualising influence on the modern age which is grossly materialistic in its nature.

The statistics show that during the course of last thirty years, towns containing population from 5,000 to 20,000 have declined though European commercial activities have led to the creation and expansion of large commercial cities to the growth of which Indian contribution is not certainly very great. The tendency of the Indian people is to live calmly and they generally want to avoid bustles, to this if the conception of the future world be added then the outlook of life as I have stated in another place becomes altogether different. This fact will be clearly proved that while since the middle of the last century, the urbanisation of the European and American countries has been complete, India in the same period has not made any appreciable progress. In England, the urban population is

now 78 percent and in Germany it is 45 whereas in India, it is only under ten.

Notwithstanding the fact, we cannot ignore that the influences of the modern age have become very prominent in India and it is now high time for India to adapt herself trying to assimilate those influences with a view to acclimatise them and thus to derive the largest amount of benefits. Towns have grown, European commercial cities have expanded, industrial life of the people has been thoroughly revolutionised, customary state of things have lost flavour, competition is making its importance felt in every walk of life every day, or, in short, the very mentality of the people has undergone a complete transformation; under all these circumstances, it is only prudent that we should take early action to divert the modern influences to work for the national well-being,

Modern Divisions of Population. The modern population can generally be divided into two sections—the employers and the employees. Again among the employers there may be some capitalists or factory managers or proprietors. Among the employees there may be various stages of employment.

Production is the joint action of the employers

and the employees. Each of the two sections depends upon the other and any independent action is altogether unthinkable. The interest of the employers is to work at a least minimum cost to get the largest amount of production. The interest of the employees is to extract the best possible remuneration with a view to live in the best possible way in the world. But in this it should also be borne in mind that most of the employees are also consumers. So, if on account of efficient management, cost of articles consumed by the employees themselves fall off, then an indirect benefit accrues to the employees and this should also be taken into consideration in measuring their total happiness. The theory that the employers want to fleece the employees may be true temporarily but it cannot be a permanent truth. As any reduction in wage-fund will lead to a decrease in efficiency in employees with the inevitable result of a rise in the cost of production. But what practically happens in a society is that certain greedy persons being unmindful of economic laws, take advantage of the improvident nature of labour and for the time being succeed to take a share of the incomes of the labourers to augment their profits. Strikes and misunderstandings between the employers and

the employees have become the inevitable result of this. Ultimately, the country suffers as its production shrinks.

Actual Division of Population. The modern Indian people inspite the caste system which exists still in fossilized condition can be divided according to modern categories into (1). Higher Class, (2). Upper Middle Class, (3). Lower Middle Class and (4). the Mass. The higher class represents the land-lords, the moneyed and the leisured class who have not to labour for their maintenance. The upper middle class represents the successful merchants, medical practitioners, lawyers and the high government officials. The lower middle class represents the the same class of people with lesser incomes, The mass represents the labourers or who are on one step higher than them. Unlike the caste system, this economic arrangement is always in a state of fluid condition. An energetic and able man can rise up from the fourth class to the first class and there is no law to hinder him. Merit alone is considered sufficient and consequently competition is the motive force. The economic effect of this is that the sum total of country's intelligence is increased and with it the power of earning of the nation is augmented. I am conscious of the

objection which the humanitarian may raise here. He may say that the eternal truth which we find in plant and lower animal life and if this truth in the gerb of competition be applied to higher intellectual animals like man endowed with reason and rationality ; any more degradation in a human being cannot be thought of. To this my answer is that the weeding out is the eternal law in this world and it is applicable in all phases of creation including man. If we all admit that the aim underlying this creation is advancement and improvement, weeding out then becomes the natural processes by which nature proceeds to eliminate overgrowths. It is the tender virtues of human beings which has led to the foundation of charity. It is an essential human virtue as it develops the godly qualities in a materialistic man. But these high conceptions and higher ideals must have, I admit, a certain place in our every day life if we want to mix spiritualism with materialism and thus want to create a earthly paradise here on earth. But any misdirected charity leads not only to great economic loss but also to a national degradation to a great extent. That is why. in every society, there are some chosen people who are regarded as the custodians of morals and virtues of the nation. Thus

my argument is this that in our every day life, competition should rule as it develops the inner faculties and increases the sum total of nation's intelligence and earning power. To give competition a free play, equal opportunities should be given to all classes of people and promising youths of all classes must be brought up together in one environment. The present Indian arrangement is totally unsatisfactory. The lower middle class and the general mass of people on account of their chronic poverty have been driven to such recklessly miserable condition that they almost live on the verge of starvation. It is indeed a matter of regret that sometimes cliques are found in the higher middle class who oppose in every possible way the lower middle class to rise. The next serious fact is the inactivity of our higher class. In fact they do not consider that they have any mission in life excepting making some risks at the races or of taking some exertions in games.

Female Population in India. The one important feature in Indian population is that its females are less in comparison with the males. In every one thousand male population, we have about 963 females. This paucity of female population is another sign of the poverty of the Indian people. Anthropologists assert that poverty leads to

fecundity and superfluity to barrenness. Apart from this scientific reason, it is true that the Indian people cannot bestow the same care and attention upon the girl babies as they do in case of their boys. This also is due to the acute state of poverty which prevails.

Woman folk is considered by all the nations of the world as partners-in-life of men. In ancient India, when the majority of the people lived in the villages, the Indian women helped their male partners and so their living in seclusion did not matter much. But in towns, purdashin ladies practically have lost her economic position and in most cases, they consume without contributing anything to the national production. So long this sort of thing would remain, the achievement of full economic development of the nation will remain a dream only.

V

PRODUCTION

Primitive man and his wants. When God created us, He implanted two great passions in us ;—hunger and thirst. But to help us to appease these two, He loaded the trees with fruits and commanded the rivers to flow brimful. Thus the needs of a primitive man were few ; food and drink being the principal items. So long man lived in subconscious state the margin of difference between him and a wild animal was practically nil and it was not strange that to satisfy his physical necessities he had very often to fight with the denizens of the forests amidst whom he lived.

Then came the slow awakening of conscience which led him to perceive the tortures of wild nature and ultimately the desire arose in him to meet or avoid them. This evolution of intellectual faculties led to the conception of happiness and to achieve which both the brain and muscle of man became active. Thus first wants created activities but later on when human brain became sufficiently

well-developed, man became ceaselessly active and in our modern society the restless human brain conceives of further advancement and consequently, wants are now created by activities.

The standard of human happiness varies of course from race to race and country to country. In some country, the necessaries of life are few and in some the number is great; some people are satisfied with food and drink only and some want to include many things within the category of necessaries. But the main principle still remains i. e. some things are necessary for the very existence and without which man cannot live. These indispensable primary things necessary for the very existence of man are called the necessaries of life. Anything above the necessaries which are wanted for either show or comforts may be termed as luxuries.

Necessaries and luxuries. The terms necessaries and luxuries are not invariable. The idea of necessaries change with the growth of national wealth and so the conception of luxuries also undergoes a transformation. But a limit to necessaries can be put but no limit to luxuries can be devised. According to the old idea necessaries still mean the things which are wanted for maintenance. To perpetuate the human race it is necessary that

the people should find food not only for himself but also for his wife and at least for two children. It is the duty of every man to bring up his children at least in the same fashion in which he was brought up. Thus every man is in need of money up to the extent in which he will be able to maintain himself and his family according to his social status and this demand is termed as necessities. Necessaries can always be ascertained but it is very difficult to measure luxuries. Any diminution in necessities leads to physical deterioration and ultimately it may lead to extinction also.

The utility of production. Production economically means anything which is over and above subsistence and therefore everything which is grown or produced is not production. If the surplus be the real economic production, the question then naturally arises what is the necessity of producing anything over and above subsistence. The answer to this is very simple. It is the human psychology which tells us that man cannot become happy until he gets something above his wants i. e. something with which he can do as he likes. This desire on the part of man electrifies his energy which is responsible for the evolution of this modern world.

The demand for luxuries absolutely depends

upon the existence of necessities ; luxuries mean in reality superfluous necessities. Thus national luxuries are the sure sign of national prosperity, because, unless there be a real increase in national wealth there can be no entrance of luxuries. Any undue increase of luxuries at the cost of national necessities leads to national deterioration and if this be not timely checked decrease in number will follow. Thus though luxuries are the true criterion of national prosperity but its undue preponderance in any society causes deterioration both in quality and quantity of its people.

The Agent of Production. Labour alone is the agent of production. All productive industries require labour and without labour any production could not have been thought of. The economic division of industries are into (1) extractive, (2) distributive, (3) manufacturing, (4) services and free incomes. Excepting free incomes, all other sources of earning money depend upon labour, because, lands and other natural agents cannot be productive unless labour is bestowed upon them. Capital again is past labour and even capital itself is powerless unless it gets help from labour. But labour does not look up to for any one else in act of production, though it is true that

with the help of capital, the fields of activities of labour are enlarged.

Indirect Agents of Production. Thus it is seen that land and capital are the indirect agents of production. Land was previously considered by economists as fixed and it was also thought that different kinds of land possess different fertility values and rent was therefore considered as an unearned increment and therefore according to the old law of distribution the whole of it was ascribed to the landlord. But this scientific doctrine of rent now requires some modification. Fertility of soils is a relative term and it is wholly inconceivable to consider something as absolute fertility as it is very often seen lands endowed with all powers of productivity by nature but lying at a considerable distance from the market are seldom wanted and therefore these lands are considered from the point of view of society as unproductive and they are generally classed as barren. Other argument that the quantity of land is fixed in a country also requires some modification. Modern science has invented many land saving instruments the chief of them are synthetic production, steel frame in the building construction and motor in transport. Proposals are already on foot in advanced countries for the installation

of motor transport in the place of railways. Thus it is seen that neither the theory of absolute fertility of soils nor the theory of fixed quantity of lands in a country is any longer tenable.

Capital of course still is a great machinery of production but the help which it renders to production is only indirect. There can be no gainsay that labour itself without the help of capital is able to produce something and capital without labour is barren. But there is the other side of the picture. What is capital, it is nothing but past labour. Capital has become almost an indispensable adjunct in modern society because both the idea of the standard of living and the modern system of production cannot go one step independently without capital. It is labour and capital combined which has reared up the modern economic structure of society.

Indian Capital. Now we want to make a survey of capital invested in India with a view to ascertain its power of productivity and also to know how much it contributes to our national wealth. Indian capital can be divided into two clear cut distinctive parts, namely, foreign and native. When the industrial renaissance came to India in the beginning of the last century, India very keenly felt

the want of capital. Foreign capital came spontaneously to India as the foreign investors found vast field for their investment in a virgin country like India. Their enterprising spirit got a further stimulus from the invention of steam engine and the discovery of the new sea-route to India. Another additional stimulus was peace and tranquility which came permanently to reign in India with the introduction of British rule.

The paid up capital of the companies incorporated in india is now about Rs. 1, 23, 21, 36, 000. Foreign investment is also considerable. A list is given below of approximate totals of foreign investments.

	Shares Rs	Debentures. Rs.
Railways and Tram Companies.	53,16,00,000	60,86,00,000
Navigation Companies.	33,60,00,000	nil
Mining Companies.	20,25,00,000	nil
Jute Mills.	35,50,00,000	nil
Tea Planting Companies.	27, 00,00,000	nil

The total foreign investment i. e. foreign capital invested in India is about Rs. 630, 00, 00, 0000 and Rs 155, 00, 00, 000 in debentures.

Disadvantages of Foreign Capital. The advantages of foreign capital for the development of a new country is immense. The American

states or the provinces of the Australian Commonwealth might have still remained in a barbarous state had not the British capital gone there to exploit the resources of those countries. But a country like India which by no means be considered as a new country whose density of population is easily comparable to that of any country of Europe or of America is really put to great difficulty when foreign capital comes in of its own accord on account of easy access to investment. It is our common knowledge that foreign capital encourages foreign trade to a limit in food stuffs and other necessary articles which generally drives the poorer section of the people on the verge of starvation.

Besides that it entails a lot of disadvantages which are enumerated below.

(1). Foreign capital imports foreign skill and management. The profits under this head is utilised by the foreigners and for the fear of competition the natives are never allowed to know the secrets and thus the charges remain a permanent one. Again, a sudden industrialisation of a country requires the importation of foreign machineries the cost of which always appears heavily on the debit side of the International Trade of India. The third point is that the

foreigners who invest their capital in India naturally want to derive the best utility out of their stock and so they foster those industries only which pay them most. Thus it has been repeatedly pointed out that jute industry in Bengal has been a source of tremendous discomforts to the people of Bengal, but, the directors of this industry have not paid the least heed up to this time, the reason is very plain that they have invested their capital in India not out of any philanthropic motive but only for the sake of deriving some profits and dividends. The fourth disadvantage is the combination of the foreign capitalists against the Indian producers. Concerns with big capital with their ramifying branches throughout the country have more prospect of capturing the market than small capitalists either with no branches or with branches only one or two. The fifth difficulty is that the foreign capital works up the virgin mines and it is but natural that within the course of some years these mines will be converted into pits and the national loss which will be thus incurred will be indeed great as when the national consciousness will come and capital will be forthcoming, the means of investment will be wanted.

The Real Meaning of Productivity. Ordinarily, it is presumed whatever produces something tangible may be termed as productive. In this light, all extractive industries are productive as they invariably produce something whenever any attempt is made. But the word production economically means a net gain that is something over above the cost of production. In agriculture, when we get a return below the cost of production the soil which produces the crops must by no means be considered as productive though it produces something tangible. Similarly, the mines which do not pay the cost of its working up though produces something tangible cannot be called as productive.

Thus there may be some industries the carrying out of which though never directly produces anything very visible yet it bestows upon those who carry them on a certain amount of net surplus and consequently they ought to be termed as productive. Such concerns are all the branches of the distributive and manufacturing industries. Distributive industries represent trade, commerce and transportation. In our modern age, things are manufactured in anticipation of demand and in fact sometimes articles are manufactured even though there be no demand in the market. Under all these circumstances there ought to be a lot of

middle men who would intervene between the time of production and the time of actual consumption. The business of these people is to carry a thing from one place where it practically has no economic value to a place where it acquires considerable economic importance or to transmit a shape and thus confers values creating demand for them. In this light the utility of trade and commerce in economic distribution cannot be denied.

Transportation also plays an important part in economic welfare of a nation. As without transportation, the superfluous production of one particular province might have remained unutilised and thus a great portion of the production might have lost economic utility. It is transportation which carries an article from one place where it exists in superfluous condition to a place where it is scarce and thus confers economic values upon it. But still there remains one question to be asked? Trade, commerce and transportation entail a certain amount of cost and therefore to ascertain whether these are productive it is necessary to measure the benefits which they actually confer at the time of action. Consequently, if the cost entailed in constructing the machinery be in excess of the benefits derived, it must be presumed that the economic veins of the nation

are not in sound order and an effective medicine is soon to be applied. The fact is that like all extractive industries, all distributive industries and even to a certain extent all manufacturing industries also obey the laws of diminishing returns under unfavourable circumstances and they can only be worked up causing to yield a profit under certain amount of favourable circumstances. Thus if a railway line be constructed in a country where neither the passenger traffic nor goods transport exists, the line is there worked at a loss. But this present loss be of no consideration, if there be a possibility of developing traffic in future in such a way which would pay not only the cost and profit of future working but would also pay a certain amount of interest charges on the capital which has been lost in installing the industry. Thus whenever the balance sheet of national trade and commerce has to be presented before a public, it is to be seen whether the gain has been in commensurate with the cost. Judged by this light all national trade which does not pay the amount of benefits in proportion to sacrifices made must be given up as it causes a drop in the credit side of the national balance.

Indian Industries. India has been recognised as one of the eight great industrial countries of

the world by the League of Nations. Some of the Indian industries, such as cotton manufacture, indigo industry and some fine art-crafts, drew the attention of Europe long before. Art-crafts flourished in ancient India because there was a constant tendency on the part of the Court to encourage the artists and they gathered together round a Court and particular art thrived in particular province under the patronage of a particular ruler. Since the decline of the native rule, arts declined only because the encouragement they used to get ceased to function and unless they now be organised on a scientific basis the art craftsmanship in India will altogether vanish.

(1). Manufacturing industries. The most important manufacturing industry is the weaving of cotton. In 1922, the number of cotton spinning and weaving mills was 284 and employed 283, 297 persons. The average number of employers in each establishment was 994. In the same year, the number of cotton ginning and pressing factories was 1, 775 and employed 133, 323 persons. The average number of employees in these establishments was 3,525. The presidency of Bombay has specialised in cotton manufacturing industry and it manufactures about 79 per cent of the cloth manufactured in India. The expansion of the industry during the last thirty

years has been immense. The number of spindles from 1898 to 1918 increased by 48 per cent and the looms by more than 200 per cent. But the recent tendency in these industries is rather to increase the output per mills than to increase the number. The paid up capital of the incorporated companies in 1921 was Rs. 19, 79, 82,000.

When the cotton mills were first opened in India, the Indian mill-owners found vast fields for their activities in the markets of China and Japan. Consequently, they manufactured only coarse cloth to meet the demand of those countries. But with the awakening of national spirit from the beginning of this century, this industry got a new stimulus and the activities were further accelerated by the inauguration of the Swadeshi Movement in Bengal in 1905 and since then national patriotism is giving to the mill-owners a kind of protection.

China and specially Japan began to spin cloth for home consumption from the beginning of this century and therefore the demand for the Indian produce in those markets began to fluctuate. At last, the variations in the price of silver rendered the Indian trade in China and Japan a kind of speculation. So the mill-owners were compelled to turn their attention to home market and began to spin higher counts for home consumption. But recently,

the cotton manufacture in Japan has been thoroughly organised and the country produces cotton cloth not only sufficient for home consumption and thus eliminating the Indian import but it also exports a large quantity of cotton manufacture a considerable portion of which finds their market in India. In 1924, the total exports amounted to 326, 547,000 yens of these shipments India received cotton manufactures valued 47, 142,000 yens. In January of 1925, Japan exported cloth worth 29, 229,000 yens. The corresponding figure of the last year in the same month was 20, 450,000 yens and thus an increase of 8, 779,000 yens has occurred. In last January, British India received from Japan cloth worth 4,557,000 yens.

All these facts have told heavily upon the cotton industry of India and the total production of the power mills in India shows consequently a tendency of decrease.

Thus it is seen that the industry of cotton manufacture though of some considerable experience in India is declining and unless some particular care is taken of, it is sure that it will dwindle which will mean not only loss of bread to those people who work in the cotton mills, it will also mean an industrial degeneration of India. There are two main facts which are

retarding the progress. When the cotton mills were started in India, the pioneers of this industry did not pay any heed for the development of those side industries and trade which supplement this industry and without the help of them any economic management could not possibly be thought of. The mill-owners not only imported foreign skill and machineries but from the very beginning they developed their trade on the demand of the foreign markets over which they had absolutely no control. The Manchester cotton trade first meets the home demand and its exports are managed by the English merchants who have flourishing concerns in all parts of the world wherever the British piecegoods go for sale.

Then comes the question of productivity. As I have remarked in this chapter elsewhere that all productions are not productive unless they produce something over and above the cost of production. It is indeed very difficult to gauge whether the sacrifices entailed in installing the cotton industry in India was commensurate with the gain. This industry, was nurtured in a hot house and from the beginning it got a ready market in the far eastern countries and afterwards it got practically a strong protection

from the spirit of national patriotism. That is why though this industry proved something to the organisers from the beginning, it is doubtful, whether the gain which accrued to them was really a national gain. The second thing is that the cotton mill-owners have never been very sympathetic to the national demand which is giving the industry a kind of protection for the last 20 years. The statistics of production of Indian cotton mills show that since 1908 i. e. from the Swadeshi days, the demand for the country made cloth has been steady because inspite the drop in the export side of the Indian cotton manufacture, the total production has increased from 657, 585, 159 pounds to 705, 873, 443 pounds. But the producers of cloth have very rarely recognised this national spirit and they have always been very keen about their own profits.

Besides the manufacturing industry, cotton industry was a kind of cottage industry and it supplemented agriculture which is the main occupation of India. It is a common knowledge that Indian peasants have ample time and they could easily pursue any industry which can be had without any least exertion i. e. the practice of which will require neither capital

levy nor any great physical exertion. Out of 365 days in a year, the industry of agriculture cannot require more than 180 days of five hours hard labour per day. Thus if the Indian cultivators get cotton to spin in their home and yarns to weave they with the help of their dependants might easily earn something to eke out their poor income. Home spun cloth still possesses some reputation and its market was never captured by the foreigners. If this side of the industry can be developed the surplus energies and capital of the nation which generally lie unutilised might be made to yield something and therefore the national gain which will be derived must amount to a considerable amount.

This side industry exists from time immemorial. According to the census report of 1921 the number of handlooms in India was about two millions. The yarn, both mill made and foreign, which the handlooms weavers spin is about 250 millions annually.

Now it is seen that cotton industry is a great national industry of India and it is also seen that on account of foreign competition for some years the industry of cotton manufacture has not been very lucrative and therefore

the time has come to ponder over the matter. No industry can exist unless it depends upon itself, perpetual protection can be likened to a nurture in a hot-house and it is known to all that all hot-house growths never attain full maturity ; they may be treated as luxuries in national production but not surely as a means of increasing national income. Time has therefore come to bifurcate the cotton industry into two important portions i. e. the mills which will devote their energies to the production of yarns mainly and the handloom industry which will devote its energy to the production of cloth. Co-operative societies need to be started which will act as distributors of yarns to the cottages of the peasants and of cloth to the different markets of the different provinces. Besides that other supplementary industries which are necessary for the development of cotton industry must be fostered. I mean the manufacture of cotton machineries must be attempted here. So long, we will depend upon other countries for our machineries our improvement in manufactures will be deferred. Firstly, the foreigners who manufacture machineries know very little of Indian conditions and the machineries which they manufacture are specially suited to

their own convenience. The Indian data differ in every respect ; its labour is not so efficient and therefore any machinery specially constructed to be handled by high efficient labour will certainly be costly in the long run as per capital production will never be equal. Secondly, the climatic condition also plays an important part in manufacturing industries. Machineries constructed to be handled by men of temperate climate can never be of efficiency in tropical climate. But, if these machineries be constructed in India with a special eye to special conditions which prevail here, the result will be that we will not only get machineries at a cheaper price but they will also be of great efficiency. There is another side of the picture which is also to be seen. The import of machineries causes an export and if we can lessen our imports the consequent result will be a lessening in prices of raw materials which are exported in payment.

(2). **Jute industry.** This industry is specially confined to the Presidency of Bengal and the province of Assam. Like cotton industry, this industry is also of some years' standing, the first jute mill was started in 1855, in Rishra, a village in the Hooghly District and the original out-turn was only 8 tons a day. The first power loom was

introduced in 1859. Since then the number rapidly increased and the jute industry expanded. A table is given below from Mr. Cotton's Hand Book of Commercial Information to have an idea of the expansion,

No. of mills.	Nominal capital in lakhs.	Persons employed in thousands.
1914-15 70	Rs. 1,394.3	238.3
1915-16 70	1,322.5	254.1
1921-22 81	2,647.0	288.4
1922-23 86	3,192.0	321.2

In 1879-80, the number of jute mills was 21 and the nominal capital was 270.7 lakhs and the number of persons employed was 38.8 thousand. If we compare this figures with the recent figures, we will find that there has been more than 400 per cent increase in the number of mills, 1179 per cent increase in the nominal capital and 828 per cent in the number of persons employed.

On account of these activities of the mills and the foreign demand in raw jute the area under jute crops has immensely increased. In 1874, only 850,000 acres were under jute cultivation and it rose gradually till it reached the climax in pre-war days in 1913-14 to 3,352,000 acres.

Some remarkable aspects of [the industry.

This industry can be divided into two parts—the growing of raw jute and jute manufacture. According to Mr. Cotton's calculation the values of raw jute in 1923 were £15,019,000 and jute manufactures were £26, 996,000 or in total £42,015,000 or 63,02,25,000 rupees. This sum no doubt represents a high figure and if all this amount was earned by the nation still the question might have arisen how far of it can be ascribed to real national gain in consideration of the fact that on account of growing jute, malaria is making great havoc in Bengal and the health of the people of the Presidency has been totally shattered. Besides that, the question of shortage in food grains is also to be considered. This shortage at least in Bengal and Assam may be ascribed to the growing of jute and if the areas under jute cultivation be released, the areas under rice would certainly increase and with rise in acreage under production in rice the price in food stuff will certainly decline. It is a common fact that if the price in food stuffs declines there will be an all round fall in prices in other materials which will certainly be an advantage to a country like India where cheap labour is urgently wanted for part industrialisation of the country. Besides these cogent reasons, it is to consider how much of

the net profits is really earned by the people themselves. Almost all the jute mills are foreign concerns and many of the jute companies have been incorporated in England. Jute shares which are bought by the Indian investing public are more in the nature of speculation. Again, almost all these concerns are managed by foreign skill and the superior stuffs are invariably Europeans. The Indians who work in the jute mills, the sanitary condition of which however improved, suffer heavily in their health and they work there as either ill-paid clerks or as labourers. The cultivator who grows jute is as a common fact very poor and he neither can wait just after the production for a better time nor can he dispose of his goods in the best market to get the highest possible price. A large number of people intervene between him and the shippers who consume a very big portion of the incomes. The price of raw jute rises as much as 400-500 per cent from the actual cultivator to the shipper. Thus considered from all sides it is plainly seen that it is entirely a foreign industry owned, managed and piloted by the foreigners and consequently the huge annual profits earned goes though not entirely but a considerable portion of it into the pockets of the foreign capitalists, entrepreneurs, mechanics, engineers, jute mill machine

manufacturers, and others. We annually export raw jute and jute manufactures worth Rs. 60 crores or more. India annually exports more than she imports. In pre-war days i.e. in 1913-14, the Indian imports amounted to 183 crores and the exports were 244 crores. In 1919-20, the Indian imports amounted to about 101 crores and the exports 198 crores. A large portion of this export is represented by jute. There is indeed some affinity between the jute trade and the Indian import trade. In a year, which is a prosperous one for jute trade; it is a common knowledge in the local bazars that the buying of foreign articles specially cloth, toys and sundries increases and in a year which is a bad year for the jute trade, foreign articles do not sell in the same proportion. Thus this jute industry is responsible also for the expansion of foreign trade in articles which we do not either very urgently want or which if we like we can manufacture here in India under some favourable circumstances. Indeed, the history of jute industry in India will amply bear testimony to the fact that the introduction of many foreign articles might have been simply impossible had not jute industry tremendously developed. The all-round rise of prices in India is also to a certain extent due

to jute industry. It is a common knowledge that during the rainy season when the foreign merchants buy raw jute, the currency of the country is unnecessarily expanded and this inflation raises the prices of the articles. It is really a Herculean task to exactly measure how much currency is needed at the time of jute season and how much is to be contracted when the season becomes over. There has been an inflated currency in India and it cannot be argued otherwise that this has not been to a certain extent responsible for the rise of prices in India. Then there is the other argument. No country can for ever export more than what she imports. It is an eternal truth in economics that the export side must be balanced by the import side. So long, the difference will continue ; import of gold bullion will occur into the country and this import of gold bullion will automatically settle the balance by raising the prices within the country. The present level of prices in india is certainly due to this phenomena to a certain extent. Thus the industry of jute though it gives some increasing purchasing power to the peasants and consequently some higher rates of rents to the Zamindar but the loss considered from the point of view

of the whole nation is indeed very great. (1). The industry is responsible for the expansion of foreign trade in India. (2). It has unnecessarily expanded the currency. (3). It has given the purchasing power to the foreigners who mainly conduct the jute trade and with the help of this increased purchasing power they fare well in Indian external trade. (4). The cultivation of jute industry has been a source of unhealthiness to Bengal and Assam and the national loss thereby sustained is also very great. (5). It has unnecessarily swelled the number of middlemen who do nothing either for the cultivation or for the advancement of the industry but grow rich at the cost of the poor peasants and thus the economic potentiality of the nation gets a check.

Wool Industry. This is an indigenous industry in India. But the climatic condition of India in most parts is as such the wearing of wool is not possible except during the cold weather and even that is for one month in the best.

The quality of Indian wool proper is not good ; it is generally noted as the third class i. e. carpet wool. But India annually receives large consignments of wool from the surrounding countries namely, Persia, Afghanistan, Tibet, the Central Asia. Most of the import comes by

land and certain portion of it which comes from Persia comes by the sea. The average fleece in India is only 2 pounds whereas the average fleece in Australia is $7\frac{1}{2}$ pounds. Some portion of the Indian wool is called '*dead wool*' i. e. wool which is taken from the carcasses after slaughter and not fleeced. India also receives large consignments of foreign wool from Australia and Europe. The average import of foreign wool is in the neighbourhood of 130 lakhs and the average export of Indian wool is about 530 lakhs.

The chief centres of the wool industry are the Punjab, the United Provinces, Sind, Beluchistan and Bikaner State. Again in these provinces, the trade flourishes where the winter is severe and lasts for some considerable time in a year. Indian wool is exported from Karachi. The principal centres for the purchasing of the Tibetan wool are the Teesta Valley and Kalimpong. Amritsar, Quetta receive wool from Persia, Afghanistan and the Central Asia, Khandesh and Deccan wools of the Bombay Presidency have also some considerable value. That the industry of wool manufacture has made some considerable progress in India will be evinced from the fact that in 1902, there were three factories with an authorised capital of $38\frac{1}{2}$ lacks. The number of

persons employed was 2,559. The quantity produced was 2, 148, 000 pounds. In 1917, the number of mills rose to five and the capital increased to $2\frac{1}{2}$ crores. The number of persons employed became 7,824 and the quantity of goods produced was 9,744, 264 pounds. The number of woollen mills in 1922 became ten.

The special feature of the wool trade in India is that woollen goods are generally consumed by the hilly tribes or by the people living in the submontane tracts. People living in the plain though as a rule do not use wool in large quantity, better quality is consumed by the richer section of the town people who consider woollen goods more as luxuries and so they preserve them as show and for rare use. Most of the foreign imports are either used by the European living in India or people who live in European style.

Of the Indian produce, Shawls and Carpets possess unbounded popularity both in Home and Foreign markets. India exports annually on an average carpets and shawls worth Rs 80, 00, 000.

From the above survey, it will become plain that the wool industry in India is a prime necessity in some parts and the less the woollen goods are imported the better for India as the section of people who are in absolute need of wearing wool

are generally poor and it is beyond their means to buy a foreign fabric. Like cotton, wool should also be made a kind of side industry and should be practised in cottages by the peasants or by the people who might practise them in their spare time. This will not only increase their income and will free the country from depending upon the foreign resources for supply but it will also lessen the side of exports as the manufacturing branch of this trade is mainly practised by the European experts with European capital and skill with machines made in Europe ; so, any lessening in demand will mean a lessening in their incomes and thus consequently the annual charges in the shape of profits and interests etc. will dwindle. It is, as I have remarked elsewhere, the artificial stimulus created in the export trade by the foreigners which has led to the expansion of the import trade. In developing our industry it should be our prime consideration that the branches of industry which are here carried on by the foreigners with foreign skill and capital should be lessened with a view to lessen our export trade and this lessening of export trade will automatically react on the import side. So long, this is not done any attempt to check the imports will almost be futile.

Silk. Another important textile industry is

silk. This industry is mainly in the hands of the Indian. Silk had at one time a very great demand in the European market and a considerable quantity was also consumed locally within the country. With the decline of the native rule, the trade also declined and the amount of annual export of silk manufacture has practically dwindled down into nothing. The following figures will prove the fact.

Year.	Quantity. yds	Value. £
1918-19	823,282	82,364
1919-20	371,689	36,824
1920-21	271,489	33,879
1921-22	155,908	19,529
1922-23	131,588	14,678

Bengal and Assam possess special virtues and they have in sense a speciality in the industry of silk and this should be a kind of side industry in those provinces where the industry of wool is not practised. The aim of this industry should be to meet all the home demand and thus to stop the annual import of silk.

Extractive Industries. Of all extractive industries, the raising of food grains is the principal occupation of India ; and in fact, in some staple

crops India possesses unique advantages. According to Mr. Cotton 'world production of cleaned rice is in the neighbourhood of 60,000,000 tons, exclusive of entirely empirical estimate of 30, 000, 000 tons for China. India's share of this grand total 90,000,000 tons may be taken approximately at 35 per cent.' In wheat, India occupies the third place in the world production, the first being the United States of America and the second being Russia. Besides those two important food grains, India also produces barley, millets and pulses in considerable quantities which are sometimes good substitutes for food grains. On an average, we annually export rice weighing four crores of maunds and wheat and wheat flour to the extent of one crore of maund. Thus the total amounts to 5 crores. We have seen else where that the total produce in rice and wheat is on an average 93 crores of maunds. Thus we export more than five percent of our principal food stuffs when our annual production per head is below 4 maunds. If the undeveloped areas in the Central Provinces, Assam and Burma be developed ; certain amount in total production can no doubt be increased. Assuming that India needs for her 24 crores of people rice and wheat weighing 100 crores of maunds so

there must be strict legislation that any export below that national demand should be prohibited. But so long, India will depend upon other foreign countries for the supply of some articles she either cannot produce or can at a great cost, she is bound to export something in payment of import of these articles and this can best be made in her staple food crops in which as we have seen she possesses special qualifications as being the first in the production of rice and the third in wheat. The attention of the Indian agriculturists is needed to be drawn to this fact and they should attempt to increase their output and the attention of the nation should be drawn to the fact that areas lying fallows or areas surveyed but not sown soon should be brought under cultivation with a view to increase the annual production. Any amount above one hundred crores of maunds may safely be imported.

Minerals. The next important extractive industry is mining. We have seen else where that though the mineral resources of India are immense still only a small amount is annually earned on account of India's ignorance and want of credit facilities. This industry is also in majority of cases under foreign management and financed by the foreign capitalists.

Distributive industries. India, properly

speaking, has had no mercantile shipping. India's exports and imports are carried on by foreign vessels who earn big profits which are represented in external trade balance as 'the invisible returns'. Attempts have been made and still are being made to provide India with a competent Indian merchant fleet and all these attempts are proving nothing. The foreign ship-owners promise the shippers a certain amount of the charges to refund if the shippers continue to use the ships of one company for a certain period. But if the shippers fail to do so the penalty will be the forfeiture of the rebate promised. Mr. Haji of Bombay in his pamphlet on the deferred rebate system clearly shows that the main characteristic of this contract is that it perpetually binds the shippers without imposing a corresponding binding upon the ship-owners. The next selfish feature of this system is that the ship-owners determine the rate without making any reference to the shippers. What is the most objectionable thing is the forming of the companies into groups called *rings* which artificially combine together to oust any new-comer. The tactics which they employ in carrying out their object is really very condemnable. Whenever any new company enters their line they combine

together and lower their rates in such a way which does not actually pay the cost and thus with the help of big capitalists at their back they starve out new companies. Mr. Haji's remark in the preface to his pamphlet is worth quoting. 'The present Indian feeling on the subject of the merchant fleet gathers strength not merely from the grievances of the shippers but from the unsatisfied patriotic spirit which, looking for an adequate national shipping, is confronted with a foreign monopoly'.

The next important mode of transport are Indian Railways, Canals and Rivers. In the middle of the last century, the Government prepared a plan for the canalisation of India both for the purpose of irrigating the fields and also for the purpose of carrying the Indian produce from one province to another or to the ports for export. But after the Sepoy Mutiny, this wise policy of the Government was given up and the policy of connecting the different parts of India by a net work of railways was taken up. The total capital spent towards the construction of Indian Railways has been more than 656 crores ; of this more than 500 crores represent outlay charges paid by the Government in buying up Companies' share. By a recent legislation of 1924 railways

were separated from the general finance and accordingly at the last budget separate accounts were presented for the railways. This move on the part of the Government deprived the nation a portion of national income, because, since the inception of railways, it remained a losing concern till 1900, and the public exchequer had to meet the balance. So, it is only but natural that the public might expect some realisation on the expenses already incurred. Again, there might have been no objection if the railways were conducted on national basis and purely for the national benefits. But it is a patent fact that Indian railways were started first to meet the exigencies of the military and then the policy was adopted on a wide scale to encourage the export of the country produce and the import of foreign articles. Mr. S. C. Ghose in a pamphlet on Fiscal Policy state this truth in a very clear and forcible language. He states his arguments :—“The past policy of railways was mainly directed towards encouragement of raw produce and imports of foreign manufactured goods by quotation of special rates for these from and to the ports on the ground of encouraging long distance traffic, and also because railway managers were trained in the belief that India’s chief industry

was agriculture and, that it was to the interest of the railways to encourage large exports of agricultural productions. The railway managers, also, in this connection, relied on the policy carried on in the English and American railways ; forgetting that the trunk lines of India were practically the property of the State, and, that they were built with the avowed object of developing India's resources and for the good of the people. The policy of working Railways in England and America, purely from a commercial point of view for the benefits of the shareholders, could hardly, at least at the present time be applied to India seeing that they are owned by the Government. The chief duty of our railways lies in encouraging India's local industries and in helping the population to make most out of their agricultural productions before exporting any surplus and to protect crafts and industries from the invasion of foreign competition in order to enable the country to become commercially and industrially great".

Recent Tendency of the Railway Finance.

The recent tendency in the Railway finance is seen towards increasing the gross expenditure in proportion to gross income and the following

figures from the Indian Year Book will attest the statement :—

Year.	Percentage of expenses to gross earnings of railways.
1913-14.	51.79
1914-15	54.19
1915-16	50.91
1916-17	47.26
1917-18	45.72
1918-19	48.45
1919-20	56.81
1920-21	65.54
1921-22	76.22

Thus it is seen that since 1917-18, there is a persistent rise in the expenses. The net return on capital per cent has similarly dwindled down.

In 1913-14, it was 5.58. In 1917-18, it rose to 7.30, and in 1918-19, it reached 7.53. Since then there is a gradual decline. In 1919-20 it was 6.28, in 1920-21, it was reduced to 4.74 and in 1921-22 it was to 2.75. This result is entirely due to the revival of the feverish policy of Railway expansion. The Government of India got the assent of the Indian Legislature to spend a large sum annually for the doubling of existing lines and also to open new railway lines ; but, the

railway authorities failed to utilise the sum and this shows, the artificial nature of the project.

Now we have more than 37,000 miles of Railways, nearly 3,000 miles of navigable channels and over 2,00,000 miles of road and for the industrialisation of India we think this is sufficient and any more extension towards communication specially in the shape of railways will go against the interests of the nation.

Protection Versus Free Trade. Before advancing any argument on this subject, I like to quote the very cogent reasonings of the President of the Indian Industrial Conference of 1918. "Speaking of the policy of free trade that is forced on this country by England, we must clearly realise that it means, in other words, protection for England. This was admitted by even so anti-Indian an imperialist as Lord Curzon in one of his utterances. If we had fiscal freedom and allowed to impose duties on imports to protect our industries, it would bring more money into the pockets of our manufacturers, which, when full, would enable them not only to develop their own industries but would also afford their ways and means for exploiting the markets of the world. I fail to see why England should protect her industries at our expense by compelling us

to keep our doors open to receive her goods duty-free. Whilst even such highly advanced and scientific countries like Germany, America and Japan were forced to take the aid of tariff in order to develop their resources; poor India is expected by the Government to build up her industries with the help of science alone. It is a patent fact that Germany tried free trade after the Franco-German war, but had to abandon it in 1879. France also tried her hand at it, but failed. England after building up her nascent industries with huge protective walls extending over centuries and wiping out infant Indian industries out of existence by imposing upon them among other measures prohibitive import duties in some cases equivalent to 80 per cent is now maintaining her trade with India and forcing her goods into India, through indirect protection of the character, I have ventured to describe to you."

Utility of International Trade. The international trade means nothing but the acquirement of some articles considered as necessaries but the production of which within the country is impossible and therefore a nation desires to have that thing at a cost of some sacrifice at least in proportion to the benefits received. This is no doubt

the prime motive of international transaction. At the beginning of the last century, England opposed any opening of her ports and high protective tariffs excluded foreign imports. The shortage in food crops led unconsciously Sir Robert Peel, a Tory Prime Minister to lean towards free-trade and even then the English people could not realise the importance of it. England needed food, her annual production was not sufficient for her national demand and in fact it was a dire necessity which induced her to abolish the duties on corn. This fact fully shows that the free-trade policy made its first appearance for the purpose of procuring the articles, the production of which was an impossibility in England. But if we judge by this standard the condition of India, every impartial judge must give the verdict that time has not yet come for India to launch upon an extensive scale the doctrine of free-trade. There are many articles which India can safely manufacture here and consequently the importation of these articles into India means her economic impoverishment. The other theory of international trade is that the whole nations of the world have been grouped together into certain economic entities and it is advantageous for one particular country to produce one particular

thing only if she possesses an advantage in the production of that article. Even in this doctrine it is to be seen whether the sacrifices made are exactly equal to the benefits obtained, i. e., it is to be seen whether the advantages formulated by the theorists are matters of practical instance or they are very good in theories only. Speaking of India we might say that it will indeed be a wrong assumption that India is specially meant by nature as an agricultural country and she would produce nothing but agricultural articles only. As India is a vast country and as all the climatic variations can be found within the precincts ; it is only but natural that she can manufacture all articles with equal efficiency if only certain start be accorded to her.

England does not murmur or grudge if her colonies erect high tariff walls to oust foreign articles and in fact they are bent upon producing everything within their own countries though production of some articles can never be paying at any time. The excise duties of India were imposed at the instance of Manchester who found with a great amount of diffidence the foundation and rapid expansion of the cotton industry in India. Now the table has been turned. Japan has recently entered into the field of cotton

manufacture and the result has been that both Indian and English trade have been crippled. Again, the story of bounty-fed sugar told us that how it was possible for a foreign nation to invade our market with bounty-fed articles and how we remained powerless on account of our free-trade policy.

Besides this, all sound economists have argued that a kind of protection is to be given to new industries with a view to encourage people to vest their capital in those concerns. Because, the larger an industry is, the bigger is the amount of capital at its back, the less is the cost of production and therefore the more are the chances of fighting well in competition. Therefore, the scientific protectionists rightly assert that those industries should be fostered under high tariff walls which promise to pay in future. Any immediate importation means the thwarting of the industry. It is an acknowledged truth that textile industry, hide industry, silk industry and certain chemical industries can safely be inaugurated here with efficiency without violating in the least degree the orthodox principles of international trade.

Indian National Credit. The Indian national finance is still in the crude form ; in villages, the

professional money-lenders advance money to the needy cultivators at a cut-throat rate and the village Mahajans who finance the village industry and agriculture generally eat up the major portion of the profits as an intermediary and only bare subsistence accrues to the hard-labouring peasants. The organisation of town credit is generally vested in the hands of joint-stock companies who are engaged in carrying on banking operations in India. Almost all these concerns are small ventures and most rightly can be termed as loan offices. A sum about 20 crores are kept in the Government Savings Banks and consequently possesses no influence on Indian industries.

A practice is recently seen on the increase among the urban population of India to have their lives insured, but unfortunately, the number of Indian Life Insurance Companies is very small.

This profitable concern is mainly carried on by foreign companies who annually get huge credit which is mostly employed in advancing the industrial interests of their own native countries. An early attempt to this direction is urgently required,

The Future of Indian Industries. The theory that India needs no industry and agriculture

ought to remain the main occupation has been seen is totally a fallacious one ; like all other countries of Europe, India also possesses special advantages for manufacturing industry and certain amount of textile industry, silk and hide industries can safely be reared up here. The other maxim though somewhat akin in nature but different in theory is that all evils have grown out of concentration and manufacture and so people would be advised to live without factory industries and if industries be at all necessary, home industries should be fostered. Without entering into the Bolshevic theory of production or the theory of complete ruralisation of nations for the attainment of happiness, it will be sufficient here to remark that the present materialistic condition and tendency of the world forbids any direct action in this direction, as, if all the nations be mad (if we accept for the argument's sake that the theory is true) the sanity in one particular nation will be a disadvantage and that particular sane nation has to assume insanity till the other insane nations are cured. This analogy can be applied in the case of India. When all the nations of the world will remain in materialistic mood and they with feverish heat will pursue the game

of money-making, it will certainly not be very prudent for India to remain aloof because the result will be her total annihilation in economic world. So, future India is in awful need of industrial development. The lines of industry she has to adopt have been suggested in the course of these chapters.

VI

DISTRIBUTION

Introductory Remarks. The theory of distribution is more or less of academic interest than of practical concern as every society has certain amount of conditions and laws according to which the produce of the nation is divided and so long the basic principle is not interfered with, the theory is never challenged and each man remains satisfied with his condition ; but, when the very fundamental principles are violently neglected and as a consequent result gross inequality among different classes of people come to exist and then certainly the necessity comes for the over-hauling of the machinery of distribution. The theory of distribution of course made its first appearance with the organisation of society before that when mankind lived in rude barbarian state, it is simply inconceivable to imagine any law of distribution save and except the law of "might is right." The imaginary equality of man which the socialist paints to-day did never exist and

it is a human psychology that every man likes to tyrannise over another and thus to appropriate for himself as much comforts of the country as he can. The first creator of this inequality in the distribution of national wealth is physical force and the second creator is education and the third is environment and heredity. It is the physical force which ordained at the primary stage of civilization of individual's share in the national production. Secondly, increased share of the national dividend created a special class of people ordinarily far superior to the general run and this kind of people taking advantage of their enviable position began to derive proportionately greater benefits for their own consumption and consequently the less became the share of the unfortunate people who on account of their ill-favoured conditions had to remain in the same condition for generations together.

In our modern age, the sources of the national income can mainly be divided into two classes,—remuneration of labour and benefits from private ownership of property. To this two more unproductive sources may added; namely, enjoyments of civil rights and charity both public and private.

Different theories of distribution. In ancient society, we have seen that custom alone was

the determinant of nation's production. With the gradual industrialisation of human societies and with the acceptance of the theory of equality of man, competition slowly emerged and became the recognised factor in a nation's production in industrial society. Thus the theory of demand and supply was formulated in full details and was applied to all phases or conditions of life irrespective of human psychology. When this theory was brought into prominence, it underwent a little transformation and though this doctrine is still intact but a little re-shaping has taken place. Now the theory of distribution means the theory of marginal net produce.

According to this theory, every agent of production must be given equal chance and advantages and if possible, the environment of their bringing up must also be the same and the only inequality which will be tolerated is the inequality inherent in a man. Competition will of course come to play in actual fields but no stiffness will be displayed in making the fibres of individuals equally strong. Of course, modern society acknowledges the institution of property and the inheritors of acquired wealth are not very keenly exposed to competition and they are in most cases allowed to get increased benefits to the creation of

which they have either no contribution or very little contribution. Private ownership has been condemned by a certain class of people who want to level down and erect a new edifice on the ruins of the old structure. Mill, in his principles of Political Economy argued that the statement that individual's activity will slacken if the primary motive of leaving an estate is taken off is not so important as in a communistic society the incentive to work is by no means less and so the conception of societies where people working for the common good is not altogether impossible. However, strong this contention may be my argument is that the theories of man change with the growth of some habits. It is a common knowledge that whenever one thing preponderates, however good it may be, with the lapse of time a considerable volume of opinion is created, which may be based upon false doctrines, but, the atmosphere becomes so keen that very little exertion is required for the acceptance of the dogmas. So, in the economic world, when one doctrine is too much stretched in one direction it becomes a little slackened and a fresh doctrine appears which for the time being is welcomed as a gospel truth.

What is Distribution ? Distribution really means a division of a nation's earnings among

the different groups who jointly helped to achieve the national production. All the agents who are directly or indirectly concerned with this production claim a share and it is the duty of the society to determine how much will go to the different groups theoretically accepting the fact each according to his ability has exerted his best. The dividend which they will receive is not in reality as it is often assumed by the amount of exertions made but by the inequalities of human differences originally created by the God himself and also by certain conventions of human society. So long this natural ordinance is not disturbed the economic veins of the nation are kept in normal order. But when on account of unnatural greed, lust and caprice the favoured classes begin to take more than naturally due and the populace are driven more and more on the freaks of fortune which ultimately drives them to despair. Thus it may be laid down as a general principle that in every society, there are certain accepted principles according to which the structure of the society and the economic divisions of classes have been created and so long the basic dogmas are respected ; disrespect or disloyalty never appear. Thus in old societies where every thing is ordained or

predestined; custom rules prominent and a slight violation disturbs the conditions of affairs there.

Again, in highly industrialised societies where efficiency is the only watch word demand and supply rule there best. In non-stationary societies, where changes are always taking place and every thing is measured by a man's ability to do; respect for particular classes could not exist there and respect for individuals will be found to exist in a very restricted form as every one has equal hope of rising possessing equal merit. Thus respect for classes and absolute regard for individuals can only exist in societies which are not in dynamic state i. e. which exist in static condition.

The Peculiar Indian Conditions. A cry is generally heard that the respect for higher classes is rapidly vanishing and the people of undoubtedly of very low origin are sometimes accorded very exalted position to which the higher classes of Hindustan take very serious objection. The people of lower middle class who before the advent of the English into India played very important parts in every walk of life is gradually being decreased and the higher classes who only some twenty or thirty years before were able to exact a

considerable amount of reverence are gradually feeling their position insecure and the people of the lower strata are slowly rising and though poverty and squalor still stand on the way but their brightened future has been within sight.

In fact a partial revolution in thought and action is seen amongst all classes of people in India and it is generally felt that a new ordinance has become absolutely necessary and every body though feels the desirability of changing the present circumstances but nobody does think seriously about the harmonious changes which need to be effected ; the reason is that every class is girding up its loins to keep the position enjoyed for long years in tact and any encroachment to its rights and privileges is looked upon as an invasion by others upon the individual rights of the particular class. The Brahmins still want absolute submission to them from the castes beneath and the orthodox Zemindars still want to exercise absolute control over their tenants and the Government officials still regard themselves according to the oriental theory as masters of the people and not the servants of the nation. In villages, the people murmur whenever the customary prices are changed and physical labour is still looked down upon and the cultivation of

mental culture still retains its undue appreciation.

The reason for this hubbub which is heard in the economic world of India to-day is that she is now passing through a stage of transition and so long the matters do not settle down and so long a definite settlement is not made determining individuals' share in national production ; this state of things is bound to exist and what is worse most explosive doctrines of the West will be imported which have come to prevail there on account of acute economic distress and gross insult to humanity and however sweet they might appear for the common run of people it is yet to see that those explosive theories when carried into action will be able to produce benevolent effects as they are generally supposed able of producing. Time is yet for the Indian nation to pause and to devise the path to economic salvation ; and any blind following on the footsteps of the new nations of Europe will lead to a general chaos as it will enkindle war between classes and classes, sects and sects and castes and castes. A very broad differentiation in the national cohesion of the Indian people already exists and a little carelessness might embitter the present state of things more and possibly this intensified feelings

of difference might be so great as to render the economic salvation impossible for some centuries engendering the annihilation of the whole nation in the long run.

What will be the determining factors in Indian distribution of production. It must be the guiding principle that the lower class of people should be maintained at an efficiency basis. India is still principally an agriculture country. So, for the full development of her natural resources and also for the tapping up of the virgin mines the demand for physical labour is immense and so the cult i. e. a disrespect for all kinds of physical labour must be given up and in its place a graceful respect for any kind of physical labour should be instituted. In the last chapter we have seen that labour alone is the agent of production, because, without labour any development of country's resources is not conceivable. To do all these, the theory of net produce requires a little variation here in India. According to this theory every one must be given at least that portion of the share of the national produce with which he himself along with his wife and two children should be able to maintain health and strength requiring to work at his fullest

capacity and also to bring up his two children under the same circumstances in which he himself has been brought up. This statement presupposes the static condition of a society as the remarks that only two children and not more means to represent himself and his wife. It is an economic truth that demand adjusts itself to supplies and vice versa. Thus if a rise in demand in one article occurs an automatic increase in production follows till the demand is completely met. A rise in interest increases capital and similarly a demand for buildings stimulates building trades. But an appreciation of labour cannot meet the demand at once ; it will take at least a generation to meet a portion of the supply if the demand be great. The theory that India is overpopulated is ill-conceived. It may be that some parts of India have been densely populated but it is not true that India with her present resources is not able to supply food for all her population. On the otherhand, I think that a decrease has occurred in Indian population in consideration of the increases which are happening in the advanced countries of Europe and America. What is really felt in India is not over-population because the scarcity of labouring population has been so great in recent years that

it goes to prove the contrary assertion i. e. scarcity of population. This fact will be very clearly evinced from the rapid rises in the price of labour within the course of some years only.

If this be true that India needs more labouring population and also the theory that her present number of labouring population is not sufficient for her requirements; it is necessary that particular care should be taken of the labouring population of India and to do this it is to be seen that wages will represent not only the charges for maintenance of himself and his wife but also for a number of children with a certain amount of comforts and security so that the future labouring population of India might be efficiently cheap. I mean mere subsistence might help them to keep their soul and body together but to nurture the essential qualities in them which are urgently required in present day of competition, a certain amount of comforts and even a few luxuries are to be accorded to them.

If the future Indian population can be reared up under all these circumstances the total wealth and earnings will surely increase and consequently the sum total of individual happiness will follow.

The next principle which is to be applied is to see how much is required for one particular

class and with what national sacrifices the due number and efficiency of that particular class can be maintained. This of course presupposes that every class of people has had certain mission to fulfill in the social organisation and the extinction of that particular class from the society means a national degradation. Of course, a complete estimate is required to be made of different usefulness of different classes of people and also to ascertain the standard of efficiency of the individual members of that particular class and their maintenance charges both for the present generation and also for their future progeny for the propagation of the race.

The present economic division of the Indian people. Figures are given below from the census reports of 1911 & 1921.

Classifications,	1921	1911	Percent of increase or decrease,
I. Exploitation of animals or vegetables,	230,652,350	226,556,483	+·8
II. Exploitation of minerals.	542,053	529,609	+2·3
III. Industay. ...	33,167,018	35,320,704	-6·0
IV. Transport. ...	4,331,054	5,028,978	-13·8
V. Trade. ...	18,114,622	17,756,983	+2·8
VI. Public Force. ...	2,181,622	2,398,586	-9·0
VII. Public Administration.	2,643,882	2,648,005	-·1
VIII. Professions & liberal arts. ...	5,020,571	5,409,813	-7·1

IX. Persons living on their incomes, ...	479,835	540 175	- 11'1
X. Domestic services	4,570,171	4,599,080	- '6
XI. Insufficiently described occupation. ...	11,098,566	9,236,217	+ 20'1
XII. Unproductive. ...	3,253,532	3,451,381	- 5'7

From the survey of the above figures, it will be evinced that almost all kinds of occupation which are capable of producing increasing returns have decreased and only occupations which weigh only as debt charges to the nation have increased. Decreases have occurred in industry, transport, public force, public administration, professions, free incomes, domestic service and in unproductive occupation. Under the unproductive occupation, jail population is included.

The decrease under public administration is very small and therefore we can easily overlook the fact. But the decreases under industry, transport, professions and liberal arts and free incomes must be looked upon as something economically ruinous. The slight increase in trade shows the gradual increase in number of petty shop-keepers and ferriwallas, having been defeated in other walks of life, people fall back upon this last resource which requires very little capital.

To have an idea of the peculiarities of the people of different provinces a table is given below indicating the number of persons under different professions in different provinces.

Out of 10,000

	Assam	Bengal
I. Exploitation of animals & vegetables	8,947	7,885
II. Exploitation of minerals	13	20
III. Industry	244	761
IV. Transport	99	155
V. Trade	336	513
VI. Public force	22	37
VII. Public administration	20	30
VIII. Professions & liberal arts	123	165
IX. Free incomes	5	8
X. Domestic service	65	145
XI. Insufficiently described occupation	57	206
XII. Unproductive	82	95

Out of 10,000

B & O	Bombay	Madras	C. P.	Burma	Punjab
8,194	6,489	7,252	7,776	7,347	6,061
54	8	2	15	33	9
663	1,214	1,125	915	661	1,920
75	205	126	113	269	194
382	727	643	445	833	687
28	85	39	65	58	105
25	183	36	79	78	35
87	194	133	116	215	324
2	32	16	4	10	25
151	138	45	138	56	255
348	573	493	261	436	228
45	160	48	88	37	242

From the above figures we understand that agriculture preponderates almost in every province. As mines abound in Assam, Bengal, Burma and C. P., so these provinces have some population who have specialised in mining arts. In industry, the Punjab tops the list and Bombay comes next. In transport Burma comes first, Bombay is second and the Punjab is third. In trade, Burma comes first, Bombay second and the Punjab third. In professions and liberal arts, the Punjab comes first, Burma second and Bombay third. In free incomes, Bombay is first, the Punjab is second and Madras is third. Thus it is seen that in productive arts and industries Burma, Bombay and the Punjab lead the other provinces.

The Present Economic Division of Indian People. With the relaxation of the rigidity of caste system, it has become very difficult to divide the Indian people economically into several groups. As India is still mainly an agricultural country so almost in every province we find two classes of people—the zemindar and the raiyat. Though the ownership of zemindaries varies from province to province but zemindars in some shape or other are found to exist in every province. In big commercial cities some industrial people are

of course found who work either as brokers or middlemen or traders or shop-keepers and in some occasions merchants are also found. But people living in the higher strata of life are gradually on the decrease.

Rent. The economic rent in India is called land revenue. In theory, the State is the absolute owner of the soils in India but almost in every part there are groups of intermediaries called the zemindar who stand between the raiyat and the State. Rent is arbitrarily fixed by the Government officials without any reference to economic laws and in most cases according to the necessity of the State. In the permanently settled zemindary tracts though the rent by a statutory arrangement has been fixed for ever but the levy of cesses has converted rent into an anomalous condition of a tax. In the temporarily settled zemindary tracts, land revenue resembles in many respects to a tax both in the system of progression and in the method of its levy. In the temporarily settled areas, this exacting dues hangs heavily upon the peasant and he is allowed as in a capitalistic system of production only bare subsistence and it is a proverbial fact that notwithstanding the official statement the Deccan peasant is always on the verge of starvation and a slight economic

disturbance causes immense injuries to him. As India is specially an agricultural country and as has been admitted in the Census report also that it is 'very difficult to ascertain who really live on agriculture and who do not'. Again, due to illiteracy and practice of sub-infeudation, an Indian peasant is peculiarly in awful plight and consequently to assume in him all the qualities of a western peasant is certainly wrong. To remove the agricultural indebtedness in India what is urgently needed is to fix the zama for ever and to extend the benefits arising out of it to the tenants in the zemindary settled tracts the rights of transferrability and occupancy should be conceded to them. As we have seen elsewhere that the economic theory of rent assumes some ideal set of conditions which are to be found nowhere in the world except in the brain. Fertility of soils is not the absolute factor in determining rent and we have seen that more powerful factor is civilization. The increase in productivity of soils is no doubt to a great extent due to environment and surroundings both of which greatly depend upon the progress of civilization. Judged by this standard, it may be fairly laid down as a general maxim that this economic rent should belong to the nation and any Government levy

upon it is fraught with danger because the Government levies taxes according to its necessity and therefore the danger always lies of going beyond the limit. In fact, modern administration in India requires variety of taxes and they should be levied according to the different capacities of the different classes of people. So, land revenue in India has grown archaic and the sooner it is abolished the better for the people.

The Economic Status of the Zemindar.

Like Shakespeare's Shylock in the Merchant of Venice, the Indian Zemindar has been 'more sinned than sinning.' Whenever any attack is to be made upon him it is to be borne in mind that the vast improvement which became possible for England to achieve in the last century was certainly due to a great extent to the activities of the English peers. Both in politics and in economics they led the country for centuries. It was the English lord who fought successfully to gain a constitution for the country and it is he who introduced all seeds of reform whether social or economic which bore fruits in later years. If in an independent country like England the economic necessity of a landlord is felt as a necessary evil I see no reason why in a country like India with small leaseholds, with poor

peasantry, with diverse interests, the economic necessity will cease to exist. Our fibre in modern industrial welfare has yet to be tested. For food we depend absolutely upon the good management of our soils. To assume a poor peasant will do for himself all the needful is only a rash statement. It is contended that originally the permanent settlement was granted by Lord Cornwallis in the expectation that the Zemindar would develop the soils. This original expectation was faithfully performed by them till the passing of the Tenancy Laws which in fact bound them hand and foot. Again, constitutional agitation which has become universal law was originally inaugurated and started by the zemindar. Even the Swadeshi movement of Bengal had strong adherents among the landlords. A progressive section of this class did not fear to join the Non-co-operation movement. The fact is that industrially we are still very insufficient and will have to remain so for some years yet and therefore it is beyond our hope to try to create a set of magnates who would not be busy and always absorbed in fighting out their own existence. For the improvement of any society it is absolutely needed that there must be a class of people above indigence who should supply intellectual food or who would

help people capable of doing this. Again, the inherent desire in a man is to find out for himself and his family a position of leisure and dignity and it is this desire which stimulates the activities of man and minus this motive he becomes a less productive economic being. This analogy is found in the English peers. Whoever achieves something in any sphere of life is awarded with a peerage at the end of his career and this serves as a target for a man endowed with intelligence.

Interest. According to the old law of distribution interest is settled by the demand and supply of capital. It also like the theory of rent assumes that both the debtors and the creditors are equally alert on their own self-interest and each is engaged in production. In ancient world, interest was universally condemned and some nations even asserted that money can produce no money. They were true as in those days borrowings were effected mainly for unproductive purposes and the debtors were in many cases poor people who borrowed because they could not meet their ordinary expenses with their usual earnings. So, any levy of interest was uneconomic and it only led to a diminution of national efficiency in production. In a highly industrialised state, where every body

is bent on production and borrowings are made for effecting production ; money under these circumstances no doubt produces more money and if a portion of the profits earned is claimed by the professional money-lender who has made this as his means of subsistence may be justified but even in these cases, it is really difficult to measure the scientific rate, as the needs of different producers vary according to their wants and consequently more needy might be forced to accept more stringent terms than his affluent competitor. The financial position of the individual borrower also plays an important part. It may be laid down as a common maxim that better finances secure better terms.

Thus stands that in India we cannot accept the modern theory of interest in toto. The agriculturist borrows money very often for unproductive purposes and on rare occasions for the improvement of soils. To retain his efficiency it is needed that money when wanted should be supplied at his door and on terms which would not mar efficiency in act of returning. In case of petty shop-keepers the borrowings are often made by them for productive purposes and as money does not come spontaneously in our country so it is necessary that an eye should be kept that what

is kept from him is not the whole of the profits i. e. it is to be seen that a fair portion of the profits earned has been left to him. In commercial cities, big merchants and manufacturers who conduct their business either with the help of limited companies or with their own private fortune, the modern theory of rent might be applied there with some modifications.

Profits. According to the orthodox theory of distribution, profits are the residual share of the entrepreneur. It is said that in scientific system of distribution everything is done automatically. That is, just after the production, the land-lord comes in and goes away with the share determined by the economic laws and similarly the capitalist goes away taking the share of his own contribution and the labourers also get what is settled by the law of demand and supply and the last portion thus left if any, no matter big or small, rightfully belongs to him and it is termed as profits. But in actual state of affairs, these ideal set of conditions are very rarely seen to exist. Specially in India, we have seen that the principle of economic distribution cannot be applied where rent resembles to a tax and where the rate of interest is settled by the need of the borrower. Again, the Indian purchaser are often duped by

the middlemen who go to their doors to sell and the idea of a market where competition rules is only a dream. Moreover, the factory owners as a rule in India are very rich and the consumers are similarly poor and any competition between a strong man and a weak person is wholly inconceivable. What happens in India is that producers combine and fix their own price and this is forced on the consumers. In case of cottage industries custom rules still and any idea on the western pattern is not possible.

Wages. Wages are settled under ideal economic conditions by the play of demand and supply. If the demand for labour be greater in proportion to the supply of course labour cannot at once be forthcoming and consequently a rise in the price of labour occurs. Just conversely, if the supply of labour be in excess of demand, a fall in the price of labour becomes the result. Before the introduction of industrialism into India demand for labour really did not exist and consequently wages were determined by custom. But with the installation of factories and the creation of commercial cities, the actual demand for labour comes to exist and therefore the price which was paid previously was higher and that is why migration of labour from villages

to cities took place. Prof. Marshall remarks "customary wages in a village drive the abler section to seek remuneration elsewhere. Similarly among the educated community, the less able migrates to find occupations else where. This kind of migration can go on up to a limit after which it will cease, when sufficiency of labour in urban districts and scarcity in labour in rural areas will occur".

This has happened in India. The price of agricultural labour has risen high and in close proximity to factor labour price, Now, if the factory owners cannot find their way to pay more wages by way of temptation, it will indeed be very difficult to allay the present discontent in India.

Psychology of labour. In our ordinary life, we want to judge every thing by our calculation of pounds, shillings and pence. But things do not always turn out to be what they seem. Before fixing the price of labour it is to be seen how much we really want and how much we shall be able to pay efficiently i. e., I mean the standard necessary for the propagation of the race,

If the demand for labour be in excess it will be the duty of the employees to help to grow the labour population up to the necessary limit, If the

supply of labour be in excess it is the duty of the employees to see that the superfluous portion or at least a major portion is eliminated either by promotion to higher ranks or by migration to provinces where the demand for labour is acute. To take advantage of helplessness of labour is impolitic. It not only ruins the labour population but the national industry is also bound to suffer in efficiency in the long run. Moreover, every body must be given some *locus standi* so that he might always feel that he has had some responsibility and like others he has also some share to contribute to the national welfare. The divorce of this principle in the economic distribution has created unrest in the labour world of the west and any more rash action towards this on the threshold of Indian industrialism must be guarded against. Our ideal was the best. The employers here treated the employees like their own children of blood and very little difference was made in courtesy. In factory system, if the labourer be granted some position and some security is given in any shape and the chances are promised that whenever possible they will be helped to rise up, the present economic unrest will surely in this case cease to exist

Indian Labouring Population. It is a wrong

notion that the Indian labouring population is in excess of demand. The fact is that on account of higher wages labour migrated to towns in excess of demand. On the other hand, no period in the history of India the demand for labour was so keen as it is now. Vast uncultivated fields await for exploitation and for the installation of some native industries which are vitally necessary for our existence we are in urgent need of labour. What has become necessary is to employ some experts to watch the labouring population and to help them to grow with advice by infusing among them primary education and most elementary truths of modern principles of production. It is also necessary that the employers of labour should give way something and though they might get less remuneration for a generation or two but without their hearty co-operation it will be simply impossible to increase the number and efficiency of labour.
