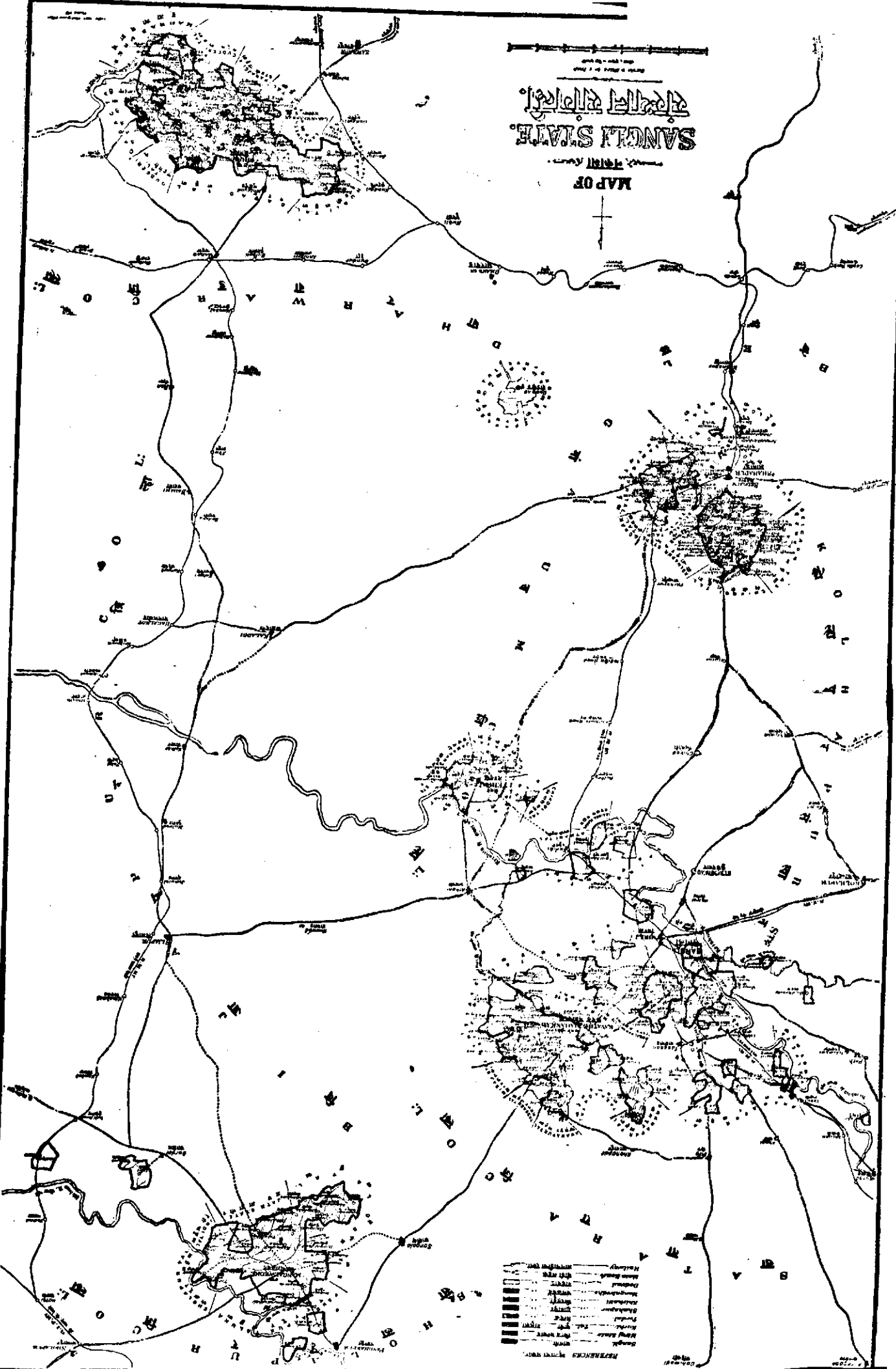
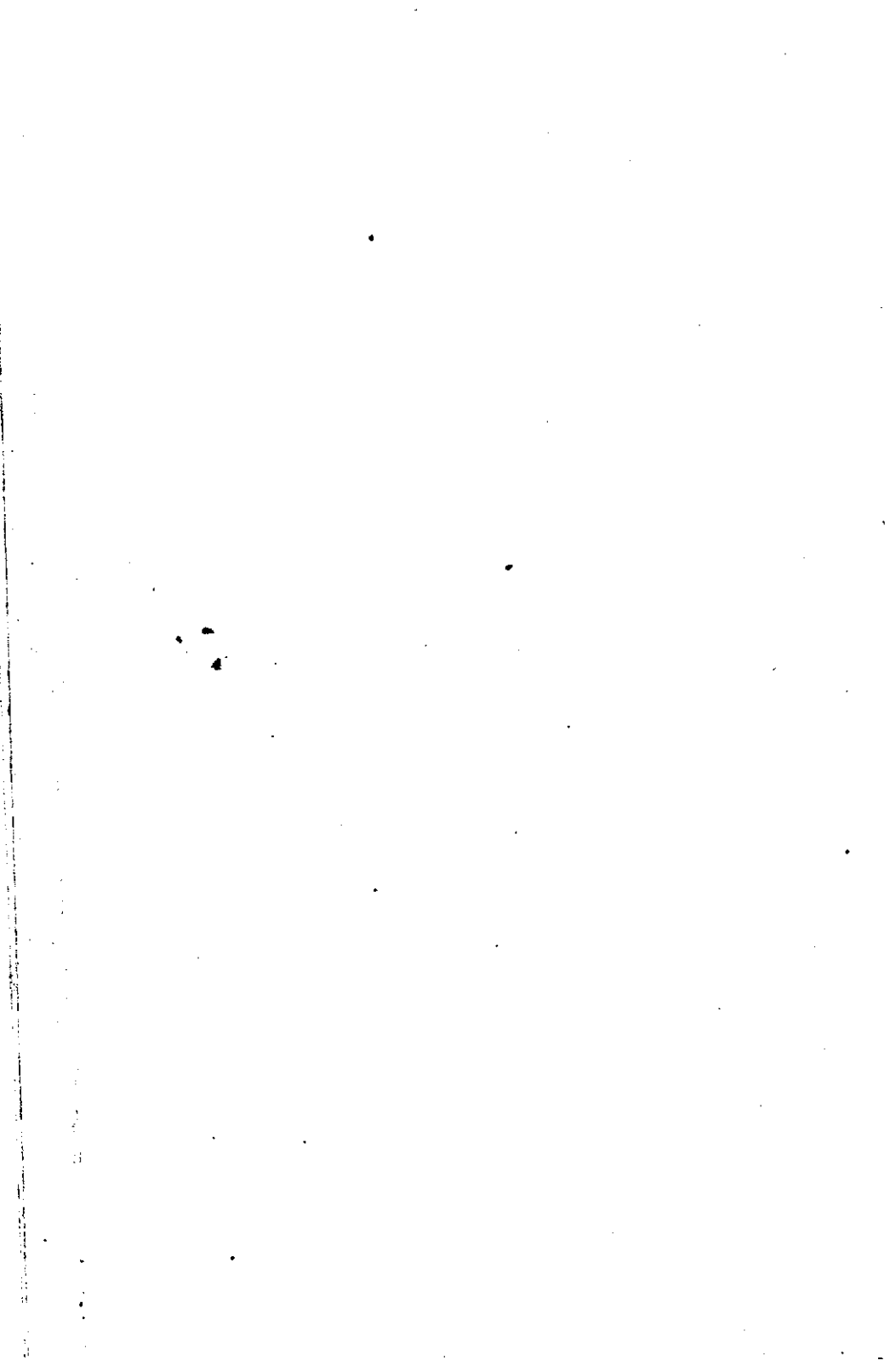


MAP OF
SANGALI STATE.
Prepared by the Survey of India.

Scale 1:50,000
Spheroidal Projection



- LEGEND
- Railway
 - Main Road
 - District Boundary
 - Sub-Division Boundary
 - Taluk Boundary
 - Village Boundary
 - Village
 - Hamlet
 - Well
 - Tank
 - Pond
 - Canal
 - Irrigation Channel
 - Drainage Channel
 - Stream
 - River
 - Lake
 - Sea
 - Forest
 - Cultivated Land
 - Uncultivated Land
 - Barren Land
 - Water





REPORT

OF

**The Sangli State Economic Enquiry
Committee**

SANGLI

1942

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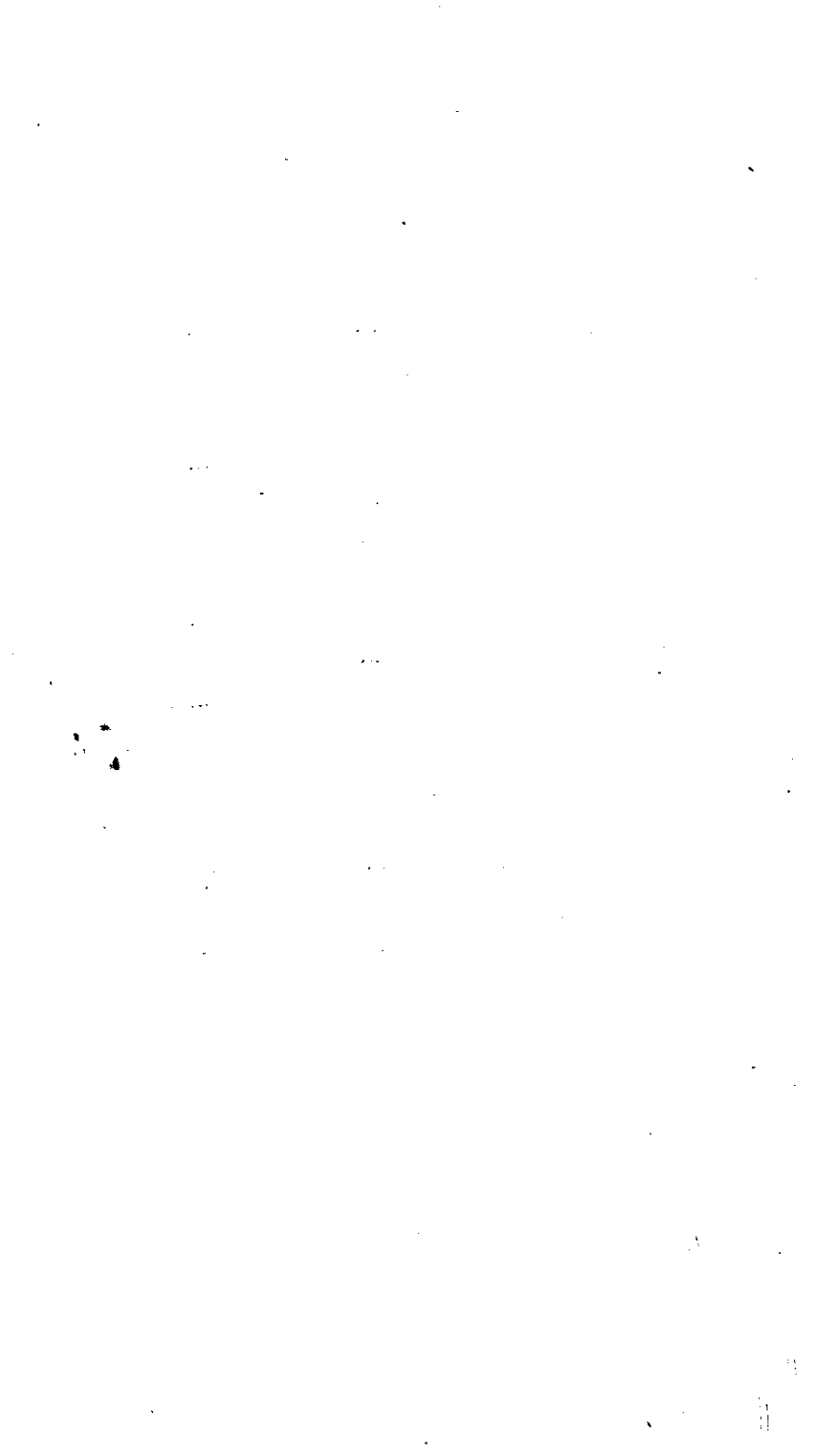
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Report of the Sangli State Economic Enquiry Committee

INTRODUCTORY

Appointment of the Committee

In common with the rest of the country Sangli State has, during the last fifteen years, passed through many vicissitudes of economic fortune. As it is situated mostly in the precarious Deccan tract its main industry, agriculture, has always been on a footing of doubtful profitability. Thanks to the fertile soil whenever there was a good monsoon the crops and with them the life of the cultivators thrived very well. Such good seasons, however, were not uniform and the frequent occurrence of unseasonable and scanty rainfall made for a poverty of resources from which the public and private economies suffered equally. To add to these natural drawbacks, the post-war depression and the consequent dislocation of trade and industry undermined the position of agricultural as well as industrial producers and middlemen. While new industries, on large and small scales, were gradually coming into existence the general atmosphere was charged with a feeling of pessimism.

2. This period of economic stagnation in the country coincided with an intense wave of constitutional agitation and reform within Sangli State itself. The people and their representatives have constantly represented to the authorities the nature of their economic needs and they have often suggested measures which they thought would meet the situation. The democratisation of the legislature and the introduction of the principle of partial responsibility in the executive administration of the State created favourable conditions for a systematic approach to the whole problem of the economic development of the State. The close contact that one of us enjoyed for some time with the State affairs had given occasion for an occasional exchange of notes on these important subjects with both official and non-official spokesmen in Sangli. It was perhaps on this account that when the stage was ripe for defining an economic policy of development for the newly started administration the authorities felt inclined to utilise his services. When this intention of authorising an official enquiry into the economic pro-

blems of the State ultimately took shape the decision was announced by His Highness the Rajasaheb in the following terms.

3. The following Press Note appeared in the Sangli Gazette, dated 5th April 1941 :—

“ His Highness the Raja Saheb of Sangli is pleased to appoint a Committee consisting of the following members to carry out an Economic and Industrial survey of the Sangli State.

- i. Professor D. G. Karve, M. A., Professor, Fergusson College, Poona.
- ii. Professor D. R. Gadgil, M. A., M. Litt. (Cantab), Director, Gokhale Institute of Politics and Economics, Poona.
- iii. The terms of reference to the Committee are as follows :—

To enquire into the material resources of the State and their development in the future with special reference to the establishment of new small and large scale industries and the improvement of agricultural production and to make recommendations.

The Committee to report as early as possible.

- iv. The Committee will be free to incur such expenditure for the prosecution of their enquiry as they deem necessary.
- v. His Highness desires that his subjects will render the Committee all possible assistance in conducting the enquiry fraught with immense possibilities for the development of the State.
- vi. The Committee are authorised to call for information relevant to the enquiry from Mamlatdars and Mahalkaris and are also welcome to consult such papers and documents available in the Diwan's Office.
- vii. The members of the Committee will have the Status of officers of the First Class”.

4. His Highness while inaugurating on 3rd June 1941, the First Session of the reformed Sangli State Assembly, was pleased to refer to the appointment of this Committee in the following terms :

“ Ladies and Gentlemen, as you know, I have appointed a Committee of Professors Karve and Gadgil to enquire into the material resources of the State and their development in future with special reference to the establishment of new large and small scale indus-

tries and the improvement of agricultural production and make recommendations. We have long looked forward to the appointment of such a Committee, and I am sure there will be a general consensus of opinion that we have been able to secure the services of two such distinguished men who have not only made it their life-work to study the economic problems of India and her component parts but also have taken a deep interest in the State and its problems. We must be very thankful to them for their having undertaken this important task."

5. This spirit of confidence and helpfulness, we are glad to say, has always characterised the Committee's relations with all the official and non-official elements with whom the Committee was brought into contact during the course of its labours. While the subject matter of the enquiry was continuously before us for obvious reasons of other important pre-occupations it was not possible for us to devote ourselves exclusively to the work of this Committee for any considerable length of time. We were, however, fortunate in securing for the Committee, the assistance of Mr. N. M. Joshi, M. A., whose experience in the field of economic investigation especially with reference to urban industries was almost unique. Thanks to the continuous and whole-hearted work that Mr. Joshi has put forward since October 1941 we could carry out our task within a reasonable period. We owe the part surveying economic conditions and the interesting statistical appendices almost entirely to the patient industry of Mr. Joshi. Economic investigation is essentially a matter of detail. For reasons both of time and expense we could not be expected to attend to and finally dispose of all the interesting problems and the many valuable suggestions addressed to us by many official as well as non-official parties. We can only assure all these friends that everything that has been placed before us either in oral or in written evidence has been carefully taken into consideration in outlining our recommendations. It is expected that the machinery of economic organisation and development that we have suggested in our report will be fully competent to secure further consideration of many of these problems of detailed reform.

Methods of enquiry

6. We must record our sense of appreciation of the unstinting care and industry with which all officials high and low worked to supply the many kinds of information that we constantly asked from them. We have received literally heaps of information. Even before

we started with our questionnaire the then President of the State Executive Council Mr. B. N. De, C. I. E., I. C. S. (Retired) was good enough, at our request, to distribute among the village officers in all the villages of the State a very general form of economic and social enquiry which was already in existence. Every village officer was instructed to return this form and though we cannot but find fault with many of the replies, which were bound to be vague and occasionally conflicting, the result of this preliminary effort at fact finding was very helpful in creating interest in the Committee's work in all parts of the State. During this very time, information from official records for rural as also for urban conditions was being supplied to us. Thus the size and the nature of the problems involved in our enquiry began to unfold themselves before us.

7. For maximising the practical usefulness of our Enquiry, we always felt, we should start with a full knowledge of the experience, expectations and suggestions of the people in close contact with the economic life of the State. Before we started to frame out questionnaires for detailed information and suggestions, therefore, we requested leading officers of the State including Mamlatdars and departmental heads as also the leaders of different commercial, industrial and agricultural groups to meet us at Sangli. We are grateful to all these gentlemen for having placed at our disposal the fruits of their long experience. We are glad to note that all sections of opinion and interest agreed on this occasion to inform us of their own grievances as also suggestions. In the nature of things much of this evidence was of a general description. In framing our questionnaires an attempt was made to bring out more accurately the implications of these general statements about policy and action.

8. As is suitable to purposes of economic enquiry we prepared our questionnaires firstly according to classes of economic problems and secondly according to the nature of the constituent details, only by reference to which the real state of things could be revealed. Agriculture being the most important of the economic activities in the State we gave a whole set of detailed questions bearing on different aspects of agricultural industry viz. Cultivation, Tillage, Subsidiary agriculture, Marketing, Finance, Water supply, Transport, Subsidiary occupations and State policy. We agree that this questionnaire proved to be too long and too detailed for most of those who tried to answer it. This, however, was neither unnatural nor unexpected. Such a questionnaire, apart from being inevitable in agricultural economic enquiry has considerable educative effect

among those who try to order their experience and information in the form of answers to it. We were glad to come across many such valuable efforts both in the written replies received by us as also in the course of our personal enquiries.

9. The questionnaire bearing on Handicrafts had a special importance on account of the fact that Sangli State possesses many such industries which have special problems of their own. In such matters the economic structure of an industry is at least as important as its technical processes and we are sure that those who made a serious attempt to reply to this questionnaire must have realised the importance of many valuable aspects of the organisation of their business. We on our part have been able to get from these replies considerable light on the detailed problems which confront the small handicrafts of the Sangli State.

10. As the subject of Rural Development has by itself attracted considerable attention during recent years we had framed a special questionnaire bearing on this subject. We are glad to say that a very large number of people returned this questionnaire with a statement of their own suggestions regarding the several aspects of this important subject. Among these there have been many whose first-hand experience of rural development work is calculated to influence any promising schemes of a far-reaching character.

11. That suggestions which were evoked by our questionnaire about the prospects of new industries in the Sangli State were extremely general and vague was not at all surprising. The replies however, evinced a keen desire on the part of several enterprisers to chalk out new lines if even a reasonable chance of success could be offered. No doubt these replies will prove valuable when the machinery recommended by us comes into action. As for the existing industries run on factory lines detailed information has been supplied by some proprietors as per a special questionnaire supplied to them. Information of a technical and confidential character could naturally not be revealed nor had we any interest in the same. But all the chief characteristics of the business organisation of these concerns were presented to us in a very revealing light.

12. It will thus be seen that the evidence that we had gathered before and after the release of our questionnaires was both varied and voluminous. The nature of the problems involved renders un-serviceable most of the material that is ordinarily received in such enquiries. We, therefore, had made a special effort to explain

to correspondents in rural areas the nature and purport of the several enquiries contained in the questionnaires. The assistance of the Mamlatdars was utilised for this purpose and it is due to their effort that at least a widely representative type of answers could be secured. With a view to overcoming the difficulty of language which was likely to be felt in certain areas the questionnaires were issued both in Marathi and Kanarese. Several replies were received in Kanarese which had to be translated for our use. As, however, there is an almost universal lack of accurately recorded and classified information the replies had little significance from a strictly scientific or statistical stand-point. It was thought desirable, therefore, to gather first-hand impressions about objective conditions and the reactions of the people themselves by group-enquiries conducted in all the Talukas.

13. Mr. Joshi was specially put in charge of these group-enquiries. He not only helped the groups of representative agriculturists, artisans, businessmen, reformers etc. gathered in each place, more effectively to reply to the questions already circulated but he framed his own additional questions to suit each case. The persons assembled were also left free to say in their own way what they felt about their own economic difficulties. Information supplied by one in such a group could be easily checked by the experience of others and thus the results of these group-enquiries helped us, to some extent at any rate, to fill in the numerous gaps left uncovered in the written replies. Even the group-enquiries were further followed up by fresh queries on doubtful points. Almost till the day of the signing of our report these references are continuing to evoke fresh information. We feel certain that what was presented to us through written and oral evidence from all sources constitutes as exact and reliable a picture of economic conditions in the Sangli State as it is possible to get under the limitations of time and expense necessarily placed on an enquiry like this.

14. Armed with this mass of information supplied to and collected by us we visited many places in the State where we had the advantage of meeting representative citizens and businessmen and of securing further elucidation of many of the points raised in their earlier evidence. The contact thus established with the men and the situation as these obtain in the State has greatly helped us to decide the steps which we felt were necessary and practicable in each case.

15. It has been the experience of extensive economic investigation in all parts of India that the real usefulness of the mass of material gathered is very limited except as a starting point for further enquiry. Our own experience of this enquiry is no exception. We have, therefore, in most cases utilised the results of our statistical investigation only to check and correct the impressions gathered by actual observation. The results of the statistical enquiry cannot at this stage be incorporated in this report, as even a distant approach to the real picture. It is our hope that when a permanent machinery is set up to watch over and to guide the economic development of the State the maintenance and collection of more reliable statistics will be attended to. For the present we have confined ourselves to a few tables in the Appendix which might give the careful observer some idea as to the nature and limitations of the material now available.

16. It remains for us to convey our best thanks to those who have made it possible for us to undertake and carry to its conclusion this important task of enquiry. His Highness the Rajasaheb of Sangli whose constant watchfulness for the welfare of his subjects and whose determined efforts to promote the same by all legitimate means have now become proverbial, deserves the entire credit for this effort on our part. From the day when the idea was first mentioned he placed at our disposal the entire machinery of the State for any demand that we would make on it for purposes of this enquiry. His hospitality and assistance in Sangli and other places has rendered possible the early conclusion of a task which in even better endowed places has often taken much longer to finish. The President of the Executive Council, the Diwansaheb, the Minister and other Councillors of the State have fully co-operated with us in our enquiry. The other Departmental officers and their staff both at headquarters and the mofussil have been uniformly helpful, for which our best thanks are due to them. Our thanks are also due to the many public bodies and leaders who helped us often at great inconvenience to themselves. Agriculturists, artisans and businessmen had often to go out of their way to meet us and we owe to all these not only our best thanks but perhaps an apology for having occasionally withdrawn them from their normal pursuits.

17. A special mention must be made of the assistance that we received from Mr. V. R. Gadgil, B. Ag. (Bom.), M. Sc. (Calif.), of the Gokhale Institute of Politics and Economics, Poona. Mr. Gadgil's experience of Agricultural Surveys was of special utility in

helping us to assess at their proper worth the various aspects of the results of a statistical inquiry and of their bearing on a programme of rural reconstruction. Our best thanks are due to him.

18. Almost the entire burden of putting into motion the machinery of our enquiry and of connecting it to the official and non-official sources in the State fell on Mr. H. B. Kulkarni, B. A., who was appointed to be liaison officer to our Committee. The unfailing courtesy, the steady industry and the wide information that Mr. Kulkarni brought to his task have made our labours considerably easier than what they would have been otherwise. We take this opportunity to record our sense of appreciation for the valuable services rendered to the Committee by Mr. Kulkarni. Mr. N. G. Diwan who throughout was available to us while in the Sangli State as steno-typist has also been extremely helpful in our work.

PART I

Survey of Resources and Economic Activity in the Sangli State

19. It is proposed to survey the existing resources and the various economic activities in relation to exploitation and development of these resources, in the State. As is well known the Sangli State is extremely dispersed. Its six administrative divisions viz. Talukas are spread over a wide area embracing different British Districts in Southern Deccan and Karnatik. Thus Miraj-Prant and Kuchi Talukas are in the vicinity of Satara District. Mangalwedha is surrounded by Sholapur and parts of Bijapur District. Terdal and Shahpur are in the neighbourhood of Belgaum District and Shirhatti is in the southern parts of Dharwar District. Thus the Sangli State Talukas varying in size are spread over a region lying between Bhima and Tungbhadra. The reasons for this dispersion are mainly historical. What is particularly of interest for the present survey is that these Talukas have, in the midst of certain common features, peculiarities of their own in so far as their physical features, climate, rainfall, natural resources and economic activities such as agriculture, subsidiary industries, rural and urban industries, trade etc. are concerned. For the sake of convenience we propose to survey the conditions in these Talukas separately. Wherever uniformity of conditions is present it would be described in some detail in the earlier parts of the survey and in other Talukas attention to these details would be drawn in passing. It would, however, be our endeavour to mention in brief special aspects of each Taluka.

20. For purposes of this survey we have drawn on data from different sources. Chief among them may be mentioned the following. The Revision Settlement Reports, Administration Reports and Gazetteer of the Sangli State formed the main source. This was supplemented by notes, memoranda and statistical information supplied by various administrative Departments. Investigations, personal observations, group enquiries and replies to Committee's questionnaires were further utilised to cull information on the existing conditions. With the help of these data we would now describe in brief the conditions in each Taluka. Statistical information as was found to be useful for the present purpose has been brought together in Appendix II.

Miraj-Prant Taluka

21. **Physical features :** This Taluka consists of 40 villages and one city which are spread over a tract lying along Krishna river in small groups and runs some miles deep on the general northern side of the river. The map because of the high dispersion of the villages presents an appearance of a British and other State territory interspersed with Sangli State villages belonging to Miraj-Prant. The homogeneity and compactness is entirely absent. The broad classification of these villages is (1) villages lying on left bank of Krishna or Krishna Valley villages as it flows from Karad in the extreme north-west to Ugar in the extreme south-east of Miraj-Prant Taluka. The important villages which lie along this river are grouped as (a) Tupari group—consisting of Tupari, Ghogaon, Dudhondi, Nagrale. (b) Second and the largest group which is comparatively compact is Central group—consisting of Sangli, Sangli-wadi, Digraj. (c) 5 detached villages to the south-east of the Taluka viz. Mhaisal, Molwad, Kusnal, Ugar and Katral. (2) Another class is that of villages lying along tributaries of Krishna i.e. rivers such as Verala and Varna. They are, starting from extreme north of the Taluka, Andhali, Borgaon, Shirgaon-Visapur, Nagaon-Nimni, Bendri, Shirgaon-Kavathe, Khatav, Nandre etc. on Verala and Sawalwadi on Varna, which flows through Walve Taluka and Kolhapur State in the south-west of Miraj-Prant Taluka and joins Krishna near Haripur. (3) This class of villages lying in Tasgaon region both in its northern and southern parts, forms a separate group with altogether different physical characteristics. The northern part of this class of villages consists of 2 or 3 villages, far removed from the river. The southern part consists of 12 villages with Kavalapur at its south-west, Nagav-Kavathe in the west, Matkunki in the north, Upalvi in north-east, Dhulgaon in the east and Kanadwadi in the south. The other villages lie inside this ring Kumthe being the most important of them.

22. From the above it would be seen that this Taluka is enriched with three rivers joined by several hill streams some of which flow for some portion of the year.

23. Physical features are dissimilar in different parts of the Taluka. The villages in the northern parts of Tasgaon contain considerable strips of Mal land undulating with wide stretches of high land alternating with shallow valleys. These Mal lands are mostly uncultivable and possess poor qualities as grazing areas. Cultivation is possible in the shallow valleys. The tract through which

Krishna flows is the most fertile plain consisting of deep black soil of a very high order. The eastern block of villages led by Kavalapur, though flat is not as fertile as the central tract. It contains strips of Mal lands, but because of various streams has some Pat and well-irrigated areas.

24. The prevailing soil in the plains by the side of the three rivers is deep black and level and has a high degree of fertility. This black soil frequently extends 3 to 4 miles deep on either side of the river and in some places is subject to seasonal inundation which acts as a helpful factor in keeping up the fertility of the soil. Very frequently a kind of deep soil which is called Karal is also found in river-side villages especially along streams. This soil requires constant and drizzling rain to soak the surface. Heavy downpours are of no use to such lands.

25. Just on the banks of the rivers is found a special type of very fertile soil called Mali. Areas containing this soil are flooded and are subject to frequent land-slides which can be prevented by cultivation of types of grasses and fodder trees as is done in Sangli, Sangliwadi etc. This soil is particularly known for its fertility and is considered very valuable. It is found in Sangli, Sangliwadi, Digraj and such other river-side villages.

26. **Climate and Rainfall :** The climate, generally is hot, dry and healthy Winters are cool. The central belt is particularly known to be healthy. The total average rainfall is about 20 to 22 inches and is fairly evenly distributed in the Kharif and Rabi season. The ante-monsoon or the early falls in April and May which are characterised by heavy downpours fluctuate from year to year and usually help early sowings in the northern and eastern villages and facilitate ploughing and other preliminary agricultural operations in the black central tract. The Rabi or the late rains are the most important as they serve the double purpose of bringing to maturity the early crops and facilitate sowing of the Rabi or late crops. The south-west monsoon, nevertheless is considerably important because, generally throughout the Taluka early crops appear to preponderate. Eastward, however, the intensity of this monsoon is lessened but this tract is favoured by the eastern monsoons. In effect the central block of villages is pretty certain of both the monsoons and the northern and eastern villages are liable to draught if the early rains fail.

27. The characteristics of rainfall, its distribution and its seasonability can be very easily understood from the following table

for the latest year 1939-40, for Miraj-Prant. The figures in inches are for Sangli Rain-guage Station.

April	May	June	July	August	September	October	November
·56	...	4·71	6·12	3·49	3·34	2·24	3·62

Total for the season is 24·08 inches. The average for the past five years is 21·16 inches.

28. **Population :** Population Tables given in Appendix II indicate the position of this Taluka with regard to variation in total population, urban and rural distribution of the population, sex and age composition and distribution of population according to religion and principal classes and groups of occupations. 1941 figures in detail, with the exception, of total population, are not available. The tables, therefore, largely indicate the position for the period between 1911 to 1931. With regard to vital statistics, it may be noted that Taluka figures of Births and Deaths are not available. The relevant table in Appendix II gives births and deaths for the whole State. Hence we are not in a position to say anything about the births and deaths in each Taluka. We might, however, note, that the births appear to be on the increase and the deaths on the decrease. It is in the 1921-31 decade that the births are more than deaths. In the earlier two decades the deaths have been in excess of births. The 1921-31 was a normal decade and hence the normal features of births and deaths have asserted themselves. Earlier two decades had witnessed abnormal years of famine and epidemics and those were reflected in the higher number of deaths in both the decades.

29. To return to Miraj-Prant Taluka, Sangli, by far the biggest urban centre in the State showed continuous increase in population which was largely the effect of trend of the population to move to urban areas for various social and economic reasons. Thus from 16 thousand and odd population in 1911 the figure increased to 37·7 thousand in 1941. Due to a large element of error in enumeration and changes in occupational groupings and classification, nothing significant can be said about the position in this as well as in other Talukas. 1931 occupational distribution considerably differs from the earlier distribution and no comparisons can be

instituted.¹ Neither the 'Earner' nor the 'Dependent' of 1931 Census is the same as in earlier Census. Similarly the groups and sub-groups have undergone changes in different directions. Beyond therefore noting the predominantly agricultural character of the occupations of this Taluka nothing definite can be said about these figures. According to 1931 Census the density of the population was 1700.5 per square mile approximately in Sangli town and 363 per square mile in Miraj-Prant (Rural).

Natural Resources

30. **Land:** As we have already seen the Taluka is rich with black, deep soil and particularly along the rivers, has inundated areas whose soil is enriched every year by the silt deposits. In the uplands the soil is not so very favourable and major portion of the uncultivable area is rough grazing area.

31. **Water:** The Krishna and its tributaries and a number of minor streams provide water resources to the major portion of this Taluka. But many of them are not directly exploited as the river water is not utilised on any appreciable scale for productive purposes. The Pats and Bandharas that are found in some of the villages in the Mal lands are not perennial sources of water and provide water for irrigation for comparatively small areas for short periods. The summer usually dries up these scanty resources. The third and common water source is the permanent wells—pucca and kaccha and temporary wells locally called Budkies which are usually on the banks of major streams. The relevant table in Appendix II, shows the position with regard to wells and Budkies. This source depends upon rains and in time of draught many of the wells seem to fail completely in summer. This restricts the choice of irrigated crops to that class of crops which are short period crops and which require less watering. The position with regard to these wells and Budkies used for irrigation is that river-side villages in the centre of this Taluka have very little scope for well irrigation particularly in the black soil because of its depth. The wells and Budkies preponderate in the eastern and northern groups of villages. The increase in the number of wells used for irrigation, in spite of the fact that well irrigation entails

¹ For details see Census Report 1931, Kolhapur & S. M. C. States, Page 91.

a comparatively longer investment of fixed capital than the Pats do, indicates the general dependence of irrigational activity more on perennial or semi-perennial sources than on seasonal sources like Pats and Bandharas.

32. **Forests:** There are no reserved forest areas in this Taluka. The unoccupied areas are found studded with pastures and thin shrub-growths, particularly in regions which are subject to innudation and are not cultivable. Such areas are noticed in the central group along the river-side e. g. at Karnal, Sangli, Sangliwadi etc. On the eastern and northern side the unoccupied areas are mostly rough grazings.

33. **Mineral Resources:** They are almost entirely absent. Stone and lime occur in Mal lands and the former is quarried on an appreciable scale. The lime quarrying is restricted to a very small region and is carried on on a small scale. Along the banks of Krishna, earth suitable for bricks is found and it is utilised for this purpose to a small extent in some villages like Sangliwadi.

Economic Activity—Agriculture

34. In the sphere of production, Agriculture, as in the other parts of the State is of primary importance. Dependent on and subsidiary to agriculture are such industries as cattle rearing and dairying, which are fairly common in all parts of the Taluka and sheep-rearing and poultry, which are found in some parts only. Then come such specialised rural industries as hides and skins, tanning, rope-making etc., which are carried on on a very small scale in villages like Kavalapur, Kumthe etc. Next to agriculture in importance from the view point of employment are small and large industries, which are almost exclusively concentrated in Sangli, the capital of the State and the headquarter town of the Taluka. These include, handicrafts in metal, manufacture of bidis, handicrafts in leather, miscellaneous small industries with or without power such as toilet, medicinal and herbal preparations, manufacture of tape, newar etc. Processing industries such as curing of tobacco, refining of turmeric, ginning and pressing of cotton, extractive industries such as oil mills; and large scale manufacturing industries such as textiles. This list sums up almost the entire productive activity in this Taluka.

35. Taking up Agriculture first, it absorbs the largest percentage of the rural population. The cultivation, according to Revision Survey Settlement Report, 1918, appears to be predominantly in the hands of the occupants. Tenancy is found in respect of the lands owned by Shri Ganpati Sansthan, by large Inamdars, and large non-agricultural holders. The enquiries at the time of the Revision Settlement in 1914-15 showed that nearly 76.7% of the entire area under cultivation was cultivated by occupants and their co-sharers both in Government and Inam lands¹. Our group enquiries in different parts of the Taluka indicate that the Taluka is predominantly a Taluka of Occupant cultivators. In the Central group, however, the land is increasingly passing into the hands of a class of a few people who are partly cultivating their own lands but are largely dependent on the tenants for the cultivation of their larger pieces of land. The vicinity of Sangli has enabled some urban population to develop landed interests in the deep black soil along Krishna in villages like Sangliwadi, Karnal, Nandre, Digraj etc.

36. With regard to the size of the *average holding* our group enquiries in Nandre, Digraj and Kumthe where agriculturists from nearabout villages were called for the purpose, indicate that the average holding differs from village to village and group to group. It is commonly believed that an average cultivator in Miraj-Prant has none or at the most 1 or 2 acres of irrigated land and 10 to 30 acres of dry land. His agricultural live-stock usually consists of a pair of bullocks, 4 or more bullocks being very rare. In the north-central, north-east and eastern groups of villages because of the wells, irrigation, it appears, is comparatively more common and in the group enquiry the villagers from these areas referred to existing problems of irrigation. The obvious reason for the greater absence of irrigation in the central group is the fact that river water level is considerably below the mean field levels and because of the greater depth of soil, well sinking is not easy. Those who have tried wells in this group of villages say that they have sometimes to go as many as 25 feet below the surface to find rocky soil and many more to find water bearing strata. To cultivate the predominantly dry holding the cultivator has usually a pair of bullocks and when operations are to be carried out in the agricultural season, he has to rely on the system of exchange of bullocks.

1 See Miraj-Prant Revision Settlement Report, 1918, pp. 29-30.

(locally known as Paira System), as the need for bullocks is greater for the seasonal operations than the cultivator himself can satisfy from his own live-stock. The system in short is bullock for bullock for as many days as the cultivator employs other's bullocks. This system which is very extensively in vogue serves a very useful purpose in as much as it does away with the maintenance of a larger unit of live-stock than the farm can bear throughout the year. Our enquiries indicate that very few cultivators keep more than a pair of bullocks.

37. Agricultural live-stock is bred in the Taluka itself and is also imported from neighbouring areas. The predominant type is the heavy "Krishna valley" breed which is particularly efficient for heavy ploughing, cart transport through the black soil and water-lifting by country *mots*. The biggest market where the purchases of live-stock are made is Sangli where a weekly cattle Bazar is held and large number of cattle are dealt in with the help of middlemen. The other type of plough cattle which is found in the eastern and north-eastern parts of the Taluka is "Hannam" which is known for light and swift transport in the Mal lands. The hoops of this breed are specially suited for rocky soil and this breed thrives very satisfactorily in the neighbouring Taluka of the Sangli State viz. Kuchi and other British and State areas, from where large number of them are imported.

38. Generally the plough cattle once purchased are used for a number of years. Death by disease is the occasion for the cultivator to go in for replacement. The plough cattle in the case of a substantial cultivator is frequently bred at home. Young ones are bought at low prices in the cattle market and they are reared on the farm till they are ready for hard work. The cattle are put to a variety of use in and around the farm. Cultural operations, threshing operations, irrigation, transport on farm by carts, inter-village cart transport and visits to nearest important markets all these need the pair of bullocks. When all this is done the bullocks have no time left for additional remunerative employment. During off-season they are free to recuperate and be ready for the next agricultural season.

39. The feed consists of stalks of cereals, gram and dry threshings of pulses like Udid, Tur, Matki etc., green grass in rainy season and oilcake during seasons of heavy work. It is generally the Deshi bullocks that appear to be underfed, otherwise the cattle generally speaking is well fed particularly in the riverside villages.



Krishna Valley Bull.



Hannam Bull.



With this plough cattle and with agricultural implements which are common to almost all parts of the tract, the cultivator, dependent more on rainfall than on any other secured source of water, carries on his farming of dry crops with methods which are traditional. Improvements in respect of implements are the use of heavy plough used by some for deep ploughing and removal of weeds like *Hariali* and implements for wide sowing, harrowing and weeding where wide-sowing is adopted in recent years as in Digraj and other villages in the central group by some enterprising agriculturists. This has been a result of the experiments and propaganda undertaken by an indigenous and voluntary organisation viz., the Shetki Sabha at Digraj and since recently by Taluka Shetki Sangh—an organisation established with the State initiative.

40. **Methods of Agriculture :** With the exception of the farms cultivated by enterprising farmers, the old processes still hold the ground in the majority of farms. The cultivator is willing to adopt only so much by way of an improvement as will show him immediate gains. His reliance on money crops like tobacco, cotton, groundnut in the dry farms and turmeric, sugar-cane etc. in the irrigated farms has forced him to adopt such methods of agriculture giving more yield. Thus he has readily accepted a more systematic and scientific rotation of crops. Tobacco-Jwar-Cotton-Gram course is very commonly found in this tract. This four-year-course has its variants in different groups e. g. cotton and gram alternate in areas where three years' rotation is adopted. Once the rotation has proved its efficiency the farmer has accepted it in his own way. Similarly draught resisting varieties of seeds of food crops and marketable varieties of cotton and tobacco, (Jaywant Cotton and Pandharpuri and Nadiad tobacco), different varieties of sugar-cane etc., are adopted. Experiments with seeds, however, are restricted to a few enlightened agriculturists who are prepared to seek help and guidance from organisations connected with agricultural development, e. g. the Agricultural department and Taluka Shetki Sangh. Our enquiries show that the agriculturists generally are favourably inclined to improvements provided they are convinced of the economies of these improvements and have sufficient resources to adopt them.

41. Many of the indigent and indebted farmers are unable to undertake full and systematic processes connected with ploughing, sowing, harrowing, weeding, manuring etc. Thus for instance, because of the inability of some farmers the ploughing operations are

effected in a very half-hazard manner, with the result that many fertile pieces of land are neglected and are full with wild growth like *Hariali*, which have affected the fertility of the soil. This problem of *Hariali* is very common in the Taluka, in those farms where heavy and deep ploughing is not regularly done by the cultivator, for want of sufficient capital for heavy iron ploughs and the necessary bullock power.

42. With regard to manure, farm-yard manure, is the most common method of manuring. Another way of manuring is penning the sheep owned by shepherds for some nights in the fields and penning the farmer's own cattle. Next in importance, so far as their use is concerned, are oilcakes and chemical fertilisers. These two are used by only a few farmers for heavy irrigated crops like sugar-cane and turmeric. The last e. g. chemical fertilisers are rarely used and are still used as an experiment. Those who have used chemical fertilisers in the absence of a systematic rotational fallow, severely complain regarding the exhaustion of the soil after such chemical manuring. The manure in effect, so far as the average farm is concerned is very largely the farm-yard manure and manuring by penning of sheep. The latter is common in the areas which are frequented by shepherds from the Taluka itself and from neighbouring tracts. The extent of manuring differs from farm to farm and crop to crop. Tobacco among dry crops and sugar-cane and turmeric among irrigated crops require large dozes of manure. It is, however, noticed that the manure is not properly treated whilst in the pit and even the construction and location of manure-pits etc. are almost entirely neglected. Instances are quoted in which because of the faulty location of the manure-pits, there is appreciable wastage of dung and prevalence of insanitary conditions both for the inmates of the house and for the live-stock.

43. The problem of maximum utilisation of farm-yard sweepings and dung is very closely related to the problem of rural fuel supply. With a few exceptions the farmers, who, it is alleged, suffer from a general shortage of fuel, use dung for fuel purposes. It is only those who have sufficient alternative sources of fuel that conserve entirely the farm-yard sweepings and dung for manure. There are a few farmers who have attempted tree plantations for fuel purposes but their efforts are not widely copied. Such plantations are found in some inundated private lands or in private lands along major streams. The plantation on survey number boundaries appears to be disliked by the farmers due to the possibility of such plantation affecting the crops at the later stage of their growth.

44. Closely connected with the farming methods is the problem of soil and moisture conservation. The farmers appear to have realised in a very general fashion the efficiency of constructing bunds in the fields which display a variety of contours. The construction of such bunds or *Tals* is undertaken by some farmers with a view to preventing erosion of soil in heavy rains and conservation of moisture by allowing rain water to accumulate and proceed very slowly in its natural direction. But the agriculturist depends more on his eye inspection and his simple observation for purposes of fixing up lines and heights for the bunds. He is not acquainted with the correct technique associated with such bunds and hence major defects very frequently creep in the construction of big bunds, resulting in large land-slides and washing off of the bunds particularly when the pressure of the accumulated water is very heavy.

45. Another direction in which the soil conservation problem asserts itself is in respect of alluvial lands (*Mals*) on the river banks particularly of Krishna which flows through the Central and Southern groups of villages. Here the annual flooding results in major land-slides and soil erosion along the banks. Soil conservation by cultivation of different kinds of grasses and light plantations like Kanjal is encouraged at Sangliwadi through the efforts of Sangliwadi Mali Sangh. But what has been done appears to be just a beginning and similar attempts are yet to be made in other villages.

46. **Crops:** With equipment and technique we have hitherto described, the farmer, with his inclination more pronounced in favour of production of commercial or money crops, than it was the case in the first decade of this country, cultivates his insecure dry crops. The cultivation of food crops, however, like Jwar, Bajri, Wheat and pulses like Gram and subsidiary crops like Tur still occupies a pre-eminent position. The main crops in order of importance from the view point of acreages are Jwar, both Kharif and Rabi, Wheat, Gram, Cotton, Tobacco and other minor crops like Tur, Matki, Udit etc., which are cultivated in combination with Jwar in black soil and with Bajri in mal lands and Safflower, and Castor in combination with Gram and Cotton. Cereals and pulses give the agriculturist his food and fodder for his live-stock and he is very particular about the food crops as they are his main stay. Surplus is, of course, sold in the consumer's markets and weekly bazars. Since these satisfy his primary needs he is not prepared to take any risks. This is one of the reasons why many

agriculturists are not prepared to take up wide sowing as an improved method, the most usual argument in this respect being that wide-sowing in case of copious rainfall is uneconomic and unnecessary and in case of scanty rainfall means less fodder for his live-stock. This is just to illustrate the keenness with which the agriculturist cultivates food crops as a safety measure.

47. So far as the commercial crops are concerned, Tobacco, Cotton and Groundnut are by far the most important ones and are widespread. Their cultivation is undertaken by almost every agriculturist, the extent varying from individual to individual according to conditions of farming and respective capital resources. These crops need more intensive methods of cultivation and involve comparatively larger short-term financing in the form of preliminary operations, standard seeds, more manure, frequent employment of labour for different operations, etc. Furthermore the crops when ready are subject to fluctuations in commodity markets and hence involve intricate problems of marketing. All the three crops mentioned above are subject to inter-provincial and the last two to inter-national forces and hence need a more scientific and highly technical handling in the production stage, which the agriculturist in this tract, as indeed in other parts of the country, cannot unfortunately secure for himself. As an illustration, we may refer here, to the conditions created by the present war in respect of short-staple cotton and groundnut both of which are export crops. Obviously the agriculturist here, as in other parts of the country, is not able to devise effective measures, either independently or in collaboration with the State, to meet the situation with regard to the acreages and costs. Even so there is a marked preference for such crops.

48. The irrigated crops are produced chiefly as money crops and secondly as crops for local consumption. The money crops are turmeric, chillies and sugar-cane; while vegetables, seasonal fruits like melons, root crops like potatoes, onions, garlic etc. are both for local consumption and retail sale in the urban centres like Sangli, Tasgaon etc. Some of the agriculturists, however, partly utilise some of the crops like carrots, sweet potatoes, beans etc., as fodder for milch cattle.

49. Fruit gardens like citrus, graft mangoes, grapes etc., are very rare and are restricted to a few rich agriculturists or non-agricultural urban owners of land nearabout the towns like Sangli. Thus, for instance, in Sangliwadi in the Mali region there are some fruit gardens recently cultivated; but they are in a way exceptional. As

we have seen earlier, irrigated crops like turmeric, sugarcane, betel-leaves etc., mostly depend upon well irrigation in the case of majority of farms. The north-western villages like Dudhondi, Ghogaon, Tupari, etc., depend upon the tail-end water from the Krishna canal in addition to wells. Pat irrigation occurs as a seasonal source in north-east and eastern groups of villages. But this is useful for short-period crops. Wells, though the most important source of water at present, are nevertheless subject to vagaries of monsoon and thus as in other parts of the Southern Maratha Country bring certain amount of insecurity to the irrigated crops. Throughout our enquiries, therefore, in this Taluka, where Krishna flows for all seasons at certain points in its course, some agriculturists have suggested detailed study of the commercial possibilities of irrigation by the pumping method. Thus in Digraj-Nandre, Sawalwadi, Sangli, Sangliwadi, etc., this suggestion was put forth by a large number of people. Similarly in the north-east and eastern groups where irrigated crops are cultivated to an appreciable extent and where complaints regarding frequent failures of wells and pats are heard it was suggested by a number of agriculturists that possibilities of construction of dams across important streams in suitable catchment areas, should be exhaustively studied, with a view to increasing the acreage under irrigation and to supplement rainfall for Rabi crops particularly when the last one or two essential showers fail.

50. Marketing: Both the dry and irrigated crops have distinct markets according as they are commercial crops or consumption crops. Crops like tobacco, and cotton, oil-seeds like groundnut, chillies, turmeric, gur, etc., are sold in the established wholesale commodity markets. These are Takari in British area in the vicinity of north-western and north-eastern groups; Tasgaon, Sangli and Jayasingpur in the neighbourhood of central group and Athani in the southern group. Of all these markets, Sangli is the most important wholesale market and enjoys an India-wide reputation for over 40 years. It is the market not only for Miraj-Prant Taluka and Kuchi Taluka of the Sangli State but it attracts trade in these commodities from a very wide area, both British and other States. Because of the recent rules and regulations regarding the dealings in this wholesale market and because of the organised system of Adat and spot and forward dealings, agriculturists from far and wide are keen on taking advantage of this competitive market and there has consequently been a considerable growth in the volume of trade that passes through Sangli.

51. Our group enquiries have revealed very frequent difficulties encountered by the agriculturists. These chiefly arise out of their ignorance with regard to the middlemen and trade practices. There is a very wide complaint that in spite of rules and regulations administered by a body like the Sangli Market Supervising Board, the uniformity regarding weights and measures, deductions, discounts etc., is deviated from. Similarly in respect of tobacco sales the agriculturist who is called upon to accommodate the buyer for 2 months has to look up to the middleman who charges anything, it is alleged, from Rs. 3-2-0 to Rs. 5-0-0 per cent of the value of tobacco as fixed on the day of auction. It is not that there are no rules regarding the authorised deductions. Nor is it that the agriculturist has no opportunity to lodge his complaints but the fact is that the agriculturist has neither the freedom nor the wisdom to strictly enforce what the law permits. Very frequently the agriculturist is a debtor to the middleman or Adatya for the short term advances he needs for his farm business and hence he has to submit himself to any type of unauthorised deduction. It is also true to a considerable extent that the produce brought to the market by the agriculturist is not graded and prepared for the market. An allowance, therefore, has to be made by the agriculturist to the middleman who helps him in marketing his product which is sometimes not upto the ruling standards in the market. It is, however, the reputation of Sangli market that attracts the agriculturists to this market and in spite of some difficulties as mentioned above the Sangli market is preferred for the disposal of almost all important money crops.

52. Secondly the agriculturists sell their food grains in the Grain markets as in Sangli and vegetables, surplus green fodder, butter, ghee and other milk products, etc., in Sangli and other weekly markets in the Taluka and even in neighbouring British and other State territories. Weekly markets in the towns like Sangli, Tasgaon, Jayasingpur, etc., and in bigger villages like Sawalwadi, Kavalapur, Nandre, Ugar etc., are visited by the cultivator with a view to sell his products and purchase his necessaries of life.

53. The means of transport for carrying the products to the market is the cultivator's cart which he plies on fair weather tracks for great distances. The Taluka is well-served by roads. Replies to our questionnaires on the point of roads indicate that the carts have to take a long detour to avoid major obstacles in the way and that in some cases as in Mouje-Digraj connection with a principal road is lacking.

54. **Finance:** In the credit structure of the agricultural business professional money-lender and the capitalist middleman still play a very important part. In recent years, however, Co-operative credit organisations have sprung up in the Taluka to finance the agricultural needs. But this movement has only touched the fringe of the problem. The professional moneylender and the capitalist middleman both supply finances at very high and, from the view point of agriculturist, uneconomic rates. The loans usually are on the security of land and also on Pro-notes. The very common rate for the secured loans is between 12% and 24% and for unsecured loans on Pro-notes the rate varies from 18% to 36% according to the status of the debtor. In our group enquiries this matter was very prominently brought to our notice and the general prevalence of indebtedness was very pointedly referred to. Co-operative credit has made notable progress in this Taluka and it occupies an important position in rural finance.

55. These capital resources are utilised by the agriculturists for long-term and short-term financing of agricultural operations and for major family expenses essentially of an unproductive character. The occasions for loans that are very frequently mentioned in the replies to our questionnaire are capital investments for land improvements, sinking of wells, purchase of livestock, implements etc.; current agricultural needs for financing the production and marketing of crops; marriages, sickness, litigation and such other family needs.

56. **Agricultural Associations:** We have already referred to the two voluntary and popular organisations which have been working in a limited sphere for improvements in agriculture. They are the Digraj Shetki Sabha which came into existence in 1918 and began to function effectively since 1920 and the Sangliwadi Mali Improvement Sangh organised in 1933. The organisation at Digraj is the life-work of late Mr. Bhaurao Siddappa Pharate, an enlightened and energetic farmer who was responsible for popularising the improved dry farming methods amongst the members of this organisation. This organisation has carried on continuous propaganda for the spread of improved and scientific methods of cultivation of dry crops like Jwar, Cotton, Tobacco, etc. The Mali Sangh, as we have noted earlier is concerned with the conservation and development of land along the banks of the Krishna river. This is a duly constituted body and receives encouragement and sympathy from the State administration. In both these organisations the finances are

limited and hence the extent of work that is undertaken is very limited. The Miraj-Prant Taluka Shetki Sangh is an organisation started with State initiative. It has a membership from among the agricultural classes. The Mamlatdar is the Chairman and other important officials connected with agriculture and rural work are ex-officio members of the Board of advisers. The finances of the organisation chiefly consist of subscriptions and grants from the State. The association aims at the general improvement of agriculture, more particularly by the spread of improved technique of agriculture by demonstration and propaganda; use of improved seeds, improved implements, wide sowing, proper manuring, rotation etc., are the different directions in which the association works. The annual report for 1938-39 shows that the Sangh has a membership of 290 from about 25 villages. Out of these, Kasbe Digraj, the headquarters of the Shetki Sabha, has 61 members, Kavalapur 34, Mhaisal 26, Nandre and Borgaon 17 each. Report for 1939-40 shows that the Sangh has an annual income of about Rs. 1000/- and an equal expenditure. It receives a grant of Rs. 400/- from the State and Rs. 300/- from Miraj-Prant Taluka Local Board. This grant of Rs. 700/- is the mainstay of the association's funds. Subscriptions are in arrears and income from that source is only about Rs. 60/-. The main item of expenditure is propaganda on which Rs. 400/- are spent every year.

57. **Exhibitions:** As a result of these associations and also partly as a result of consciousness in the neighbouring districts regarding the improvements in agriculture, many agriculturists appear to participate in the annual agricultural exhibitions which are organised in recent times in connection with important fairs in this and other Talukas as in Sangli, Kavathe etc. In these exhibitions best crops, improved implements, improved types of carts, improved methods, best cattle etc., are exhibited and to encourage improvements in different directions inducements in the form of medals, proficiency certificates etc. are granted. Replies to our questionnaires indicate that many agriculturists do derive benefits from these fairs and exhibitions by way of increase in their knowledge but many plead their inability to adopt important improvements as are found in such exhibitions, precisely because of their financial weakness and lack of proper direction.

Subsidiary Industries

58. The most important subsidiary industry which is carried on on a small scale is cattle-rearing and dairy-farming. Cattle-rearing is mainly for agricultural purposes. Young ones are bought in the surrounding weekly cattle markets and are reared on the farm for farmwork or are sold in the market at a profit through middle-men. While purchasing the young ones the agriculturist relies on his own powers of observation and knowledge about the breeds and in doing so prefers the most popular breeds, like Krishna Valley, Hannam, Amrit Mahal, etc. The industry is found in the central zone to an appreciable extent where the mali lands and inundated areas afford green fodder and where economies in feeding are possible. Secondly the dairy-farming industry is limited to the keeping of a buffalo or two and selling surplus milk and butter in the weekly markets like Sangli. Our enquiries and replies to our questionnaires show that the size of this industry is small and the most common number of milch cattle is one buffalo. It appears that this industry is not carried on as a regular business but is largely the concern of the women in the house and hence no attempt is made to organise this industry on any sound basis. Surplus milk is sold to distributors who carry on milk distribution trade in towns like Sangli. The butter sale is in the hands of the women who visit the weekly market in Sangli. As the industry is not carried on as an organised business, it was not possible to collect details regarding the character of feed, milk yields, costs and returns etc. It can, however, be said that as a matter of common practice very little of feeding stuff is imported from outside the farm; the cattle is fed on the farm itself and whatever milk yield is possible under the circumstances is relied upon.

59. We have no reliable data with regard to the extent of milk and butter market. It may, however, be stated definitely that the surplus butter and ghee in the urban markets like Sangli is exported to Poona, Bombay etc., by middlemen who purchase butter from the villagers in the weekly market in Sangli. In recent years the evil of adulteration appears to have crept into this trade and Sangli which once enjoyed Deccan-wide reputation for pure butter and ghee is in danger of losing it. The Sangli Market Supervising Board has been aware of this and in recent years attempts at preventing adulteration are being made by instituting tests for pure butter.

60. Poultry farming occupies a still less important place in the scheme of farm business and is utterly unorganised. We have no detailed facts and figures regarding this as in the majority of replies to our questionnaires, questions on poultry have been left unanswered. Our group enquiries, however, lead us to say that improved poultry farming is very rare and is restricted to a very few enterprising farmers as in Kavalapur, Sangli etc. They have attempted to rear leghorn breed for eggs in preference to country poultry, which is reared both for table and eggs. The improved poultry farming has brought with it the open air pens of wire gauge and movable arks, sanitary precautions to prevent diseases etc. But this is still in the initial stages and is an exception rather than a rule. As a rule the village poultry of the back-yard with no system of proper feeding, with insanitary conditions still largely prevails, catering for eggs and table poultry demand of an extremely local character. The eggs and birds, produced under these conditions are sold by women in the local weekly markets to the middlemen who have connections with poultry consumption markets elsewhere. The conditions in the poultry industry as in dairy-farming are thus backward.

61. Other **Rural industries** which are found in some parts of the Taluka are mainly sheep-breeding, rural tanning of hides and skins and rope-making from Agave (Ghayapat), a cordage plant. The first of these is restricted to hilly tracts where rough grazings are available for sheep. The industry as in other parts of the country is in the hands of Dhangar castes and the sheep reared yield a very rough kind of wool which is spun and woven into country blankets. We have not been able to collect sufficient data regarding the unit, the capital structure, the wool yields and other incomes from sheep rearing, such as sale of rams for mutton and remuneration for penning the sheep in the lands under plough. Our enquiries show that conditions in this industry are almost the same as in other parts of the Bombay Deccan. Rural tanning industry is found in a few villages like Kavalapur. The industry is in the hands of the rural tanners who work as independent artisans with their own equipment and in their own premises with capital borrowed for working the unit. The processes employed are lime and bark tanning processes common in other places. The hides and skins are locally bought or are bought in distant hide markets if the finances permit a trip to outside hide centres. The same are worked up according to traditional methods of tanning, with the help of a few wage-earners and the hides when tanned are either converted into *mots* or are sold in the leather market for uppers and soles. Our

group enquiries in Kavalapur have revealed highly unsatisfactory conditions regarding the premises where tanning is carried out, regarding water necessary for processing and also regarding finances to meet the necessary working expenses. Their present problems are adoption of improved technique, financial facilities and development of such profitable industries as mill-beltting, roller skins, pickers etc., for which there has been a steadily increasing demand in the last few years.

62. Rope-making in palces like Kavalapur is in the hands of illiterate classes of ropemakers belonging to Matang castes. As the Agave from which the ropes are prepared has to be first treated in water, the villages, where such facilities are not available, import this fibre in a partially processed state and then it is made into ropes. Kavalapur is an instance in point. There are a number of families engaged in this industry in Kavalapur. All of them who carry it on as a cottage industry import fibre ready for spinning from different places in Kuchi Taluka. They prepare the ropes in their houses with the help of women and with equipment which is crude and primitive and sell them to agriculturists in different parts of the Taluka in the weekly markets. Cordage necessary in agricultural operations is supplied to agriculturists on the *Balut* basis. Surplus if any is exported by middlemen to distant markets in the north and south of Sangli. This industry is not in the least complicated but due to very low credit-worthiness of the rope-makers their financial needs though small, are met by rural money-lenders at extremely high rates of interest. In Kavalapur we are informed the rate of interest for these unsecured loans is as high as 4 annas per rupee per month or 300 p. c. An attempt to ease this utterly unsatisfactory position with regard to the capital necessary in the industry, was made by organising a Co-operative credit and sale society, but the society ran into heavy arrears and suffered losses in sale business and had therefore to suspend its activities. The position is all the more serious particularly when it is realised that the need of each family for working capital does not exceed Rs. 30/- at the most. Conditions in this respect are not materially different in other parts of the Taluka.

63. Other rural industries are handloom weaving, brick-making, lime-quarrying and baked-lime manufacturing by kiln processes. They are of only local importance and they need not detain us.

Urban Industries

64. Urban industrial activity is restricted to Sangli, the capital of the State and the headquarters of the Taluka. The urban industries of Sangli are urban handicrafts (using no power), small industries using power in some form and large-scale industries. Information regarding these industries is very largely based on the replies to questionnaire Past III and Part V and on the group enquiries conducted by the Committee's Investigator. Group enquiries were conducted in the case of brass and copperware, silverware, leather manufactures and brick-making.

65. **Urban Handicrafts :** From the view point of the present enquiry it seems that important handicrafts are leather manufactures, brass and copperware, silverware, bidi manufacture and other tobacco products and creameries.

66. The economic organisation of leather handicraft is on the same lines as in other areas. The independent artisans with the assistance of wage-earners, manufacture leather articles like foot-ware, sports-ware, mill-stores (only two units are reported to be carrying on this manufacture) and sell them in the local market or sometimes export them to other consuming centres nearabout. Their finances are small and even for that they have to depend upon the Sowcar who charges them 12 to 18 % interest. Some of the artisans work on outwork system and earn a wage on work to order for some important independent artisans who have slightly bigger shops. The branch of manufactures other than foot-ware is at present in an infant stage. The present War has given this branch a temporary impetus and the industry is benefiting by it.

67. The Brass and Copperware industry is in the hands of the capitalist dealers who distribute work to artisans in beaten and castware and get the manufactured articles from the out-workers according to market needs. In the last few years the competition of large scale Brass and Copperware factories has hit the local industry very hard. The outside markets are lost and even the local market is now captured by the wares imported from outside. This has affected the wage rates in the industry and the outworker has heavily suffered in the last few years. This progressive deterioration in the position of the industry has reduced the extent of this industry to a great degree.

68. Handloom industry, even more than Brass and Copperware, has, it seems almost disappeared from Sangli. At the time of the

first revision settlement report (1918) Sangli had 50 handlooms¹, and the State then had tried to encourage this industry by inducing some weavers' families from Terdal to settle in Sangli by giving them all facilities. But the result of this was not satisfactory. Our enquiries have not revealed the continued existence of handloom industry in the Sangli city. When it existed the normal product was 20s to 60s saree. But the industry later on, it seems, lost even the local market and virtually disappeared.

69. The organization of Silverware manufacture is on the same lines as Brass and Copperware. The Sarafs like the dealers in Brass and Copperware, are the capitalist financiers. They distribute the work in plain and design ware to the highly skilled and specialised artisans and get back the finished products on payment of wages. Very frequently the artisans resort to advances from these dealers for domestic needs and are thus bound to different dealers by out-work bonds. Their condition in recent years has, it is said, deteriorated. With the competition from other centres the wage rates have been subjected to frequent cuts and the volume of work, as was pointed out in the group enquiries, has also been appreciably curtailed.

70. Since the last 2 or 3 years two small creameries have been working in Sangli. The milk is collected from neighbouring villages. The simple separator is used for taking out the cream which is packed in suitable containers and exported to Poona, Bombay, Belgaum etc. Both the units in Sangli being very small involve little capital. Only one or two male labourers and a female labourer are employed to carry out the different processes from grading of milk to packing of cream. As each unit is small, annual net income from its working is estimated to be in the neighbourhood of Rs. 500 to 600. One of these creameries had attempted the manufacture of casein from milk after separating the cream. But the processes employed were crude and the product was not upto normal standards in the market. The chief difficulty in this industry is lack of sufficient supplies of milk of uniform quality. The cream yields are therefore, unsatisfactory and compare unfavourably with cream from elsewhere.

71. The manufacture of *Bidis* which is conducted on an extensive scale in Sangli for the local as well as outside markets, is in the hands of seven or eight small capitalists. Each invests about 10 to 12 thousand rupees in the business. They import leaves from C. P.

1 See Miraj-Prant Revision Settlement Report 1918, page 22.

and Berar,¹ purchase the locally produced tobacco and prepare *Bidis* by employing women workers to the extent of 15 to 20 in each karkhana. They are paid on piece wage system (6 annas per 1000 bidis) even though they may work in the karkhana or in their own house. The chief difficulty is about the freights on waggon loads of leaves on certain sections of the Railways. There are no special rates for Sangli and freights add considerably to the cost of leaves. Another difficulty is the distance at which the sources of raw material exist. Attempts are being made to study the possibility of using leaves available in the State forests in Shahapur ranges. One or two bidi manufacturers are using the local leaves as an experiment.

72. Tobacco curing is carried on without the help of any machinery almost on the scale on which bidi manufacture is carried on. As in bidi industry, female daily labour is employed in tobacco curing. The cured tobacco is sold locally or exported according to orders. Curing essentially consists of drying the leaves, crushing them and grading the material according to different sizes. The problem with these curing houses is more of general layout of their buildings and open spaces for drying. This was specially referred to by the tobacconists who were interviewed. From the view point of internal economies in haulage, sanitation and general efficiency the present layout is said to be defective.

Small Industries

73. In this class we include small industries using power in some form. In Sangli such small industries are (1) cotton ginning and pressing factories, (2) turmeric polishing factories which are run in combination with groundnut decortication, (3) flour grinding mills, (4) iron and steel manufactures and (5) rope and tape manufacture. The following table shows the growth of these industries during the period 1914-1940.²

	Nature of work.	1914	1940.
1.	Cotton ginning and pressing Factories	3	8
2.	Turmeric polishing and groundnut decortication	3	12
3.	Flour mills	2	14
4.	Iron and steel manufactures	0	1
5.	Rope and tape	0	1

¹ The annual imports are estimated at Rupees 30 thousand worth and the annual output of bidis is estimated at Rupees 1 to 1.5 lakhs worth.

² See Miraj-Prant Revision Settlement Report 1918 pp. 126-131 and Annual Administration Report 1939-40, p. 131.

74. The growth in cotton ginning and turmeric polishing units reflects the increased quantities of cotton, turmeric and groundnut placed on the Sangli market. Increase in flour mills indicates as elsewhere the increasing dependence of the local population on mill grinding in preference to grinding at home for the daily bread. The last two are of recent origin—the iron works since the last 20 years or so and the rope and tape since the last 6 years.

75. These small factories employ steam, gas and electricity as the motive power according to individual needs. Boilers, oil engines or electric motors are used. Of the above units the last two alone are manufacturing industries, the remaining are processing or refining industries. Cotton ginning, turmeric polishing and groundnut decortication are seasonal industries and their fortunes fluctuate with the agricultural season. These industries carry on processing work for exporters of refined produce, at certain fixed rates. These rates for work like ginning, pressing etc., are falling from time to time due to mutual competition and therefore the margins to the capitalist owners of these small factories are also falling. There are no associations of gin and press owners or turmeric polishing factory owners and are run on individual initiative and risk. Iron and steel manufacturing is carried on by the only concern of its type in Sangli and is a proprietary concern. Scrap iron is the main raw material used others being tool steel, sheets, brass and other metal bars. The articles manufactured are agricultural implements and machines, water pumps, textile machinery—particularly looms and accessories etc. Manufacture of rope and tape from low count cotton yarn, is carried on by a small proprietary concern. Special looms are constructed for the purpose. Electricity is employed as motive power. Labour is trained by the owner who has technical experience of similar factories in Japan. The factory employs about 60 people of which 48 are males and the rest are females and boys. The annual output comes to about Rs. 30,000/- worth. The markets for the product are textile mills which require tape of special type, War Supply Department since the last one or two years and the consumers' market for ropes, newar etc.

76. Almost all these small factories suffer from some common difficulties. They are, generally speaking, want of sufficient credit accommodation at low rates and heavy freights on almost all railways with the exception of some concessions. Over and above this the internal difficulties like absence of interprocess balance, technical draw backs, lack of mutual assistance by organisations, etc., are also said further to affect the position of these industries.

Large-scale Industries

77. There are two spinning and weaving mills, three oil mills in Sangli and a sugar mill situated at Ugar (Khurd). One of the spinning and weaving mills has a very interesting history behind it since 1912. The oil mills are all proprietary concerns. The last namely the sugar works are a joint-stock concern with a share capital and is liberally assisted by the State. The technical history of the spinning and weaving mills is remarkable as the organisation of the spinning section has been a later growth. In the case of one, the manufacturing is restricted to coloured sarees and artificial silk cloth; the other produces only low count grey piece-goods. The first has a very wide market all over India and the almost entire credit for innovation of weaving of sarees on power-looms in bright colours and modern attractive designs is claimed by this concern, whose efforts have been copied all over the Bombay Deccan in the last 20 years or so. The annual output of sarees alone is about rupees 4 lakhs worth; add to this the annual output of art silk piece-goods worth about rupees 2.5 lakhs, since the last 6 years or so. This concern has its own selling organisation based on agency system and spends large amounts on that account. Among the power-loom saree manufacturing concerns, this stands first and foremost employing more than 1000 people and has to meet, it is understood, competition from about 400 small power-loom concerns in the Bombay Presidency and the Central Provinces and Berar; most severe competition, it is alleged, comes from Ichalkaranji.

78. The three oil mills extract, with the help of expellers and rotary ghanies, oil from groundnut and export the oil and oil-cake to wholesale markets like Bombay and Poona and sell locally some oil and oil-cake. Their problem chiefly is of groundnut storage and the necessary capital for the same, difficulties regarding tank waggons and absence of special concession rates on railways for oil. Because of these difficulties the local oil mills are unable to compete with up-country oil mills which are favourably situated with regard to rail distances, heavy tank waggon traffic, favourable freight rates, etc.

Trade and Commerce

79. Trade chiefly consists of export and import on wholesale basis, of agricultural and industrial produce and distribution of consumption articles on retail basis in permanent shops, weekly bazars, spread over different parts of the Taluka and annual fairs held in some centres. Localisation of export and import activity in wholesale markets like Sangli is clearly visible. Sangli by

far is the largest trade centre not only in the State but even in the surrounding territory. It has developed continuously during the last 40 years and more. By about 1914-15 Sangli wholesale market for agricultural produce with specialisation in the export of commercial crops like tobacco, cotton, groundnut, turmeric, chillies, gur, etc., had already established itself as can be seen from the revision settlement report. Sangli, by that time had acquired considerable reputation regarding quality all over India. This fact coupled with the State encouragement and the favourable terms of business offered by the dealers to the producers attracted large volume of agricultural produce from a very wide area and tendency towards rapid growth of the volume of export trade clearly established itself.¹ This tendency of expansion continued to assert itself in the post-war period and in recent years in spite of rise of commodity markets in the vicinity of Sangli, Sangli has been able to attract a considerable volume of trade due to the regulation of trade practices, regularity of quotations, forward dealings in groundnut, oil and turmeric, open auction bids, comparatively easy terms of payment, institution of a Market Supervising Board and the organisation of a Chamber of Commerce since 1910, railway concessions, octroi concessions, facilities for storage of commodities like turmeric etc. For many of these things the State initiative and encouragement are largely responsible. The following table reveals the extent and character of wholesale trade in agricultural commodities in the Sangli market. Reliable figures are available since the Market Board began to maintain regular statistics, of arrivals in the wholesale market for sale and export.

TABLE
(Figures in thousands of carts).

Commodity	1936-37	1937-38	1938-39	1939-40	1940-41
Groundnut ...	22.76	22.62	30.51	37.28	19.9
Tobacco ...	4.1	4.68	5.39	6.37	4.26
Turmeric ...	7.1	8.63	8.98	10.1	10.55
Gul ...	10.15	7.96	8.58	12.21	14.52
Chillies ...	2.13	1.93	2.39	2.28	2.63
Cotton ...	3.4	3.32	2.86	2.67	1.2
Ghee ...	.07	.08	.09	.09	.1
Miscellaneous ...	.13	.24	.75	.85	.68
Total ...	49.98	47.72	59.57	71.88	53.92

¹ For details see Revision Settlement Report, pp. 16-19.

80. In order to enable the agriculturist to have a share in the control of marketing of his produce, and in order to enable him to reap the benefits of co-operative marketing, a Co-operative sale shop is organised since 1926 with share capital. It gets accommodation from the Central Co-operative Bank. It accepts deposits and acts as middleman for the sale of the produce of members and non-members. It also accommodates the producer. The charges for marketing, weights and measures, trade practices are all according to the rules framed by the market. It is, therefore, able to attract good business. All commodities are dealt in. They are according to their importance, groundnut, tobacco, turmeric, gul, cotton and chillies. The sale shop has a working capital of about Rs. 30,000/- an annual expenditure of about Rs. 3000/- and a net profit of about Rs. 2,500/- annually.

81. Sangli is also a distributing centre. Large volume of food grains and other raw and manufactured commodities are imported and sold in wholesale and retail in a wide area round about. The consumption market in Sangli, chiefly consists of permanent wholesale and retail shops and a large weekly market catering largely for the agricultural demands. The weekly cattle market is one of the largest markets in the surrounding tract. Sangli market thus enjoys a premier position in the economy of the Southern Maratha and the Karnatik regions.

82. Other markets in the Taluka are weekly markets held in important villages like Borgaon, Kavalapur, etc. A very large number of agriculturists from the Taluka visit weekly markets in surrounding British and State territories, e. g. the weekly markets at Kundal, Tasgaon, Palus, Vite, etc. The important annual fairs in which agricultural commodities, agricultural implements, agricultural live-stock, handicrafts products and imported consumption articles etc. are bought and sold, are held at Sangli, Dudhondi, Nandre and Kavalapur. Like weekly markets they occupy a very important and interesting position in the rural economy as in other parts of the country.

83. The financing of the trade is by the traders themselves, professional moneylenders and banks viz. the Sangli State Bank and the Central Co-operative Bank. The traders secure cash credits from the Sangli State Bank against security of commodities. The State Bank has one of its branches at Tupari a small trade centre in this Taluka.

Communications

84. This Taluka is very well served by roads and railways. In the vicinity of north-western group lies the Karad-Tasgaon Road. North-east group is served by Satara-Tasgaon road. The central group is served by Islampur-Sangli, Sangli-Nandre road and Nandre-Tasgaon fair-weather tracks. The eastern group is served by Sangli-Kuchi and Tasgaon-Miraj roads. Sangli is also connected with Kolhapur by a very good road. Southern group villages are also connected with Miraj by a good road. These roads are metalled roads. Some of the important roads are maintained by the Public Works Department; some are maintained by the Taluka Local Boards, particularly the minor roads; and the approach roads are constructed and maintained from Rural Uplift grants. Approach roads were constructed in 10 villages between 1937-1939. With the growth of bus transport, this Taluka has been well served by passenger buses and goods trucks. The recent petrol rationing and the consequent restriction of bus traffic, was pointedly referred to in some villages as one of the difficulties indicating thereby the appreciable and increasing dependence of the rural population on this speedier mode of passenger transport.

85. Some villages in the Taluka lie within easy distances from the M. S. M. Railway track which runs from north-west to south-east in this Taluka. The stations on this Railway system lying within this Taluka are Nandre and Ugar. The Sangli-Miraj State Railway section opened in 1907. It is managed by the M. S. M. Railway Company and it covers nearly 6 miles. It has given a distinct help to the trade of Sangli and its importance is predominantly in this direction. Concessional rates from and to Sangli for many commodities have further helped the concentration of trade in this reputed centre.

86. Sangli being the capital of the State and headquarters of the Taluka has Posts and Telegraph Office. There are branch post offices in important villages. The Taluka has on the whole good communications which have enabled the Taluka to derive advantages in its productive sphere to a considerable extent.

Kuchi Taluka

87. This Taluka consisting of 30 villages, and having a total area of 219 square miles, or 139850 acres, lies to the north-east of Miraj-Prant and Sangli proper and like Miraj-Prant is split up into frag-

ments consisting of groups of villages. Starting from the north-west of this Taluka, a group of villages led by Manjarde, Bastwade, Balgawade, etc., and which we have styled as north-west group is the first fragment. This is surrounded by villages of Tasgaon and Khanapur Talukas and other State villages. The second fragment is in the centre and we have divided this into (1) North-central, with Kundalapur as the dividing village, (2) Central with Kavathe Mahankal as its centre and (3) West-central and (4) East-central groups. This fragment is surrounded in the east by Jath State, on the north by Khanapur, on the west by Tasgaon Taluka and on the south by detached villages of Tasgaon. To the south of Miraj-pandharpur road lies the southern part of this Taluka consisting of 4 villages, three in one group, and Salgare a detached village, to the south of Kavatha.

88. Physical features : Physical characteristics of this Taluka are generally the same all over the tract. Except the two southern villages viz. Mallewadi and Salgare, villages in the Taluka are hilly being cut up by ranges of low hills. The tract is treeless and undulating. The ups and downs alternate imperceptibly. The uplands are generally uncultivable and at best afford poor grazings for sheep and cattle. The shallow valleys are made up of medium black soil which is cultivable for both dry and irrigated crops. Along the river Agarni which waters the west central group of villages the tract is more open and fertile. Similarly the south-eastern villages like Dhulgaon, Salgare and Mallewadi in the south-west, chiefly, possess level and pretty good land. Thus the general topography of the Taluka shows the rugged and hilly nature of the tract particularly in the north and north-west and south-west.

89. Climate and rainfall : Climate is extreme and dry, the summers are very hot whilst the winters are severely cold. The average rainfall is in the neighbourhood of 22 inches in the centre and about 18 inches in the eastern parts of the Taluka. The revision settlement report,¹ indicates that though early and September monsoons are fairly evenly divided, the fall in the early monsoon is dispersed over 3 months, whereas the Rabbi monsoon precipitates in a concentrated fashion within a period of 1½ months. Thus the period April to August yields about 9 inches with 17 to 18 rainy days on an average; whereas the period 15th August to 21st October yields about 15 inches in about 14 or 15 rainy days. The position in the

¹ See Kuchi Taluka Revision Settlement Report, p. 21 and p. 83, Appendix A-1.

recent years can be understood from the following table. The figures are for 1939-40, at Kavatha Mahankal Station :—

April	May	June	July	Aug.	Sept.	Oct.	Nov.	Total.	Average for the last 5 years
..	..	2.5	4.25	2.50	3.3	0.30	0.82	11.95	25.45.

90. The South-west monsoon penetrates the part of the Taluka lying to the north of Miraj-Pandharpur road. It goes on diminishing towards east. The hilly tracts particularly as in the north-west group of villages are favourably situated as they attract slightly more rains than the plains do. Even the north-central group consisting of Kundalapur, Ghatnandre etc., get a favourable fall due to the hills. The eastern villages, however, do not enjoy the favourable position with regard to rains and they are liable to periodical scarcity if the September rains fail. In the tract where Bajri or early Jwar can be grown, the dependence on Kharif monsoon is almost complete. The black soil, however, where it occurs in the shallow valleys lying within the influence of the monsoons, can depend on either of the falls and can have either Kharif or Rabbi crops,

91. **Population:** As the relevant table in Appendix II would show, this Taluka has no urban population. It is purely rural. The increase in the population occurred after 1921. The greatest increase was recorded in the 1931-41 decade, i. e. from 35.4 thousand in 1931 to 41 thousand in 1941. Age and sex composition does not materially differ from that in Miraj-Prant. Hinduism as in Miraj-Prant predominates in this Taluka. Jains, however, are considerably less in this than in Miraj-Prant Taluka. Occupational distribution again shows the important position held by agriculture and allied industries in this Taluka. According to 1931 Census the density of the population was 157 per square mile.

Natural Resources

92. **Land:** The most important resource on which the entire life of the tract depends, is as we have already seen either mal and hilly or medium black and fertile land. Both types of soil alternate from region to region. The degree of fertility in the black soil naturally varies from area to area. Near the nallahs and the river Agrani the soil is alluvial and deep. Similarly some eastern plains contain very fertile soil.

93. **Water resources** : The rise in the irrigated acreage during the last 30 years shows the gradual change in the agricultural practices. The agricultural population has begun to depend more and more on irrigated crops, particularly money crops like turmeric. In the revision settlement period this feature appears to have established itself. "Bagayat by that time was becoming the chief industry of the people.¹" This change became possible due to increasing exploitation of the surface and sub-soil water-resources of the Taluka. This Taluka because of its hilly character has certain number of important streams on which small dams are constructed as at Kuchi and the kuchha dams on the streams have given pats which during periods of normal rainfall, flow for some months over areas other than the easternmost villages. But this pat water is useful for Rabbi Jwar or Shalu, because turmeric and similar 9 months crops cannot depend on this short period water resource. There are three irrigation tanks in the Taluka at Bastwade, Kundalapur and Jakhapur and 5 tanks are useful for cattle and washing purposes.² The temporary pats account for nearly 2700 acres of irrigated area. The rest of the irrigated land is dependent on well irrigation. Over and above this the river Agrani and the Kapur Odha in north-western group possess volume of water which is yet to be fully exploited.

94. The wells, which are the sub-soil water resource, partly depend on rainfall and the surface flow in the streams and river. As this Taluka has numerous streams, the wells have better water supply than in other Talukas like Miraj-Prant and the depth of the wells also is not considerable. This enables the irrigated areas to draw upon well irrigation and to supplement the pat irrigation.

95. **Forests** : There are no forests in the Taluka. The unoccupied uncultivable waste is *mal* and consists, at best of rough grazings. Unoccupied cultivable area, 7400 acres roughly, is largely under State kurans, reserved in some village areas.

Economic activity

96. **Agriculture** : Agriculture is the most important productive activity in this Taluka. Next in importance are cattle-rearing and sheep-rearing, the only rural and subsidiary industries

1 See Kuchi Taluka Revision Settlement Report, 1918, p. 8.

2 There were 2 irrigation tanks and 5 ordinary tanks during the Revision Settlement period (1914-15); See *ibid*, p. 27.

in the Taluka. There are no important small or large scale industries.

97. Taking up agriculture, we need not examine in detail the organisation of agricultural business, its methods and practices, its technique, marketing, finance etc. In all these respects there are no fundamental differences or variations from the position as it obtains in Miraj-Prant Taluka. We will, therefore, note only important facts in this connection.

98. First with regard to acreages under dry and irrigated crops. Dry crops are the same as in Miraj-Prant, namely, jwar, pulses, bajri, gram, cotton and groundnut. In the patasthal and motasthal areas garden crops like turmeric, sugarcane, chillies, plantains, khapli (wheat), root-crops like sweet potatoes, onions, and pans, particularly in Mallewadi and Salgare, are grown. There are a considerable number of country mango groves spread over different parts of the Taluka. We may also refer to the laudable attempts made by some enterprising agriculturists at horticulture particularly citrus fruit in villages like Salgare, Agalgaon, Jaigavan, Gavan etc.

99. The growth in acreages¹ of irrigated crops and dry commercial crops in recent years is remarkable. The dependence on some irrigated crop is fairly wide-spread in areas other than the eastern-most villages.

100. With regard to the status of the cultivator in relation to the land he cultivates and the character of his holding, the position, as it appears to have been in the revision settlement period was that the major percentage of the cultivated holdings was in the hands of the pure occupant-cultivators. During that period nearly 78% of the entire survey numbers were cultivated by occupants and the remaining by partly occupants and partly tenants². The general impression gathered in the group enquiry is that increased irrigation activity and dependence on irrigated commercial crops and their price reactions on agricultural business have induced the occupants to go in for more of land on rental basis.

¹ The irrigated crop acreages for 1914-15 as mentioned in the Revision Settlement Report, 1918, are sugar-cane 401 acres; chillies 298; khapli 230; turmeric 499; jwar 1211; others 1850. (See Revision Settlement Report 1918, p. 28 and p. 31).

² See *ibid*, p. 19-20.

101. Live-stock in this Taluka on which the agriculture so largely depends differs from that in Miraj-Prant in that the types bred in Kuchi Taluka are more suited to hilly and rugged tract, namely (i) Deshi, (ii) Hannam, and (iii) Khillari. The latter two types however, were not bred on any considerable scale at the time of Revision Settlement.¹ In recent years our enquiries show, the cattle breeders are showing a distinct preference for Hannam and Khillari breeds. The cattle useful for the needs of the agricultural operations in this Taluka are bred in the Taluka itself. This Taluka imports cattle from neighbouring areas for grazing and gives a profitable employment for many. Further the Taluka exports on considerable scale agricultural live-stock to surrounding areas. The hilly tract and rough grazings give scope for the activity. With regard to fodder, nature of work, etc., the conditions are almost the same as in Miraj-Prant with the exception that because of irrigated farming activity which is comparatively on wider scale than in Miraj-Prant, plough cattle have to work very intensively on the farm and have, therefore, to be better fed. The green fodder available in the irrigated areas gives food of good nutritive value and hence lean and weak cattle is rare in this Taluka except on the poorest farms in the poorest mals. Implements are the same as we have seen earlier and we need not deal with them at any great length. The problem with regard to water resources is, however, of considerable importance. The conservation of water and soil is a major problem in this Taluka. The Taluka is, replete with major and minor streams which are only partially harnessed by kaccha bandharas. Certain catchment areas, as near Kapur-Odha in Manjarde section are also indicated. In our group enquiry the Kapur-Odha was very frequently referred to as a probable source of water which if properly dammed is expected to irrigate an extensive area. Similarly the problem of tals in the fields assumes importance in those parts of this Taluka which have scanty rainfall.

102. We need not go into details of methods and practices of farming. We have dealt with them while studying the conditions and problems relating to this aspect of agriculture in Miraj-Prant. The conditions in Kuchi are much the same and present the same problems as in Miraj-Prant. We may, however, note one broad aspect regarding the problem of seeds and plants in relation to irri-

¹ See p. 35 of the Report.

gated crops and fruit gardens. This Taluka is specially interested in irrigated crops and availability of suitable seeds and seedlings for turmeric, plantains, pears, sugar-cane, etc. and fruit-grafts, in such areas which are well suited for fruit plantation. Knowledge of modern technique regarding these crops, supply of fertilisers¹ and cakes at fair prices are special problems which each agriculturist has to meet in his own way.

103. As the problem of fodder and fuel² is closely connected with live-stock feeding and manure, afforestation acquires a special significance in this Taluka. There are wide stretches of hilly tracts and mal. These have to be surveyed and studied in order to find out the possibility of developing the fuel resources of the Taluka with a view to release the pressure on farm-yard dung and supplement green fodder resources in the irrigated lands.

104. Markets for the agricultural products are Sangli, Kavathe-Mahankal, Salgare, Tasgaon and Savalaj. The marketing system and problems arising therefrom are similar to those we have described earlier. Chief means of transport in the Taluka is the cart, plying on fair-weather tracks and on important roads leading to the towns and markets. In recent years bus transport has partially facilitated the movement of passenger traffic,³ but it is very difficult to ascertain as to how far the goods traffic has been taken over by the truck.

105. Capital structure of agriculture in this Taluka does not differ from that in Miraj-Prant. Sowcari rate of interest is between 12 and 24 per cent. The Co-operative credit has also made some progress during the last 30 years or so. But the farmer still depends largely upon the sowcar and the middleman for long-term and short-term accommodation respectively. There are of course some well-to-do farmers who have their own capital to draw upon.

1 It is interesting to note that in 1913-14 and thereabout, no artificial manures were used. Our enquiries clearly show that artificial manures like ammonium sulphate and bone-meal have been recently introduced in irrigated tracts growing turmeric, and sugar-cane.

2 Our enquiries show that in this Taluka as in Miraj-Prant a large number of farmers use dung as fuel as their fuel resources are scanty.

3 Mamlatdar's memorandum on the Taluka refers to this growth but not give the quantitative aspect of this development.

106. The most important agricultural association in the Taluka is the Taluka Shetki Sangh working on the same lines as that in Miraj-Prant. It has its own building at Kavathe. It has a membership of about 375.¹ But membership fees are heavily in arrears. It receives a grant of Rs. 700 from the Local Board and the State funds and its expenditure is about the same.² In the last 2 or 3 years, however, the Sangh is not working to its full capacity and its practical usefulness to the agriculturists, therefore, is on the wane. An agricultural exhibition is held every year at Kavathe at the time of the annual fair there and agriculturists are induced to participate in it. Along with this a very important cattle fair is organised and breeds of the types in demand in the surrounding areas are bought and sold on a large scale in the fair and prizes are awarded for the best cattle.

Subsidiary and Rural industries

107. Industries subsidiary to agriculture are cattle-breeding and poultry. Cattle-breeding is chiefly in the sphere of keeping cows and breeding and rearing agricultural livestock for local and outside needs. This Taluka has considerable rough grazings which provide grass for cattle. Buffaloes do not predominate, as dairy farming is not widely practised. Our enquiries in the Taluka show that cattle breeding industry is carried on by a large number of farmers as a subsidiary industry. The main problems connected with this industry are almost the same as we have described earlier. The markets on which this industry depends are Kavathe, Dhalgaon, Kharsundi, Khanapur, Karagni, Sangola etc. That the industry is not organised on a sound footing is evident from the way in which our questionnaire in this regard has been answered by a majority of farmers who have returned replies. Beyond mentioning that they carry on this industry as a subsidiary industry and that they depend on the markets mentioned above no useful data are supplied. It is only in the case of one farmer in Morale and 2 or 3 farmers in Tisangi that replies to the questionnaire are fairly in detail. They mention the chief difficulties about the purity of breed, premium bulls, scientific feeds, regular veterinary relief, regulated markets, etc.

108. Poultry though carried on by some people is considered as absolutely a minor industry and though Kavathe and Salgare are two large exporting centres, Poultry-farming is largely unorganised and a back-yard affair. Except a few enlightened farmers who

1 See Taluka Shetki Sangh Report for 1937-38 pp. 2 and 15.

2 For details see *ibid* pp. 2-3.

have tried leghorn breed, the majority of poultry farms are of the unorganised type and the incomes from this source are not looked upon as anything dependable. Replies to our questionnaire substantiate this.

109. An important rural industry is sheep-rearing which is on the same lines as in Miraj-Prant. The breed reared in the Taluka yields very rough wool which is exported to other areas. Wool weaving industry is not carried on on any appreciable scale. Another industry is rope-making from *Agave* and its conditions are largely the same as in Miraj-Prant, as our group-enquiries show. As there are some favoured spots where water is available fibre extraction for local consumption and export is carried on. There are no other industries worth mentioning. Cotton weaving is decadent and is carried on by small number of weavers in Khanderajuri and Kavathe. They weave only low count pasodies (cotton blankets) and dhotees used by agriculturists. The recent yarn fluctuations have almost entirely killed this already decadent industry. There are no important handicrafts or large-scale industries, organised on factory lines. Industrially the Taluka is backward and the position remains the same as it was some 30 years back. The Revision Settlement Officer found that industrially the Taluka was backward and thought that "it would remain so far a long-time to come"¹. The last 25 years or so have borne out this.

Trade and Commerce

110. Important markets in the Taluka are Kavathe and Salgare. The latter is growing gradually as a commodity market particularly since the initiative in that direction was taken by the state by organising a market site on the outskirts of the village. The growth of trade there, however, has been largely hampered by the lack of good roads leading to that centre from surrounding areas. Many of the roads lie through other jurisdictions and they are neglected and in many parts incomplete.

111. Our group-enquiry at Salgare showed that in spite of these difficulties, there are good arrivals of important commercial crops. The average annual figures for the last 5 years are² :—

1 See Revision Settlement Report, 1918, p. 16.

2 Based on oral information. Evidently these are very rough estimates and indicate only general character of commodity trading and its infant stage as compared to other markets like Jath.

Ground-nut	20,000 bags, i. e. about 1500 carts
Cotton	600 "
Chillies	50 carts
Gul	100 "
Tobacco	50 to 60 carts
Turmeric	1200 bags
Food-grains	2000 " (for local consumption)
Butter	1200 tins (for export)
Eggs	2000 caskets of 500 eggs each
Pans	1500 parcels a year.

112. This market, if and when properly developed, is expected to serve an area lying within 30 miles radius from Salgare. Salgare has a railway station at a distance of 3/4th mile from the village and Barsi Light Railway connects Salgare with Broad-guage G. I. P. Ry., and Metre-guage M. S. M. Ry. at Kurduwadi and Miraj respectively.

113. Kavathe being the Taluka centre is also a market for export but its importance is not very great. Commercial crops in north-western groups find their way to Tasgaon. Market for the central and southern villages like Mallewadi is Sangli. Eastern villages have Sangli, Jath, Salgare etc., for their markets.

114. Weekly markets in the Taluka are Kavathe, Salgare, Irali, Ranjani and those in the neighbourhood of the Taluka are Tasgaon, Savlaj, Miraj, Jath, Daphalapur, Dhargaon etc. Important annual fairs are held in Kavathe, Salgare, Khanderajuri, Ghatnandre, Kharsing, and Ranjani. These fairs play the same part in the rural life as the fairs elsewhere do.

Communications

115. Road transport is the most important system of transport. Public works department roads have nearly 41 miles length. Local Board maintains nearly 23 miles and village approach roads cover a total length of two miles. The six sections of the P. W. D. roads in the Taluka are (1) Miraj-Pandharpur Road, (2) Kavathe-Jath Road, (3) Kavathe-Kuchi Road, (4) Kavathe-Landgewadi Road, (5) Kuchi-Ghatnandre Road, and (6) Kuchi-Jayagavan Road. The total annual maintenance grant is Rs. 7500. The Local Board Roads and approach roads are over 13 sections and join some

important villages. Each section is one or two miles in length at the most. Total annual maintenance grant by the Local Board is Rs. 425/-. 1.7 miles at Agalgaon and .75 miles at Salgare are merely kaccha approach roads. Railway communications are available on the Barsi Light Railway which passes through certain parts of this Taluka. Kavathe, Dhulgaon, and Salgare are the stations in the Taluka and they serve some villages round about them. There is a Sub-Post and Telegraph Office at Kavathe and there are Branch Sub-Post Offices in a few important villages like Ranjani and Salgare.

Mangalwedha Taluka

116. This Taluka lies to the extreme north-east of Sangli and is surrounded by different Talukas of Sholapur District of British India. It consists of 32 villages, 27 of which lie in a very compact group, with Mangalwedha at its centre. The remaining 5 are scattered to the north-west and south-east of the main group of 27 villages. The Taluka is surrounded by Pandharpur and Sangola Taluka on its north-west, north, south-west and west. To the north-east and east lies Sholapur Taluka. To the south-east lies Indi Taluka of Bijapur District and parts of Jath State. On its north-west, northern and north-eastern borders run the Man and the Bhima rivers of which the former is a tributary. The Bhima like the River Tungabhadra in the extreme south forms the northernmost boundary beyond which Sangli State has no jurisdiction.

117. **Physical features :** Physical features and soil conditions differ from region to region. The Taluka, therefore, can be conveniently grouped as under : Villages lying along the Man and the Bhima form one group which we have styled as north and north-eastern group ; the central group consists of Mangalwedha and villages roundabout, generally lying on the northern side of the Pandharpur-Bijapur Road. The third group consists of villages lying to the south and south-west of this road which runs through the heart of this Taluka ; and the fourth group, which consists of 3 villages of which two (Gotyal and Loni) are together and Lachan is detached, lie interspersed in the Indi Taluka, between river Bhima and the Pandharpur-Bijapur Road. The north and north-eastern group is served by rivers and has fertile stretches of deep alluvial and black soil. The central group is dry but fertile with deep black soil. The south and south-western group has medium and poor soil with gravel-mal-and mostly yields poor

qualities of rough grazings in addition to some light dry crops. The south-eastern group has medium black soil.

118. Climate and rainfall: The climate is extreme and dry and, in low lying areas, malarious. The rainfall is low and uncertain. Mostly it is distributed in the latter part of the monsoon and Rabbi crops, therefore predominate. The early monsoon yields about 5 inches on an average and the late monsoon gives 9 to 10 inches. The Summer and Winter rains together account for 2 or 3 inches at the most. The average is about 18 inches. The rainfall figures for the Revision Settlement period¹ and for recent years, do not materially differ from each other. This Taluka has thus to depend upon late rains and is, therefore, subject to scarcity at intervals.

119 Population: With regard to total population there has been no substantial increase between 1911 and 1941. The population actually decreased in 1911-1921 decade, the Taluka having experienced both severe draught and influenza in the decade. Thus from 31.6 thousands the population went down to 27.5 thousands in 1921 and again increased to 32. thousands by 1931 and is now stationary for the latest census (1941). Mangalwedha, the only town in this Taluka, has not experienced any appreciable increase in the population. It had 10.1 thousands population in 1911 and has 10.5 thousands in 1941. Distribution according to religion shows that next to Hindus, Mohamedans account for nearly 2500 population, Jains accounting for a very small number. In the occupational distribution the importance of agriculture may be noted. According to 1931 census the density of the population was 149 per square mile.

Natural resources

120. Land: As we have seen, land is hilly or rocky in some areas, black and medium in others. Alluvial soil is found only in small strips along river banks. The distribution of land under several heads is found in the Appendix II. The actual acreage available for cultivation is about 1.12 lakhs of acres of which almost entire portion is dry area, irrigated area being hardly 2%.

¹ This and the subsequent information for the period round about 1910 is culled from the unpublished Report of the Revision Settlement, for Mangalwedha Taluka, 1908. Unlike the earlier Talukas, we are handicapped for our earlier information particularly as the report is incomplete in some respects.

121. **Water resources :** Water resources of the Taluka are the Man river which flows for a few months in the rainy season ; Bhima river which has perennial flow and pools (*Doha*) in many detached places ; the several streams flowing from south-west to north-east and lastly the wells and tanks used for irrigation. Of these only wells and tanks need be considered as resources partially utilised. There is no Patasthal irrigation of any appreciable size. The wells and Budkies nearby the streams and Man river have seasonal supply of water and irrigate nearly 2500 acres of land, according to revision report, 1908, and 4500 acres approximately according to recent figures. The total number of wells and Budkies useful for irrigation was 691, according to revision settlement report. There are 2 permanent (pucca) and 1 kaccha tanks which are useful for irrigation and which irrigate about 95 acres of land. The rest of the resources are yet unexploited. The streams, flowing through black-soil have resulted in considerable soil erosion in the absence of *Tals* in several places ; wherever the *Tals* are constructed the soil and moisture are both conserved. We have, however, no detailed data regarding the extent of this conservation of rainwater.

122. **Forests and minerals :** There are no forests in the Taluka. Shrubs and Babul in the mals which are rough grazings and in the blacksoil, particularly in Kurans and village commons, are of course, found to a certain extent. Beyond this there are no forest growths. The kurans or pastures in Mangalwedha cover about 2200 acres as against 7400 acres for Kuchi Taluka and 795 for Miraj-Prant.¹ The rough grazings in the south and south-west offer grazing for sheep and in this tract sheep rearing industry is carried on in many villages by the Dhangar castes. In certain areas roundabout Mangalwedha earth suitable for plaster of paris occurs in some quantities. Besides this there are no other important minerals in the Taluka.

Economic activity

123. **Agriculture** as in other Talukas is the most important activity and is chiefly in respect of dry farming. Rabbi dry crops predominate. The most important dry crops in order of importance are jowar, bajri, gram, safflower (*Karadi*) and groundnut. The important irrigated crops are *khapli* wheat, chillies, sugarcane and maize.

¹ Annual Administration Report, 1939-40, page 18.

124. Cultivation is mostly in the hands of the people who are partly occupants and partly tenants. The latter cultivate land on share or cash rent systems. The revision settlement report found that 86.7% of the entire survey numbers were cultivated by occupants themselves. But subsequently the tenancy cultivation seems to have increased considerably. Our group-enquiries show that tenancy has spread on an extensive scale and the result of the failure to pay regular rents has been the loss of land of small occupants in favour of the bigger occupants by whom the land is leased on rent for cultivation. The competition between cultivators has affected the rent-rates considerably. Our enquiries show that the cultivated holding in this Taluka is comparatively larger than in other Talukas. This larger size of cultivated holding raises the question regarding the live-stock and equipment. In group enquiries, it was commonly stated that there is a paucity of agricultural livestock. The area though a fodder exporting area, is subject to frequent spells of scarcity and hence the agriculturists have to pay a heavy toll in the form of frequently heavy disposals of livestock. We were told further that the agriculturists in this Taluka being heavily debt-ridden cannot properly undertake the full and efficient operation of cultivation and the scarcity of livestock due to slender resources is said to be one of the important drawbacks in the local agriculture. It was not possible to collect sufficient statistical data to examine this alleged paucity of livestock and its causes. Roughly speaking, it is stated, a pair of bullocks in exclusively dry farms has to work on about 30 to 40 acres of land ; while on farms having both irrigated and dry farming a pair has to work about 3 acres of irrigated land and 20 acres of dry land. It is here particularly, that the paucity of cattle is complained of.

125. Other aspects of agriculture need not detain us any longer. The problems of irrigation, soil and moisture conservation, fodder storage, fuel, marketing difficulties, finance etc., are equally intense and are almost of the same character. Agricultural finance particularly is an acute problem here essentially because of the prevalence of tenancy system in some form or other. Rates at which finance is available are alleged to be particularly high. Being a scarcity tract the credit-worthiness is low. In recent years, however, the Agriculturists' Protection Act, land mortgage bank and of Co-operative Credit Societies have been introduced as relief measures. The land mortgage bank and Co-operative credit are still in their infancy and their effect, if any, has been negligible.

126. The markets for the agricultural commodities, chiefly, are Pandharpur and Mangalwedha. Mangalwedha is not a commodity market in the sense in which Pandharpur is. Three-fourths of the product of the Taluka thus finds its way to Pandharpur.

127. Road is the chief system of transport. The important roads in the Taluka all of which pass through Mangalwedha are Pandharpur-Bijapur, Jath Pandharpur and Mangalwedha-Sangola. Other subsidiary roads are fair-weather tracts and join some villages in the Taluka. They are five in number and start from Mangalwedha. The total mileage in the Taluka is 58, of which 16 miles are Provincial on Pandharpur-Bijapur Road.

128. The only agricultural organisation is the Taluka Shetki Sangh modelled on the lines of those in the earlier Talukas. The Sangh works in the same sphere as the Sanghs in other Talukas. At the end of 6 years of its existence, it reached a membership of 123¹ in 1939-40. It carries on propaganda for improved methods of cultivation. In 1939-40 the work done by the Sangh consisted of distributing improved and graded seed of Jowar and Wheat, inducing about 83 persons to introduce wide-sowing in dry lands, assisting 6 persons in construction of tals by giving them expert advice and distributing insecticides for garden crops etc.² The Sangh organises annual agricultural show at Mangalwedha and distributes prizes and certificates for best crops and best livestock.

129. Important rural industry which we may notice in passing is sheep-rearing. This is chiefly concentrated in the central group and south and south-western group. The following table gives the number of sheep in villages where special enquiry was conducted in this respect :—

1 See Taluka Shetki Sangh, Annual Report, 1939-40 ; p. 8.

2 For details see *ibid* pp. 9-24.

TABLE

Village	No. of families carrying on sheep-rearing	Goats	No. of sheep	Average sheep per family
1 Mangalwedha	16	...	340	21
2 Dongargaon	3	...	120	40
3 Khadaki	5	...	235	47
4 Nandeshwar	26	...	860	32
5 Shirsi	12	...	410	34
6 Gonewadi	5	...	150	30
7 Janoni	3	...	92	30
8 Hajapur	7	...	340	48
9 Jalihal	10	...	505	50
10 Khomnal	3	...	75	25
11 Hivargaon	5	...	170	34
12 Bhalewadi	4	...	250	62
13 Talsingi	9	102	185	20
14 Deogaon	4	...	135	33
15 Dhavalas	4	...	120	30
16 Borale	2	...	80	40
17 Loni	1	...	85	85
18 Gotyal	1	...	60	60
19 Lachan	9	...	674	75
20 Akole	3	...	145	48
21 Mundewadi	2	...	110	55
22 Marawade	7	45	230	34
	141	147	5381	38

130. The following table gives the distribution of 141 persons, who have given information about the sheep they keep, according to number of sheep they rear :—

Persons with sheep	No.
20 or below	44
20—30	33
30—40	26
40—50	9
50—60	14
60—70	6
above 70	9
	141

131. The economic organisation of this industry, the difficulties with regard to drinking water for sheep, veterinary relief, grazing facilities, experiments with breed, marketing, finance etc. are the same as elsewhere. Wherever the dhangar-women spin the yarn, the yarn fetches them 4 annas as wages per seer. Thus if raw wool is sold at the wholesale rate of Re. 1 per 2 lbs. (this is the present rate), yarn is sold at Rs. 1-4-0 per 2 lbs. i. e. 10 hanks (Padagas). This yarn is usually purchased by Sangars who weave rough Kamblies. Except at present, the wool is normally consumed in the Taluka. The present war which has created an increased demand has forced up the prices and the Dhangars are now selling raw wool to middlemen who collect wool from different centres and export the wool to wholesale wool markets.

Urban handicrafts

132. **Wool weaving:** Connected with sheep-rearing and exclusively dependent on it for raw material is the Kambli weaving which of late is in depressed state due to lack of normal quantities of spun wool. The number of wool weaving looms as mentioned in the Revision Settlement Report was 60 of which 32 were in Mangalwedha, 20 in Loni, 4 in Bhalewadi and 2 at Marwade.¹ Our investigations show that there are at present 19 looms in 15 families in Mangalwedha and 2 looms in 2 families in Loni. Of the 19 looms, 5 looms, according to our enquiry, belonging to 5 families are not working since June 1941. The industry, in effect, is now only of local importance.

1 Revision Settlement Report (unpublished)—Note on Appendix G.

133. Similarly the Handloom weaving of coarse count sarees and pasodees with very crude processes is in an extremely depressed condition. Equipment and processes in the preliminary stages, the looms and accessories are all of the crudest type and they affect very adversely the product, the efficiency and the petty incomes of the weavers. Our investigations show that there are in Mangalwedha 7 looms producing pasodees and 36 looms producing coarse lugadees, which are in demand in rural areas. These 36 looms at Mangalwedha are found in 14 families of whom 2 have 4 looms each, 6 have 3 looms each, 4 have 2 looms each and 2 have 1 loom each. In Loni we find 8 looms in 8 families.¹

134. The country ghani, which still persists in this Taluka, has been able to do so because of safflower (Kardi) which is said to be unsuitable for extraction by expeller or rotary ghani. There is still some demand for oil from Kardi. This Taluka like other Talukas of Sholapur District in its neighbourhood, produces considerable safflower (Kardi) which is exported to other areas to a very large extent; part of it is converted into oil and cakes by country ghanies. The cakes are particularly favourite with agriculturists as they contain higher oil percentage and are therefore, considered better and nutritious food for agricultural livestock. The number of ghanies in Mangalwedha according to our enquiries is more than 12 worked in 9 families. The number of ghanies according to revision settlement report Mangalwedha, was 16 in Mangalwedha, 7 in Loni and 10 spread over other villages. The industry at present partly supplies the needs of the Taluka and also of the surrounding areas. It is organised on purely domestic basis. Women and men both work on the ghani. Bullock supplies the necessary motive power and as the work is very heavy, sturdy bulls alone are useful. This means an investment of Rs. 100 to Rs. 150. Once a bull is bought he gives service for 10 to 15 years. The average wage income of the family comes to Re. 1-0-0 per day. Profits of the industry are extra.

135. Manufacture of brass utensils, once carried on by about 20 families is now entirely in a decadent condition. There are at present 5 families who possess the necessary equipment and skill; but due to high prices of raw material and falling off in demand, production is not undertaken by any of these families.

¹ The number of looms at the time of Revision Settlement was as under:— Out of total 53 in the whole Taluka, 45 were located at Mangalwedha, 2 in Loni, 3 in Bhalewadi, 2 at Marawade. Note on Appendix G of the report.

136. There is one power-loom karkhana with 2 or 3 power-looms. These are run in combination with a flour mill. The present production is on a reduced scale due to high yarn prices and scarcity of mercerised yarn. Twist double yarn is not used as hank-sizing is not undertaken by this unit. There are no large scale industries in this Taluka.

Trade and Commerce

137. The trade chiefly consists of export of cereals, oil-seeds, pulses and fodder. The market to which major portion of the product goes for sale is Pandharpur, where middlemen are alleged to take heavy price for the services they perform. The important market in the Taluka is Mangalwedha. Weekly Bazar is held in Mangalwedha. Other weekly markets which are visited by the people of the Taluka are Sangola, Chadchan, Begampur, Javale, Pandharpur, and Indi. The important annual fairs held in the Taluka are at Sidapur, Sidhanker, Mangalwedha, Shirsi, Talsingi and Chalhe.

Communications

138. Over and above the roads, which we have mentioned earlier, the Barsi Light Railway and Hotgi-Vijapur section of the M. S. M. Railway are approachable by this Taluka on its western and eastern side, at Pandharpur and Sangola on B. L. Railway and Indi road and Lachan on M. S. M. Railway.

139. There is a Sub-Post and Telegraph Office at Mangalwedha and branch-post offices in villages like Sidapur, Loni, Nandeshwar, etc.

Terdal Mahal

140. Surrounded on all sides by Talukas of Belgaum District and on the south-east by Jamkhindi State areas, is the smallest Taluka, Terdal Mahal, consisting of a block of 10 villages with Terdal in the centre and of 2 detached Inam villages viz. Byakud and Teerth, the latter lying to the direct north of Terdal, on the banks of Krishna. Terdal Mahal thus consists of 12 villages covering a total area of about 33 thousand and odd acres. The Taluka lies to the south-east of Sangli, 17 miles from Kudchi, a Station on Poona-Haribar section of the M. S. M. Railway. Athani and Gokak Talukas surround this Mahal on three sides. Jamkhindi State touches this

Taluka on the south-east. Krishna river flows on the northern and north-eastern sides and passes by Tamdaddi, Halingali and Madanmatti, all of which are Inam villages.

141. **Physical features:** Except for the hills near Terdal and Rabkavi the tract is plain with an easterly drainage and consists of stretches of black soil. The riverside areas have alluvial soil. In the hilly tract Karal and Mal soil are interspersed with narrow belts of medium soil called Masar. As one goes from the low hills towards the river and towards north and south, one comes across different types of soil from the poorest Mal to the deep black soil, one following the other in succession.

142. **Climate and rainfall:** Climate is hot and dry. Rainfall is low and unevenly distributed. Though the Kharif and Rabi monsoons yield some falls, the general characteristic of the rainfall is eccentric. The Rabi rains, however, are slightly dependable in some areas.¹ Average rainfall is 16 to 18 inches. Distribution of rainfall over the entire season in 1939-40 was as under :—

May	June	July	August	September	October
.7	5.26	5	2.75	7.85	2.65

143. Villages to the south of Terdal, are Kharif villages. The soil is poor and unsuitable for Rabi cultivation. Failure of early rains, at frequent intervals, creates conditions of draught in the villages round about Terdal particularly those villages lying to the south.² The riverside villages on the eastern side of the Taluka are comparatively free from crop failures as they are most of them innundated areas along the banks of Krishna.

144. **Population:** Like Mangalwedha, this Taluka has an almost steady population and no appreciable movements in population are indicated by figures in Appendix II. The urban and rural population is fairly evenly distributed except for 1931 census. This urban population is concentrated in 2 small towns, Rabkavi and Terdal and the rural population almost equal in strength is distributed among 10 small villages. Jains are next in importance to Hindus and Mohamedans are slightly less than Jains in number. In the occupational distribution the importance of industry may be clearly seen. Industry accounts for an appreciable

1 Revision Settlement Report, 1918, p. 26.

2 Ibid, p. 28.

percentage of the total population and a large part of this is engaged in textile handicrafts. According to 1931 census the density of the population was 247 per sq. mile.

Natural resources

145. **Land:** We have seen above that the soil features are mostly as in Miraj-Prant Taluka and create almost the same problems as regards the exploitation of land resources.

146. **Water:** Well irrigation, the only water resource is not very important owing to uncertainty of rainfall. In the pre-revision period, there seems to have been some irrigation activity in a few villages to the south of Terdal. But well irrigation seems to have lost its importance owing to insufficient and uncertain rainfall over a succession of bad years. We have no data to compare the position as it was at the time of Revision Settlement and as it is at present. But the report definitely indicates the unsatisfactory position with regard to well irrigation.¹

147. As in other Talukas, it was suggested in our enquiries, that there are certain major streams which if suitably bunded could inundate a large acreage of black soil capable of yielding better Rabi crops. Ajnal stream for example near Terdal, if suitably bunded is expected to confer benefits over an area of about 500 acres. Similarly Jellegeri tank, it is locally believed, would be useful for irrigation if its capacity is increased.

148. **Forests and minerals:** There are no forests in this Taluka. There are rough grazings in the Mal tracts. Dairy farming and sheep rearing, the latter on a small scale, are dependent on these grazings. No important minerals are known to exist in this Taluka. Only stone-quarrying is carried on in the hilly tracts.

Economic activity

149. **Agriculture:** Conditions with regard to agriculture, i. e. holdings, character of cultivation, livestock, implements, methods of cultivation, crops, fodder, fuel, etc. are almost the same as in Miraj-Prant and we need not repeat them.

¹ See Revision Settlement Report, p. 8.

150. **Markets:** Terdal is the important weekly market for agricultural products. Next comes Rabkavi. Other markets which are visited by agriculturists and which lie outside this Taluka are Shirguppi, Kagwad, Shedbal, Chinchli, etc. Ainapur and Athani are also frequented by agriculturists from some eastern villages.¹

151. Agricultural fair at Terdal is held under the auspices of the State since recent times, in conjunction with the annual Prabhu Swami fair at Terdal. Crops and livestock and improved methods of farming etc. are exhibited for the benefit of the agriculturists.

The important fairs in the Taluka are Rabkavi and Terdal fairs, held in the month of August (Shravan). The general character of trade here is predominantly in rural consumption articles.

Agricultural credit is almost entirely in the hands of sowcars and co-operative movement has made only a small advance during the last 20 years or so.

152. Taluka Shetki Sangh was organised in March 1940. The Sangh has on its register 140 members and has a budget of about Rs. 700/-. It receives a grant of Rs. 200/- from the Local Board and rural uplift fund.²

153. **Dairy farming** is carried on on a small scale in villages roundabout Terdal and our enquiries in this respect show that Terdal is a considerable export centre for ghee. The evil of adulteration is said to exist to a considerable extent and Terdal seems to have lost its reputation for pure products. The organisation of this industry is the same as in other Talukas and we need not describe the same here.

Industries

154. **Handloom weaving:** The most important handicraft in the Taluka is Handloom Weaving which is largely concentrated in Rabkavi and Terdal. Rabkavi and Terdal together account for more than 700 looms; but since the sudden rise in prices of yarn during 1941 and the comparative lag in the prices of handloom products the industry has considerably dwindled in both the

1 For details see Revision Settlement Report, pp. 11-12.

2 Report (unpublished) submitted by the Chairman of the Sangh for the period March 1940—December 1941.

centres. Both these centres for a long time have enjoyed a good deal of reputation in the Southern Maratha Country for fast coloured fabrics. The industry has been established long since. In 1880-81 the sarees and dhotees of Terdal and Rabkavi had already established themselves in the surrounding consuming areas.¹ The number of looms showed a slight fall by about 1913 when the number fell from 650 (in Terdal and Rabkavi together) to 550.² In the subsequent period the number seems to have gone up again and before the yarn crisis in 1941 the number stood at over 700 in both these centres.³

155. Organisation: The industry since its localisation in these two centres in the last century, has been predominantly in the hands of the capitalist dealers. Independent artisans working exclusively on their own initiative have been restricted to a very small field of the productive activity. The almost entire industry is organised on out-work system, under which the capitalist dealers, concentrated in Rabkavi, import yarn from outside, get it locally dyed for which Rabkavi is well-known and then distribute the yarn to the weavers on out-work system. The type, the count, the measurements, colour and designs are all determined by the capitalist dealers and the weaver retains to himself the freedom of working hours and control over his loom and equipment. Even the major preliminary processes, namely, warping, twisting, etc., are in the hands of the capitalist who gets ready warps from some warping mills which are about 12 to 15 in number. The ready warps are sized and woven by the weavers who are permanently bound to the capitalist by the system of advances which is broadly the result of conditions of poverty among the weavers and lack of proper credit facilities. The special feature of the system of wages in Rabkavi and Terdal, and since recent times in other centres like Sulebhavi in Shahapur Taluka, has been what is locally known as "Jodni". The system in short is that the capitalist gives yarn sufficient for 9 sarees and gives a cash wage of Rs. 4 to Rs. 6 for a Choukadi (8 Sarees). The weaver has to give back 8 sarees as per specifications and is allowed to keep for himself the 9th saree which he is implicitly expected to sell to the capitalist at a price which is 8 annas to Re. 1 less than the ruling market price of that particular variety. Thus the weaver gets his

1 See Gazetteer, Bombay Presidency—Kolhapur Vol. XXIV, p. 374.

2 See Revision Settlement Report, p. 15.

3 Based on oral information. We have, over and above group enquiry, collected written information regarding this industry from 38 weavers, dyers, dealers, etc. who have submitted answers to our questionnaire Part III.

wages partly in kind and partly in cash. The disposal of the saree retained by the weaver, it is complained, is not according to the informal understanding and the weaver is said to sell his saree under this system, to petty saree dealers at abnormally low prices thus disturbing the market prices. This complaint against the outworkers was voiced by the capitalist dealers in the interviews with them. It is said that the weaver is usually badly in need of cash and is therefore loath to hand back the saree to the capitalist who only credits the amount to the weaver's account which frequently shows a debit balance on account of frequent advances. This forces the weaver to prefer a sale of his wage-sarees, if we may so style these sarees, to a petty dealer who pays him in cash. Apart from this complaint there is no drawback in this system and its advantage is that it partially adjusts the total wages which the outworker gets, to the changes in prices. The wage conditions, in effect, are comparatively better than in other centres where the outwork system on cash wage basis prevails as in some parts of Bombay Deccan.

156. Because of the present rise in prices the capitalist is prepared to introduce a change in the present system as it pays him to do so. In doing so, he wants to secure a complete control over the wage conditions and thus over a part of the cost, which he can reduce by forcing down the wages on the ground of lack of demand for the product. The weaver, however, prefers to cling to this system which gives him at least a partial relief in the midst of complete capitalist control over the industry.¹

1 It is very difficult to explain the origin of this system of "Jodni". The Revision Settlement Report mentions that "yarn and silk enough for 8 sarees was given to the outworker at a wage varying from Rs. 3 to Rs. 8 per 8 sarees. The weaver was alleged to be "dishonest in his dealings" and was said to manufacture 9 sarees out of this material, hand back only 8 sarees and appropriate one saree to himself" (pp. 15-16 of the Report). If this is true then what was a malpractice, some 25 years back, has now become an established practice, with a recognition in the business world. We are not, however, inclined to accept the interpretation offered by the Survey Report. We have no grounds to say that a disadvantageous mal-practice has received a recognition, particularly at the hands of capitalists who alone can establish or abolish trade practices to safeguard their own interests. Moreover our enquiries in Sulebhavi show that the practice is fully approved of by the capitalist who have only very recently introduced this system in Sulebhavi much to the discomfiture of the weavers. We are inclined to disbelieve the origin of this system as described by the Settlement Report. It appears the practice is the result of low level of prices in the pre-War period, i. e. before 1914-15 and must have been introduced with approval of both the weavers and the capitalists.



Hand-loom — old type.



Improved hand-loom.

157. **Technique** : The industry has its processes largely specialised as in Malegaon and the technique is considerably advanced particularly in respect of the looms and the equipment. The specialisation of dyeing had already taken place in the late 19th century ; but the warping mill and distribution of ready warps is a significant technical development in recent years and has benefitted the industry as a whole in its competition with other advanced centres in the field of fancy fabrics (Patals) which do not require sized warps because of the use of 84/2 mercerised yarn in the warp.

158. **Production** : Rabkavi being a large distribution centre, a considerable amount of yarn is imported and locally consumed and exported to centres of production round about, e.g. Terdal, Banhatti, Jamkhindi, etc. The yarn trade is completely in the hands of the capitalist dealers who also act as enterprisers in Rabkavi and Terdal handloom weaving. Rabkavi and Terdal between themselves are estimated to consume yarn worth about Rs. 5 to Rs. 6 lakhs per year excluding the yarn consumed in 2 power-loom factories in Rabkavi. The present position, however, in respect of manufacture is extremely unsatisfactory owing to enormous rise in prices due to yarn famine arising out of the present war, with the result that a considerable number of looms is idle and production has gone down to the rock-bottom. Thus the weaver who used to produce 9 sarees in about a fortnight used to earn about Rs. 9 to Rs. 12 per month. Now he produces 9 sarees in about 45 days and gets Rs. 10 or thereabout during that period. He simply does not get the work from the capitalist. Unemployment, therefore, prevails to a considerable extent.¹ Some "relief in trade" by Co-operative methods is attempted in Terdal where the evil of unemployment is considerable.

159. Apart from the immediate problem of relief, problems of a long period importance that prominently present themselves in the field of production are (1) technical training in the use of improved equipment, training in designs and patterns and development of speed-technique particularly in those products which have

¹ Even the independent artisans have been adversely affected by the recent yarn crisis. Majority of independent artisans have partially closed their looms. Thus a man who was running, say 5 looms in 1939-40 is now running 2 looms at the most.

to face direct competition from Power-looms and mills' viz. middle-class products (Patals etc.) and (2) better organisation of dyeing industry with standards of fast dyes for high count products.

160. Normally rural sarees account for 25% of the total production; 50 to 60% of the production is of the traditional middleclass saree such as Ilkal, Maheshwari, Khambayati, etc., and the remaining are fancy Patals and other sorts. Rabkavi and Terdal together export sarees worth about 9 to 10 lakhs of rupees per year to Southern Maratha Country and important consuming centres in the Bombay Deccan.

161. The manufacture of **Brass and Copperware** is now of local importance. There are 6 or 7 contract workshops in Terdal, which are owned by master-craftsmen who take work on wage-contract from dealers in brass and copperware in Terdal, convert the raw material into finished ware and hand back the product to the dealers. The production is worth a lakh of rupees per year and is under the control of 3 or 4 dealers in Terdal. Formerly the industry in brass and copperware was carried on on a considerable scale and Hangandi and Terdal product was well-known in rural areas. But the competition of large-scale machine-made products has adversely affected the industry during the last 10 or 15 years. Due to the present War the position of the industry has further worsened. The total volume of work is reduced and the wage rates have so much fallen that the wage incomes of artisans and their coolie assistants are hardly 8 annas a day.

162. There are no large-scale industries in this Taluka. Industry using power, is Power-loom industry. There are 2 Power-loom factories producing Patals. In one of them there are about 36 looms and in the other 12 looms. Both these factories use oil engines as the main motive power.² Till very recently they

1 In this case Rabkavi can take a leaf from the history of Ichalkaranji Weaving technique, where in spite of a very wide spread development of Power-loom industry, Handloom industry persists particularly because of the rapid development of the loom and equipment which has readily adapted itself to speed and working specifications dictated by the nature of the product. The Frame-loom with dobbies is adopted in several weaving sheds. Not only that; even some Power-loom factories have Frame-looms worked by hand on which only special types of sarees are woven.

2 This and further details are based on oral information. Questionnaires distributed to these karkhandars were not adequately filled in. Hence we have to rely on the personal enquiries in both these factories which were visited by our Investigator.

exclusively depended on mercerised yarn and artificial silk for warp and borders. But with the cessation of imports of mercerised yarn the industry is hard hit. Since the last few months, however, mercerised yarn is gradually being replaced by twist-yarn, which a few twisting and reeling mills in Satara, Shahapur etc., are now supplying to Karkhandars. Instead of 84/2 mercerised, Madura 60^s, 80^s, 100^s are reeled and doubled and supplied in suitable hanks. The difficulty with this yarn is that of sizing. None of the power-loom factories except probably a few at Ichalkaranji have sizing machinery. Beam warps cannot be sized by ordinary methods. Hence hank-sizing is resorted to. It has its own drawbacks. Uniform sizing is difficult if not altogether impossible. If proper sizing materials are not used the size is likely to lose its adhesivity very quickly. This difficulty of sizing has proved a deterrent factor in the wide-spread adoption of hank-sizing. In Rabkavi this was prominently mentioned in our enquiries. Both these power-loom factories produce 40^s and 60^s with 84/2 and now 80/2, 100/2 as warp. The pieces are fancy bordered Patals in light and attractive colours and command a market all over the Bombay, Deccan, C. P. and Berar, Southern Maratha Country, etc.

Trade and Commerce

163. The important markets in the Taluka are Terdal and Rabkavi, which carry on a considerable export and import trade. Imports chiefly consist of yarn, dyes, sizing materials, loom-stores and accessories, cloth and other articles of consumption; while the chief items in the exports are cloth (handloom and powerloom fabrics), coarse grains and other agricultural commodities, butter and ghee.¹ The trade is organised as in other markets on individual lines and has the same practices of trading. The finance is by individuals who have their own capital and who also seek cash credits in the State Bank branch at Terdal. The Sangli State Bank branch is the chief banking organisation and provides banking and credit facilities to the local traders.

1 No statistical data regarding the extent of volume and value of export and import trade are available, nor was any special investigation carried on in this connection. There was only a group-discussion with some traders in Terdal and it was particularly restricted to the problem of ghee adulteration.

Communications

164. The Taluka is situated away from the railway line and has a road communication with the nearest railway station. Kudchi-Jamkhindi road passes through Terdal, Hangandi, Rabkavi, etc. Other villages have approaches to Terdal by fair-weather-tracks. Byakud and Teerth are away from the road. There are no other important roads in the Taluka. There is a Post and Telegraph office at Rabkavi and Terdal. The latter, though a less busy town, is the headquarters of the Taluka.

Shahapur Taluka

165. Shahapur Taluka consists of 56 villages and hamlets (Wadies) with Shahapur town, as its headquarters, and lies in Karnatak, surrounded by Talukas of Belgaum District and Kolhapur and Kurundwad State areas. It is to the south of Sangli and is approachable by M. S. M. Railway with Belgaum as the main station. Almost all the villages of this Taluka lie within 10 to 15 miles from Belgaum. Shahapur is mixed up with Belgaum town and is at a distance of one mile from the Belgaum railway station. The distribution of 56 villages including Dodwad which is a detached Khasgi Inam village at a distance of 40 miles to the south-east of Shahapur, is that out of the total, 6 are uninhabited and the remaining are grouped in 4 distinct blocks viz. north-western block of 28 villages; north-eastern block of 16 villages; 4 scattered villages round about Shahapur and Dodwad the only detached village. The last differs from the rest in respect of soil, climate, crops and general economic life.

166. **Physical features:** The north-western block has on its extreme north Ghataprabha river which flows through hilly tract. The entire northern and eastern parts of this block are thickly studded with hills and dense forests. Majority of the villages in this block are situated in the vicinity of the forests and have uneven stretches of land which are suitable for rice cultivation. The north-eastern block is comparatively plain and contains black soil. The western portions of this block are in the vicinity of the forests and partake of the same nature of soil as the eastern portions of north-western block do. The scattered villages roundabout Shahapur have black soil and copious rainfall. Dodwad, is a plain and has deep black soil suitable for dry farming.

167. **Climate and rainfall:** The climate in all the first three blocks, except the eastern portions of north-eastern block is cool

and temperate. In the hot season the temperature does not exceed 98°. Dodwad, however, has dry and arid climate. The summer there is very hot and temperature goes beyond 110°. The average rainfall in the Taluka is 40 inches and major portion of it (about 23 to 24 inches) precipitates between June and 15th of August, 8 to 9 inches between 15th of August and third week of October and the remaining is scattered over the Summer and Winter.¹ The average rainfall during the last 5 years comes to 43.22 while the fall in 1939-40 (April-March) was 49.60 inches. Of this 44.95 precipitated between June and August.² Thus the area is predominantly a Kharif area. In Dodwad, however, the average rainfall is 22 inches.³ and the major portion of it falls between August and September.

168. Population : Shahapur Taluka has more total population than rural Miraj-Prant (i. e. excluding Sangli town) has. All through the period there has been a continuous increase. It is, thus, second in point of population to Miraj-Prant as a whole. Its population has increased at a considerable rate during the last two decades. The population of Shahapur, the chief town in the Taluka, has increased from 9.7 thousand in 1911 to 11.7 in 1941. Mohamedans come next to Hindus in population. The industrial importance of Shahapur and some small villages like Sulebhavi, Sambre, etc. is indicated by the appreciable number of people shown under industry in the occupational tables. Trade also gives employment to a substantial proportion of the population. According to 1931 Census the density of population was 336 per sq. mile.

Natural resources

169. Land : Out of a total acreage of about 87 thousand acres, 51.7 thousand acres are under cultivation, 35.6 thousand acres are not available for cultivation. Of this 32.7 thousand acres are under forest and the rest is uncultivable waste covered by rough grazings, streams, etc. In this Taluka two kinds of soil prevail viz. black soil suitable for wet and dry crops and Tari soil suitable for rice and its subsidiary crops. The latter is a red soil formed out of disintegration of rocks in the hilly tract.

170. Water: No large rivers flow through this Taluka. Ghataprabha which passes by the north-western tip of the north-western

1 See Revision Settlement Report, 1908, Appendix A.

2 See Annual Administration Report, 1939-40, Appendix XVIII, page 163.

3 Based on Shahapur Taluka Maqalatdar's Note on Shahapur Taluka.

block of villages belonging to this Taluka is not a considerable water resource in that particular area. But the river Markandeya is used for irrigation purposes in such villages as Kadoli, Alatge, Kakti, etc. The other water resources are tanks and wells which are useful for irrigation and for men and cattle. These, depend on rains and as the rains in this Taluka are comparatively certain, the tank and well irrigation should be much more stable and dependable and one should expect a good deal of Patasthal and Motasthal acreage under irrigated crops; but it appears only 4 per cent. and odd of the total cultivated area has been under irrigation. The rest is dry. This was the position in 1908. Subsequently the acreage seems to have increased to a certain extent. The comparative position is revealed by the following table which gives irrigated acreage:-

	1908 Acres.	1939-40 Acres.
Sugarcane	199	1216
Other garden crops	89	100
Rice (irrigated)	7365	9100

171. The revision settlement report found that maximum use of water resources was not being made. It is probably because of the neglect of tank irrigation that many tanks have become shallow during the last 25 years or so and with the rise in irrigated acreage particularly under sugarcane and rice in recent years, there has arisen a common demand for desilting of the tanks in order to increase the storage capacity of many of them. The revision settlement period showed the following position with regard to wells and tanks useful for irrigation and for other purposes:-

	For Irrigation.		For other purposes.	
	Pucca	Kaccha	Pucca	Kaccha
Wells and Budkies	91	26	1183	422
Tanks ¹	3	5	...	43

1 8 Pucca and 5 Kaccha tanks not useful for irrigation were in disuse.

172. The present position with regard to tanks is that there are 37 tanks (Talavs) of which 11 are useful for irrigation in rice fields. But even these 11 tanks need reconstruction before they can be put to fullest use in rice and sugarcane farms. The rest of the tanks are at present mostly useful as cattle ponds and rice cultivation under it is very little if any.¹ The irrigation activity, in short, in spite of comparatively better rainfall is, our enquiries show, restricted to a few areas only.

173. **Forests :** This Taluka has forests which cover, as we have seen, more than 32 thousand acres all concentrated in the hilly tract that lies to the north and east of north-western block. Kakti for purposes of the Forest department is the headquarters. These forests are largely a grazing and fuel resource. The timber and other commercial products from the forests are scanty. The only important growths are Tembhurni (useful for Bidi making) and Chandan. Match-wood useful for match boxes is also found to a small extent. The Shahapur forests, in effect, are at present fuel and fodder resources. Nearly 24000 Khandies of fuel-wood, 1000 teak poles and 500 ordinary wooden poles are sold per year by the Forest department and 21300 acres roughly are open for grazing and this area is just sufficient for the livestock in the Taluka itself.²

174. **Minerals :** Apart from stone, certain parts of north-western hills in north-eastern block, namely those nearabout Marihal, Sulebhavi, etc. have, it is said, raw materials useful for glass industry, particularly quartz and felspar. It was locally reported that both these materials were tried by a certain glass works, but were not found to give satisfactory results.³

1 The note on these tanks, submitted to the Committee, by the State Engineer, shows that the estimated acreage under all these tanks comes to 1490 acre. But as the majority of tanks are very shallow and need repairs and dredging very badly, they do not seem at present to guarantee regular supply even for this small acreage.

2 Based on the note submitted by the Forest Officer on "Forests in the Sangli State".

3 Gazetteer for Sangli State, (Vol. XXIV, pp. 32) does not mention any minerals in this Taluka, except good clay for brick and tile-making. Marihal Bangle-making also is not mentioned in the "Crafts of Sangli State" in the Gazetteer. Probably it was insignificant then as now.

Economic activity

175. **Agriculture:** Agriculture is the most important occupation. Next in importance is the exploitation of forests, particularly in villages in the forest zones. Agriculture as in other parts of the state has the same organisation and has almost the same problems to meet. We might, however, note that it is only in this Taluka that rice cultivation is the most important agricultural pursuit; next in importance are the dry crops like jwar, cotton and summer crops. Sugarcane is an important irrigated crop.

176. The revision settlement report found that nearly 52.6 per cent. of the occupied land was tilled by occupants themselves. 16.8 per cent. was cultivated by occupants in partnership with others while 26.5 per cent. was cultivated by tenants on cash and kind rent basis. We have no statistical data for the position as it is at present. Our group enquiries, however, show that pure occupant cultivation has yielded some place to cultivation by occupants in partnership with others. Further, the pure landlord who does not himself undertake any risks of cultivation seems to have appeared on the scene. The revision settlement report found considerable extent of occupied fallow lands. Nearly 33 per cent. of the occupied land was fallow in 1908. The position to day, is that as against nearly 14000 acres of occupied fallow in 1908 the occupied fallow in 1939-40 amounts to 2720 acres roughly.¹

177. We need not go into details of agricultural organisation and the present difficulties the farm business has to face. In respect of water facilities, improved technique, finance, marketing etc. they are almost the same as we have described in earlier Talukas. As almost all the villages are situated within 10 to 15 miles from Shahapur and Belguam, Belgaum is the only important market for agricultural produce. Dodwad has Bail hongal as its marketing centre. Shahapur² has lost its importance, as a market long ago. Weekly markets visited by agriculturists are Shahapur, Sambre,

1 This must have naturally affected the fodder resources of the Taluka and hence, probably, the widespread demand on the part of the cultivators for increased grazing facilities by the Forest department of the State, which was pressed in the group enquiries in this Taluka.

2 By about 1908 Shahapur had weekly sales to the extent of Rs. 28500/-. But the major portion of transactions was in cloth (handloom). Here the agriculturists used to purchase their cloth. But in subsequent years this trade began to decline particularly after Shahapur began to produce middle-class sarees in 1910-1911. By 1925, Kunbau (rural) saree ceased to be produced, as is evident from the fall in number of looms in Shahapur and surrounding villages.

Kadoli, Balekundri and Dodwad. Transport to the main market is by two important roads which pass through both the north-western and north-eastern blocks and converge in Belgaum. Taluka Shetki Sangh has been in a dormant condition and has hitherto done no important work in connection with the agricultural improvements.

178. Next to agriculture, forest gives employment to some people in the village, who carry on felling and carting of fuel and other minor products of the Shahapur forests. When the silk weaving industry of Shahapur and other centres like Yeola, Poona, etc., was thriving, silk-reeling industry was concentrated in the hands of the silk-dealers, who used to give employment to many villagers roundabout Shahapur. But with the decline of silk-weaving industry in Shahapur and other centres and the growth of silk-reeling and twisting factories on centralised and power basis in Shahapur, the outwork in unwinding and reeling processes carried on by Rahatkaries in their own houses was considerably reduced. This adversely affected the subsidiary incomes of agriculturists in many villages in the north-western block.¹

Industries

179. **Textile handicrafts** : The important handicraft concentrated to a certain extent in Shahapur, Sulebhavi, Sambre and Marihal is **cotton hand-loom weaving**. In Shahapur silk weaving is also carried on. In all these places the industry is on the decline. Shahapur cotton weaving is, since the last 10 or 15 years, restricted to Garbharshmi and other high-count Sarees and Khans (Bodice cloth). In Shahapur the production of rural Sarees, ceased to be of any importance by 1925.² In earlier periods this was the most important type of cotton fabrics woven in Shahapur. Shahapur since 1910 gradually came to be widely known for its high-count production and had a dominating position so long as its reputation for fast dyes

1 Based on oral information.

2 Based on oral information.

3 During the period of growth of middle-class saree production, both technique and equipment underwent rapid changes. Thus gold-thread came to be used since 1930 and fly-shuttle which was first used for Panchas in 1925 came to be used for production of Kunbau types and since 1930 it came to be widely used for all types of middle class (Pandharveshi) sarees. Trade names of rural sarees are "Salwati, Putli, Khaddi, Gulali, Kondi-chakki, Rasta, Anjuri, Chandrakala, etc., etc., Those of middle class sarees are Ilakal, Kali-Chandrakala, Kali Choukat, Reshmi Khadi, Reshmi Radhawal, Rasta, Garbhasuti, Tok-kanashi-Padar etc., etc.

was stable.³ In recent years this industry has been on the decline¹ and is affected by changes in fashions and tastes of middle-classes, and their marked preference for cheap and attractive powerloom products.

180. The economic organization is largely one that is common in centres where independent artisans prevail. But with the decline in the industry the independent artisan has gradually lost his ground and the system of out work on wage or price basis has been adopted by some middlemen who supply yarn and take back the finished product.

181. Handloom industry in Sulebhavi and other rural centres is similarly a decadent industry. In Sulebhavi, which has all along been a centre of rural saree production, the industry till recently was in the hands of the independent artisans; but with the intense depression in the industry which is said to have occurred between 1930 and 1937, the number of looms sank and the local middlemen took over the entire control of the industry in 1938 and by introducing "Jodni System," as in Rabkavi, gave an artificial stimulus to the industry by introducing the production of coarse count (20^s) Kunbau types produced at Rabkavi and Terdal. With Rabkavi types came the Rabkavi economic organisation as a result of which the number of looms increased considerably.² But after 1941 June the yarn crisis again affected the industry and there was a steep fall in the number of working looms. Thus out of 34 weavers for whom we have information with us, 29 have been working for capitalist financiers and only 5 are independent artisans.³ Out of 29 again, 6 to 7 have

1 It is roughly estimated, locally, that the fall in number of looms in Shahapur proceeded as under :—

1918	...	1500 looms			
1930	...	700 "	1938-39	...	150 to 200 looms
1935	...	300 "	1941	June	75 to 100 "
			1941	November	50 or thereabout.

(Based on oral information).

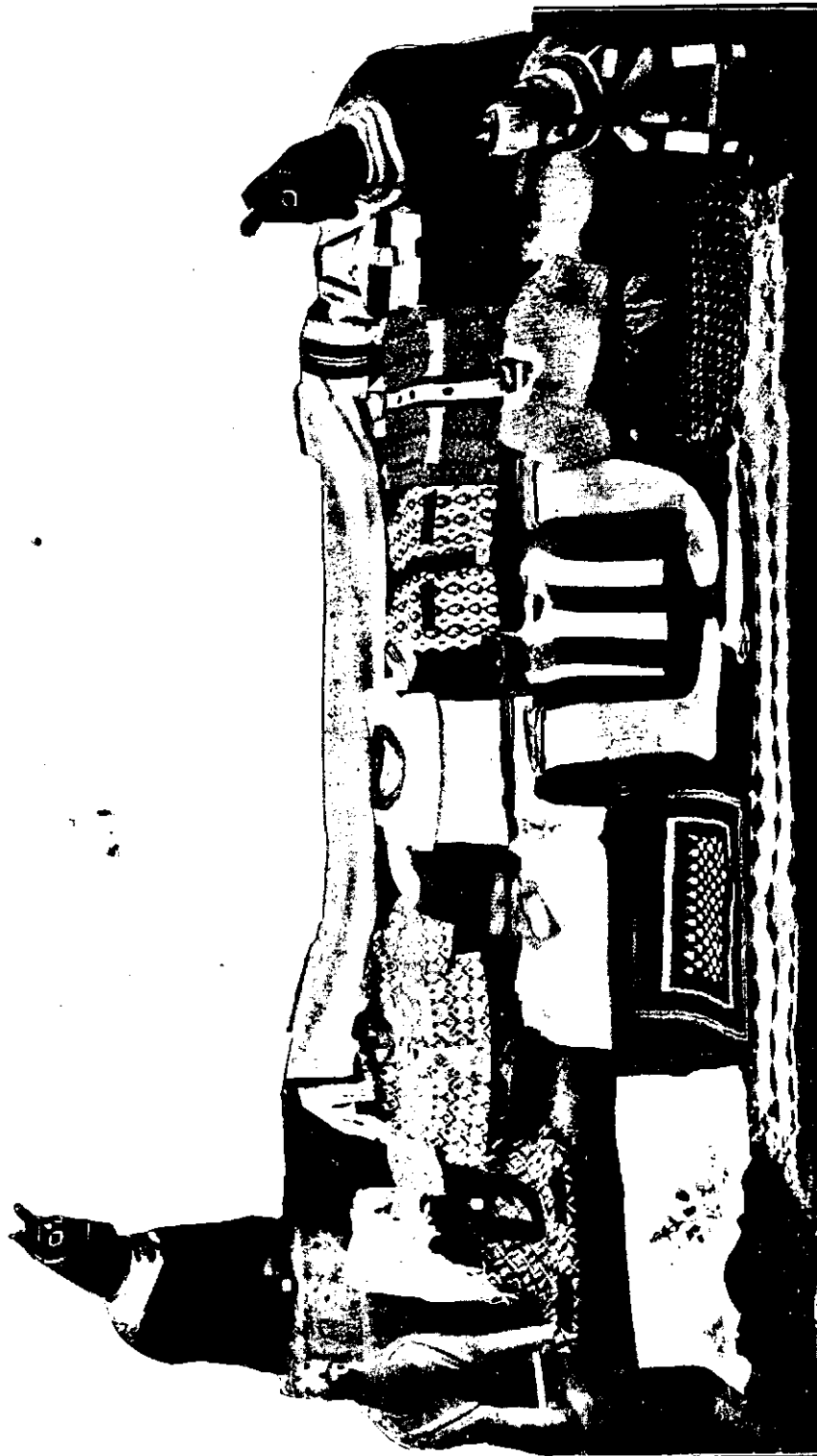
2 It was roughly estimated in Sulebhavi in the group enquiry that number of looms stood at different figures as under :—

1918	—	500 looms.	1938	—	150 looms.
1930	—	400 "	1941	—	400 "
1935	—	300 "	Nov. 1941	—	150 "

3 Enquiries in Shahapur also revealed that out of 34 weavers who have given information and who weave high-count cotton sarees more than 20 who are independent artisans have closed their work since June 1941.



Shabapur Silk Sarees.



lost employment entirely during the last 6 months or so, and the remaining 23 have reduced their number of looms.

182. We may also note the existence of cotton hand-spinning and weaving in Dodwad on a small scale, which has been carried on by local agriculturists (women in the family) and weavers for a very long time. In recent years this centre has been worked as a Khaddar production centre by the Uppenbettigiri branch of A. I. S. A. A small number of spinning wheels (about 200) have been traditionally worked by women in the families of agriculturists and they have been supplying yarn to a few weavers from the period before the mill yarn came into vogue. This centre in the present yarn crisis has assumed a special significance and both the spinners and weavers have, they say, remained comparatively unaffected by the fluctuations in the yarn market.

183. **Shahapur Silk Weaving** which had a widespread reputation for the last 25 years and more has also declined, in spite of the fact that design and technique have on the whole, kept pace with changes in the nature of demand. This, it is said, was particularly due to the introduction by some of cheap colours in dyeing silks. The reputation of Shahapur for fast dyes was lost and that is alleged to have considerably affected the market for Shahapur product. Indian silk was used in the beginning. Later Chinese silk came to be used as it was preferred for fixation of colours and brightness. But once more after the enormous rise in prices of Chinese silk in 1940-41, Indian silk is being used. The decline in the industry is reflected in the fall in the output of silk reeling factories in Shahapur. Both these factories have recently taken up twisting and reeling of single yarn. The industry has been organised on the outwork system and is dominated by the capitalist dealers. Many of the dealers who were interviewed in Shahapur felt that Shahapur silk-weaving industry could regain its position provided it strictly lays down standards of quality, weights and measures and fastness of dyes and adheres to the same.

184. Another notable industry in Shahapur is **Hosiery** which is localised there during the last 20 years or so. There are 4 knitting works all of which are run with manual labour. No power is used. They produce low-count hosiery and sell in the local and surrounding market. The machinery that is used is manipulated by labour locally trained. All these small units which employ less than 10 men have had to face severe internal and external competition. The

It also affects the efficiency of the population, particularly in the first and the third blocks of villages. Where malaria is rampant, agriculture is reported to be neglected. The recent census shows that in these two blocks the increase in population is only 5 per cent and odd and in the second block of villages the increase has been about 20 per cent.¹

193. The average rainfall is 18 to 20 inches, as against 23 inches in 1908 and thereabout. The average for the quinquennium ending with 1938-39 was 14.74 inches in the first block, 22.38 inches in the second block and 19.41 inches in the third block.² Average for the whole Taluka for the quinquennium ending 1939-40 was 22.20 inches, while the fall for 1939-40 was 16.80 inches.³ The distribution of the rainfall in the pre-settlement period was as follows. The summer rains gave 3 to 4 inches. Kharif monsoon about 7 inches; Rabbi monsoon about 9 inches and winter rains accounted for nearly 3 to 4 inches⁴. The distribution in a recent year (1939-40) is as under⁵ :—

Summer	1.60 inches
Kharif monsoon	7.80 ..
Rabbi monsoon	12. ..
Winter	.95 ..

194. In the western block Rabbi monsoons are more important and the crops in this Taluka considerably depend on them. In the central and the eastern-block Kharif rains are more important and the crops in this Taluka are more Kharif than Rabbi.

195. **Population:** Shirhatti, the third Taluka in point of population, after a fall from 46.2 thousands in 1911 to 40.6 thousands in 1921 restored its strength in 1931 and the increase has continued upto 1941 exceeding the 1911 figure by about 2.6 thousands. Thus

¹ Based on Memorandum submitted by Mamalatdar, Shirhatti Taluka. Our investigator who held enquiry in 3 or 4 centres in this taluka, was impressed with the prevalence of malaria and in one village out of 25 persons, who attended the group enquiry, he found that as many as 10 persons actually had temperature.

² Annual Report, Shirhatti Taluka Shetki Sangh, 1938-39, Appendix VII.

³ Sangli State Annual Administration Report, Appendix XVIII, p. 163.

⁴ This is based on the average for the period between 1895 and 1905—Appendix A—Revision Settlement Report 1908.

⁵ Sangli State Annual Administration, Report 1939-40, Appendix XVIII, p. 161.

during 30 years the increase has been only 2.6 thousands. There is no evidence of any immigration into this Taluka. If anything due to unfavourable conditions of climate and health there must have been some emigration. Sbirhatti, the only town in the Taluka has shown a slight increase in population. If this is natural increase, trend towards movement from rural to urban areas can be said to be absent in this Taluka. As in Shahapur, Mohamedans are next to Hindus in point of population and are slightly more than 7 per cent, of the total Hindu population. According to 1931 Census, density of the population was 143 per sq. mile.

Natural resources

196. **Land:** We have already seen that, broadly speaking, there are three types of soil in this Taluka, viz. the deep black, medium and Masar or rocky mal. The exploitation of the land and the character of cultivation is as in other Talukas, appropriate to the variety of soil.

197. **Water resources:** Tungabhadra flows by the south of the central block. But from the view point of its utilisation for productive purposes it is not in the least harnessed. There are 2 or 3 important streams that flow in this Taluka in black as well as Masar areas. But in the absence of any bunding they flow through the wet season and the first two months of winter. There are no Pats or Bandharas, as can be seen from the fact that acreage under Patasthal is less than 50 acres - 49 acres to be exact - as recorded by the revision settlement report. Further the streams that flow through black soil, are not only not utilised for agricultural purposes, but as the fields by which they flow are not properly bunded, there is considerable soil erosion.

198. Well irrigation is of very limited extent. In the black region there is considerable scarcity of water even for non-irrigational purposes. On the whole the Taluka has very little by way of secured agriculture. It depends mostly on the vagaries of monsoon. Six hundred and odd acres only are under well irrigation. This shows a fall in the irrigated acreage as compared with 911 acres of Motasthal acreage in the revision settlement period. The position, then, with regard to tanks and wells useful for irrigation was as under. A comparison with other Talukas shows that this is the least favoured Taluka in respect of sub-soil as well as surface water resources.

Nature of resource	Useful for irrigation		Other purposes		In disuse	
	Pucca	Kachha	Pucca	Kachha	Pucca	Kachha
Wells and Budakies	305	114	64	57	61	67
Tanks	3	2	5	56	5	7

199. **Forests:** Though the forests appear to be increasing in extent, the nature of forest growth is such that its commercial exploitation has great limitations. More than 35000 acres under forest and about 6000 acres under Kurans are at present available for a systematic exploitation. Largely speaking, the forests at present, yield produce of a fuel value and of a rough and inferior variety of timber useful for rural housing.

200. **Minerals:** This Taluka, though not very favourable in other respects has, it is said, deposits of minerals, particularly, mica, manganese and gold. Some time back (about 25 years ago) gold-mining on modern lines -was attempted in eastern hills in eastern block. But the project was abandoned as being an unprofitable one. Manganese and mica also occur in this region. Raw materials useful in glass industry are also said to occur in this region and the Bannikop bangle-making, in olden times, was drawing on the local materials when the cheap imported glass bangles were still rare. Soft-stone also occurs in the south-eastern hills of the eastern block and in Belhatti, there are some 40 families of Dombaries who quarry the soft stone in the hills nearby and make crude stone pots with rough designs. They sell them to itinerant middlemen who visit the village to take away the pots for sale in annual fairs in and outside the Taluka.¹ Yellamma Fair which is one of the largest fairs of Karnatak is a place where annually a few thousands worth of stoneware is sold. This industry gives a bare subsistence to these families and it is now in a decadent condition.

¹ In olden times this stoneware seems to have been well-known over a wide area and it is said middlemen from Nizam's Dominions and as far up as Kolhapur and from neighbouring districts of the Madras Presidency used to purchase the stoneware and carry them to their local markets for sale.

Economic activity

201. **Agriculture**: Agriculture, as in other Talukas, is the most important productive activity. As the character of agriculture is almost purely dry, the economic organisation of farming business, its present position and its problems with regard to capital, technique, livestock and equipment, efficiency, marketing etc., are mostly the same as in other dry Talukas like Mangalwedha. Only the degree of acuteness of the difficulties varies. We need not, therefore, go into details of agriculture in this Taluka. We may only note the following few facts which are particular to this Taluka.

202. The Settlement Report found that nearabout 1908, out of the total cultivated land nearly 51 per cent. was cultivated exclusively by the occupants themselves; 22.6 per cent. was cultivated by occupants in partnership with others; 15.9 per cent was cultivated by tenants and 10 per cent. was waste land.¹ We have no recent data regarding the economic status of the cultivator. The average size of the cultivated holding in this Taluka appears to be considerably large. Group enquiries in different places show that a good number of agriculturists cultivate more than 50 acres. Further, the enquiries show the almost exclusively dry character of cultivated holding and the insignificant proportion of irrigated farming. It is because of this extensive character of dry farming that there is a common complaint throughout the Taluka, regarding the paucity of agricultural labour and livestock.² Our group enquiries indicate that during agricultural season, labour and livestock from surrounding areas are imported for agricultural operations as the local labour and livestock is not enough for the purpose. This imported labour and livestock is said to be costly. Dependence on hired livestock for the cultivation is possible because of the virtual absence of irrigational activities which necessitates continuous employment of livestock for a large portion of the year. In a dry tract livestock is normally employed for short periods only. In the absence a complete and close survey of livestock in relation to character of agriculture it is difficult to say whether employment of hired livestock is ultimately not economical to the agriculturists, who do so. We may only note that, the number of agriculturists who do not maintain livestock tends to be more than in any other Taluka.

1 Revision Settlement Report, 1908, Appendix I.

2 Total number of agricultural livestock was 12489 bullocks and 891 buffaloes in the revision settlement period. Recent figures do not show any substantial increase in the livestock. (Revision Settlement Report, Appendix F.)

203. The chief crops grown in this Taluka are jwar, cotton, millets and other coarse grains and oil-seeds like groundnut and sesame. Irrigated crops are sugarcane, vegetables and rice, the last under tank irrigation. Acreage under rice is extremely small i. e. only 190 acres. Sugarcane about 300 acres. Chillies etc., account for the rest. Shirhatti has to face the same problems regarding crop technique, methods, of cultivation, conservation of soil and moisture, manure, fodder and fuel, marketing and short period and long period finance, etc., as in other Talukas. With regard to marketing we may note that there are no organised commodity markets in the whole Taluka. Hence the major portion of the commercial crops, chiefly cotton and groundnut, is either taken to markets like Gadag and Hubli, or is sold to petty middlemen in places like Belhatti. If the latter course is followed the agriculturist gets for his product a price which is said to be lower than the ruling price in bigger markets, even after making an allowance for all charges incidental to taking the product to distant markets.

204. **Agricultural Association:** As in other Talukas there is the Taluka Shetki Sangh, which during its existence for the last 5 years or so, has, with grants from the Government and the Local Board and with membership fees, carried on propaganda for improved processes of agriculture, and use of improved equipment and has demonstrated improved farming methods in Shirhatti. It has also tackled the problem of pests and diseases by popularising use of insecticides for seeds, plants, etc. But all this work in different spheres is very limited in extent and has touched only a small portion of the entire field of agricultural problems. The membership of the Sangh is 92, a very low figure considering the extent of the Taluka. It gets a grant of Rs. 500 from the State and the Taluka Local Board grant also comes to Rs. 500. It has an annual expenditure of about Rs.1000 and a Reserve Fund of about Rs. 800.¹

205. **Subsidiary industries:** Subsidiary industries in this Taluka are dairy farming on petty domestic scale and in forest areas, employment in forests for felling and collection of fuel and other minor products of the forests. There is no other industry which supplements the agricultural incomes.

206. A rural industry which is wide-spread particularly in central and eastern regions, is sheep-rearing which is carried on by

¹ Taluka Shetki Sangh Annual Report, 1938-39; Appendix II, III, IV, etc.

Dbangar castes, but the chief control of which is in the hands of the capitalist middlemen who control the entire wool trade. The wool in the Taluka is long-staple and of a superior type and the sheep are also of a better variety. Sheep-rearing in this Taluka is on a greater scale than in other Talukas. Our group enquiries regarding this industry show that the chief difficulties in this industry are (1) the problem of improvement of the breed, (2) grazing and water facilities, (3) veterinary relief particularly for epidemics which break out at frequent intervals in sheep pens, (4) marketing of wool and (5) finance for the industry. In all these respects conditions appear to be extremely unfavourable.

Industries

207. Dependant on wool, spun either by women in the families of the shepherds or by other women in rural areas is the **Blanket weaving** industry in this Taluka, which is localised in places like Bannikop, Suganhalli, Shirhatti, etc. But at no time was this industry localised on any extensive scale in any centre.¹ In and nearabout 1908 there were only 130 looms in the whole of the Taluka. The number, it is reported, had been steady for a long time. But since 1932 it has been continuously decreasing and the present number is estimated at about 75 looms in the whole of the Taluka. Even these 75 looms are at present finding it difficult to get full work, because of high prices² and scarcity of wool. As the Shirhatti wool is of a superior type, blankets woven are of a superior kind and command a selected market in rural and urban areas. The present rise in prices has affected the demand and many of the looms are reported to be idle. Since the last 6 months, however, attempts are being made to find employment for these weavers by organizing a wool production centre under the direction and control of the state. The economic organisation of this industry suffers from the same organisational difficulties as the industry in other parts does.

208. Cotton weaving was, some 40 years back, carried on in Shirhatti and Khanapur. Both these centres had between them about 30 looms producing silk-bordered dhotees, which were well-known over a very wide tract³. But the industry as in some rural centres like Mayani in Satara District has now completely decayed.

1 Revision Settlement Report, 1908, Appendix G

2 Based on oral information.

3 Revision Settlement Report, 1908, para 26.

209. Similar has been the fate of bangle-making in Bannikop. As in parts of Khandesh, bangle-making in Bannikop was once an important handicraft giving employment to some 25 families some 30 years back. But during the last so many years, the industry has been continuously declining. Our enquiries in Bannikop show that there is now only one family employing a small group of skilled and unskilled artisans, and producing rough types of bangles with traditional methods. The industry has now lost even its local importance. There are no large-scale industries in the Taluka.

Trade and commerce

210. There are no important markets in the Taluka. Shirhatti, Magdi, Belhatti and Bannikop are of local importance and have weekly markets. The major portion of the money crops, goes to Gadag or Laxmeshwar, one on the northern-side and the other on the southern side of the Taluka. Chief items of export are cotton, groundnut, fuel, raw wool and woollen blankets, ghee and butter. Items of import are all kinds of consumption articles, in demand in rural areas such as cloth, kerosene, salt, groceries, hardware, etc. Finance for trade and commerce as in other Talukas is by individuals themselves. The branch of the Sangli State Bank, affords credit facilities to many traders. As Cooperation has made no appreciable progress, there are no facilities of urban Co-operative credit.

Communications

211. The Taluka has to its north the Hubli-Guntakal section of M. S. M. Railway which lies at a distance of 16 miles from Magdi. To the south runs Poona-Harihar section of M. S. M. Railway which is at a distance of about 20 miles from Magdi, Gudgeri being the chief railway station. The Gadag-Laxmeshwar Road runs from north to south through this Taluka. Shirhatti is connected with this road by a local board road covering over 5 miles between Magdi and Shirhatti. Another road runs from Shirhatti to Belhatti in south and then goes north-east — beyond Bannikop. Of these Gadag-Laxmeshwar and Magdi-Shirhatti are good metalled roads and afford communication throughout the year. Shirhatti-Belhatti road is fordable for a major portion of the year.

There is a sub-post and telegraph office at Shirhatti and branch-post offices at Belhatti, Bannikop and Yerebudhihal,

Survey of State Policy

212. A brief review of the policy followed by the Sangli State with regard to different fields of economic activity becomes necessary before we proceed to unfold our recommendations for the future policies to be adopted by the state. It would suffice for our present purpose if we restrict our review to the period between 1910 and 1940. Broadly speaking the enlightened policy of the Sangli State in relation to the welfare and betterment of the state, in spite of its slender income, operates in the following directions:—

- (i) Improvement and development of agriculture and allied occupations,
- (ii) Provision of credit facilities through Co-operative organisations,
- (iii) Provision of veterinary relief,
- (iv) Exploitation and development of forest resources,
- (v) Encouragement to industry and trade,
- (vi) Development of transport facilities,
- (vii) Organisation of medical relief, and
- (viii) Progress of education.

213. The main agencies employed to work out the policy of improvements are, (1) Department of agriculture, (2) Co-operative department, (3) Veterinary department, (4) Forest department, (5) Financial aid and concessions to industries and trade, (6) Public works department for maintenance and development of road communications, (7) Medical department, (8) Department of Public Instruction, and (9) organisation of local bodies such as Gram Panchayats Village Committees, Local Boards, Rural Development Committees Agricultural Associations, etc., to perform economic functions of local importance. It would be convenient to study the organisation, growth, functions and salient features of the working of these different agencies under two periods, viz. 1910-1930 and 1930-1940. It will be seen that appreciable progress has been made in the activities of the state in the economic sphere, due to the liberal policy of the state during the last decade and it would, therefore, help a proper appreciation of the state policy if we chronologically divide the treatment of the subject as above.

1910-1930

Agriculture

214. Till 1920 the Agricultural department had one Agricultural expert only. After this year the strength was increased to two. Throughout this period the chief functions of both these agricultural experts, largely related to the supervision and direction of the agricultural farm at Sangli, covering 65 acres, dissemination of knowledge of improved seeds and useful manures and tackling the general problem of pests and diseases. Technical assistance was rendered to the far-flung rural population by touring and group meetings with agriculturists. The farm was utilised for experiments with improved methods, seeds and manures and the results were available to the public. This department, further, carried on experiments with ensilage of grass (preservation of green fodder in silo or pits), and acted as agents for supply of improved seeds, manures, implements, etc., to the agriculturists.¹ The total expenditure came to Rs. 10,000/- per year, the major portion of which was naturally spent on the Sangli model farm.

Co-operation

215. The Co-operative movement was introduced in the State in 1910. Till 1926, very little progress was recorded in the direction of Co-operative credit and non-credit movement. In 1914-15 the number of Co-operative credit societies was 13 with a total working capital of Rs. 22.9 thousands, loans of Rs. 6500/- from the state and a membership of 1077. In 1919-20 the respective figures were 25 societies, Rs. 59000/- working capital and Rs. 9800/- loans from the state.

216. With a view to placing the entire movement on a satisfactory basis, however, the state initiated a plan of development and organisation of Co-operative societies on an increased scale. The post of the Registrar of Co-operative societies was permanently created in 1926. In order to finance the increasing needs of the increasing number of societies, the Central Co-operative Bank was established in 1927, the state holding 50 per cent. of its issued capital. Similarly the Co-operative sale shop was organised in Sangli in 1926, in order to facilitate co-operative marketing of agricultural produce.

¹ See Sangli State Administration Report, 1914-15, p. 22. Also see Administration Reports, 1919-20, 1929-30, p. 5 and pp. 62-63 respectively.

Within 4 years of its working the shop showed a profit of Rs. 4000/- in 1929-30. During this year the position of the Societies was as under :—

Description	No. of Societies	Members	Working capital Rs. (thousands)	Reserve fund Rs.
Central Bank Agricultural credit Societies	1	164	224.5	500
Non-agricultural societies	60	4437	292.8	25374
	8	862	12	2364

The staff by the end of this period consisted of a Registrar, an Auditor, head-clerk and a clerical assistant.

Veterinary department

217. During this period organisation of veterinary relief centres in different Talukas had yet to make a considerable progress. The Veterinary Officer who was looking after the state cattle in state Thatties and Kurans, and who was in charge of the Veterinary dispensary at Sangli, rendered assistance to agriculturists in the neighbouring Talukas, in tackling their problems of cattle diseases.

Forest department

218. Exploitation and development of forest resources during this period was carried on by the Forest department and the work chiefly consisted of systematising the forest areas in Shabapur and Shirhatti Talukas, protection and preservation of forests and maintenance of two small forest nurseries in Shabapur. The sources of income for this department mainly consisted of sale of forest produce; (predominantly fuel till 1919-20 and thereafter fuel, sandalwood and other minor produce), and grazing fees. The position with regard to income¹ and expenditure during this period was as under:—

Year.	Revenue Rs.	Expenditure. Rs.	Area under forests. (Acres.)
1914-15	26534	11578	60678
1919-20	39418	16428	60601
1929-30	134215	7053	60094

1 Detailed sources of revenue are (1) sandalwood, (2) fuel, (3) bamboos, (4) myrabolams, (5) inferior quality of timber, and (6) grazing fees. The income for 1929-30 is considerably high because of increase in sandalwood proceeds during that year. As this is a long term yield, the income is cumulative in character.

Industries and trade

219. Encouragement to trade and industry was directly given by the state in several ways. It was chiefly in the form of financial assistance to industries like cotton weaving and cotton ginning and pressing. The assistance was by way of loans and subscription to share capital, concessions regarding factory sites, exemption from taxation etc. Banking facilities were also granted to trade and industry by the state holding substantial amount of capital in the total capital of the Sangli State Bank Ltd. Attempts were thus made by the state administration to help the growth of the trade and industry in the state. The organisation of Sangli Chamber of Commerce, development of spot and forward commodity trading in commodities like groundnut, oil, turmeric etc., in Sangli and opening up of some new centres of trade, are illustrations of the direction in which the state was doing its best to provide reasonable facilities for trade. The growth in the number of industrial establishments in Sangli is an indication of the success of this policy.

Transport

220. The state afforded facilities of transport and communications (i) by constructing and maintaining roads in different Talukas, (ii) by constructing railway between Sangli and Miraj, which was opened up in 1907 with a capital outlay of about Rs. 1'77 lakhs. for its construction, (iii) and by encouraging the establishment of posts and telegraph offices.

221. The construction and maintenance of roads is primarily in the charge of Public Works Department. The Railway is managed by the M.S.M. Railway Company and the posts and telegraph offices are under the control and management of the Government of India. During the period under review the Public Works Department and Local Boards together financed the road construction and repairs all over the state. The most important bridge construction was the Irwin bridge between 1926-29. It was opened in November 1929. The following table indicates the road mileage in different Talukas at the end of the period :—

Taluka	1929-30 miles.
Miraj-Prant (including Sangli)	28·25
Kuchi	41·75
Mangalwedha	27·25
Terdal	8·75
Shahapur	10·75
Shirhatti	35·05

222. The Department in addition to communications looked to construction, maintenance and repairs of Public buildings, Water Supply, etc., for which there are separate budget grants. The entire expenditure on the Public Works Department stood in the neighbourhood of Rs. one lakh per year during the period, the communication branch alone accounting for Rs. 40,000/- in addition to expenditure of about Rs. 12,000/- from Local Fund on local fund works. The department was in the charge of an Engineer assisted by 7 Sub-overseers and other subordinate staff.

223. The growth of trade and industry during the period definitely shows the extent to which the Miraj-Sangli Railway section had facilitated the inward and outward movement of commodities. The railway earnings were on the increase as can be seen from the following table :—

Year.	Earnings Rs.
1914-15	17,495
1919-20	30,970
1928-29	47,143
1929-30	36,574

The investment on this branch line by the state seems to have been mainly actuated by a policy of facilitating trade and industry and of supplying a convenient means of transport to the people. The posts and telegraphs services kept pace with the development of trade, industry and other economic activities in the state. The number of Posts and Telegraph Offices throughout the State was 18 and 4 respectively in 1929-30.

Medical relief

224. This is organised through the Medical Department. The Chief Medical Officer is expected, in addition to his normal duties, to supervise such works as vaccination, relief in periods of epidemics, malaria relief, etc. During the period under review relief was granted through a central hospital at Sangli, Taluka dispensaries at Taluka head-quarters, branch dispensary at Dodwad in Shahapur Taluka and through distribution of medical chests in rural areas in charge of the people duly instructed as to their use.

Education

225. Just as Medical relief is one of the important directions in which a modern state tries to maintain and improve the quality of its population, spread of education and enlightenment of the masses is another important field of the state activity in relation to the welfare and betterment of the population. It is gratifying to note that the Sangli State introduced free and compulsory primary education as early as in 1906 and made it a permanent general feature of its educational policy in 1916. The State during the period under review went on increasing the number of primary schools in villages having more than 400 population. Secondary education also received the due attention of the state and facilities of High School education were provided in Shahapur Taluka Headquarters over and above the High School facilities in the capital. Grants were also sanctioned to private-aided institutions. Incidentally we may note that the American Presbyterian Mission Industrial School at Sangli provided industrial training in different technical subjects and some number of students from the neighbouring areas derived benefit from this training. The following table shows the position of Education in the State :—

Type of Schools	No. in 1919-20	No. in 1929-30
State High Schools	2	2
State A. V. Schools	6	7
State Primary Schools	148 ¹	159 ¹
State Schools other than above	11	12
Aided Schools	4	2
Unaided Schools	11	16
Total expenditure from state funds on education	Rs. 81,722	Rs. 1,45,568

During the period under review the total number of pupils went on increasing with the growth in the number of institutions.

¹ These include 10 and 12 Girls' Schools respectively.

The number of pupils in schools of all varieties was 10.8 thousands in 1919-20 and 14.1 thousands in 1929-30.

Local bodies

226. By 1925 almost all important types of local bodies had been brought into existence. The earliest were the municipalities¹, established in the last two decades of the 19th century. Then came the establishment of village committees in bigger villages where municipalities had little scope for being organised. This was done by a special executive order in 1902. By another special order Local Boards were organised in 1909 for all Talukas. In 1925 came the Sangli State Gram Panchayat Act, which facilitated organisation of Gram Panchayats for administering the municipal and minor civil and criminal work. A review of the work done by these local bodies, which contained an element of popular control and representation, would show that they have been mainly financed from their own sources of revenue and have been largely carrying on urban and rural municipal functions and minor public works like small roads, wells, etc., particularly all local works of not more than Rs. 200/- net cost. These latter have been carried on by the Local Boards.

1930-40

227. This decade witnessed some progressive changes in State policy in some directions. We need not repeat the details of the working of different departments. We will only note such important and significant changes as have taken place in this decade.

Agriculture

228. The most important change during this decade is the organisation of Taluka Shetki Sanghs in all the Talukas. We have already studied their organisation and working and the state and local grants they receive. We need not review them here in detail. Further, a special department of Rural Uplift under the Rural Uplift Officer, who is also Registrar of Co-operative Societies, and a separate portfolio of a Popular Minister nominated by the state

¹ Kuchi Taluka had no municipality, There was a Village Committee to carry on municipal work at Kavathe.

from the elected representatives in the Sangli Legislative Assembly and in charge of the nation-building activities has been created since 1938. Through the agency of Rural Uplift Committees appointed in different Talukas minor works, like approach roads, drinking water supply, prevention of soil erosion, etc., are undertaken. Medical relief, prevention and cure of malaria, aid to rural education, aid to agricultural associations, village industries, etc., are also made available to different Talukas.¹

229. The cost of the uplift work is met from Village Uplift Fund² maintained by the state out of the proceeds of income tax—part of which is earmarked for this work. Secondly, the villagers themselves have to contribute in certain proportion for works carried on in their respective villages under the Rural Uplift scheme. The Taluka Local Boards and the Village Committees also have to contribute towards the cost. Thus in 1939-40, the total expenditure on uplift activities amounted to Rs. 33,714 of which Rs. 25,140 were from the said fund; Rs. 8058 were contributed by the villagers, Rs. 383 by Taluka Local Boards and Rs. 133 by the Village Committees concerned.

230. There has been no change in the administration of the Agricultural Department but some of the technical work of improving methods of agriculture, supply of improved seeds, manure, etc., has been delegated to Agricultural Associations. Further, soil conservation schemes undertaken by voluntary organisations such as Sangliwadi Mali Sangh, are encouraged. A special Bunding Officer has been appointed in recent years to help the agriculturists in the construction of bunds and embankments in the fields, after proper contour surveys, etc. The department is still in its infancy³.

231. The State has adopted the Tagai system and in 1939-40 the position was as under :—

Arrears at the beginning of year.	Rs. 25,687.
Advances during the year.	„ 3,195.
Recoveries during the year.	„ 5,846.
Outstanding at the close of the year.	„ 23,036.

1 For details see Administration Report, 1939-40, Chapter XI-A.

2 This was created after the Income-Tax Act came to be applied in Sangli State in 1933.

3 In 1939-40 one village in Miraj Prant and one each in Shahapur and Shirhatti were touched by this department. 900 acres of land were surveyed in Miraj Prant and general instructions regarding bunding, were given in a Miraj Prant village, in a field covering 12 acres. Bunds were constructed in 245 acres of land in Miraj Prant; 104 acres in Shahapur Taluka and 18 acres in Shirhatti. (Annual Administration Report 1939-40, p. 105.)

This Tagai is administered by the Revenue department and as in British India, it is not very popular. The grants have been few and far between and as in British India, suffer, it seems, from unavoidable red-tapism. The problem of indebtedness has also been tackled to a certain extent and the Agriculturists' Protection Act, passed in 1937 was first applied to Mangalwedha and a special tribunal for settlement of debts has been created.

232. During this decade the annual fairs have been utilised for purposes of agricultural exhibitions and shows in different Talukas. These, as we have seen, are organised by Shetki Sanghs in collaboration with state departments of Agriculture, Veterinary, Co-operation, etc.

Veterinary relief

233. The important feature in the working of this Department is the organisation of Veterinary Dressers' classes and the appointment of dressers in the Talukas. The Department also collaborates in the organisation of cattle shows in the State and the Veterinary Officer acts as an expert and selects Cattle for prizes. The Veterinary dispensary at Sangli treated 1142 cases during 1939-40.

Co-operation

234. The present conditions of co-operative bodies in the several Talukas will be seen from the following table :—

Taluka.	Co-operative organisations of all sorts.
Miraj-Prant	44
Kuchi	27
Mangalwedha	13
Shahapur	5
Shirhatti	4
Terdal	3
<hr/> Total	<hr/> 96

235. At the end of 1939-40 there were, one Central Co-operative Bank, one Land Mortgage Bank, one Taluka Co-operative Bank, 2 Urban Banks, 79 Agricultural Societies, 10 Non-agricultural Societies, one Supervising Union registered

in 1934, and one Co-operative Institute at Sangli, making up a total of 96 of all sorts of Co-operative organisations.

236. The following table shows the position of the Co-operative societies in 1939-40 :—

	Agricultural societies.	Non-agricultural societies.
No. of societies	79	10
No. of members	7344	1900
Members' deposits	Rs. 95362	Rs. 7561
Share capital	" 11400	" 26167
Reserve fund	" 80027	" 12692
Other funds	" 34004	" 5092
Working Capital	" 509554	" 60092
Laons outstanding	" 387746	" 39411
Overdues	" 188247	" 2895
Profits	" 15474	" 3388
Working expenditure	" 9143	" 1224
Rate of interest on		
(i) Deposits	4% to 4.11%	3% to 4½%
(ii) Borrowings from Central Bank	7%	7%

237. The Ganpati Co-operative sale shop continued to work in the field of Co-operative marketing. The number of shareholding members in 1939-40 was 33 and persons who paid subscription of Re. 1 for being eligible to have their produce sold through the shop stood at 1415. The shop had a net profit of Rs. 2186.

238. The financing of these societies is in charge of the Co-operative Central Bank and the Taluka Co-operative Bank. We have already referred to their working earlier.

239. So far as the artisan co-operative organisations are concerned they have been receiving due attention in recent years. A leather workers' co-operative society has been organised in Sangli and a weavers' society at Terdal. The brass and copperware workers' society at Mangalwedha organised earlier has been wound up. The other artisan societies are rope maker's society at Kavalapur and a Co-operative laundry at Sangli.

Forest Department

240. Small plantations of sandalwood and mahogany were undertaken in recent years. Since 1938 exemptions in grazing fees are being sanctioned resulting in a departmental loss of revenue to the extent of Rs. 3.2 thousands per year. The income and expenditure during 1939-40, stood respectively at Rs. 41,085 and Rs. 9,255 as against Rs. 1,34,215 and Rs. 7,053 respectively in 1929-30. This enormous fall in revenue during the last decade is due to the fall in the output of valuable products like sandalwood, timber, and other minor produce which in their very nature are fluctuating. The area under forest was 68,504 acres as against 60,094 acres in 1929-30. In view of the rise in area under forests the fall in the revenue appears to be very striking and must be attributed to fall in sandalwood revenue which in turn depends on plantation and maturity.

Industries and Trade

241. Apart from loans to private enterprises the most outstanding feature of the industrial policy of the state during this period is substantial capital assistance to Ugar Sugar Works, Ltd., in which the state holds a considerable number of shares, thus initiating a bold policy of liberal encouragement to industry. The state has its representatives on the Board of Directors of this Company and it has given concessions regarding water, land and taxation. As a result of this the Company has not found it difficult to collect the necessary capital from the investing public and within two years of its registration it has reached a stage of development which has enabled the Company to undertake sugar production. Similarly small industries are also being encouraged by a liberal Stores Purchase policy and by helping the small enterprises like rope and tape making, in securing War orders from the Supply Department. The handloom industry was granted a special representation in the expanded Legislative Assembly. This is calculated to improve the position of this industry.

242. The policy of fostering trade expressed itself, during this decade, in the form of creating the Market Supervising Board and giving constitutional representation along with industry to trade and commerce by reserving two seats for commercial interests, in the new Assembly. This has given a recognised constitutional status to organised trade and industry in the State. The Market Supervising Board was created in 1934. It consists of two representatives of

commercial interests, two non-official nominees by the state to represent agricultural interests and the Chairman, a government official nominated by the state. The Board supervises the general trading in commodities and the working of the Chamber of Commerce. The Board maintains a register of all traders, middlemen, etc., operating on the Sangli Market. It has power to examine weights and measures current in the market, to regulate trade allowances, rates of commissions, discounts, etc., and to sit in appeal on the verdict of the Settlement of disputes Committee of the Chamber of Commerce. The Board maintains market rates, statistics and also organises sale of cotton and helps the institution of butter tests by means of a refractometer in the local butter market. The Board is empowered to levy a fine upto Rs. 25 on defaulters who violate the rules and regulations of the Board. The income of the Board by way of fees was Rs. 3931 and the expenditure was Rs. 2714 in 1939-40. As a result of the organisation of the market, the trade in Sangli has been able to hold its own position in spite of competition from surrounding markets and the recent data point towards a further increase in the trade and in the importance and prestige of Sangli as an inter-provincial market.

Transport

243. In point of communications, 15 miles of roads in Miraj-Prant and 2 miles in Shirhatti have been added to the total road mileage in the State. Another important bridge came to be constructed in 1939-40 over the Man river, thus securing a permanent communication between Mangalwedha and Pandharpur. This bridge has inter-district significance since it lies on Pandharpur-Bijapur road. The bridge was constructed at a cost of Rs. 1,03,628/- to the state.

244. The total expenditure on construction and maintenance of roads amounted to Rs. 1,10,323 of which Rs. 51,225 were spent on original works in 1939-40. The maintenance and repairs of these roads particularly on sections having heavy vehicular traffic have been well looked after involving considerable amount of expenditure on it.¹

¹ In addition to water supply, electric supply was made available to Sangli town, since 1936 at a capital outlay, of Rs. 2.41 lakhs. This is satisfying not only the domestic consumers' needs, but it is also supplying power to small industries.

The Town Improvement Board created since 1931, has been striving for the general improvement of Sangli town and it is entrusted with preparation, execution and supervision of improvement schemes in different areas. Town Extension Schemes are worked out by an Officer specially appointed for the purpose.

245. There was no expansion in the field of railways during the period. The Miraj-Sangli line continued to work in the interest of the trade and industry in Sangli. Special concessions in freights were sanctioned whenever a case was made out for such concessions. The earnings of the branch line were Rs. 30,876 in 1939-40 as against Rs. 36,574 in 1929-30.

246. The Posts and Telegraph service facilities were available to 19 and 5 localities respectively as against 18 Post offices and 4 Telegraph offices in 1929-30. Shirhatti got a Telegraph office in 1939-40.

Medical relief

247. Medical relief to the population continued to be granted through dispensaries maintained by the state, by distributing medical chests, providing nursing facilities in Shirhatti, Mangalwedha and Rabkavi dispensaries by appointing nurses and contributing two-thirds of their cost, by assisting Ayurvedic dispensaries and by adopting preventive measures against malaria in Shirhatti and Mangalwedha. The cost of all the last four ways of relief was met from the Rural Uplift-fund.

248. Medical relief under Rural Uplift plan in 1939-40 consisted of relief to 2576 and 2542 cases of malaria in Shirhatti and Mangalwedha respectively at a total cost of Rs. 1,657; grant-in-aid to 4 Ayurvedic dispensaries—3 in Miraj-Prant and 1 in Kuchi Taluka; distribution of 45 medicinal chests; provision of nurses at a cost of Rs. 1296 and conducting a midwifery class in Sangli. Medicinal chests were distributed in rural areas as under:—

Miraj-Prant	9 chests.
Kuchi	8 ..
Mangalwedha	7 ..
Shahapur	10 ..
Shirhatti	10 ..
Terdal	1 ..

Total 45

Vaccination and other departmental activities connected with epidemics continued as before.

Education

249. There has been a steady growth in the number of schools, primary as well as secondary. A Training College for Primary teachers was started in 1940. The position with regard to educational institutions in 1939-40 was as under :

Kind of institutions.	No. of institutions.	No. of pupils on rolls
State: High Schools	2	680
Middle Schools	6	377
Primary Schools for boys	172	12836
do girls	12	1768
Sanskrit Schools	9	124
Low caste	6	279
Grant-in-aid... Schools	11	1751
Unaided ... Schools and classes	21	779
Total ...	239	18594

250. The total direct expenditure on education of all sorts was Rs. 1,67,942 as against Rs. 1,45,568 in 1929-30. Non-recurring expenditure on education amounted to Rs. 9,678. The direct expenditure on education through state institutions and on grants to private institutions was as under :—

	Amount Rs.	Percentage of the total
State Funds	1,19,306	71.1
Local Funds	18,000	10.7
Municipal	2,500	1.4
Fees	20,927	12.6
Ganpati Sansthan contribution	7,209	4.2
	1,67,942	100%

Local bodies

251. At the end of this period, there was further democratisation of the constitution of local bodies particularly Municipalities and Local Boards. This was at the end of 1938. During this year Kavathe got a Municipality which replaced the earlier Village Committee. Municipalities under new rules are to have three-

fourth elected element with an elected President. The Local Boards are to have three-fourth elected element with Taluka Mamlatdar as Ex-officio President. This is an important step in the constitutional development of the State. The Gram Panchayats and Village Committees continued to work as in the earlier period.

Retrospect and prospect

252. It will thus be seen, on a survey of the last thirty years, that in matters of economic development the Sangli State has made very notable progress. Without doubt this progress is due to the fostering care and wise statesmanship evinced by the state authorities, no less than to the geographical situation of the place and the enterprise of the people themselves. A considerate revenue policy and a steady encouragement of efforts at reform, coupled with an efficient administration of justice, have secured for the agriculturists favourable conditions which can be utilised for further progress. By organising a good system of roads and ensuring reasonable marketing facilities the farmers have been put into touch with profitable custom. This is an advantage the importance of which can be hardly overstated.

253. The Co-operative movement, both in its credit and non-credit branches, has given enough proof of internal strength to warrant a hope that in future it can play a more vital part in building up the edifice of economic development. The amenities by way of educational and health services maintained in almost all parts of the State induce a feeling of hope among the citizens, which it is desirable to nurse by further acts of constructive statesmanship. The general atmosphere of cultured society to the maintenance of which the social activities of the rulers and especially of Her Highness the Rani Saheb, have contributed in a rich measure attracts to the State resources of money and talent which may be expected to play even a more prominent part in promoting the economic progress of the State in future, than it has done hitherto.

254. In the textile group of factory and domestic industry Sangli occupies a noteworthy place as much by its past achievements as by its future promise. Other industries e. g. metals, sugar and electricity have also shown signs of strength. Finance, in the shape of Joint-stock and Co-operative banks, has kept pace with industry. The popular organisations of the government e. g. Panchayats, Local Boards and the Legislative Assembly have stirred the people to a consciousness of their opportunities in the way of mate-

rial progress. The state authorities who have already created conditions favourable to economic progress and who have conferred important rights of self-government on the people, are now faced with the task of using the new enthusiasm and the new administrative structure for the oldest of all purposes of beneficent government, viz. the betterment of the lives of the people. If the same statesmanship and capacity that have been evinced in the past by the state as well as its people are forthcoming in the future, there is no doubt that Sangli will be still in the vanguard of economic progress.

PART II

Recommendations

CHAPTER I

Conservation and Development of Resources

Introductory

255. As has been stated in the Introductory Chapter this Committee was appointed for the very practical purpose of suggesting means to improve the productivity of the various large and small industries and agricultural activities carried on in the State. Considering the size and the dispersion of the territory which comprises the Sangli State, it is obvious that the economic development of Sangli can hardly be thought of independently of the wider currents of Indian economic progress. Subject, however, to any influence that may be exercised by unforeseen occurrences in the wider sphere of Indian and world affairs we have tried to concentrate on the special problems of the people of Sangli in their efforts to make a success of their normal business activity.

256. With a view to acquainting ourselves with the existing state of this business activity, we have endeavoured to sketch the organisation and practice of the important aspects of the occupations followed by the people. As the State is distributed among six mutually differing regions we have thought it necessary to study the main features of each Taluka. Wherever conditions in two Talukas were identical our observations extend to both alike. Overlooking minor differences and special features it will be seen that agriculture continues to be the main industry of the people all over the State. While well-irrigation is extensively practised in some favoured spots the principal source of water is still the monsoon which is highly precarious over a large part of the State. The crops, the system of tillage and the size of agricultural business are inevitably conditioned by these natural features.

257. **Progressive State:** Thanks to the enterprise shown by the more enlightened among the farmers themselves and to the watchful and fostering care that the state has bestowed on its rayats, agriculture in Sangli has felt the enlivening influence of

improved methods of farming. In our opinion this is a very encouraging circumstance. The people and the administration have both already learnt by co-operation to utilise the instruments of economic progress. The resourcefulness that they have exhibited till now justifies a hope that they will be able not only to chalk out for themselves a policy which may not necessarily have already been proved elsewhere but that they will also carry to success any new organisation that their own circumstances may point as being natural to them. In our report while we have tried to study conditions in Sangli in the light of wider experience, we have not confined our attention merely to set types and models of economic and administrative organisation. Hence we have suggested some steps which at first glance may appear to be somewhat unfamiliar methods of organisation. We feel convinced, however, that these suggestions are not only sound in themselves but are the only ones which in the peculiar circumstances and limited resources of the Sangli State will produce practical results for which all of us are so anxious.

258. Occupations-Agriculture : Agriculture in Sangli except in the irrigated tracts is an occupation which offers employment to agriculturists only during some portion of the year. Cultivators are, therefore, compelled to take to subsidiary occupations such as dairying, cattle-breeding and poultry. We are glad to say that in several places dairying is so very effectively combined with normal agricultural practice that the cultivator has succeeded in eking out a living better than what the precarious rainfall would indicate as normal. In favoured spots where the grazing and other natural circumstances are favourable, good breeds of cattle have long been reared. In fact some of the most popular breeds in the Sangli State are well-known all over the country. Very little, however, has yet been achieved by way of the maximum exploitation of these important supplementary activities of the agriculturists. In any scheme of rural development the more intensive and systematic exploitation of these and similar occupations appears to us to be an almost indispensable part.

259. Rural artisans : The villages have their own traditional artisans like the tanner, the carpenter, the smith who mostly supply village needs. While on the one hand traditional skill is found to be inadequate to cope with the more complicated requirements of modern mechanised methods, those of the artisans who have acquired such improved knowledge fail to secure full and profitable employment in the villages. The problem of village indus-

tries is thus essentially one of reorganisation and adaptation of village talent to such local and wider avenues of employment as are within reach. This might not appear to be so comforting a conclusion as some of the more ambitious reformers would like to draw, but if practical results are the test to be applied to our conclusions and recommendations we cannot escape from these inherent limitations of the situation, especially if we recognise that Sangli is but a small part of the total complex of Indian economic activity.

260. Urban handicrafts : This need to concentrate on the practical results of any new methods of reform that may be suggested is equally present with regard to what may be described as urban handicrafts. Traditionally, the Sangli State has been known for many varieties of urban products such as the brass, copper and silver utensils of Sangli, the coloured Sarees of Rabkavi and the high quality silk and cotton goods of Shahapur. In all these places the producing establishments were hardly bigger than house-hold employment and the implements used were those which tradition and experience had indicated as the most suitable. Even now the good-will of all these centres in their respective trades is a valuable economic asset of the State but the competition of rival centres of industry and of improved and scientific methods of production is proving an almost irresistible foe. How to guide the natural process of internal readaptation in the most profitable channels is the question that any economic reformer will have to answer in this respect. Whatever one might desire ultimately it is the efficiency of the industry measured in terms of the satisfaction of the customer realised at lowest cost that will make or mar the future of these once famous industries of the Sangli State.

261. Large scale industries : Sangli has not escaped the process of transformation of the small-scale into large-scale economic activity. The natural resources of the State and the enlightened policy followed by the administration have combined to make Sangli town a centre of mills and factories. We have in the Gajanan Mills at Sangli a very striking example of the successful results that may be expected from wise co-operation between the enterpriser and the state. The oil mills at Sangli point to a probable line of further progress not only in the main oil but several allied industries. The Bidi industry in Sangli, though carried on without the help of machinery, by a large number of small establishments is capable of serving even higher and wider needs of the tobacco user. Other industries, some of them now conducted in Sangli on

a comparatively small scale have been suggested as capable of considerable development. The generation of electricity at Sangli and Rabkavi in units specially established for this purpose and the supply of the same at Shahapur from the Belgaum generating plant indicate a likely source of supply of cheap energy which may be utilised on a more systematic basis. While the details of the industrial prospects and policy of the state will have to be discussed at a later stage we must record here our opinion that the progress made by the Sangli State in organising modern industry is sufficiently striking to justify a hope that a more purposeful policy of industrial development will not fail to produce far-reaching results.

262. **Sangli market:** Sangli has attracted even greater attention as a market than as a centre of production. Transport and banking have helped this commercial development and have in turn received a great fillip from the progress of commerce. The Sangli market which is a well organised and carefully supervised body of dealers is mainly interested in collecting the farmers' produce especially groundnut, turmeric, tobacco, chilly, cotton, gul etc. and exporting it to other parts of India. In groundnut, groundnut oil and turmeric, dealings both spot and future are done on the Sangli market. These facilities have brought Sangli prominently to the notice of dealers in big centres and it is to be expected that with a more systematic regulation of forward dealings the advantages of the Sangli market will be even more widely appreciated. With the increasing production of medium staple cotton Sangli is also rising in importance as a Cotton market. Other articles of trade of which grain is the most important are also capable of being organised in an equally systematic manner and the whole trade of Sangli and other important towns of the State may be made to play their due part in a scheme of all-round improved production. Marketing, finance, transport all these will need to be reorganised where necessary so that the people of the State may make the best of the resources that are at their disposal.

263. **State policy:** As we have observed elsewhere, the administration of the Sangli State during the last thirty years has constantly tried to help the economic progress of its people not only by adopting as far as circumstances permitted the successful models of policy from British India, but also by offering special attraction to its own business. The growing integration of the country at large and the increasing speed of modern industrialisation now make it essential that the state should make a systematic effort to develop its own economic resources as a part and parcel of Indian economy.

This is a very much more complicated task than what has hitherto been attempted in the State. While on the one hand the methods of business, agriculture and other economic activities followed in the State will require to be constantly kept up to the standards followed elsewhere in the country the opportunities of sharing to the full in the large scale national economic progress that is going on in India must be studiously kept in view. A watchful, informed and efficient administration of economic policy must now be considered as an important and necessary function of the state. The evolution of administrative departments in other progressive States and in British India also indicates that the time has now arrived when economic development should be given a more prominent place in Sangli State administration than has been possible hitherto.

264. **Limitations of the development scheme :** As we proceeded with our enquiry certain features of the economic and administrative situation in Sangli State were impressed upon us as being fundamental to the whole scheme of development. We realised that for any lasting benefit to be secured the scheme of reform must be based on the closest co-operation between the people and the administration. It has been noticed by several All-India Commissions, such as the Royal Commission on Indian Agriculture, that the main purpose and condition of reform are the readiness of the people themselves to receive in the proper spirit all the developmental facilities that are offered by the various state departments. While certain aspects of economic welfare have to be realised by the administration whether the people co-operate or not, for any extensive scheme of systematic development, the people's readiness to organise according to a given plan must be considered as a *sine-qua-non*. While organisation of public bodies and their continued working are always matters that tax the tenacity of people we have reason to hope that the people of Sangli will in this respect give at least as good an account of themselves as the people of any other Indian State or Province.

265. Another feature that has created a deep impression on us is the comparative paucity of the administrative and financial resources of the State in face of the very complicated problems of a widely dispersed area. It is only by the most economical and efficient use of these resources that we might hope to secure any practical results in the near future. It is our hope that as the economic situation improves these resources may also be expected to grow and a more elaborate organisation of the developmental services

may be feasible. For the present, however, we must decide to do the best we can with available administrative and financial resources.

266. Quite apart from the urgent necessity to economise the personnel and the revenues of the State, it is our reasoned conviction that unless the state organisation in each area is unified for all administrative purposes the most satisfactory results of a reform policy cannot be expected to accrue. Such purely restrictive departments as the police have of course to be kept out of a good deal of the working of reform departments. So also the working of technical departments, such as sanitation, agriculture, education etc. has to be left to the staff specially appointed for the purpose of carrying out these activities. But in each separate administrative area, as the Talukas in the Sangli State are, the function of co-ordinating all administrative services and helping to guide them according to the common plan of action decided upon by the State government as a whole must be discharged by the head of the Taluka. If such a unifying and co-ordinating centre of authority is not supplied the functioning of the various beneficent departments will lack the vigour and unity which they so vitally need.

Popular associations

267. **Basis of the scheme of economic development:** Popular initiative and co-operation as well as administrative unity and strength are the essentials of our scheme of economic development. We feel that if any one of these two sets of requirements is left unsatisfied the success of reform measures will be endangered. We are, therefore, led to recommend as a preliminary to the adoption of any elaborate plan of reconstruction, the formation of Village Associations on a purely popular basis. Any adult resident of a village paying the minimum subscription per year will be eligible to be a member of the Village Association. (Gram Sabha). We expect that ultimately almost all villagers caring for their own betterment will become members of the Gram Sabha. As the function of the Sabha is to realise for its members the benefits of co-operation among themselves and with the various departments of the State, we suggest that these Sabhas should be registered under the Co-operative Societies Act. This arrangement will supply a legal basis for the functioning of the village associations and will at the same time leave them sufficient freedom to frame their own bye-laws to suit the differing conditions and needs of each village. The existence of the associations, how-

ever, will be a great asset for the success of reform measures undertaken by the state and it will serve as an earnest of the people's desire to organise and to co-operate in the task of their own improvement.

268. Functions of village associations: The functions of these associations will be capable of considerable variation from village to village. The more enterprising among the villages will desire to utilise the agency of their association for an almost unending list of public functions. In fact it might not be too much to expect at least in some villages that the habit of acting together as members of the village association will recreate the spirit of corporate life which our villages have lost but which they now very badly need. Leaving out of account the more distant future and the very exceptional cases we might, however, say that the minimum which all village associations may immediately hope to realise is to secure the following advantages for their members :—

- (a) To popularise methods of individual and collective action which are recognised as desirable. Such action may relate to economic, civic or social aspects of the village life ;
- (b) To secure for members the proper advantages of services provided by the state such as education, medical relief, roads, famine relief, etc. ;
- (c) To carry on propaganda for the initiation and success of any measures of reform that the association may feel desirable ; and
- (d) Generally to help in co-ordinating the various aspects of the life of the people and the activities of the state.

269. Constitution: The constitution of the Gram-Sabhas should be entirely democratic. Membership, as has been said above, should be open to all grown-up persons. Members should elect their own office-bearers. Subject to the normal principles of the constitution and functioning of such bodies each association will be free to frame its own bye-laws. These Gram-Sabhas consisting of persons interested in the economic and social betterment of their respective villages will be able to do a good deal by their own unaided effort. It will, however, be necessary for them to secure from the Taluka officials services which extend over the whole Taluka. This cannot be done without the existence of a Taluka Association

of which the village associations are members. We, therefore, recommend that Taluka Associations should be organised on the same basis as the Gram-Sabhas and should help to secure for their members, viz. the village associations the same kind of services that are mentioned with reference to each village. As the points of contact between the working of Taluka administration and of the Taluka association are bound to be numerous we recommend that either the Mamlatdar of the Taluka or a representative of his should be necessarily included in the Committee of management that each Taluka association will set up. Such a provision will secure co-ordination without loss of popular initiative and control.

270. The Village and the Taluka associations exist for a general purpose which in a way extends to all the people residing in the locality concerned. But for the special needs of a specific set of people, such as credit, marketing etc. Co-operative societies of the usual type will have to be organised. Wherever such societies already exist they will continue as before. It is possible that these Co-operative societies, old and new, might find it desirable to have Taluka federations for strengthening their own organisation. The existence, however, of the Village and Taluka associations will create an atmosphere of popular initiative, enthusiasm and co-operative spirit which will immensely help the success of the more specific activities of the Co-operative societies. We expect that all members of the Co-operative societies operating in a given area will have been members of the village associations concerned. Thus though the village association will have no legal responsibility for the functioning of the co-operative bodies they will all the same act as parent organisations of all other popular organisations working for a beneficent purpose.

271. Even now all the Talukas have bodies called the Shetki Sanghs and no doubt they are doing very useful work. But as the Taluka Sangh does not depend on the existence of any primary association in the villages, its influence is very limited. The purposes for which these Shetki Sanghs are organised are also confined in practice to the popularisation of certain well-known agricultural improvements. Similarly the Rural Uplift Committees that have recently been set up in all the Talukas are *Ad hoc* Committees whose only function is to advise with regard to the utilisation of grants made for the Taluka out of the Rural Uplift Fund. It will be helpful to the better realisation of the objects for which the Shetki Sanghs and the Uplift Committees exist, that the Taluka associations which will be created as federating

bodies of the village associations should take over these functions along with the others that have been recommended above. The Taluka associations will be more representative and better endowed with resources to carry out the functions that are now left to be discharged by the Taluka Sangh and the Uplift Committees.

272. Functions of the Taluka Sanghs: The Taluka Shetki Sanghs now employ the services of paid 'Pracharaks'. As will be seen later on in the report many of our recommendations will call for regular service on the part of these and similar officers not only for the Taluka as a whole but also for each village. Our recommendation is that the services of these 'Pracharakas' should be taken over by the Taluka associations and that they should be available as far as possible for guiding the activities of the village associations as well. But these latter cannot depend only on the occasional assistance of the Taluka Pracharaks. Each village association must have minimum of staffing on which it can count. It is desirable that honorary services of public spirited members should be utilised for secretarial and propaganda work wherever possible. It would be most desirable to make the village school teacher the propaganda officer for the betterment schemes that the village association may from time to time adopt. In a very real sense this is a work of popular education and should with propriety be discharged by the village teacher. We have recommended elsewhere that instruction in agricultural subjects should be specially attended to in preparing courses for the Training College at Sangli. Thus these teachers would be well qualified to organise seasonal classes in agricultural subjects for the benefit of the adult population of their own villages and of students studying in the higher standards. In suggesting that the village teacher should make himself helpful in carrying instruction even to the grown-ups in respect of individual items of improvement, we are only emphasising the central position that the village teacher would occupy in a scheme of intelligent direction of the life of the village. It is possible that an extra pressure of service may in some cases fall on the teacher on account of this extension of his duty. In such cases it should be possible to pay to the teacher a suitable allowance out of the funds of the village association. It should be noted, however, that we desire the teacher to discharge only an educative function and not any administrative duty which latter must devolve either on an honorary or a paid office-bearer of the association.

Natural resources

LAND

273. **River-side soil reclamation** : In a state whose main industry is agriculture, it is difficult to over-emphasise the importance of the conservation of the soil. The individual farmer, the village as a whole and the state have to put forward their combined efforts to see that no piece of land is lost to profitable cultivation. While normal care and foresight have been exercised in this respect we have noticed several cases in which the unchecked action of rain and streams has been allowed literally to wash away the basic economic resource—soil. Wherever, as in the neighbourhood of Digraj, heavy floods tend to wash away masses of fertile land it is desirable by co-operative effort to take suitable preventive action. The nature of such preventive action will have to be settled in consultation with experts and the interests concerned. Wherever things have passed the stage of prevention, reclamation by similar co-operative action is indicated. We feel that if a workable scheme is prepared with details so as to convince even the least optimistic among the land holders concerned, a co-operative solution to this problem need not be ruled out. If, however, the co-operative method fails even after the best efforts of the administration and of the Gram-Sabha, the state should be prepared to bring about the necessary reclamation by its own action. It is possible in some cases that by providing for suitable facilities, financial and administrative, the state may be able to induce enterprising land-holders to undertake the reclamation affecting their own land. Where state action should extend to direct construction and reclamation is a matter to be settled by reference to local circumstances. It may be possible to realise the cost of such direct state action by levying a proportionate charge on holders of land who are calculated to be benefitted by the work. We do not desire to dogmatise as to the method and agency that are suitable for giving effect to a soil conservation policy. Our only concern is to show that such conservation is too vitally important for the economic welfare of the State to be left to the doubtful action of a purely voluntary and individual effort. The experience of such voluntary efforts in this sphere as those of the Mali Sangh at Sangliwadi only serves to emphasise the feasibility of a wider adoption of the underlying principle.

274. **Hill-side soil conservation** : The problem of the annual washing down of hill-sides is fortunately not so acute in Sangli

State as it is in some of the surrounding Deccan districts. There are, however, areas in almost all Talukas and especially in Kuchi, Mangalwedha and Shirhatti where the monsoon washes off from the side and the foot of hills valuable soil. It is possible to think of a scheme of sowing these areas with suitable grasses and shrubs to be selected and supplied through the agency of the Agricultural department. Such action will not only conserve a much needed resource but will add to the all too scanty fodder and fuel resources of the State.

275. Arable soil conservation : A more intimate interest attaches to the periodical washing away of the soil from the cultivator's own field. Except in very recent years no systematic interest seems to have been taken in a programme of contour surveys and bunding as means to prevent such erosion of the soil. A new interest has been added to this programme by the paramount need to make the best of the scanty and precarious water supply of most of the Sangli Talukas. We leave for a later mention the details of bunding policy. But we consider it desirable that the wider economic implications of a policy of conserving soil resources in agriculturally developed parts of the State should not be ignored. All recent attempts at insuring the Deccan farmer against precarious rainfall have brought into relief the need to conserve the soil of the cultivator's field and it is desirable that in any scheme of conservation and development of resources of the State as a whole the soil resources of the individual fields should be considered as of basic importance.

276. A scheme of soil conservation : In certain parts viz. Digraj and Sangliwadi a contour survey with a view to prepare a plan of bunding has already been undertaken. As soon as the Agricultural and Development departments are organised as recommended by us elsewhere, similar surveys will have to be undertaken for many of the villages in the several Talukas. This will no doubt take some time but we indicate here, a scheme of preparing and carrying out soil conservation which will be useful as a guide for further action. The first step is obviously a report from competent revenue or agricultural authority regarding the need for soil conservation. If the evil of erosion is confined to a few fields it can be corrected by individual action under the advice of the Agricultural department. Wherever extensive erosion is noticed the whole area should be surveyed by competent bunding and agricultural officers. As a result of the survey, an actual scheme

of conservation with the help of bunds or perhaps a few more substantial embankments will be prepared. The resulting benefit and the total cost will be worked out. While the cost of survey and preparation of the scheme will be borne by the respective departments of the state, the actual expenses of executing the scheme viz. those incurred on labour and material will have to be distributed among the land-holders on the principle of benefit. In arriving at a scheme of distribution of costs local opinion will be consulted. It will be open to land-holders either to carry out their own part of the scheme for themselves or to contribute in cash or kind towards the expenses incurred on their account. It will be necessary in almost all cases to advance money for purposes of executing the scheme. The administrative services necessary for execution will also have to be organised and, unless they are offered by local voluntary effort, will have to be paid for. We suggest that both the initial financial provision and administrative direction should be supplied by the state to the extent to which these are necessary. As we have observed it will be natural to expect that the co-operative principle of organisation is utilised to some extent to realize maximum local association. But in the last resort the state will have to take the initiative and shoulder the responsibility of execution. Except for works on the execution of which depends the preservation of a vital and public convenience or resource it will not be proper for the state to put into execution a scheme of compulsory collective bunding without carrying with it at least a majority of persons concerned. Wherever such minimum co-operation is forthcoming the state should help by giving to the village concerned the benefit of the Soil Conservation Act under which the unwilling minority will be required to fall in line with the general plan. Any advances made either by the state or by a Co-operative society for financing a collective scheme of bunding will be realisable in instalments along with the instalments of land revenue.

277. Soil Conservation Act and its principles: The benefit which a collective scheme of conservation of soil is designed to secure is the improvement either in the quality or quantity of produce raised in given areas. Such an improvement may be expected on account of the prevention of washing off of valuable soil or on account of the preservation of moisture which would enrich the crop. Wherever such improvement and conservation can be reasonably expected by following a policy of correcting defects in contours, the application of the Soil Conservation Act

would be indicated. While the framing of an appropriate act in all its details must be left to a competent legislative committee the principles herein stated should normally be incorporated in the enactment. As some coercion is necessarily involved in collective schemes of this kind and as financial obligations which are recoverable by state authority are created it is necessary that the Act should provide for an Arbitration Tribunal to which persons who consider that they have a grievance should have the right to appeal. Recoveries of money will normally be made in a suitable number of instalments as indicated above. The convenience of holders would, however, be promoted by making the initial instalments as low as possible and working up gradually to the full normal instalment which would be recoverable for the major part of the allotted period. This would enable the holder to realize the advantages of the scheme before the obligations commence. In distributing the total cost of a scheme, the net benefit that is expected to accrue to each individual holder must be taken as basic principle of allocation. We agree that it is never possible to estimate accurately the extent either of total or of net benefit. But when all precautions are taken in making a workable estimate and distributing it by observation of special conditions obtaining in each case the ends of justice would be fully served. In the initial stages of putting into force the objects of a soil conservation scheme the state will be well advised in selecting a few model areas in which the need, the benefit and the appreciation of a scheme of collective bunding are most assured. The practical success of schemes undertaken in such areas will immensely strengthen the hands of reformers and of the administration. In the event of a temporary conflict among several schemes seeking priority of execution these criteria viz. need, benefit and local appreciation would enable the authorities to make the most satisfactory choice. The benefit which is expected to accrue either in respect of soil or of moisture being of a cumulative character it is of the utmost importance that bunds once constructed under a collective scheme should not be allowed to fall into disrepair. It should be the obligation of each holder to maintain his own bunds in proper condition and to contribute his apportioned share of labour and expense for the maintenance of bunds of a major character whose benefit he shares with others. Any default on the part of the cultivators in this respect should be corrected by state action and the expenses of repairs should be collected from the defaulter.

Water resources

278. **Utilisation of river water :** Only next to soil in importance is the problem of conservation of water resources of the State. With the exception of the Shahapur Taluka almost all the parts of the Sangli State fall in the tract of scanty and precarious rainfall. Except for lands lying on either bank of the great Krishna river, the State is almost without any riverine source of water supply. It has been suggested that for that portion of the Shirhatti Taluka which lies along the Tungabhadra river, a scheme of lifting water by mechanical power from the bed of the river may be introduced. About the engineering implications of such a scheme we are not in a position to express any definite opinion. Probably experience gathered in connection with the land attached to the Ugar Sugar Works may be of interest in this connection. The crucial question is with regard to the cost of water in relation to the additional value of the irrigated crop thus raised. We have not found it possible to get all the details for such an enquiry either in Shirhatti or elsewhere, but if a scheme which is found to be satisfactory in respect of these vital details is prepared we recommend that the state should grant financial assistance under the Agriculturists' Loans Act or any other suitable piece of legislation that we have recommended elsewhere in this report. It is probable that the technical and economic details having been found satisfactory a Co-operative organisation for securing such irrigational advantages might be found to be suitable. The Co-operative department should in such cases render all the help that it can by way of facilitating the formation of a suitable type of a Co-operative society. In this respect the services of an Agricultural Engineer and of the staff of the Board of Development, the appointment of both of which we recommend elsewhere would be found to be very valuable.

279. **Wells and conservation of sub-soil water :** By far the most widespread source of water supply in the State is of course the wells. The occurrence and the volume of well water are no doubt a function of the monsoon and of the contours and composition of land. This explains the highly speculative character of well-sinking in most of the Talukas and the heavy costs and poor returns that it entails. Nothing that the state can do will change the natural conditions under which economic life has to be organised. It is probable, however, that some of the suggestions for the constructions of Bandharas across water-ways in the vicinity of wells may, if adopted, help to improve the supply of water in wells. The

nature of such works, however, is essentially local in character. Except for the supply of technical assistance and perhaps of administrative permission for the construction involved very little can be done by the state itself towards promoting these works. We expect that when village associations are formed they will be in a better position firstly to assess the feasibility and importance of such works and secondly to distribute the cost of undertaking these among the beneficiaries concerned. It will also be for the associations to move the relevant state departments to grant suitable assistance. One of the forms that such assistance might take may be a loan under the Agriculturists' Loans Act given through the association. We recommend that in the administration of such loans, the state should be guided by the combined advice that it receives from its Agricultural Engineer and from the responsible office-bearers of the village associations.

280. Classification of minor irrigation works: The irrigation works which seem to be natural to the Sangli territory are those which are based on water reservoirs either in the shape of tanks naturally formed or of storages created by Bandharas or similar works. According to the size and nature of these works, it may be possible to divide them into classes. We have not been able to locate either an existing or a prospective scheme of irrigation in the Sangli State which can be classified as a really major class of irrigation work. But for the sake of convenience it may be possible in ascertaining the importance of a proposed work to classify the schemes, according to the area that they are expected to serve. Such classification, however, cannot be held to have any significance unless the influence of water supply on the character of cultivation is ascertained. The inclusion of large area and the promotion of whole time intensive cultivation are both necessary to justify a special responsibility for finance and execution on the part of the state.

281. For minor irrigational constructions comparatively less direct effort may be expected on the part of the state. In this class of works might fall a large number of local Bandharas, some of them of very light construction which have been suggested to us in many parts of the State. We suggest that when the village associations are formed they should frame concrete suggestions in consultation with the Agricultural Engineer and according to the scheme suggested above, the constructions should be facilitated by state help. We contemplate, however, that these works will be comparatively light in character and both their construction and main-

tenance will be more appropriately treated as a charge on the local resources of talent and money. The state can only help with technical advice and loans if necessary.

282. Productive irrigation works : As regards the three other classes of irrigational works which will be beyond the unaided efforts of any local association we have to suggest the following policy. The purpose of irrigation may either be productive or protective. Wherever for either one of these purposes a major irrigation project such as the Kuchi tank is under consideration, after suitable enquiry the feasibility of constructing it at state cost and by state agency, may have to be further explored. To the extent to which it is calculated to be a productive work, that is, it is expected that the recurring expenses including maintenance and interest on capital will be met out of the additional income to be expected from enhanced land and water rates, the proper method of finance would be to raise an earmarked loan. We take this opportunity to emphasise the necessity of adopting a definite loan policy for the state so far as productive investment in public utilities is concerned. This is a recognised method of financing public utilities and it should find a place in the future economic policy of the state.

283. Protective irrigation works : To the extent to which an irrigational work is expected to be not fully productive, it should be decided whether it has any protective purpose to discharge. If such a purpose is proved and is found to be physically and financially feasible, the state may allot the necessary funds out of its general revenues. Such expenditure may be spread over a number of years and if the Famine Relief Fund has a balance in excess of the minimum considered to be adequate, expenditure on protective works may, in part or whole, be charged to the Famine grant.

284. Intermediate works : For works which are of an intermediate character that is are calculated to benefit only a limited number of land-holders the state will be justified in placing the main responsibility of finance on the local body concerned and especially on those who are likely to benefit most directly by the construction of such works. All the same the service of the Agricultural Engineering department of the State should be available for assessing the merits of each scheme. These services should as a rule be rendered free of charge and every administrative assistance that the state can give by way of encouragement, loans

etc. should always be forthcoming. We have noticed that there is a frequent tendency on the part of the local population to emphasise only the immediate physical possibility of a work. The cost involved in relation to return and the possible conflict with other interests are naturally not so well appreciated. This is true not only with regard to the construction of new works but also to the maintenance and repairs of old tanks etc. For instance the general complaint of silting of tanks appears to be exaggerated. Either the configuration of the soil or the cost of desilting or the disposal of the silt is a factor which on further enquiry is found to be fatal to any scheme of desilting. We do not mean to suggest that this observation holds good in all cases. We only desire to emphasise the point that more expert enquiry and greater local initiative and responsibility are called for in this sphere.

285. Third class irrigation works: What may be described as the third class of irrigational works i. e. those which serve only a few individual fields, beyond technical advice and assistance under the Agricultural Loans Act, little further action would seem to be necessary. In cases where the need for such works is emphasised by the generally dry character of cultivation and wherever the merits of the scheme are approved some special encouragement such as a subsidy or exemption from enhanced land revenue demand for a limited number of years may be found to be a desirable method of developing irrigation.

286. Maintenance of minor irrigation works: The conservation and proper use of the irrigational resources of the State are of such vital importance that once a work has been constructed either by state or by local action its maintenance must be scrupulously attended to. The silted tanks, have at least this moral for us. We do not apprehend any special difficulty about the maintenance of the tanks constructed by the state itself as they would be under direct supervision of the Engineering department. But for the other classes of works the local bodies and the local officers will have to maintain a constant supervision. Once the responsibility for maintenance has been localised either in an authority or in an individual, its discharge must be rigorously enforced. We expect that the village associations will be equal to the task of ensuring this but if any parties are found to be guilty of neglect in this important respect, we recommend that after due notice the maintenance and repair should be carried out by the Agricultural Engineer's department and the cost should be recovered from the defaulters. We attach crucial importance to

the conservation and development of the soil and water resources of the State. Hence we have recommended that these objects should receive priority over almost every other item of expenditure out of funds allotted for development purposes.

Forests

287. **Commercial forests:** Sangli State cannot be said to be rich in forest resources. Only two Talukas have reserved forest areas—Shahapur and Shirhatti. Of these the Shirhatti forest is mainly a source of fuel and no special problem except that of departmental plans of afforestation arise with regard to them. The Shahapur forest is also mainly a grazing and fuel area. But its resources in timber, sandalwood, bamboo, bidi leaves and soft wood are noteworthy. We were informed that the Forest department has a regular plan of re-forestation and that no excessive depletion of the existing resources is feared. Every scheme of an industrial use of any of the forest resources in Shahapur will have to be judged with reference to many more technical and economic considerations than we can afford to enter into just now. We only recommend that after further departmental enquiry the prospective resources such as e.g. soft wood for matches should be brought to the notice of enterprising businessmen and a policy of encouragement and help as per recommendations made later on should be followed with regard to the establishment of the industries concerned. The development of forest resources can be realised only on a long term plan of departmental activity. Such sustained pursuit of a plan will be facilitated if the department has at its head a well-trained and energetic officer who can be made responsible for the results of his own policy.

288. It has been suggested to us that the Shahapur forests may serve as a good centre for bee-keeping and silk-worm rearing industries. We find that at Belgaum, experiments in both these fields are being undertaken at Government farm. The results of these experiments when published should be scrutinised with a view to ascertaining their likely bearing on the proposed schemes for establishing either of these industries in Shahapur.

289. **Tree-planting:** While only two Talukas have areas under forests the problem of tree-planting is of wider importance. The importance of trees with reference to rainfall and climate has latterly not received the careful attention that it deserves, in spite of the fact that the state has in many places, especially in Sangli, set a good ex-

ample in this respect. Even for more immediate purposes such as fruit bearing and fuel supply, a further increase in trees is to be desired in almost all areas. By organising collective action of villagers in village commons and wastes and by inducing the individual farmer to favour tree-planting more than he has done in the past, a change in the outlook of the people must be brought about. Tree-planting should be encouraged as an important feature of rural development programmes; and wherever administrative action in the Revenue or other departments seems unjustifiably to discourage tree-planting suitable alterations in state policy should be immediately brought about. Planting of trees in private lands adjoining public roads and the rearing of sandalwood trees by private persons are matters which deserve reconsideration along these lines. The state itself can do a good deal by way of encouraging local officers to undertake programmes of tree-planting in unoccupied lands directly under state control. This will serve as a good example to the non-official public who may be further encouraged by the Forest and the Agricultural departments by way of supply of proper plants and advice about their planting and care.

290. **Fuel-trees and grasses :** The direct and indirect influence of an adequate supply of fuel on the economy of agriculturists is so great that we feel that no opportunity of raising even the more modest shrub trees should be ignored in any plan of tree-planting. Areas which cannot bear the larger trees may yet be suitable for some of the varieties of minor plants. After further expert enquiry suitable plants for various areas should be selected and their use should be popularised through state and local action. No doubt the present experience of the various Talukas will be of great assistance in choosing appropriate plants. Only next to shrubs in importance as fuel but having more direct importance for the supply of fodder is the question of grass lands. No doubt the existing practices in this respect are such as have been traditionally found to be suitable to the areas concerned. As we have stated in an earlier para we need only emphasise the necessity of including grass-raising in the scheme of full utilisation of the area now classed as uncultivated or uncultivable. This is a matter in which it would not be proper to dogmatise. For each area local experience and the advice of Forest and Agricultural departments must decide what is necessary and feasible.

291. **Scheme of forest development :** The practical success of a policy of encouraging the plantation of trees, shrubs and grasses in all suitable areas either belonging to the state or under the occupa-

tion of private individuals and bodies will be greatly helped if a workable scheme is prepared along following lines. The Revenue, Agricultural and Forest departments should combine firstly to survey the possibilities in regard to plantation and secondly to prepare schemes for carrying out year after year parts of such schemes. In indicating the prospects of particular plants the advice of the Forest and Agricultural departments would naturally prevail. Acting on such advice and taking into account local facilities such as the supply of water, the Mamlatdar of each Taluka should, in co-operation with the Taluka and Village associations prepare, detailed plans of action. These should be put into operation as local co-operation becomes available though the authorities need not wait for local co-operation in carrying out those parts of the plan for which voluntary co-operation is not essential. In any case the supply of suitable plants and of technical assistance should always be available to all those who are ready to take advantage of these facilities.

Minerals

292. **Minerals** : As the Sangli State is mostly spread over the Deccan black soil tract, it has few mineral resources. Only in Shirhatti and Shahapur traces of certain mineral deposits have been brought to our notice. In the present state of information about these, it is not possible to make any definite recommendation about their development. The Manganese and Mica deposits that occur in the eastern parts of Shirhatti Taluka have not yet attracted the attention of any enterprising prospector. It may be worthwhile to advertise the existence of these resources and to grant prospecting licenses on suitable terms. The incidence of raw materials for glass mostly quartz and felspar which has been noticed in Shahapur as well as Shirhatti has by itself not yet proved enough of a basic advantage to justify the establishment of a glass-works in these areas. If other advantages that we are later on recommending for prospective industrialists prove sufficient attraction to an enterprising businessman interested in glass, further utilisation of these resources may be possible. In the meanwhile the Development department of the state should take steps to have expert advice on the industrial merits of the raw materials for a glass industry that are said to abound in these Talukas. In Shahapur and to a lesser extent in Mangalwedha some clay deposits were brought to our notice. Persons who are interested in their commercial development should receive sympathetic consideration under the general policy of encouragement and state aid to industries that we later on recommend.

Economic activity

Agriculture

293. **Agricultural holdings** : Agriculture which is the main industry of the people of Sangli depends for its profitableness on the size of the holding. While no hard and fast rule can be devised to determine the exact size of an optimum or most profitable holding, it is clearly desirable that the prevailing average for an area should not too markedly differ from the optimum. While we have not heard of any specific complaints on the score of subdivision of holdings and fragmentation of lands we have noticed a tendency towards very obvious fragmentation in Shahapur Taluka. As no figures are available from which the average size either of owned or cultivated holding can be accurately worked out we cannot go into a further discussion of this important feature of agricultural organisation. The village records are in this respect very defective and compare unfavourably with similar records in British India. We, therefore, recommend that at the earliest possible date a full register of tenancy rights should be introduced and classified abstracts of information on the subject of average owned holdings should be published quinquennially.

294. **Soil and moisture** : It is obvious that no steady or improving cultivation is possible if the actual soil in the field is liable to be washed off. Such erosion is by no means rare in many parts of the State. While individual farmers do take such precautions as they find feasible, their limited resources and often their dependence in this respect on other farmers in the same area leads them to neglect the necessary action. For this reason we have recommended earlier the preparation and adoption of soil conservation schemes. If these are carried out a preliminary condition of improved farming would be satisfied.

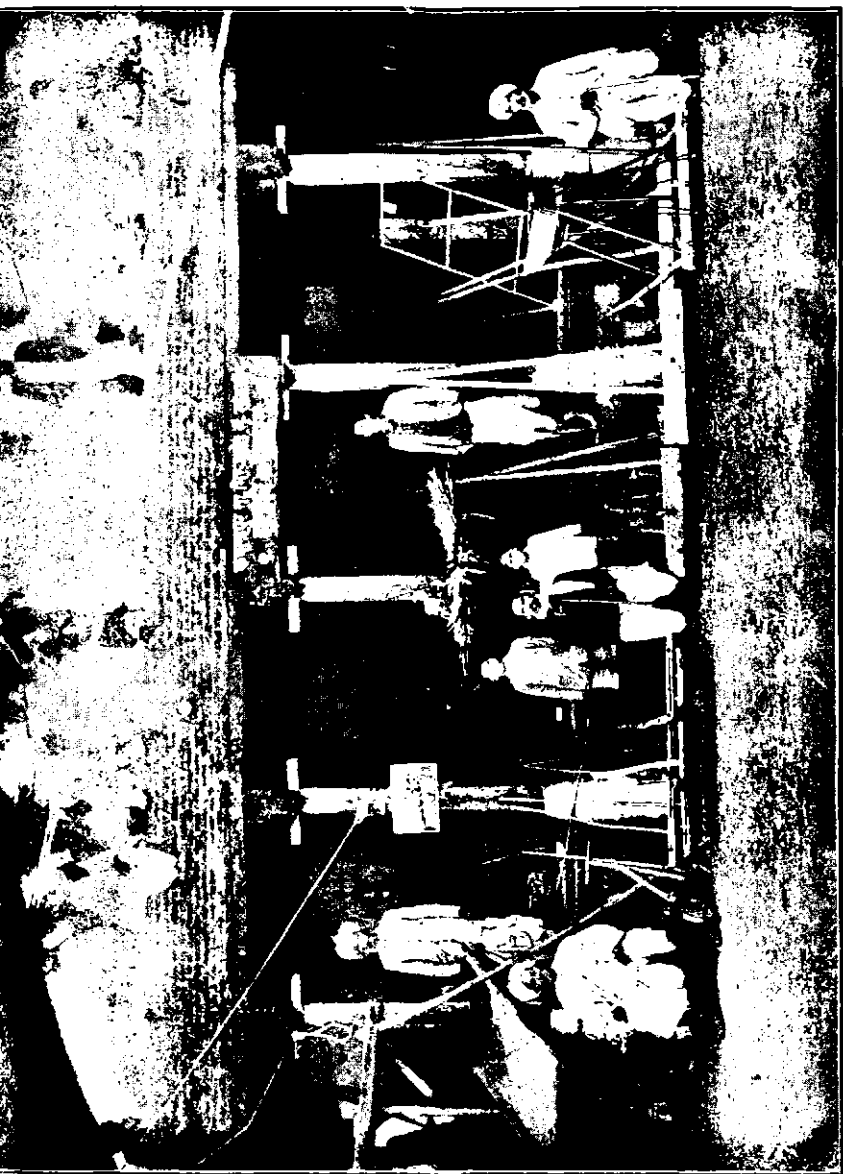
295. Almost equally important as a beneficent influence on improved farming is conservation of moisture. As is well-known most of the Sangli territory falls into a zone of precarious rainfall. Hence the conservation of moisture assumes vital importance. Schemes of bunding earlier recommended are designed to create favourable condition in this respect. No schemes of dry farming can hope to succeed which do not provide for maximum conservation and use of moisture resulting from scanty rainfall. Both for soil and moisture, therefore, we record our conclusion that the

conservation of these two should figure as the first item in the plan of improved tillage to be adopted in unirrigated tracts.

296. Implements and machinery: The Royal Commission on Indian Agriculture has found that the implements in use among agriculturists are mostly such as are best suited to their needs and we found this remark well illustrated by our observations in the Sangli State. We were specially impressed by the ingenious though simple modifications introduced by the Digraj farmers in several implements which are in normal use. As the knowledge of better farming methods spreads the need for using such improved implements will also be felt more acutely. We see, however, no difficulty in the cultivators securing or preparing for themselves suitably improved implements. In some cases especially where commercial crops are being raised in irrigated tracts some use of power machinery such as cane crusher, iron ploughs etc. will be found to be appropriate. Wherever possible the use of such costly machinery should be organized on a co-operative basis and should receive state assistance under the usual rules. It should be one of the functions of the Agricultural staff to advise cultivators on the use of improved implements.

297. Digraj methods—dry farming: At this point we consider it proper to express our sense of appreciation for the very laudable attempts made by the Digraj Shetki Sabha for the betterment of the practice of dry farming. Under the inspiring leadership of the late Mr. Bhau Siddappa Pharate, a band of enthusiastic and enterprising farmers has been formed in that village. While most of their activity consists in adapting for local use the results of dry farming experiments carried on elsewhere, these workers have shown a remarkable ingenuity and persistence in following some characteristic methods of their own. Thus they have a vogue all their own in the matter of wide-sowing, selection of special seeds, frequency of harrowing and interculture etc. While individual features of a plan of improved agriculture may prove of doubtful ulterior value and while these may vary from area to area the spirit of self-reliance and progress shown by the Digraj Shetki Sabha deserves to be emulated by farmers in other parts of the State. We are glad to notice that prejudice against the use of new methods which are found to be profitable is appreciably on the decrease and no small amount of credit for this encouraging state of things should go to the successful efforts of the Digraj Sabha.

298. Trial farms: The problems of cultivation in Sangli do not differ in character from those in surrounding districts in British



Improved implements of Digraj. Sitting to the extreme left in chair is late Mr. Bhauro Siddappa Pharate.

India. It would, therefore, be sheer duplication of effort for the state to maintain any large sized experimental farms. We do not think that the state finances would stand the expenditure involved in this policy even if it were proved to be necessary to incur the same. We therefore suggest that the state authorities should be in regular touch with the work of research and experimental stations in British India. Once the feasibility of a new process is proved in similar tracts of British India the state should try out the process for its own satisfaction on its Trial farms. Such a practice would not only strengthen the confidence of the departmental staff in their propaganda activities but the nearer proof of the success of the new method might be available for many doubters to see. The trial on the farm will have to take into account not only the technical side of the experiment, but it must extend to the relation between the total costs of the new methods and the net yield arising out of the proposed change in the method of cultivation. Incidentally the maintenance of cost data on Trial farms will supply good material for further economic investigation and may guide the more intelligent among the farmers themselves in maintaining similar though perhaps simpler accounts for their operations. The state now possesses an Agricultural farm in Sangli (Tatya Saheb's Mala). This farm should be used for trying out under local conditions the various improvements in tillage that the Agricultural department of the state would desire to popularise. Considering the far-flung nature of Sangli State territory it will not do as a permanent arrangement to rely on only one farm for these purposes. We, therefore, recommend that in due course another Trial farm should be established in a suitable part of the State. This would help in realising better the purposes for which a Trial farm exists, firstly verification of results under local conditions and secondly popularisation by nearer experience.

299. **Demonstration plots :** We do not feel that even the activities of the Trial farms will suffice to overcome the prejudice commonly felt by farmers against all innovations in their technique of cultivation. A few enlightened farmers may be found who might go out of their way to seek new light, but for the majority of rural population the profitableness of the new methods has to be proved by almost first-hand experience. We, therefore, suggest that the activities of the Agricultural department in each Taluka should be concentrated on demonstrating in the cultivators' own plots both the physical and economic success of the proposed improvements in cultivation. The Agricultural department and the

total supply of bones is thus collected in a central place in each village, further use either locally or through central bone collecting and crushing agencies should be left to be organised by the Taluka Association in consultation with the Agricultural Inspector. As is well-known there is no systematic effort yet made to deal with the problem of the disposal of night-soil either from the standpoint of public health or from that of economic utilisation. We are conscious that this is a very much bigger problem than we can hope to solve in our present context. We recommend, however, that by popularising the use of trench latrines the twin purpose of the proper disposal of night-soil should be realised. Any expenditure either of effort or money that is incurred in bringing about an appreciable reform in this direction would be more than repaid by the augmentation of rural wealth and welfare.

304. **Crops :** As we have pointed out we do not recommend that the Agricultural department of the state should as a rule experiment either with any new crop or with any new process. They should be guided in their policy in this respect by the results arrived at by research stations and experimental farms in British India and the bigger States. The spread of information about these results will usually suffice to indicate to the cultivators any desirable change in the crops that they might be accustomed to. If the Agricultural department is itself convinced that either a new crop or a new variety is better suited to a locality by carrying out an experimental cultivation on its own Trial farm, it might go on to demonstrating its success on the plot of the cultivator himself.

305. **Crop policy :** As regards crop policy we are chiefly concerned about the problem of change over, that is, the problem of changing from time to time the crop grown to suit the conditions, either of the season or of the market. As far as the influence of changing seasons is concerned, changes in practice will have to be guided by the process of trial and error and beyond advising as to the characteristics of several crops we do not think that the Agricultural department can shoulder any more positive responsibility for a change in the crops. As for changes in the prices of the several alternative crops that a cultivator may possibly raise in his plot the situation is equally uncertain. We agree that to the extent to which the cultivator grows for the market, a further spread of price-mindedness and a wider diffusion of marketing intelligence and marketing facilities will help easier adjustment of the crop to the price. The problem, however, of administratively regulating

the acreage under different crops is an essentially All-India matter. It is only the Government of India which can conceivably regulate all the forces that ultimately count towards profitableness of the agricultural industry. While the State authorities and popular bodies like the village associations should be ready to co-operate in any All-India schemes of agricultural planning, we do not think that isolated action by the State authorities themselves in directing a change from one crop to another would be beneficial to the cultivator.

306. Garden crops: In the parts that are well served by irrigational facilities the raising of profitable fruit and vegetable gardens is normally indicated. We notice that the growing concentration of population in cities, the improvement in communications and the growing popularity of the use of vegetable and fruit have made horticulture more attractive than it was some time before. The efforts of the Agricultural department and village associations may be profitably directed in investigating further possibilities of progress along these lines. Departmental advice regarding the choice, supply and care of plants and Co-operative agency for the disposal of the product may facilitate further horticultural progress.

307. Crop diseases and pests: Not only fruit and vegetable but the other crops raised in dry and irrigated lands occasionally suffer from diseases and pests. Considerable work has been carried out in British India by way of studying the nature of and the cure for many of these crop diseases. This information is now available to the more intelligent among the farmers in all the Talukas, though it is not always easy to acquire the cures. We recommend that a systematic attempt should be made by the Agricultural department through its fieldmen to carry to all the villages, latest information about the pests and diseases that are prevalent in each area. The village associations and other Co-operative bodies should then be encouraged to distribute and popularise suitable remedies, in the supply of which the state should play the same helpful role which we have recommended for it in regard to seeds.

Rural finance

308. Agricultural finance: The agriculturist has a frequent need to borrow. So long as borrowing for consumption is within his reasonable capacity to repay and so long as borrowing for a productive purpose is wisely correlated to the actual increase in the

profitableness of his occupation such borrowing need not be considered as anything but a normal incident of the agriculturist's career as a householder and a businessman. We do not desire in this place to make any observations as regards the needs of the agriculturists in the matter of consumption loans. These are dependent on the general state of the agriculturist's finances which latter depend on the productiveness of his industry. The main problem therefore, of agricultural credit is to secure an adequate and cheap supply of funds for the agriculturists as a normal business proposition.

309. Classification of agricultural credit : The needs of the agriculturist for productive credit fall into three more or less well-defined classes. For the current expenses of cultivation, such as purchase of seed and manure, the payment of wages etc., the agriculturist needs a short-term accommodation. Funds borrowed for this purpose are really a charge on the year's crop out of the proceeds of which the cultivator normally hopes to repay the loan with reasonable interest. If the cultivator has a bad run of unfavourable seasons due either to natural or economic factors, even short-term credit by falling into arrears may drag into medium-term. But as a rule such purposes as the purchase of cattle, reclamation and bunding of lands, digging of wells, form the objects for which medium-term loans, that is, those which are expected to extend for repayment over a period of from 5 to 7 years have to be borrowed. Such investment especially in a tract of precarious rainfall is not without considerable uncertainty and hence without proper security no investing agency would think it proper to lend money to the cultivator for such protracted periods. Major improvements in the technique of cultivation such as large-scale bunding, costly additions to irrigational facilities etc. and the repayment of long-term obligations entail the need not only for heavy but prolonged financial accommodation. Only loans borrowed for a fairly long period for about 10 years can meet this heavy need. A very cautious policy based on first-hand knowledge of the debtor's position and an adequate real security are indicated for providing such accommodation. In assessing the present position with regard to rural credit these differing needs of the agriculturist have to be separately judged and suitably provided for.

310. Co-operation and the village Sowcar : The dominance of the money-lender in the sphere of rural finance is even more pronounced in the Sangli State than it is in the surrounding districts of British India. This, of course, is due in large measure to

the comparatively late beginnings of the Co-operative movement in the State where it is still mostly confined to a few Talukas. But even if Co-operative credit were to make considerable progress in the coming years, the agriculturist would in a large measure have to depend on his old friend the Sowcar. We notice this fact with no desire to deplore the situation as we consider it to be natural in the circumstances. We must, however, make our recommendations separately for the Co-operative societies and the indigenous money-lenders.

311. Co-operative credit : Recent experience in British India has emphasised the need for greater care in administering the affairs and in regulating the investments of Co-operative institutions. So far as administration is a matter of choosing proper personnel for membership and direction, we need do no more than to urge that quality in Co-operative progress should be attended to at least as much as quantity. The past record of the Co-operative movement in Sangli is encouraging in this respect and we hope that while attending to the further development that many of our recommendations would entail the department and the leaders of the Co-operative movement will not slacken in their insistence on proper quality in membership and administration.

312. Investment policy : More important, however, is the subject of investment policy. The village Co-operatives are composed of members whose average financial standing is not very high. As a rule these societies operate in areas of dry farming which in the Deccan tract means precarious cultivation. Though technically members are also proprietors, being share-holders, a large part of the working capital has to be borrowed from central financing agencies which collect deposits from the urban population. Even where cultivation has the advantage of comparatively assured water supply the vagaries of the market cannot be obviated. For these special reasons the village Co-operatives must for the sake of safety confine their activities mostly to short-term loans. Though technically the unlimited liability of members is the final security of the loans made by the Co-operative societies, in practice the year's crop must alone be counted on to facilitate the repayment of the loan. This circumstance indicates firstly that loans made to the agriculturist should in size bear some proportion to the crop that he normally expects to raise ; secondly that the productive use of the loan should be carefully scrutinised by the society, any diversion for consumption purposes being strictly regulated and thirdly that the marketing of the crop should be assisted or carried

out by the society itself. Such a limitation and extension of the activities of a credit society has now received the sanction of Co-operative law and practice in British India; and we recommend a systematic adoption of the underlying policy for the Co-operative organisation in the Sangli State.

313. Medium-term credit policy : As we have observed with the best of caution exercised by the Co-operative societies, it might occasionally have to provide for arrears on account of unforeseen circumstances. Thus short-term credit may unavoidably develop into medium-term credit. Apart, however, from such exceptional cases, it is a legitimate part of the activities of a Co-operative credit society to extend accommodation for the usual purposes of medium-term investment noted above. Two precautions, however, must be scrupulously taken, if the affairs of the society are not to get hopelessly involved. The extent of medium-term business as compared to the main short-term business should be carefully restricted and it should bear some definite relation to the period for which central financing agencies are ready to offer advances for fixed long periods to their member societies. Secondly in choosing eligible borrowers for such investment only such parties as have a sound standing and are known for the careful management of their business should be chosen. Unless such care is exercised in the choice of borrowers and further supervision is provided for, the use of the loan for medium-credit may well prove a source of trouble for the Co-operative society.

314. Long-term credit supply : As a rule the village Co-operative societies cannot be expected to serve the need felt by some agriculturists for long-term credit. Neither the administrative nor the financial resources of the ordinary Co-operative credit society are equal to the task of attending to this more responsible type of investment. We note that following the practice in British districts a Land Mortgage Bank has been started in the Sangli State. We are, moreover, not surprised to learn that its success is no more striking than that witnessed in British India. We feel that while in selected areas the formation of Co-operative associations for long-term credit need not be ruled out, as a general practice long-term credit should be considered as a branch of the legitimate business of the Central financing agencies. We are glad to learn that the Sangli Central Co-operative Bank is doing extensive business on sound lines. If in future its investment policy is revised so as to provide in suitable proportions for medium-term loans to member societies and long-term loans to selected debtors who are either

members of the Central Bank itself or of any other affiliated Co-operative body, it might be expected to play a more prominent part in the financial structure of the state. We contemplate for the Central Co-operative Bank the same position of leadership in respect of agricultural credit that the Sangli State Bank naturally occupies in the matter of commercial credit. The general association of the state with the working of co-operative institutions is a sufficient guarantee for the success of their well-devised and adequately supervised extensions of business.

315. Long term credit policy : To enable the Central Co-operative Bank to carry out long-term and land mortgage business some further steps will have to be taken towards its reorganisation. No doubt its capital will have to be increased, though the extent of such increase will necessarily depend on the size of long-term business that the bank is able to attract. As the establishment of Co-operative societies in all the Talukas of the State takes effect such business of the Central Bank is likely to grow. Whatever the size of land mortgage business may be, certain precautions will have to be taken in the interest of the financial safety of the bank. Correct valuation of the mortgage property and ensuring the productive use of the loan are two vital conditions which cannot be violated without serious danger. Impartial and expert valuation can be supplied by the officers of the Revenue department in each area and we recommend that this service should be placed at the disposal of the bank by the Revenue authorities. After allowing for a safe margin for lack of liquidity and vagaries of prices and seasons the loan may be sanctioned by the bank. This sanction should always be subject to approval by the Co-operative department.

316. Regulation of credit organisation : Howsoever the Co-operative societies may try to meet the credit needs of the agriculturist a very large portion will remain to be attended to by Sowcars. In view of the fact that the supply of credit generally and the provision of credit to the principal industry of the country in particular are vital economic functions it is now the recognised practice of all governments to systematise and regulate the credit business. The unequal bargaining position as between the creditor and debtor only makes the need more emphatic. But even if the treatment meted out to the clients by the money-lenders was without a blemish in all cases, as the supply of credit is vitally connected with the profitableness of industry and with the currency and price equilibrium, regulation of money-lending as that of Co-operative

societies and banks has become desirable. It is on this principle that regulation of money-lending is now attempted in all economically advanced communities and in suggesting that the same principle should be followed in the Sangli State we imply no judgment on the way in which the business is now conducted.

317. Money-lenders' Act : As a part and parcel of a more systematic and profitable organisation of the economic resources of the State we recommend a scheme of registration of money-lenders. It is unnecessary to go into the details of a particular Money-lenders' Act, though we can suggest that as a model the Bombay Money-lenders Bill may be adopted as a preliminary draft. The principles which we would desire to be incorporated in the Sangli Regulation of Credit Act would be as follows: Every person who habitually earns a part or whole of his living by carrying on money-lending as a business should be required to register himself as a money-lender. After an initial period of warning award of decrees by the courts for debts due to money-lenders should be conditional on the money-lender concerned being a registered money-lender. Penalty for non-registration before decree is granted, non-admissibility as evidence of the account books of unregistered money-lenders and putting non-registration on the list of crimes are further stages of tightening the regulation of this business. We do not by any means suggest that it is either possible or desirable to put non-registration on the list of criminal offences in the near future. But by all means within the power of courts of civil justice an almost universal registration of professional money-lenders should be immediately secured.

318. Debtors' protection Act : If and when the stage is reached at which carrying on money-lending business without registration is declared an offence under the criminal law, it would be easy to protect a debtor from physical harassment and coercion at the hands of his creditor. We need only include in the conditions of registration a clause to the effect that the registered money-lender shall refrain from doing anything which will cause mental harassment or physical coercion to the debtor and that violation of any of the conditions of registration would constitute an offence. But so long as credit regulation has not reached this developed state gross cases of harassment and coercion of debtors must be prevented by passing a special Debtors' Protection Act on the lines of the Act in the Central Provinces which will apply to the registered and unregistered money-lenders as well.

319. **Registration of money-lenders:** Registration certificates should be issued for a fee which should not be deterrent and which should bear some proportion to the total business transacted during a year. Returns made for the purpose of assessing the registration and renewal fee should be considered as confidential in the same manner as Income-tax returns. As the first condition of registration, money-lenders should be required to maintain their books, showing deposits as well as advances, in prescribed standard forms. Secondly, there should be an obligation on them to give to their clients, depositors as well as debtors, periodical statements of their accounts. If the statement which the registered money-lenders will have to submit each year to the Registrar of credit institutions is simplified so as to convey to the state authorities the progress of banking business in the State, valuable information which might suitably guide the economic development of the State would be available.

320. **Regulation of interest rates:** The most vexed question with regard to regulation of credit transactions is about the rate of interest. Our considered view on this subject is that while regulation is needed to prevent extortionate dealings the variety of conditions under which loans are made must be taken into account in laying down a schedule of legal maxima of interest rates. We are constrained to observe that legislation on this subject undertaken in British India is far from satisfactory either in its conception or in the results. This comparative failure of the attempt effectively to regulate the prevailing rates of interest has been due to a lack of appreciation of the differing nature of credit transactions. Thus it is obvious that the period for which a loan is made, the security which is offered for the same, the purpose for which it is intended to be used and the size of the amount loaned are vital points which should affect our judgment about a proper rate of interest. The prevailing conditions of money-lending as a business such as the demand for loans in relation to the supply of credit and the uncertainties of the trade, will also have to be taken into account before legal maxima are fixed. This is not the place where the details of an appropriate schedule for the Sangli State can be offered. But obviously regulation of the rate of interest, if it is intended to be fair and effective, will have to follow the lines indicated herein. We recognise that the problem of regulation of credit is by no means confined to agriculture and that urban credit institutions, large and small, will also have to be brought within the same system of regulated credit. At appropriate places later

in the report we would make our further recommendations in the matter.

321. Conciliation and redemption of debts : We cannot leave the subject of agricultural credit without making a reference to the policy of providing for conciliation and redemption of debts. Rural indebtedness is a problem by itself and we have received no special evidence from agriculturists in Sangli on this score. If and when the situation is considered to be ripe for introducing special legislation on this subject a separate enquiry will have to be ordered and experience of the many laws recently passed in British India for the relief of rural indebtedness will have to be drawn upon. We feel, however, that the basic cause of the almost insoluble problem of rural indebtedness is the poor productivity of the agriculturists' business. The various recommendations that we have made in this respect with regard to agriculture will, if adopted help in making the agriculturists a solvent borrower which is in itself a great contribution towards solving the problem of indebtedness.

Marketing

322. Agricultural marketing : Adequate marketing facilities occupy a very important place in the business organisation of agriculture. To get a good market is almost as important as to get a good crop. The facilities for marketing now available to the agriculturists are mostly those which were suitable to a stage when sales of agricultural produce were more the exception than the rule. The growing importance of commercial crops is bringing out this defective character of the marketing system. We have now to look at the whole structure of markets from the stand point of the agricultural producer on the one hand and the final consumer, industrial or domestic, on the other. The markets, generally and their members individually, will be justifying their existence in so far as they help the producer to get a fair return and bring within reach of the consumer adequate supplies at reasonable prices.

323. Marketing methods: The present methods of marketing prevalent in Sangli State conform to the general type in India. The small size of the individual transaction, the ungraded nature of the produce, the comparative lack of information about the most profitable markets, difficulties of transport and of reliable representation in the bigger marketing centres are some of the well-known difficulties, which are also noticed in Sangli. It must be admitted that in Sangli and to some extent in smaller towns in the State

marketing services are now rendered in a manner which will not compare unfavourably with what was known in British India till recently. If, however, the resources of the agricultural producer are to earn for him the highest possible return a more systematic and improved pattern of marketing would have to be developed.

324. Co-operative marketing: Co-operative marketing is a field in which progress to be real and lasting must be made by slow but sure steps. We visualise an ultimate development in which Co-operation will play a large part in the marketing of agricultural produce in the State. It is, however, a common experience that Co-operative marketing is an advanced type of organisation and unless the members have learnt not only the benefits of joint action but also of loyalty to the common organisation, Co-operative shops tend to prove a dismal failure. We have recommended in many places in this report an all-sided development of Co-operative bodies which we hope will pave the way for a successful organisation of Co-operative marketing. For the present, however, we recommend a further extension on systematic lines of the activities of the Co-operative Sale Shop at Sangli. We suggest that as an experimental measure this shop should start a branch at Kavathe where produce will be received from the agriculturists in the same manner as is done in the Sangli Co-operative Shop. The produce will be received in a graded form. This will induce the producer not only to bring his goods to the market graded according to quality but will also encourage him in due course to take a particular interest in raising produce of as high a grade as possible. At this stage the assistance of the Agricultural department should be available to enable the producer to grade his goods properly. Once the goods are graded, bulking and forwarding should not offer insoluble difficulties to the shop branches. Sales should be executed either according to the judgment of the Manager of the Central Shop at Sangli or on advice received from the producer after information regarding the markets has been supplied to him. We have no reason to doubt that such an experiment particularly if it is confined in the first instance to a few leading commodities, such as groundnut, will prove a success. The field of action may then be extended so as to cover other areas and other commodities. Working in close co-operation with the Co-operative bodies existing in each Taluka this shop with its branches may, in due course, develop into a federation of Co-operative sale societies.

325. Other marketing channels: Neither in the immediate nor in the distant future do we expect that the normal channels of

marketing would lose all their importance. Besides the direct service that it renders Co-operative marketing has mostly an educative role to play and to realise the best interests of the agriculturists and businessmen in the State an all-round improvement in marketing organisation and practice is necessary. In this regard we have some particular suggestions to make which should receive a very early consideration at the hands of the authorities and public bodies concerned. It was represented to us that the local authority in Sangli administers its Terminal tax in a manner which in many cases amounts to taxing the same article twice. This, of course, if true is against the principle and the intention of a terminal tax. While we cannot, in this place, go into an elaborate examination of the pros and cons of the contention on either side, we think it necessary in the interest as much of the market as of the Sangli Municipality to state that all traces of such double taxation should be immediately removed from the rules and practice governing the Sangli terminal tax.

326. Ware-housing: Closely connected with this complaint about the terminal tax is the provision of adequate ware-housing facilities within the municipal limits in Sangli. While the development of the market is in the first instance a concern of the merchants themselves, the civic body and the state authorities ought not to cease taking a positive and a constructive interest in this sphere. Already the state has done a good deal by way of establishing and developing a bank, providing reserved sites for marketing purposes and by instituting a Marketing Board to increase both the serviceableness and the prestige of the Sangli market. But the large scale transactions that are now involved and that are even more likely to be involved in future in respect of marketing of agricultural produce entail the use of extensive ware-housing facilities at collecting centres. We recommend that an enquiry should be carried out to assess the adequacy or otherwise of the present ware-housing facilities available in Sangli not only for the chief staples now traded in on what is called the Sangli market, but also for such commodities as grain in which we understand a very extensive business is even now done. If as a result of this enquiry the need of improving ware-housing facilities is proved the municipality may well undertake a scheme of construction of ware-houses along with improving the amenities of and approaches to the marketing area. In this sphere the co-operation of the mercantile community as well as of the state may be sought.

327. Mofussil markets: Outside Sangli, organisation of markets is naturally undeveloped. It is only after considerable further

progress has been made in respect of agricultural production that a more systematic organisation of markets can be thought of as opportune. In one place, Terdal, we understand that already a considerable business in agricultural produce is being done. There is reason to believe that if the dealers are organised under the same plan as in Sangli, it would be an advantage both to the dealers and to the producers. An organised market may be expected to attract even further business and prices may tend to have a more direct correlation with movements in bigger centres than they now have. The list of commodities that are now traded in at Terdal is as variegated as in any other similar market. The exports of ghee, however, are a special feature of Terdal. While it is wellnigh impossible, even if it were proved to be desirable, to restrict the sale of adulterated butter and ghee by drastic action it would certainly be an advantage to secure proper protection for the pure product. We suggest that the Terdal market, if and when it is organised, should institute a special mark of quality for the pure ghee. In Maharashtra the dairy products of villages that lie along the Krishna have a special goodwill and every attempt should be made to make the best of this asset. Similar action on the part of corresponding bodies in Sangli will strengthen the position of the suppliers of pure ghee from the Sangli State.

328. Weights and Measures: A uniform system of weights and measures is an undoubted facility especially in a scheme of organised marketing in which we expect the producer himself to play an important role. While the Sangli State legislature has already adopted a Weights and Measures Bill, similar to the law on the subject now prevalent in British India, the measure has not yet been put on the statute book. Judging from experience elsewhere we realise that there is always some initial prejudice especially among the traders against any regulation of weights and measures. Things, however, have moved too far in British India, with which Sangli State has intimate trade relations, for the markets in Sangli to lag behind. We, therefore, recommend that the Weights and Measures Act should be immediately put into action and proper provision should be made for ensuring early conformity with the same. In another part of our report we have recommended the appointment of an officer, part of whose duties would consist of supervising the operation of such an Act.

329. Development of new markets: The geographical location of the villages in the Sangli State leads to special relationships between them and the wider economic regions into which the

country as a whole tends to be divided. Thus several places in Sangli State attract business from outside and in turn some places in territory under other jurisdictions attract business from places in Sangli. As we view the matter, it is in the best interests of all the jurisdictions concerned that business should flow in channels that are the most natural, that is to say, are such as yield to the producer and to the consumer the maximum possible advantage. It should be the object of administrative policy to provide facilities so that this essential purpose is most economically served. A survey of existing and prospective business areas should take note of the facilities needed, the cost of providing them and the volume of total business over which the cost of development has to be distributed. Business, like water, finds its own level and a very detailed study of the physical and the economic features involved is necessary before schemes of far-reaching modifications in existing trade channels are undertaken.

330. **Transport :** The far-flung and interspersed character of Sangli State territory makes its transport problem an especially difficult one. Assuming reasonable co-operation on the part of other jurisdictions we can outline the following policy for adoption by the Sangli State. Judged as an economic service, transport facility has to be correlated to the value and volume of the goods moved and the period during which they have to be moved for profitable sale. As regards agricultural produce its sale at a profitable price depends on access to the nearest competitive market. As agricultural produce is marketed in the dry season and is not of a highly perishable character the crucial transport service that the agriculturist needs to carry his goods to the market is the existence of a fair-weather track. It should be a first charge on the rural development budget of the State to provide fair weather tracks to all its villages. Such tracks should be constructed without waiting for any voluntary sacrifice on the part of the people concerned. At the other end, that is the approaches to the markets in the Sangli State, a similar policy of direct state action should be followed to provide for good access to these markets. Wherever it is expected that even during the monsoon, traffic will normally be carried, provision of culverts and dips should be considered to be a normal service to be financed and carried out by the state. Other features of transport development, such as link-roads or motorable roads, should be left over for consideration in the light of the financial position of the State and the actual benefit, conferred by these on particular classes. Once the agricultural producer is placed in easy touch with the market which ordinarily

is of interest to him other schemes of road development should be judged primarily as a part of Public works policy and not of rural development.

331. **Weekly markets and fairs:** The markets and fairs play an important part in securing sales for the produce of Sangli cultivators. In Kuchi, Miraj-Prant and Shirhatti well-known fairs which attract buyers and sellers of agricultural produce and stock have established a wide reputation. We desire that such occasions should be better advertised and more widely utilised than at present. The Talukas that are now without comparable occasions should institute their own fairs which should serve to bring together all the possibilities and achievements of economic development in their respective tracts. To give a uniform character and central encouragement to such fairs, we recommend the formation of a permanent Committee on fairs and exhibitions in the State. This Committee will have branches in all the Talukas. While individual fairs will be held under the auspices of local Committees, the Central Committee will be responsible for making a constant effort to improve the standards and usefulness of all the fairs held in the State. All the departments of the state concerned with economic development should be represented on the permanent Committee. It should be the duty of this Committee in consultation with the several Taluka Committees to organise a wide-spread programme of the exhibition and sale of produce of the Sangli State.

Animal husbandry

Agricultural livestock

332. **Cattle breeds:** Cattle which are an important constituent of rural economy, figure prominently at many of the fairs held in Sangli State. The Cattle Census figures which have been periodically published in the Administration reports leave much to be desired by way of accuracy. There is reason to believe that both in point of quality and quantity Sangli is well served in respect of cattle. Almost all the Talukas have their characteristic breeds of bullocks and cows. These along with buffaloes in respect of which latter, no special breeds seem to have been developed, render valuable support to the agricultural population by way of supply of milk and draught cattle. What is now needed is a more systematic effort at commercially exploiting these natural avenues for the employment of the peoples'

industry. We recommend that in all the Talukas the State Kurans should be utilised for the maintenance of herds of cattle which are considered to be suitable in the area. These herds should be maintained separately from any other cattle that may be stationed in the Kurans. It should be the purpose of these herds, firstly to supply to the surrounding villages cattle, specially bulls, of the requisite variety and secondly to carry on experiments in naturalisation and cross-breeding. As in the matter of the State Agricultural farms, we do not expect that any ambitious experiments will be carried on in the State which will have to utilise to the full the results of research and experiments carried out elsewhere. But the cattle herds should serve as a depot of information and agency for the supply of good cattle.

333. Veterinary relief : Closely connected with the supply and maintenance of cattle is the problem of veterinary aid. We are glad to note that the State has already organised a Veterinary department though on account of the limitations inherent in the administration of a small and dispersed State like Sangli the department is not yet as developed as it needs to be. As, however, further progress either in the matter of supply of livestock or of the building up of animal husbandry as an important adjunct of rural economy depends on adequate veterinary advice and service we recommend, that an additional Veterinary Doctor should be appointed to take charge of Shirhatti, Shahapur and Terdal Talukas. It should be the duty of the Veterinary doctors to advise on not only the treatment of particular cases of disease brought to their notice but generally as to the manner in which diseases of animals including poultry and sheep may be prevented and treated. To help in the actual treatment of disease the doctor should be assisted by Dressers in each Taluka. An adequate supply of medicines and other appliances should be maintained so as to make the veterinary staff of maximum use to the rural population. Besides the treatment of disease, members of the Veterinary department should also be well informed on the subject of breeds of animals and should actively help in carrying out the cattle policy of the State. If with a view to maintain the purity of breeds some form of compulsory castration is introduced in particular areas, the Veterinary department should be responsible for carrying out the policy.

334. Fodder supply : As far as the normal needs of the cattle population are concerned the Sangli State is well endowed with fodder supply. This, indeed, is due to the existence of rich Kurans

in most of the Talukas and to the extensive character of the cultivation of food crops. In so far as the oil-seeds yield concentrates for the use of cattle the extension of area under cotton and groundnut and other oil-seeds has been instrumental in improving the situation with regard to cattle feeds. The special difficulties about fodder mainly arise in Talukas like Mangalwedha and Terdal which are susceptible to periodical failure of rains. While individual farmers occasionally store fodder so as to be available in a bad season there are hardly any collective efforts made to create fodder depots as a measure of famine policy. We suggest that the state in co-operation with the village associations should undertake in both these Talukas a regular policy of forming Fodder Depots along lines which have been followed in such British Indian districts as Ahmednagar which are similarly liable to famine.

335. **Dairy farming:** Those parts of the Sangli State which lie along the banks of the Krishna river have been reputed as sources of dairy products of high quality. Owing to the unorganised nature of this industry as at present carried on and owing to the evil of adulteration the progress of the dairy industry in spite of all its natural advantages seems to have been unsatisfactory. Adulteration of dairy products is a very wide-spread evil and nothing that a single administration can do will succeed in counteracting the same. There are, however, other constructive lines in which the state can do a good deal to encourage the progress of this important industry.

336. In the first place by maintaining nearabout Sangli a Dairy Farm, the state may help in selecting and popularising special breeds of cattle suitable for milking purposes. The Agricultural department should obtain information from centres in British India as to the likely milk breeds which may be introduced in Sangli. These should be maintained at the Dairy farms and when their success has been assured, propaganda in favour of their extensive maintenance should be carried out.

337. Attached to the Dairy farm there should be a Dairy department conducted specially for the purpose of verifying the commercial success of different methods of organising medium and large sized dairies endowed with modern features. Pioneering work in this field is bound to help considerably in improving the lot of the agriculturist by supplying him with a very natural subsidiary occupation. Even now many of the agriculturists eke out their scanty living by maintaining a few milk cattle. If the advice and example of the State Dairy help the agriculturists in improving the

methods of conducting this subsidiary occupation the standard of income and life will be appreciably raised.

338. **Co-operative butter and ghee sale shop:** While Co-operative organisation seems to be indicated for the disposal of the dairy products now supplied by large number of individuals, it will not be easy to start a Co-operative sale society in the immediate future. We recommend for immediate adoption the starting in Sangli of a sale shop like the Ganpati Sale Shop for the disposal of all kinds of pure dairy products. This shop should make it a point to deal in only pure goods and its mark should in course of time develop a good will for quality which may be of use even in distant markets such as Poona and Bombay. As we have recommended earlier, the trade in ghee at Terdal may also be organised on a similar basis.

339. **Poultry farming:** The peculiar conditions of climate prevalent in the Deccan villages have so far rendered precarious the lot of most of the poultry farms that tried to maintain superior breeds. Where so many well-endowed enterprisers have met with doubtful success, we would not recommend any ambitious plan of poultry extension for Sangli. For the present we would only suggest that the agriculturists as a class should be encouraged to maintain country types as an adjunct to their normal business. The country birds are naturalised to our conditions and carefully maintained they add a considerable source of income to the agriculturists' budget. Further assistance may be given to agriculturists maintaining poultry in the following ways. The Veterinary department's advice should be available in suggesting ways of preventing and curing the common diseases of the poultry; secondly the introduction of new and tried breeds may be facilitated by advice from the same source. On a small scale attached to the Dairy farm in Sangli some birds may be maintained so as to carry out experiments with new breeds though even here we would expect state authorities to rely mainly on results of experience elsewhere. Wherever the maintenance of poultry is likely to improve by being connected with a nearby market some assistance preferably through the Co-operative department may be given in finding out convenient marketing agencies for poultry products.

340. **Sheep breeding:** Sheep breeding is an important rural occupation in three of the Talukas — Kuchi, Mangalwedha and Shirhatti. Anything that improves the breeds of sheep or provides a more profitable market for their product is bound to react favour-

ably on the economy of these Talukas. We recommend that at Shirhatti a Trial farm should be maintained, so as to prove the merits of introducing new breeds and crosses. We do not expect this farm to be a large scale one nor do we desire any ambitious breeding research to be carried out at this place. But when a promising variety is intended to be newly introduced in the State, it should be first tried out for some time on the State farm so as to strengthen the propaganda in its favour. The Veterinary Officer should look after this part of the activities of the farm. His close association with sheep-breeding will make him a more useful adviser for the sheep-breeders as a whole. One of the Veterinary Officers should have special knowledge of the diseases of sheep. If one does not already possess such knowledge he should be deputed to a centre in British India for a short course of training.

341. Organisation and development of wool-trade: As the object in view is to strengthen the wool trade as a whole, it is desirable to popularise among the Dhangars a breed of sheep which is suited to the locality and is a good wool-bearer. The attempts of the Trial sheep farm should be aimed at ascertaining the most promising breeds suitable for such a purpose. Further steps to improve the fortunes of the wool-trade include the organisation of producers of woollen products either in Co-operative societies or otherwise so that a steady and profitable demand may be maintained for the local wool supply. We learn that the state has already taken some preliminary steps on its own responsibility to organise the production of woollen goods at Shirhatti for the Supply department of the Government of India. In its very nature this is a war time endeavour. We recommend, however, that the wool trade in Shirhatti should be organised on a more permanent basis so as to make that place an important wool centre supplying the normal needs of the market.

Rural handicrafts

342. Tanning and Rope-making : In the nature of things rural handicrafts have a very limited field of expansion. Whereas on the one hand various needs of the villager are found to be economically met by the produce of improved large scale industry, the ill-organised and the ill-developed village artisans are unable to take advantage of the growing markets in urban areas. Only in such places as have a natural advantage either in respect of raw material supplies or of an assured demand is any constructive reform feasible. We find that in the Sangli State the only rural industries which

may be helped so as to make them more remunerative are tanning and rope-making. Both these, however, have a limited market to cover. If they are kept informed about the prospects of their trade and if suitable technical advice is occasionally made available they may be in a better position to make the best of their limited opportunities. Improvements in technique and apparatus that have taken place in these trades are not readily appreciated by the village artisans. For this reason we recommend that every year two actual workers from each of these two trades should be deputed to centres of training in their respective crafts organised by the Industries department either of the Government of Bombay or of some other State administration such as Mysore. The amount of these scholarships should be enough to cover the normal expenses of travel, maintenance and training of the candidates. In selecting candidates for scholarships preference should be given to young and efficient workers who have already shown an inclination to remain in business. As a rule those who have put in less than five years of actual work or have shown signs of unsteadiness should not be chosen for deputation. It will be normally expected that after the period of training the trainees would return to their place and impart improved training to their fellow workers in the trade. In the normal working of the trade Co-operative credit societies where they exist should help the artisans by way of loans and sale and purchase facilities wherever possible.

343. At this point we would like to say a few words about the position of village artisans generally and that of the more skilled amongst them such as the carpenters and smiths in particular. A large number of things now in our daily use including vehicles, iron ploughs etc. require extensive facilities for local repair and adjustment. It should be possible if not for each village at least for every well marked group of villages to possess some craftsmen who have been trained in bigger centres and who have been supplied with the minimum of tools and equipment of their trade. In the training and equipment of such workers the Taluka associations and the state should co-operate as per plan which will have to be devised after further local enquiry.

Urban handicrafts

344. **Urban handicrafts :** In the brass and copperware industry of Sangli, the saree producing establishments at Rabkavi, Terdal and Sulebhavi, the silkweaving at Shahapur and the wool weaving in Mangalwedha and Shirhatti, Sangli State possesses prominent

remnants of a thriving period of urban handicrafts. In common with similar industries in other parts of India these occupations have passed through several vicissitudes but on the whole they have shown a very creditable and promising tenacity of existence and adaptability of technique and organisation. Besides these remnants of the past, new urban industries such as bidi-making, lace-making, hosiery, leather goods etc. are also coming into existence and they bid fair to play an important part in meeting the needs not only of the local population but also of the wider Indian markets. We feel assured that with suitable technical improvement and with a more efficient organisation these occupations have an important part to play in the economy of the State. It is impossible in this place either to survey the prospects of individual industries or to make detailed recommendations with regard to them. This work will naturally devolve on the organisation which we have recommended elsewhere as the permanent instrument of the State's industrial policy. We confine ourselves here to some recommendations about the important trade of textiles and a few other prominent occupations.

Textiles

345. Development of cotton handloom industry: By far the most important of the textile handicrafts is the handloom weaving of Terdal, Rabkavi and Sulebhavi. The present organisation of the industry of the weaver artisans conforms to the traditional pattern. A large number of operatives carry on the weaving mostly in their own households with raw material and/or financial assistance supplied by the middlemen. In many cases the technical processes are unprogressive and the scale of individual production is very small. Any reform of the handloom industry will, therefore, have to take account of these features of long standing. We recommend that an organised effort should be made to supply advice and information to all the handloom centres. We suggest that in co-operation with other interested bodies such as the Municipality and the Shankarling Trust at Rabkavi, the services of a whole-time Textile Expert should be engaged by the State. The headquarters of this officer should be at Rabkavi where a permanent demonstration of improved textile processes, designs and equipment should be maintained. The Expert should do regular touring of handloom centres and he should carry to the artisans not only the technical knowledge that he possesses but also other information of commercial importance. If the Textile Expert succeeds, in collaboration with the Department of Economic Development to be established

for the State as a whole, in maintaining an atmosphere of progressiveness and ready adaptation to changed conditions the handloom industry of the Sangli State may yet have a brighter future than many people imagine.

346. Finance and Marketing : The present methods of finance and marketing of the produce of handlooms are so deep-rooted in the needs of the artisans and the conditions of the trade that we think it inadvisable to try and change the main principle of organisation. It is, however, desirable that such of the artisans as have sufficient enlightenment and co-operative spirit should organise themselves into Co-operative Producers' Societies. Such societies have come into being in many centres in British India and there they are doing fairly profitable business. Even in Sangli State, at Terdal a Weavers' Society has latterly been formed though its genesis is to be found in the acute yarn famine that had developed some time ago rather than in a genuine appreciation of the benefits of Co-operative production. We recommend that this society should serve as a nucleus of a genuine weavers' society. The Co-operative and other departments of the State should give all legitimate assistance towards its working by way of credit, marketing facilities and technical advice. This experiment may be tried on a small-scale in other areas as well. Apart from the benefit obtained by the individual members such societies have an educative effect on the whole body of artisans and we feel that the prospect of organising weavers' societies should not be neglected because of the limited field that they are likely to cover.

347. Guild organisation of silk industry : The silk sarees and some other silk goods that are produced by the Shahapur weavers satisfy the wants of a select clientele. Weavers and merchants engaged in the trade have a long standing experience of their own. We are sure that the Textile Expert will be able to advise the Shahapur weavers in matters of designs, patterns etc. Information with regard to markets will also be made available through the commercial intelligence service of the Development department. But a form of more immediate assistance to this trade would seem to be in encouraging the local traders themselves to organise in defence of their goodwill. In respect of the fastness of colours and the quality of material used indiscriminate action on the part of a few is enough to undermine even a longstanding goodwill. If the Shahapur traders form themselves into a guild for purposes of certifying the quality of goods by means of their own stamp they will be doing a good turn to themselves and to the artisans.

In forming such a guild the authorisation of the state may strengthen the hands of the guild management who would then be able to enforce its decisions. Such organisation of the trade not only in Shahapur but in all other important centres of textile as also other crafts would be a very desirable method of imparting the element of grading and regulation to the promising industries of the State. Wherever authorisation by the state is desired for inducing members to join an association or to carry out the decisions of the common authority it would follow that before granting such authorisation the state would satisfy itself about the beneficent character and the proper working of the organisation. Thus the constitution and bye-laws of each such association will be subject to state approval. The executive body of the association will be free to carry out its normal functions under these bye-laws. The state must, however, have the right to inspect and supervise the activities of such an association. This will naturally include occasional inspections of the manner in which the essential work of the organisation such as the maintenance of prescribed standards is carried out. Besides regular inspection of records, the state will have to be empowered, as a reserve measure to suspend any act of the association which the state construes as being in contravention of the best interests of the trade.

348. **Wool weaving :** The weaving of rough woollen blankets is carried on in many places but on account of the more concentrated supply of wool Shirhatti and Mangalwedha are the more prominent centres. Our recommendations in respect of sheep-breeding are calculated to improve both the quality and quantity of the local wool supply. Spinning of wool yarn and weaving of kambalies are processes which can bear considerable improvement. As, however, these operations are now done by a class of people whose resources, material as well as intellectual are less satisfactory than those of the cotton or silk weavers, a more systematic effort is necessary in this field. We recommend that the woollen production centre now organised at Shirhatti as a war measure should later on be put to the use of demonstrating better methods of spinning and weaving of wool to be adopted by the artisans to suit the normal requirements of the market. The educative effect of this centre coupled with credit and other assistance coming from the Co-operative and Textile departments can be expected to give the necessary impetus for the reform of the woollen blanket industry in the State. Though a very ambitious scheme is to be ruled out on account of limitations such as the quality and the quantity of the raw material we are certain that with suitable improvements in

technique and organisation the woollen handloom industry may be expected to play an important part in improving the standard of life of the classes concerned.

Metal handicrafts

349. **Brass and copperware** : The brass, copper and silver ware industry of Sangli had once a flourishing market all over India and even now this industry especially the silverware industry is maintaining its goodwill. The progress of power-driven and large-scale metal factories has rendered uneconomic the process of producing common utensils by manual labour. This process of natural supercession can hardly be counter-acted even if it were thought desirable to do so. It is only in respect of special patterns of utensils and of high-class silverware that artisanship has yet some advantage over machine production. We appreciate the efforts made by some of the dealers in Sangli to improve the technique of their production and to introduce new patterns of goods. It is in this direction that further progress may be made. The Commercial Intelligence department may be able to obtain information about new lines of production and about likely markets and pass it on to the trade. So long as the establishment of any large scale metal industry has not made any appeal to businessmen no improvement in organisation can materially help the lot of this industry. We do not indeed consider the prospects of a metal factory in Sangli as being particularly promising. This, however, is a matter which may well come up for enquiry under the provisions of the State-Aid to Industries Act, the adoption of which we recommend elsewhere in this report.

350. **Other handicrafts** : Besides these more prominent occupations conducted in urban areas other occupations such as hosiery, leather goods, tobacco etc. have also now come into being. The problems of these industries are in one sense similar in that they have to live in constant dread of competition from more efficient and large-scale units of production. As we have observed above, wherever a better system of production makes for economy of cost and advantage in satisfaction of the consumer the replacement of the less efficient methods is too natural a process to be effectively counter-acted. It is, however, possible that for smaller units of production in towns like Sangli where the cost of living and overhead charges are appreciably lower than what they are in bigger centres, further advantages of finance, location, marketing and technical

advice may be secured through the action of a separate department established by the state. In recommending the creation of such a department and the enactment of a State-Aid to Industries Act, we have in view the application of such a discriminating policy of assistance. While the fortunes of individual industries may be subject to fluctuation over which the state administration or for that matter the persons engaged in the trade can have no control the existence of a special department armed with adequate instruments of scrutiny and help may be trusted to secure for the industry of the people as much progress as is possible under the circumstances.

Small and large scale industries

351. **Power industries:** Along side of small village industries and the struggling urban handicrafts modern industry conducted on a comparatively large scale with or without power is making its appearance in the Sangli State. Some of these capitalistic enterprises, the characteristic features of which are the investment of considerable capital and the employment of hired labour, are conducted on a modest scale, while others are full-grown factories such as the Shri Gajanan Mills at Sangli. As we have recognised earlier the establishment of superior and more profitable types of industry is a natural process which must be welcomed and encouraged. In doing so, however, the legitimate interests of village and urban handicrafts ought not to be sacrificed and in particular any hardship caused by replacement of domestic by factory industry should as far as possible be relieved by state action. Subject to these reservations we recommend that the state should encourage by all legitimate means the establishment of medium and large-sized industries in its territory.

352. As details, given in the Part I, (Survey of resources and economic activity) will show, a variety of manufacturing establishments is presented by Sangli. Thus we have the comparatively modest establishments consisting of a few powerlooms at Rabkavi and Shahapur and the lace-works at Sangli. Industries which consist in processing agricultural produce for the market such as turmeric refining, ground-nut decortication, cotton ginning and pressing are prominently seen in Sangli. The large supply of ground-nut that is also attracted by the Sangli market has given rise to a flourishing industry of oil mills. The natural advantages that Sangli enjoys in respect of cotton, coupled with the outstanding enterprise of the proprietors have already given to Sangli a couple of spinning and

weaving mills. The Ugar Sugar Works is another prominent case of a large scale and highly technical industry being established in the State. The possibilities of exploitation of the natural and administrative resources of the State are by no means exhausted by these industries which have already come into being. In fact success hitherto gained in the sphere of industrial progress encourages a hope that under the stimulus of systematic policy of industrial development further progress in establishing various kinds of manufactures can be attained.

State-aid to industries

353. Besides the natural advantages offered by Sangli territory and the skill and enterprise of the persons concerned, this industrial development has been materially helped by many-sided state help. By providing suitable land, by offering financial help and accommodation, and by providing for other services such as water, transport and electricity, the state administration has contributed a good deal to the economic development of its resources. We feel that the stage has been reached at which this traditional policy of help to promising industries should be put on a statutory basis. Such an element of regularity and permanence in the industrial policy of the state will not only encourage the existing industries but will serve as a steady attraction for skill, enterprise and capital from within or without the State.

354. **State-aid to industries legislation:** In recent years in most of the Provinces of British India and in prominent Indian States like Mysore enactments have been passed for the purpose of assuring to existing and new industries all legitimate help from their respective governments. The main enactments lay down the goal of industrial policy, the organisation of a Board of industrial development and the principles according to which help is to be granted. The enactments are followed by the framing of detailed rules as to the making of applications for aid, the examination of the applicant's case, the manner of state assistance, the safeguards under which assistance is granted and the conditions to which an aided industry is required to conform. There is considerable uniformity among British Indian enactments on this subject and we recommend that as soon as the state decides to introduce the State-Aid to Industries Bill a small departmental Committee should be set up to prepare a suitable draft for the Act and the rules which will be applicable to conditions obtaining in the Sangli State.

355. Underlying principles of the State-Aid to Industries Act :

While the details of the draft enactment will have to be decided at the time of actual introduction and adoption of the measure a few underlying principles may be here indicated. As we visualise the measure, the State-Aid to Industries Act will in respect of its agricultural application be a supplement to the Land Improvement and the Agriculturists' Loans Acts. Most of the help that the agriculturist will need for the improvement of his land and for the transformation of his technique will be made available to him under these two Acts. But in special cases as for instance in the matter of instituting power-driven pumps for the supply of water any difficulty is felt in extending the provisions of the Agriculturists' Loans Act, as it now stands, suitable modifications should be forthwith undertaken. Our idea is that all the help that the agriculturist needs for growing a better produce should be made available to him under the existing laws and by the administrative action of the departments charged with responsibility for his welfare. Wherever the agriculturist thinks of developing into a semi-industrial enterpriser such as a manufacturer of raw sugar or a curer of tobacco, his case may well come under the provisions of the Industries Act.

356. **Administration :** There can hardly be any difference of opinion about the object of a State-Aid to Industries Act as the provision of State-Aid to all attempts at profitable exploitation of the State's resources is an acknowledged policy of the Sangli administration. The body which will be responsible for administering this policy in the future and for entertaining applications under the new Act will appropriately be the Board of Economic Development the creation of which we recommend later in this report. While this Board will be the executive authority responsible for administering the Act we would expect it, as a rule, in all important cases to call in the assistance of technical and economic experts whose advice may appear to be appropriate in the situation.

357. **Forms of State-Aid :** While the details of the scheme of assistance are capable of adjustment the following appear to us to be obvious forms of State Aid for which the Act will have to provide :
 (a) loans to be secured and repaid in the prescribed manners ;
 (b) the guarantee of bank credit to be similarly secured ; (c) the taking up of shares and debentures in appropriate cases ;
 (d) guarantee of minimum interest on shares or debentures ; (e) grant

of land, raw material, fuel, water etc. on favourable terms; (f) assistance for purchase of machinery. These by no means exhaust the possibilities of state help nor do we imply that any or all of these forms are appropriate in every case. The enquiry to be conducted by the Board is a very vital process and we recommend that while the offer of assistance should be there for the benefit of any intending applicant the Board should take special care to see that the available resources of the State are not frittered away on unpromising or doubtful schemes. Once State-Aid is granted to an industry the latter must assure the state that it is doing everything that is reasonably possible to make proper use of such aid. Not only would it be necessary to create a legal charge on the assets of the aided industry but administrative inspection will have to be provided for, to see that a reasonably cautious and progressive policy is being adopted by the recipients of State-Aid. In particular we would recommend that all establishments receiving assistance from the state in one form or another should undertake to provide instructional facilities for student apprentices belonging to the Sangli State. The assistance granted according to the terms of the State-Aid to Industries Act will no doubt require further implementing by administrative action in other departments. The provision of transport facilities and the ensuring of reasonable rates on the state and foreign railways will fall in this category.

358. Prospects of further industrial development: Further extensions of the textile industry and the establishment of hosiery, leather, matches, refined dairy products, oil products and glass are some of the lines of industrial development which will require more careful and detailed examination than we could bestow on them during the course of our enquiry, among other reasons for the complete lack of any reliable data on the commercial prospects of the scheme urged before us. The procedure outlined for enquiries under the State-Aid to Industries Act will have to be made applicable to any suggestions and requests for help that may be addressed to the state either in respect of these or other industries.

Banking and Insurance

359. Banking organisations: Alongside of the growth of modern industry and organised business, Banking also has made appreciable progress in the Sangli State. While the needs of the rural population are still met mostly by the village sowcars, Co-operative societies have made some contribution in that field. As observed earlier, our expectation is that further extension of the

Co-operative movement will be directed towards those areas where the movement has not made much headway till now. We also expect that under the system of registration suggested for them the money-lenders as a class will continue to give expanding service to rural clients and they may in due course develop banking business by attracting deposits, issuing drafts etc. As for the urban population and the large and small-scale industries stationed therein banking facilities are now offered by two sets of institutions. The Sangli State Bank which has its head-quarters at Sangli has branches in all the Talukas. Both for agricultural and commercial finance these branches offer good facilities and we are glad to note that these services are being appreciated in an increasing measure. The Central Co-operative Bank at Sangli through its constituent societies is also playing an important part in providing credit facilities. The Urban Co-operative Bank at Sangli extends credit facilities to business-men in the capital town.

360. Development of banking institutions : We recommend that all these credit agencies should be further strengthened so as to provide banking services to the more systematic and enlarged flow of business that we contemplate as an outcome of a policy of economic development. As a first step the paid-up capital of both the Sangli State Bank and the Central Co-operative Bank requires to be further augmented. Such a strengthening of their capital resources will attract that further support from the depositors which is necessary if these institutions are to play a greater part than at present in the finance of industry and commerce. The Sangli State Bank under reasonable precautions can be expected to offer valuable financial assistance to small and large-scale industrial enterprisers. Besides a careful and cautious analysis of the prospects of the client's business, the precautions to be taken in any such extension of the bank's activities are mainly two. Industrial investments should bear some definite proportion to the long-term resources of the bank, such as its own capital and reserve fund. Such a precaution is necessary in view of the greater risk and lack of liquidity involved in industrial business. The same considerations justify another caution viz., that the total investment should be spread over several businesses so as to balance considerations of time, liquidity and risk.

361. Land mortgage department : In an earlier para we have recommended that land mortgage business through Co-operative agencies should be transacted by a special department of the Central Co-operative Bank. For this purpose the capital resources

of that bank will obviously need to be strengthened. The special recognition and assistance from the state that extends to all transactions of Co-operative bodies will cover this business as well. Normally, we expect, this much state patronage and state regulation and inspection provided by the Co-operative Societies Act will suffice to strengthen the confidence of investors on whose deposits and loans will depend the extent of the long-term business transacted by the bank. In British India, guarantee of the state for the yield on debentures issued for land mortgage business has been provided in some Provinces. If such a step were found to be necessary we see no reason why the Sangli State also should not guarantee the land mortgage business of the Central Co-operative Bank both in respect of recoveries and the rate of interest.

362. Sangli State Bank: These two banks mentioned above are doing a large variety of banking business and there are other smaller and less organised business houses which also provide their clients with banking services which they badly need. While the Sangli Bank by its position as the biggest financial organisation can legitimately expect to increase its business within and without the State and in fact be, at no distant date, a Scheduled Bank of the Reserve Bank of India, we desire specially to recommend that the policy of the Sangli State Bank in its relation with other banks established in the State should continue to be one of friendliness and leadership. It is as the apex of organised banking spread throughout the State that the Sangli State Bank can hope to rise to the highest possible level of usefulness and prestige. The close association with and prominent financial interest in the Bank which the State has hitherto evinced makes the Sangli State Bank in essence more of a public institution than merely a commercial firm. If the State Bank increasingly realises the functions inherent in such a status we hope that other banks also will play their part in offering expanding credit services to the existing and new businesses that we hope to see developing in the State.

363. Insurance: Insurance Companies play a very important part in inducing the habit of thrift among a people and in mobilising their savings and harnessing them to productive purposes. The extending operations of several Insurance Companies in Sangli State show the existence of a promising field of business. Insurance is a service which tends to be more and more economical as the scale of business grows. Judging from experience gained elsewhere, we do not see why this normal incentive to credit mobilisation and

to provident arrangement on the part of individuals and business concerns should not be further exploited in the Sangli State. Apart from the efficiency and enterprise of management, the scale on which business is done will be the decisive factor. The underlying principles of recent Insurance legislation in British India are worthy of adoption by all Insurance concerns.

Trade and Transport

364. Problem of transport : The problem of transport in its bearing on business in agricultural commodities has already been alluded to in an earlier section. Wherever the carrying of goods from the producing centres to the markets in seasons which are appropriate to each commodity is hampered by the absence of transport facility the lack of such a facility should be forthwith remedied. As we have observed the nature of the transport facility is less important than its existence and it may depend on the volume of trade actually carried by a route. In deciding the priorities of construction preference should be given to vital points such as bridge heads, dips and culverts.

365. Railway freights : In a class by itself must fall such subjects as freights charged by the State railway and other Railways. The structure of Railway rates is a very complicated business and it is not possible for us in the present context to make any detailed recommendations about rates charged on particular hauls. Subject to the profitableness of the railway industry as a whole, it may be possible to consider a revision of rates so as to provide favourable transport for imports of raw materials and other producer's goods and the export of finished products. How far such a policy can be reconciled with the obligations of the state either in the matter of its railway management or its relations with other administrations must be considered carefully before practical effect is sought to be given to a scheme of differential rates. Without touching the whole scheme of rates, however, the state through its Development department may keep itself informed of the alleged grievances of its subjects in this respect and it may make representations to the administrations concerned to secure favourable transport for its own business.

366. Regulation of bus transport : The temporary restriction on bus transport instituted as a War measure has seriously crippled transport facilities. When normal conditions of transport are restored the problem of the reactions of bus traffic on cart

traffic on the one hand and on the railways on the other will again assume urgent importance. While the Sangli State cannot, for obvious reasons, hope to solve this problem without regard to the action of other administrations, we recommend that in any future policy, that it might chalk out for itself, licensing of routes should figure as a basic principle. Indiscriminate licensing in the long run, defeats the purpose of securing cheap and efficient transport service.

367. Exhibition of state products : For the better organisation of trade in Sangli products, a systematic plan of extensive advertisement will have to be carried out under the guidance of the new Development department. A good aid to such propaganda would be found in the establishment of permanent exhibitions of Sangli products to be maintained at Taluka headquarters for the products of each Taluka, at Sangli for the products of the State as a whole and at least at some centres in British India where the products find considerable sales. Not only some of the agricultural products of high grade quality but many manufactured articles such as cotton, woolen and silk textiles, metal work, leather goods, hosiery and other miscellaneous products can be profitably exhibited in this way. At each place within the State where the exhibitions are maintained specimen of the produce of other centres of industry in which the local producers are likely to be interested should also be placed. Thus the exhibition will serve a double purpose that of popularising good Sangli products in local and outside markets and introducing new and attractive patterns to the local business community. For the general public as well these exhibitions will have considerable educative value. As a periodical activity connected with these exhibitions it may be worthwhile organising industrial exhibitions either confined to particular classes of goods as textiles or metalwork or extending to all commodities. At such special exhibitions, producers and suppliers from all over the country should be invited to exhibit their goods and suitable facilities should be granted to them. These exhibitions will no doubt give great impetus to the economic effort being organised in the Sangli State.

Technical education

368. Need of technical education : It is a truism to say that improved production and business are impossible without the provision of instructed talent. In all schemes of economic reform, therefore, great emphasis is laid on technical education. Judging,

however, from experiments in this sphere made in several parts of India it appears that there is a frequent tendency to lose sight of the chief purpose of technical education. The existence of trained workers is rarely sufficient to bring into existence an industry where they can be profitably employed. Rather it is the existence either of an established or of a promising industry that renders plausible a scheme of technical instruction. In making our own recommendations for the organisation of technical education in Sangli State, we have been guided by this essential limitation on the practical feasibility of schemes of technical education.

369. **Agricultural training:** If then, the purpose of technical education is to supply trained workmen to industry, the training of agricultural workers in the craft of improved cultivation must take the first place in our scheme. It is not possible, even if it were desirable, to impart elaborate technical instruction to the whole of the agricultural population. Tillage is an occupation in which practical experience, much of which is traditionally passed on from generation to generation, plays a crucial part. But the changing technique and organisation of agricultural operations justify some special training generally in the policy that a successful agriculturist has to follow in his profession and especially in the particular lines of cultivation and business in which the agriculturist may be interested. Even in this limited sphere it will be impracticable to provide for advanced instruction for the whole population.

370. **Primary education and agricultural bias:** We visualise an almost universal extension of primary education in which for rural areas a considerable agricultural bias should be maintained. The spread of primary education to small sized villages is possible if only we recognise the legitimacy and importance of voluntary effort and diverse organisation. It is impossible to expect that even the smallest village can have in the near future a school-house, a school teacher and school equipment, all according to uniform regulations. We shall have to make the best of such material as is going and impart to the local population, the elements of education in such manner as to encourage them to take a more enlightened and profitable interest in their surroundings. For this reason we recommend not only that simple and if necessary seasonal schools should be recognised for some of the villages, subsidies being granted to those persons and organisations who are providing part of the effort, but in the organisation of the village, room should be found for sustaining the literary interests of the local population. The village associations will have an important part to play in organis-

ing such effort and in bringing before the villagers commercial, administrative and hygienic matters in a way which will put to good use the education imparted by the schools.

371. With a view to maintain successfully the principle of occupational bias in rural instruction we have two special suggestions to offer. The text books and curricula authorised for the Primary schools in rural areas should be specially designed to serve this purpose. Good models for such revision of courses can be had from the Bombay Presidency. As instruction will in most cases be imparted by teachers who have passed through the Training College now established in Sangli, we recommend that a special extension course in Rural Instruction should be provided for the students of the College. Some subjects either with regard to agricultural organisation or marketing and finance may be common to all the students. But other subjects confined to individual crops may vary from student to student according as the area in which he is likely to be employed has one dominant crop or another. It would be most desirable to secure an agricultural bias in almost all the subjects taught to the pupil teachers. But if such a course is ruled out on account of considerations of uniformity of courses with similar institutions elsewhere we may have to be content with organising special courses of agricultural studies as outlined here.

372. **An Agricultural Polytechnic :** The extension of Primary education with agricultural bias in rural areas will go a long way in providing intelligent and capable farmers, who would be ready to co-operate in any schemes of improvement that may be decided upon from time to time. The supply of well-instructed rural personnel will be all the more assured wherever full-fledged vernacular schools teaching upto Vernacular Final are established. For the higher standards in such schools, it will be possible to organise special instruction in some agricultural subjects. This, however, does not obviate the need of intensive instruction in the art of improved tillage, suited to local conditions. Such higher and in a way specialised instruction can be offered only to the more advanced and alert among the students of village schools. We recommend that at least one Agricultural School should be immediately opened by the State in Sangli. This school should have a staff of a trained Agricultural teacher and at least one Assistant master. The course should extend over two years. Such subjects as agricultural practice, subsidiary rural occupations, business organisation, minor engineering and construction works

e. g. Bandharas, Pats etc. should be included in the course of instruction. It will also be desirable to give to students good practical grounding in smithy and carpentry work so that the student as finally turned out will not only be a good cultivator, but also a good artisan and businessman, in so far as the conditions of village life require him to play these roles. For purposes of the normal needs of the village population this school would in effect serve as a polytechnic institute. A special course in horticulture and dairy-farming should be instituted for those who desire to specialize in these trades. Besides the regular classes conducted in these schools, short courses should be organised for farmers. It should be the object of instruction imparted in this school to make the student an efficient instrument of improved agriculture as at present suggested and a willing and resourceful agent of further improvement that may become practicable at a later period. As a rule only such students should be encouraged to join this school as will after their stay at the central institute return to their villages as practising agriculturists. The Alumni of this school will supply the trained staff of Taluka and Village associations and will generally act as leaders of rural improvement. We suggest that the school be organised in close association with the agricultural farm to be maintained in Sangli. We do not expect the cost of this school to be very high and we might say with reference to this and the further suggestion about commercial education that we make, that it is in such lines of practical instruction that the resources of the state should now be made available for the education of the people. The scheme of scholarships to be maintained in association with village bodies will bring the facilities offered by this school within the reach of promising lads from the villages of the State. The age at which a student should normally secure entrance to these schools should be 15, corresponding to the Vernacular Final examination.

373. Future possibilities of industrial training: The present size of industrial employment available in the Sangli State or elsewhere in the country does not justify an immediate hope that a school of mechanical, electrical or similar trades would prove a practical success. Experience of the Technical schools elsewhere and of the American Mission at Sangli emphasises the need for caution in this respect. We visualise a considerable expansion of manufacturing industry in the country at large in which Sangli State will have its due share especially if it organises its economic resources as suggested in this report. When such further increase

in industrial employment takes place, it may be found desirable to establish a well-equipped Central Technical school at Sangli. For the present we recommend that the best possible use should be made of existing facilities of training, either in the Mission school at Sangli or in industries receiving state assistance in one form or another. If for the specialized needs of existing or promising industries in the State instruction in any special craft is considered to be desirable, scholarships should be provided to enable suitable candidates to receive such instruction at Technical institutions outside Sangli State.

374. Commercial classes : The commercial importance of Sangli and generally the increasing need felt for specially trained employees in commercial firms suggest the establishment of a Commercial class. To begin with a Commercial class imparting instruction in some of the practical subjects such as accountancy, book-keeping, commercial correspondence, elementary commercial law etc. should be started in the Sangli High School. The equipment required by such a class at any rate in the initial stages will not be very considerable and the employment of a Commerce Graduate on the staff of the Sangli High School will be enough to make a beginning, with perhaps the addition of part-time tutors in such subjects as typewriting.

375. Public health and sanitation : The efficiency of production depends as much on the physical fitness of the population as on its technical equipment. While the subject of sanitation and public health only indirectly falls within our purview, as a constituent of rural development we consider it desirable to draw pointed attention to complaints about the prevalence of malaria in Māngalwedha and Shirhatti Talukas. We are not in a position to judge the genuineness or the extent of this evil. We would only suggest that it should be a part of the economic policy of the state to root out such insidious enemies of efficient and progressive industry as susceptibility to malaria, typhoid and other diseases which should be preventible if a proper sanitary policy is followed.

CHAPTER II

Finance and Administration

Legislative

376. Fundamental basis of our recommendations: The scheme of reform and reorganisation suggested in the previous chapter cannot be described as being too ambitious. We have been guided in our enquiry by a desire to suggest what would appear to be practical solutions to outstanding problems of economic development. No doubt we have attempted, as in fact we had to attempt, if our suggestions were to find a strong foundation in the realities of the situation, to visualise the economic problems of Sangli State against the background of the process of economic change going on within and without the Sangli State territory. We have, however, avoided any effort at painting distant possibilities, which may be left to be studied at appropriate stages. Nor have we taken on ourselves a meticulous examination of the various problems of detailed application of policy. These must, in the nature of things, be left to be decided by the authorities concerned in consultation with interests and expert opinion appropriate to each case. We have in our report outlined a policy of legislative and administrative action which will supply efficient instruments for the more systematic development of the economic resources of the State.

377. Conservation of Resources Act: In this place we propose to present in a nut-shell the legislative and administrative effects of our proposals and to give an idea as to the financial implications of the adoption of our scheme of reform. As mentioned earlier we feel it essential that the state should adopt a legislative measure which will supply a statutory procedure for the conservation of soil, moisture and other natural resources. The actual use of such a measure may depend on conditions of a physical as well as of an administrative nature. But wherever investigation has shown the need for collective and authorised action to conserve any valuable resource the authority of the state to take the necessary steps in pursuance of a policy of conservation should be readily available from the statute book.

378. Credit and commercial legislation: In regard to several services on which business organisation depends legislation

has been suggested for the following :—(a) An Act which will put on a regular and systematic basis the whole business of receiving deposits and/or supplying loans by money-lenders is an elementary necessity and should be undertaken at an early date. (b) More urgently needed from a slightly different stand-point is an Act designed to protect debtors against physical and social harassment at the hands of creditors or their agents. The C. P. Debtors Protection Act supplies a model for such legislation which should be immediately undertaken. (c) For the more directly commercial purposes it is desirable that the Weights and Measures Act already adopted by the state legislature should be put into operation. (d) An Act which will enable an authorised association, official or non-official, to institute recognised and protected marks of grade and quality is also urgently called for.

379. State-Aid to Industries Act: The policy of encouragement to industries in the State requires to be put on a basis of permanence in the shape of a State-Aid to Industries Act and Rules made thereunder. While the details of this and other measures suggested herein will have to be decided by appropriate officers or Committees, the broad outlines of existing pieces of similar legislation in British India should be freely utilised. We do not recommend the wholesale adoption of any one Act but the models should be consciously adapted to local conditions and needs.

380. Amendments to existing Laws: Such existing laws as the Co-operative Societies Act and the Agriculturists' Loans Act will also need re-examination in the light of our recommendations with a view to modifying them if necessary.

Administrative structure and policy

381. Centralisation of developmental activity and policy: We have made a deliberate attempt to fit in our recommendations as far as intrinsically possible with the existing administrative and financial structure of the state. It was, however, inevitable that in urging upon the state and the people the deliberate adoption of the policy of organised economic development some changes in the administrative structure should be found to be necessary. These changes are based on some reasoned convictions that have been forced upon us by our observations within the Sangli State and by our knowledge of conditions and experience elsewhere. No policy of an informed, systematic and continuous guidance of economic

progress can be undertaken without placing the central responsibility in this matter on some authority whose main job is to discharge such a responsibility. While we recognise that several officers of the State are now sharing a good part of the functions suggested by us this very division necessarily leads to a lack of unity and drive which would be fatal to any intensive attempt at securing favourable results.

382. Director of Development : We, therefore, recommend that an Officer with the status of any other high officer below the rank of a Councillor should be appointed to be in charge of economic development. Such a Director of Development will have to discharge a variety of functions. He will have to inform himself as a first thing of all the economic happenings and prospects of the area in the Sangli State. He will also have to maintain close contact with the movements of commerce and industry in the outside world so that he might take or suggest such steps as would help the people in the State to adapt themselves to the changing situation in the wider world. The officer will also be responsible for securing an internal unity of policy in the several departments of administrative and legislative action into which the routine business of the state is normally distributed. The necessary function of maintaining close relation between the state administration on the one hand and other jurisdictions and institutions situated elsewhere will also have to be performed by this officer. Besides these important functions of a directing and investigational character the Director of Development will be responsible for many detailed functions regarding commerce and industry which are now distributed among several officers. It is not necessary to enumerate all these functions. We only record our opinion that if our scheme, or for that matter any scheme of economic development, is to be successfully carried out its direction must be vested in some responsible officer of the state.

383. Board of Development : While direction, co-ordination and information will have to be supplied mainly by the Director of Development the necessary unity of policy and efficiency of execution will not be forthcoming unless a Board is set up for the purpose. Besides the Director of Development who will be its Secretary and an Ex. Officio member, the Board ought to contain the following as members : (1) the Minister for Agriculture, Co-operation etc. (2) the Member in charge of Finance, (3) the Member controlling Land Revenue department and (4) the State Engineer.

While initiation and execution will for the most part lie with the Director of Development and in certain cases with other officers indicated in a given context an inter-departmental and comprehensive consultation regarding all important proposals or projects will be supplied by this Board of Development. Technically the decisions of the Board will be recommendatory to the Council. Thus without encroaching on normal executive authority of the state, the Board will supply specialised consultation which otherwise it is difficult to obtain. General lines of economic policy will continue to be effectively influenced by the legislature by way of law making, administrative criticism and financial control. Thus without arrogating to itself any of the functions that properly belong to the legislature or the executive, the Board of Development will supply a very essential and useful mechanism of deliberately and efficiently carrying out in each case, through the executive administration, the general policy approved by the legislature.

384. Panel of experts : In addition to matters that might go before the Board either as the result of some existing law or on the initiative of the Government or any of its members, it should be possible for any other person or association within the State to send proposals to this Board of which the Director of Development will be the chief executive officer. Ordinary meetings of the Board will be held periodically at which all suggestions will be considered and disposed of. In cases where an elaborate enquiry is indicated or special problems are involved the Board will be expected to call in the services of recognised experts. As such consultation is expected to be a necessary and regular process for the framing of appropriate state action we recommend that a panel of experts should be appointed and the assistance of the relevant members should be secured as each fresh proposal comes before the Board. Wherever important interests are concerned they should be given ample opportunity to place their views before the Board and generally to make their experience useful in helping the Board to arrive at a decision. The Board will also be free to call in any other oral or written information which it considers relevant for its purposes. We expect that the Board will thus supply the central guiding and co-ordinating agency for all the schemes of economic progress undertaken in the state.

385. We have recommended the appointment of a Director of Development and the setting up of a Board of Development, as these steps appear to us to be a necessary corollary of the ado-

ption of a policy of systematic economic progress of the State. There has been a tendency not confined to the Sangli State of visualising development in too narrow a fashion, and confining it in a way to a few activities of rural welfare. As a matter of fact conditions of modern economic life necessitate the recognition of conscious direction of industrial development as a function touching almost all departments of private and public life. It will be observed by reference to the creation of special advisory and executive authorities in British India and other countries that no administration which is conscious of its economic responsibilities can now afford to be without an organization which is sufficiently efficient for the purposes of discharging these responsibilities. Thus we view the creation of the Board and the Director as a mark of the natural evolution of the administrative and economic progress of the State.

386. **Development Board and Development department in relation to existing popular bodies :** The creation of such a specialised department acting as a co-ordinator of the activities not only of several government departments but also of popular bodies like the Village and Taluka Co-operative associations renders necessary a change of outlook regarding some existing bodies. The Taluka Shetki Sangh and the more recently started Rural Uplift Committees that obtain in all the Talukas have functions which are well indicated by their respective names. We readily recognise the valuable nature of the work now being done by them. As we desire to see popular associations established for the entire purpose of creating interest in economic progress and of securing the necessary administrative and financial assistance from the State we have recommended earlier the setting up of Village associations and the Taluka federations of these. As these bodies will be more broad-based and will have a wider plenitude of authorised functions and resources, further functioning of the old Sanghs and Committees will be redundant. The associations suggested by us are a fulfilment of the promise of constructive popular action held out by the now redundant bodies. We expect the State's policy regarding the new associations to be certainly not less sympathetic either in a financial or in an administrative sense than its present policy in relation to the Taluka Sanghs.

387. To avoid a possible misunderstanding it is necessary to refer to the position that the Village and the Taluka associations are expected to occupy *vis-a-vis* the Taluka Local Boards and the Village Panchayats where they exist. Far from these two

of institutions being mutually conflicting in any way they are expected to be highly helpful to one another. The administrative and financial resources of local bodies will be utilised in a more purposeful and efficient manner if they are brought into close touch with the schemes of development planned for the state as a whole. It is a common experience of Local Board and of Panchayat Officers that for want of active interest and co-operation on the part of the public neither progress nor efficient working are possible. The Village and the Taluka associations which will attract to themselves all public spirited persons in their areas will strengthen the popular foundations of existing local bodies and will spread the same spirit of active co-operation among other fellow citizens. On the other hand the Village and the Taluka associations will not be able to improve the living and prospects of their members except by guiding the action of statutory public authorities, among whom must be numbered the Taluka Local Boards and the Panchayats, into channels of increasing usefulness. We suggest that an early State-wide effort should be made to organise Village and Taluka associations as a part of the whole scheme of economic development. We are sure that if the advantages and implications of the scheme are well appreciated, Associations can be easily formed in almost all the villages. These will in turn strengthen the desire and capacity for corporate action which may lead to a further extension of the Panchayats themselves.

388. **Reorientation of inter-departmental relations and policies:** Wider contact with the life of the people and greater unity in actions taken to improve the same are desirable features which are greatly needed in the general administration of the State. We do not approve of the frequent tendency to institute an almost complete separation between the executive departments of the state and those which are supposed to be charged with welfare or developmental functions. For one thing such a multiplication of agencies is economically wasteful and at any rate for a small State like Sangli wastefulness has to be prevented by all means. But even if it were to be economically feasible such a dissociation of welfare from executive functions would seem to be undesirable. In spite of the fact that a tendency towards a multiplication of departments has been visible in some parts of India the test of experience is almost uniformly favourable to the view that even welfare activity produces striking results where it is closely associated with executive authority. This is by no means an accident much less a regrettable feature. As a rule it is only the local representative of the majesty of the state who can inspire the

requisite confidence among the common people. While technical departments such as medical relief, education etc. have to possess their own organisation which is separately established for the whole State, the function of bringing home to the citizens the benefits of the general welfare policy of the state must naturally be discharged by the local executive authority. The carrying out in detail of such policy will be done through staff specially appointed for the purpose. But the Mamlatdars in Talukas and other Revenue officers above and below them must be considered as being responsible for administering in their respective areas not only the revenue and magisterial functions of the state but also for carrying out the constructive welfare policy of the administration. We desire particularly to emphasise the need of assessing the efficiency of executive officers with reference to their capacity for welfare no less than for executive functions.

389. Statutory basis for the new primary and secondary bodies: A systematic organisation of popular and official action for economic development cannot be conceived except on some statutory basis. Neither continuity nor strength of organisation can be secured in any other way. For this reason we have recommended earlier that Village and Taluka associations, not to mention the more well-known credit, marketing and such other Co-operative bodies, should be registered under the Co-operative Societies Act. The close association that we desire to see established between Taluka officers and welfare activities in their talukas will not be effectively realised unless the responsibilities that devolve on the Co-operative department are also discharged by the Mamlatdars themselves. For one thing it would be impossible to provide a separate staff through the Co-operative department for guiding the activities of the comparatively large number of Co-operative bodies that will come into being as a result of our recommendations. But even if additional staffing could be provided we feel it undesirable to divide the responsibility for assisting and guiding the work of welfare associations between the departmental staff and the executive officers. We, therefore, recommend that powers and functions which are normally to be discharged by the Assistant Registrar should be discharged by a Mamlatdar in respect of the Co-operative societies situated within his own Taluka. Such a devolution of Co-operative authority will be at once economical, efficient and progressive. As with the Mamlatdars so with the Chief Revenue Officer for the State as a whole. Though the functioning of non-agricultural societies has little to interest the

Revenue authority all the agricultural societies and the Central financing institutions have a special interest for the officer who in our estimation is responsible not merely for the collection of land revenue from the whole State but also for the general welfare of the people in that territory. For the same reasons, therefore, for which we have recommended the conferring on the Mamlatdars of powers and functions of Assistant Registrars for their respective areas, we recommend that the Chief Revenue Officer should also act as Registrar of Co-operative societies. Such an amalgamation of offices will probably increase the total work of the officer. It is, therefore, suggested that a Deputy Registrar who will relieve the Chief Revenue Officer of a good deal of routine business regarding the Co-operative department should be appointed. Thus equipped the Collector will discharge all the executive and welfare functions that devolve on him either as the Chief Revenue Officer or as the Registrar of Co-operative Societies. The adoption of this recommendation will lead to the termination of the separate office of the Registrar. The financial implications of this arrangement are referred to in a later para.

390. Conferences as an instrument of developmental co-ordination: Where work designed to promote welfare and to secure development is carried out by a number of official and non-official workers distributed all over the State it would be of the utmost importance to ensure a due co-ordination of effort and a proper understanding of the objectives and methods. Frequent visits of inspection on the part of the Headquarter staff meet this need in no small measure. It would, however, be desirable to organise periodical conferences, training and refresher classes etc. for official as well as non-official personnel. Not only willingness but enthusiasm, not only knowledge but appreciation are needed to make a success out of a mere programme of reform. We hope that under the direction of the Director of Development and the Collector-Registrar, and with the patronage of the government an atmosphere of mutual understanding and continuous co-operation will be maintained among all ranks of official and non-official workers.

391. Review of developmental work and publicity: A desire to see practical results achieved rather than to satisfy an urge to outline an attractive scheme has guided our report. We would, therefore, desire that year after year the progress of all activities undertaken in virtue of our report should be reviewed. This review should be published as a part of the Annual Administration Report. At least in the earlier years statistical information

about the progress of developmental activity should form part of the publication. We take this opportunity to record our observation that the Annual Report of the State is noteworthy for the lack of statistical material which usually is published by other administrations either with the Annual Report or separately. Considerations of economy and administrative convenience must no doubt be held responsible for this shortcoming. But at least for the major heads of economic information detailed below¹ tabulated statements should be published along with the Annual Administration Report. Such information will be widely appreciated within and without the State.

392. Store-purchase policy : There is one line of action on the part of the state which is calculated to encourage local industrial development in an appreciable measure. We have not alluded to this matter earlier as we presume that it is a part and parcel of the usual administrative policy of the state, to encourage by preference the produce of local industry. Where considerations of meeting an essential want are concerned or where the local produce is expected for all time to remain on an uneconomic or an inefficient

1 Agriculture : Talukawise statements re.

- (1) Total area and classification of area.
- (2) Area under different crops.
- (3) Patasthal and Motasthal irrigated aereages by crops.
- (4) Anewari by crops.
- (5) Statistics of owned holdings and abstracts of Tenancy Register (quinquennial).
- (6) Cattle census by Talukas (quinquennial).

Prices :

- (1) Monthly average wholesale prices of principal articles of trade in Sangli market.
- (2) Sangli market wholesale price Index.

Industries :

- (1) No. of industrial establishments employing 10 or more persons classified according to industries.
- (2) Average daily employment in organised industries.
- (3) Production of important large scale industries in the State e. g. textile, oil mills, sugar etc.

Trade : Exports and Imports of chief commodities from and to organised markets in the State.

Vital Statistics : Talukawise annual Births and Deaths.

Public Health : Talukawise Statement of indoor and outdoor patients treated in state dispensaries together with classification of cases by diseases.

level, it cannot be reasonably expected that the state will continue to patronise local production. Such special considerations of quality and price apart we would consider it not only justifiable but highly desirable that the government as well as semi-official and non-official consumers should make it a point to consume State produced goods. The example of state departments would go a long way in giving the proper lead to others in this matter. If purchases for all the government departments are pooled in a Stores purchase department it will be possible to get material at the lowest possible cost and to influence the policy of the producer in directions considered desirable by the Development department.

Financial

393. The financial implications of the scheme of development suggested by us can be judged by reference to the following aspects. As a first step some officers with corresponding staff will have to be appointed. In some cases these appointments will strengthen existing staffing of particular departments whereas some appointments will be absolutely new. Secondly, departmental charges incurred for the carrying out of the normal work of a department will also have to be provided. Most important of all, the actual assistance that developmental activities have to carry to individuals and associations interested in securing economic progress will utilise almost every resource that the state can spare. We propose to discuss financial implications under these three heads and to suggest what appear to us to be the governing considerations in each.

394. **Staff salaries: Development department:** As we have recommended the creation of a new department for guiding economic development the appointment of a Director of Development with the status of a First Class officer is necessary. A subordinate assistant who will generally assist the Director of Development and inspect the operation of various regulations and policies regarding the organisation of markets, enforcement of uniform weights and measures, grading and marking Act, etc. and industries and commerce will also be needed. These two together with their clerical and other staff will constitute the Development department. The appointment of a well-qualified Textile Expert for the State has been indicated as a necessary step. The full advantage of the services of such an officer can be secured only if the appointment follows lines of organisation in which the co-operation of all

the textile interests has been secured. In this case it should be possible to appoint a really capable person with experience and to meet the cost of his services on some contributory basis. The Textile Expert will have an officer's status. The services of an Artisan Assistant and of the necessary menial staff will have to be provided for.

395. Expansion of agricultural and Veterinary departments : In regard to Agricultural and Veterinary departments we have suggested several extensions. In its expanded form the Agricultural department will consist of three Inspectors, one of whom would be in charge of the administration of the department as being the senior-most. As for their departmental usefulness we contemplate that one will be an Agricultural Engineer, specialising in such activities as bunding, construction of minor irrigation works, suitability of implements etc. We might mention in this connection that we would advise the imparting of special training in works of agricultural importance to one of the Overseers in the Public Works department. Such training will enable the state to undertake extensive schemes of construction and land development. Another Agricultural Inspector will have to possess special training and experience in respect of all the aspects of the rearing and maintenance of live-stock. A third one will have to be specially well-versed in the general business organisation of agricultural industry. We learn that at present there are two senior members in the Agricultural service and that their experience qualifies them for two of these three posts. Thus only one further appointment will have to be made.

396. As for the subordinate staffing in the Agricultural department the great importance that we attach to bunding operations necessitates the continuance of a special Bunding Officer. We contemplate, as is clearly seen in our recommendations, a regular and whole-time assistance rendered to the cultivators almost on their own farms. Such steady service will not be supplied by the Inspectors themselves, whose duties will lie mostly in inspection, the solving of special problems referred to them and in attending to the institutes such as the Trial farms, Dairy farms and Cattle herds. The function of carrying to the cultivator advice and assistance will, therefore, fall on a new body of Fieldmen whose appointment we recommend on a Taluka basis. Each Taluka should have one Fieldman apiece with an extra Fieldman for the two bigger Talukas viz. Miraj-Prant and Shirhatti. The Fieldmen will have only such qualifications as the Agricultural school when established will

impart. These will be chosen mostly for their experience and capacity as guides. Some idea as to the nature of work which will be done by the Fieldmen will be had by referring to the duties of the Pracharaks that are now appointed in all the Talukas. The technical assistance now offered by the Pracharaks will thus no longer be needed and the purely propaganda part of their duties will be taken over by the office-bearers of the Taluka and Village associations.

397. In the Veterinary department we have recommended the appointment of one more Surgeon as we have felt that the whole State is too big an area to be effectively covered by one Doctor. We contemplate regular veterinary service to the villages. Hence we have further recommended the appointment of Dressers in each Taluka with an extra Dresser for one or two Talukas where the need may be specially noticed. This will mean a corresponding increase in the present number of Dressers.

398. **Technical education : Agricultural school :** Our recommendations for organising agricultural and commercial education entail further cost. As for the agricultural training to be imparted to students in the Training College we do not contemplate any whole-time appointment for this purpose. As, however, we desire that the subject of rural reorganisation including agricultural improvement should be taught as a separate subject, it will be necessary to have on the staff of the Training College a teacher with qualifications in agricultural subjects. The proposed Agricultural school will be an altogether new institution. The teaching staff required will consist of at least two masters besides Artisan Instructors. Out of the two masters the senior will have to be an Agricultural Graduate and the Assistant will in most cases be a lesser qualified but experienced teacher.

399. **Commerce Classes :** As for the Commercial Course to be taught at the Sangli High School, as has already been stated, a Commerce Graduate will have to be appointed as an additional teacher in that School with perhaps additional part-time servants for such subjects as type-writing.

400. **Reorganisation of Co-operative department :** The Co-operative department through which a large part of organisation will be supplied to the developmental effort will have to be reorganised along lines already suggested. This will mean the appointment of a Deputy Registrar in place of the present Assistant Registrar. But the separate post of the Registrar will be rendered

unnecessary. The increased work of the department will justify the appointment of a qualified auditor. There may have to be in this, as in the other departments mentioned above, some re-organisation in the clerical and menial staff.

401. Departmental expenses: The functioning of departments like the Development department, the Agricultural School, the Veterinary, Agricultural, Technical departments etc. will naturally involve corresponding expenditure on material, travelling etc. In fact to get full value out of the increased staff, it will be essential to supply the necessary equipment and material. Part of this equipment will be of a non-recurring character, such as buildings, farms or an industrial plant. Even in these respects we recommend that the greatest possible economy should be exercised in point of construction, cost of buildings etc. The recurring expenditure will depend on the extent of the activities of each department. The more successful a department becomes in establishing contacts the more will be the need for expenditure. While it will not be possible to incur at any given time more expenditure than the state can bear, ultimately such increased expenditure if properly directed will not fail to increase the available resources of the state.

402. Estimates of total recurring expenditure: As the scales of salaries suitable in the Sangli State for the different classes of servants whose appointments we have recommended are not before us we cannot accurately estimate the recurring expenditure involved. Such calculations as we have been able to make on the basis of the present scales obtaining in the Sangli State and outside lead us to the conclusion that if all the staff recommended by us is appointed its recurring cost will be about Rs. 15,000 per annum. To this must be added a figure for departmental expenses which as observed above is capable of considerable expansion along with the increase in the activities of the departments concerned. But merely for the running of the departments and maintaining them on a minimum level of activities a further recurring expenditure of Rs. 6,000/- may be required. These estimates naturally exclude the amounts to be spent by way of grants, subsidies, scholarships etc. These again are items which are not only variable in point of time and place, but the extent of expenditure on these will necessarily depend on resources made available by the state. As will be seen from a later para of our recommendations, we desire that the state should be generous in making such grants. Not only are these grants in themselves a very appropriate expendi-

ture of public revenues but their influence on the productivity of the private and public exchequers is all to the good.

403. **Development Fund:** While, therefore, no specific figure can be indicated as an appropriate amount to be set apart for meeting this developmental expenditure, we would like to set forth what appears to us to be proper lines of financing such activities. We must say at the outset that we have not been called upon to go into the financial organisation and resources of the State. But taking the financial arrangements of the State as they appear in the recent budgets we feel that the scheme that we have recommended can with out insuperable difficulties be financed by necessary appropriations from the State budget. We are aware that for reasons special to the case, the maintenance of a separate Rural Development Fund was decided upon, when a particular tax viz. the Income Tax, was introduced in the State some years ago. The possible dangers of charging to the Fund items which should normally fall under some other head and of restricting expenditure on several items of beneficent expenditure in rural areas to monies released from the Development Fund have both to be avoided. Development of the resources of the State as a whole is a legitimate charge on the entire budget. The amounts made available from the Rural Development Fund, while ear-marked for specific purposes are to be treated as the minimum provision that is available under the given heads. For these purposes additional amounts if available may be properly spent out of the general revenues of the State. Development, moreover, extends to various items both rural and urban which naturally find no place in the objects which are considered as appropriate to the Rural Development Fund.

404 Considering, therefore, development and resources as a whole we recommend the extension of the principle underlying the formation of the Rural Development Fund. We should no longer be content with a single Fund fed out of a contribution from the yield of a particular tax. Its place must be taken by a bigger Fund which will draw its strength from the entire resources of the State and which will be available for financing all items of economic development. For purposes mentioned in our report and generally for purposes of the economic and industrial development of the State we recommend the institution of a new head of disbursement called the Development department. While we expect that the suggestions made by us under such heads as Agriculture, Veterinary, Education, Forests etc. should as far as possible be met by increase in the corresponding budget provision for the departments,

for meeting cases where in a single year all the items mentioned may not need a provision and where greater expenditure than the departmental budget can bear is called for the institution of a separate head as Development department will be an appropriate financial convenience.

405. We recommend that a substantial amount, say Rs. 25,000/- per year should be provided for this head. This will be a minimum uniform demand, and all undisbursed amounts during a year should be carried to a Fund on the same principle as the Rural Development Fund. Considering the constant increase in the demands for development, we do not expect that considerable balances will accrue in this fashion. We only desire to avoid wasteful and unplanned expenditure which may result if the annual provision is liable to lapse. Considering the heavy responsibilities by way of administrative charges, departmental expenses, grants and loans, that we have suggested, this recurring amount of Rs. 25,000/- will be seen to be erring on the side of inadequacy. It will be prudent for the state to build up a big Development Fund out of which large scale and long term productive expenditure may be financed. Whether it is a large scale soil reclamation scheme, for which loans have to be made under the Land Improvement Loans Act, or it is a modern factory to which a capital contribution has to be made, the resources of the state must be steadily conserved and built up. This end can be reached slowly but surely if all the unspent balances of the State's budget are carried to the general or a special Development Fund. We recognise, though in this context we have not studied all the implications of the budget, that either special funds connected with some individual departments or with the general security of revenues, will have to be built up, if they are not already in existence. But all amounts which are in the nature of a wind-fall or which are balances otherwise unappropriated should go to the special Development Fund. If such a policy is followed we expect that in due course the state will have at its disposal a considerable source out of which the recurring and non-recurring charges of many desirable schemes of development will be easily met.

406. **Priorities in expenditure:** There is one aspect of the utilisation of Development monies to which reference must be made. A fund is built up for several purposes which are considered as appropriate items of expenditure through the fund. As, however, the purposes are many and the amounts available in each fund are limited it is essential to define an order of priorities with reference

to the basic purpose of each fund. This order should be framed by reference to considerations which are immune from the influence of administrative and other purely expedient circumstances. For instance, we would feel that soil conservation and minor irrigation works are objects which should be a prior charge on funds set apart for Rural Development purposes. Activities which can be ordinarily financed out of current grants of departments should not encroach upon items which are expected to realise the purpose of development in a far greater measure. In this context we would suggest that even the preliminary propaganda expenditure in respect of initiating any new scheme of development should take precedence over any particular item of direct developmental activity.

407. State Loans for development : While the nature of developmental expenditure requires that it should be met either out of recurring or funded resources, there are other channels of profitable investment in respect of which the proper course for the state would be to borrow in the shape of a State loan. As a precautionary measure it would be desirable to confine such loans only to purposes the productive or profitable character of which is proved beyond reasonable doubt. To what extent such loans can be floated by the state without impairing its credit or how far the state may have recourse to loans for purposes which are not demonstrably productive are questions which cannot be answered until the whole financial position of the administration is examined.

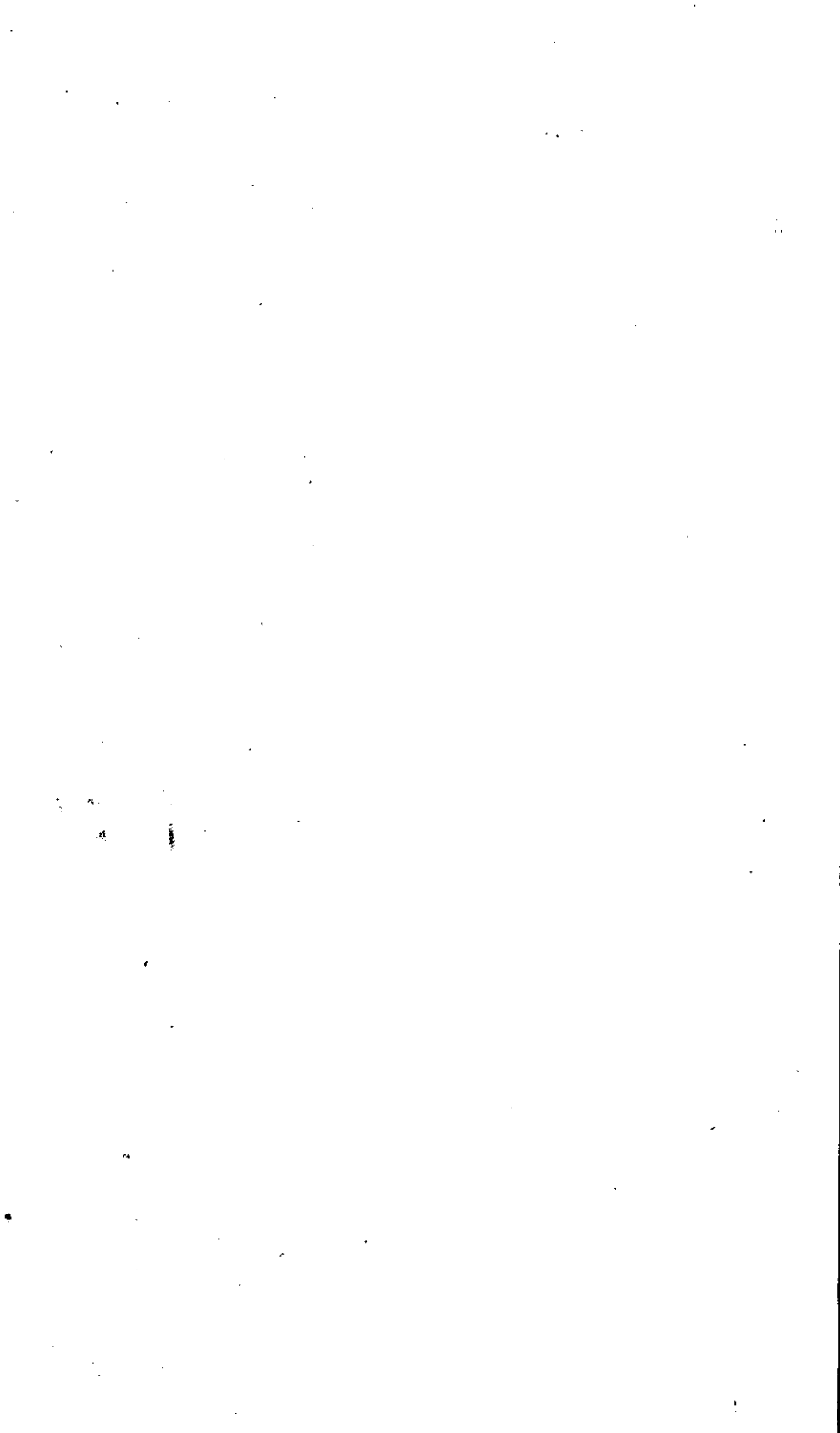
408. Honorary services the principal source of development activity : We have indicated several alternative sources of income for meeting expenditure on schemes of development. We must, however, record our firm conviction that the principal resource which will lead to successful development is the enthusiasm and co-operation of the people themselves. Though we cannot in all cases wait till the initiative comes from the people themselves it should be our constant endeavour to interest the people concerned in all the aspects of our schemes. In the task of such propaganda and organisation the leaders of the people have a very important role to play. In fact the organisation and working of the Village and Taluka associations, the functioning of such bodies as the Fairs and Exhibitions Committees etc. cannot be productive of any beneficent results unless the best elements among the people are called forth to co-operate with the operation of the Development and other departments. We cannot effectively realize development where development is not desired or is not striven for. The minimum conditions of a peaceful life may have

to be maintained even by the unaided acts of the administration. But any real progress or development will depend on popular co-operation. Whether it is the construction of an important road, the desilting of a local tank or the major objects of planned agriculture such co-operation is of inestimable value.

409. **Concluding :** In the course of our report we have tried to sketch what appeared to us to be a plan of economic progress both the necessity and feasibility of which were forced upon us by the evidence of our own observation as by that of the official and non-official material that was placed before us. It is more than probable that while some critics will see in our report only a tinkering with the grave problems that now confront the people of the State, in certain other quarters the scheme may be considered as being too ambitious and unpractical. It is also possible that some whose thoughts of reform are closely limited by existing channels of organisation will see in our suggestions an unwarranted disturbance of the administrative machinery. We would appeal to all concerned to study our report carefully and to look at it as an effort to realise for the people of the Sangli State as a whole, maximum economic development at the earliest possible time with such resources of men and money as they now possess. If as a result of our report early steps are taken which will result in improving how-so-ever modestly the lot of the people of the State and thus adding to the well-deserved reputation of Sangli as a model of wise and progressive rule, our long-drawn efforts will have received the only reward for which we have cared.

D. G. KARVE

D. R. GADGIL



APPENDICES



APPENDIX I

Itinerary of the Committee.

Group discussions were carried on by the Committee at the following centres with representatives of different interests such as agriculture, trade, industry etc.

Serial No.	Centre	Dates
1	Sangli	9-8-1941 to 11-8-'41
2	Nandre	23-12-'41
3	Kasbe Digraj	24-12-'41
4	Kavathe-Mahankal	22-12-'41
	Kuchi	22-12-'41
6	Terdal	10-4-'42
7	Rabkavi	10-4-'42
8	Shahapur	11-5-'42
9	Kakti	11-5-'42
10	Shirhatti	12-5-'42

APPENDIX I-A

Itinerary of the Investigator.

Group-enquiries were held by the Committee's Investigator as under :

S. No.	Taluka	Centre	Dates	Subject of enquiry and representatives of
1		Sangli	from 1-11-1941 to 6-11-'41	Agriculture, Dairy and Creamery, Silver, Brass and Copperware (dealers and artisans), Leather, Bamboo, Clay-works and Lime-quarry industries.
2		Sangliwadi	7-11-'41	Agriculture and representatives of Sangliwadi Mali Sangh.
3	Miraj-Prant	Kasbe Digraj	16-11-'41	Agriculture and members of the Shetki Sangh.
4	Miraj-Prant	Nandre	30-11-'41	Agriculture, members of the Shetki Sangh and Gramodddhar Committee.
5	Miraj-Prant	Kumthe	1-12-'41	Agriculture and members of the Shetki Sangh.
6	Miraj-Prant	Kavalapur	3-12-'41	Agriculture, rope-making, rural tanning, poultry industries and members of the Taluka Shetki Sangh and Gramodddhar Committee.
7	Kuchi	Kavathe Mahankal	9/10-11-'41	Agriculture, Sheep-breeding, Wool and Cotton weaving, Leather tanning, Shoe-making, Country carpet making industries and members of Shetki Sangh and Gramodddhar Committee.
8	Kuchi	Salgare	11-11-'41	Market-Dealers operating in the Market.

S. No.	Taluka	Centre	Dates	Subject of enquiry and representatives of
9	Mangalwedha	Mangalwedha	12/13-11-'41	Agriculture, Sheep-breeding, Cotton and Wool (weavers and spinners), Oil industry, Brass and Copperware industries and members of Shetki Sangh and prominent gentlemen of the town.
10	Terdal Mahal	Terdal	27/29-11-'41	Agriculture, Handloom weaving-Brass and Copper, ware industries and members of Shetki Sangh and Gramoddhar Committee.
11	Terdal Mahal	Rabkavi	28-11-'41	Hand-loom and power-loom Weaving, Dealers of yarn, Warp-makers, dyers, Weavers following the 'Jodni' and the 'Rokadi' system.
12	Shahapur	Dodwad	18-11-'41	Agriculture.
13	Shahapur	Kakti	19-11-'41	Agriculture.
14	Shahapur	Sulebhavi	20-11-'41	Hand-loom weaving.
15	Shahapur	Sambare	20-11-'41	Agriculture.
16	Shahapur	Shahapur	21-11-'41	Hand-loom weaving, Yarn dealers and members of the Taluka Shetki Sangh and Gramoddhar Committee.
17	Shirhatti	Shirhatti	22-11-'41	Agriculture, and Sheep-breeding and members of Agricultural Association and Gramoddhar Committee.
18	Shirhatti	Bannikop	23-11-'41	Agriculture.
19	Shirhatti	Itage	24-11-'41	Agriculture.
20	Shirhatti	Yelvatti	25-11-'41	Agriculture.

List of individuals and representatives of firms interviewed by the Investigator.

Serial No.	Taluka	Centre	Name and / or designation of the person interviewed.
1		Sangli	1. Proprietors of— (1) Textile and Oil Mills, (2) Turmeric polishing factories, (3) Tobacco curing & Bidi factories 2. Mr. G. K. Godbole, B. A., LL. B., Pleader, Sangli. 3. Mr. R. S. Kulkarni, Union Supervisor, Sangli. 4. Mr. D. S. Lad of Kavalapur.
2	Kuchi	Salgare	1. Mr. G. N. Gadgil.
3	Terdal	Rabkavi	1. Manager, Rabkavi Electric Supply Company. 2. Mr. S. C. Kokalki, Proprietor Kokalki weaving factory.
4	Shahapur	Shahapur	1. Proprietors of— (1) Silk reeling and weaving factories. (2) Hosiery factories. 2. Mr. B. R. Naik, Industrialist.
5	"	Kakti	1. Mr. V. R. Damale, Forest Officer, Kakti.
6	"	Marihal	1. Proprietor, Bangle-making karkhana.
7	Shirhatti	Bannikop	1. Proprietor, Bangle-making karkhana.

APPENDIX I-B

List of officers, institutions and individuals who have submitted written evidence to the Committee.

Serial No.	Name and designation.	Subject.
Officials		
1.	Raosaheb V. G. Bhawe, B. E. (Civil), State Engineer, Sangli.	Technical education, roads and water resources.
2.	Mr. K. N. Patwardhan, B. Ag., Agricultural Inspector, Sangli.	Note on agriculture in the State, water resources, fodder resources etc.
3.	Mr. N. V. Chiplunkar, B.A., LL.B., Ganpati Manager, Sangli.	Memorandum on the present economic condition and development of the Taluka with special reference to agriculture, trade, industry etc.
4.	Mr. B. B. Patil, B. A., LL. B., Mamlatdar, Miraj-Prant Taluka.	—do—
5.	Mr. M. S. Sahasrabudhe, B. A., LL. B., Mamlatdar, Kuchi Taluka.	—do—
6.	Mr. G. N. Kshirsagar, B. A., Mamlatdar, Mangalwedha Tal.	—do—
7.	Mr. L. V. Chiplunkar, Mahalkari, Terdal Mahal.	—do—
8.	Mr. G. R. Palkar, B. A., B. Sc. (London), Mamlatdar, Shahapur Taluka.	—do—
9.	Mr. D. L. Gokhale, M. A., Mamlatdar, Shirhatti Taluka.	—do—
10.	Mr. H. B. Kulkarni, B. A., Registrar, Co-operative Societies, Sangli.	Notes on Sangli Market and Co-operative sale shop with branches.
11.	Mr. S. R. Mukhedkar, Superintendent, Central Jail, Sangli.	Jail industries.

Serial No.	Name and designation.	Subject.
12.	Mr. N. V. Bidnur, B. A., LL. B., Huzur Secretary, Sangli.	Note on economic and industrial development of villages in the State.
13.	Mr. V. R. Damale, Forest Officer, Sangli.	Note on development of forests, fodder and fuel resources and industries such as bee-keeping, sericulture etc.
14.	Mr. N. T. Kulkarni, Veterinary Officer, Sangli.	Note on present working of Veterinary department in the State and on the important breeds of cattle in the State.
15.	Mr. B. G. Kulkarni, B. A., Bunding Officer, Sangli.	Note on bunding of arable lands.
16.	Mr. K. B. Lagu, B. Ag., Superintendent, State gardens, Sangli.	Note on dairy industry.
Local and non-official bodies		
1.	President, Sangli Municipality.	Note on terminal tax.
2.	Chairman, Saraf Association, Sangli.	Note on silverware industry and constitution of the Association.
3.	Chairman, Rohidas Co-operative Credit Society, Sangli	Working of the Society and leather industry in Sangli.
4.	Sangliwadi Mali Sangh.	Soil reclamation work of the Association.
Private Individuals		
1.	Mr. M. H. Godbole, B.A., LL. B., Pleader, Sangli.	Sangli Bank.
2.	Mr. B. B. Patil, B. A., LL. B., Pleader, Sangli.	General.
3.	Dr. V. A. Patwardhan, Ph. D., Fergusson College, Poona.	Oil industry.
4.	Mr. V. R. Velankar, Proprietor, Shri Gajanan Mills, Sangli.	Textile industry.

Serial No.	Name and designation.	Subject.
5.	Mr. C. T. Navalgundkar, Dodwad.	Agricultural and general economic conditions of Dodwad
6.	Mr. R. N. Rajadna, Hon. Organiser, Co-operative Societies, Satara.	General.
7.	Mr. D. V. Khadilkar, Sangli.	Agriculture and lime industry.
8.	Mr. P. C. Marathe. B. sc., D. Tech., Poona.	Development of industries in the Sangli State.
9.	Mr. L. M. Kulkarni, Sangli.	Agriculture and industry.
10.	Mr. A. D. Bele, Samdoli.	Cultivation of tobacco for cigarettes.
11.	Mr. R. S. Kulkarni, Union Supervisor, Sangli.	Agriculture and Co-operation in village industries.
12.	Mr. B. R. Kulkarni, Nandre.	General.
13.	Mr. B. D. Shinde Saranjandar, Mallewadi.	General development of Kuchi Taluka.
14.	Mr. S. T. Bhosale, Ranjani.	Animal husbandry.

APPENDIX I-C

List of Officers and persons who tendered oral evidence to the Committee.

Officers

1. Hon. Mr. B. S. Kore, B. A., LL. B., Minister, for agriculture Local Self-government and Education, Sangli.
2. Mr. N. V. Bidnur, B. A., LL. B., Huzur Secretary, Sangli.
3. „ V. K. Khadilkar, B. A., Chief Revenue Officer.
4. Raosaheb V. G. Bhawe, B. E. (Civil), State Engineer.
5. Mr. V. R. Damale, Forest Officer.
6. „ S. R. Mukhedkar, Superintendent, Central Jail.
7. „ H. B. Kulkarni, B. A., Registrar Co-operative Societies.
8. „ N. V. Chiplunkar, B. A. LL., B. Ganapati Manager.
9. „ D. L. Gokhale, M. A., Mamlatdar, Shirhatti Taluka.
10. „ G. N. Kshirsagar, B. A., Mamlatdar, Mangalwedha.
11. „ B. B. Patil, B. A., LL. B., Mamlatdar, Miraj-Prant.
12. „ M. S. Sahasrabudhe, B. A., LL. B., Mamlatdar, Kuchi.
13. „ L. V. Chiplunkar, Mahalkari, Terdal Mahal.
14. „ K. N. Patwardhan, B. Ag., Agricultural Inspector.
15. „ G. V. Gokhale, B. Ag., Agricultural Inspector.

Private Individuals

1. Mr. R. R. Bakhale, Member, Servants of India Society, Poona.
2. Prof. P. M. Limaye, M. A., Fergusson College, Poona.
3. Mr. V. R. Velankar, Industrialist.
4. Messrs. Ramnarayan Jaynarayan and Babulal Nemani, Industrialists.
5. Mr. V. K. Joshi, Industrialist.
6. „ R. V. Bhide, Industrialist.
7. „ N. G. Khokale, President, Sangli Chamber of Commerce.
8. Sjt. Shivaji Punja Kothari, Businessman.
9. Mr. Gulabchand Khemchand, Businessman.
10. „ A. S. Rajmane, Member, Sangli Legislative Assembly.
11. „ Ramnarayan Jaynarayan, Proprietor, Balaji Oil Mills.
12. „ Narayandas Sarvottamdas, Proprietor, Laxmi Oil Mills.
13. „ R. D. Retrekar, B. A., LL. B., Pleader, Sangli.
14. „ P. S. Mokashi, B. A., Manager, Sangli Bank.
15. „ S. G. Phadke, B. A., LL. B., Pleader, Sangli.
16. „ B. B. Patil, B. A., LL. B., Pleader, Sangli.

17. Mr. P. H. Khadilkar, Editor, Dakshin Maharashtra.
 18. " H. W. Brown, B. A., Expert in Mechanical arts and technical training.
 19. Dr. J. L. Goheen, Agricultural Expert.
 20. Mr. B. A. Daftardar, B. A., President, Sangli Municipality.
 21. " G. K. Godbole, B. A., LL. B., Pleader, Sangli.
 22. " M. H. Godbole, B. A., LL. B., Pleader, Sangli.
 23. " D. V. Khadilkar, Agriculturist.
 24. " A. B. Ramchandre, Merchant in brass and copperware.
 25. " K. V. Limaye, Do.
 26. " P. M. Shinde, Do.
 27. " Babalal Rajubhai, Bidi Merchant.
 28. " Babalal Mirabhai, Do.
 29. " Babalal Faridbhai, Do.
 30. " A. S. Rahimanbhai, Do.
 31. " L. M. Kulkarni, Do.
 32. The Chairman, Rohidas Co-operative Society, Sangli.
 33. Mr. Masaji Vithal Dhor, Tanner.
 34. " G. B. Manohar, Cloth Merchant, Sangli.
 35. " P. N. Gadgil, Saraf, Sangli.
 36. " Vithaldas Sarvottamdas, Timber Merchant.
 37. Proprietor, Shri Ganesh Furniture Works, Sangli.
 38. Mr. D. M. Kulkarni, B. A., LL. B., Pleader, Sangli.
 39. " J. V. Patankar, B. A., LL. B., Pleader, Sangli.
 40. Messrs. Sattikar Brothers, Clay & plastic toy-makers.
 41. " Otari Brothers, Manufacturers of Silver and Gold articles.
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APPENDIX I-D.

Talukawise statement showing the number of Committee's
Questionnaires returned with replies.

Serial No.	Taluka	Part 1 & 2	Part 3	Part 4	Part 5	Part 6
1	Sangli Town	36	44	27	12	8
2	Miraj-Prant Taluka	109	28	29	0	0
3	Kuchi	78	5	15	0	0
4	Mangalwedha	85	10	21	1	1
5	Terdal Mahal	37	43	14	2	1
6	Shahapur	51	19	26	3	2
7	Shirhatti	176	35	28	2	4
	Total	572	184	160	20	16

APPENDIX I-E.

Sangli State Economic Enquiry Committee.
1941.

Questionnaire.

Part I—Agriculture

General Instructions.

1. You are requested to answer only such parts of the Questionnaire as you consider to be within the immediate scope of your experience and interest.
2. Whenever possible, factual and statistical data in support of the answers should be given, either with the answer itself or as a separate note.
3. A brief account of your own experience and connections will be very helpful to the Committee.

-
1. Name:—
 2. Village:—
Taluka:—
 3. Caste:—
Age:—
 4. Occupation—Principal:—
Subsidiary:—
Personal information:
 5. How long are you in this industry?—
 6. Workers in the family:—

S. No.	Name of the worker.	Relation.	Where working	Nature of work	Approximate annual income.	Remarks.
1						
2						
3 etc.						
Total						

7. Agricultural land (in acres).

Land under cultivation.	Irrigated.	Dry.	Fallow.	Total.	Remarks.
Total owned.					
Leased to others.					
Leased from others.					
Net cultivated.					

Section I—Agricultural practices

1. General

- (a) Do you think that the present organisation and practices of cultivation in your part are satisfactory ?
- (b) If not what defects do you consider to be most glaring ?
- (c) Have you any suggestions to make so as to remove these ?

2. Crops

What are the main crops in your area ? *Wheat, rice, jowar, sugarcane, etc.*

3. Yield

What is the average yield per $\frac{\text{acre}}{\text{bigha}}$ of each of the crops mentioned above ?

- (a) Is there a tendency for the yield to go down ?
- (b) What do you suggest as to what should be done to improve the yield ?

4. Sub-Division and fragmentation

- (a) Have farms been so much sub-divided in your area as to lead to unprofitable cultivation ?
- (b) If so, what remedy do you suggest for remedying and preventing of the evil ?
- (c) Would you favour legal prohibition of subdivision and/or compulsory consolidation ?
- (d) If so, on what conditions and through what agency e. g. Panchayat, Taluka Board, State Assembly etc. ?

5. Implements

- (a) Are you satisfied with the present implements of agriculture ?
- (b) If not, in what particular respects do you feel that a reform is necessary ? (Please mention the needs that require to be better served).

- (c) Do you think that it is possible to use machinery for any of the agricultural operations? If so for what particular operations?
- (d) Are improved implements (e. g. iron plough, hoe, tilt, etc.) being used in your area on a large scale?
- (e) Is the lack of facilities for repair any obstacle to the wide-spread use of these?
- (f) Do you think that large scale manufacture and supply of standardised parts of even the older types of implements will be of assistance in improving cultivation?

6. Power

- (a) Do you use any power other than cattle power?
- (b) If so, give details of use and cost.
- (c) Do you keep your own cattle for farm use? If so what is their number and cost of their maintenance? Have they full employment on your farm? If not, are any supplementary employments available? Give details including earnings?
- (d) How far is the practice of exchange of bullocks, or hiring out of bullocks prevalent in your part?

7. Manure

- (a) Do you use any manures for your crops?
- (b) If so, what are they? Give details, including cost, (bone-meal, sulphate of ammonia, oilcake, farm manure, compost green manure, night soil etc., should be mentioned with details of experience).
- (c) Do you use cow-dung as fuel on any large scale? If so, what proportion of the total dung is so utilised?
- (d) Have you any suggestions to make with regard to alternative supplies of fuel.

8. Seed

- (a) Do you use seed produced on your own farm or you procure it from elsewhere? If the latter from whom and under what system?
- (b) Would you consider it an advantage if some agency took up the supply on reasonable terms?

- (c) Have you been using special or improved types of seed ?
If so, with what results ?

9. Crop experiment

Have you tried any experiments with regard to the cultivation of additional or alternative crops ? If so with what results ?

10. Rotation of crops

- (a) What rotation of crops, if any, do you follow on your farm ? Does it conform to the usual practice in your area ?
- (b) Have you any suggestions to offer regarding a change in rotation, either with existing or with any new crops ?

11. Dry farming

- (a) Have you taken to bunding as a protection against insufficient rainfall and washing off of the soil ?
- (b) Would you favour a scheme of collective survey and bunding ?

12. Co-operation

- (a) Have you any experience of Co-operation being used for any of the needs and operations of cultivation ?
- (b) If so, do you think that Co-operation might with advantage be utilised on a greater scale in your area ?

13. General

- (a) Have you any other suggestion based on your knowledge and experience, to make with regard to the practice of cultivation in your area ?
- (b) Do you think that the State or any other public organisation could help you in any particular way to improve your practice ?

Section II—Subsidiary agriculture

1. General

- (a) Do you grow any secondary crops other than the main crops mentioned in Section I.
- (b) If so, give details about area, season, yield and cost.

2. Fruit

- (a) Do you grow any fruit for the market. If so, give details of cultivation and sale.
- (b) Have you any suggestions to make regarding the extension of fruit cultivation in your area?
- (c) Is there any prospect of developing any industry in fruit products in your area? If so in what particular direction.

3. Vegetables

- (a) Do you grow any vegetables for sale? If so, give details of cultivation, cost, sale etc.
- (b) Is there any vegetable market growing in your area? Are there any special facilities that you need for taking advantage of such a market?

4. New crops

Considering your resources and the peculiarities of your tract, do you think that it is possible to introduce any new or additional secondary crop? If so, give details of your suggestions?

5. Fuel

- (a) What are the sources of fuel in your area? Are they adequate?
- (b) Is it your experience that fuel resources are shrinking in your area? Give details, if you can.
- (c) Have you ever tried tree plantation either for fuel or other purposes? If so, with what results?
- (d) Do you think that a scheme of tree plantation in your area will be possible and advantageous?
- (e) Have you anything to suggest by way of state action or collective organisation in improving fuel resources?

Section III—Cattle and fodder

1. Is the fodder supply in your area adequate for your cattle?
2. Is yours a fodder-exporting or a fodder-importing area?
3. If the latter, what are the seasons of scarcity and from what sources is the supply made up?
4. Does the practice of sending out or receiving cattle for grazing during specified periods prevail in your area? If so, give details?

5. Is there any fodder preservation practice on any appreciable scale in your area? If so, is it for normal sale or for famine purposes? Give details of the practice e. g. the description of the system, the costs, quantity, agency i. e. private, co-operative, through dealers or any other organisation etc.

6. Are there any special fodder crops in your area, other than those which yield fodder as by-product?

7. Have you any suggestions to make regarding the improvement in the fodder supply of your tract?

8. Is there any provision for attending to normal diseases and epidemics of cattle? Have you any suggestions to make in this regard?

Section IV—Marketing

1. Market

- (a) Where do you usually sell your produce? at your farm, in your village or in a nearby town?
- (b) Is the market a regular market or a periodical market?
- (c) How do you sell your produce? (1) Directly to the consumer, (2) through a middleman, or (3) to a dealer (Bepari). If (2), on what terms? Give details under (i) brokerage, (ii) weighing and measuring charges, (iii) warehousing, (iv) Dharmadaya, (v) and other charges.
- (d) Are you a member of any Co-operative society formed for purposes of marketing? If so, what is your experience about it?

2. Transport

- (a) Have you felt any difficulty either in the matter of ease or expense of taking your produce to your usual market? If so, give details of the situation, with suggestions for improvement.
- (b) Have you any fresh markets in view which you think you can, profitably reach if better transport and freight terms are offered? If so, give details of your suggestions.

3. Weights and measures

- (a) Have you experienced any inconvenience regarding correct weighing of your produce? If so, give details of your experience.

- (b) Have you any suggestions as regards the manner in which your convenience in this matter can be met ?

4. Grading and adulteration

In view of the bad market that ungraded goods tend to have, would you agree to a scheme by which your produce is graded by any impartial body before it goes into a regular market ?

5. Price and recovery

- (a) Are you satisfied that the prices you realise are the best that you can get, at any given time and market ?
- (b) Do you find any difficulty in realising the full amount of the value of produce sold by you ?
- (c) Do you find that prices in different seasons are different in the market, and that you are prevented from taking advantage of higher prices on account of any special difficulties ? If so, what are these difficulties ?
- (d) In selecting particular crops for cultivation and in fixing their acreage, do you act on market information regarding ruling or prospective prices ? If so, give details.

Section V—Finance

1. Sources

- (a) What is the normal source of your finance ? private money-lenders, Co-operative society or a bank ?
- (b) On what terms and conditions do you deal with these ?
- (c) Have you any other relations, e. g. commercial or tenancy, with your creditors ?
- (d) Does the Government meet your financial needs in any way ?

2. Purposes

- (a) What are the purposes for which you have occasion to borrow ? State season, source and terms of borrowing.
- (b) Do you deal with different creditors in respect of cultivation, commercial and domestic advances ? If so, give details.

3. Hire-purchase

- (a) Do you ever get implements, cattle etc., on hire-purchase or any other system? If so, indicate source and system.

4. Co-operation

- (a) Are you a member of a Co-operative credit society? If so, what is your experience about the terms on which it deals with you.

5. Usury

- (a) Have you ever felt that the terms on which the creditors deal with you are exorbitant or unfair? If so, give details.
- (b) Are there any special laws which protect you from such practices, if they exist? If so, are they effective? Do you suggest any modification?
- (c) If there are no such laws would you recommend their introduction?
- (d) Do you find any difficulty in borrowing on your personal security for your current needs?

Section VI—Agriculture and Co-operation**1. Power and bullocks**

- (a) Do you usually co-operate with other cultivators for the use of bullocks? If so, how often and on what terms?
- (b) Do you use power for any purpose on co-operative basis? If so, give details.
- (c) Have you any experience of the working of a Co-operative society for the supply of implements, machinery etc.

2. Marketing

- (a) Would you be ready to join, if you are not already a member of a Co-operative sale and purchase society?
- (b) Would you find any difficulty in making all your sales and purchases through such a society?

3. Better farming

- (a) Are any steps being taken at present to spread knowledge about better farming methods? Are you satisfied with them?

- (b) Would you be prepared to improve your cultivation by such steps as bunding, consolidation of holding, minor irrigational facilities etc. in co-operation with other farmers?
- (c) Have you any previous experience of such steps? If so, give details, especially regarding difficulties.

Section VII—Agricultural water supply

1. Irrigation

- (a) Do you get water from any source other than rainfall? e.g. well, stream, tank, bandhara, etc.
- (b) If you do, give the manner in which you use it for your crop, by lift, by canal, or by carriage.
- (c) Do you feel that there are any alternative ways in which water-supply for cultivation can be made available to you?
- (d) If you have any scheme of water-supply, give details?
- (e) Has the problem of water logging arisen in your tract in any form? If so, give details.

2. Co-operation

- (a) Would you be prepared to co-operate, by way of financial or labour contribution, to undertake any co-operative scheme of water supply?
- (b) As bunding helps to retain water supplies and moisture would you find any difficulty in carrying out a scheme of co-operative bunding?

3. State policy

- (a) Does the State at present supply any irrigational facility?
- (b) If so, on what terms?
- (c) Have you any suggestions to make in respect of state policy for the supply of water?

4. Irrigated crops

- (a) What crops do you now raise on irrigational water? Give details of acreage and crop.
- (b) Have you any proposals to raise additional crops with new sources of water? If so, give details.

Section VIII—Roads

1. Types of roads

- (a) Are you well situated in respect of road connections in all seasons with the nearest market, railway station and administrative station? Give details e. g. paths, cart-tracks, motorable roads etc.
- (b) Are the roads usable by buses and carts in all seasons?

2. Maintenance

- (a) Have you to pay any special charges for the use of roads?
- (b) Do you get any assistance for the construction and maintenance of roads?
- (c) Have you any suggestions to make with regard to extension or improvement of road system?
- (d) Would you be prepared to co-operate with other people and with the State in the matter of road improvement, either by contributing labour or money?

3. Bus, rail and cart

- (a) What part do each of these play in your transport needs now? Give details.
- (b) Have you any suggestions to make for reforming and extending any of these?

Section IX—State and agriculture

1. Departments

- (a) What departments of the state touch you in your life as a cultivator? and how?
- (b) Have you any suggestions regarding better service by these?

2. Associations

- (a) Is there any agricultural association in your area? Give details of its composition, working and its importance.
- (b) Are you a member of any agricultural association? If so, what is your experience?
- (c) Have you any suggestions to make for the improvement or extension of the activities of these associations?

3. Shows and demonstrations

- (a) Are any agricultural or cattle shows held in your part? Give details.
 - (b) Have you taken interest in these? If so, give your experience. If not, please mention reasons, if any.
 - (c) Have any demonstrations of improved methods of cultivation, dairying or breeding been held in your area or elsewhere? If so, have you participated in them? What is your experience about them?
 - (d) Have you derived any benefits from them?
 - (e) Have you any suggestions to make for their improvement?
-

PART II

SUPPLEMENTARY AGRICULTURAL OCCUPATIONS

Section I—Cattle breeding

1. Business

- (a) Are you a professional breeder or a breeder for your agricultural purposes only?
- (b) Is breeding your main business or a side business?
- (c) How long have you been in this business? Please give a brief account of your general experience, especially with regard to its profitable character, its cost, sale and purchase and special difficulties, if any.

2. Animals

- (a) What animals are you chiefly interested in? Give names of breeds with peculiarities.
- (b) Do you breed them for any special purpose e. g. Milk, Plough or for both?
- (c) Have you ever tried to introduce new varieties with specific purposes? e. g. dual dairy and draught purposes.
- (d) If so, with what results?
- (e) Have you experienced any difficulties regarding purity of breed? If so, give an account of their nature with your proposals.
- (f) Have you any schemes either for the introduction of new varieties or for the crossing of old ones which you think will benefit you by some action on the part of the authorities? If so, give details of the schemes, and manner of assistance desired.

3. Fodder

What fodder sources do you now rely upon? Are they adequate? If not, have you any suggestions to make to improve them?

4. Controlled area

With a view to maintain the purity of breeds would you favour (a) control of types of animals imported in your area, and (b) compulsory castration of unsuitable animals?

5. Diseases and epidemics

Have you any special problems with regard to diseases of animals, which you would like to be looked into?

6. Marketing

- (a) What is the normal way of disposing of your animals?— in your own place, at fairs or in markets? Give details of marketing centres, seasons and prices.
- (b) Do you sell direct to consumers or through a middleman?
- (c) Do you feel that given better transport and marketing facilities, you could sell more profitably? If so, give details of your suggestions.
- (d) How do you dispose of the bye-products of your industry? e. g. milk, butter, ghee, manure etc.
- (e) Are there any special problems regarding the sale of these products that you would like to be looked into? Give details.

7. Finance

- (a) What are your usual sources of finance?
- (b) On what terms and conditions do you get this finance?
- (c) How do these terms and conditions affect your trade?
- (d) Have you any difficulties in this respect? How can they be removed?

8. Co-operation

- (a) Have you ever tried for any purpose of your trade to co-operate among yourselves e.g. bull service, market, finance, grazing etc.
- (b) Would you be ready to co-operate if a Co-operative scheme is organised for this purpose?

9. Shows

- (a) How far have you been helped by cattle shows till now?
- (b) Do you think that the state could help you in the matter of shows, stud-bulls etc.?
- (c) If so, would you be ready to co-operate with the state in any scheme that it might undertake for this purpose?

Section II—Sheep-breeding

1. How long have you been following this trade?
2. Do you breed sheep for wool or mutton or for both? Give a round idea of the proportion between the three purposes?
3. How many heads of sheep and goats have you on your hands per year?
4. Do you make an income by such employment as letting out sheep for manuring?
5. Please give the amounts involved in the various parts of your trade.
6. Have you to borrow for financing your activities? If so what difficulties, if any, do you experience?
7. Do the sheep suffer from any special disease, and is there any provision to cure or to prevent these?
8. Have any attempts been made to improve the breed of the sheep? If so with what results?
9. Do you follow any trade in which the raw material supplied by the sheep you maintain is used to any extent? Give details.
10. Do you follow any other industry except sheep breeding? Give details.
11. What facilities for grazing do you now have? Are any special difficulties experienced?
12. If grazing facilities are increased in any way, would you be able to maintain profitably bigger flocks?
13. Where and how do you dispose of your sheep and sheep products? What difficulties, if any, are experienced in doing so?
14. Do you keep in touch with market information and in any way act on the same?

Section III—Dairying

1. Business

- (a) How many dairy cattle do you keep? Give details.
- (b) Do you use any of your milk cattle for other than dairy purposes?

2. Fodder and feeding

- (a) How much of the total feeding has to be purchased by you and how much is available from your own farm?

- (b) What fodder crops, if any, you grow for yourself?
- (c) What are the grazing facilities available to you? On what terms?
- (d) Have you any improvement to suggest in these respects?

3. Finance

- (a) What are the usual sources of your finance?
- (b) On what terms and conditions do you get this finance?
- (c) Do you feel that the terms are in any respects unfair?
- (d) If so, have you any remedial steps to suggest?

4. Marketing

- (a) What dairy products do you market? Where do you sell them?
- (b) Do you get remunerative prices for your products?
- (c) Do you think that an improvement in transport facility will help you to reach a bigger and more profitable market?
- (d) If so, give details of your suggestions.

5. Bye-products

- (a) What are the bye-products of this industry? Do you sell them? Give details.
- (b) What milk products do you usually sell?
- (c) Do you sell any of these because they pay better?
- (d) Have you ever interested yourself in the idea of selling milk in condensed form?

6. Co-operation

- (a) Is there any Co-operative organisation to help your industry? Are you a member of such an organisation? If so, what is your experience about its working?
- (b) If a Co-operative society were established, would you join it?

7. Competition

- (a) How far has your business been hit by sale of vegetable ghee?
- (b) Have you tried by creating a graded and certified product e. g. butter, to meet the market for pure butter or ghee?

- (c) Have you tried to push your sales of those products of milk with which vegetable products do not compete?
- (d) Do you think that adulteration should be prevented by law? If so, what should be its general nature?

Section IV—Poultry

1. Business

- (a) How long have you been in this business? What is your general experience about its profitability and progress?
- (b) Do you combine poultry with some other business.
- (c) What is the number of eggs and birds that you sell per year?

2. Varieties

- (a) What varieties do you keep?
- (b) Have you experimented with some of the special types? If so, with what results?
- (c) Are there any diseases to which the several types of birds are susceptible?
- (d) Does your experience suggest any practicable remedies?

3. Market

- (a) How far does your product reach?
- (b) Will any transport and marketing facilities help you to reach a wider market?
- (c) Will you be ready to co-operate for purposes of purchase and sale?

Section V—Unspecified

- (a) Are there any subsidiary industries other than cattle breeding, dairy and poultry in which you are engaged?
- (b) If so, give details of size, finance, technique, marketing etc. (e. g. bee-keeping, rope-making, preparing agricultural produce for the market etc.).

PART III
SMALL INDUSTRIES

1. Name:—
2. Village:—
Taluka:—
3. Caste:—
Age:—
4. Occupation:—
Personal information:—
5. How long are you in this industry ?
6. Workers in the family:—

Serial No.	Name of the worker.	Relation.	Where working.	Nature of work.	Approximate annual income.	Remarks.
1.						
2.						
3. etc.						
Total.						

7. Short description of the industry.

Section I—Technique

1. Do you use machinery or any of the modern mechanical devices?
2. Do you use any power other than manual labour? Give details.
3. Do you carry on your business in your own house or in a separate business premise?
4. What arrangements exist for the repair and replacement of any machinery, tools and appliances that you may be using?

5. Have you any suggestions to offer in respect of machines, tools and appliances, either by way of adopting new machinery and tools or new methods?

6. Do you keep yourself informed of the patterns in demand and adjust your production accordingly?

7. Do you experiment with the production of any new types of products in your industry? If so, what is your experience?

Section II—Raw materials

1. What are the chief direct and indirect raw materials that you need?

2. Where and through whom do you get these?

3. Are they satisfactory in point of quality and price?

4. If not, have you any suggestions to offer so as to improve the supply?

5. Do you co-operate with anybody in getting your supplies? If so, with what experience?

6. Would you join in any Co-operative union that may be started for this, and other useful purposes?

7. Have you ever thought of securing raw materials from sources nearer home than you are now getting them from?

Section III—Labour

1. What is the total number of workers employed in your works? Give details under male, female and children.

2. How many members of your family work in the industry? How many outsiders do you employ? Give details e.g. sex, age, designation etc.

3. Is the employment uniform over the year? If not, give busy, slack and average seasons with number of days and causes.

4. Are there any specially skilled workmen employed by you? Give number with details of work.

5. What are the terms of employment for both the skilled and the unskilled labour?

6. Do you feel that any course of theoretical and practical training will improve the efficiency of your labour and make it more

profitable to your business? If so, give details of the type of work for which training will be useful.

Section IV—Finance

1. Have you to borrow for any of your business operations? What are the normal terms and conditions of credit for purchase and sale in your industry? Give details.

2. Do you purchase on credit other than on normal terms of credit or sell your product against advances or on credit other than normal mentioned above? If so, give details.

3. If you borrow your capital, for what purpose and how much amount at a time do you borrow?

4. From whom do you borrow? Moneylender, dealer, bank, Co-operative society etc.?

5. On what terms and conditions do you borrow? Give details regarding period, security, rate of interest etc.

6. Do you think that the terms are fair? If not in what respects do you consider them to be unfair?

7. Would you be ready to join a Co-operative union which will finance your business and also supply you with purchase and sale facilities?

8. If the state makes any loan to you on reasonable terms, would you agree to give to the state a first charge on your business assets?

Section V—Marketing

1. How do you dispose of your goods? to consumers or to a middleman dealer?

2. Do you accept advances, either in kind or cash, from your purchaser or selling agent?

3. What are the terms of sale offered to you?

4. Do you consider them to be fair? If not, in what respects do you consider them to be specially unfair?

5. Have you been a member of a Co-operative society for sale? If so, what has been your experience?

6. Will you agree to join a Co-operative society for sale of your goods?

7. What are your usual channels of getting market information, regarding quantity and nature of demand, prices, patterns etc.
8. Is the information useful and satisfactory ?
9. If not, would you like to be served by a Co-operative society in this respect ?
10. Do you ever advertise your goods ? If so, how ?
11. Would you agree to a co-operative or centralised advertising of your goods ?
12. Would you in that case agree to a standardisation of quality and prices ?
13. Are there any special difficulties with regard to transport that stand in your way ? If so, mention them in detail.

Section VI—Competition and Margin

1. Considering the last three years' business have you been getting a remunerative price for the business taken as a whole and for its several parts ? Answer separately and with details.
2. Have you any scheme by which you can adjust your costs to prices if necessary ?
3. What are the chief sources of competition for your goods ?
4. Are there any advantages based on quality, cost, (raw material, labour, overhead charges, taxation etc.) or some other special advantage which your competitors enjoy ?
5. Do you consider any of these advantages unfair ? If so which and for what reasons ?
6. So far as the fair advantages are concerned have you tried to acquire them for yourself ? If so what is your experience ?

Section VII—State Policy

1. In what respects does your business come into contact with the working of any of the departments of the state ?
2. Is this contact, if it exists, regulated as well as you would like ? If not, what are your observations and suggestions ?

3. Have you any suggestions to offer with regard to the manner in which the state can help your industry? If so, give them with details of action proposed.

4. Do you think that the state can with advantage help you in respect of finance, technical training, advertisement, Co-operation and such other aspects of your industry?

5. If the state is prepared to take greater interest in the progress of your industry, will you be prepared to do your own part in any scheme that may be drawn up?

PART IV

RURAL DEVELOPMENT

1. Name :—
 2. Village :—
Taluka :—
 3. Caste :—
Age :—
 4. Occupation :—
- Personal information.
-

1. What is the nature of your interest in rural development? Personal, administrative or reformatory? Give details of experience?

2. Do you think that the work of rural welfare should be organised in two separate parts, ameliorative and developmental?

3. If so, what activities would you include in each of these classes?

4. Do you think that a common rural plan would operate in the whole state? Or would you recommend a village to village survey with a view to find out what plan is best suited to the locality?

5. Do you desire the plan to be a permanent feature of village organisation or would you limit it to a certain number of years?

6. Do you think that it is necessary and right that the village people should be asked to help in promoting their own welfare by a partial contribution in cash, kind or labour?

7. What should be the planning, financing and directing agency in rural welfare? Special officer acting with specially created local bodies or executive officers of Taluka acting with the help of local panchayats and technical departments should undertake this?

8. As between literacy and useful business information, which do you think should come first in a scheme of rural welfare?

9. Have you any experience of public health work in rural areas? In what respect state action in this field is urgently necessary?

10. Do you think that any of the older associations such as temple committees can be used for rural development work? If so, how?

11. Do you think that periodical adult classes should be held in all localities for the spread of useful knowledge, mostly by the method of question and answer. If not, suggest any other method of adult education?

PART V

LARGE SCALE INDUSTRIES (USING POWER)

Please give full details on the following points with special reference to your Industry.

1. Short description of the industry :—
2. Location of the factory :—
3. Please give details about workers employed in your factory on the following lines :—

Description	Male	Female	Children
Salaried.			
Wage-earners.			

4. Is your industry seasonal ?
5. Number of working hours :—
6. What are the sources for the raw materials you require ? How do you purchase them ? Describe the purchase organization in detail.
7. Give details about plant, machinery and the nature of motive power you use. Give details of cost of power.
8. Marketing organisation for the products of your industry. (agencies, advertisement etc.)
9. Total investment in the industry under fixed capital and working capital.
10. Description of all taxes that your industry has to bear.
11. Nature of the competition you have to meet.
12. Any scheme to meet the competition in your industry.
13. Details of cost of production :—
Direct raw materials:
Indirect raw materials:

Fuel, power and water:	...	...
Salaries and wages:	...	...

Over head costs

Salaries:	...	...
Postage etc. :	...	...
Printing and stationery:	...	...
Travelling expenses:	...	...
Advertisement and canvassing:	...	...
Miscellaneous:	...	...
Depreciation on Building, Plant and Machinery and Interest:	...	...
Rates, rent, taxes and Insurance:	...	...
Workmen's amenities:	...	...
Machinery, maintenance and repairs:	...	...
Selling expenses:	...	...
Inward & outward freight	...	...
Etc etc.:	...	...
Compensation, Medical Aid etc.	...	...
Other miscellaneous expenses.:	...	...
14. Annual production-quantity:	...	...
Annual sales-quantity & value:	...	...
15. Any other details on special points not mentioned above:		

PART VI

PROSPECTIVE NEW INDUSTRIES

Please give your scheme on the lines mentioned herein, if you think that any of the following Industries or any other industry can be profitably started in the Sangli State.

1. Tanning Industry.
2. Manufacture of cigarettes and/or other tobacco products.
3. Dairy and milk products.
4. Manufacture of bonemeal and other products from bones and horns of cattle.
5. Any other prospective industry.

Important information re. the industry you propose

1. Short description of the industry :
2. Probable location :
3. Is the industry seasonal ?
4. Local sources and available quantities of direct and indirect raw materials :
5. Plant, machinery, nature and cost of motive power :
6. Labour : volume and character :
7. The constitution and composition of the concern that would undertake the production (e. g. Private limited or Public limited Co., Co-operative organisation etc.)
8. The extent of demand for the products, markets and nature of likely competition :
9. Transport facilities and costs :
10. Capital involved and methods of raising the capital :
11. Capital investments under :
 - (a) Premises
 - (b) Plant and machinery
 - (c) Land, water and other facilities
 - (d) Working capital
12. Estimated Balance-sheet :
13. Details of concessions that you think the state should give to the industry :
14. Any other item on which you think you can give useful information :

APPENDIX I-F.

Supplementary Questionnaires for group enquiries.

QUESTIONNAIRE 1

Representatives and members of different associations and committees.

- (i) General aspects of agriculture and subsidiary industries in the area.
- (ii) Particular areas in which subsidiary industries appear to be prominent.
- (iii) Crops—their importance, costs, yield per acre.
- (iv) Main difficulties in agriculture and subsidiary industries.
- (v) Drawbacks in (1) methods of cultivation, (2) live-stock, imple-ments, seeds, water-supply, manure etc. (3) purchase and sale organisation, and their effects on agriculture.
- (vi) Immediate needs of the Taluka, and the ways in which they can be met by the state, local bodies, Co-operative bodies and other associations.
- (vii) Attempts hitherto made by different organisations in this direction.
- (viii) Improvements in the working of the present administration.
- (ix) New acts for the welfare and improvement of agriculture and allied occupations.

QUESTIONNAIRE 2

Dealers in raw materials and exporters of finished products

1. Total approximate number of persons who carry on the business of importing raw materials e.g. $\frac{\text{silver bars}}{\text{brass and copper sheets}}$, manufac-turing different types of products and of selling locally or exporting in industry in Town or village.
2. Total number of units who undertake contract work.
3. The rate at which the work is given out.
4. Average monthly output.
5. Terms on which the articles are received back.
6. Work done by each karkhana per month.
7. Annual estimated export of finished ware.

8. Places where this is exported.
9. What are the difficulties in the expansion of the industry ?
10. How can the state remedy them ?
11. Can you suggest any workable scheme which will be beneficial to your industry ?

QUESTIONNAIRE 3

Artisans working under contract system

1. Total number of karkhanas.
 2. Nature of work done.
 3. Contract—types of work and rates of contract.
 4. Men employed on an average in each karkhana and system of wages.
 5. Appliances—description and total cost.
 6. Work brought at a time.
 7. Period allowed for completion.
 8. Terms of delivery.
 9. System of advance—average amount of advance and terms.
 10. Cost of processing—3 or 4 important types of products of the industry.
 - (1) Materials other than those supplied by the capitalist.
 - (2) Fuel and power.
 - (3) Labour.
 - (4) Annual repairs and maintenance.
 - (5) Rent.
 - (6) Other charges.
 11. Monthly out-put per karkhana—3 or 4 important types.
 12. Monthly cost.
 13. Average income per month.
 14. Difficulties of the trade at present.
 15. How can they be removed ?
 16. Has this industry any possibility of future expansion ?
 17. Can the state help you in any way ?
 18. Why do you not undertake this work as an independent artisan ?
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APPENDIX II

TABLE A

Rainfall in the Sangli State according to Talukas 1919-20 to 1939-40

Year	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Total	Average for the previous 5 years.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Miraj-Prant Taluka														
1919-20	—	—	4.89	4.5	2.45	4.81	5.94	—	0.28	1.40	—	—	23.82	27.47
1924-25	0.90	0.25	1.10	2.60	4.60	4.20	1.40	—	—	—	—	—	15.5	16.30
1929-30	1.11	2.24	2.42	2.77	0.47	5.5	4.32	0.29	—	—	—	0.30	18.97	18.13
1934-35	—	—	0.50	6.56	3.15	3.64	3.35	1.35	—	—	—	—	18.55	25.56
1939-40	0.56	—	4.71	6.12	3.49	3.34	2.24	3.62	—	—	—	—	24.8	21.16
Kuchi Taluka														
1919-20	0.28	1.49	6.75	3.46	2.30	4.12	8.72	1.75	0.12	1.8	—	—	30.7	27.14
1924-25	—	2.13	1	1.16	5.20	4.3	4.37	1.82	—	0.50	—	—	20.51	23.43
1929-30	1.10	1.30	1.50	1.20	...	11.15	3.85	—	—	—	—	—	20.70	25.10
1934-35	1.5	—	4.50	3.80	2.15	5.70	8.65	0.90	—	—	—	—	26.75	23.32
1939-40	—	—	2.5	4.25	2.30	3.3	6.30	0.82	—	—	—	—	18.95	25.45
Mangalwedha Taluka														
1919-20	—	0.45	4.20	—	0.40	9.35	4.10	0.50	—	0.50	—	—	19.50	25.10
1924-25	—	—	2.55	0.50	5.15	7.45	1.35	—	0.45	—	—	—	17.45	16.14
1929-30	0.50	0.20	3.5	—	0.45	12.90	3.49	0.25	—	—	—	—	20.84	28.79
1934-35	1.10	—	0.48	—	—	4.14	3.85	—	—	1.25	—	—	10.82	20.88
1939-40	—	—	6.25	3.20	0.40	6.35	2.70	—	—	—	—	—	18.90	18.25

TABLE B
Population Statistics
Movement of Population—1911 to 1941

Taluka	1911			1921			1931			1941		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1 Sangli Town	8,622	7,519	16,141	12,345	10,752	23,097	14,682	12,691	27,373	19,717	18,054	37,771
2 Miraj-Prant	19,288	18,569	37,857	17,606	16,593	34,559	24,835	24,043	48,878	26,289	25,137	51,426
3 Kuchi	15,300	14,608	29,908	14,958	14,051	29,009	17,552	16,854	34,406	20,914	20,116	41,030
4 Mangalwedha	15,966	15,699	31,665	14,080	13,504	27,584	16,533	15,766	32,299	16,815	15,878	32,693
5 Terdal Mahal	11,394	11,180	22,574	11,214	10,806	22,020	10,184	9,853	20,037	11,976	11,131	23,107
6 Shabapur	21,391	21,479	42,870	22,329	22,063	44,392	25,377	25,024	50,401	28,498	28,136	57,634
7 Shirhatti	23,296	22,969	46,265	20,667	19,993	40,660	22,826	22,222	45,048	24,965	23,872	48,837
Total Sangli State ...	1,15,257	1,12,023	2,27,280	1,13,199	1,08,122	2,21,321	1,31,989	1,26,453	2,58,442	1,50,174	1,42,324	2,92,498

TABLE B-1

Vital Statistics

Annual Births and Deaths in Sangli State

Year	Births	Deaths
1914-15	7,972	6,715
1919-20	6,901	5,610
1929-30	8,667	7,087
1939-40	12,574	7,237

TABLE B-2

Birth and Death rate in Sangli State

Year	Birth rate per 1000 population	Death rate per 1000 population
1914-15	35	29
1919-20	30.26	24.68
1929-30	39.1	32.02
1939-40	48.6	28.3

TABLE B-3
Area, Towns and Villages and occupied Houses in them
according to 1931 Census

Taluka	Total area sq. miles	No. of		Occupied houses in 000s	
		Towns	Villages	Towns	Villages
Sangli Town	16.2	1	—	5.7	—
Miraj-Prant	132.62	—	40	—	10.3
Kuchi	218.62	—	30	—	8.6
Mangalwedha	223.28	1	31	2.4	4.3
Terdal Mahal	81.56	2	10	2.7	1.6
Shahapur	149.97	1	49	2	6.76
Shirhatti	313.33	1	70	1	8.2
Total State	1135.55	6	230	13.9	39.78

TABLE B-4
Density of the population according to 1931 Census

Taluka	Density per sq. mile
Sangli Town	1,700
Miraj-Prant	363
Kuchi	157
Mangalwedha	149
Terdal-Mahal	247
Shahapur	336
Shirhatti	143
Sangli State (excluding Sangli Town).	214

TABLE B-5

Distribution of Population—Urban and Rural

S. No.	Taluka	Urban	Percentage of the total population of the Taluka	Rural	Percentage of the total population of the Taluka
1911					
1	Sangli Town ...	16,141	—	—	—
2	Miraj-Prant ...	—	—	37,857	—
3	Kuchi ...	—	—	29,908	—
4	Mangalwedha ...	10,347	32.6	21,318	67.4
5	Terdal Mahal ...	10,952	48.4	11,662	51.6
6	Shahapur ...	9,804	22.9	33,066	77.1
7	Shirhatti ...	5,008	10.8	41,257	89.2
	Total ...	52,254	22.9	1,75,068	77.1
1921					
1	Sangli Town ...	21,123	91.5	1,974	8.5
2	Miraj-Prant ...	—	—	34,559	—
3	Kuchi ...	—	—	29,009	—
4	Mangalwedha ...	8,456	30.6	19,128	69.4
5	Terdal Mahal ...	10,442	47.4	11,578	52.6
6	Shahapur ...	10,484	23.6	33,908	76.4
7	Shirhatti ...	4,317	10.6	36,343	89.4
	Total ...	54,822	27.7	1,66,499	72.3
1931					
1	Sangli Town ...	27,373	—	—	—
2	Miraj-Prant ...	—	—	48,878	—
3	Kuchi ...	—	—	34,406	—
4	Mangalwedha ...	10,559	32.5	21,740	67.5
5	Terdal Mahal ...	12,353	6.16	7,684	38.4
6	Shahapur ...	11,704	23.2	38,697	76.8
7	Shirhatti ...	5,658	12.5	39,390	87.5
	Total ...	67,647	26.2	1,90,795	73.8

TABLE B-6

Distribution of Population according to religions

Taluka	Hindus		Mohammedans			Jains			Christians			Parsees		Animists			
	1911	1921	1931	1911	1921	1931	1911	1921	1931	1911	1921	1931	1911	1921	1931		
Sangli Town	12,810	18,598	23,965	2,348	2,870	3,633	848	1,302	1,788	131	322	416	—	5	1	—	15
Miraj-Prant	31,834	28,632	37,614	2,011	1,753	2,835	3,990	4,036	5,701	22	138	233	—	—	—	—	—
Kuchi	28,633	27,885	33,036	897	808	969	378	316	299	—	—	2	—	—	—	—	—
Mangalwedha	29,384	25,615	30,008	2,104	1,863	2,160	177	106	131	—	—	—	—	—	—	—	—
Terdal Mahal	16,475	16,096	14,632	2,471	2,468	2,603	3,628	3,456	2,802	—	—	—	—	—	—	—	—
Shahapur	39,110	40,554	46,202	2,920	2,933	3,426	712	796	670	128	109	103	—	—	—	—	—
Shirhatti	41,828	36,890	40,970	3,720	3,113	3,445	706	939	626	11	18	7	—	—	—	—	—
Total ...	2,00,074	1,94,270	2,26,427	16,471	15,808	19,051	10,439	10,651	12,117	296	587	761	—	5	1	—	15

TABLE
 Number of persons employed
 (Figures

Description	Sangli Town			Miraj-Prant			Kuchi		
	1911	1921	1931	1911	1921	1931	1911	1921	1931
A--Exploitation of Natural Resources of which									
(a) Pasture and Agriculture ...	2.	4.2	2.	14.8	9.6	14.7	10.8	8.9	11.
(b) Fishing and hunting ...	.01	—	.01	.01	—	.01	—	—	—
(c) Exploitation of minerals ...	.01	—	.1	—	—	.05	—	—	.02
B--Preparation & supply of material substances of which									
(a) Industry ...	1.2	1.3	1.4	1.5	.9	1.5	.9	.7	.9
(b) Transport ...	.4	.1	—	.12	.02	.01	.001	—	.03
(c) Trade ...	.7	.9	1.2	.4	.2	.6	.3	.2	.3
C--Public Administration and Liberal Arts ...	1.1	1.7	1.5	.8	.4	.8	.5	.6	.4
D--Miscellaneous ...	1.4	1.7	2.5	.22	.6	1.5	1.3	.5	.5
Total employed in all groups. ...	6.82	9.9	8.91	17.85	11.72	19.17	13.801	10.9	13.15

B-7

in different occupations

in 000s.)

Mangalwedha			Terdal			Shahapur			Shirhatti			Total for the State		
1911	1921	1931	1911	1921	1931	1911	1921	1931	1911	1921	1931	1911	1921	1931
12	12.8	9.5	5.9	4.7	3.	10.8	8.9	10.4	15.6	13.1	13.3	71.9	62.2	63.9
—	—	—	—	—	—	—	—	—	-0.17	—	—	-0.37	—	.02
—	—	.03	—	—	—	—	—	.3	-0.02	—	.1	-0.12	—	.60
1.3	.9	.9	3.7	1.9	1.1	5.	3.4	3.	1.8	1.4	1.3	15.4	10.5	10.1
.01	.004	—	.003	.02	—	.1	.1	.02	.017	.09	—	.65	.33	.06
.4	.3	.3	.7	.6	.2	1.4	1.2	1.7	.7	.5	1.	4.6	3.9	5.3
.4	.5	.6	.5	.4	.2	.8	.8	1.2	.6	.2	.3	4.7	4.6	5.2
.6	1.2	.2	.6	1.2	.3	.6	1.2	.5	1.	1.	1.2	5.9	6.4	6.7
14.71	15.704	11.52	11.403	8.82	4.8	18.7	15.6	17.12	19.736	16.29	17.4	103.199	87.93	91.88

TABLE B-8

Persons employed in important occupational groups per 100 of the total in all groups and per 100 of the total population of the State

Description	Per 100 of the total employed			Per 100 of the total population of the State		
	1911	1921	1931	1911	1921	1931
	A--Exploitation of Natural Resources of which :					
(a) Pasture and Agriculture	69.5	70.6	69.5	31.6	28.5	22.4
B--Preparation and supply of material substances of which :						
(a) Industry	14.9	12.	10.9	6.7	4.7	3.9
(b) Transport	.06	.03	.07	.02	.01	.02
(c) Trade	4.4	4.4	5.7	2	1.7	2
C--Public Administration and Liberal Arts	4.5	5.2	5.5	2	2	2
D--Miscellaneous	5.7	7.2	7.3	2.5	2.8	2.6

TABLE B-9

Age and Sex composition according to 1931 Census

Age groups	Sangli Town		Miraj-Prant		Kuchi		Mangalwedha		Terdal		Shahapur		Shirhatti	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0-5	1,923	1,952	3,498	3,839	2,570	2,716	1,424	1,459	4,105	4,062	3,461	3,322	2,516	2,621
5-10	1,940	1,764	3,211	3,088	2,398	2,356	1,220	1,327	3,816	3,554	2,875	3,029	2,190	2,188
10-15	1,988	1,687	2,897	2,619	2,183	2,038	1,238	1,186	3,436	3,082	2,658	2,676	1,987	1,826
15-20	2,070	1,170	1,930	1,884	1,349	1,464	1,005	851	2,268	2,244	1,999	1,948	1,352	1,329
20-25	1,716	1,184	1,888	2,047	1,361	1,571	958	899	2,125	2,324	1,968	2,081	1,428	1,517
25-30	1,356	1,136	1,800	1,834	1,345	1,639	843	801	1,888	1,980	1,966	1,915	1,362	1,346
30-35	1,249	978	1,775	1,582	1,282	1,155	771	729	1,772	1,743	1,914	1,766	1,251	1,125
35-40	1,085	856	1,511	1,318	1,134	617	672	655	1,502	1,434	1,623	1,440	1,085	907
40-45	811	1,163	1,304	1,137	987	795	599	509	1,302	1,199	1,191	1,147	893	744
45-50	643	573	1,041	941	786	661	451	476	993	925	906	848	684	554
50-55	416	461	857	774	643	526	334	308	744	715	725	711	534	462
55-60	367	350	706	638	527	469	254	257	527	556	533	550	427	402
60-65	314	337	515	533	453	420	195	232	440	501	421	470	375	360
65-70	136	139	337	255	240	175	92	93	199	303	204	193	198	159
70 and over	177	195	356	328	291	252	134	171	259	403	282	281	241	226
Total	15,901	13,917	23,616	22,817	17,552	16,854	1,0175	9,853	25,377	25,024	22,826	22,222	16,533	15,766

TABLE C
Agricultural Statistics
Talukawise number of holdings and occupied acreage according to
the latest records

S. No.	Taluka.	No. of holdings.	Total occupied acres in 000s.
1.	Miraj-Prant	29,285	103·2
2.	Kuchi	16,066	123·3
3.	Mangalwedha	13,791	135·08
4.	Terdal	3,435	28·7
5.	Shahapur	33,116	51·9
6.	Shirhatti	21,625	186·3
7.	Sangli & Sangliwadi	1,978	9·3

TABLE C-1
Agricultural statistics for the year 1939-40
TOTAL AREA AND AREA UNDER CROPS
(figures in 000 correct to the first decimal point.)

Taluka.	Total area.	Area under crops.			Occupied Fallow.
		Dry	Irrigated	Total	
Miraj-Prant	112·8	91	3·2	94·2	5·2
Kuchi	139·8	115·6	7·7	123·3	16·5
Mangalwedha	142·9	130·7	4·4	135·1	7·8
Terdal	29·2	28·2	·6	28·8	·5
Shahapur	87·5	50·4	1·5	51·9	1·7
Shirhatti	200·8	140·3	·1	140·4	14·1

TABLE C--2

Area in acres under Important Crops--1939-40*

(Figures in 000 correct to first decimal point)

Taluka	CEREALS						Pulses		Oil Seeds		Fibers		Tobacco		Garden crops		Fruit and Vegetables of all sorts
	Jwar	Bajri	Wheat	Rice	Maize	Tur	Gram	Ground-nut	Safflower	Cotton	Cotton	Sugar-cane	Turmeric	Garden crops			
														Sugar-cane	Turmeric		
Miraj-Prant ...	45.9	2.5	3.3	.1	.6	9.8	5.5	13.5	1.9	8.5	6.1	.4	.8			.2	
Kuchi ...	34.5	24.3	2.5	.1	.2	1.9	2.9	7.6	.7	.4	.6	.5	1.1			.8	
Mangalwedha ...	70.1	15.3	2.9	.5	.8	4.3	1	3.1	8.3	1.1	.2	.1	-			.9	
Terdal ...	11.2	3.7	2.9	-	-	1.3	.4	1.1	-	3.4	-	-	-			.1	
Shahapur ...	12.2	.3	2.3	9.1	-	.5	.5	.4	-	3.8	-	1.2	-			.1	
Shirhatti ...	37.5	1.3	9.8	.2	-	1.6	2.5	19.	2.4	39.1	.06	.07	-			-	

* Figures for earlier years are not uniformly available.

TABLE C-3.

Water Resources in Sangli State according to Talukas

Name of Taluka and year	Tanks and Ponds	Dharans & Bandharas	Wells	Heis and Budakies
Miraj-Prant				
1919-20	6	47	928	17
1924-25	6	34	840	14
1929-30	6	34	824	16
1934-35	6	34	820	20
1939-40	6	34	836	22
Kuchi				
1919-20	53	235	2,897	194
1924-25	53	235	2,897	194
1929-30	53	235	2,897	194
1934-35	53	235	2,897	194
1939-40	53	239	2,822	194
Mangalwedha				
1919-20	14	4	640	103
1924-25	14	4		
1929-30	14	4	827	103
1934-35	14	4		
1939-40	14	4	1099	103
Terdal Mahal				
1919-20	—	—	262	—
1924-25	—	—	267	—
1929-30	—	—	273	—
1934-35	—	—	282	—
1939-40	—	—	302	—
Shahapur				
1919-20	65	54	2,873	26
1924-25	65	54	2,919	33
1929-30	65	54	3,009	38
1934-35	65	57	3,082	46
1939-40	67	61	3,164	67
Shirhatti				
1919-20	24	15	193	1
1924-25	24	15	205	1
1929-30	24	11	206	1
1934-35	24	11	205	1
1939-40	24	11	207	1

TABLE C-4
Agricultural Live-stock (1939-1940)

(Figures in 000s.)

S. No.	Taluka	(Figures in 000s.)										Sheep
		Bullocks above 3 years.	Male young stock below 3 years.	Buffaloes male above 3 years.	Male young stock below 3 years.	Cows above 3 years.	Female young stock below 3 years.	Buffaloes females above 3 years.	Female young stock below 3 years.	Goats	11	
1	2	3	4	5	6	7	8	9	10	11	12	
1	Sangli & Sangliwadi	.8	.2	.08	.2	.5	.2	1.5	.7	.7	1.1	
2	Miraj-Prant	6.7	1.4	.2	1.8	3.2	1.4	6.1	2.6	8	4.6	
3	Kuchi	8	2.4	.3	1	5.5	2.6	3	1.5	16.4	9.8	
4	Mangalwedha	5.2	2.4	.1	.5	4.6	2.5	1.3	.9	10.4	12.5	
5	Terdal Mahal	1.7	.5	T	.5	1	.6	1.3	.4	2	3.5	
6	Shahapur	7.4	1.4	1.5	1.3	5.2	1.4	6.9	1.7	4.7	2.8	
7	Shirhatti	10.2	2.5	.09	1	5.2	2.3	4.8	1.9	17.7	11.1	
	Total ...	40.1	10.9	2.5	6.3	25	11	25	9.9	60.1	45.5	

T— denotes a figure of less than fifty.

TABLE D

Export and Import of commodities from and to Sangli across the Krishna river before and after the construction of Irwin Bridge at Sangli.

S. No.	Year	Quantity of export and import * (Bengali maunds)	Remarks
1	1927-28	2,40,000	Irwin bridge was opened to traffic in the year 1929-30.
2	1937-38	4,50,000	
3	1940-41	5,23,000	

* Bengali Maund = 40 Seers of 80 Tolas each.

TABLE D-1
Import and Export of commodities other than food-grains to and from Sangli city

Description of the Commodity	I M P O R T				E X P O R T	
	1939—40		1940—41		1939—40	1940—41
	No. of Carts	Volume in Bengali Maunds	No. of Carts	Volume in Bengali Maunds	Volume in Bengali Maunds	Volume in Bengali Maunds
Groundnut ...	38,345	671,037	18,855	329,962	12,913	16,196
Groundnut seed ...	—	—	—	—	1,94,231	81,262
Tobacco ...	6,407	112,122	4,218	73,815	150,598	115,856
Turmeric ...	9,685	169,437	10,625	185,937	170,985	207,767
Gul ...	11,597	208,755	14,771	261,878	134,514	252,998
Chillies ...	2,628	42,056	2,651	42,416	41,230	43,269
Ghee ...	102	1,227	107	1,290	—	—
Cotton ...	2,612	39,180	1,211	19,215	9,614	5,320
Miscellaneous ...	978	14,670	624	9,367	—	—
Total ...	72,354	12,58,524	53,132	923,880	714,085	722,668

* This is Jinned cotton.

TABLE D-2
 Import and Export of food-grains to and from Sangli City for the year 1939-40

Commodity	IMPORT			EXPORT
	No. of Carts	Volume in Bengali maunds	Volume in Bengali maunds	Volume in Bengali maunds
Jwar	12,000	1,80,000	65,394	
Bajri	400	6,000	2,033	
Wheat	2,400	36,000	4,182	
Grams	1,000	15,000	10,628	
Gram dal	800	12,000	—	
Tur dal	800	12,000	—	
Pulses	—	—	1,852	
Rice	7,500	1,12,500	7,351	
Total	24,900	3,73,500	91,440	

TABLE E

Educational Statistics 1920-21 to 1940-41

S. No.	Taluka.	Year.	English Secondary Schools.			Vernacular Schools.			Religious schools under Government management.			
			Government.		Aided.	Government.		Aided.	Government.		Aided.	
			No. of schools.	No. on roll.	No. of schools.	No. on roll.	No. of schools.	No. on roll.	No. of schools.	No. on roll.	No. of schools.	No. on roll.
1.	Sangli town...	1920-21	1	390	1	306	9	1,407	—	—	5	76
		1929-30	2	515	2	363	8	1,567	—	—	5	80
		1940-41	1	384	3	955	8	2,779	9	743	9	115
2.	Miraj-Prant...	1920-21	—	—	—	—	33	1,713	—	—	—	—
		1929-30	—	—	—	—	38	2,552	—	—	—	—
		1940-41	—	—	—	—	41	3,503	2	59	—	—
3.	Kuchi ...	1920-21	1	18	—	—	24	956	—	—	—	—
		1929-30	1	19	—	—	26	1,122	—	—	—	—
		1940-41	1	8	—	—	29	1,577	1	22	—	—

TABLE E (Continued)
Educational Statistics 1920-21 to 1940-41

S. No.	Taluka.	Year.	English Secondary Schools.			Vernacular Schools.			Religious schools under Government management.			
			Government.		Aided.	Government.		Aided.	No. of schools.		No. on roll.	
			No. of schools.	No. on roll.	No. of schools.	No. on roll.	No. of schools.	No. on roll.	No. of schools.	No. on roll.	No. of schools.	No. on roll.
4.	Mangalwedha.	1920-21	1	25	—	—	19	926	—	—	—	—
		1929-30	1	22	—	—	19	980	—	—	—	—
		1940-41	1	38	—	—	23	1,304	—	—	—	—
5.	Terdal Mahal.	1920-21	1	34	1	41	7	668	2	259	—	—
		1929-30	1	40	1	42	10	638	2	251	—	—
		1940-41	1	37	1	91	10	685	4	411	—	—
6.	Shahapur ...	1920-21	1	262	—	—	24	1,868	—	—	—	—
		1929-30	2	356	—	—	26	2,297	—	—	—	—
		1940-41	2	562	1	38	32	2,571	6	420	—	—
7.	Shirhatti ...	1920-21	1	22	—	—	36	2,152	2	32	—	—
		1929-30	1	9	—	—	37	2,468	—	—	—	—
		1940-41	1	16	—	—	45	2,497	9	242	—	—

TABLE F

Income and Expenditure of Local Bodies

Name of the Taluka and Institution	1929-30		1939-40	
	Income	Expenditure	Income	Expenditure
	Rs.	Rs.	Rs.	Rs.
1. Sangli				
Municipality ...	44,466	47,793	1,41,947	1,36,828
Sangliwadi Grampanchayat ...	—	—	555	556
2. Miraj Prant				
Taluka Local Board ...	28,772	50,765	19,842	23,824
Kavalapur Village Committee ...	1,054	1,479	1,208	909
Kasbe Digraj Grampanchayat ...	—	—	1,732	313
Nandre " ...	—	—	909	1,227
Ugar Khurd " ...	—	—	1,050	900
3. Kuchi				
Taluka Local Board ...	6,169	11,526	7,276	6,847
Kavathe Mahankal Village Committee ...	1,687	917	2,315	2,099
4. Mangalwedha				
Taluka Local Board ...	—	—	9,673	9,845
Mangalwedha Municipality ...	7,045	6,494	7,909	7,965
Borale Village Committee ...	—	—	350	275
5. Terdal Mahal				
Taluka Local Board ...	3,768	5,124	4,393	5,854
Terdal Municipality ...	4,305	6,670	4,741	6,502
Rabkavi Municipality ...	6,989	6,382	7,381	7,274
6. Shahapur				
Shahapur Municipality ...	16,738	15,836	21,390	21,640
Taluka Local Board ...	9,225	8,058	11,057	9,269
Dodwad Village Committee ...	—	—	1,600	1,600
7. Shirhatti				
Taluka Local Board ...	9,073	8,861	17,693	14,940
Shirhatti Municipality ...	2,354	2,557	2,798	3,171
Yerebuddhihal Village Committee ...	738	256	606	319
Magadi " ...	203	320	209	206
Yelwatti " ...	229	118	231	231
Bannikop " ...	348	288	594	515
Belhatti " ...	227	341	485	750

APPENDIX III

Analysis of statistical data collected through replies to Committee's questionnaires Parts I & II

As noted in the Introductory part of the report the distribution of the questionnaires on anything like sampling basis could not be achieved. It was, therefore, not possible to incorporate the quantitative data contained in the replies received nor could any detailed use be made of this information in our survey of resources and of economic conditions of the State. We have, however, made an attempt to analyse the small amount of statistical material available through these replies not because they have got any precise value but because such an analysis would indicate the different ways in which material if collected on a more representative sampling basis could be usefully classified and utilised for drawing more reliable conclusions in several directions. It should therefore, be noted that the following tables for different Talukas provide specimens of analytical treatment rather than samples of factual data.

For all Talukas we have given tables indicating the status of the cultivator and the size and character of his cultivated holding. Table Nos. 1 and 2 in all the Talukas except Mangalwedha give information on the above points. In the case of Mangalwedha Taluka, Tables 1 and 3 do this. In the case of Miraj-Prant we were able to find some material for a table regarding the sources of agricultural finance and rates of interest. In Mangalwedha Taluka as the occupancy and tenancy table indicated a substantial number of cultivators who were partly occupants and partly tenants we have tried to classify these according to size and character of holding cultivated under Tenancy. In Mangalwedha and Shirhatti Talukas a persistent complaint regarding paucity of live-stock was made at our group enquiries. We have, therefore, tried to include for these Talukas tables giving distribution of cultivators firstly according to the number of live-stock they maintain and secondly according to size and character of their cultivated holding in relation to live-stock. This has been done with a view to indicating the method by which the existence of this paucity can be properly investigated. It is not claimed that tables given herein accurately reflect the status quo.

APPENDIX III—A

Miraj-Prant Taluka

TABLE I

Distribution of 99 farm-units according to occupancy
and tenancy cultivation

CULTIVATOR					
Group of villages	Pure occupant	Pure tenant	Partly occupant partly tenant	Partly occupant partly landlord	Total
North-west	4	—	—	1	5
Central-north	7	—	3	—	10
Central	10	—	20	5	35
Ugar group	10	2	5	4	21
North-east	3	—	2	1	6
Eastern plains	14	1	4	3	22
Total ...	48	3	34	14	99

TABLE II
Distribution of 99 farms according to irrigated and dry cultivation

Irrigated acres	Dry Acres									Total
	0—5	5—10	10—15	15—20	20—30	30—40	40—50	50 and above		
0—3	1	6	7	12	18	7	6	6	6	63
3—6	2	3	5	1	1	2	—	—	—	14
6—9	—	1	1	—	2	1	—	3	3	8
9—12	—	—	—	1	—	—	—	3	3	4
12—15	—	—	—	—	3	—	—	2	2	5
15—18	—	—	1	—	—	—	—	—	—	1
18—21	—	—	—	—	—	2	—	1	1	3
21 & above	—	—	—	1	—	—	—	—	—	1
Total	3	10	14	15	24	12	6	15	99	

TABLE III

Distribution of 93 cultivators according to their sources of finance and rates of interest

Group	Total No.	No. giving information re. financing.	No. having their own capital.	Co-operative Society's capital at Rs. 9/6/- or below.	Sowcar's Capital.				Middleman's Capital.		Total.
					Below 10%	12%	15%	18%	24%	18%		24%
North-west	5	5	—	—	—	5	—	—	—	—	5
North-central	10	8	—	—	4	4	—	—	—	—	8
Central	35	35	13	7	1	5	—	5	2	2	35
South-central (Ugar)	21	19	8	1	—	1	6	—	—	—	19
North-east	6	4	1	2	—	—	—	—	—	—	4
Eastern plains (Kavalapur)	22	22	4	2	—	4	—	7	3	2	22
Grand Total	99	93	26	12	5	19	6	12	5	4	93

APPENDIX III—B

Kuchi Taluka

TABLE I

Distribution of 70 farm-units according to occupancy
and tenancy cultivation

CULTIVATOR					
Group	Pure occupant	Pure tenant	Partly occupant partly tenant	Partly occupant partly landlord	Total
North-west	8	—	3	6	17
North-central	3	1	—	1	5
Central	9	—	2	2	13
West-central	4	—	—	1	5
Eastern	10	1	5	6	22
Southern	5	—	2	1	8
Total ...	39	2	12	17	70

TABLE II
Distribution of 70 farms according to irrigated and dry cultivation

Irrigated Acreage	DRY ACREAGE										Total
	0-5	5-10	10-15	15-20	20-30	30-40	40-50	50 & above	Total		
0	—	—	—	2	2	—	—	—	—	4	
0-3	6	—	1	3	2	—	1	3	16		
3-6	2	2	2	3	5	—	—	3	17		
6-9	4	1	1	—	1	1	1	3	12		
9-12	—	—	1	1	3	—	—	—	5		
12-15	—	—	1	—	1	1	—	1	4		
15-18	—	—	1	—	—	—	1	1	3		
18-21	—	—	—	—	—	—	—	2	2		
Above 21	—	2	—	—	—	1	1	3	7		
Total ...	12	5	7	9	14	3	4	16	70		

APPENDIX

TABLE

Distribution of 43 partly tenants and partly occupants
and acreage under

Owned Acreage.		Irrigated and dry acreage under tenancy.							
Irrigated	Dry	0 Irrigated				0-5 Irrigated			
		Dry				Dry			
		0-5	5-20	20-50	Above 50	0-5	5-20	20-50	Above 50
0	0-5	-	-	-	-	-	-	-	-
	5-20	-	3	3	1	-	-	-	-
	20-50	-	3	1	-	-	-	-	-
	Above 50	-	-	1	-	-	-	-	-
	Total	-	6	5	1	-	-	-	-
0-5	0-5	-	-	-	-	-	1	-	-
	5-20	-	-	1	1	-	1	-	-
	20-50	-	-	4	-	1	-	-	-
	Above 50	-	2	-	1	-	1	-	-
	Total	-	2	5	2	1	3	-	-
5-10	0-5	-	-	-	-	-	-	-	-
	5-20	-	-	-	-	1	-	-	-
	20-50	-	-	2	-	1	-	-	-
	Above 50	-	-	-	-	-	-	-	-
	Total	-	-	2	-	2	-	-	-
10-20	0-5	-	-	-	-	-	-	-	-
	5-20	-	-	-	-	-	-	-	-
	20-50	-	-	1	-	-	-	-	-
	Above 50	-	-	2	1	-	-	-	-
	Total	-	-	3	1	-	-	-	-
Above 20	0-5	-	-	-	-	-	-	-	-
	5-20	-	-	-	-	-	-	-	-
	20-50	-	-	-	-	-	-	-	-
	Above 50	-	1	-	-	-	-	-	-
	Total	-	1	-	-	-	-	-	-
Grand Total		-	9	15	4	3	3	-	-

III—C

I.

of Mangalwedha Taluka according to their own holdings
tenancy cultivation.

Irrigated and dry acreage under tenancy.													Total.
5-10 Irrigated				10-20 Irrigated				Above 20 Irrigated					
Dry				Dry				Dry					
0-5	5-20	20-50	Above 50	0-5	5-20	20-50	Above 50	0-5	5-20	20-50	Above 50		
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	2	-	-	-	-	-	9
-	-	-	-	-	-	-	-	-	-	-	-	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	2	-	-	-	-	-	14
-	-	1	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	-	-	-	-	3
-	-	-	1	-	-	-	-	-	-	-	-	-	5
-	-	-	1	-	-	-	-	-	-	-	-	-	5
-	-	1	1	-	-	-	-	-	-	-	-	-	15
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	-	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	1	-	-	-	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	1	-	-	-	-	-	-	1	-	-	-	-	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	1	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	1	-	-	-	-	-	-	-	-	-	4
-	-	-	1	-	-	-	1	-	-	-	-	-	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	1	-	-	2
-	-	-	-	-	-	-	-	-	1	-	-	-	2
-	1	1	2	-	-	-	3	1	1	-	-	-	43

APPENDIX III—C

Mangalwedha Taluka

TABLE II

Distribution of 84 farm-units according to occupancy
and tenancy cultivation

CULTIVATOR					
Group of village	Pure occupant	Pure tenant	Partly occupant partly tenant	Partly occupant partly landlord	Total
North and North-east	5	—	9	2	16
Central	12	1	19	5	37
South and South-west	14	—	10	1	25
South-east	1	—	5	—	6
Total ...	32	1	43	8	84

TABLE III

Distribution of 84 farms according to irrigated and dry cultivation

Irrigated acreage	Dry Acreage								Total
	0-5	5-10	10-15	15-20	20-30	30-40	40-50	50 & above	
0	—	1	2	2	2	5	4	14	30
0-3	—	—	—	—	2	—	1	4	7
3-6	—	—	1	—	—	2	—	13	16
6-9	—	1	—	1	3	2	—	5	12
9-12	—	—	—	—	—	—	—	5	5
12-15	—	—	—	1	—	—	—	1	2
15-18	—	—	—	—	—	—	—	—	—
18-21	—	—	1	—	—	—	—	4	5
Above 21	—	—	—	—	1	—	—	6	7
Total ...	—	2	4	4	8	9	5	52	84

Distribution of 78 cultivators according to the size and character

Cultivated holding.		Bullocks.		
Irrigated	Dry	0	1	2
Acres	Acres			
0	0-5 ...	—	—	—
	5-20 ...	1	—	2
	20-50 ...	—	—	7
	Above 50 ...	—	—	4
	Total ...	1	—	13
0-5	0-5 ...	—	—	—
	5-20 ...	—	—	1
	20-50 ...	—	—	2
	Above 50 ...	—	—	1
	Total ...	—	—	4
5-10	0-5 ...	—	—	—
	5-20 ...	—	—	—
	20-50 ...	—	—	—
	Above 50 ...	—	—	—
	Total ...	—	—	—
10-20	0-5 ...	—	—	—
	5-20 ...	—	—	—
	20-50 ...	—	—	—
	Above 50 ...	—	—	—
	Total ...	—	—	—
Above 20	0-5 ...	—	—	—
	5-20 ...	—	—	—
	20-50 ...	—	—	—
	Above 50 ...	—	—	—
	Total ...	—	—	—
Grand Total ...		1	—	17

IV.

of cultivated holding and the number of bullocks they keep.

Bullocks.					
4	6	8	10	Above 10	Total
—	1	—	—	—	1
1	1	—	—	—	5
5	—	—	—	—	12
8	2	—	—	—	14
14	4	—	—	—	32
—	—	—	—	—	—
—	—	—	—	—	1
2	1	—	—	—	5
4	2	1	—	1	9
6	3	1	—	1	15
—	—	—	—	—	—
2	—	—	—	—	2
5	1	—	—	—	6
2	2	2	—	2	8
9	3	2	—	2	16
—	—	—	—	—	—
1	1	—	—	—	2
—	—	—	—	—	—
1	1	4	—	1	7
2	2	4	—	1	9
—	—	—	—	—	—
—	—	—	—	—	—
1	—	—	—	—	1
—	2	2	—	1	5
1	2	2	—	1	6
32	14	9	—	5	78

TABLE V
 Distribution of 78 farmers according to number of plough-cattle they possess.

Group of Villages	Total No. of replies	No. giving information about bullocks	BULLOCKS										
			0	1	2	4	6	8	10	Above 10	Total		
North and North-east	16	15	—	—	4	5	4	2	—	—	—	—	15
Central	37	33	1	—	9	12	5	2	—	—	4	—	33
South and South-west	25	24	—	—	4	10	5	5	—	—	—	—	24
South-east	6	6	—	—	—	5	—	—	—	—	1	—	6
Total ...	84	78	1	—	17	32	14	9	—	—	5	—	78

APPENDIX III—D

TERDAL MAHAL

TABLE I

Distribution of 28 farm—units according to
occupancy and tenancy cultivation

Group of villages	Cultivator				Total
	Pure occupant.	Pure tenant.	Partly occupant partly tenant.	Partly occupant partly landlord.	
Terdal-Rabakavi	8	1	9	8	26
Detached Villages	—	—	2	—	2
Total	8	1	11	8	28

TABLE II
 Distribution of 28 farms according to irrigated and dry cultivation

Irrigated acreage	Dry acreage.										Total
	0-5	5-10	10-15	15-20	20-30	30-40	40-50	Above 50			
0	2	1	4	4	4	2	—	3			20
0-3	—	1	1	1	—	—	—	—			3
3-6	—	—	1	—	—	—	—	1			2
6-9	—	—	—	—	—	—	—	—			—
9-12	—	—	—	—	1	—	—	2			3
12-15	—	—	—	—	—	—	—	—			—
15-18	—	—	—	—	—	—	—	—			—
18-21	—	—	—	—	—	—	—	—			—
Above 21	—	—	—	—	—	—	—	—			—
Total	2	2	6	5	5	2	—	6			28

APPENDIX III-E

Shahapur Taluka

TABLE I

Distribution of 49 farm-units according to occupancy
and tenancy cultivation

CULTIVATOR						
Group of villages	Pure occupant	Pure tenant	Partly occupant partly tenant	Partly occupant partly landlord	Pure landlord	Total
North-western	3	—	2	16	2	23
North-eastern	3	—	3	9	8	23
Shahapur	—	—	—	2	—	2
Dodwad	—	—	—	1	—	1
Total ...	6	—	5	28	10	49

TABLE II
Distribution of 49 farms according to irrigated and dry cultivation

Irrigated acreage	DRY ACREAGE								Total
	0-5	5-10	10-15	15-20	20-30	30-40	40-50	above 50	
0	12	6	1	—	1	1	1	1	23
0-3	5	2	1	2	1	—	—	—	11
3-6	—	3	—	3	1	—	—	—	7
6-9	—	1	—	1	—	—	—	—	2
9-12	—	—	—	—	—	—	—	3	3
12-15	—	—	—	—	—	—	—	—	—
15-18	—	—	—	—	—	—	1	—	1
18-21	—	—	—	—	—	—	—	1	1
Above 21	—	—	—	—	—	—	—	1	1
Total ...	17	12	2	6	3	1	2	6	49

APPENDIX III—F

Shirhatti Taluka

TABLE I

Distribution of 172 farm-units according to occupancy and tenancy cultivation

Group of villages	Cultivator					Total
	Pure occupant	Pure tenant	Partly occupant partly tenant	Partly occupant partly tenant	Pure landlord	
Western ...	17	—	14	8	2	41
Central ...	23	—	33	37	8	101
Eastern ...	14	—	8	8	—	30
Total ...	54	—	55	53	10	172

TABLE II
Distribution of 172 farms according to irrigated and dry cultivation

Irrigated acreage	Dry acreage										Total
	0-5	5-10	10-15	15-20	20-30	30-40	40-50	Above 50	Total		
0	3	2	2	7	21	10	15	87	147		
0-3	—	—	2	1	3	—	1	8	15		
3-6	—	—	—	—	2	1	—	6	9		
6-9	—	—	—	—	—	1	—	—	1		
Total	3	2	4	8	26	12	16	101	172		

TABLE III

Distribution of 141 farmers according to number of plough-cattle they possess

Group of villages	BULLOCKS										Total.
	0	1	2	4	6	8	10	Above 10	Total.		
Western	2	—	10	8	6	4	2	3	35		
Central	9	1	15	25	17	5	2	3	77		
Eastern	4	—	6	9	2	3	1	4	29		
Total.	15	1	31	42	25	12	5	10	141		

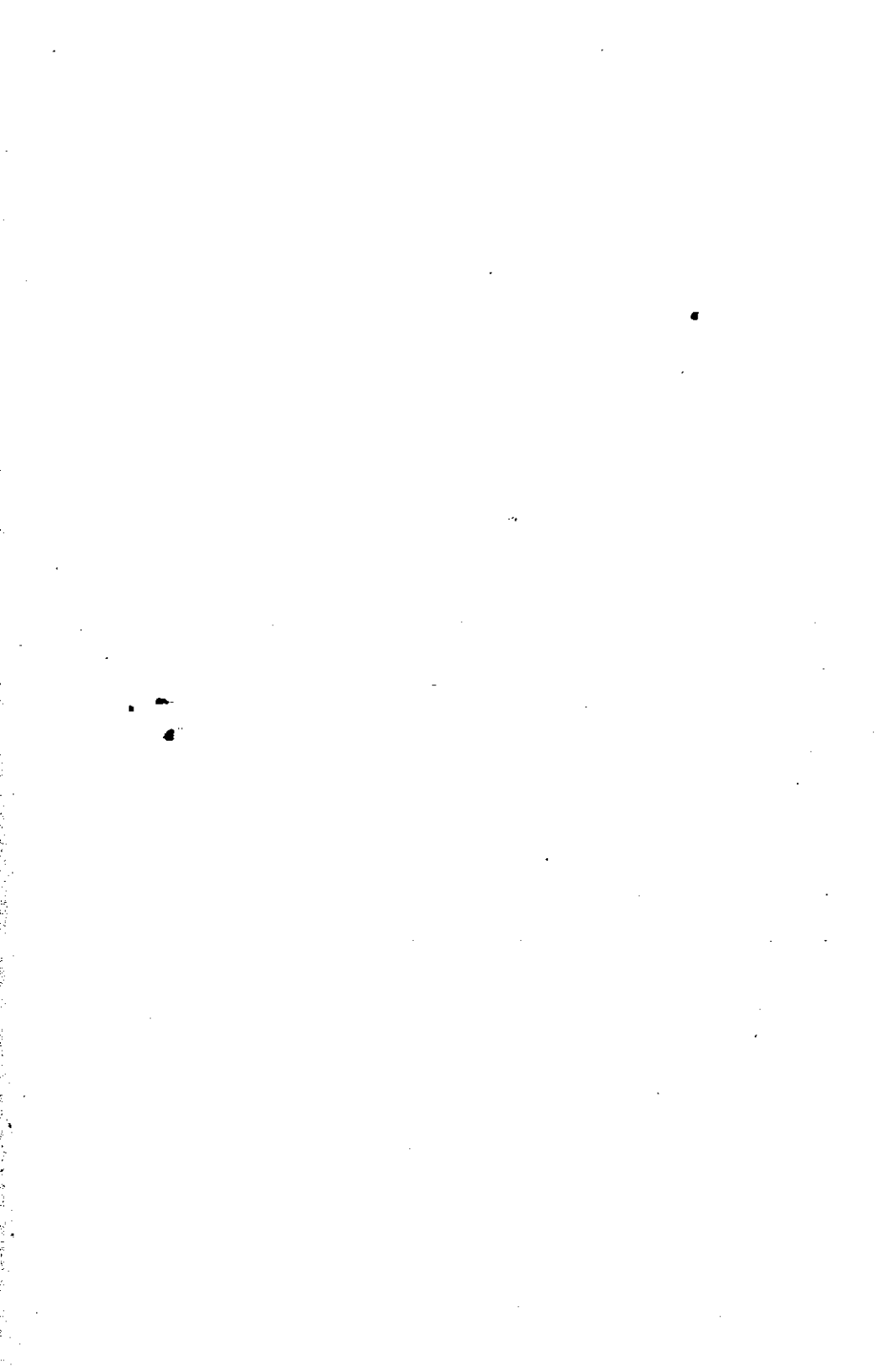
Distribution of 141 cultivators according to their size and character

Cultivated holding		Bullocks		
Acres Irrigated	Acres Dry	0	1	2
0	0—5	1	1	1
	5—25	5	—	5
	25—50	2	—	14
	50—75	1	—	3
	75—100	—	—	2
	100—150	3	—	1
	Above 150	1	—	1
	Total ...	13	1	27
0-3	0—5	—	—	—
	5—25	1	—	1
	25—50	—	—	1
	50—75	—	—	1
	75—100	1	—	—
	100—150	—	—	—
	Above 150	—	—	—
	Total ...	2	—	3
3-6	0—5	—	—	—
	5—25	—	—	—
	25—50	—	—	1
	50—75	—	—	—
	75—100	—	—	—
	100—150	—	—	—
	Above 150	—	—	—
	Total ...	—	—	1
Grand Total ...	15	1	31	

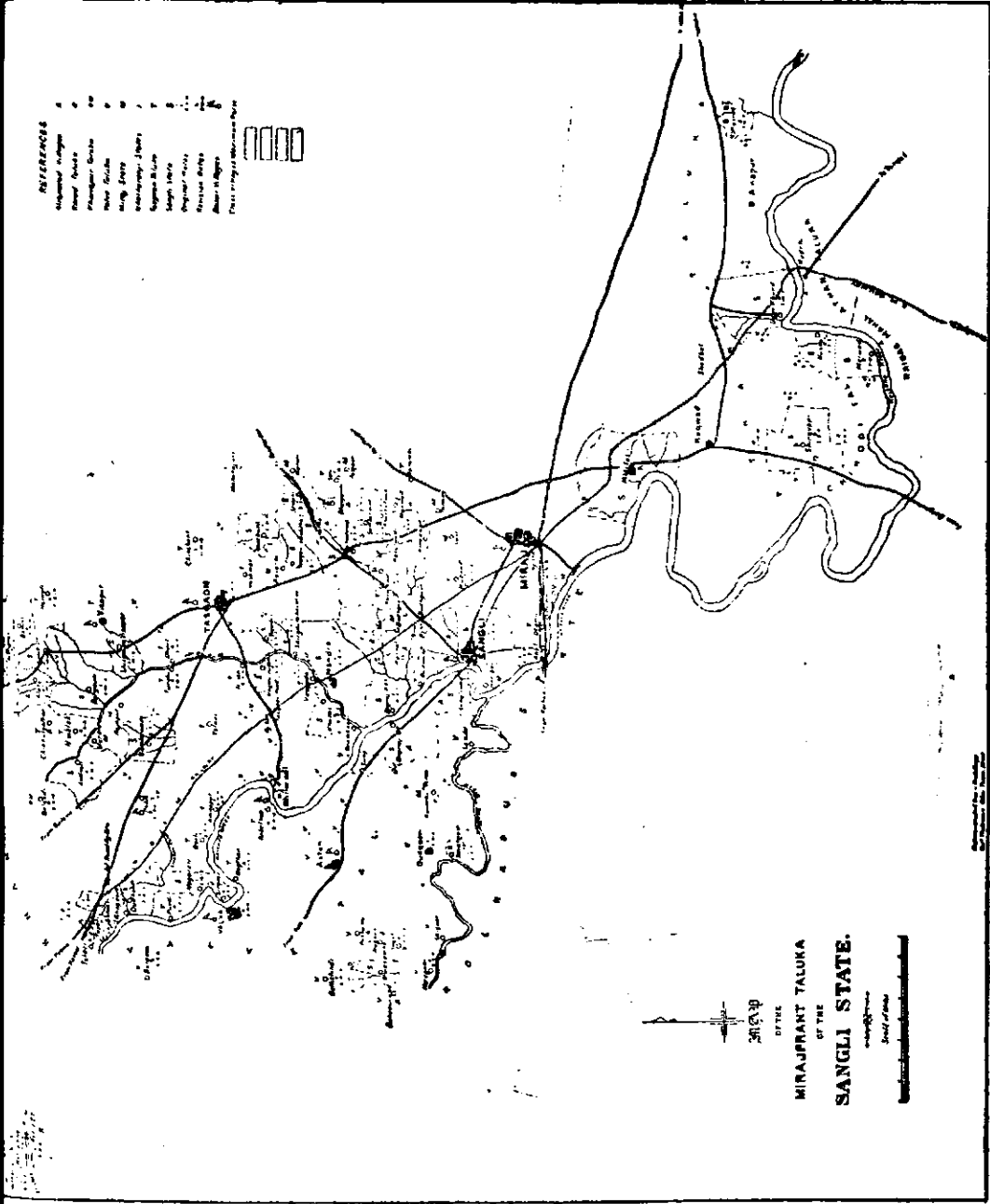
IV

of cultivated holding and number of plough cattle they keep.

Bullocks					Total
4	6	8	10	Above 10	
—	—	—	—	—	3
—	2	—	—	—	12
9	3	—	1	—	29
8	7	2	—	—	21
14	4	2	1	1	24
2	8	2	1	1	18
1	—	3	2	5	13
34	24	9	5	7	120
—	—	—	—	—	—
2	—	1	—	—	5
1	—	—	—	—	2
1	—	—	—	—	2
1	1	—	—	1	4
—	—	—	—	—	—
—	—	—	—	—	—
5	1	1	—	1	13
—	—	—	—	—	—
—	—	—	—	—	—
1	—	1	—	1	4
2	—	—	—	—	2
—	—	—	—	1	1
—	—	1	—	—	1
—	—	—	—	—	—
3	—	2	—	2	8
42	25	12	5	10	141



- SYMBOLS**
- 1. Government Buildings
 - 2. Chief's Quarters
 - 3. Police Station
 - 4. School
 - 5. Temple
 - 6. Well
 - 7. Tank
 - 8. Railway Station
 - 9. Post Office
 - 10. Public Well
 - 11. Village
 - 12. Forest
 - 13. Boundary
 - 14. Road
 - 15. Canal
 - 16. River
 - 17. Lake
 - 18. Hill
 - 19. Mountain
 - 20. Cliff
 - 21. Cave
 - 22. Tomb
 - 23. Fort
 - 24. Enclosure
 - 25. Wall
 - 26. Gate
 - 27. Bridge
 - 28. Ferry
 - 29. Boat
 - 30. Boat House
 - 31. Boat Quay
 - 32. Boat Dock
 - 33. Boat Landing
 - 34. Boat Wharf
 - 35. Boat Pier
 - 36. Boat Jetty
 - 37. Boat Ramp
 - 38. Boat Sluice
 - 39. Boat Lock
 - 40. Boat Dam
 - 41. Boat Weir
 - 42. Boat Barrage
 - 43. Boat Dam
 - 44. Boat Lock
 - 45. Boat Dam
 - 46. Boat Lock
 - 47. Boat Dam
 - 48. Boat Lock
 - 49. Boat Dam
 - 50. Boat Lock



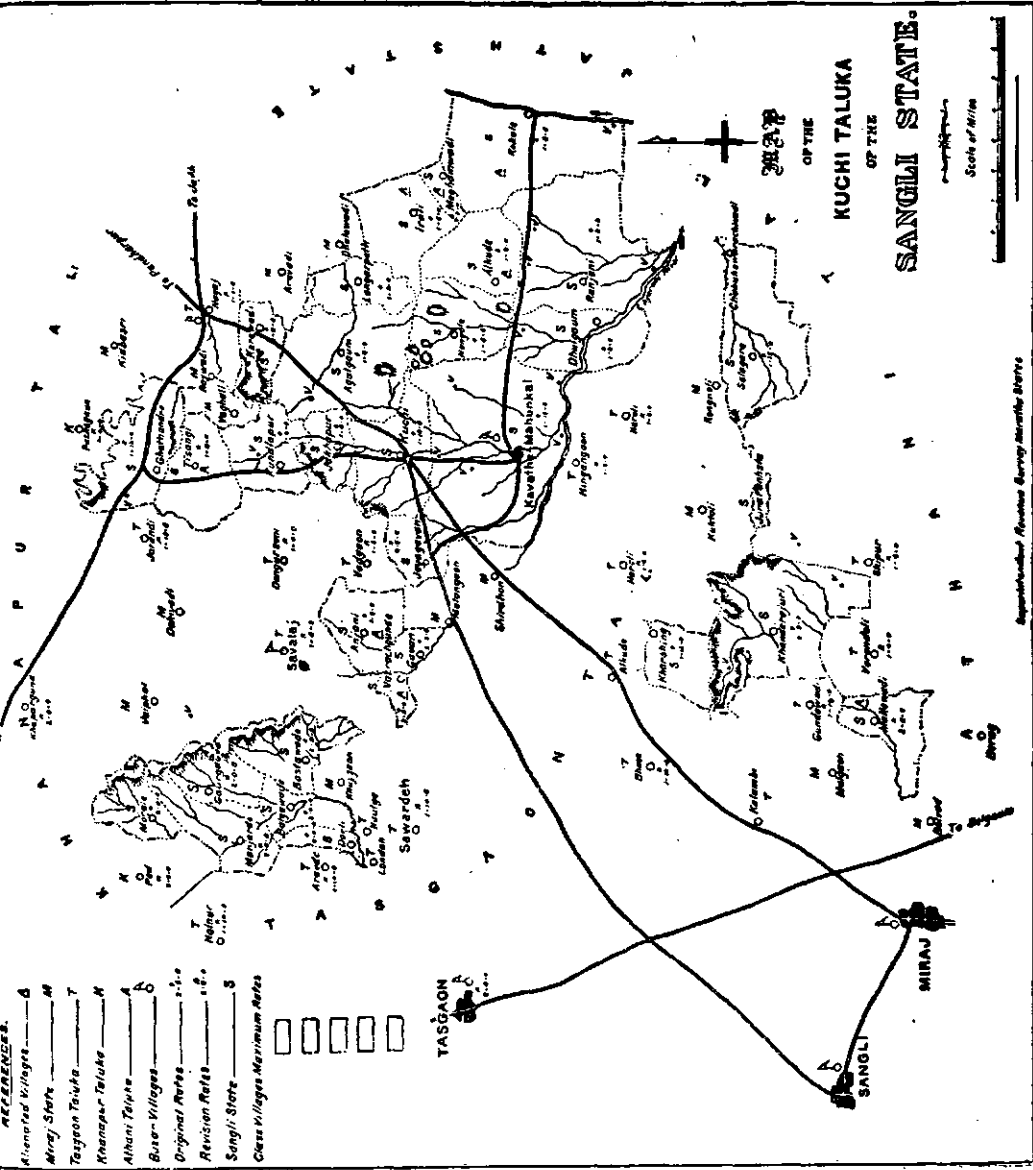
MIRAJPRANT TALUKA
OF THE
SANGLI STATE.



Scale
1 inch = 1 mile

Miraj-Prant Taluka





- REFERENCES.**
- 1. Kisanfard Villages — A
 - 2. Muz-Starts — M
 - 3. Tasgaon Taluka — T
 - 4. Khatnagar Taluka — K
 - 5. Alhani Taluka — A
 - 6. Buser Villages — B
 - 7. Original Notes — 1-10
 - 8. Revision Notes — 11-20
 - 9. Sangli State — S
 - 10. Class Villages Maximum Notes

OF THE
KUCHI TALUKA
 OF THE
SANGLI STATE.





Scale of Miles

Approved and Published by the Government of India

Kuchi Taluka



REFERENCES

- Base Map:  A
- Altered Maps:  B
- Revision Dates:  C
- Original Dates:  D

- Class Meters Maximum: 0 to 100
- I.  0 to 25
 - II.  25 to 50
 - III.  50 to 75
 - IV.  75 to 100



MAP

OF THE

MANGALWEDHE TALUKA

OF THE

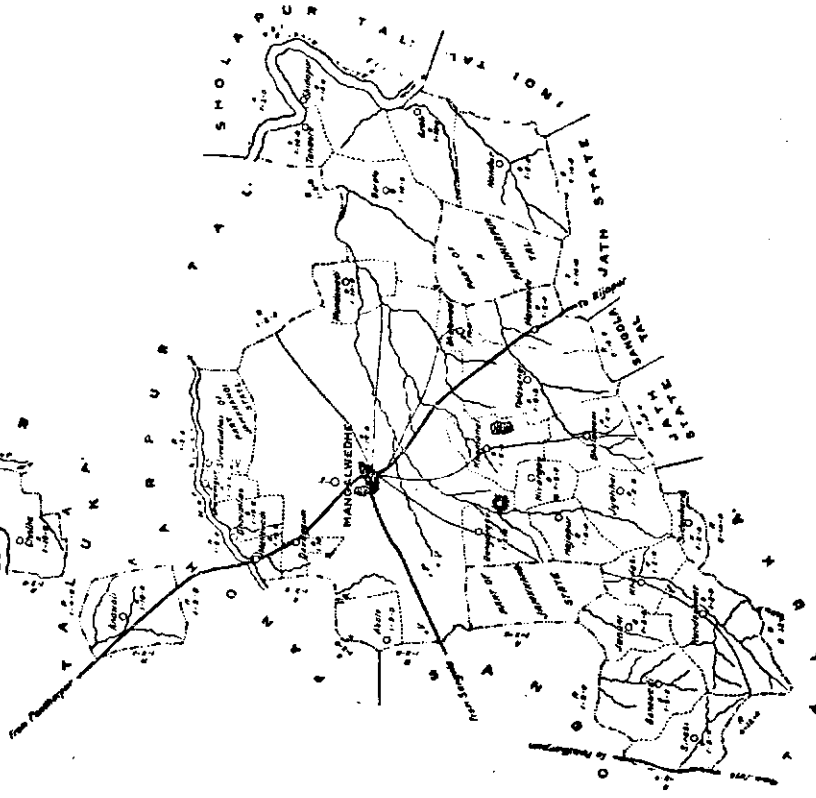
SANGLI STATE.

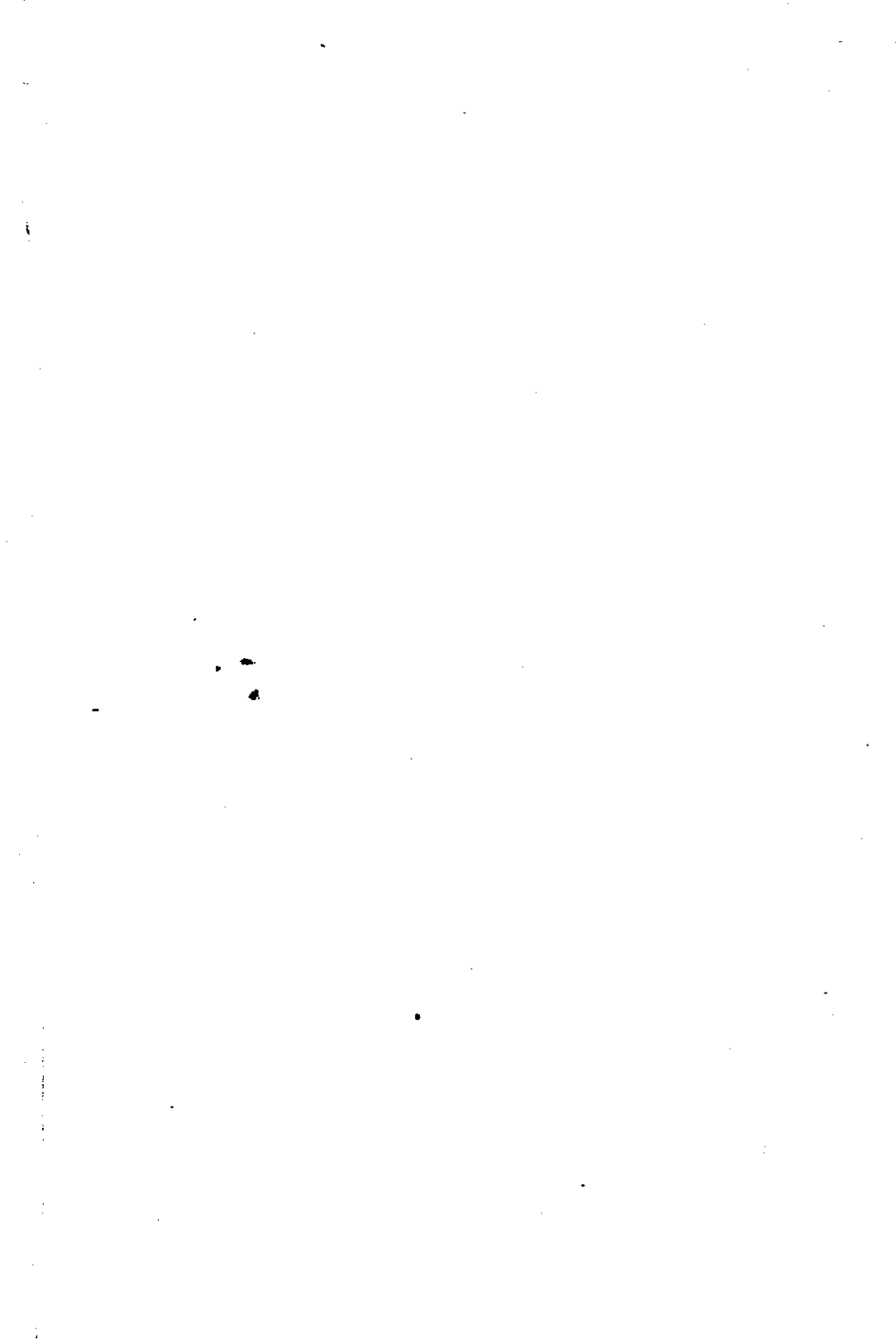
Scale of Miles

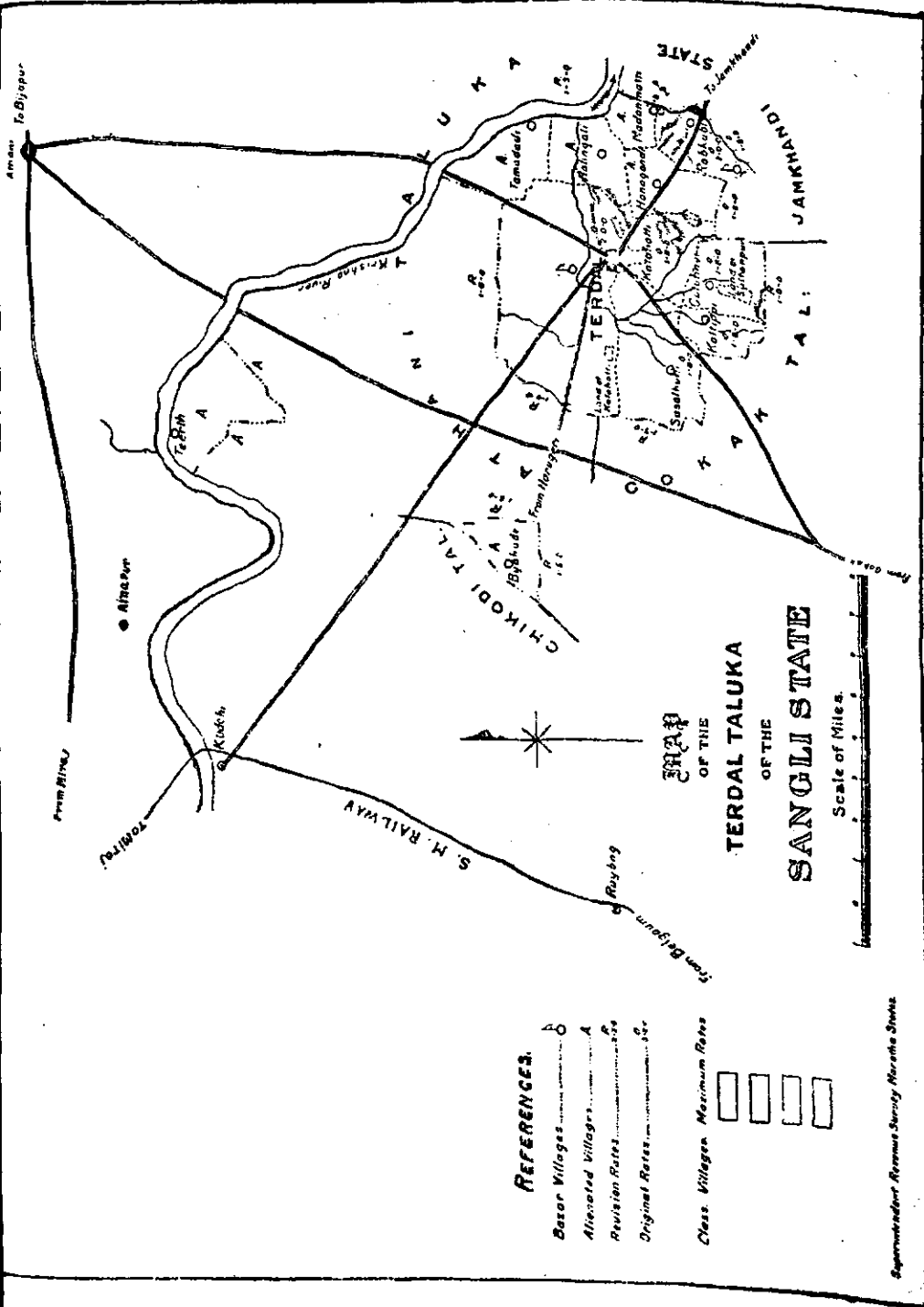
0 1 2 3 4 5 6 7 8 9 10

(Signed) P. Young,

Superintendent Revenue Survey Mangalwedhe Taluka.







REFERENCES.

- Bazar Villages
- Alienated Villages
- Revision Rates
- Original Rates

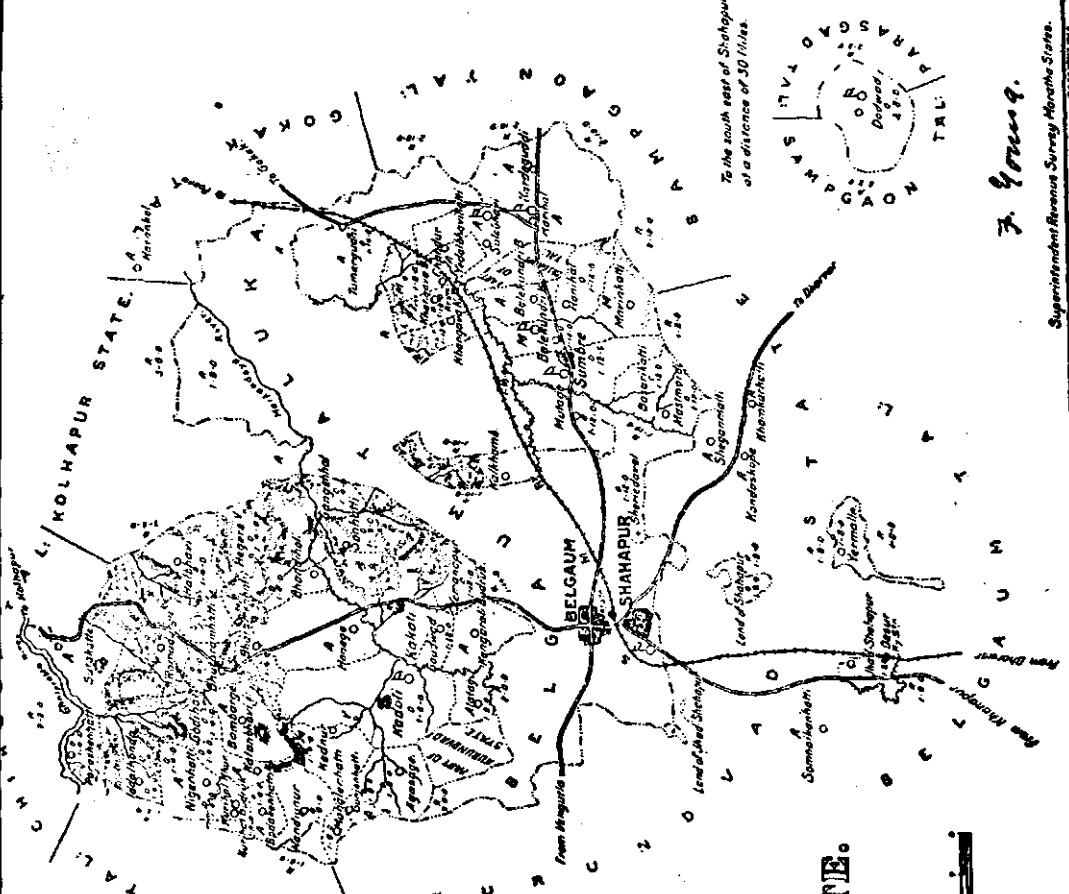
Class Villages Maximum Rates

Scale of Miles.

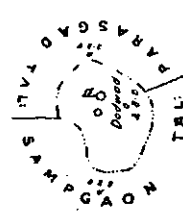
Superintendent Revenue Survey Marathe State

Terdal Mahal





To the south east of Shahapur
at a distance of 50 Miles.



F. Young.

Superintendent Revenue Survey, Marathe States.

Best Villages	8
Allocated Villages	4
Main Villages	11
Revenue Rate	250
Original Rate	150

Class Villages	Maximum Rates
I { 1 Center 6 Inam	Rs 2,250
II { 2 Centers 2 Inam	Rs 2,000
III { 3 Centers 3 Inam	Rs 1,750
IV { 4 Centers 4 Inam	Rs 1,500



MSRP
OF THE
SHAHAPUR TALUKA
OF THE

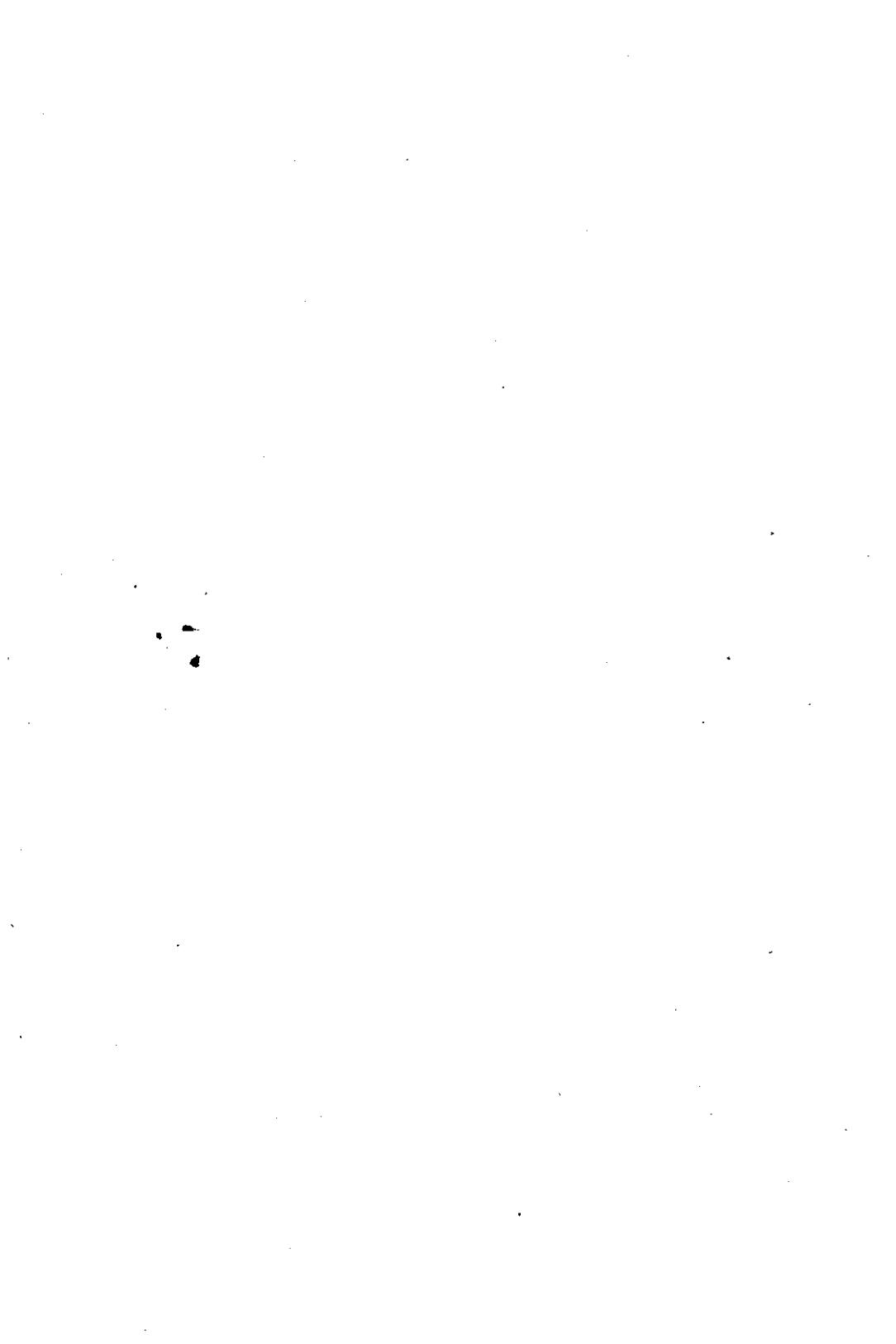
SANGLI STATE.

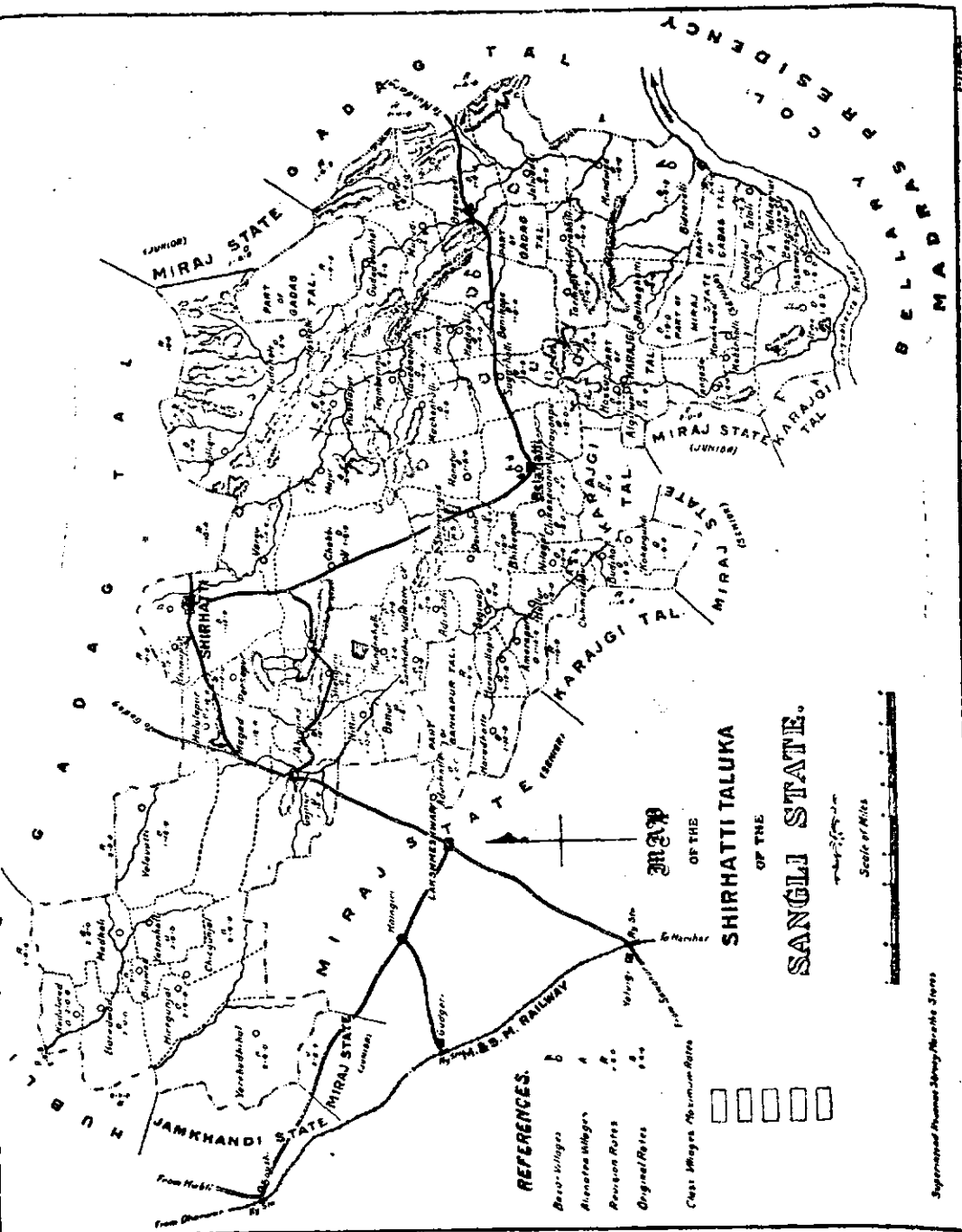


Scale of Miles.



Shahapur Taluka





REFERENCES.

- Base Villages
- Allocated Villages
- Revision Rates
- Original Rates



Class Villages Abolished Rates

SHIRHATTI TALUKA
OF THE
SANGLI STATE.

