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BLOCK LEVEL PLANNING FOR
FULL EMPLOYMENT

SAGBARA

(Dist. Bharuch)

Prepared by

R. B. LAL

and

BHARATI DESAI

T. B. NAIK

Chief Consultant



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INSTITUTE, GUJARAT, VIDYAPITH
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Published by :
Ramlal Dahyabhai Parikh
Managing Trustee
Gujarat Vidyapith
Ahmedabad 380 014

Price: Rs. 40

© Gujarat Vidyapith

Printed by :
Jitendra T. Desai
Navajivan Press, Ahmedabad-380 014

P R E F A C E

Preparation of plans for generating employment at the micro-level is full of hazards. The task becomes all the more onerous when such a plan is meant for a tradition-oriented society. The taluka, i.e. Sagbara for which the block level planning exercise was entrusted to us is an area inhabited by such an indigenous society. Obviously, the nature of the task was beyond the ambit of solo-performance of a research team; it could never have been performed without the active support, help and guidance from several quarters.

At the outset we gained a good deal of insight into BLP at the workshop organized by the Jyoti Consultants Ltd. at Baroda in the first week of October last year. Prof. V.S. Vyas (Director, IIM) and Shri R. Parthasarathy (Secretary, Planning Dept.) inspired us for innovative and creative thinking for the task. We take this opportunity to thank both of them for instilling into us necessary inspiration and encouragement.

In the course of the survey work, valuable help and support was given to the members of the survey team by the Taluka Pramukh, Taluka Development Officer, Mamlatdar and several other officials of the Taluka Panchayat office. Due to their active interest, the team's stay at Sagbara and the selected villages was pleasant. We owe much gratitude to each of them.

For preparing a viable and workable plan, the discussions held at the meetings of the District Coordination Committee under the able guidance of the District Collector was extremely rewarding for us. We are particularly indebted to the District Collector, Shri Sanjeev Mishra, the District Development Officer, Mrs. Mishra and the

District Planning Officer, Shri Desai for taking keen interest in our work and giving us very useful insight in finalizing the details of the scheme. Our thanks to them as well as to each member of the Committee.

Close at home, i.e. at Vidyapith we have always received great inspiration to dedicate ourselves for the cause of rural and tribal people from Prof. Ramlal Parikh, Managing Trustee of Gujarat Vidyapith. The long Gandhian tradition of Vidyapith to devote its energy and resources for the development of down-trodden makes us to be extra-enthusiastic to put our entire energy in contributing, to our best capacity of course, to keep this tradition alive. Needless to emphasize, it is to the credit of Prof. Parikh, the torch of our dedication to such works, as this one, is kept burning. We are extremely grateful to him.

To our Vice-Chancellor, Shri Dahyabhai Naik, this kind of work is extremely close to his heart. Everybody in Gujarat knows about his life-long dedicated work to end the exploitation of the Adivasis. It is very natural that he took keen interest in our work and benefited us from time to time by providing us extremely useful guidance regarding the approach to this entire exercise. We owe a great deal of gratitude to him for always solving our confusion.

Shri Vinod Tripathi, the Registrar of Gujarat Vidyapith, took special interest in the recruitment of right type of Investigators for this work and made necessary arrangements for the speedy execution of the administrative aspect in this work. To him and Shri Rameshbhai Parikh, Asstt. Registrar, we are very much thankful.

Our Institution's Director, Dr. T. B. Naik, who also is the Chief Consultant in this project, always put us on the right track, right from the beginning of the survey work to the completion of the last chapter of this report. He very carefully went through each line in this report and guided us in a very fruitful manner. It is largely because of his guidance and support that the work could be completed in a satisfactory way. If the report receives any

credit and the programmes for generating employment as suggested here prove to be of any worth, it will be mainly due to the guidance we received from him at every step. He himself went to the field with us and saw to it that we were proceeding in right direction. We don't know how to thank him. This is as much his work as ours.

At our Institute, several of our colleagues took keen interest and gave us all the valuable support one needs from colleagues. Our Office Superintendent, Shri Rambhai Patel deserves special pat for solving our all administrative problems connected with this work. To him, to our colleagues and to all other staff members of this Institute who have helped us, we express our sincere gratitude.

Lastly, but the most important of all, the members of the survey team deserve all the credit for performing their duties in a very sincere and industrious way. The team consisted of Sarva Shri Simon Meckwan, Shri Gordhanbhai Ribadia, Shri Manubhai Makwana and Shri Satishbhai Vashi. Special credit goes to Shri Meckwan who was mainly instrumental in the preparation of the Gujarati version of this report. We thank each of them for their hard labour.

R.B. LAL

BHARATI K. DESAI

**GUJARAT VIDYAPITH
AHMEDABAD**

25-9-1980

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CHAPTER I

INTRODUCTION

1: The District: A Short Profile

Bharuch district is one of the 19 districts in the State of Gujarat, situated in the southern part of the State. It ranks eighth in number from the point of view of the size in all the districts of the State. Geographically, it is located between $21^{\circ} 25'-45''$ and $22^{\circ} 15'-16''$ north latitude and $72^{\circ} 34'-19''$ and $73^{\circ} 12'-15''$ east longitude. The geographical area of the district measures 9045 sq. km. which accounts for 4.62 per cent of the total area of the State. The neighbouring districts of Bharuch are: Vadodara and Kheda in the north, Dhulia (Maharashtra) in the east and Surat in the south. In the west is the Gulf of Cambay which is an indentation of the Arabian Sea in its coast.

Topographically, the district can be divided into two distinct natural regions, one the plain or lowland region characterized by flat lands which is by and large quite fertile while the other is the upland hilly region, which was covered with dense forest in a not too distant past and still bears good forests in many parts of the region. The former, which for administrative purpose, is identified as Bharuch sub-division of the district, has six talukas* : Bharuch, Vagra, Jambusar, Amod, Ankleshwar and Hansot. The latter, known as Rajpipla sub-division has five talukas : Sagbara, Dediapada, Valia, Jhagadia and Nandod. The plain area of the Bharuch sub-division can be further

* In the Gujarat State, a district is divided into several smaller units which are known as talukas.

sub-divided into three natural areas: (i) the coastal land in the west, (ii) the river valleys formed by the rivers Narmada, Kim and Dhadhar which are in the middle part of the district and (iii) the delta belt where the Narmada river flows down into the Gulf of Cambay. The eastern part of the district i.e. the Rajpipla sub-division too can be further sub-divided into two parts: (i) the lowland and (ii) the undulating upland. Towards the east of this sub-division, the land bears a much dissected and poorer appearance. Deeply furrowed streams—zigzagging through the low hills and plateau—are a common sight. The hills and the slopes are covered with forest, once dense but a good deal depleted now due to indiscriminate felling. The region shaped like a plateau has quite a few hills. The hill ranges in the eastern part of the district are those of the Satpuda as well as the Sahyadri. The Satpuda hill range enters the district from the north-east side while those of Sahyadri range from the south-east side. Both these ranges virtually end up in this district.

Narmada, which is the most important river of the Gujarat State passes through this district from east flowing to west and as down into the sea in the district itself. Other important rivers are the Dhadhar and the Kim. While the Tapi and the Mahi rivers, the two important rivers of the State, do not actually flow through this district, they have contributed in the creation of fertile valleys in this district. Apart from these important rivers which have perennial source of water there are some other tributaries of the Narmada, such as the Amravati, the Karjan, the Dewai and the Kaveri, which flow through the district. Besides the rivers, there are streams like Buwa, Nahiyar, Bhukikhadi, Amalkhadi and Vankhadi flowing through the district. Most of these streams contain flow of water almost throughout the year.

On the basis of the classification of the soil, the district can be put into four zones— (i) the rocky tracts of

the eastern part comprising of Dediapada, Sagbara, Nandod, Jhagadia and Valia talukas, (ii) the coastal belt of waste land having waste Khar and brown soil, comprising of Jambusar, Vagra and Hansot talukas, (iii) the rich garden land of north-eastern part of Jambusar taluka which is excellent for the production of long staple varieties of cotton and (iv) the central region abounding in highly fertile black soil covering the Bharuch, Ankleshwar and Amod talukas.

The district is endowed with rich forests. The forest in this district covers an area of 1725.52 sq. km., (1971 census) out of which 1129.94 sq. km. has been classified as reserved while unclassified forest is 292.79 sq. km. Besides, 302.79 sq. km. of the forests has been under private proprietorship.

Geologically, the district has become an important one in the national map for its crude oil reserves. Among the other important minerals which are found in this district area: Agate, Calcite, Bentonite, Boulder, Brick earth, Fuller's earth, Grawel, coloured clay, china clay and limestone.

The district is also known for frequent floods, ravages caused by the floods in the Narmada river and its tributaries. In the course of last thirty years, the Narmada crossed the danger mark in its flow for 11 times. Due to the recurrence of floods the district has to suffer considerable damage. The following figures will give an insight of the extent of the flood ravages in the district.

The district, experienced a severe earthquake in 1971. The Bharuch town and its surrounding areas had been rocked due to this earthquake.

The district frequently experiences drought and scarcity conditions. During the last decade, it was hit by drought and scarcity conditions for six times. The informa-

tion given below provide a pretty good idea regarding this. When drought hits the district almost all the eleven talukas of the district come under its sweep.

Table-1

Statement showing flood-affected villages & population

Year of floods.	No. of talukas affected	No. of villages affected	Population affected	Extent of damage to crops (in Rs.)
1969-70	5	52	9,000	8,37,000
1970-71	7	204	2,85,000	2,20,73,000
1972-73	4	52	73,800	24,84,000
1973-74	7	155	2,09,700	1,58,99,000
1976-77	7	780	2,26,226	2,74,425

Table-2

Statement showing drought & scarcity situation

Year of drought	No. of talukas affected	No. of villages affected	Population affected	
			Human	Cattle
1966-67	11	127	N.A.	N.A.
1968-69	11	243	N.A.	N.A.
1972-73	11	662	14,50,877	2,49,882
1973-74	11	668	7,72,551	2,34,269
1974-75	11	714	5,77,928	1,68,666
1975-76	9	724	N.A.	N.A.

The worst drought prone areas are the central and western regions of the district.

As recorded in 1971 census, the total population of the district is 11,09,601 which is 4.16 per cent of the total population of the State. Of the total population in the state, 17.4 per cent live in urban areas while 82.6 per cent in rural areas. The average density of population per square kilometre for the district is 123 which is slightly lower than the state's average of 136. Of the total population 5,69,026 (51.3 per cent) are men while 5,40,575 (48.7 per cent) are women.

Although endowed with good forests, quite a lengthy coastal line, (nearly 80 kms.) valuable mineral deposits and rich soil in central region and a few other pockets, the district has been, since 1972, declared as a backward district in the State. Due to its extreme backwardness it has been made eligible for receiving 15 per cent Central cash subsidy on capital investment to the tune of Rs. one crore and 5 per cent State cash subsidy on fixed assets to the extent of Rs. 5 lacs.

It is from this backward district of the State, the most backward taluka of the district has been selected for making a fruitful exercise in the Block Level Planning for Full Employment. This taluka, Sagbara, is located in the extreme south-east of the district, in the hilly tract of the Rajpipla sub-division. A brief account regarding its history, geography and topography is being given below.

Sagbra taluka had been a feudatory state before the country gained independence. According to some old informants of the Vasava tribal group, who had been the rulers of this region, the chieftainship had been established as early as in 1200 A. D. However, there is no authentic record pertaining to this fact. But in all probability, the tribal chiefs in this as well as in adjoining regions had established their rule before the Britishers came to occupy the country. The British rule recognized the power of the chiefs and were made tributary chiefs. The Sagbara

chieftain was given recognition as ruler of the Sagbara State. The state was politically controlled by the Political Agent of the Rewakantha Agency whose headquarter was at Godhra. After the merger of the princely states, Sagbara too was merged into the Indian Union, alongwith the Rajpipla state whose tributary Sagabara had been in earlier days. After the reorganization of the states and the formation of Gujarat State in 1960 Sagbara taluka was included as one of the talukas of Bharuch district. 22 villages of Maharashtra which were formerly in the Kanthi State were transferred to Sagbara taluka while two of its villages got included in the Akalkuwa taluka of Dhulia district in Maharashtra State.

During the feudatory rule, Sagbara was almost completely cut off from the outside world except that its rulers had friendly relations with the neighbouring rulers of Rajpipla and other states. With rulers of the Kanthi state, and Akalkuwa states they had marital relations. But, the people, by and large, were having an isolated life. The Sagbara chiefs, being of tribal origin, had no awareness of the economic and educational development of the people. The Britishers, too, following the policy of keeping the tribal people isolated and aloof from the wider society, did not give encouragement for adopting schemes for the development of the people. Some of the chiefs had become terror for the people who were exploited by the chiefs and their kins in all possible ways. Thus the people had a suppressed life under the rule of such chiefs. Due to such a historical background, the people have developed a fearful and apathetic attitude towards persons having authority to deal with them.

Although practically no effort had been made for their development during the pre-merger period, the tribal people, by and large, had not to face much problem for their existence as land was in plenty, forest was dense and rich which provided a lot of game and wild fruits,

roots and edible leaves and the population was comparatively much smaller. The people had not to face starvation and as such were not forced to go out for earning livelihood like these days when a substantial number of adult persons have to leave their villages for getting wage-employment elsewhere.

Sagbara owes its name to the fact that 'Sag' (teak) trees had been in abundance in the forests of this region. There had been a rich growth of 'Sag' tree in its forest, from which the taluka derived its name. This taluka, being the frontier of the Bharuch district in south-east, has the Khandesh region of Maharashtra State as its immediate neighbour in the east. To its north and west lies the Dediapada taluka of the Bharuch district while in the south its boundary line adjoins the boundary line of Surat district. Lengthwise the taluka is 27 km. north to south while in breadth it is 21 km. east to west. Altogether, it has an area of more than 400 sq. km. It is located between 21° 30' north latitude and 73° 30' east longitude.

A major part of the taluka had been under forests, where teakwood and bamboo of good quality were found in abundance. The forests are of the tropical dry deciduous with two sub-types—one dry teak forest and the other dry mixed deciduous forest merging one into the other imperceptibly. Now much of the forest has disappeared because of illegal cutting on a large scale. For a long time, the forest land of this taluka was under dispute because of a suit filed in the court by the ex-chief of the Sagbara taluka. Due to this reason, the supervision and control needed for the felling of trees was not there which resulted in indiscriminate felling. The failure to form any forest labourers' co-operative society in the taluka is on account of the above-mentioned dispute. Now the dispute has been settled as a result of which

now the forest department can give full attention towards prevention of unlawful cutting as well as taking up afforestation programme on a large scale. As the question of ownership of the forest land was *subjudice* till now, the forests department was not able to undertake afforestation programmes.

The headquarter of the taluka is at Sagbara village which is situated in the north of the taluka. It is on the Ankleshwar-Akalkuva road which runs by Valia, Netrang and Dediapada villages. From Ankleshwar, Sagbara is at a distance of 98 km. while Dediapada, the headquarter of Dediapada taluka is at a distance of 27 km. Sagbara is a small village and its importance is only due to the location there of taluka's headquarters. More important than Sagbara is Selemba village which lies at a distance of 3 km. from Sagbara. Although not a town, Selemba is the commercial centre of the taluka.

According to 1971 census, there has been altogether 121 villages in the taluka. There has been no town in this taluka. Of the 121 villages, 21 villages have been uninhabited. Thus, only 94 villages have been such where people lived. But on account of the construction of Ukai dam in 1976-77, 16 villages of the taluka were declared submerged in the catchment area of the dam. The population existing in these villages have been rehabilitated either in Mangrol taluka or in Sagbara taluka itself. As the situation stands now, there are 105 villages in the taluka. The total population of taluka is 52,576 of which 26,168 are men while 26,804 are women. The sex-ratio of the taluka shows distinct dominance of women over men. For over 1000 men, there are 1005 women. Looking to the figures given in the Table, it becomes apparent that this ratio is higher than those of the Bharuch district and the State. This is, however, quite in tune with the demographic

Table-3

State-wise, District-wise and Taluka-wise figures for Area, Population, Scheduled tribe population (1971 census)

	Gujarat State	Bharuch District	Sagbara Taluka
1. Area (In sq. km.)	1,95,984	9,045	400
2. Population	2,66,97,475	11,09,601	52,576
3. Density of Population	136	123	135
4. Scheduled- tribe popu- lation	37,34,422	4,86,901	47,724
Percentage	13.99	43.88	90.77
5. Scheduled- caste popu- lation	18,25,432	53,432	407
percentage	6.84	4.82	0.77
6. Sex-ratio (Number of women per thousand men)	934	950	1005

features of tribal communities where generally the women are higher in number than men.

A further look into the figures in the above table clearly suggests that the scheduled tribe population in the taluka is in an exceedingly high proportion when compared to the figures of the district and the State. But, scheduled caste population is in much lower proportion. The density of population per sq. km. in the taluka is

131 while that of the district and State is 126 and 136 respectively. Thus in this respect, there is not striking difference between the taluka on one hand and the district and State on the other hand although quite a large area of the taluka is mountainous and covered with forests. But as the land in the valleys is quite fertile, there is population concentration in the villages of the valleys.

Another typical characteristic of tribal area is the smallness of the villages from demographic point of view. This characteristic is found in case of Sagbara taluka too, which can be observed in the figures given in the next table. In comparison to the district and the State, the

Table-4

Size of the villages from population point of view

Size of the village (Population-wise)	Gujarat State		Bharuch district		Sagbara taluka	
	Number	p.c.	Number	p.c.	Number	p.c.
1. 0-200	2054	11.24	152	31.84	29	27.36
2. 200-499	4352	23.81	362	13.37	38	35.85
3. 500-999	5281	28.68	354	31.13	29	27.36
4. 1000-1999	4398	24.07	191	16.80	9	8.49
5. 2000-4999	1965	10.75	70	6.16	1	0.94
6. 5000 & above	265	1.45	8	0.70	0	0
Total :	18275	100%	1117	100%	106	100%

smaller size of the villages are in greater proportion in the taluka. The percentage of villages having less than 500 persons is 62.21 in the taluka while in

the district and state, the corresponding percentages are 45.21 and 35.05 respectively. The medium size villages having a population between 500-1999 is less in proportion in the taluka when compared to the district and State. In the Sagbara taluka, the percentage of such villages is only 35.85 while those of the district and the State are 48.13 and 52.75 respectively. In comparison to the state and the district, the percentage of the large size villages having a population of 2000-4999 is almost negligible. In the State and in the district this percentage is 10.75 and 6.15 respectively, while in the taluka it is only 0.94. Not a single very large size village, having a population of more than 5000 has been recorded in the taluka while the percentages of such villages in the State and the district are 1.45 and 0.70 respectively. On the whole, it can be safely concluded that the small sized villages are in preponderance in the taluka. Another significant fact, about which mention has already been made, is that there is not a single town in the taluka.

Topographically, Sagbara is a region of plateaus, residual hills and intermontane valleys. The whole region is characterized by rolling landscape with a number of peaks of different shapes and sizes. The area represents of old land surface and rising above these land surfaces are residual hills and ridges. It has many precipitous slopes which form main line of Satpudas. Only the southern and southeastern portions of the taluka adjoining the Ukai reservoir is flat. The valley portions are also gently undulating. The highest point in the hills of this taluka is at the hill near the Dev-mogra village which is situated in the north-west of the taluka. The western and southern parts of this taluka are mountainous due to which land in these parts is rocky in nature. As described earlier, the hills and slopes in the western and northern parts are still covered with forests. A description of the flora and fauna has been given in the next chapter.

No major river, such as one which has perennial source of water flows through this taluka although the Tapi river, upon which the Ukai dam in the Surat district has been constructed, runs on the boundry of this taluka in the south-east, separating it from the territory of Surat district. There are several sub-tributaries or rivulets which rise in the hills and converge into the Tapi river. These rivulets drain the uplands and the plains of this taluka but they remain dry most part of the year. There are seven "Khadis", the water of which is used for irrigation purposes. These rivulets and "Khadis" are indicative of mountain torrents, carrying in their descent a vast volume of alluvial deposit to enrich the soil below.

As indicated above, major part of the Sagbara taluka is undulating. Even the flat land in the south and south-east, which are nothing but tableland, are slopy in one direction or other. Thus, in spite of heavy rainfall during monsoon, water drains out from most part of the cultivable land except the deeper lowlands.

There are three distinct and well marked seasons, summer, monsoon and winter. Summer season generally starts from March and ends up in the middle of June. The rainy season, i.e. monsoon normally begins in the second or third week of June and lasts upto September, with occasional showers in October too. The region experiences winter season from November to February. The tribals have to suffer much in excessive cold nights and they have no alternative but to keep wooden logs burning for the whole night for protection against cold. During winter, the sky normally remains clear of clouds and mornings are chilly with occasional severe cold waves when there is heavy snowfall in the Himalayan region. Though frost is rare, it occasionally occurs sometime towards the end of the month of December or in the beginning of the month of January. During winter season, the temperature falls down to about 22° C.

Right from the close of February, the summer season dawns in this region but its intensity is felt after the middle of March. Mid-summer, i.e. from the last week of April to May it is often intensely hot and during this period the temperature shots up to 31°C.

The taluka gets rainfall from monsoon which originates from the Arabian Sea and blows south-west. Heavy showers of short duration with long break are common feature of the rainfall in this taluka. This becomes responsible for the heavy soil erosion.

From the statement of rainfall in this taluka given below from 1970 to 1979 (ten years), it can be observed that the maximum rainfall in the course of last ten years was recorded to be 2222 m.m. in the year 1976 while the lowest one 736 m.m. was recorded in the year 1972.

Table-5
Rainfall data and Number of Rainy Days (From 1970 to 1979) in Sagbara taluka

Year	Rainfall recorded (in m.m.)	Number of rainy days
1970	1912	77
1971	1058	56
1972	736	35
1973	1160	74
1974	745	50
1975	1205	53
1976	2222	70
1977	1743	64
1978	1241	64
1979	1033	63
Average of ten year	1305.5	61

The average rainfall for ten years comes to 1305.5 m.m. while the corresponding figure for the number of rainy days is 61. The rainy season keeps the agriculturists of the taluka busy from June to September as a large majority of them are dependent upon rain for their agricultural production. In case there is no timely rain, the agricultural production suffers to a great extent. In course of the field investigation, all the informants informed that in case there is no timely sufficient rain, they have to face drought situation. They further informed that the very nature of rainfall, (heavy showers of short duration with long spell of dry days), a feeling of uncertainty for the crops always keep the agriculturists worried. Due to the heavy dependence on rainfall for their agricultural pursuits, the people of this taluka grow only kharif crops. Some agriculturists who manage to avail irrigation facilities, do grow rabi crops. But, by and large, the net impact of the rainfall, coupled with non-availability of irrigation facilities is that only kharif crops are sown in this taluka. Further, as pointed out earlier, due to heavy showers, the agriculturists have to face the problem of soil erosion on a big scale.

Soils and their nature are of permanent importance in an agricultural economy as existing in the Sagbara taluka. The soil of the hilly tract in the taluka is reddish brown in colour and generally shallow in nature. On the lower gentle slopes and in the valleys, it varies from light brown to greyish black in colour. In the flat portions near the Ukai dam reservoir, too, the soil is alluvial and light brown to greyish black in colour. On the hills, the soil is very shallow, almost exposing rocks and hence difficult for ploughing. Erosion of the soil is further aggravated in the hilly region owing to the heavy but unchecked grazing of cattle. This practice has resulted into the impoverishment of the nutrient value of the soils.

The soil found in the hill slopes is suitable for coarse paddy, jowar, maize, pulses and oilseeds, while the greyish-black clay found in the valleys and in the flat portions, is suitable for paddy, jowar, cotton, pulses, oilseeds, groundnut and wheat too, in case irrigation facilities are available. Apart from the fact of suitability of the soil, number of other constraints such as soil erosion, lack of irrigation facilities, old methods of doing agriculture, use of traditional implements, no use of chemical fertilizer, etc. make the cultivators unable to get a high yield. If these constraints are removed, even the brown soil and rocky in nature can give much better yield.

Due to the soils of large part of the taluka being rocky in nature, more than half of the total land is unusable for agriculture purpose. Out of the total land i.e. 40031 hectares, only 16667 hectares (41.63%) have been put under cultivation during 1977-78. The amount of land under the category of current fallow and other fallow have been 951 and 425 hectares respectively, while the amount of cultivable waste land has been 12720 hectares. Of the total land put under cultivation 64.81 per cent has been used for growing food crops, only 35.18 per cent has been used for growing non-food crops. This again is mainly the result of the poor quality of soil in the hilly terrain of the taluka. The most important food crop of this taluka is jowar for which the soils, both in the hilly terrain as well as in the valleys and flat portions, are very much suitable. Next to jowar in importance is paddy. However, in the type of soils existing, fine quality of rice cannot be grown in the most part of this taluka. Of other food crops, pulse, specially "Tuver" grows better in the soil of the taluka. 'Urad' is quite suitable for the soil in the cultivable land of the hilly region. Cultivation of sugar-cane and vegetable is almost totally non-existent.

In comparison to situation of drought occurring in the Bharuch district, Sagbara taluka does not have to

face this problem in the acute sense. Not a single village in the taluka has been recorded during the course of last ten years (1969-70 to 1978-79) where a situation of complete drought has been declared. However,

Table-6

Statement showing drought and scarcity conditions in the villages of Sagbara taluka

Year	Complete drought & scarcity condition	Semi-drought & scarcity condition	No drought & scarcity condition	Total
1969-70	Nil	Nil	121	121
1970-71	„	„	121	121
1971-72	„	„	121	121
1972-73	„	7	114	121
1973-74	„	7	114	121
1974-75	„	25	96	105
1975-76	„	46	75	105
1976-77	„	46	50	105
1977-78	„	Nil	Nil	105
1978-79	„	Nil	Nil	105
Average	„	26	92	—

several villages had been declared as having conditions of semi-drought and scarcity but the number of such villages is alarming only in two years i.e. 1975-76 and 1976-77. On the whole, looking to the number of villages declared as either having complete drought situation or semi-drought situation, it can be pleaded that the problem of villages facing drought conditions in this taluka has not much dimension. But although this is so, a large

number of tribal families in this taluka, as we will discuss elsewhere in this report, have to face lot of hardships towards feeding the family members properly throughout the year. In fact as a large number of house-holds covered under the sample survey are below the poverty line, they have to struggle hard for their existence and thus it hardly matters anything to them, if their villages are not declared as having drought and scarcity condition.

CHAPTER II

INVENTORY OF NATURAL AND PHYSICAL RESOURCES

Sagbara taluka, one Senior Official at the district level remarked, is 'Africa' (meaning by a dark continent) of Bharuch district where to spend even a single day is full of hazards. Of course this is an exaggerated view of the taluka having hilly terrain covered with forests. But with the under-developed infrastructure facilities, the hills and forests of the taluka appear to an urban-bred individual as an 'African territory'. During the rainy season, it really becomes difficult to reach many of the villages of the taluka and rainfall being quite substantial, a single day stay even at the taluka head-quarter, Sagbara which is just a small village at the foot of a hill range, must be an extremely dull and inhospitable stay for such officials. Any way, the point is that the Adivasis did manage to survive in such an inhospitable, natural surroundings. One wonders as to what kind of natural and physical resources of the area sustained them for centuries. What are the existing natural and physical resources in the taluka, which can be exploited for the purpose of development of the area and the Adivasis living therein in order to transform the taluka from an area of darkness to an area of brightness? Let us examine how much the natural and physical resources of the taluka offer to accomplish this task. Mention about the natural and physical resources have been made in the preceding chapter. Now we shall examine these in detail.

Land

According to the statistics available for 1970-71, the total geographical area had been 40031 hectares which in

the year 1976-77 was reduced to 39980 hectares. It appears that the reduction of 51 hectares has been caused because this much area of land was submerged as a result of the implementation of several irrigation schemes.

It has already been indicated that a good part of the area is covered with forests and hills which means that the land available for agricultural purposes would not be in sufficient measures. The nature of land in the hilly terrain being rocky to a great extent, the situation becomes more unfavourable for utilizing more and more land for cultivation. On a careful look to the figures given in the next table regarding the pattern of land utilization in Sagbara taluka, the above contention will hold water. Of the total geographical area only 41.93 per cent have been recorded as net sown area in the year 1976-77, although seven years back i.e. in the year 1970-71, 55.14 per cent of the geographical area had been declared as net sown area. Altogether, an area of 5309 hectares has been removed from being used for cultivation in a span of seven years. A close look at the year-wise figures in this respect clearly reveals that starting from 1970-71, there has been steady reduction in the acreage under cultivation in the subsequent years till 1973-74 after which the trend got almost stabilized. In 1970-71 the percentage of land under cultivation had been 56.14. It went down to 53.33 per cent next year, i.e., in 1971-72, thus recording a decrease of 1.81 per cent in 1972-73 the rate of decrease was more, 6.63 per cent. Similar was the trend in the immediate next year, i.e., in 1973-74 in which the percentage of the acreage under cultivation fell down to 41.66 from 46.70 in the preceding year of 1972-73. Afterwards, the variation has been of minor nature. Thus altogether in a period of seven years, the reduction in the average under cultivation has been to the extent of 13.21 per cent.

Table 7

Statement showing the pattern of land utilization in Sagbara taluka from 1970-71 to 1976-77 (area in hectares) (Source—Taluka Panchayat Office, Sagbara)

Sr. No.	Categories	1970-71 Area p.c.	1971-72 Area p.c.	1972-73 Area p.c.	1973-74 Area p.c.
1.	Under Forest	11637	29.07	11637	29.07
2.	Barren and Uncultivable	1052	2.63	1154	2.88
3.	Non-agricultural use	3832	9.58	3880	9.70
4.	Cultivable waste	26	0.06	64	0.16
5.	Pasture	173	0.43	125	0.31
6.	Current Fallow	47	0.12	198	0.49
7.	Other Fallow	1189	2.97	1626	4.06
8.	Net Area sown	22074	55.14	21346	53.33
9.	Area sown more than once*	98	0.44	169	0.09
10.	Total cultivable	22172	21515	18784	17171
Total (1—8)		40030	100.00	40030	100.00

* p.c. out of total gross cropped area.

Table 7 (Contd.)

Sr. No.	Categories	1974-75 Area p.c.	1975-76 Area p.c.	1976-77 Area p.c.
1.	Under Forest	11637	29.11	11637
2.	Barren and Uncultivable	1154	2.89	1154
3.	Non-agricultural use	5389	13.48	5389
4.	Cultivable waste	124	0.31	124
5.	Pasture	151	0.38	151
6.	Current Fallow	1228	3.07	1262
7.	Other Fallow	3682	9.21	3682
8.	Net Area sown	16665	41.63	16581
9.	Area sown more than once*	251	1.48	142
10.	Total cultivable	16916	16723	16978
Total (1—8)		40030	39980	39980

* p.c. out of total gross cropped area.

Apart from this, the notable feature in the land use pattern in the taluka is that there has been a steady increase in the acreage of land under cultivable waste and land under non-agricultural use categories till the year 1973-74. Another significant trend has been that the area of land under pasture remained more or less the same except some minor variations here and there. But the amount of land ear-marked as pasture has been woefully small in this taluka. From the point of view of growth of dairy industry in this taluka this situation is far from satisfactory. However, as there is enough amount of land covered under forest, where grass grows in abundance, the people generally do not face much problem in matter of getting fodder for their cattle. In fact, this is a general practice among the people in the taluka to take the cattle into the forest for grazing. But, in the summer season, they are put into difficulties when it becomes hard to get patches of grass-land in the forests for grazing the cattle.

Another dismal reading which one gets from the figures regarding land utilization pattern is that almost the entire cultivable land is cultivated for only one crop. This is a clear indication that irrigation facilities are quite poor in this taluka which prevents the cultivators from cultivating the same field for more than once. But when compared to the situation existing in this regard in 1970-71, there has been improvement in subsequent years although in no way much encouraging. Hence, from the development point of view, there certainly remains much to be done to increase the irrigational facilities in order to enable the cultivators to take more than one crop on a large scale. At present, the little acreage of land in which cultivation is done for more than once in a year is in the south-east region and it is mostly the non-tribal cultivators who have been using their land for two to three crops in a year. The tribals have lagged much behind in this respect. They have to remain contented by raising only kharif crops, depending on monsoon rains.

In proportion of the decline in the acreage of cultivable land, there has been a steady increase in the acreage of land categorized as current fallow and 'other fallow'. This trend is noticeable upto the year 1974-75, after which the position has got stabilized in this respect. The reason for this is not far to seek. With the decrease in the acreage of net area sown, the increase in acreage of land under these categories has taken place. Similar trend is noticed in respect of land under non-agricultural use. The amount of land under this category went on increasing till 1974-75. Now this has been arrested.

As in the case of land under pasture, there has been little variation in the acreage of land under cultivable waste. Only a small acreage of land out of the total geographical area in the taluka need to be reclaimed for agricultural purposes. In the year 1976-77, only 124 hectares of such land has been recorded in this taluka.

There has been practically no variation in the course of the last seven years in the area under forest and in that of land which has been declared as barren and not fit for cultivation. However, in the forest land it has been reported that here and there some cultivators have been doing cultivation in unauthorized manner but no authentic information is available in this regard. As is evident from the figures, quite a substantial part of the taluka is covered under forest (29.11 per cent of the total geographical area).

It is quite apparent from the above discussion that during the period of last seven years, the acreage of actually cultivated land has shrunk down on one hand while area not available for cultivation has expanded on the other hand. Partly this is due to the submersion of several villages of this taluka in the catchment area of Ukai dam. This has resulted in the going down of several good patches of cultivable land under the water of the Ukai reservoir.

Of the total land available for cultivation (including the fallow land and cultivable waste), which amounted to 21649 hectares in the year 1976-77, as far as 78.42 per cent has been under cultivation. In 1970-71 i.e. seven years back, the area of cultivable land had been 23336 hectares and out of this 94.53 per cent had been actually under cultivation. Thus, a decline of 16.11 per cent has taken place in the course of eight years in regard to the amount of land actually being cultivated out of the total available land for the purpose of cultivation. This is certainly alarming in view of the fact that there is hardly much scope for the expansion in the acreage of agricultural land. But if there is little such scope, at least the shrinkage of cultivable area should be prevented by all means. The total population of this taluka is 52,576, according to 1971 census. In view of this, cultivable land available per capita will be 0.42 hectare only.

Looking to the land use pattern in the ten villages covered under the sample survey (Table 8) it is seen that of the total land available in all the ten villages only 53.65 per cent has been in actual use for cultivation purposes. The total amount of land available in these ten villages has been 3867.75 hectares, out of which 2086.81 hectares has been cultivated land. In comparison to the taluka figures, the situation is slightly better. But only three of the ten villages have irrigational facilities, as such the percentage of cultivable land in which more than one crop have been raised is only 0.50 of the total amount of land in these ten villages.

46.05 per cent of the total geographical area of these villages has been under forest, fallow land, cultivable waste land and pasture land, etc. From none of the villages, however, land designated as 'current fallow' has been recorded while the amount of land under 'other fallow' is also quite small, only 4.05 per cent of the total land available in the ten villages. The corresponding

figures (9.21 per cent of total geographical area of the taluka in the year 1976-77) for the entire taluka has been much higher than this. But the percentage of such land which at present is categorized as cultivable waste, is higher in case of the total amount of land available in all the ten villages than of the total amount of land available in the entire taluka. In the former case, the percentage is 20.10 while in latter it is only 0.31 as the figures of 1976-77 for the land use pattern in the taluka indicate. But the simple reason for this wide range of difference between the taluka figures and figures of the surveyed village is the non-availability of the figures regarding the area under forest in the case of the surveyed villages. It appears that the amount of land covered under forest in these villages has been included in the cultivable waste category. Similarly, the difference between the figures of the taluka and of the ten villages in respect of the percentage of land covered under non-agricultural use can be explained. While in the former case, this percentage is only 13.43 of the total geographical area of the taluka, in case of the villages taken together this percentage is 22.56. The percentage of barren land out of the total geographical area of the ten villages is 2.90. Nearly the same figure has been recorded in the case of the taluka.

As in the case of the taluka, the average of land available in these ten villages for pasture is quite small. Only 0.21 per cent of the total geographical area of these villages is under pasture. The corresponding figure for the taluka is 0.38 per cent. However, the figures for only two out of the ten villages have been supplied in case of the pasture land. Javli, which is a village in the south-east of the taluka where practically there is no forest, has got the maximum of land designated as 'pasture land'.

On a further close look to the Table 8 it is revealed that quite a large amount of cultivable waste land has

Table 8

Statement showing land use pattern in the villages covered under the sample survey
(Source—Talathi's Office of the respective villages)

Sr. No.	Category	Name of the Villages				
		Kunwarkhadi	Kodba	Chikali	Mobi	Dhavliber
1.	Net area sown	4.83-61	93.30-09	185.72-16	264.15-86	267.28-37
2.	Area sown more than once	—	—	—	—	15.14-76
3.	Current Fallow	—	—	—	—	—
4.	Other Fallow	—	16.16-72	—	—	0.25-29
5.	Cultivable waste	225.31	—	3.96-58	265.36-28	—
6.	Non-Agricultural use	—	2.72-15	6.42-45	13.90-11	21.50-92
7.	Barren and unfit for cultivation	0.02-02	1.91-21	10.35-99	11.25	3.62-20
8.	Pasture	—	—	—	—	—
Total :		230.16-63	114.10-16	206.47-18	554.67-28	292.66-78

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Table 8 (Contd.)

Sr. No.	Category	Name of the Villages				
		Sorapada	Barktura	Moti Devrupan	Javli	Devsaki
1.	Net area sown	330.08-40	220.71-63	75.11-26	381.72-27	263.28-06
2.	Area sown more than once	—	0.80-94	—	3.35-46	—
3.	Current Fallow	—	—	—	—	—
4.	Other Fallow	131.45-28	5.00-80	3.09-49	0.72-84	—
5.	Cultivable waste	—	—	—	—	282.80-47
6.	Non-Agricultural use	14.52-83	11.23-03	600.70-24	35.68-33	19.81-96
7.	Barren and unfit for cultivation	31.13-06	40.25-63	11.45-32	1.33-55	0.90-04
8.	Pasture	—	—	2.57-99	5.45-32	—
Total		503.19-57	277.21-09	693.54-40	424.92-24	566.80-53

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been recorded in three villages, viz. Kunvarkhadi, Devsaki and Mobi. All these three villages lie in the hilly terrain of the taluka where most of the land is covered with forest. The nature of land being rocky, in major part of the land doing agriculture is economically unrewarding. Thus although such land can be brought under cultivation by reclaiming the blocks of land, unless improved ways of doing agriculture are not adopted, the yield will not at all be encouraging. In absence of improved practices and irrigation facilities, practising agriculture in such land will not be desirable. Thus, due to the nature of land and it being covered with forest, the amount of cultivable waste land has gone high in these villages. In contrast, in villages such as Dhavliber, Barkutra, Javli and Moti-Devrupan which have no forest or little forest, cultivable waste land has not been recorded. Of course, barren land, unfit for cultivation is found in these villages. It then suggests that much of the land which might be under forest has got the potentiality of bringing into actual cultivation. But it should be thoroughly examined between a programme of intensive forestry and programme of reclaiming this land for cultivation, which one will be better choice in terms of bringing economic benefits to the Adivasis in real sense and of durable nature. Left to ourselves, we will opt for the forestry programmes in which the total involvement of the people will be realized so that they participate in a meaningful way to develop the area and in consequence to develop themselves.

Now, after discussing the existing situation regarding the pattern of land utilization in the taluka and the surveyed villages it will be worthwhile to find out the types of changes that have taken place in this pattern after the Sagbara region was brought into acquisition of Bharuch district after the merger of Rajpipla and other states (including Sagbara) into the Indian union after independence. To get the trend of changes we will compare the

statistics obtained in 1955-56 regarding land use pattern with those of available in 1976-77 (as given in Table 3). As the figures given in the following table speak,

Table 9

Land use pattern in Sagbara taluka in 1955-56* and in 1976-77 (Figures given in percentage)

Sr. No.	Land use	1955-56	1976-77
1.	Net area sown	39.69	42.46
2.	Forest	40.40	29.11
3.	Barren and un-culturable land and land put to non-agricultural use	13.36	16.37
4.	Cultivable waste	6.05	0.31
5.	Current Fallow	0.23	2.16
6.	Other Fallow	0.27	9.21
7.	Pasture	—	0.38
Total		100.00	100.00

*(Source—District Gazetteer, Broach District, 1961)

there has been an increase of 2.77 per cent in the amount of land under the category of net area sown. In 1956-57, only 0.01 percent of the total land available in Sagbara taluka was cropped more than once—whereas in 1976-77 the corresponding percentage has been 0.53. It does not require much intelligence to grasp that only a marginal achievement has been made in the matter of improvement of agriculture in the taluka in spite of all the efforts put for this.

Another striking fact emerges out of the comparison of the statistics of these two years regarding the marked decline in the area of forest in course of about 20 years. From 40.40 per cent of the total geographical area under forest in the year 1955-56, it decreased to 29.11 per cent in the year 1976-77. What is more distressing is that this has not correspondingly resulted in the increase in the area of cultivable land. Of course the percentage of area designated as 'other fallow' has increased from 0.27 in 1955-56 to 9.21 in 1976-77. This may have been due to the destruction of the forest. The percentage of cultivable waste land has been 6.05 in the year 1955-56 while the corresponding figure in 1976-77 is 0.31. It can be imagined that gradually most of the land which was not put to use for cultivation, although endowed with the potentiality for cultivation, have been put into use for agriculture. Twenty years back, nearly all the cultivable land was in use for raising crop, only a small acreage of land was left unused which we usually designate as 'current fallow'. But in 1976-77, the percentage of such land has gone upto 9.21 from 0.27 in 1955-56 which indicates that in present times, a cultivator has to face problems to till all his cultivable holdings.

Regarding the position of the area cropped more than once, it has already been shown in Table 3. On analysing the figures given in this respect, we find that in the year 1973-74, the highest percentage, i.e. 2.86 per cent of the total gross cropped area has been recorded while the lowest, i.e. 0.44 per cent has been in 1970-71. From the year 1970-71, there has been an increase in the immediate next year when this percentage went up to 0.9 but again fell down next year, i.e. in 1972-73 to 0.8 per cent. After the year 1973-74, when this reached to the highest peak in the course of eight years the percentage again fell down to 1.48 from 2.86 in the preceding year. It further fell down to 0.85 per cent in the next year but

went up again in the year 1976-77 to 1.24. The picture one gets from the above analysis is that no sustained effort has been made to make steady progress in this regard. The increase in the year 1973-74 is perhaps due to special drive made during that year.

As pointed out earlier, in 1956-57, only 0.01 per cent of the total geographical area had been cropped more than once. On calculating this area out of the gross cropped area in that year the percentage was 0.02. If we look to this percentage in 1976-77, which is 1.24, we can easily see that 62 times increase has taken place in course of twenty years. This itself looks quite an impressive achievement but in terms of the percentage of area sown more than once out of the total gross-cropped area, certainly the progress seems to be quite dismal.

One of the reasons for this sorry state of affair has been the poor facilities for irrigation in this taluka. Let us now examine the existing situation in this regard. As the figures given in the next table indicate, in the year 1976-77 only 3.55 per cent of the net area sown and 3.51 per cent of the gross cropped area have been under irrigation. A close look to the table gives a very surprising feeling that instead of achieving progress in matter of bringing more and more area under irrigation from year to year what we find here is just a contrary situation. From year 1970-71 to 1972-73, there has been a steady progress in this direction. In the year 1970-71, the percentage of area under irrigation out of the total net area sown has been 5.62. It went up to 7.05 per cent of the net area sown in the immediate next year i.e. 1971-72. It further went up to 9.59 per cent in 1972-73. From thenceforward, the area under irrigation started shrinking. In 1973-74, the percentage of irrigated area to the net area sown went down from 9.59 in the preceding year to 4.51. It further went down in the following year i.e. 1974-75, to 3.26. It went up again in 1975-76 to 4.15 per cent but nevertheless remained below the percentage recorded in

Table 10

Statement showing area under irrigation during last seven years, i.e. 1970-71 to 1976-77 (Area in Hectares)

Sr. No.	Year	Net Area sown	Area under irrigation	Gross cropped area	Percentage of irrigated area to Net area sown	Percentage of irrigated area to gross cropped area
1.	1970-71	22074	1241	22172	5.62	5.60
2.	1971-72	21346	1504	21515	7.05	6.99
3.	1972-73	18693	1793	18784	9.59	9.54
4.	1973-74	16676	753	17171	4.51	4.38
5.	1974-75	16665	544	16916	3.26	3.21
6.	1975-76	16581	688	16723	4.15	4.11
7.	1976-77	16765	596	16978	3.55	3.51

the year 1973-74. In the year 1976-77, it once again was reduced to 3.55 per cent.

It is really difficult to know why downward trend has occurred from the year 1973-74 to 1976-77. However, one may take consolation that when compared with the situation in 1955-56, more than 22 times increase has taken place in the percentage of net area irrigated to the net area sown at the end of the year 1976-77. In 1955-56,¹ only 0.16 per cent of the net area sown was under irrigation. According to the figures given in the report of I. T. D. P. Rajpipla, the percentage of net irrigated area to the net area sown in the year 1960-61 had been 0.32 in Sagbara taluka.

1. See Gazetteer of India, Bharuch district, 1961, p. 266.

In the ten villages covered under the sample survey, the percentage of net irrigated land to the net area sown has been 8.71 which is much better in comparison to 3.55 per cent at the taluka level in 1976-77. But of the ten villages, there has been no irrigation facilities existing in three, namely Motidevrupen, Devsaki and Kunwarkhadi. In two villages, viz. Navi Javli and Barkutra, the irrigation facilities have been much better. In Navi Javli, 14.48 per cent of the the net area sown has been under irrigation while in Barkutra the corresponding figure has been 28.54. In the remaining five villages, the area under irrigation has been quite negligible.

Surface And Ground Water Resources

In the year 1963, the Geological Survey of India had conducted a survey in the Rajpipla sub-division of the Bharuch district (including Sagbara taluka) and according to its finding very little ground water resources are available in the hilly terrain of the taluka. The topography being hilly with rocky underground, it is not suitable for well-sinking to a large measure. In spite of these difficulties, programmes regarding sinking of wells have been taken in quite earnestness which can be seen from the figures of existing wells in the taluka. According to available figures, there have been 578 wells at that end of the year 1978 whereas in 1955-56 only 111 wells were in existence in the taluka. This means that there has been almost fivefold increase in the number of wells in a period of twenty-two years.

The nature of land being what it is, wells are the only meaningful source of irrigation in the taluka although attempts have been made and are being made to tap other sources for bringing more and more land under irrigation. According to the figures given in the next Table, the total acreage of land under irrigation in this taluka in the year 1978 has been 712 hectares which is

just 4.24 per cent of the net area sown. Of the 712 hectares 529 hectares i.e. 74.30 per cent is being irrigated through wells while of the remaining, 67 hectares, i.e. 9.41 per cent and 116 hectares i.e. 16.29 per cent are being irrigated by canal and under schemes of minor irrigation respectively.

Table 11

Statement showing area under irrigation according to source of irrigation (Source: Annual season and crop report, 1978).

Sr. No.	Sources	Number	Length (in km)	Area under irrigation (in hectares)
1.	Wells	330	—	529
2.	Tank	—	—	—
3.	Canal	1	5	67
4.	Checkdam	—	—	—
5.	Lift irrigation	3	—	116
6.	Other sources	—	—	—
Total				712

There are 578 wells in the taluka, as mentioned earlier. But only 330 wells are being used for irrigation purpose while in the remaining 248 wells, the water level is so low that there does not exist any scope for using the water of these wells for irrigation purpose. Of these 248 wells, 28 are completely useless, that is, even drinking water is not obtained from these. Of the 330 wells used for irrigation, 264 are pucca ones while 66 are kachcha ones.

As the figures speak, there is not a single tank or tube-well available in the taluka which can be put to use for irrigation purposes. Although quite a big portion of the catchment area of Ukai dam adjoins the south-east boundary of the taluka, almost no use has been made till now of the water available in the reservoir for irrigating the cultivable land of this taluka. However, because of this reservoir water level in the wells of the villages near the catchment area remains high and thus the potentiality of irrigation in these villages has certainly increased.

From the Tapi river, a small canal has been dug out which runs inside the taluka for 5 km. and through the water available in this canal, 67 hectares of land get water for irrigation.

Under the minor irrigation scheme, four lift irrigation schemes had been started in 1972-73 and it was expected that when completed at least 262 hectares of land would be brought under irrigation. These irrigation schemes had been started at Dhavliber, Dattwad, Mahupada and Taval. But the Dhavliber and Taval lift irrigation schemes could not materialize. Thus, only in three villages, Nani Devrupen, Dattwad and Mahupada the schemes have been put to operation. But against the expected potentiality of 1980 hectares, only 116 hectares have been brought under irrigation. Two more schemes—Simamli and Ghotpada lift irrigation schemes—have been taken up in 1975-76. The Simamli scheme has a potentiality of irrigating 88 hectares while the Ghotpada scheme has 60 hectares. It is expected that if all these seven schemes, including that of Dhavliber and Taval, are put to proper functioning, there would be good rise in the area of land under irrigation. Taken together, these schemes have a potentiality of irrigating 1335 acres of land.

Apart from these schemes, several check-dam (Bandhara) schemes have also been taken up. On implementation

of these schemes the level of water in the villages where these schemes are located would go high on one hand and the land coming under the command area of these check-dams would be able to receive water for irrigation on the other hand. Besides, during summer season, the human being as well as cattles would get regular supply of drinking water. Seven such schemes have been taken on hand in the following villages:—

1. Pat, 2. Chopadvav, 3. Ganhara, 4. Duttawad, 5. Nani Devrupen, 6. Mahupada and 7 Parodi.

Four more lift irrigation schemes have been proposed by the I.T.D.P. in its fifth five year plan report. These are to be located at 1. Kukdya, 2. Umaria, 3. Kolvan and 4. Mota Kekadi Amba villages.

There are seven more schemes under minor irrigation in which the water flowing through the "Khadis" would be put to use for irrigation. These schemes are to be operated in the following villages: 1. Dattwada, 2. Con-amba, 3. Godapada, 4. Khopi, 5. Simaamli, 6. Chitra-kevdhi and 7. Panpipdi.

In the Pat village, the check-dam cause-well scheme has been undertaken and it is expected that an additional 900 acres of land would be brought under irrigation.

All the above mentioned schemes have been undertaken or to be undertaken under the I. T. D. P. programme. Apart from these schemes of lift irrigation, check-dams and Bandharas, schemes for sinking more wells and installing oil engines and electric motors are also being taken up. A financial outlay of Rs. 11.80 lakhs has been made in the fifth five year plan which is likely to be spread up in the sixth five year plan too. Under the S.F.D.A. programmes too, minor irrigation schemes have been undertaken in the year 1977-78. A sum of Rs. 3010/- has been spent.

Thus, till recent times, irrigation played a very small role in the agricultural economy of the tribals of this taluka. This is evident from the fact that even in the year 1977-78, only 4.24 per cent of the net area sown has been brought under irrigation. Hitherto wells have been the only source of irrigation. Till 1960-61, the only source of irrigation has been wells through which an area of 66 hectares of land used to be irrigated. Another noteworthy fact in this regard is this that there has been not a single inch of land till 1972-73 which used to be irrigated more than once. Even now, there has been not much achievement on this score.

In view of this all efforts through the I.T.D.P., S.F.D.A. and panchayat schemes should be made to tap all the available sources of water for irrigating as much agricultural land as possible.

Forests

As has been pointed out this taluka has 11637 hectares of forest covered land. It has also been discussed earlier that the amount of land under forest had been much bigger only twenty years back. From 40.40 per cent of forest covered land out of the total geographical of the taluka available in 1955-56 to 29.11 per cent in 1976-77 is clear indication that forest wealth of taluka has dwindled down to a great extent. The forests are of the tropical dry deciduous type. The Sagbara forests are known for is teak. The forest which were very dense and valuable only a decade back, considerably helped in regulating the climate and water flow, checking erosion and flood damage, supplied valuable timber, firewood, bamboo fodder grass and many varieties of minor forest products for the use of the Adivasis as well as their cattle. It is no exaggeration to say that for the Adivasis of this taluka, the forests served as life line. For a long time, the forests in Sagbara could not be exploited to a great extent due to lack of transport

facilities and long distance to rail-head. Another important reason which prevented the government to exploit the forests in the taluka was the civil suit being fought by the ex-Chieftain of the Sagbara state against the State Government. But although the forests were not being exploited officially, the very fact that within an interval of twenty years, the area of forests in the taluka decreased by 11.29 per cent, unambiguously proves that there had been unauthorised cutting on a large scale. However, even today, this has a rich forest wealth.

The major product found in the forests of the Sagbara taluka is teak or Sag (*tectona grandis*). Teak is found growing with following associates in the top canopy :

1. Sadada (*Terminalia tomentosa*)
2. Shisham (*Dalbergia latifolia*)
3. Khair (*Acacia catechu*) 4. Tanachha (*Ougeinia dalberoides*), 5. Bio (*Pterocarpus marsupium*), 6. Haldevo (*Adina cordifolia*), 7. Kalam (*Stephegyne parviflora*), 8. Simal (*Bombax malabaricum*), 9. Timru (*Diospyros melanoxylon*), 10. Gugal (*Boswellia serrata*), 11. Kadai (*Sterculis urens*), 12. Behada (*Terminalia belerica*), 13. Jamun (*Eugenia Jambolana*), 14. Amba (*Mangtfera indica*), 15. Mahuda (*Bassia latifolia*), 16. Katas (*Bambusa arundinacea*—bamboos).

In the under storey, the following trees are found:

1. Palas (*Butea frondosa*) 2. Ashitra (*Bauhinia racemosa*), 3. Kumbi (*Careya arborea*) 4. Aritha (*Sapindus trifoliatus*), 5. Kudi (*Wrightia tomentosa*), 6. Manvel Bamboos (*Dendrocalamus strictus*.)

Apart from these trees, the following trees are also found.

1. Amli (*Tamarindus indica*), 2. Aola (*Phyllanthus exmblica*) 3. Adusa (*Ailanthus excelsa*), 4. Charoli

(*Buchanania latifolia*), 5. Gular (*Ficus glomerata*) 6. Harda (*Terminalia chebula*) 7. Khakhar (*Butea fronopsa*), 8. Khajuri (*Phoeniz dactylifera*), 9. Kathi (*Feronia elephantum*), 10. Limdo (*Azardirachta indica*), 11. Pipal (*Ficus Tsiela*), 12. Vad (*Picus bengalensis*).

These are usually found near the village sites.

The following is the list of the chief minor forest products from the forests of this taluka:—

1. Apta : (*Bauhinia racemosa*) —leaves for bidis.
2. Bamboos: Manvel (*Dendrocalamus strictus*)—bamboos, for use in making huts, palas, supdas, toplas etc.
3. Chilari (*Caesalpinia Sepiaria*) —bark for tanning.
4. Grass—for cattle food and grazing.
5. Kadaya (*Sterculia urens*),
6. Moha — (*Madhuca indica*)—flowers for eating and seeds for extracting oil for soap making.
7. Timru (*Diospyros melanoxylon*)—leaves for bidis.

For making firewood and charcoal, the wood of certain trees found in these forests are very much suitable. Besides, several medical herbs are also found in the forests of this taluka.

Before the merger of this state into Bharuch district it is claimed that there were plenty of tigers (*felis tigris*) in these forests. As this forest is a continuation of Satpuda range, coming from Central India and West Khandesh it was never without tiger and its habitat was mostly limited to the forests of this taluka. The forests near the Sorapada village have been the game preserves of the Maharaja of Rajpipla. Now the tigers have become restricted in number and are only occasionally seen in the Sagbara forests.

Panther (*Felis pardus*) was also common in the forests of this taluka. There were two kinds of panthers—the forest panther and the village panther. Leopard cat (*Felis Bengalensis*) and Jungle cat (*Felis chaus*) have been also very common wild animals. These have been very destructive to poultry.

Apart from these animals, the following are some of the common animals and birds found in the forests of this taluka:

1. The small Indian Civet (*Viverricula malaccensis*)
2. The Indian Palm Civet (*Paradoxurus niger*)
3. Hyaena (*Hyaena striata*) called jarkh, chitro and vanio. The local Adivasis call it vanio meaning money-lender.
4. The Indian Wolf (*Canis Lupus*), Now it is rarely found.
5. The Indian wild dog (*Cyon dukhunensis*), 6. The Indian fox (*Vulpus Bengalensis*), 7. The Jackal (*Canis aureus*), 8. The Indian Ratel (*Mellivora Indica*), 9. The sloth-bear (*Melurus, ursinus, Rinchh*), 10. The flying squirrel (*Pteromys*): Pakharoo, 11. The Palm squirrel (*Sciurus Palamarus*): the Adivasis catch it, and eat it. 12. Hare (*Lopus negrice llis*): Sasaloo, 13. Rat and Mouse (*Bandicota bengalensis*), 14. The Indian Porcupine (*Hystrix Lencura*), 15. The Black Buck (*Antelope cervicapra*), 16. The Barking Deer (*Cervulus Muntjac*), 17. The Sambar (*Cervus Unicolor*), 18. Chital or spotted deer (*Cervus Axis*), 19. The painted partridge, the blue rock pigeon, jungle fowl, pea fowl, and green pigeon some of the common birds.

From the above list of the flora and fauna found in the forests of this taluka, it can be imagined that how rich the forests have been. Due to destruction of the

forests in recent years, the wild animals have migrated elsewhere and are rarely seen in the forests of this taluka.

It has already been indicated that the forests in this taluka are mainly located in the northern and western parts. In the south also, we find blocks of forests. But in the south-west there are no forest patches. Hence, afforestation programme near the Ukai dam reservoir should be undertaken on a large scale. In fact such a programme has already been indicated by the forest department. It needs to be pursued vigorously.

Due to the availability of a variety of flora in the forest of this taluka, there is tremendous scope to develop apiculture in this taluka. At present, not much attention has been given in this direction. There is a great potentiality of taking up programmes of apiculture in the villages of northern, western and southern parts of the taluka.

It has also been pointed out that there has been a sharp decline in the area of forest land in this taluka. In view of this, social forestry programmes, alongwith afforestation programmes, carried out by the forest department should be undertaken on an earnest basis. Under the ITDP schemes, the social forestry programmes have been undertaken which needs to be implemented vigorously. Till now, afforestation programmes have not been taken up due to the forests of this taluka being under dispute. In the year 1975, the forests have been declared under the Indian Forests Act of 1927 and a forest settlement report has been now prepared, and it is expected that now afforestation programmes will be undertaken in all earnestness. However, in the Ukai Catchment area, in areas of 200 hectares and 125 hectares, afforestation programmes have been already taken up. Recently, in the year 1979-80, programme regarding digging up trenches in the area of 200 hectares has been taken up.

Supply of bamboos to the Songadh paper pulp mill has also been started with effect from the year 1979.

The forest department has also been supplying grafts of trees for encouraging planting of trees. Sometimes, an individual Adivasi takes away as many as 500 crates and out of this about 60 to 70 per cent grow up.

The Gujarat State Forest Development Corporation has taken up the collection of minor forest produces through the Adivasis. In 1977-78, 1978-79 and 1979-80 following products have been collected:

Table 12

Statement showing collection of minor forest produce in Sagbara

Sr. No.	Name of minor forest products	unit	1977-78	1978-79	1979-80
1.	Kadaya gum	Qts.	26.64	23.85	500 —
2.	Moded gum.	„	2.14	6.71	
3.	Timru leaves	bags	—	412.884	569.700
4.	Mahuda flowers	Qts.	5.05	14.47	18.54
5.	Mahuda dholi	„	0.50	36.72	21.40
6.	Karanj seeds	„	—	—	12.81

(Source: Office of the Gujarat State Forest Development Corporation, Rajpipla)

The collection centres in Sagbara taluka are at following places:

1. Chopadvav, 2. Ranbuda, 3. Amiyar, 4. Narvedi,
5. Khopi, 6. Mal, 7. Pipala Pani, and
8. Dhodhanvadi.

The central godown is located at Dediapada.

Minerals

Although this taluka has fairly long hill ranges, it is not rich in mineral deposits. But the presence of the following minerals have been recorded.

1. Agates: This taluka is one of the good sources of Carnelian and agate stones. This mineral can be used for manufacture of pestle and mortar.
2. Building stones: The trap rocks from the northern and western portions of the forest could be used as building stones and aggregate for concrete.
3. Cale tufa: Small lenticular deposits of cale tufa are met with at many places in this taluka. The material from these deposits is used for lime burning.
4. Clays: Clays of different colours varying from greyish to buff are noticed in some areas of this taluka.
5. Limestone: Grey and slate coloured limestones occur in this taluka, particularly in the western part of this taluka. These are, however, too small in extent to be of any economic use.

A comprehensive geological survey should be undertaken in this taluka to assess the economic potentialities of minerals found in the taluka.

CHAPTER III

SOCIAL AND PHYSICAL INFRASTRUCTURE

3.1: Having examined the natural and physical resources of the taluka in the preceding chapter, it will now be prudent to look into the social and physical infrastructures available there in order to find out the structure of the society emerging after more than two decades of development efforts. The society which was very much native in character had little agriculture, no commerce, a lot of undeveloped land, mostly covered under forests, practically no facilities for education and almost a complete lack of other social and physical infrastructure without which no society in these days can take a leap into its social and economic development. After the area was brought into non-feudal framework i.e. merged into the Indian union as part of the Bharuch district, the most immediate problem was to create viable social and physical infrastructure in order to bring the society on the road to development, i.e. modernization. The process of building a new society required the evolving of workable and durable social and physical infrastructure. Thus, the development of the Adivasi Society of this taluka in the post-independence period was characterized by the growth of social infrastructure facilities such as education, public health and housing and physical infrastructure facilities such as transport, communication and rural electrification. Other institutional facilities, which play important roles in the development of any society, such as co-operative societies, banking institution and other agencies, were also gradually built up in the taluka. These grew in a time when everything was being done for the first time, when everything was a starting

point. This has been what one may aptly say, a formative period for the Adivasis of this taluka. The future pattern of development for these Adivasis will very much depend upon the advance made in this direction. A survey of the existing social and physical infrastructure facilities, modern economic institutions and the way these are organized will enable us to make an assessment about the advance made in this taluka. Let us first examine the existing social infrastructure.

3.2: Education

Education, as we know, is meant to train citizens for their civic, social and intellectual responsibilities. In a democratic country like ours, education is a function of the state. Where Adivasis are concerned, development of modern education, i.e. formal training in a school or college is a special responsibility of the government, as enshrined in the constitution itself. Implied therein is the fact that the state will make all efforts to promote the modern educational system on a rapid scale. Undoubtedly, it had to start from a scratch since among the Adivasis of this taluka, there had been almost no tradition of formal education.

In the year 1952-53, there had been only 19 schools in the Sagbara taluka,¹ all being primary schools, although free compulsory primary education had been introduced in the Broach District Local Board area² from 1st September, 1944, for the age-group of 6-11. Not a single secondary school was in existence in the taluka in those days. The villages where the primary schools were located were: Ambagam, Amiyar, Dattavada, Dhavliwer, Dodhanvadi, Jodavan, Khota, Nana Kakadiamba, Nani Paroli, Navagam, Panchpipri, Pat, Patanmauv, Rojadev, Sagbara, Sajanvav, Selaamba, Sorapada, and Ubharia.

¹ See Gazette of India, Gujarat State, Broach.

² *Ibid.*

Thus, out of 107 villages, as recorded in 1951 census, only 17.76 per cent of the villages were having primary schools. It should be remembered, however, that the taluka had been recently brought under the jurisdiction of the Bharuch district and further, the district itself formed part of the then Bombay state. After the creation of a separate State of Gujarat in the year 1960, the district became part of the Gujarat State and thenceforward educational development took place in a rapid manner so much so that in 1970-71, 77 out of 105 inhabited villages (forming 72.64 per cent) of the taluka were having primary schools. But the target of covering all the villages with a primary school has not been yet achieved in the taluka.

Although there has been an appreciable expansion in the spread of primary education in the taluka, the same has not been the case regarding secondary education. As we have seen earlier, there was not a single secondary school in the taluka in the year 1952-53. By 1970-71 only one secondary school came into existence in the taluka. Thus, in the sphere of expansion of secondary schools in the taluka, the pace is yet very slow. In fact both Dediapada and Sagbara talukas in the district have the lowest proportion of villages with secondary schools (0.6 and 0.9 per cent respectively). The number of secondary schools rose to three by 1980-81. Till this period, there has been no provision for higher secondary education in the taluka. But in the 1978-79, in one of the secondary schools, facilities for higher secondary education in the arts and commerce subjects have been created.

From the figures given in Table 13, the number of primary schools have gone up from 77 in 1970-71 to 86 in 1978-79.

There have been only two Ashram Schools in the taluka. Both these Ashram Schools, one located at Pat and other at Bhavrisavar, have been started in the

Table 13

Growth of primary and secondary schools in Sagbara taluka

Year	Total No. of villages	No. of primary schools.	No. of secondary schools	No. of Ashram shalas
1952-53	114	19	Nil	Nil
1970-71	106	77	1	2
1978-79	106	86	3	2

year 1963-64. Surprisingly, there has been no increase in the number of Ashram Schools in the taluka after these two had been started, although the number of Ashram Schools in other tribal areas have been steadily going up. Further, this taluka being a predominantly Adivasi one (90.8 per cent of the total population being those of Adivasis), the fact that the number of Ashram Schools has remained at two only for the last fourteen years is quite puzzling one. As we know well, Ashram Shalas fully cater to the needs of tribals so far as their problem of sending children to schools and keeping them there is concerned, and due to this these schools are more useful and effective in spreading education amongst the boys and girls of the Adivasi community. For interior regions like Sagbara where communication facilities are poor, Ashram Schools are very suitable educational institutions for imparting education to Adivasi boys and girls. It appears that due to lack of initiative on the part of the voluntary agencies this situation arose. It has been learnt, however, that two more Ashram Schools at Chikali and Ubharia villages are to be started under the I. T. D. P. programmes. When these come into being the number of Ashram Schools in the taluka will go up to four.

Due to the expansion in the educational facilities in the taluka, the Adivasis started sending their children to schools. As a consequence of which, the number of literates started increasing. In 1961, the literacy rate in the taluka had been 14.8 per cent, 24.5 percent amongst the male population and 5.0 per cent amongst the female population. But, as one can see from the figures given in Table 14, there has been a decline in the percentage of literacy from 1961 to 1971. The literacy rate has particularly

Table 14

Percentage of literacy by sex in the Sagbara taluka

Year	Male		Female		Total	
	No.	PC.	No.	PC.	No.	PC.
1961	5097	24.5	1040	5.0	6137	14.8
1971	6002	22.9	1563	5.9	7565	14.4

gone down among the male population while among the females it has gone up by 0.9 per cent. It is difficult to give any positive explanation for this reduction in the percentage of literacy by 1.6 per cent among the male population. But it may be assumed that the economic condition of the Adivasis might have deteriorated during this period due to which more and more people started migrating outside in search of livelihood. Children of school-going age too might have been made to earn wages to keep the family members off from starving. This appears to be the only plausible reason for the decrease in the literacy rate.

In comparison of the literacy rate found in the taluka with those at the district and the state levels it can be seen that the taluka is lagging far behind. As the figures given in the next Table speak, the literacy rates at State

and district level are 35.79 percent and 35.73 respectively while in the Sagbara taluka it is only 14.40. But, if we

Table-15

Statement showing percentage of literacy at state, district and taluka levels (1971 census)

Level	Population	Number of literates	Percentage
State	26697475	9551289	35.79
Bharuch— District	1109601	39446	35.73
Sagbara— Taluka	52576	7565	14.40

look into the corresponding figures regarding the Adivasi population at these levels, we find that in matter of educational development, the taluka's position has not been that bad one. According to the figures given in the next Table, only 14.12 percent of the Adivasi population in the state has been literate while at district level the corresponding figure has been 13.83 percent. At the taluka level, the literacy rate among the Adivasi population of the Sagbara taluka has been 12.25 percent. Thus, it is apparent that the difference between the figures of the taluka and those of district and state is not striking one. Sex-wise also, the literacy rate is more or less the same at all the three levels so far Adivasi population is concerned. The literacy rate among the Adivasi women of Sagbara taluka is only slightly lower than that of the literacy rate among the Adivasi women of the district as a whole. But in the male population, the percentage at the Sagbara

Table 16

Percentage of literacy amongst the Adivasi population at taluka, district and state levels (1971 census)

Sex	Gujarat State	Bharuch District	Sagbara Taluka
Male	21.83	22.64	22.94
Female	6.15	4.76	4.46
Total	14.12	13.83	12.24

taluka level is higher than those at the Bharuch district and Gujarat state levels. Thus one can safely conclude that the efforts made in the growth of education by the state government did yield proportionate results at all three levels.

While one may take satisfaction from the above analysis, it will make one disheartened when the figures of literacy of the Sagbara taluka are compared with the figures of other Adivasi talukas in the Bharuch district. There are four other Adivasi talukas in the district viz.,

Table-17

Percentage of literacy among the Adivasi population of all the five talukas in the Bharuch district (1971 census)

Taluka	Male	Female	Total
Sagbara	22.94	4.46	12.2
Dediapada	18.1	3.6	10.9
Nandod	28.0	6.3	17.3
Valia	24.6	6.3	15.5
Jhagadia	22.0	4.9	13.6
Total	23.2	5.2	14.3

Dediapada, Nandod, Valia and Jhagadia. Let us examine the figures of literacy rate among the Adivasi population of these talukas. The figures have been given in this respect in Table 17. Except the Adivasi population of Dediapada taluka among whom we find the lowest rate of literacy, Sagbara taluka has comparatively lower rate of literacy among the Adivasi population than the other remaining three talukas of the district. This clearly points out that the Adivasis of both Sagbara and Dediapada talukas have lagged behind the Adivasis of the rest of the three talukas viz., Valia, Nandod and Jhagadia in the growth of literacy.

Coming back to the expansion of educational facilities in the taluka, it will be clear from the year-wise figures given in the next Table that in the course of last eight years i.e. from 1970-71 to 1977-78, the pace has been woefully slow.

Table-18

Year-wise growth of educational institutions in Sagbara taluka during the period of 1970-71 to 1977-78 (Sources: District Statistical Office, Bharuch)

Years	Primary Schools	Secondary Schools	Ashram Schools	Total
1970-71	77	1	2	80
1971-72	79	1	2	82
1972-73	81	1	2	84
1973-74	81	1	2	84
1974-75	86	1	2	89
1975-76	86	1	2	89
1976-77	86	1	2	89
1977-78	86	2	2	90

Since 1974-75, there has been no addition in the number of primary schools in the taluka. Between the years 1973-74 and 1974-75, there has been a sudden increase of 5 schools after which there is a stagnation. With the opening of another secondary school at Kolwan in the year 1980-81 now the number of secondary schools, as mentioned earlier, becomes 3. The oldest secondary school is located at Sagbara which is being run under the auspices of 'Sagbara Vibhag Kelavani Mandal'. This school had been started in the year 1964. In the year 1975 the Mandal received aid from Swiss-Aid Abroad to the tune of Rs. 3 lakhs which enabled the institution to construct a pucca school building, girls' hostel and staff quarters. The Swiss-Aid Aboard also sanctioned an additional amount of Rs. 3 lakhs to convert the secondary school into an agriculture school. Construction of a boys hostel has also been completed out of this grant. About 300 Adivasi students have been studying in this school in the year 1976-77.

In the present situation, 88 villages have the facilities of primary education while 7* villages are still without any school. All the three villages where the secondary schools are located are almost on the eastern side. In the villages lying in the western and southern parts, there is no secondary school. In matter of location of Ashram Shalas the villages lying in the eastern, northern and western regions of the taluka have not been given due consideration. Both the Ashram schools are located in the central region of the taluka.

In the primary schools of the taluka, altogether 8211 students have been studying during 1977-78. Out of this number, 5404 i.e. 65.81 percent of the total were boys while 2807 i.e. 34.19 percent were girls. As the

* The total number of revenue villages are 105, out of which 10 are deserted ones.

Table-19

Grade-wise distribution of students (Source-Taluka Panchayat Office, Sagbara)

Sr. No.	Grade	Number of students					
		Boys		Girls		Total	
		No.	Pc.	No.	Pc.	No.	Pc.
1.	1st	1490	18.15	916	11.16	2406	29.30
2.	2nd	1232	15.00	690	8.40	1922	23.41
3.	3rd	1130	13.76	620	7.56	1750	21.31
4.	4th	920	11.20	351	4.27	1271	15.49
5.	5th	230	2.80	120	1.46	350	4.26
6.	6th	150	1.83	90	1.10	240	2.92
7.	7th	252	3.07	20	0.24	272	3.31
TOTAL		5404	65.81	2807	34.19	8211	100.00

figures given in the above Table indicate, in all the grades, the percentage of girl students have been much less in comparison to boy students. This situation obviously points out the fact that in matter of education of girls, the Adivasis of this taluka have not been very enthusiastic.

In the course of a period of eight years i.e. from 1970-71 to 1977-78 there has been 171.44 percent increase in the number of students in the primary schools. While the strength of students in the secondary schools increased by 20.70 percent. Thus, on an average an annual increase of 21 percent took place in case of number of students studying in the primary schools of the taluka and in case of students in the secondary schools, an annual increase of 2.5 percent took place. Obviously the growth of secondary education has been at a lower rate. The figures given in the next Table will give an idea regar-

ding yearly increase in the number of students at both primary and secondary levels. On a close look to the Table

Table-20

Year-wise strength of students in the primary and secondary schools, from 1970-71 to 1977-78 (Source : District Statistical Office, Bharuch)

Year	Strength of students at primary level.	Strength of students at secondary level.
1970-71	3025	285
1971-72	3504	285
1972-73	4355	278
1973-74	4206	280
1974-75	5123	280
1975-76	5675	285
1976-77	6513	284
1977-78	8211	344

it can be seen that in the year 1973-74, a decrease by 3.42 percent took place in the number of students from the previous year. In the year 1977-78, quite a big increase in the number of students has been made. 1698 more students were enrolled in the primary schools thereby achieving 26.07 percent increase from the preceding year of 1976-77.

But in the secondary schools, as indicated earlier, the increase in the number of students from one year to next year has been almost marginal. Infact, a decrease has been recorded by 2.46 percent in the year 1972-73 when the number of students fell down from 285 in the previous year of 1971-72 to 278. An addition of 5 students in the year 1975-76 made the increase by 1.78 percent. Once again, the number fell down to 284, registering a decrease of 1 student in the year 1976-77. But in 1977-78,

a substantial increase in the number of students was effected. 60 more students were enrolled in the secondary school this year, registering an increase by 21.16 percent over the preceding year of 1976-77. This has been the maximum increase recorded in a year.

In the Ashram Shalas, the number of students remains constant as the sanctioned strength to be kept in an Ashram Shala is 120, 60 boys and 60 girls. In the two Ashram Shalas of the Sagbara taluka, each year the number of students has been 240.

Due to the expansion in the educational facilities and consequent increase in the number of students, the teacher-student ratio has been also increasing from year to year. As the figures given in the next Table speak, in the course of 8 years, 19.23 percent increase in this ratio has been made in the primary education sphere while at the

Table-21

Teacher-student ratio at the primary and secondary education levels

Year	Number of students per teacher	
	Primary level	Secondary level
1970-71	156	12
1971-72	160	12
1972-73	165	12
1973-74	168	12
1974-75	172	12
1975-76	178	12
1976-77	180	12
1977-78	182	13

secondary education level the ratio has almost remained at a constant of 12 students to one teacher. At the primary

education level, in 1970-71 the ratio had been 156 students to 1 teacher which gradually went on increasing from one year to next year and by 1977-78 the ratio became 182 students to one teacher. It naturally leads us to conclude that large majority of primary schools in the Sagbara taluka are one teacher schools.

After dealing with expansion of primary educational facilities in the taluka, the number of students at the level of primary and secondary education and the student-teacher ratio, let us find out how far it had made real impact on the educational development of the Adivasis of this region. In other words, it would be interesting to know how many Adivasi children came forward to fully utilize the existing facilities, how many of them completed their primary education and how many left in between. From the foregoing discussions in earlier pages it is apparent that educational opportunities at primary level has expanded to a great extent. But such an expansion in terms of quantity is meaningful only when large number of Adivasi children who enter the primary school in the 1st grade are able to complete the full course of primary stage.

To get a coherent and correct picture of the rate of reduction in number of students in subsequent grades let us examine the figures given in Table 22 where the percentage of students in the different grades have been given, taking those in the first grade as 100. On a careful examination of the figures given in the next Table, certain facts emerge regarding wastage in the primary education in the Sagbara taluka. These are as follows:

(i) About half of the total number of students reached the IV grade. If these figures can be taken as an indicator of wastage, it means that as far as 47 percent of the total number of students entering the first grade could not reach IV grade. This is, of course, a tentative generalization,

Table-22
Percentage of boys and girls in different grades

Grade	Boys	Girls	Total
1st grade	100	100	100
2nd grade	83	75	80
3rd grade	76	68	73
4th grade	62	38	53
5th grade	15	13	15
6th grade	10	10	10
7th grade	17	2	11

but nonetheless provides some insight about the quantum of wastage.

(ii) After IV grade there is a steep fall in the number of students in the V grade so much so that only 15 percent of the total students entering in grade I could pursue their studies further. At the end of the primary stage education i.e., VII grade, only 11 percent remained. This means that as much as 89 percent of the students dropped out.

(iii) In comparison to the boys, there has been steeper fall in the number of girl students in subsequent grades, particularly the rate of decline from III to IV grade and in subsequent grades has been too high. By the time students reached VII grade, a great majority of them, to the tune of 98 percent, dropped out from schools.

(iv) The sharpest and steepest decline in the number of both boy and girl students is from IV to V grade.

(v) From V to VI grades, the rate of decline is same for both the boy and girl students. The trend of decline continues in case of the girl students from VI

to VII grade whereas there is upward trend among the boy students. It is possible that the boy students of the villages of the neighbouring taluka might have got admitted in the VII grade in quite a large number.

Although these are tentative generalization, the figures of the above Table makes interesting reading and provides insight into the quantum of wastage at the primary stage of education.

Having discussed the general features of the primary and secondary education in the taluka on the basis of secondary data, let us now have a look into the results obtained from the sample survey of the ten villages of the taluka. Of the ten villages, nine are having primary schools while in one village, Kuvarkhadi, there is no school. According to the figures given in the next Table only in two villages the schools have been running I to VII grades.

Table-23

Distribution of villages according to types of schools

Type of schools	Number of Villages	
	Number	Percentage
1—IV grade	6	60.00
1—V grade	1	10.00
1—VII grade	2	20.00
No School	1	10.00
	10	100.00

60 percent of the sample villages are having facilities for education upto IV grade only while in one village the school runs I-V grades. The schools having facilities for education upto VII grade are located in Dhavliiver and Javli villages.

Looking to the figures given in the next Table, it can be seen that the total number of students receiving edu-

cation in the schools located in the nine villages is 1152, out of which 725, forming 62.93 percent, are boy students while 427, forming 37.67 percent are girl students. More

Table-24

Sex-wise distribution of students in the sample survey

Name of the village	Boys		Girls		Total	
	No.	Pc.	No.	Pc.	No	Pc.
Dhavliiver	167	67.89	79	32.11	246	100.00
Chikali	33	64.71	18	35.29	51	100.00
Devsaki	68	56.67	52	43.33	120	100.00
Movi	85	63.43	49	36.57	134	100.00
Sorapada	69	57.98	50	42.02	119	100.00
Barkutra	50	62.50	30	37.50	80	100.00
Moti Devrupan	26	59.09	18	40.91	44	100.00
Kuvarkhadi	—	—	—	—	—	—
Kodba	108	79.41	28	20.59	136	100.00
Javli	119	53.60	103	46.40	222	100.00
Total	725	62.93	427	37.07	1152	100.00

or less similar situation has been at the taluka level as indicated by the figures given in Table 20. A close look into the above Table reveals that except in Kodba village where the percentage of girl students is quite low, in all the sample villages almost the same trend is found as in the total number of students. The highest percentage of girl students is in Javli village where 46.40 percent of the total students have been girls.

According to the figures given in the next Table, the rate of literacy among the population covered in the sample villages is 26.89.

Table-25

Rate of literacy in the surveyed villages

Sr. No.	Name of the Village	Total population covered			Percentage of literates		
		Male	Female	Total	Male	Female	Total
1.	Dhavliver	131	128	259	32.06	28.12	30.11
2.	Chikali	106	110	216	36.79	90.09	27.77
3.	Devsaki	109	131	240	45.87	16.79	30.00
4.	Movi	118	135	253	50.00	14.07	30.83
5.	Sorapada	149	132	281	29.53	16.67	23.49
6.	Barkutra	146	126	272	16.43	21.42	18.75
7.	Moti Darapan	104	105	209	31.73	22.85	27.27
8.	Kuvarkhadi	81	72	153	3.70	—	1.96
9.	Kodba	102	102	204	27.45	17.64	22.54
10.	Javli	184	172	356	53.26	27.90	41.01
	Total	1230	1213	2443	34.14	19.53	26.89

A close look to the Table reveals that the highest literacy (41%) rate has been recorded in Javli village which is situated in the plains of the eastern part of the taluka while the lowest (1.96) in Movi village which is situated in the hilly and forest region of the northern part of the taluka. Only in one village, namely Barkutra, the percentage of literacy among the females has been higher than that of among the males, otherwise in all the villages males have a higher percentage of literacy over females.

Regarding the educational achievement of the literate persons among the population covered in the surveyed villages, majority of them i.e. 451 persons forming 68.65 percent of the total literate persons have received or have been receiving primary education. As the figures given in

the next Table point out, 10.20 percent of the literates have received secondary education but not completed S.S.C. Only

Table-26

Distribution of literates among the population covered in the surveyed village according to their educational achievement

Sr. No.	Educational achievement	Male		Female		Total	
		No.	Pc.	No.	Pc.	No.	Pc.
1.	Can read only	55	8.37	52	7.91	107	16.29
2.	Primary level	287	43.68	164	24.96	451	68.64
3.	Secondary „	50	7.62	17	2.59	67	10.20
4.	S.S.C. completed	24	3.65	3	0.46	27	4.11
5.	Graduate	3	0.46	1	0.15	4	0.61
6.	Technical education	1	0.15	—	—	1	0.15
	Total	420	63.93	237	36.07	657	100.00

4.11 percent of the literates have completed secondary education. 4 persons have been recorded as graduates while one has received technical education. Examining the figures sex-wise, it can be seen that from amongst the females, there have been some who have completed S.S.C. 1 woman has received education upto graduate level too. The percentage of the literate persons among the female who have completed S.S.C. is 1.26 out of the total female literates. The number of females who have received or have been receiving secondary education is 17, forming 7.17 percent of the literates among females. Thus, one can see with satisfaction that tribal women in the Sagbara taluka have started receiving secondary and higher education although their number at present is very small. It certainly refutes to some extent the remark made earlier

in this report that 'Adivasis have not been very enthusiastic in matter of education of girls.'

From the foregoing discussions it can be visualized that educational development in the taluka has gained momentum during recent years. The speed will further increase after the implementation of the tribal sub-plan programmes in the taluka in the sector of education.

3. 3: Public Health

During the British period, modern health services were practically non-existent in the Sagbara taluka. The Adivasi people depended upon the indigeneous practices of curing diseases in which application of herbal medicines and making appropriate rituals to appease the evil spirits which were supposed to cause diseases. By and large, the Adivasis were completely ignorant about modern health practices during that period. Their knowledge in matter of health was rudimentary. But as they were able to gather their own fresh food from the forests, they were able to maintain a reasonably good standard of health. With the disappearance of games from the forests and gradual decrease in the availability of wild fruits and roots from the forests, the Adivasis gradually became more dependent upon the agricultural produce. As we have seen earlier, the flora and fauna had been quite rich and full of variety in this taluka. But owing to the destruction of forests, the availability of games and edible wild fruits, roots and leaves went beyond the reach of the Adivasis. Their dependency on the food which they grew increased to a great extent. But for majority of people it is never sufficient for their own requirements. Malnutrition became common. This led to loss of resistance even in ordinary diseases. Alongwith this, the lack of consciousness among the Adivasis regarding environmental and bodily sanitation also played havoc with the health of these people. Bad environmental sanitation led to numerous hazards for the Adivasis in matter of their health.

Due to such a situation, the Adivasis started to have large number of diseases about which their pharmacopoeia was unaware. Their age-old and tradition steeped habits and customs have kept them ignorant of simple rules of hygiene. The main reasons for this state of health and sanitation among these Adivasis are as follows:—

- (i) the Adivasis have been attributing diseases and deaths to evil spirit, wrath of Devi and to witchcraft or to the breach of taboos. According to them, if the Devi, the supreme goddess is not propitiated properly, calamity in the form of disease comes and
- (ii) lack of dynamic health and health education programmes in this taluka.

With increase of educated persons among the Adivasi population, the traditional belief of the causes of diseases is being abandoned. And with the introduction of modern health services, their attitude to environmental sanitation, disease and death has changed to a great extent.

Before the Primary Health Centre was started in the year 1965 under the programmes of Sagbara Tribal Development Block which came into being on 1st April, 1962, a subsidized medical practitioner centre had been started at Sagbara in the year 1953. This scheme was introduced to encourage qualified medical practitioner to settle in rural areas. Under this scheme, the practitioner used to receive a monthly subsidy and travelling allowances and a limited supply of medicines. An Ayurvedic subsidized medical practitioner started practising at Sagbara in the year 1953. He was being paid by the government a sum of Rs. 80 per month and also personal travelling allowance at the rate of Rs. 37.8 annas per month. Besides, supply of medicines worth of Rs. 300 was also used to be made each year.

At present there is one Primary Health Centre, two Rural Health Centres and six sub-Centres. The Primary Health Centre is located at the taluka headquarter, Sagbara while the two Rural Health Centres are functioning at Sorapada and Patlamau villages. These centres had been started in the year 1970. The six sub-Centres are located at the following villages:

(i) Chopadvav (ii) Taval (iii) Dhavliber (iv) Selaamba (v) Kolwan and (vi) Patlaman.

As will be evident from the figures given in the next Table, there has been practically no change in the position regarding the number of Primary Health Centre, Rural Health Centres and sub-Centres during the last eight years. During the fifth five year plan, one addi-

Table-27

Growth of medical facilities in the taluka during the period of 1970-71 to 1978-79

Years	No. of Primary Health Centres	No. of Rural Health Centres	No. of Sub-Centres
1970-71	1	2	6
1971-72	1	2	6
1972-73	1	2	6
1973-74	1	2	6
1974-75	1	2	6
1975-76	1	2	6
1976-77	1	2	6
1977-78	1	2	6
1978-79	1	2	6

tional Primary Health Centre had been proposed under the programmes of Integrated Tribal Development Project but as yet it has not been implemented.

Although there has been no increase in the number of medical-aid-giving centres in the course of last nine years, a substantial increase in the number of persons utilizing the services provided at these centres has been recorded during the period of last nine years i.e. from 1970-71 to 1978-79. According to the figures given in the next Table,

Table-28

Year-wise number of cases treated at the Primary Health Centre and Rural Health Centres

Year	Number of cases treated	Percentage of increase (year to year)
1970-71	4560	—
1971-72	5350	17.32
1972-73	5680	6.16
1973-74	6550	15.31
1974-75	7861	20.01
1975-76	7459	-5.11
1976-77	6961	-6.68
1977-78	7816	12.28
1978-79	13951	78.49

the number of patients treated rose from 4560 in 1970-71 to 13,951 in 1978-79, thereby registering an increase by 205.94 percent. On a close look to the Table it becomes clear that for four years i.e. from 1970-71 to 1974-75, there has been a steady increase in the number of patients. In the year 1972-73 there has been an increase but not much in comparison to the increases in other years. During the next

two years, i.e. 1975-76 and 1976-77 the number of patients coming to these centres for treatment has fallen down from the previous years. The percentage of decrease has been recorded as 5.11 and 6.68 percent respectively. However, the number again picked up next year i.e. in 1977-78 when an increase by 12.28 percent over the number of patients in 1976-77 has been registered. In the year 1978-79 the increase in the number has been extremely good. An increase by 78.49 percent over the number of patients treated during 1977-78 has been registered in the year 1978-79.

The steady increase in all the years, except the two years of 1975-76 and 1976-77, in the number of patients clearly suggests that the popularity of modern ways of curing diseases is gaining speed among the Adivasis who traditionally depended upon the medicine—cum—magician for curing diseases. Such a man, known as 'Bhuwa', exist in each of the villages in the taluka. According to the traditional belief of the Adivasis, this man has the proper knowledge to locate the nature of the diseases and to fix the type of sacrifice. Now due to the popularity of the modern ways of treatment available at the health centres, the hold of this medicine man has weakened to a great extent.

The fall in the number of patients in the year 1975-76 and 1976-77 when there ought to have been an increase, might have happened due to the medical staff of those two years being less dedicated and in consequence less popular among the Adivasis. However, this is just a speculation. It is really difficult to explain the reduction in the number of patients in those two years.

Three maternity centres have been functioning in the taluka since 1970. These are located at Dhavliwer, Patlamauv and Kolwan. During the period of nine years i.e. 1970-71 to 1978-79, there has been no addition in the number of maternity centres. Through these maternity

centres, the Adivasi women are given proper care, both during the pre-natal and post-natal period.

There have been three family planning sub-centres, apart from the main centre at Primary Health Centre, in the taluka, located at Chopadvav, Taval and Selemba villages. These centres are functioning for the last 15 years. In the course of last nine years, no further addition has been made in the number of these centres. However, number of persons covered under family planning programmes in the taluka has been quite encouraging. In view of the fact that family planning is an alien concept among the Adivasis of this taluka, quite good achievement has been made. Although social conditions have not been fav-

Table-29

Year-wise number of persons covered under family planning programme in the taluka from 1970-71 to 1978-79

Years	Number of family planning centres	Number of persons covered under family planning programme	Percentage of increase from year to year
1970-71	3	752	—
1971-72	3	2532	236.70
1972-73	3	1265	-50.03
1973-74	3	681	-46.16
1974-75	3	845	24.08
1975-76	3	1384	63.79
1976-77	3	4796	246.53
1977-88	3	936	-80.48
1978-79	3	1755	87.50

ourable for the success of this scheme, the interest shown by the Adivasis on the one hand and the intensive campaign made by the staff of those centres on the other hand have resulted in good coverage every year. As the figure given in the Table 29 suggests, the maximum number of persons covered under this programme had been in the year 1976-77, while the minimum coverage had been in the year 1973-74. The record increase took place in 1976-77 when the number went up to 4796 from 1384 in the previous year, thereby registering an increase of 246.53 percent. But immediately after this, a heavy reduction in the number took place when the number fell down to 936 from 4796, registering a decrease by 80.48 percent. But the number has started picking up once again and as a consequence of this, in the year 1978-79 an increase by 87.5 percent took place.

The family planning centres also organized vasectomy and tubectomy operation camps. The figures given in

Table-30

Year-wise number of persons operated upon for birth control (from 1970-71 to 1978-79)

Years	Number of persons operated	Percentage of increase/decrease from year to year.
1970-71	181	—
1971-72	2066	1041.43
1972-73	296	-85.67
1973-74	51	-82.77
1974-75	351	588.23
1975-76	1068	204.27
1976-77	3986	273.22
1977-78	140	-96.49
1978-79	645	360.71

the above Table provide an insight into the number of persons who underwent operation for restricting further birth of a child. On a careful look into the Table, one can see that in certain years, for instance in the years 1971-72, 1975-76 and 1976-77, quite a big number of persons have been operated upon. Here again, the lowest number of persons covered has been in the year 1977-78 while the highest number has been achieved in the year 1976-77. For the last two years, the target regarding birth control operations has been achieved within the fixed period and hence the taluka has become able to win award.

The taluka has also a mid-wife training centre which was started in the year 1976-77 and 16 and 22 women received training in midwifery in 1976-77 and 1977-78 respectively. But in 1978-79 not a single person received

Table-31

Year-wise number of mid-wife training centre and number of persons trained

Year	Number of training centres	Number of persons recd. trainings
1970-71	—	—
1971-72	—	—
1972-73	—	—
1973-74	—	—
1974-75	—	—
1975-76	—	—
1976-77	1	16
1977-78	1	22
1978-79	1	—

training. As this centre has been created quite late, the training programme should be carried out in all earnestness. Attempt should be made to train more and more Adivasi

women for doing the work of midwifery on modern lines. Through the Primary Health Centre located at Sagbara special treatment is provided to patients suffering from Leprosy, T.B., Malaria and Chicken Pox. For preventing the incidence of these diseases, vaccinations and injections are also given to the people. All these services are provided through multi-purpose health unit of the Primary Health Centre. The Primary Health Centre also has a labour room for conducting the delivery of the pregnant women on scientific lines. Apart from this facility at the Primary Health Centre, the services of trained midwife and nurses are also available at the six sub-centres which mainly do the job of attending to pregnant women

Table-32

Statement showing number of delivery cases conducted and related medical services provided to the people in the taluka (1977-79)*

Sr. Services No.	Years		
	1977	1978	1979
1. Delivery cases	140	153	185
2. Treatment given to pregnant mothers	994	725	915
3. Post-natal treatment	888	713	907
4. Anti-tetanus injections given to pregnant women	380	1280	1514
5. Vitamin A tablets given to lactating mothers	712	971	888

* Figures are available only for three years

for conducting delivery on modern lines. The figures regarding the delivery cases conducted and related health services provided have been given in the above Table. The figures are self-explanatory.

Under the school health programme, medical investigation of the school children are undertaken by the Primary Health Centre. Those studying in the 1st grade are given D.T. and T.A.B. injections. Figures regarding year-wise treatment given to children have been given in the following Table.

Table-33

Number of children given various type of treatment during 1977-79

Sr. Medical Services No.	Years		
	1977	1978	1979
1. Vitamin A tablets given to children	953	1264	921
2. Medical investigation of children studying in schools	1344	1237	1275
3. Medical investigation of children under the age of 5 years	1467	1365	1578

The most common diseases among the Adivasis of this taluka are skin diseases, cirrhosis of liver, blood and lymphatic system diseases and diseases of the digestive system. Among the skin diseases, ringworm has been the most frequent disease, next in order being scabies and tinea.

Among the children tinea is much common. Amongst the diseases of blood and lymphatic system anaemia is most common, especially in Adivasi women and this is more often on account of lack of sufficient nutrition than other-wise. Amongst the diseases of digestive system, diarrhoea, dysentery, constipation and indigestion are most frequent. Among adults, dysentery and constipation are most common while among children, diarrhoea and indigestion are much common.

Some incidences of leprosy and T.B. have also been reported from this taluka. The incidence of malaria has also increased in recent years. In the next Table figures regarding patients covered for treatment of these diseases have been given. A special leprosy centre unit has been

Table-34

Year-wise number of patients treated for major type of diseases

Sr. No.	Years	Leprosy	T.B.	Malaria
1.	1970-71	—	.9	40
2.	1971-72	—	11	60
3.	1972-73	—	13	75
4.	1973-74	—	15	90
5.	1974-75	—	21	530
6.	1975-76	—	25	380
7.	1976-77	99	30	425
8.	1977-78	49	40	721
9.	1978-79	41	31	147

started in the year 1976-77 under the National Leprosy Control Programme.

To check the incidence of infectious diseases, the Primary Health Centre has been taking special measures. As shown in the following Table, quite a substantial number of persons have been covered for giving vaccination and injections.

Table-35

Number of persons covered for vaccination etc.

Sr. No.	Kind of injection	Years		
		1977	1978	1979
1.	Anti-Cholera vaccine	200	Nil	2349
2.	Triple injections	735	1462	2353
3.	D.T. and anti-tetanus injections	1156	387	5535

Birth and Death: According to the figures given in the next Table, the number of births and deaths registered each year during the period of 1970 to 1978 show a fluctuating trend, particularly in the number of births. This is mainly because in a tribal area like Sagbara many births remain unrecorded in particular years. As shown in the Table, the maximum increase in the number of birth is in the year 1976, while the maximum decline is in the year 1977. We have already seen earlier that in the year 1976, the family planning programme has been at its peak of performance and hence it is quite in fitness of the things that a big reduction in the number of births has been recorded in the following year i.e. 1977. There has been a steady decrease in the death rate from the year 1970 downwards except in the last two years i.e. 1976 and 1977 when the

Table-36

Statement showing year-wise number of births and deaths recorded in the taluka

Sr. No.	Year	No. of births	Percent- age of increase/ decrease from year to year	No. of deaths	Percent- age of increase/ decrease from year to year	Percent- age of infant mortality out of the total number of deaths
1.	1970	1469	—	487	—	13.96
2.	1971	1600	+ 8.99	441	— 9.45	17.69
3.	1972	1400	— 12.55	410	— 7.03	13.90
4.	1973	1402	+ 0.14	400	— 2.44	16.25
5.	1974	1471	+ 4.92	322	— 19.5	16.15
6.	1975	1256	— 14.62	269	— 16.45	18.59
7.	1976	1510	+ 20.22	307	+ 14.13	14.33
8.	1977	1046	— 30.73	308	+ 0.33	12.01

number of deaths have shown an upward trend. It can be deduced from this general trend of decrease in the number of deaths that the medical facilities available at the Primary Health Centre have benefited the Adivasis. But the same trend is not observed in the case of infant mortality. Only in the last two years of 1976 and 1978, a decrease has been noticed.

The northern and western parts of the taluka face inadequate water supply because of the hard sub-strata. Looking to the figures given in the following Table, it will be clear that in the year 1970-71 almost half of

the total number of villages were having no well to get the supply of drinking water. Although the number of villages having well have increased in subsequent years, even in 1978-79, six villages have no well. Apart from these six villages there are number of villages where water in

Table-37

Year-wise number of villages in the taluka having simple well and number of the villages having no facilities for drinking water

Sr. No.	Years	Villages having simple well		Villages having no facilities	
		No. of increase from year to year	Percentage out of the total villages	No. of increase from year to year	Percentage out of the total villages
1.	1970-71	68	—	27	25.47
2.	1971-72	71	4.41	23	21.70
3.	1972-73	75	5.63	19	17.92
4.	1973-74	77	2.67	17	16.04
5.	1974-75	78	1.30	16	15.09
6.	1975-76	80	2.56	14	13.21
7.	1976-77	81	1.25	13	12.26
8.	1977-78	85	4.94	9	8.49
9.	1978-79	88	3.53	6	5.66

well dries up in summer season. In fact, except in the villages of eastern part and south-east, practically all villages have to face the problem of inadequate water supply during the summer season.

Apart from these programmes, works regarding construction of Bavla type latrines, other types of latrine-cum-

urinal pits, and Nirdhum type of oven and spraying of well have been also undertaken. The progress made in these can be seen from the figures given in the following Table. The work regarding construction of other type

Table-38

Statement showing other measures taken up in the taluka regarding health and sanitation

Sr. No.	Item	Years		
		1977	1978	1979
1.	Construction of Bavla type latrines	30	21	50
2.	Other type latrine-cum-urinal pit	—	—	15
3.	Construction of Nirdhum oven	—	—	15
4.	Spraying of well	417	1282	1488

of latrine cum-urinal pits and Nirdhum oven has been started only in the year 1919.

3-5: Rural Housing:— There has been a programme of constructing cheap hutments for the Kotwalia families but the statistics regarding this is not available. There is also a scheme in operation in which Adivasis, whose houses have been destroyed by flood or fire are given materials like wood, bamboo and grass free of charge for constructing a new house. Here again, information is not available regarding the number of beneficiaries. On the whole it appears that housing programme has not been implemented in right earnest manner among the Adivasis of this taluka.

Physical infrastructures

3-6: Transport and Communication: It has been already indicated that Sagbara taluka being interior most in the Bharuch district has poor communication facilities. Let us see the actual position in this regard. As will be clear from the figures given in the following Table there is no railway in the taluka, only through 5 villages metalled road passes and electricity is only in 7 villages.

As large number of villages are covered with Kachcha road only, communication with these villages

Table-39

Transport and communication facilities in the taluka

Facilities	No. of Villages covered	Percentage out of total number of villages
I—Transport		
1. Metal road	5	04.87
2. Kachcha road	89	84.76
3. Bus facilities	40	38.10
4. Railway Stn.	Nil	Nil
II—Communication:		
1. Post office	19	18.10
2. Telegraph office	1	00.95
3. Post and telegram	1	00.95
4. Experimental office & temporary post offices	4	3.80
III—Electricity:		
1. Villages having electricity.	7	6.60
2. Villages having electricity for agricultural purposes	6	5.66

virtually get snapped during monsoon season. Although 40 villages have been shown as having bus facilities, the position becomes different during monsoon season as plying of buses on kachcha road is stopped. Except the Ankleshwar - Akalkuva road which passes through Sagbara and 1 km. of road leading to Selaamba, not a single road is metalled one. It is not difficult to visualize the fact about the isolation of the majority of the villages in the taluka. Similarly one can easily see the poor facilities in respect of communication facilities. In the taluka, 1362 persons own radio licenses. The total length of pucca road in the taluka is only 26.19 km. while that of kachcha road on which buses can ply is 27.50 km.

In the villages where electricity is available, the kind of benefits taken by the villagers have been shown in the next Table. It is apparent that except in Sagbara and Selaamba

Table-40

Use of electric connections in the electrified villages

Sr. No.	Names of the villages	Purpose for getting electric connection					
		For ins-ta-lling elect-ric motor	Pen- ding conn- ection for elec- tric motor	For dom- estic use	Street light	For flour mills	For water works
1.	Sagbara	5	4	149	60	1	1
2.	Pankhala	7	1	16	30	—	—*
3.	Kankhadi	4	—	13	15	—	—
4.	Selaamba	6	3	197	60	12	1
5.	Pat	6	10	40	25	1	—
6.	Bhorambli	3	8	17	30	2	—
7.	Chopadvav	1	5	16	60	1	—
	Total	32	31	448	280	17	2

* One scheme has been sanctioned but not yet implemented,

villages, not many persons in other villages have been using the electricity for domestic use. Sagbara being headquarter of the taluka and selaamba being the marketing centre, it is quite obvious that the number of consumers of electricity in these two villages will be on high side. How many of them would be Adivasis one can never tell.

Table-41

Villages having electricity for agricultural purposes

Sr. No.	Names of the villages	No. of Persons who have installed electric motor	No. of Persons whose cases are pending
1.	Narwadi	5	4
2.	Koida	1	3
3.	Gotpada	1	6
4.	Dhansera	2	4
5.	Ubharia	—	7
6.	Chitta Kewdi	2	2
	Total	11	26

Apart from the above seven villages there are six other villages where electricity has been provided for restricted use i.e., for only agricultural purpose. The names of the villages with number of beneficiaries have been given in Table 41. It is very much obvious that a very small number of agriculturists have been covered for taking the benefits of availability of electricity in these villages for agricultural purposes. There are more cases pending than cleared.

As the Adivasis' economic condition is not such which allow them to pay even the minimum charges required for getting an electric connection, the progress made in the direction of installing electric motors as well as getting

household connections has been very much inadequate.

Institutional set-up

3-7: Cooperative Institutions : Backwardness of this region has prevented even an all round progress in the formation of cooperative societies in the taluka. Although movement for organizing cooperative societies was started long ago (in the late fifties), the progress made in this direction has been rather slow. According to the figures given in the next Table in the year 1960-61 there were 16 Primary Agricultural Credit Multi-purpose Cooperative

Table-42

Year-wise number of primary agricultural credit and multi-purpose co-operative societies, and their membership and other details

Year	Number of societies	Percentage of increase/decrease	Number of members	Percentage of increase
1960-61	15	—	910	—
1970-71	12	25.00	1310	43.96
1971-72	12	—	1470	12.21
1972-73	12	—	1567	6.59
1973-74	12	—	1617	3.21
1974-75	12	—	1747	8.04
1975-76	13	*8.33	2721	16.15
1976-77	13	—	2137	5.39
1977-78	13	—	2227	4.21
1978-79	13	—	2313	3.86

Societies in the taluka but within a decade, instead of increase in the number, the number fell down to 12, registering a decrease by 25 percent. Thereafter, in the year 1975-76 one more society has been established but one different society out of the earlier 12 has stopped function-

ing. This means that during the period from 1970-71 to 1978-79 the number of functioning societies has remained at 12 only. However, there has been distinct increase in the number of members in these societies. An increase by 43.96 took place between 1960-61 and 1970-71. There after although the pace of the increase has slackened down, the net increase is 76.57 percent from 1970-71 to 1978-79.

Details regarding other type of cooperative societies have been given in the next Table. Looking to the Table closely it becomes apparent that in the taluka, the following societies are in non-existence : (1) Primary Agricultural Non-Credit Society, (2) Primary Non-Agricultural Credit Society, (3) Consumer's Stores, (4) Cooperative Farming Society, (5) Lift Irrigation Society, (6) Housing Society, (7) Cotton Ginning and Pressing Society, and (8) Forest Labourer's Cooperative Society. Further, some of the important societies which directly benefit to the Adivasis such as Primary Industrial Co-operative Societies, Milk-producers Co-operative Societies and Fishermen Co-operative Societies are of quite recent origin. Their number needs to be augmented.

In comparison to the district level organization of co-operative societies, this taluka definitely is far behind in this respect. Only 3.32 percent of the total Primary Agricultural Credit-Cum-Multipurpose Societies are located in this taluka. Similarly, out of total memberships in these societies at district level, only 3.4 percent are from this taluka.

Several of the societies have been functioning well, as reported by informed persons in the taluka. In the past some have been liquidated. Even at present, some are on way of liquidation.

The problem which is confronted in the formation of cooperative societies in this taluka and after organization in their smooth functioning are, by and large, as follows: (i) The economic condition of majority of Adivasis of this taluka being extremely poor, it is, in general, hard for them to raise money for even purchasing the shares.

Table-43

Year-wise number of other co-operative societies with number of members and other related details

Type of cooperative societies	Years								
	1970-1971	1971-1972	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979
1. Primary Non-Agricultural Credit Societies.									
(a) No. of societies	—	1	1	Nil	Nil	Nil	Nil	Nil	Nil
(b) No. of members	—	46	46	Nil	Nil	Nil	Nil	Nil	Nil
2. Milk Producers' Societies									
(a) No. of societies	—	—	—	—	—	—	2	9	8
(b) No. of members	—	—	—	—	—	—	315	670	850
(c) Production (in Rs.)	—	—	—	—	—	—	70,000	2,50,000	4,50,000
(d) Sale (in Rs.)	—	—	—	—	—	—	74,000	2,30,000	4,30,000

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Table-43 (Contd.)

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3. Marketing Societies									
(a) No.	—	1	—	Nil	Nil	Nil	Nil	Nil	Nil
(b) Members	—	73	—	Nil	Nil	Nil	Nil	Nil	Nil
4. Fishermen Cooperative Societies									
(a) No.	—	—	—	—	—	1	1	1	1
(b) Members	—	—	—	—	—	80	215	260	803
(c) Production (in Rs.)	—	—	—	—	—	50,280	66,708	11,12,920	8,23,291
(d) Sale (in Rs.)	—	—	—	—	—	57,035	83,957	1,80,278	1,28,554
5. Poultry-raising Cooperative Societies									
(a) No.	—	—	—	—	—	—	—	4	4
(b) Members	—	—	—	—	—	—	—	—	—

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Table 43 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6. Primary Industrial Cooperative Societies									
(a) No.	—	—	—	—	—	—	1	2	2
(b) Members	—	—	—	—	—	—	60	140	295
(c) Production (in Rs.)	—	—	—	—	—	—	7,000	64,000	73,000
(d) Sale (in Rs.)	—	—	—	—	—	—	7,000	60,000	48,000
7. Godown constructed by Primary Agricultural Credit Cooperative Societies	9	11	13	14	14	14	14	14	14

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(ii) Due to such condition as enunciated above, the borrowing capacities of these societies remain limited. As a result of this situation, the financial condition of the societies are quite poor and hence are not able to advance money adequately to the needy Adivasis.

(iii) Since the Adivasi members are not permitted to get credit from these societies for non-productive works, the Adivasis of this taluka have to depend upon the village-shop keepers, local traders and money lenders to borrow money. Therefore, at the harvest time, the crops are sold to such persons from whom they had borrowed money in order to pay back the loans. In such a situation, the Adivasis fail to pay the loan taken from the cooperative societies which consequently make the financial condition of the societies weak.

(iv) On the various committees of the societies, the key positions are held by either non-tribal persons or by elites of the Adivasi community. The poorer section of the Adivasis hardly get representation on the committees, as a result of which the advantage of taking loan from the societies is not utilized by the weaker sections of the Adivasi community.

(v) Some of the office-bearers of the cooperative societies have been reported to indulge in mal-practices which ultimately hit the functioning of the society badly.

Since no information is available regarding the quantum of credit and number of farmers using the credit facilities given by the Primary Agricultural Credit-cum-Multi-purpose Societies and other societies it is difficult to know about the impact of these societies on the improvement in agriculture production in the taluka.

Banking Institutions: Only three types of Banking institutions are operating in this taluka. The first and the oldest one is the branch of Bharuch District Central Cooperative Bank which was started in the year 1962 and is located at Sagbara village. The second one is the branch of

Gujarat State Co-operative Land Mortgage Bank, established in 1974 (October). This branch is also located at Sagbara. The third one is the two branches of a commercial Bank-Bank of Baroda. One branch is located at Sagbara which had been started in the month of May, 1975 while the other branch is at Selemba which was started in the month of November, 1975. Except the branch of Bharuch District Central Co-operative Bank, the other three Banking institutions in the taluka are of recent origin.

The position regarding the amount of credit advanced and recovery made by these Banking institutions has been given in the next Table. On a close look to the Table it is

Table-44

Statement showing amount of credit advanced and recovery made by the different Banking institutions

Sr. No.	Name of the Banking institutions	Amount of credit advanced in 1979-80 (in Rs.)	Recovery made (in Rs.)	Amount still to be recovered (in Rs.)
1.	Branch of the Bharuch District Central Co-operative Bank	3,71,940	—	26,80,976 (this includes the arrears of earlier year too)
2.	Branch of the Gujarat State Co-operative Land Mortgage Bank	9,21,360	2,29,507	6,91,853
3.	Sagbara Branch of Bank of Baroda	38,000	17,600	20,400
4.	Selemba Branch of Bank of Baroda	75,000	33,000	45,000

quite evident that not much concrete efforts have been made in respect of covering a large number of Adivasi farmers through the Banking institutions.

Bank of Baroda branches are functioning as the lead Bank in the taluka.

Reason for only partial recovery of the credit advanced to different farmers have been mentioned as the poor economic conditions of the Adivasis. But how far this reason is valid is difficult to say without examining some specific cases.

3.8: Other Agencies:

Development programmes by Small Farmer Development Agency and Integrated Rural Development Project have been undertaken in this taluka. The former agency is functioning since 1974-75 while the latter one since 1978-79. Since its inception the S. F. D. A. has covered 762 beneficiaries in the taluka while the I. R. D. P. 49 cases. Details regarding their programmes have been given in the next Table.

The most important agency working in the taluka is, of course, the Integrated Tribal Development Project whose head-quarter is at Rajpipla. Review of its programmes implemented in this taluka would be discussed in chapter VII where history of development programmes and its probable impact on Adivasis would be covered.

The District Industry Centre was established in the year 1975-76. In Sagbara taluka it started undertaking programmes from 1977-78 when it granted an amount of Rs. 4,550/- to the Sagbara Bamboo Workers Cooperative Society, Rs. 3,500/- as subsidy while Rs. 1,050.00 as contribution to share capital. In the year 1978-79 it did not implement any programme. Afterwards it became instrumental in starting Ambar Charkha classes in the taluka through Khadi and

Table-45

Statement showing progress of S. F. D. A. and I.R.D.P. programmes in the taluka

Sr. No.	Sector	Total amount invested since inception (in Rs.)		Cases benefited	
		S.F.D.A.	I.R.D.P.	S.F.D.A.	I.R.D.P.
1.	Agriculture	46,116 + 22,117*	9,179 + 4,007*	471	94
2.	Minor Irrigation	3,010	—	2	—
3.	Animal Husbandry	2,03,887	3,72,737 + 80,000*	289	396
4.	Co-operation	4,423 + 12,250*	3,066	455*	—
5.	Marketing and Storage	35,000 + 40,000*	—	—	—
6.	Rural Artisan Programmes	5,040 + 18,153*	—	41*	—
Total		3,89,996	4,68,449	762	490

* This indicates the expenditure of share capital loans and the number of beneficiaries and stipend received under Rural Artisan Programme.

Village Industries. 250 persons earn some income through the Ambar Charkha scheme. The District Industry Centre has also envisaged a programme of imparting training to Adivasis of this taluka in motor rewinding, carpentry, tailoring. Recently it has approved a scheme of mini-industrial estate in the taluka.

3.9: Organisational set up:

All the villages of the taluka have been covered under panchayat. At present 6 villages are under individual panchayat of their own while the remaining villages are covered under 27 group panchayats. Figures regarding the panchayats in different years have been given in the next Table. Before 1975-76 the number of both individual village panchayats and group panchayats have been slightly higher. Afterwards there has been change in the numbers as several villages of the taluka got submerged in the the catchment area of Ukai-dam.

Table-46

Statement showing year-wise number of individual village panchayats and group village panchayats in the taluka (1970-71 to 1978-79)

Years	Number of individual panchayats	Number of group panchayats
1970-71	8	35
1971-72	8	35
1972-73	8	35
1973-74	8	35
1974-75	8	35
1975-76	6	27
1976-77	6	27
1977-78	6	27
1978-79	6	27

3-10: Administrative arrangement: The usual administrative machinery available in all the talukas of Gujarat also exists in this taluka. The taluka panchayat is headed by a President. On the executive side, there is the Taluka Development Officer, whose is a class II post in this taluka. There is a proposal to upgrade this to class I post. To assist the Taluka President and the Taluka Development Officer, there are Extension Officers in Co-operation, Agriculture, Panchayat, Education and Rural Engineering. A post of Statistical Assistant is also existing there. The development programmes approved by taluka panchayat are geared by this machinery. Besides them, there are ministerial staff at the Taluka Panchayat Office.

For implementing the programme of Block Level Planning a post of Employment Project Officer has been sanctioned but no posting has been made till today. The existing administrative structure available at the taluka level is not inadequate so far as implementation of Block Level Planning programmes are concerned. What is lacking is the quality aspect of the staff who are to be entrusted with the implementation task. It is necessary to overhaul the existing administrative machinery and only such personnel who have adequate knowledge about tribal life and culture (preferably a person trained in anthropological science) and who can develop real empathy for the Adivasis should be appointed. The post of the Employment Project Officer should be filled up as early as possible. The person to be selected for this post should have the proper background, as mentioned above.

CHAPTER IV A

VOLUNTARY AGENCIES, HUMAN RESOURCES AND EMPLOYMENT POSITION

4.1: Voluntary Agencies in the taluka:

Apart from the developmental efforts attempted by the government through their administrative machinery to bring about the socio-economic development of the Adivasis, non-official organizations have been playing a distinct and useful role to serve the cause of Adivasis in Gujarat State. Such organizations have been established for achieving the same purposes as those of government machinery. These organizations consist of persons who are inspired by the impulse to serve the Adivasis without expectation of getting any monetary remuneration or return. That is the driving force behind this enthusiasm to spend one's time and energy by setting up organizations by collective action and in conducting them. In them is the urge to help in the cause of the development of the Adivasis, particularly when there is a keen and general awareness of the woefully backward condition of the Adivasis. Such an urge is the motivational factor for some ardent individuals, binding themselves together for working to solve the problems of socio-economic development of the Adivasis. Upon initiative taken by Mahatma Gandhi several Social Workers plunged themselves in the organization of institutions among the Adivasis of Gujarat. As is well known, Thakkar Bapa who organized the Bhil Seva Mandal and Shri Jugat Ram Dave who organized the Rani Paraj Seva Sabha had been the pioneers in the movement of voluntary efforts towards development of the Adivasis of Gujarat. Inspired by them several Gandhian workers devoted their time and energy to work for this movement. Many of these Gandhian workers had received their education at the Gujarat Vidyapith

(an institution founded by Mahatma Gandhi to prepare workers for national reconstruction) where they were encouraged to work for the welfare of the Adivasis in a selfless and dedicated manner. Due to the spread of this movement and steady supply of workers by Gujarat Vidyapith, a net work of voluntary organizations emerged throughout the length and breadth of the Adivasi belt of the state.

In the Adivasi tract of the Bharuch district, the Bhil Seva Mandal started Shri Adivasi Kumar Ashram at Valia in the year 1951 which provided facilities to 114 Adivasi students every year. Some local workers, after getting inspiration from the working of the Bhil Seva Mandal, Dohad, organized an important institution-Adivasi Seva Sangh at Rajpipla which was established in the year 1949 with a view to bring about social, economic, political and educational development among the Adivasi population of the Rajpipla sub-division (Sagbara was included in this sub-division) of the Bharuch district. This organization gradually expanded its activity under the supervision and management of the Bhil Seva Mandal, Dohad and in the year 1957 it was independently registered as 'Bharuch Zilla Adivasi Seva Sangh'. From that time the management by the Bhil Seva Mandal ceased.

Another institution based on the principle of Sarvodaya was established in the year 1951 at the Rampura village of Nandod taluka. Its name has been Rajpipla Vibhag Satyadham Sarvodaya Sangh. The chief object of the sangh was to render public service without any desire of reward or gain and to raise the moral character of the Adivasis of Rajpipla sub-division by constructive work. But the activities of this institution remained confined to the Adivasis of the Nandod taluka. In the Sagbara taluka, the activities of the voluntary organization started with the opening of two Ashram Schools by the Bharuch Zilla Adivasi Seva Sangh. These Ashram Shalas were started in the early sixties. Apart from taking up the work of spreading education among the Adivasis of the taluka, the sangh also started mobilizing the

Adivasis and bringing an awareness among them for development. Its workers moved from village to village in the taluka for this purpose. But the taluka being remote in one corner of the district and being extremely poor in communication, they could not make much headway. The sangh's main contribution in the cause of development of the Adivasis of this taluka has been in the field of education.

A socio-religious movement had been started among the Adivasis of this taluka by the leader of the 'Sati-Pratha' or 'Ap ki Jai' sect. This movement had become quite popular in the early fifties but later on the Adivasis gradually came under the influence of other sects and the 'Sati-Pratha' followers are now found in a couple of villages only. This movement certainly weaned away a large number of Adivasis from the habit of drinking wine and also cultivated in them the habits of leading a clean, regulated and disciplined life. In course of time this movement became unpopular because of its stiff opposition to the present government machinery.

In the year 1964, a voluntary organization was started by some persons of the taluka itself. The name of this organization is 'Sagbara Vibhag Kelavani Mandal' (Sagbara Educational Society). Under the auspices of this organization a higher secondary school with agriculture bias is being run at Sagbara proper since 1964. Its activities are too confined to educational development of the Adivasis of this taluka. As has been mentioned elsewhere in this report, this organization was able to receive a substantial donation from Swiss Aid Abroad in 1975 and 1976, to the tune of Rs. 6 lacs. Till then, the organization was running its activities on the donations from the local people as well as grants from the government.

Leaving aside these organizations Sagbara taluka, although almost its entire population being Adivasis,

could not attract other voluntary organizations. One does not find many social workers in this taluka. In the sphere of economic development of the Adivasis, practically no voluntary effort is visible in this taluka. In view of this it is doubtful whether the existing voluntary organizations can be utilized for the programmes of block level planning. There is, in fact, an urgent need to mobilize voluntary workers to create associations in the taluka to work for the economic development among the Adivasis. This should be an important assignment of the Employment Project Officer. If he becomes successful in organizing voluntary association consisting of the local people, several of the programmes of the block level planning may be entrusted to such association for implementation.

Apart from the above mentioned voluntary efforts in this taluka, some activities have also been undertaken by organizations like Hari Om Ashram, CARE and UNICEF. Hari Om Ashram contributed a sum of Rs. 30,000/- in the fifth five year plan towards construction of school buildings while during sixth five year plan period it has proposed to spend Rs. one lac for the same purpose. Through the help of CARE, a scheme of feeding the children of some Balvadis (type of kindergarten school) has been started in the taluka while under the UNICEF programmes certain health programmes have been undertaken, particularly distribution of medicines among the Adivasis.

4-2: Industrial houses :

None of the industrial houses of the state has initiated any development programme among the Adivasis of this taluka. Two factors are perhaps responsible for this. First, Bharuch district itself does not have any big and important industrial house and secondly Sagbara taluka is located in a far away corner of the Bharuch district. With the coming up of many industries at Ankleshwar and

Bharuch, some of them may be approached and persuaded to take up rural development programmes among the Adivasis of the Sagbara taluka.

4-3: Demography :

This has been made clear number of times in this report that this taluka is a predominantly Adivasis inhabited one. Of the total population, 90.8 percent belong to Adivasi communities. The population of different Adivasi-groups has been given in the following Table.

Table-47

Tribe-wise population (1971 census)

Sr. No.	Name of the tribe	Total population	Percentage out of total tribal population
1.	Bhil, including Vasava Bhil, Tadv-Bhil, etc.	36,911	77.34
2.	Dhanka	1,878	3.94
3.	Gamit	7,007	14.68
4.	Chodhra	44	0.09
5.	Kotwalia	280	0.59
6.	Naikda or Naika	886	1.86
7.	Dubla	13	0.03
8.	Kathodi	338	0.71
9.	Rathwa	7	0.01
10.	Dhodia	2	0.00
11.	Patelia	25	0.05
12.	Pardhi	6	0.1
13.	Unspecified	327	0.69
	Total	47,724	100.00

Table-48
Sex-wise taluka's population in 1951, 1961 and 1971 census

Years	Male		Female		Total	
	Population	Percentage increase from the last census	Population	Percentage increase from the last census	Population	Percentage increase from the last census
1951	8,597	—	8,287	—	16,884	—
1961	20,766	141.55	20,766	150.59	41,532	145.99
1971	26,168	26.01	26,408	21.36	52,576	26.59

The total population of the taluka has been recorded as 52,576 (1971 census) and the entire population is in the category of rural. On comparison of the figures of the taluka's population from 1951 to 1961 and from 1961 to 1971, as given in the preceding Table, it can be seen that from 1951 the population of the taluka increased by 35,692 in the year 1971 which means that within a span of two decades, the percentage increase in the taluka's population has been 211.39. Between 1951 and 1961, the population rise had been quite high. But from 1961 to 1971, the percentage increase has been modest one indicating an annual rate of 2.66 percent increase. Between 1951 and 1961, the percentage increase was higher among the females while this trend was reversed between 1961 and 1971. The probable reason for the high increase in the taluka's population may be the migration of the Adivasis from the other areas (probably from Maharashtra region) into the villages of this taluka.

Table-49

Percentage increase of scheduled castes and scheduled tribes population between 1961 and 1971

Community	1961 Population	1971 Population	Percentage increase
Sch. Caste No.	222	407	83.33
Percentage to total population	00.53	00.77	+ 0.24
Sch. Tribe No.	37044	47724	28.83
Percentage to total population	89.19	90.77	+ 1.38
Total	41532	52576	26.59

The increase in the population of the scheduled castes and scheduled tribes in the taluka between 1961 and 1971 has been by 83.33 and 28.83 percent respectively. Obviously the population of scheduled castes increased at a faster rate. Figures given in Table 49 indicate that although the percentage increase in the population of scheduled castes has been higher than that of the scheduled tribes, the latter actually increased its proportion in the total population more than what the scheduled castes population could do similarly.

Looking to the figures given in the next Table, it will be clear that not much change has taken place during the period of three decades so far the size of households is concerned. In the year 1951, it was 6.15, while in the year 1961 and 1971 it was 6.25 and 5.92 respectively. It can be assumed from this that now the size of the households is getting smaller. It is possible that due to the family planning campaign, now the size of house-holds tend to be smaller.

Table-50

Taluka's population by households

Years	Total Population	Total No. of house-holds	Average size of the house-holds
1951	16,884	2,742	6.15
1961	41,532	6,645	6.25
1971	52,576	8,877	5.92

Of the total number of 121 villages large majority of them are having less than a population of 500 persons. Further, as the figures given in the next Table indicate very large sized villages are almost absent.

Table-51

Distribution of villages according to size of population (1971 census)

Sr. No.	Size of population	Number of villages	Percentage
1.	upto 100	13	10.74
2.	101- 200	17	14.05
3.	201- 500	38	31.40
4.	501- 1000	26	21.49
5.	1001- 2000	11	9.09
6.	2001 and above	1	0.83
7.	No inhabitants	15	12.40
	Total	121	100.00

According to the classification of the population on the basis of age group (figures have been given in the next Table), it is found that the number of young ones is quite high in the taluka.

Table-52

Distribution of population according to age (1961 census)

Sr. No.	Age-group	1961		Total
		Male	Female	
1.	0-9	7334	7405	14739
2.	10-14	2360	2128	4488
3.	15-19	1607	1690	3297
4.	20-24	1585	2037	3622
5.	25-29	1808	1867	3675
6.	30-34	1429	1398	2827
7.	35-39	1149	1046	2195
8.	40-44	947	916	1863
9.	44-49	876	700	1576
10.	50-54	664	505	1169
11.	55-59	332	294	626
12.	60-64	323	320	643
13.	65-69	120	143	263
14.	Above-70	225	309	534
Total :		20759	20758	41517

(Age-wise figures for 1971 could not be made available).

Classifying the population into broad age-group, it is found that 46.31 percent of the total population (figures given in next Table) is below the age of 15 while only 3.47 percent is above the age of 60 years. The per-

Table-53

Classification of population according to broad age-group (1961 census)

Age-group	Number	Percentage
0-14	19227	46.31
15-59	20850	50.22
60 & above	1440	3.47
Total	41517	100.00

centage of the persons in the age group 15-59, from which the working force is generally drawn, is 50.22.

Regarding the position of literacy among the general as well tribal population of the taluka, a detailed discussion has already been done in the previous chapter.

It has been estimated that nearly 900 persons migrate out to different areas in quest of getting labour work. Out of this number, 600 persons i.e. more than 66 percent are agricultural labourers while the rest are those small and marginal farmers who are not able to produce enough for the whole year's consumption. They are rather forced out to search for labour work. As given in the next Table, majority of the migrants go to other rural areas while 300 forming 33.3 percent of the total migrants go to urban places in search of labour work. Practically

Table-54

Approximate number of seasonal emigrants

Sr. No.	Occupation	No. of persons	Mig- rate	Mig- rate	Mig- rate
			to rural areas	to ur- ban places situ- ated in the dis- trict	to ur- ban places out- side the dis- trict
1.	Agriculture	300	300	—	—
2.	Agricultural labour	600	300	200	100
Total :		900	600	200	100

there is no incidence of in-migration, as there is nothing to attract a wage-earner here.

Looking into the figures given in the next Table it will be clear that there has been an increase in the density of population from 104 in 1961 to 131 in 1971. Sex-wise distribution of the population has already been given earlier.

Table-55

Density of population in 1961 and 1971

Years	Area (Sq. km.)	Population	Density per sq. km.
1961	400	41532	104
1971	400	52576	131

Looking to figures given in the next Table, it is apparent that the majority of the Adivasis in this taluka profess the Hindu religion. Although the Adivasis of this taluka had been animists in their religious belief and still are by and large, they prefer to get themselves enumerated as Hindus. The impact of Hindu religion is distinct upon them but they do not fit any where in the realm of four varnas of the Hindu caste which are the pillars of Hindu religion. They also did not have any belief in the principles of purity and pollution and hence in their traditional religious structure Hinduism had practically no place. But as they came in gradual contact with the non-Adivasi population, certain religious beliefs and practices of the Hindu community were also adopted by them. Further, certain religious sects based on the Bhakti movement also were instrumental in the spread of Hinduism.

Table-56

Distribution of population by religious faith

Sr. No.	Religion	1961		1971	
		No.	Pc.	No.	Pc.
1.	Hindu	40,560	97.65	50,905	96.82
2.	Muslim	920	2.22	1,302	2.61
3.	Buddhist	3	0.01	—	—
4.	Jain	34	0.08	45	0.09
5.	Christian	15	0.04	34	0.06
6.	Others	—	—	219	0.42
7.	Religion not stated	—	—	1	0.13
Total		41,532	100.00	52,576	100.00

In comparison to 1961 the proportion of the Hindu population has declined in the 1971 census while in that of Muslims, Jains and Christians a slight increase has occurred. In 1961 there were 3 Buddhists but in 1971 not a single person has been recorded as Buddhist. But, by and large, there is not much difference in the figures between 1961 and 1971.

The Muslim population in Sagbara mainly consists of Adivasis converted to this religion. A few generation ago the chieftain of Sagbara state married a woman belonging to the family of the chieftain of Kanthi state. The chieftain of the Kanthi state and his family members had already adopted Islam. So when the marriage was to be settled, the chieftain of Kanthi state persuaded the chieftain of Sagbara to get converted to Islam. As the latter was very much infatuated with his would-be-brid he accepted the condition and alongwith his family

members and close kins adopted Islam. In this manner, some of the Adivasi families in the Sagbara taluka have become Muslims.

4-4: Occupational distribution:

According to 1971 census, 65.26 percent of the total working population in the taluka are engaged in agriculture. Of the remaining 34.74 percent, agricultural labourers constitute 27.00 percent. On combining both these categories together, we find that for a large majority of the workers land is the major source of employment for their livelihood. In other categories of occupations such as animal husbandry, forestry, fishery, household industries, industries other than household, mining and quarries, construction, trade and commerce, transport, storage and communication and other services, a very small number of persons are found to be working. As is evident from the next Table, the percentage of cultivators has declined from 75.03 percent in 1961 to 65.26 percent in 1971, thereby registering a decrease by 9.77 percent. Whereas an increase by 7.21 percent has taken place in the percentage of agricultural labourers from 1961 to 1971. So on the one hand there has been deterioration in the number of cultivators amongst the working population while on the other hand the number of agricultural labourers has gone up. The participation of the working population of Sagbara taluka in the secondary and tertiary sectors has been quite low, both in 1961 as well as in 1971 census, but in each of the categories, the percentage of workers has increased in 1971 from 1961.

Although there has been an increase in population by 26.59 percent, the percentage of working population fell down to 35.49 percent in 1971 from 49.26 percent in 1961. It means that as much as 13.77 percent more were

Table-57

Industrial classification of workers according to 1961 and 1971 census

Sr. Category of workers	1961		1971	
	No.	Pc.	No.	Pc.
1. Cultivators	15,350	75.03	12,211	65.26
2. Agricultural labourers	4,048	19.79	5,054	27.00
3. In Mining, Quarrying, Live stock, Forestry, Fishing, Hunting, Plantation, Orchards, and allied activities	63	0.31	102	00.54
4. House-hold industry	351	1.72	327	01.75
				105

employed in 1961 in comparison to 1971. Figures for the workers and non-workers have been given in the next Table.

Table-58

Distribution of workers and non-workers according to 1961 and 1971 census

Years	Total Population	Number of workers	Pc.	Number of non-workers	Pc.
1961	41,532	20,458	49.26	21,074	50.74
1971	52,576	18,712	35.59	33,864	64.41

Looking to the figures given in the next Table it will be clear that there is sharp decline in the number of female workers from 1961 to 1971 while amongst the male working population, only a marginal decrease has taken place within the decade. Thus, it is quite evident now that due to the sharp decline in the percentage of female workers within the decade, the overall decline in the total number of workers has occurred in 1971. It is difficult to explain the reasons for such a sharp decline in the percentage of female workers within the decade. Usually, all the adult members in an Adivasi household, irrespective of being male or female, do contribute in the earning of livelihood for the household. In view of this such a low percentage (15.46) of workers among the female population of the taluka is little bit puzzling when more than 90 percent of taluka's population consists of Adivasis.

The picture which emerges out of the above discussion is that a large majority of the workers are self-employed in the primary sector. As the figures indicate

(1)	(2)	(3)	(4)	(5)
5. In manufacturing other than household industry	87	0.43	97	00.52
6. In construction	4	0.02	50	00.27
7. In trade & commerce	232	1.13	412	02.20
8. In transport, storage & communications	3	0.01	20	00.11
9. Other services	320	1.56	439	02.35
Total	20,458	100.00	18,712	100.00

in the next Table, only 2.54 percent of the working population is engaged in secondary sector while in the ter-

Table-60

Sectoral distribution of workers; 1961 and 1971 census
(Figures given in percentages)

Year	Workers		
	Primary sector	Secondary sector	Tertiary sector
1961	95.13	2.17	2.70
1971	92.80	2.54	4.66

tiary the remaining 4.66 percent is absorbed. On a close examination of the Table it is revealed that while the percentage of workers in the primary has fallen down in 1971 by 2.33 percent, there have been marginal increase in the secondary and a perceptible rise in tertiary sector. It can be assumed that due to the development efforts, the economy of the Adivasis, which hitherto depended solely on agriculture, is gradually getting diversified. This is a welcome trend but nonetheless, once again at the risk of being repetitive, land is still the principal source of livelihood and non-agricultural occupation has still a limited scope in this taluka. In view of this it is necessary to make concerted efforts to increase the scope of non-agricultural occupations since sole dependency on land for livelihood has obvious limitations. The level of income of the Adivasis and consequently their standard of living cannot be raised unless for more and more Adivasi workers such occupations which come under secondary and tertiary sectors are made within their reach in their own area.

Table-59

Sex-wise distribution of population in 1961 and 1971 census according to workers and non-workers

Categories	1961			1971		
	Male	Female	Total	Male	Female	Total
Total population	No.	20766	20766	41532	26168	52576
	Pc.	100.00	100.00	100.00	100.00	100.00
Workers	No.	11817	8641	20458	14630	18712
	Pc.	56.91	41.61	49.26	55.91	35.59
Non-workers	No.	8949	12125	21074	11538	33864
	Pc.	43.09	58.39	50.74	44.09	64.41

Since for a large majority of the population of this taluka, cultivable land is the chief source of livelihood, it will be worth while to look into the size of land-holdings which they have. The figures given in the next Table in this respect indicate that 79.00 percent of the total cultivating households (khatedars) do not own more than 5 hectares of land. Of the remaining 21.00 percent, the percentage of such cultivating households who own between 5 and 20 hectares of land is 20.6 percent while only 0.4 percent of them have more than 20 hectares of land. On a careful look to the Table, it is revealed that upto 2 hectares of cultivable land is owned by 32.77 percent of the cultivating households. 46.19 percent of

Table-61

Number and area of land held by size of operational holdings (Source: Agricultural census, 1970-71)

Sr. No.	Size of the land (in hectares)	Cultivating households		Area (in hectares)	
		No.	Pc.	No.	Pc.
1.	Below 0.5	114	2.18	37	0.19
2.	0.5 to 1.0	371	7.09	285	1.49
3.	1.0 to 2.0	1229	23.50	1867	9.78
4.	2.0 to 3.0	1095	20.94	2668	13.97
5.	3.0 to 4.0	778	14.87	2687	14.07
6.	4.0 to 5.0	543	10.38	2420	12.68
7.	5.0 to 10.0	891	17.03	5990	31.38
8.	10.0 to 20.0	185	3.54	2341	12.26
9.	20.0 to 30.0	16	0.31	363	1.90
10.	30.0 to 40.0	3	0.06	103	0.54
11.	40.0 to 50.0	2	0.04	93	0.49
12.	Above 50.0	3	0.06	238	1.25
Total		5230	100.00	19092	100.00

them have between 2.0 to 5.0 hectares of cultivable land. Although nearly half of the cultivating households own 2.0 to 5.0 hectares of land, the total area of the land which they share between themselves is 7775 hectares of land, forming 40.7 percent of the total area. Those having between 5 to 20 hectares of land own altogether 8331 hectares, forming 43.6 percent of the total area. This clearly indicates that a large area in this taluka is in the hands of few cultivating households. Similarly, only 0.47 percent of the cultivating households are cornering 4.18 percent of the total cultivable land.

According to the 20 p.c. sample survey of the cultivating households in the taluka at the time of 1961 census only 18.69 percent of the total cultivating households had been having less than 5 acres of land. The percentage of households having cultivable land between 5 and 10 acres

Table-62

Distribution of cultivating households in the taluka according to operational size of land holdings (1961 census based on 20 pc. sample survey)

Sr. No.	Size of the holding (in acres)	Percentage of cultivating households
1.	Less than 1 acres	Nil
2.	1.0- 2.4	2.41
3.	2.5- 4.9	16.28
4.	5.0- 7.4	20.20
5.	7.5- 9.9	13.97
6.	10.0-12.4	14.78
7.	12.5-14.9	3.92
8.	15.0-29.9	22.41
9.	30.3-49.9	4.12
10.	50	1.81
11.	Unspecified	0.10
Total		100.00

was 58.95. Thus, a majority of the households were having less than 10 acres of land. But quite a good number of households, to the tune of 22.41 percent of the total cultivating households, were having more than 15 acres but less than 30 acres. Further, as shown in the Table, 5.93 percent were having more than 30 acres of land, some of them [1.81 percent] owning even beyond 50 acres.

On a rough comparison from the situation existing in 1961 with that of 1971, it is very much clear that the number of very small holders has increased and the number of big holders have gone down considerably. This lead us to assume that within the decade, a lot of fragmentation in the cultivable holdings has taken place due to which the number of small holders has gone high.

From the foregoing discussion it is apparent that the land holdings of the people in this taluka are small and also scattered. Again, as the trend of fragmentation of holding indicates, there would be further fragmentation of the cultivable land and consequently the number of small farmers would still go high. In such a situation a better strategy for the economic development of the Adivasis of this taluka would be to provide alternative sources of employment to them in their own area. It should also be remembered here that except in a few pockets, by and large, the land is of rocky nature in this taluka and coupled with this are the problems of drainage, irrigation, soil erosion and absence of modern methods of doing agriculture. All these factors put great constraints in the economic development of the Adivasis through bringing improvement in the agriculture in this taluka.

CHAPTER: IV B

RESULTS OF THE SOCIO-ECONOMIC SURVEY

Altogether 400 households from 10 villages have been covered in the socio-economic survey for collecting quantitative data through canvassing of a schedule. As shown in the next Table, only 13 out of the 400 households have been non-Adivasis which means that as many

Table-63

Distribution of surveyed house-holds according to ethnicity

Sr. No.	Name of the village	Number of surveyed house-holds				Total
		Adivasis No.	Adivasis Pc.	Non-Adivasis No.	Non-Adivasis Pc.	
1.	Navi Javli	49	98.00	1	2.00	50
2.	Sorapada	44	100.00	—	—	44
3.	Kodba	33	76.74	10	23.26	43
4.	Moti Dev- Rupan	40	100.00	—	—	40
5.	Barkutra	40	100.00	—	—	40
6.	Movi	38	95.00	2	5.00	40
7.	Devsaki	40	100.00	—	—	40
8.	Chikali	40	100.00	—	—	40
9.	Dhavliver	40	100.00	—	—	40
10.	Kunwar- khadi	23	100.00	—	—	23
	Total	387	96.75	13	3.25	400

as 96.75 percent of the total households surveyed belong to Adivasi community.

According to 1971 census, the total population of these selected villages was 6767, out of which 97.07 percent was Adivasi while the remaining 2.93 percent was non-Adivasi. As shown in the next Table, the total number of persons covered in the surveyed households have been 2443, out of which 2366 forming 96.85 percent

Table-64

Population of the selected villages

Ethnic groups	1971 Census		Population of the surveyed households at the time of survey	
	No.	Pc.	No.	Pc.
Adivasis	6569	97.07	2366	96.85
Non-Adivasis	198	2.93	77	3.15
Total	6767	100.00	2443	100.00

are Adivasis. The remaining 77, forming 3.15 percent are non-Adivasis. Thus, almost the same proportion of the Adivasis and non-Adivasis population have been covered in the survey as was at the time of 1971 census.

Of the total population covered in the sampled villages, 50.35 percent are males and 49.65 percent females. Although the male population is dominant one, their dominance is very small. According to the figures given in the next Table, the male population are dominant both among the Adivasis and non-Adivasis but among the

Table-65

Percentage distribution of population in the sampled villages according to sex and ethnic groups

Community	Male	Female	Total
Adivasis	50.17	49.83	100.00
Non-Adivasis	55.84	44.16	100.00
Total	50.35	49.65	100.00

former the difference between the number of males and females is very little, while among the latter the male population is dominating over the female population by 11.68 percent.

From the figures given in the next Table, it can be seen that according to our sample survey, the sex

Table-66

Sex ratio among the Adivasis and non-Adivasis population of sampled villages

Communities	Total No. of Males	Total No. of Females	Sex Ratio (per 1000 males)
Adivasis	1187	1179	993
Non-Adivasis	43	34	791
Total	1230	1213	986

ratio comes to 986 females per 1000 males. Among the Adivasis the corresponding figure is 993 while among the non-Adivasis it is 791. Thus, among the Adivasis, the disparity is quite marginal.

Among the various age groups, the sex ratio can be seen in the Table given below. The number of females is

Table-67

Sex ratio in relation to various age groups

Sr. No.	Age-Group	Total No. of Males	Total No. of Females	Sex Ratio (Per 1000 males)
1.	0-5	179	187	1044
2.	6-14	343	320	932
3.	15-24	233	261	1120
4.	25-45	343	334	973
5.	46-59	90	82	911
6.	60 & above	42	29	690
	Total	1230	1213	986

highest in the lowest age-group which suggests that mortality rate among the males is higher than the females among the children of below 5 years. In the next age-group i.e 6-14, the males out-number the females but once again the number of females goes higher than males in the immediate next age-group of 15-24. Afterwards, the number of females goes on declining in the remaining three age-groups, the decline being very steep among the old people. This means that the mortality rate among the females is much higher than the males among the old people.

Age-Composition:

As the figures of the next Table show, more than half of the population fall between 15 and 60 age-group (54.97 percent) but the base consisting of persons below the age of 16 is quite substantial as it constitutes 42.12 percent of the total population. In the last age-group i.e. above 60 years, the percentage of population declines sharply to 2.91 percent which indicates, in general, that the Adivasis of this taluka have lesser longevity. Even in the age-group of 46-60 the

Table-68

Classification of population according to different age-groups (Figures given in percentage)

Sr. No.	Age-groups	Total No. of Males	Total No. of Females	Total
1.	0-5	7.33	7.65	14.98
2.	6-14	14.04	13.10	27.14
3.	15-24	9.54	10.68	20.22
4.	25-45	14.04	13.67	27.71
5.	46-59	3.68	3.36	7.04
6.	60 & above	1.72	1.19	2.91
	Total	50.35	49.65	100.00

percentage of population is comparatively much less. Thus demographically, the number of those persons who can be actively working to earn livelihood is quite significant. Again, those who would be thrown into the employment market within a decade i.e. persons belonging to the 6-14 age-group also constitute fairly large percentage (27.14 percent).

Looking to the figures given in the next Table, it is evident that almost the same trend is visible regarding

Table-69

Community-wise classification of population according to different age-groups (Figures given in percentage)

Sr. No.	Age-group	Adivasis			Non-Adivasis		
		Male	Female	Total	Male	Female	Total
1.	0-5	7.40	10.35	17.75	11.69	3.90	15.59
2.	6-14	15.38	12.68	28.06	11.69	12.99	24.68
3.	15-24	8.58	9.93	18.51	10.39	10.39	20.78
4.	25-45	14.16	13.40	27.56	15.58	12.98	28.56
5.	46-59	3.59	2.62	6.21	2.60	2.60	5.20
6.	60 & above	1.06	0.85	1.91	3.89	1.30	5.19
	Total	50.17	49.83	100.00	55.84	44.16	100.00

the age-structure in both Adivasis and non-Adivasis except that in case of the latter, the percentage of persons in the age-group of beyond 60 years is higher among the non-Adivasis than among the Adivasis. This points out that in comparison to Adivasis, the non-Adivasis have a higher longevity. This, in turn, is mainly due to a hard struggle for existence has to be put into by the Adivasis in general and also because of the fact that the non-Adivasis utilise the health services being provided at the primary health centre in more adequate measure than the Adivasis.

When seen from the point of view of sexes, the figures given in Table 69 do not speak of significant differences in the age-structure among males and females except that among the non-Adivasis the percentage of females below 5 years is much less than among the Adivasis.

Average Size of the Household :

The size of the households vary from 1 to 11. There are 3 uni-member households, all being Adivasi house-

Table-70

Number of members in the households

Sr. No.	Size of the Households	Adivasis		Non-Adivasis		Total	
		No. of households	No. of persons	No. of households	No. of persons	No. of households	No. of persons
1.	One	3	3	—	—	3	3
2.	Two	11	22	1	2	12	24
3.	Three	30	90	1	3	31	93
4.	Four	67	268	2	8	69	276
5.	Five	66	330	3	15	69	345
6.	Six	67	402	1	6	68	408
7.	Seven	42	294	—	—	42	294
8.	Eight	34	272	3	24	37	296
9.	Nine	32	288	1	9	33	297
10.	Ten	11	110	1	10	12	120
11.	Eleven & above	24	287	—	—	24	287
Total :		387	2336	13	77	400	2443

Table-71

Size of the house-holds, community-wise

Sr. No.	Type	Size-No. of members	Community		Total	
			Adivasis	Non-Adivasis	Adivasis	Non-Adivasis
No.			No.	No.	No.	No.
1.	Alone	One	3	—	3	0.75
2.	Small	Two to three	41	2	43	10.75
3.	Medium	Four to six	200	6	206	51.50
4.	Large	Seven to ten	119	5	124	31.00
5.	Very large	Eleven & above	24	—	24	6.00
Total			387	13	400	100.00

holds. From the figures given in the Table 70 it can be observed that number of medium sized households (having 4 to 6 persons) is the largest, while the lowest is of course uni-member type of house-holds.

Looking to the figures given in the Table 71 in which a consolidated picture regarding the size of the households is indicated, it can be seen that 51.50 percent of the total households are having 4 to 6 members, i.e., these are medium sized households. The next in order is large sized households having 7 to 10 members, the percentage being 31.00 percent of the total house-holds. Smaller sized households having 2 to 3 members are in small number, the percentage being only 10.75. Similarly, the number of house-holds in which the number of members is eleven is also small, being 6 percent of the total number of house-holds. On considering the figures community-wise, it can be easily seen that among the non-Adivasis not a single house-hold is either having eleven members or only one member in the household. Apart from this, there is little variation in the pattern among the two different communities.

The average size of the house-hold for the sample as a whole is 6.10, not a very high average. Looking into the community-wise figures as given in the next Table, the non-Adivasis have slightly lesser average than the Adivasis.

Table-72

Average size of the house-holds according to community

Community	Average size
Adivasis	5.92
Non-Adivasis	6.11
Total	6.10

Type of house-holds:

Upon a glance to the figures given in the next Table, it can be seen that the percentage of nuclear type of

Table-73

Type of house-holds, community wise (figures given in percentage)

Community	Type of house-holds		
	Nuclear	Joint	Extended
Adivasis	63.05	29.71	7.24
Non-Adivasis	38.46	46.16	15.38
Total	62.25	30.25	7.50

house-holds is higher than joint and extended types. Community-wise, among the non-Adivasis the percentage of joint and extended types of house-holds is higher than nuclear type. As is well known, usually in the Adivasi society, the sons get separated from their parents soon after getting married. Although, no division in the landed property is put to effect so long the father is alive, the married sons establish their own house-holds. This is the reason why the percentage of nuclear house-holds is higher among the Adivasis.

Civil status of the population:

On a careful examination of the figures presented in the next Table it can be seen that among the population covered under the survey, the proportion of unmarried men and women is high in comparison to the numbers of married men and women. This very well conforms with the figures presented earlier regarding the classification of sample population according to different age-groups. The percentage of persons below the age of 15 has been 42.12 percent while the percentage of unmarried persons is 46.54 which suggests that 4.42 percent from the age-group 15-24 (20.22 percent out of the total sample population), have been married. It also clearly indicates that the custom of child marriage is not prevalent among the population of this taluka which mainly constitutes

Table-74

Community-wise marital status of the sample population (figures given in percentage)

Sr. No.	Community	Sex	Marital Status				Total
			Unmarried	Married	Widow/ Widower	Divorced	
1.	Adivasis	Male	52.74	45.58	1.68	—	100.00
		Female	49.10	48.00	2.81	0.90	100.00
		Total	50.93	46.79	2.24	0.04	100.00
2.	Non-Adivasis	Male	58.14	34.88	6.98	—	100.00
		Female	50.00	44.12	—	5.88	100.00
		Total	54.55	38.96	3.90	2.59	100.00
3.	Total	Male	52.03	45.20	1.87	—	100.00
		Female	49.13	47.90	2.72	0.25	100.00
		Total	51.04	46.54	2.29	0.13	100.00

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of Adivasis. The number of persons remaining unmarried after the age of 25 has been also almost nil in the sample population.

A further look to the Table 74 will reveal that on the whole the ratio of married men to married women was comparatively less in percentage which certainly indicates that almost all the married men have been living there with their wives.

The number of unmarried males is higher than the number of unmarried females which clearly suggests that girls get married earlier than males. Usually among the Adivasis of the Sagbara taluka the marriage age for the girls is 16-20 while for the boys it is 18-23. Thus, when a girl reaches marriageable age, she is married to someone.

Looking to the figures, community-wise, it can be seen on a close look to this Table that in comparison to the Adivasis, the number of unmarried men among the non-Adivasis is much higher. Similarly among the non-Adivasis the ratio of married men to married women is much less when compared with the corresponding figures among the Adivasis. This means that more emphasis is put on the marriage of a girl among the Adivasis at an early age.

Although divorce is socially permitted among the Adivasis of this taluka the percentage of divorced spouses is quite insignificant. It can be argued that in married life the Adivasi couples adjust with each other in a better manner. Further, the society too has put checks to discourage the married couples to get divorced.

Occupation :

The main occupation in all the Adivasi villages of Sagbara taluka is agriculture. Of the 400 households covered under the selected 10 villages, 57.5 percent have been engaged in agriculture alone. As the figures given in the next Table indicates, after agriculture the next important

Table-75
Distribution of surveyed house-holds according to main occupation

Sr. No.	Category of occupation	Adivasis		Non-Adivasis		Total	
		No.	Pc.	No.	Pc.	No.	Pc.
1.	Agriculture	228	58.91	2	15.38	230	57.50
2.	Agricultural labour	91	23.51	—	—	91	22.75
3.	Unskilled labour	14	3.62	1	7.70	15	3.75
4.	Service	10	2.58	—	—	10	2.50
5.	Carpentry	6	1.55	2	15.38	8	2.00
6.	Animal husbandry	9	2.33	5	38.46	14	3.50
7.	Blacksmithy	2	0.52	1	7.70	3	0.75
8.	Tailoring	7	1.81	—	—	7	1.75
9.	Small business	13	3.36	2	15.38	15	3.75
10.	Fishery	5	1.29	—	—	5	1.25
11.	Not stated	2	0.52	—	—	2	0.50
	Total	387	100.00	13	100.00	400	100.00

occupation has been recorded as that of agricultural labour in which 91 house-holds, forming 22.75 percent of the total 400 house-holds have been found to be engaged. Thus, agricultural occupations account for 82.50 percent of the total households among the Adivasis while among the non-Adivasis only 23.08 percent of them pursue these. Majority of the house-holds from amongst the non-Adivasis in our sample are engaged in animal husbandry (38.46), small business (15.38) and carpentry (15.38). In case of the Adivasi house-holds these occupations accounted for only 2.33, 3.36 and 1.55 percent respectively.

The total number of working population in our sample has been 1420, males accounting for 713 and females 707. According to the figures given in the next Table, 84.22 percent of the total working population have been engaged in agricultural occupations, agriculturists accounting for 62.32 and agricultural labourer 21.90 percent. The next important occupation is small business in which 6.27 percent are occupied. Casual labourers without having any kind of skill form 3.17 percent of the total. In animal husbandry 2.96 percent have been engaged.

On comparison to the figures given for males and females, the percentage of female workers in the categories of agriculture, casual labour work, small business and animal husbandry is greater than the corresponding figures among the male workers.

On a closer look at the Table 76, it is obvious that the contribution of the female members in the community is no way less than those of the male members. As the figures show, 58.29 percent of the male population in the Sagbara taluka are in the category of workers while the corresponding figure for the female population is 58.13. We have already seen that according to 1961 and 1971 census

Table-76
Distribution of sample population according to different occupations and sex

Sr. No.	Industrial classification	Male		Female		Total	
		No.	Pc.	No.	Pc.	No.	Pc.
1.	Agriculture	440	61.71	445	62.94	885	62.32
2.	Agricultural labour	163	22.86	148	20.94	311	21.90
3.	Unskilled labour	20	2.81	25	3.54	45	3.17
4.	Small business	42	5.89	47	6.65	89	6.27
5.	Service	17	2.39	10	1.41	27	1.90
6.	Animal husbandry	18	2.52	24	3.39	42	2.96
7.	Fishery	7	0.98	6	0.85	13	0.92
8.	Not stated	6	0.84	2	0.28	8	0.56
	Total		100.00		100.00		100.00
	Total workers	No.	713	No.	707	No.	1420
		Pc.	57.97		58.29		58.13
	Total non-workers	No.	517	No.	506	No.	1023
		Pc.	42.03		41.71		41.87
	Total	No.	1230	No.	1213	No.	2443
		Pc.	100.00		100.00		100.00

the percentages of male and female workers respectively have been 56.91 and 55.91 among the male population and 41.61 and 15.46 percents among the female population. In contrast to these figures, the survey revealed that the proportion of female workers in the overall working population is almost equal to that of the male workers. This supports our earlier contention that among the Adivasi community of the Sagbara taluka all the adult members, irrespective of being of either sex, do make active contribution in the earning of the household.

It will also be worth while to compare the 1961 and 1971 censuses figures with the figures obtained in the sample survey in respect to distribution of workers in different sectors of occupation. As the figures speak in the next Table, the percentage of workers in the primary sector has decreased in comparison to those of 1961 and 1971 censuses while the same have increased in both the secondary and tertiary sectors. It has been already observed

Table-77

Sectoral distribution of workers among the working population in the sample survey and 1961 and 1971 working population (Figures given in percentage)

Year	Workers		
	Primary	Secondary	Tertiary
1961	95.13	2.17	2.70
1971	92.80	2.54	4.66
Sample* Survey (1980)	88.10	3.17	8.17

that due to the development efforts, more and more persons from the working population are gradually being absorbed in the tertiary sector. Further, there has been steady decrease in the percentage of agriculturists. In 1961 it has

*0.56 percent of the working population have not stated their occupation.

been 75.03 percent which went down to 65.26 percent and during the sample survey it further declined to 57.50 percent. This clearly suggests that from agricultural occupation the people in the taluka are gradually being diverted to other occupations. While there has been an increase in the percentage of agricultural labourer from 1961 to 1971, it has decreased during the sample survey. In 1971 census, the figure has been 27.00 percent but at the time of sample survey it came down to 22.75 percent which means that even the labour work in the agricultural field is becoming scarce. Significantly, there has been perceptible rise in the number of workers engaged in the construction works. In 1961 the percentage of working population in this category has been 0.02, in 1971 0.27 while during the sample survey it has been 3.75 percent. Similarly there has been increase in the percentages of workers engaged in small business and services during the sample survey.

The earnings made from the main occupation is never satisfactory and due to this majority of the house-holds have to resort to take up subsidiary occupations for supplementing the income in order to make both ends meet. It is, of course, not only the head of the house-hold who has to take up subsidiary occupations. Either he himself or other members of the house-hold or many a times both get engaged in occupations other than the main one. As can be seen from the figures given in the next Table, only 21.50 percent of the house-holds have been able to maintain their family by the earnings of the main occupation in which they have been engaged. The remaining 78.50 percent of the total house-holds have to take up subsidiary occupations to supplement their income. As is apparent from the figures given in the Table 78 nearly in all the categories of main occupations, majority of the house-holds have been pursuing subsidiary occupations of one nature or other. From the figures given in the Table 79, the nature of subsidiary occupation pursued by different house-holds can be known. As the figures reveal, a large number of the households having agriculture as the main occupation have been also engaged in the occupation of

Table-78

Percentages of house-holds in different main occupations having subsidiary occupations

Sr. No.	Main occupation	Having subsidiary occupation	Having no subsidiary occupation	Total
1.	Agriculture	77.83	22.17	100.00
2.	Agricultural labour	86.81	13.19	100.00
3.	Casual labour	100.00	—	100.00
4.	Service	30.00	70.00	100.00
5.	Carpentry	75.00	25.00	100.00
6.	Animal husbandry	71.43	28.57	100.00
7.	Blacksmithy	69.67	33.33	100.00
8.	Tailoring	57.14	42.86	100.00
9.	Small business	66.67	33.33	100.00
10.	Fishery	—	100.00	100.00
11.	Not stated	50.00	50.00	100.00
	Total	78.50	21.50	100.00

agricultural labourer and casual labourer. This clearly indicates that for these agriculturists, the produce, which they get by doing cultivation is not enough to pull them through the entire year. They have no other alternative other than to supplement their income from some other sources too. Of those whose main occupation is that of agricultural labour, many have agricultural fields too i.e. they are

Table-79

Distribution of surveyed house-holds having subsidiary occupation according to their main and subsidiary occupation

Sr. No. occupations	Main	Subsidiary occupations											Total
		1	2	3	4	5	6	7	8	9	10	11	
	Agri-cul-ture	Agri-cul-tural labour	Causal labour	Ser-vice	Car-pen-try	Ani-mal hus-ban-dry	Black-smithy	Tail-oring	Small busi-ness	Fish-ery	Fish-ery	No.	Pc.
1. Agriculture	—	78	52	5	8	16	—	7	9	4	179	57.01	
2. Agricultural labour	36	—	31	—	2	4	—	—	3	3	79	25.16	
3. Casual labour	1	9	—	—	1	2	—	1	1	—	15	4.78	
4. Service	3	—	—	—	—	—	—	—	—	—	3	0.96	

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Table-79 contd.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
5. Carpentry	4	1	—	—	—	—	—	—	1	—	6	1.91
6. Animal husbandry	4	6	—	—	—	—	—	—	—	—	10	3.18
7. Black-smithy	1	—	—	—	—	—	—	—	1	—	2	0.64
8. Tailoring	2	1	—	—	—	1	—	—	—	—	4	1.27
9. Small business	6	—	—	—	2	2	—	—	—	—	10	3.18
10. Fishery	—	3	2	—	—	—	—	—	—	—	5	1.59
11. Not stated	—	1	—	—	—	—	—	—	—	—	1	0.32
12. Total No.	57	99	85	5	13	25	—	8	15	7	314	100.00
Pc.	18.15	31.53	27.07	1.59	4.14	7.96	—	2.55	4.78	2.23	100.00	100.00

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not entirely landless. But the income gained from doing cultivation is quite meagre and hence they have to take up the work of agricultural labourer. Many of them also take up casual labour work such as in construction, road building, forest operations, etc., particularly during the non-agricultural season when there is no employment in the agricultural operations. In Sagbara taluka where only Kharif crops are raised by majority of the cultivators, the agricultural labourers must be having hard time during the Ravi season and the summer season. No wonder, getting engaged in casual labour work remains only alternative for them to ease out the precarious economic existence. A closer look at the Table reveals that those whose main occupations have been casual labour work, animal husbandry and fishery have also been taking up the work of agricultural labour to supplement their income. Further, several of the agriculturists have been found to supplement their income through carpentry, animal husbandry, tailoring and small business. However, among the subsidiary occupations agricultural labour work (31.53 percent), casual labour work (27.07 percent) remain the most important ones.

The overall picture which emerges in the Sagbara taluka regarding the economic activities of the people is that greater and most fundamental part of their economic activities take place in the subsistence sector. Surprisingly, not a single person has been listed under the category of house-hold industry. This is one sector which has gone completely unrepresented, particularly from amongst the Adivasi workers. The small percentage of workers engaged in non-agricultural occupations clearly suggests that agriculture is indeed the most important activity. The importance of agriculture is mainly due to the limited opportunities existing within the taluka for non-agricultural occupations, not that the workers do not want to take up such occupations. It has already been pointed out as the opportunities for non-agricultural occupations are expanding, more and more workers are getting shifted to secondary and tertiary sectors of occupations. If this trend is

taken as an indicator of the direction of change in the economic activities of the people of this taluka, the obvious conclusion will be that such opportunities for getting the working population absorbed in non-agricultural occupations must be expanded on a big scale.

Due to the overwhelming predominance of agricultural occupations in the occupational structure of the working population in the Sagbara taluka, it is quite natural that nearly all the adult members in the house-hold have to contribute in making a living for the house-hold. It has been already indicated that as far as 58.13 percent of the total surveyed population have been constituting the working force which means that in one way or other each of them has a share in the earnings of the house-holds. Thus, each one of the working population has an economic status in the house-holds. Let us see what kind of status they have.

For the purpose of our enquiry regarding economic status, the entire population covered under the sample survey has been classified into three groups:—(i) earners, (ii) earning dependents and (iii) non-earning dependents. In the first group are obviously those who are the main bread earner for the house-hold i.e., whose income is the main or only source of livelihood for the house-hold. The second group constitutes of those persons whose earning supplements the income of the house-holds but is not sufficient to meet his needs even if he lives independently. In some cases, however, a person from this group may contribute equally to the income of the earner in the house-holds. To such a person we have given the status of earner. Otherwise all such persons have been designated as earning dependents. In the third group are the children and such adult members in the house-holds who are not engaged in any gainful employment. They constitute the non-earning dependents in the house-holds. Among the non-earning dependents may be such persons who are either studying in schools or are unemployed.

According to the figures given in the next Table, of the 58.13 percent of the total population in the taluka

which constitute the working population, 27.59 percent have been adult males and 26.61 consists of adult females. The remaining 3.93 percent are male and female children, constituting 1.60 and 2.33 percent respectively. Further, 10.85 percent of the total sample population belongs to the group of earners, of which 10.60 percent are adult males and 0.25 percent are adult females. If the percentage of earners is reduced from the percentage of working population, we get the figure of 47.28 percent which constitutes the number of earning dependents among the working population. Out of the 47.28 percent

Table-80

Distribution of surveyed population according to earning status in relation to male and female
(Figures given in percentages)

Sr. No.	Economic Status	Adult (above the age of 15)		Children (below the age of 15)	
		Male	Female	Male	Female
1.	Earners	10.60	0.25	—	—
2.	Earning dependents	16.99	26.36	1.60	2.33
3.	Non-earning dependents	1.39	2.29	19.77	18.42
4.	Percentage of total population	28.98	28.90	21.37	20.75

of earning dependents, 16.99 percent have been adult males while 26.33 percent adult females. From amongst the children too 1.60 percent boys and 2.33 percent girls have been earning dependents. Both among the adult males and adult females, 1.39 percent and 2.29 percent respectively constitutes the non-earning dependents.

On analysis of the earning status of the adult population in the surveyed house-holds, we find that 36.58 percent of the total adult male population have the status of earners while 58.62 percent are earning dependents. A small percentage of them i.e. 4.80 percent do not contribute in any manner in their house-hold's earning. On a closer examination of the figures given in the next Table, it is revealed that a great majority of the women out of the total adult female population do assist their menfolk in their house-hold's earning.

Table-81

Percentage distribution of adult population covered in the sample survey according to sex and earning status.

Sr. No.	Economic Status	Percentage of male out of total adult male population	Percentage of female out of total adult female population	T O T A L
1.	Earners	36.58	0.85	18.74
2.	Earning dependents	58.62	91.22	74.89
3.	Non-earning dependents	4.80	7.93	6.37
	Total	100.00	100.00	100.00

While some women, constituting 0.85 percent have the status of earners, a large majority of them constituting 91.22 percent of the total adult female population are in the group of earning dependents. Only 7.93 percent of them do not earn any income i.e. they are non-earning dependents. Altogether 6.37 percent of the total adult population in the sample survey do not earn any income by any means.

From the foregoing discussion it is absolutely clear that both men and women in this predominantly Adivasi taluka, belonging to the working age group, share the

burden of earning income for the livelihood of house-hold members. The high figure of earning adult women belonging to the working age-group once again asserts the contention made earlier that among the Adivasis of this taluka, women share almost equally with their men-folk the responsibility of earning for meeting house-hold needs.

Looking to the figures given in the next two Tables it becomes clear that there is a wide gap between the percentage of male and female having the status of ear-

Table-82

Percentage distribution of earners and earning dependents according to sex

Sr. No.	Earning Status	Male	Female	total
1.	Earners	97.74	2.26	100.00
2.	Earning dependents	39.31	60.69	100.00
3.	Total earning persons	50.21	49.79	100.00

ners. The males are in overwhelming number. But in the category of earning dependents, the females have outnumbered the males. This is quite in tune with the cultural characteristics of the Adivasi population of this taluka.

We have already seen that some children below the age of 15 also contribute in the earning of the households. According to the figures given in the next Table, 6.76 of the total earning persons are children in the age group of 10-14, 2.75 being males and 4.01 percent females. They belong to such an age-group which does

Table-83

Percentage distribution of earning population according to earners and earning dependents

Sr. No.	Earning Population	Male	Female	Total
1.	Earners	18.24	0.42	18.66
3.	Earning dependents	31.97	49.37	81.34
	Total	50.21	49.79	100.00

not come at all under the working age-group. This definitely points out that incidence of child labour is in existence in this taluka. The hard struggle which some of the Adivasi house-holds have to put for earning livelihood compel them to get their children engaged in some sort of gainful works instead of sending them to schools. A further look to the figures reveals that old persons

Table-84

Percentage distribution of earning persons according to age and sex

Sex	Age			Total
	10-14	15-59	60 & above	
Male	2.75	45.00	2.46	50.21
Female	4.01	44.09	1.69	49.79
Total	6.76	89.09	4.15	100.00

beyond the age of 60 also do not remain idle. In fact out of the total number of persons in the age-group of 60 & above, only 7 male and 4 females are incapable of doing anything for earning an income. Otherwise majority of them have been found to do some sort of economic

activities. As is natural, overwhelming majority of earning persons belong to the age-groups of 15-59.

On considering the proportion of earning persons in the different house-holds it has been discovered that house-holds having only one earning person are very few in number. This is expected in a society in which nearly all members of the house-hold, barring the children, (in some cases children too) make their contribution in earning house-hold's income. As can be seen from the figures given in the next Table only 2.5 percent of the total number of house-holds covered under the sample survey depend upon the earning of one member. The percentage of house-holds having two, three and four earning persons are 31.75, 23.25 and 18.25 percents respectively. 24.25 percent of the households even have more than four earning persons.

Table-85

Proportion of earning persons in different house-holds

Sr. No.	Proportion of earning persons	No. of house-holds	Percentage
1.	One earning person	10	2.50
2.	Two earning persons	127	31.75
3.	Three earning persons	93	23.25
4.	Four earning persons	73	18.25
5.	More than four	97	24.25
	Total	400	100.00

As the agricultural economy is the predominant one among the Adivasis of this taluka, majority of the house-holds have to put almost all their members into the agricultural

operations. The nature of economic activities in agricultural economy, that too of subsistence nature, is such that no member of the working age group can be spared from work. Among the Adivasis of this taluka, agriculture is a family enterprise, those who share the hearth share in agricultural operation of the house-holds.

INCOME :

The house-hold's income has been calculated by adding together the income of the main earner and of the earning dependents. Since a substantial part of the household's income is in kind, gained from the farm production, the expenditure incurred by each household on agricultural operation has been deducted to get an idea of the net income earned. It is necessary to say a word here about the reliability of the income data as well as about the impossibility of making an accurate assessment of the contribution of the earning dependents who have been found to be engaged in agriculture. It is quite clear by now that an average house-hold in the Sagbara taluka does not earn income in cash, as the main occupation for majority of the households, has been agriculture which by and large, is of subsistence nature. The agriculture produce is mainly used for house-hold consumption, not for sale in the market to earn cash. To measure income in cash of such house-holds call for some critical scrutiny. In the case of income of daily labourers, there have been less difficulty in ascertaining the income. Notwithstanding these limitations, an attempt has been made to estimate as near an accurate picture regarding the income of the surveyed house-holds as had been possible under the circumstances.

According to the figures given in the next Table, a large majority of the surveyed households have an annual income between Rs. 1001 and Rs. 5000. Of the total surveyed households, 58.00 percent are in the income groups of Rs. 2001-3000 and Rs. 3001-5000. Another 24.00

percent are in the group of Rs.1001-2000. The percentage of households having more than Rs. 5000 of annual income but less than Rs.10000/-is 14.75 percent. In the highest income group i.e. above Rs.10,000 the number of households constitute only 1.75 percent. The same trend is visible in the lowest income group i.e. Rs. 501-1000 where only 2.00 percent of the total households are represented.

A closer look to the Table will reveal that among the non-Adivasis not a single house-hold is in either the lowest income group of Rs. 501-1000 or in the highest income group i.e. above Rs. 10,000. Further, in comparison to the Adivasi house-holds, the percentage of non-Adivasi house-holds out of their total number is higher in the higher income groups of Rs.3001-5000 and in Rs.5001-10000. But in the highest income group i.e. above Rs. 10000 all the 7 house-holds belong to the Adivasi community, all of them being agriculturists except one from the village Moti Devrupen whose main source of income has been Fishery followed by agriculture as the secondary occupation. Nearly

Table-86

Distribution of house-holds according to annual income, community-wise

Sr. No.	Income group (Rs.)	Total House-holds		Adivasis		Non-Adivasis	
		No.	Pc.	No.	Pc.	No.	Pc.
1.	500-1000	8	2.00	8	2.07	—	—
2.	1001-2000	96	24.00	95	24.55	1	7.69
3.	2001-3000	113	28.25	112	28.94	1	7.69
4.	3001-5000	117	29.25	108	27.91	9	69.24
5.	5001-10000	59	14.75	57	14.73	2	15.38
6.	Above-10000	7	1.75	7	01.80	—	—
	Total	400	100.00	387	100.00	13	100.00

all the seven house-holds in the highest income group are from such villages which lie in the plains of the taluka where agricultural lands are quite fertile. The soil in this region of the taluka is good. In the villages lying in the hilly tracts in the northern and western parts, we do not find many house-holds in the higher income group.

The total annual income earned by all the 400 surveyed house-holds comes to Rs. 13,98,900. It means that on an average a house-hold in the Sagbara taluka earns an annual income of Rs. 3497 which in terms of monthly income will be Rs. 291.42. As the average size of the house-hold is 6.1 the monthly income of an average person in this taluka will come to Rs. 47.78 only. Upon looking to the figures given in the next Table, it will at once become clear that the per capita annual income of an average house-hold of this taluka is Rs. 573 only which in terms of monthly income is, as worked out above, Rs. 48 only. As can be seen 83.5 percent of the households have less than Rs. 62 as their monthly per capita income. It has been recommended that an income criteria of Rs. 62.00 per capita per month should be applied in deciding whether a household belonged to 'Below Poverty Line' or not. Those having less than Rs. 62.00 per capita per month income should be labelled as 'living below poverty line'. Judging from this criteria, 83.50 percent of the households in this taluka fall below the poverty line. From the point of view of the population covered under the survey 77.98 percent of the total population fall under the poverty line. 14.75 percent of the house-holds and 19.07 percent of the house-hold's total population have a monthly per capita income of Rs. 68 which is just little over Rs. 62.00 i.e. they have escaped the poverty line quite narrowly. But with the substantial rise in the prices of essential commodities of daily use, it is not difficult to comprehend that the value of Rs. 68.00 must have gone down to less than Rs 62.00. If this assumption is taken as a valid one, only 1.75 of the total number of households and 2.95 percent of the surveyed

Table-87

Distribution of house-holds and sample population according to annual and monthly income

Sr. Income group (in Rs.)	Total income (in Rs.)	Total No. of house-holds	Annual income per house-hold (in Rs.)	Total No. of persons		Per capita annual income (in Rs.)	Per capita monthly income (in Rs.)
				No.	Pc.		
1. 501-1000	7700	8	932	29	1.19	266	22
2. 1001-2000	164580	96	1714	455	18.62	362	30
3. 2001-3000	297440	113	2632	654	26.77	455	38
4. 3001-5000	449730	117	3844	767	31.40	586	49
5. 5001-10000	379690	59	6435	466	19.07	815	68
6. Above 10000	99760	7	14251	72	2.95	1385	115
Total	1398900	400	3497	2443		573	48

population will not come under the poverty line. Thus, the obvious conclusion is that poverty is rampant amongst the people in this taluka.

Looking into community-wise figures, as given in the next two Tables, it is apparent that the per capita monthly income among the non-Adivasis is higher than that of Adivasis. Among the Adivasis, the house-holds coming under the first three income groups have an extremely low per capita per-month income while among the non-Adivasis the situation is better. In fact, in the income group of Rs. 2001-3000 the per capita per month income of the non-Adivasis is above the poverty line. In the next income group of Rs. 3001-5000 the condition of both Adivasis and non-Adivasis is more or less same. But in the higher income group of

Table-88

Distribution of Adivasi households and its population according to annual and monthly income

Sr. No.	Income groups (in Rs.)	Total No. of house-holds	Annual income per house-hold (in Rs.)	Total No. of persons	Per capita annual income (in Rs.)	Per capita monthly income (in Rs.)	
1.	501-1000	7700	8	962	29	266	22
2.	1001-2000	163350	95	1719	453	361	30
3.	2001-3000	294940	112	2633	651	453	38
4.	3001-5000	413870	108	3832	705	537	49
5.	5001-10000	367690	57	6450	456	806	67
6.	Above 10000	99760	7	14251	72	1385	115
Total		979620	387	2531	2366	414	35

Table-89

Distribution of non-Adivasi households and its population accordidg to annual and monthly income

Sr. No.	Income groups (in Rs)	Total No. of households	Annual income per household (in Rs.)	Total No. of persons	Per capita annual income (in Rs.)	Per capita monthly income (in Rs.)
1.	501-1000	—	—	—	—	—
2.	1001-2000	1230	1	1230	2	615
3.	2001-3000	2500	1	2500	3	833
4.	3001-5000	35850	9	3984	62	578
5.	5001-10000	12000	2	6000	10	1200
	Above 10000	—	—	—	—	—
	Total	51590	13	3968	77	670

Rs. 5001-10000, whereas the per capita per month income of the non-Adivasis is Rs. 100, it is only Rs. 67 among the Adivasis which, however, is above the poverty line.

On the whole it is quite evident that the non-Adivasis have better income than the Adivasis. Although an average house-hold among the non-Adivasis too has such a per-capita per month income which is below the poverty line, it is much better when compared to the corresponding figure among the Adivasis of this taluka.

It has already been discussed that for a majority of the surveyed households, agriculture is the main source of income. According to the figures given in the next Table it is evident that this observation is very much in tune with the percentage of income derived from agriculture out of the total income derived from various other sources, both

Table-90

Annual income per house-hold and per capita per month income of house-holds in the different main occupational groups

Sr. No.	Main and subsidiary sources	Total income earned by pursuing main occupation		Total income earned by pursuing secondary occupation		Grand Total (both main and secondary)	
		Rs.	Pc.	Rs.	Pc.	Rs.	Pc.
1.	Agriculture	800015	70.88	22680	8.39	822695	58.81
2.	Agricultural labour	167590	14.84	89757	33.21	257347	18.39
3.	Unskilled labour	9660	0.85	67538	24.99	77198	5.52
4.	Service	19000	1.68	16950	6.27	35950	2.56
5.	Carpentry	14400	1.27	15920	5.89	30320	2.16
6.	Animal husbandry	41300	3.65	17100	6.33	58400	4.17
7.	Blacksmithy	3800	0.34	—	—	3800	0.27
8.	Tailoring	15000	1.32	11300	4.18	26300	1.88
9.	Small business	33540	2.97	9350	3.46	42890	3.06
10.	Fishery	20300	1.79	17000	6.29	37300	2.67
11.	Not stated	4600	0.41	2700	1.00	7300	0.51
	Total	1128605	100.00	270295	100.00	1398900	100.00

as main as well as subsidiary ones. Of the total income earned by the surveyed house-holds 58.81 percent is derived from agriculture itself, pursuing this as either main or subsidiary occupation. Next in importance is the income from agricultural labour which accounts for 18.39 percent of the total income earned by the surveyed house-holds. Thus, agriculture is the source by which more than two-third of the total income is gained by the surveyed households. Beside this source, unskilled labour work, animal husbandry, petty business and fishery are other noteworthy sources of earning income among the people of this taluka.

Looking to the figures given in the above Table closely, it is clearly revealed that agricultural labour and unskilled labour works are the major sources of supplementing the income of the house-holds earned through the main occupational activities. Apart from this, except agriculture, in all other occupations the major part of the income is derived through subsidiary earning activities. This means that all these sources are tapped by different house-holds for supplementing the income gained from main occupations.

Upon calculation of the annual income per household and the per capita per month income as given in the next Table, it is found that except 20 house-holds forming only 5 percent of the total surveyed house-holds, in all the house-holds the per capita per month income is much below the poverty line. Occupation wise, the unskilled labourers are having the poorest income. The house-holds whose main occupations are agriculture, blacksmithy, agricultural labour, tailoring and carpentry are also having very poor earnings as reflected by the per capita per month income among them. All these households, naturally, need urgent attention for taking up measure for their economic development. In spite of the fact that several members of these house-holds are actively engaged in earning livelihood, their earnings are so low

Table-91
Annual income per household and per capita per month income of households
in the different main occupational groups

Sr. No. of the house-holds	Main occupation	No. of house-holds	Total annual income from all source (in Rs.)	Annual income per house-hold	Average size of the house-holds	Per capita annual income (in Rs.)	Per capita per month income (in Rs.)
1.	Agriculture	230	953040	4144	7	592	49
2.	Agricultural labour	91	212710	2337	4.9	477	39
3.	Unskilled labour	15	26860	1791	5.3	338	28
4.	Service	10	28640	2864	4	716	60
5.	Carpentry	8	23200	2900	4.6	630	52
6.	Animal husbandry.	14	43760	3840	6.1	629	52
7.	Blacksmithy	3	7030	2343	6	390	32

Table-91 contd.

	1	2	3	4	5	6
8. Tailoring	7	17800	2543	4.4	578	48
9. Small business	15	47860	3190	3.7	862	72
10. Fishery	5	30700	6140	6.2	990	82
11. Not stated	2	7300	3650	5.5	663	55
Total	400	1398900	3497	6.1	573	48

they have not been able to cross over even the poverty line. The economic situation appears to be quite grim in Sagbara taluka.

After discussing the extent of poverty amongst households of different occupational groups, now let us examine this situation amongst the surveyed households grouped on the basis of landholdings. Looking to the figures given in the next Table, it is revealed that the highest per capita income is amongst the households having more than 15 acres of cultivable land, while the lowest is among the landless as well as among those households having 01-2.50 acres of lands. Among both these latter groups, the per capita per month income is far below the income what we

Table-92

Per capita annual and monthly income of surveyed households having different size of land holdings

Sr. No.	Size of holding (in acres)	Average size of the house-holds.	No. of households	Annual total income (in Rs)	Per capita annual income (in Rs)	Per capita monthly income (in Rs.)
1.	01-2.50	5.2	21	44370	406	34
2.	2.51-5.0	5.9	72	206830	486	41
3.	5.01-7.50	6.8	38	140950	545	45
4.	7.51-10.0	6.6	35	161170	697	58
5.	10.0-15.0	7.6	39	208980	705	59
6.	Above 15.0	8.2	32	218850	834	69
7.	Landless*	5.4	106	234710	410	34
8.	Others **	5	57	183040	642	54
Total:		6.1		1398900	573	48

* They constitute the agricultural labourer and unskilled labourer.

** Those who depend upon non-agricultural occupations have been included in this category.

term as 'poverty line income'. Further, except the households having more than 15 acres of land, in all other categories of households, the per capita per month income is below the poverty line. This means that only 32 households amongst the surveyed households, forming only 8 percent of the total households, have a per capita per month income which is above the poverty line but just little above. The households belonging to the landless group, small and marginal farmers group i.e., those having land holding upto 7.50 acres have to eke out a precarious living due to the extremely low income earned through various sources. It is abundantly clear from the figures given in the above Table that the households belonging to the above mentioned categories need serious attention for their economic rehabilitation.

The fact that in this predominantly Adivasi taluka the economic situation of a vast majority of the sample population is extremely poor, very much emerges out on the analysis of the figures given in the Tables 87, 91 and 92. Undoubtedly, this is a sad reading of the development efforts made during the last three decades in this taluka. It is really difficult to explain this disaster in our development efforts. The result of this survey obviously strengthens the prevailing notion that failure in the development programmes for the Adivasis, particularly of interior areas, persists. On the basis of these income estimates of the surveyed households it is apparent that the goal of transition from a stagnant subsistence economy of the poor Adivasis of this taluka to a development oriented economic society seeking sustained growth is still far distant.

Expenditure:

For both Adivasis and non-Adivasis, expenditure on food accounts for the major share of the total annual expenditure incurred by the surveyed households. According to the figures given in the next Table 68.34 percent of the total expenditure is made on food items alone.

Next to food, clothes account for the second important item of expenditure. More than 15 percent of the total annual

Table-93

Principal annual living expenditure of the surveyed households

Sr. No.	Principal item	Total expenditure per annum (in Rs.)	Average expenditure per household (in Rs.)	Percentage
1.	Food	1055885	2640	68.34
2.	Fuel	57476	144	3.72
3.	Clothes	242573	606	15.70
4.	Education	34300	86	2.22
5.	Others	154814	387	10.02
	Total	1545048	3862	100.00

expenditure is spent on clothes by the surveyed households. Education and fuel are two items on which the households have not to spend much. The reasons are obvious for this. As the taluka has predominantly Adivasi population, the expenditure on education is low because Adivasi children almost get free education, including boarding and lodging too wherever it is so. Even dresses i.e. school uniforms are also supplied in most cases. An annual stipend is also given to each child to meet other expenses such as on notebooks, slates, pencils, etc. Sagbara taluka has a good forest and as explained earlier except the eastern portion the taluka is covered with forest. Due to this geological situation, the people get the supply of wood for fuel without spending a single paisa. In some areas only the people have to buy wood. Wood is the principal source of fuel. Even to such households who have to purchase firewood, they have not to spend much as firewood is much cheaper due to the forest being quite close.

Looking to the figures regarding expenditure pattern community-wise, as given in the next Table, it becomes clear that in comparison to the Adivasis, the non-Adivasis

Table-94
Community-wise annual living expenditure of the surveyed house-holds

Sr. No.	Item	Adivasis			Non-Adivasis		
		Total annual expenditure (in Rs.)	Average expenditure per household (in Rs.)	Pc.	Total annual expenditure (in Rs.)	Average expenditure per household (in Rs.)	Pc.
1.	Food	1018679	2632	68.59	37206	2862	62.21
2.	Fuel	54604	141	3.68	2872	221	4.80
3.	Clothes	232203	600	15.63	10370	798	17.34
4.	Education	31776	82	2.14	2524	194	4.22
5.	Other	147981	382	9.96	6833	526	11.43
	Total :	1485243	3838	100.00	59805	4600	100.00

spend more on items other than food. The Advaisis have to spend more on food but less on other items. It is also apparent that the non-Adivasis have a better capacity to spend as the annual expenditure of an average household among them is higher than the corresponding figure for the average house-hold among the Adivasi households. We have already seen that in regard to the annual income earned by an average house-hold, an average non-Adivasi household has a higher income than an average Adivasi household. It is quite natural then that the former has more money at its disposal to spend, whereas in case of the Adivasis, even after making a hard struggle it is very difficult to make a satisfactory living. Apart from the income criteria, the non-Adivasi consumption patterns are also influenced by consideration of social status and 'the need to keep up with the zones.' In the non-Adivasi community, considerations of social status are particularly important and the consumption level is commonly regarded as its indicator.

After having seen the expenditure level of the surveyed households, let us now use the data on the expenditure level to estimate the number of households living below the poverty line. Here again an expenditure criteria of Rs. 62 per capita per month has been applied to test whether a household belongs to below poverty line category or not. Those whose level of annual expenditure is below this amount have been taken as living below the poverty line.

As shown in the next Table, only 23 households amongst the 400 surveyed households (5.75 percent) are having an expenditure level which will project them as having an existence above the poverty line. It is quite clear then that judging from the expenditure criteria too, the magnitude of people living below the poverty line is alarmingly high. On an average the per capita per month expenditure is Rs. 53 only which clearly establishes the fact that an average household in this Adivasi taluka is living an existence which is below the poverty line. Looking closely to the figures of the above Table, it becomes

Table-95
Level of expenditure and per capita per month expenditure

Sr. No.	Expenditure level (in Rs)	No. of households	Average size of the household	Total annual expenditure (in Rs.)	Annual expenditure per house-hold (in Rs.)	Per capita annual expenditure (in Rs.)	Per capita per month expenditure	Percentage of households
1.	1—1500	36	5.7	107356	2982	523	43	9.00
2.	1501—3000	196	5.4	580097	2959	548	46	49.00
3.	3001—4500	107	6.6	494853	4624	700	58	26.75
4.	4501—7500	38	7.6	212739	5598	736	61	9.50
5.	7501—10000	16	7.8	102558	6409	827	68	4.00
6.	Above 10000	7	7.4	47445	6778	915	76	1.75
	Total	400	6.1	1545048	3862	632	53	100.00

evident that 84.25 percent of the households have an annual expenditure upto Rs. 4500. As the average size of the households is 6.1, the per capita per month expenditure of these households comes to Rs. 61 only which means that all these households are living below the poverty line. But to be precise, upon calculating the expenditure of each household, the percentage of households clearly under the poverty line is 94.25 percent.

On looking into the magnitude of poverty among the different occupational groups, it is found that except those households whose main sources of earning are fishery and small business, households in other occupational groups are having such a per capita per month expenditure which clearly place them in an economic situation of below the poverty line. According to the figures given in the next Table, the highest per capita per month expenditure of Rs. 88 has been recorded among the households whose main occupation is fishery. Next position is of those households having small business as the main occupation, among whom the figure regarding per capita per month expenditure is Rs. 75. Other than these two groups, the figures regarding per capita per month expenditure among different groups suggest that 92 percent of the surveyed households have Rs. 36 to Rs. 62 as the per capita per month expenditure which means all of them are below the poverty line. As in the case of annual income of the surveyed households, here again the unskilled labourers emerge out as having lowest expenditure per capita per month. Among the households whose main occupations are agriculture, agricultural labour, animal husbandry and blacksmithy, the per capita per month expenditure is also quite low. This suggests that the working population belonging to these households will have to be provided with enough alternative opportunities for employment which may make these households to get released from the low-income as well as low-expenditure traps, ultimately bringing them up the poverty line.

Table-96

Sr. No.	Main Occupation	No. of households	Total amount of expenditure (in Rs)	Average size of the house-holds	Expenditure per house-holds (in Rs.)	Per capita annual expenditure (in Rs.)	Per capita per month expenditure (in Rs.)
1.	Agriculture	230	1005723	7	4372	624	52
2.	Agricultural labour	91	276412	4.9	3037	619	51
3.	Unskilled labour	15	34388	5.3	2292	432	36
4.	Service	10	28640	4	2864	716	60
5.	Carpentry	8	27330	4.6	3416	742	62
6.	Animal husbandry	14	50960	6.1	3640	596	50
7.	Blacksmithy	3	11725	6	3908	651	54
8.	Tailoring	7	20560	4.4	2937	668	56
9.	Small business	15	49750	3.7	3316	896	75
10.	Fishery	5	32580	6.2	6516	1050	88
11.	Not stated	2	7980	5.5	3990	725	60
Total		400	1545048	6.1	3862	632	53

Indebtedness:

Due to the low income of the majority of the surveyed households which compels them to have an existence of poor living standard, the extent of indebtedness is quite high among them. Among the surveyed households as many as 277 households, forming 69.25 percent, have taken loan to meet their financial requirement. As the figures of the next Table indicate, of the 277 households, 272 are of the Adivasi community which forms 70.28

Table-97

Community	Number of indebted households			
	No. of households	Percentage	Total No. of households	Percentage
Adivasi	272	70.28	387	100.00
Non-Adivasi	5	38.46	13	100.00
Total	277	69.25	400	100.00

percent of the total households of the Adivasi community. Among the non-Adivasis only 39.46 percent of their households have incurred debt. It is obvious then that the extent of indebtedness among the Adivasis of this taluka is quite high.

The total amount of debt for all these households is Rs. 146148. The figures given in the next Table clearly suggest that the problem of indebtedness among the Adivasis is an acute one as the amount of debt per household among them is substantial. The problem becomes more complex as the indebted Adivasis remain indebted perpetually and since the repaying capacity is woefully poor, many a times they have to mortgage part of their cultivable land for securing loan.

Most of the indebted households among the Adivasis are aware of the ills of borrowings and about the consequences of getting economically ruined. But they become compelled to borrow in a situation of real emergency. It has been reported during the field work that there are several purposes for which loans have been taken.

Table-98

Amount of debt per house-hold and per capita

Community	Total amount of debt (in Rs.)	Per capita amount of debt (in Rs.)	Amount of debt per household (in Rs.)	Amount of debt per household among indebted households (in Rs.)
Adivasis	143598	67	371	528
Non-Adi-vasis	2550	33	196	510
Total:	146148	60	365	527

These purposes may broadly be divided into two broad categories: (i) productive and (ii) non-productive. In former category are included (a) agricultural purposes, (b) house construction, (c) purchase of cattle and (d) others such as purchase of farm implements, etc. While in the latter are included (a) household expenditure, (b) expenditure on social ceremonies, such as marriage, birth and death, (c) payment of land revenues and other taxes, (d) expenditure on festivals and religious ceremonies and (e) repayment of old debts.

In case of the Adivasis of this taluka, loans for household expenditure and meeting expenses on occasion of social ceremonies account for the majority of the cases. The low income and an expenditure higher than the income do not leave any scope for the Adivasis in general to make savings to be spent later on at the time of need during various socio-religious ceremonies. Expenses are heavy on occasion of such ceremonies and it is certain to put the household in heavy deficit. The deficit thus created is to be met by borrowing and as the interest has to be paid and additional loans have to be

taken almost every year, this leads to an increase in the total of their debt year after year.

There are several sources from which the Adivasis receive loans at variable rate of interest. In majority of cases loans are taken from private sources, such as money lenders or friends or kins rather than from official agencies. On investigation it has been revealed that money lenders are the main source to get loan. It is they who dominate the scene so far providing credit to Adivasis is concerned. It has already been discussed earlier that official agencies such as cooperatives and banks do not offer credit for meeting the deficit in house-hold expenditure and for other non-productive purposes. In such a situation the money lenders are the only source to get loans. Again, the modus-operandi of the money lenders is such that the Adivasis have more trust in him than in the officials of cooperatives and banks. The clumsy and little bit complex paraphernalia observed in granting loans to the Adivasis is beyond their grasp. In contrast to this, the ease and speed with which loans are obtained from the money lenders make the Adivasis depend upon the money lenders for all kinds of loans, whether for productive or for non-productive purposes. The money lenders on their part fully exploit this situation to charge exorbitant rate of interest. To end this sort of exploitation and to enable the Adivasis to get out from the clutches of money lenders, should be a major issue for the change agents working for the development of the Adivasis of this taluka.

Unemployment and under employment:

It has been amply demonstrated by now that the Adivasis of this taluka are still having a subsistence economy which is in a very backward condition. One can easily comprehend that in such an economy which is still tradition-oriented, the opportunities for gainful employment have severe limitations. Except agriculture, there is no other major avenue for getting engaged in

active economic activities. On the whole non-agricultural occupations have still not made any worth while dent into the economic structure of the Adivasis of this taluka. It has already been observed that the occupational distribution of the working force in this taluka is conspicuous for its lack of diversification.

Although the opportunities for employment are mainly confined to the agricultural sector, there is not much unemployment among the Adivasis of this taluka. As the concept of unemployment is usually limited to "involuntary" idleness, only those persons who are without work for considerable time are recognized as unemployed. In Sagbara taluka it is customary for the Adivasis, who do not have regular work, to accept work on a casual basis, however low paid or intermittent such work may be. Further as agriculture itself is a family enterprise every able bodied person in the family do remain engaged in one or another work connected with agricultural operations. Due to this situation they cannot be considered unemployed in the strict sense of the term but nonetheless they are in a category which is not very different from those who are completely unemployed.

For estimating the extent of unemployment among the surveyed households, the criteria of considering those persons unemployed who have been found to have worked for less than 90 days in a year has been adopted. From this point of view, altogether 196 persons are unemployed among the working population of the surveyed households. The figures given in the next Table indicate that out of the total 1324 workers from the adult population of the surveyed households (the number of economically active children has been excluded from the total working population) only 172 persons, forming 12.99 percent have less than 90 days of work in a year, hence unemployed. 24 more persons from amongst the number of economically inactive adult population (non-earning dependents among the adult population) have declared themselves as available for and willing to work.

Table-99

Number of unemployed persons

Sex	Number of persons having less than 90 days of work	Number of persons sitting idle but available for and willing to work	Total number of unemployed persons	Percentage out of adult population
Male	59	15	74	4.90
Female	113	9	122	8.08
Total	172	24	196	12.98

It should be mentioned here that for the Adivasis it is really not possible to remember about the exact number of days for which they did not have any work. This being so, it is probable that the figures regarding the unemployment may be on low side. As can be seen from the figures given in the above Table, among the unemployed persons, the women outnumber the men. Looking

Table-100

Number of unemployed persons according to age and sex

Age group	Male		Female		Total	
	No.	Pc.	No.	Pc.	No.	Pc.
15—45	51	26.02	47	23.98	98	50.00
46—59	12	6.12	59	30.10	71	36.22
60 & above	11	5.61	16	8.16	27	13.78
Total	74	37.76	122	62.24	196	100.00

to the figures given in the above Table, the unemployed

women constitute 62.24 percent of the total unemployed persons while that of the men it is 37.76 percent. Age-wise the highest number of unemployed persons is in the age-group of 15-45. Among the unemployed women, the number is highest in the age-group of 46-59. From the analysis of the figures given in the above two Tables, it clearly emerges out that in any programme of providing employment to the people, consideration of women will occupy a significant position.

According to the figures given in the next Table, the high percentage of unemployed persons is from amongst the agriculturist group. 54.59 percent of the total unemployed persons are engaged in agricultural occupation but as pointed out earlier, they find work for less than 90 days. Of the remaining unemployed persons, 20.41 percent and 12.76 percent are engaged in agricultural labour and unskilled labour works respectively, while 12.24 percent are without any kind of work.

Table-101

Distribution of unemployed persons according to occupation

Sr. No.	Occupation	No. of the unemployed persons	Percentage
1.	Agriculture	107	54.59
2.	Agricultural labour	40	20.41
3.	Unskilled labour	25	12.76
4.	Without work	24	12.24
	Total	196	100.00

From the foregoing discussion it is apparent that the extent of people's participation in gainful economic activity is largely determined by the current demand for labour as well as level of wages offered of by the employers.

Since there is not enough demand for labour within the taluka itself and also the wages offered by the employers are quite meagre, Rs. 2-3 for agricultural labourers, there is not enough scope for these unemployed persons to be absorbed in some kind of work.

But let us be very clear about one thing which of course has been repeatedly mentioned in this report from time to time. It is this that the problem of unemployment, in the strictest sense of the term, is not at all menacing in this taluka. The problem which is truly grave is the extremely low income earned by the workers. We have already discussed in detail that due to low level of income as well as expenditure, more than 90 percent of the surveyed households are living below the poverty line. It is this problem which has to be tackled in a massive scale. Programmes meant for providing opportunities for gainful employment will actually be directed to raise the level of absolute income of the Adivasi households. The traditional occupations have little scope for absorbing the surplus labour. It will be necessary then to introduce new labour absorption economic activities. Of course, as far as possible and practicable, the new economic activities should be in tune with the socio-cultural and ecological milieu in which the Adivasis have been living.

CHAPTER V

AGRICULTURE AND ALLIED ACTIVITIES

During the pre-contact days i.e. roughly before the 18th century, the economics of the Adivasis of this tract depended chiefly on shifting cultivation. Hunting was an important complementary pursuit to agriculture, for, with fishing it was the principal source of proteins. The heavy rain forest which covered much of the area rendered the work of preparing the fields difficult. Large trees were felled and heavy under-brushed cut and burned off. The hoe was the primary agricultural implement.

After this period when Marathas gradually spread into these areas and the Adivasis came in close contact with them, the settled type of agriculture, in which preparation of the agricultural field was taken on hand before the monsoon arrived, was gradually adopted by the Adivasis. Their economy was adopted to this pattern which made them to grow different type of crops. By the turn of the century rice, maize, jowar and pulses (particularly, udad) became the major crops raised by the Adivasis of this taluka. But although agriculture became the basic economy of these people, they were not able to produce surplus food, mainly because of the low density of population in this area and due to the primitive technology and method used in the production. In fact, they were not even able to produce enough to maintain themselves throughout the year. This necessitated for them to depend heavily on gathering wild edible fruits, leaves and roots and hunting in the forest. Till this day, the Adivasis living in the hilly and forest tract of the taluka still practice the old ways of cultivating the field and hence the production made by them even now is far short of their actual requirement. Now games are not much available

in the forest, so hunting has ceased to be an additional source of food. Gathering of wild edible fruits, leaves and roots still continues but the magnitude of collection has considerably gone down. Paid labour work, either in forest-work or in other construction work or in agricultural fields of others in the plain region or in neighbouring areas, has become the next important source for earning livelihood. This has been very much indicated in the previous chapters.

Agriculture

Coming back to agriculture, in the present times permanent cultivable field is the core of the economic activities for the Adivasis of this taluka. As given in the next Table, the figures regarding the size of land holding

Table-102

Percentage distribution of landholders according to size of holding

Sr. No.	Size of holding	*1952-53	**1974-75
1.	Upto 5 acres	25.33	25.00
2.	Over 5 and upto 15 acres	53.18	53.24
3.	Over 15 acres and upto 25 acres	15.34	14.22
4.	Over 25 acres and upto 100 acres	5.68	7.39
5.	Over 100 and upto 500 acres	0.47	0.15
	Total	100.00	100.00

* Source—Broach District Gazetteer, 1961

** Source— I. T. D. P's Report, (Mimeographed) on Vth five year plan.

indicates that a majority of the Khatedars have less than 15 acres of land. But there are some Khatedars who have more than 100 acres of land. These Khatedars mainly belong to descendents of the chieftain of Sagbara State. In between 20 years, there is no remarkable variation in the figures, except that the percentage of Khatedars owning more than 25 acres but less than 100 acres has gone up from 5.68 percent in 1952-53 to 7.39 percent in 1974-75.

Although the amount of cultivable land is 30,160 acres in 1976-77, only 16,179 acres has been actually put to cultivation. Thus, 43.71 percent of the cultivable land is either left fallow or no attempt has been made to use them for cultivation. According to the figures given in the next Table, in the early years of this decade greater percentage of the total cultivable land (Source-Annual season and crop report, Bharuch) has been actually used for sowing crops. From 1973-74 it goes on declining but again recovers a little bit in 1976-77.

Now, let us see what crops the Adivasis have been raising. In 1952-53, the major portion of the cultivated land was put under cereals. The same pattern is found in recent times. As shown in the Table 104 the percentage of area under cereal crops went from 52.31 percent in 1952-53 to 57.79 percent in 1972. The major difference in the cropping pattern between 1952-53 and 1972-73 is regarding the drastic reduction in the area under oil seeds. The area under pulses also went up. In 1952-53, 67 acres of cultivable land was put to use for growing condiments and spices. Now it appears that this has been discarded by the Adivasis of this taluka.

Among the cereals, most important crop had been rice which now has gone to second position, superseded by jowar. Among the pulses 'Tur' was most important and it still is so. Cotton was the major crop in fibre group and even now it is like that. Among the oil seeds castor was the major crop, which now ceases to be so. Groundnut has become the leading crop.

Table-103
Intensity of Cropping

Sr. No.	Year	Area of total cultivable land (in acres)	Land used for crops		Total Percentage gross of area under cropping sown (in acres)
			Net area sown (in acres)	Percentage of net area sown to total cultivable land	
1.	1970-71	37,321	21,976	58.88	22,166
2.	1971-72	32,273	21,346	66.14	21,525
3.	1972-73	30,767	18,693	60.76	18,784
4.	1973-74	34,772	16,676	54.19	16,821
5.	1974-75	30,769	16,655	54.12	16,906
6.	1975-76	30,162	16,581	54.97	16,723
7.	1976-77	30,160	16,978	56.29	17,191

Table-104

Percentage distribution of land under different crops
(1952-53 and 1972-73)

Sr. Principal No. crops	Area under the crop (in percentage)	
	1952-53	1972-73
1. Cereal	52.31	57.79
2. Pulses	8.20	11.22
3. Oilseeds	10.50	1.21
4. Fibres	27.56	29.31
5. Sugar cane	0.01	0.07
6. Fruits & Vegetables	0.13	0.07
7. Fodder crop	1.08	0.33
8. Condiments & Spices	0.21	—
Total	100.00	100.00

The individual crop-wise figures for the last 7 years have been given in the next Table. A careful look to the Table at once suggests that the area under the rice crop has been gradually declining. In fact, the total area under the food crops has declined from 12743 acres in 1970-71 to 9077 acres in 1976-77. Whereas the area under non-edible crops has gone high.

The growing of the maize has been discontinued by the Adivasis for the last 3 years. Since jowar has become the major cereal crop, it has also become the staple food of the Adivasis who formerly were used to eat rice regularly.

According to the figures given in the Table 106 the maximum yield per hectare has been recorded for the jowar crop which is raised during summer season. Next

Table-105

Sr. Name of No. Crop	Area under food and Non-Food crops (in Hectares)						
	Year 1970-71	Year 1971-72	Year 1972-73	Year 1973-74	Year 1974-75	Year 1975-76	Year 1976-77
1. Rice	4748	4979	4180	2558	2316	2018	2323
2. Bajri	61	48	.5	40	57	—	6
3. Wheat	351	286	193	179	93	125	140
4. Maize	125	47	45	—	—	—	..
5. Jowar	7458	6037	5188	5318	5652	6386	6608
6. Total—	12743	11397	9311	8095	8118	8529	9077
7. Ground nut	240	228	126	140	137	186	202
8. Tal (Sesamum)	36	9	8	21	28	25	17
9. Cotton	3986	5153	5470	5531	5501	4751	4696
10. Other non- Food Crops	143	138	93	42	82	61	34
11. Total for non-food crops	4405	5528	5697	5734	5748	5023	4949

in order is rice. The lowest yield is that of cotton. In comparison to early years of this decade, the production has gone down in almost all the crops. In the production of Jowar (Kharif) the reduction has been quite drastic, from 1115 kilo in 1970-71 to 226 kilo in 1975-76 and 260 in 1976-77. The figures appear to be so erratic that it is difficult to come to a definite conclusion regarding the rise or fall in production. Of course, due to poor facilities for irrigation in this taluka, agricultural production naturally depends on timely rains. This may be one reason for good yield in one year while bad in the subsequent two-three years.

The figures given in the Table 107 clearly point out the extremely inadequate irrigation facilities. As the figures show, only four crops receive water from irrigation facilities. Except wheat, even these do not get water in each year. It has already been shown in the Chapter-II that the net area brought under irrigation is only 712 hectares, which is just 4.24 percent of the net area sown. In 1960-61 however only 66 hectares was under irrigation. In the interval of 15 years thus only 646 hectares have been extended the benefits of irrigation.

On comparing the figures of the taluka regarding production of different crops per hectare with those of the district and state, it is revealed that the taluka very much lags behind in this respect. According to the figures presented in the Table 108, except in the production of 'Tur', in all cases the rate of production is very poor. But in case of 'Tur Dal', the taluka has excelled in the production per hectare over production of the district as well as of the state level. But if we look back to the figures given in Table 5, this high rate of production of 'Tur' per hectare is unusual in the year for which the figures have been provided with. In fact the average production of 'Tur' comes to only 457 kilograms per hectare in the taluka. If this figure is compared with those of the district and state a somewhat correct situation emerges. But nevertheless, the fact remains that this taluka fares

Table-106
Production of principal crops per hectare of unirrigated land (In kilogram)

Sr. Crop No.	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	Average in a year
1. Rice	678	505	505	720	800	415	420	572
2. Jowar (Rabi)	460	460	385	385	385	225	250	326
3. Jowar (Kharif)	1115	1115	1025	1025	920	225	260	691
4. Wheat	337	337	340	720	320	140	135	331
5. Bajri	526	393	240	720	260	395	390	401
6. Maize	751	561	561	561	560	140	146	393
7. Tur	488	365	365	365	365	1192	—	457
8. Groundnut	561	561	561	465	561	310	315	442
9. Tal	224	—	—	—	—	—	—	—
10. Cotton	101	76	76	65	—	125	130	53
11. Castor	375	280	280	280	280	155	160	231

(Source : Annual season and crop report, Bharuch)

Table-107

Production of principal crops in one hectare of irrigated land

Sr. No.	Name of crop	Average per year					
		1971-72	1972-73	1973-74	1974-75	1975-76	
1.	Rice	838	676	676	1080	1100	571
2.	Jowar (Rabi)	616	616	—	—	—	—
3.	Wheat	500	451	676	390	300	335
4.	Cotton	242	195	185	—	—	76

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Table-108

Production of different crops per hectare at taluka, district and state level (1975-76)

Sr. No.	Name of the crops	Per hectare production		
		Sagbara taluka	Bharuch district	Gujarat state
1.	Rice	757	1362	1246
2.	Jowar (Kharif)	225	568	494
3.	Jowar (Rabi)	225	601	506
4.	Wheat	220	1109	1677
5.	Bajri	395	626	726
6.	Maize	140	1667	2013
7.	'Tur'	1192	367	466
8.	Groundnut	310	973	1240
9.	Cotton	125	545	944
10.	Castor	155	700	974

well as far as the rate of production of 'Tur' is concerned. The situation regarding the production of wheat is very poor in this taluka. Similarly the rate of production of cotton is also very low.

The factors responsible for the low rate of production are quite obvious and have been repeatedly discussed in this report: poor irrigational facilities, very little use of fertilizers, improved seeds, old methods of doing agriculture, major part of the area being hilly tract and hence comparatively poor fertility of the soil and above all poor performance of the development agents. The figures regarding the quantum of fertilizers and improved seeds used in this taluka could not be made available to us and hence it

is little bit difficult to show concretely regarding the inadequate use of improved seeds and fertilizers. Regarding the use of agricultural implements, the figures are available as given in the next Table. It is evident

Table-109

Use of agricultural implements in the taluka

Sr. No.	Implements			Percentage of increase or decrease
		1972	1977	
1.	Ploughs			
	(i) Wooden	5928	4715	-20.46
	(ii) Iron	40	46	+15.00
2.	Bullock cart	2722	2075	-23.77
3.	Sugar cane crusher			
	(i) run by electric	7	0	-100.00
	(ii) run by bullock	0	0	—
4.	Oil engine with pump	308	334	+ 8.44
5.	Electric pump	0	1	—
6.	Tractor			
	(i) Government owned	3	0	-100.00
	(ii) Privately owned	6	5	-16.67
7.	Oil-pressing machine	0	0	—
8.	Sprayers/Dusters	23	132	+473.91

(Source : Annual seasons and crop report, Bharuch)

from the figures that use of agricultural implements and appliances are quite meagre in this taluka. According to the I.T.D.P. report, the Adivasi cultivators are using their indigenous implements at present (P 74) * and the practice of using chemical fertilizers is limited because of

inadequate irrigation facilities and poor financial resources (P. 76)* Further, the same report continues, "the Adivasi cultivators especially those staying in remote hilly areas do not use the improved high yielding varieties of seeds". (P.76)* "The tribal cultivators are not able to afford improved seeds, fertilizers pesticides, etc.". (P. 25).* There has been practically no change in the situation when the survey work was being carried out.

It has been reported that the Soil Conservation Department has taken up a programme for contour bunding, nala plugging, etc. but substantial progress could not be made due to ignorance, poverty and apathy of the tribal cultivators towards soil conservation method. It has been observed that at many places the soil erosion is so heavy that it will not be possible to develop terracing for want of sufficient depth in the soil. Soil Conservation work assumes a gigantic proportion as major part of the cultivated land will have to be brought under soil conservation. Any further delay will result in further damage of the cultivable land. Although some schemes are being implemented under the tribal sub-plan programmes, it is far from satisfactory.

Animal Husbandry

Although the Adivasis of this taluka are not a pastoral community, raising cattle and poultry have been important activities since long past. But these activities did not form, in the strict sense, part of economic activities. These activities mainly formed part of social and religious life. Cattles were raised in order to get the supply of bullocks and to be used as payment of bride-wealth. Poultry was mainly raised for the purpose of offering sacrifices to their deities and entertaining the guests. It is only in recent times that the economic value

*Report of the I.T.D.P. Rajpipla Fifth five year plan, 1975, PP. 74, 76, 25.

of these activities is now being realized by these people. But due to the traditional background of rearing cattles and raising poultry for purposes other than economic, the programmes implemented in the sphere of animal husbandry have not met the desired success. But nonetheless it is undoubtedly gaining momentum and as a result of which it stands a good prospect in contributing towards the economic development of the Adivasis.

According to the figures given in the next Table the number of cattle first increased in the period between 1961 and 1972 but later decreased during period of 1972 to 1977.

Table-110
Livestock population, 1961, 1972 and 1977

Sr. No.	Type of live-stock	NUMBER			Percentage of increase or decrease from 1972 to 1977
		1961	1972	1977	
1.	Cattle				
	(i) Males	9685	12744	9586	-24.78
	(ii) Females	3213	4606	4521	-8.36
	(iii) Young stock	2684	3585	3870	+7.75
	(iv) Total	15582	20935	17977	-14.13
2.	Buffaloes				
	(i) Males	108	60	64	+6.67
	(ii) Females	645	783	973	+24.27
	(iii) Young stock	390	529	695	+31.38
	(iv) Total	1143	1372	1732	+26.24
3.	Sheep	102	104	543	+422.12
4.	Goat	3684	5731	6029	+5.20
5.	Mule	—	60	32	-20.65
6.	Horse/Donkey	—	155	123	-46.67
7.	Ass	100	12	15	+25.00
8.	Camel	—	—	—	—
9.	Poultry	23456	9527	23174	+143.25

In case of buffaloes there has been steady increase in the number, although the number remains quite small even in 1977. If the milk dairy cooperatives are to be organized successfully, adequate attention will have to be given to increase the number of buffaloes in a big way.

Due to the hilly terrain, in major part of this taluka veterinary services are not within the easy reach of a large number of Adivasi households. Further, on account of the poor economic conditions, most of the Adivasis find it difficult to pay the usual charges for getting veterinary aid. Again, the Adivasis remained ignorant for a long time about the modern way of treating the diseases of

Table-111

Year-wise veterinary aid given for treatment of cattle (1970-71 to 1978-79)

Year	Number of veterinary hospital*	Number of F.A.V. centres**	Number of cattle treated at veterinary hospital	Number of F.A.V. centres	Total
1970-71	1	2	—	—	—
1971-72	1	2	—	—	—
1972-73	1	2	976	391	1367
1973-74	1	2	1081	434	1515
1974-75	1	2	706	751	1457
1975-76	1	2	747	2199	2946
1976-77	1	2	1164	4828	5992
1977-78	1	2	792	357	1149
1978-79	1	2	664	327	991

* The Veterinary hospital is located at Selemba and had been started in the year 1956.

** F.A.V. centres are functioning at Patlamau and Kolwan villages. These centres came into existence in the year 1963.

the cattle. In view of these the Adivasis have not been utilizing the services of veterinary hospitals to the dis-able extent. As the figures given in the next Table suggest now the Adivasis have started taking veterinary aid but still lot of ground has to be covered when the number of cattle treated is taken into account against the existing population of cattle in the taluka.

Regarding the cross-breeding programmes of the cattle, some weak attempts have been made during the Block's period but nothing tangible was achieved. Similarly, artificial insemination programmes also did not make any headway. The result is this that the number of cattle artificially inseminated is nil in this taluka. Now under the tribal-sub-plan programmes, this is expected to be taken up.

As pointed out earlier, in earlier times i.e. during the period of 1952-53, the area of cultivable land put for fodder production was comparatively bigger. But gradually it started to become smaller and in 1972-73 only 0.3 percent of the total cultivated land was used for growing fodder. But owing to proximity of the forest region, the Adivasis have no problem for grazing their cattle. Only in summer season they face difficulty. However, due to the practice of grazing the cattle in forest area and not feeding them other nutrient cattle feed, the cows of the Adivasi mature after an age of 5 years and the milk-yield of both cows and buffaloes is woefully low. In order to improve the milk giving capacity, an effective programme for popularising quality cattle-feed as well as fodder is badly needed in this taluka. It is difficult to estimate the exact requirement of fodder in this taluka but programme for growing fodder will have to be taken in a big way. Further, due to availability of grass in huge quantity in the forest area, a scheme for cutting the grass and storing after making bales should be undertaken. At present, the grass is allowed to dry.

Milk cooperative societies started functioning from the year 1976-77. As the Adivasis are not used to consume milk or milk products, the practice of milking cows or buffaloes was not very popular among them. Now as this is going to be an important economic activity, the Adivasis will need all encouragement to take up this activity.

As can be seen from the figures given in the next Table at present only 5 societies are in running condition while 3 others are in defunct condition. Looking to the membership figures in these societies, it immediately strikes that milk production is still in infancy stage. And thus a vigorous attempt is needed to make this activity popular among the Adivasis. Although community-wise figures regarding the membership is not available, it has been learnt in course of the field work that the non-Adivasis are taking maximum benefit from these milk-cooperative societies. The point to grasp is this that this activity should be

Table-112

Details about milk production

Sr. No.	Year	Number of milk co-operative societies			Scope of membership enrolment	Sale of milk per day to dairy (in litres)	
		Func-tioning	Defu-ct	Total			
1.	1976-77	2	—	2	130	1500	100
2.	1977-78	5	3	8	528	2500	1000
3.	1978-79	5	3	8	640	4000	2400

(Source: Secretary, Dairy Cooperative, Sagbara)

made more popular among the landless and poor Adivasis. It is they who badly need avenues for earning cash income for livelihood.

The milk production programme has caught momentum in only those villages which lie on the state highway. Lack of proper communication facilities is the greatest bottleneck in the development of dairy activities among the Adivasis. Despite this, there remains greater scope to organize the activities of milk-production on a sound basis even in those villages which are situated on pucca road and also in such villages which are within a distance of 5-7 kilometres from the pucca road.

At present the average yield per day per animal is not encouraging. As shown in the next Table, the average yield per day per animal was 2 litres in 1972 which has

Table:-113

Average milk yield of milch cattle and number of milch cattle (1972 and 1977)

Type of milch cattle	Number		Average yield per cattle per day (in litres)	
	1972	1977	1972	1977
Cows	1888	1521	2	2
She-buffaloes	350	480	2	2
Total :	2238	2001		

remained so even after 5 years in 1977. Further, the distressing aspect is this that there has been reduction in the number of milch cattle, particularly of cows from 1972 to 77. Due to the initiation of milk production schemes, this number ought to get increased. One hopes that now the trend must have been reversed.

Under the programmes of S.F.D.A. and I.R.D.P. many persons have been benefited. These beneficiaries received loan-cum-subsidy for purchasing buffaloes and also received financial assistance for purchasing share of

milk cooperative society. They mostly belong to weaker sections. But it is difficult to say whether these persons are actually deriving income from this activity or not. Once loan or subsidy is given to a beneficiary the officials seldom bother to keep a track to know whether the scheme is really bringing gains to him or not. Since it was not possible for us to collect all these informations in course of the field work, in concrete terms it is not easy to find out the impact of the schemes of S.F.D.A. and I.R.D.P. upon the Adivasis.

Poultry

Poultry development programmes have been implemented in the past too but without any success. In the past, the Adivasis were used to be supplied one day old chicks of improved varieties. These birds in course of time as reported by officials, failed to survive due to the inability of the Adivasis to take protective measures to keep the birds alive. And many times, it was alleged, the Adivasis consumed the birds by themselves. The upshot of whole matter is this that the programmes miserably failed.

The poultry which the Adivasis have been raising is of local variety whose egg laying capacity is confined to 50 to 60 eggs per year and hence economically not much viable. As has been pointed out in Table 110, the number of these 'deshi' birds has been recorded as 23174 in 1977. In the year 1972 the number was only 9527.

One of the greatest handicaps in the success of the schemes is the lack of marketing facilities of the eggs and birds. Since this has never been officially attempted and since the Adivasis by themselves were unable to explore possibilities and scope of marketing, this scheme could never attract the Adivasis as an economic activity. Hence in any programme of poultry development, arrangement

for marketing should be an integral part of the whole scheme. Since poultry keeping is very much a traditional activity of the Adivasis, the programmes meant to promote poultry as an economic activity should get acceptance from them, if the hurdle of marketing the poultry product is solved.

Through the S.F.D.A. and I.R.D.P. a poultry co-operative society has been organized in this taluka. Under this scheme, all the birds are kept at one place. Although it is functioning well, the Adivasi members have yet to make economic gains. This is again due to the handicap of marketing the eggs and birds.

A poultry feed unit has been started at Valia and hence now there will be no problem in getting regular supply of this commodity. Encouraged by this the I.T.D. P. is also going to implement poultry development programmes in this taluka.

Fishery

In their traditional set up, the Adivasis have always been catching fishes in order to supplement their diet. But this activity was not pursued for earning income. Although they were catching fishes, they found the opportunity mainly during rainy season when the seasonal rivulets flow with water. In some villages, which were near to Tapi river, the villagers pursued this activity for most part of the year. By and large, there have been limited opportunities for fishing in this taluka. Now after the commissioning of Ukai dam the potentialities for fishing have increased considerably. As mentioned earlier many of the villages which have been uprooted because of the reservoir of Ukai Dam have been provided with several incentives to take up fishery as their main occupation. At present more than 900 persons are engaged in fishing, several of them on full time basis. In 1975-76, a fisherman cooperative society has been formed which

has presently 380 members. As pointed out in Chapter III, the society sold fishes worth Rs. 128554 in 1978-79. It has also been seen that in the sample survey, the house-holds who reported their main occupation as fishing are having an annual expenditure which puts them above the poverty line.

About 27 villages in the taluka have been recognized as fishing villages. The fishery department has started rearing fish seeds in the ponds of some of these villages and have planned to start fish nurseries at a few places in this taluka. Training facilities have been provided at the Ukai's Training Centre. Several youngmen from this taluka have already undergone training at this centre.

The main bottleneck, as has been discussed elsewhere in this report, is to arrange transportation which at present is done through middlemen. Due to this specific reason, the margin of profit for shareholders of the cooperative society gets reduced to a considerable extent.

On the whole, this scheme is getting success and in view of this membership drive should be carried out vigorously.

CHAPTER : VI
INDUSTRIES INCLUDING HOUSEHOLD AND
COTTAGE INDUSTRIES

The key to development in a backward tribal area like the Sagbara taluka clearly must be the expansion of participation in productive activity, an objective that depends primarily on the ability of the planners to accelerate the commercialization of agriculture and to expand employment through promotion of small scale industries. These two sectors, agriculture and small industry provide the greatest potential for achieving equitable growth in the undeveloped areas. It has been amply illustrated in earlier chapters that a large sector of the population in the Sagbara taluka is left largely dependent on agriculture and subsistence economy for employment and maintenance. The nature of employment one usually gets is part-time employment in which one hardly gets proper remuneration. Thus, although chronic unemployment may not exist among the people of this taluka, it cannot be denied that they are under-employed and the income which they derive from agriculture and casual labour work is quite low. The obvious result is wide-spread poverty which has grown out of historical economic development which gave emphasis only on agricultural production. In an area where due to the physiography, topography, nature of soil and above all poor potentialities of increasing irrigation facilities, there is serious limitation to achieve the goals of economic development through agriculture alone. Another important aspect is that the Adivasis of this taluka had been virtually isolated from the outside world before the feudal state of Sagbara was

merged into the Indian Union. The taluka was virtually opened up to outside influences only when it formed part of the Bharuch district. After this, through the development efforts a sustained attempt has been made to transform the subsistence nature of the economy of the people of this taluka into a monetary economy. Under the programmes of economic development initiated in this taluka since more than two decades back, stress has also been laid on the development of rural industries too. However, despite all the efforts made in this direction, rural industries have yet almost no role in the economic development of the people of this taluka. But it is now being realized that only through creation of smaller industries, opportunities of employment can be substantially increased and the strategy of attaining more equitable distribution of income among the different sections of population can be realized to a great extent. Let us review what has been achieved in this taluka in respect to rural industrialization.

Although some minerals are reported to be available in this taluka, they have not been systematically and scientifically tapped. Due to this no mineral based industry has been created in this taluka. And in the absence of exact knowledge about the availability of any mineral from the hills of this taluka, there does not exist at the moment any potentiality of creating any mineral based industry in this taluka.

Since the taluka has large forest-tract, there is a definite potentiality of creating forest based industries. But here again, not a single unit, not even a saw mill, has been set up in this taluka till now. It can, however, be argued that since the right over the forest-tract was under legal dispute till a couple of year back, nothing was possible for creating forest-based industries in this taluka. But now the dispute has been settled and there is no

hindrance in creating units of forest based industries. Suggestions for starting such industries have been made in the chapter dealing with the action plan for full employment.

Agriculture has been, since several generations, the main activity of the people of this taluka. In recent times the people have been growing cotton and tur dal (pulse) in good quantity. But although a ginning factory at Netrang (about 45 kms from Sagbara on Ankaleshwar-Akalkuva Road) has been created since long where even the cotton grown in the Sagbara taluka is sent for processing, no such factory has been created in the taluka itself. Similarly, a pulse mill operates at Netrang but none in the Sagbara taluka itself. Thus no agro-based industry exists in this taluka. Looking to the potentiality of such industries in this taluka, some suggestions in this regard have been made in the chapter on Action Plan.

It is a matter of commonsense to understand that when no industry based on the raw materials available in the taluka has been created, what will be the situation regarding the creation of other manufacturing industries. Quite obviously, the taluka is completely blank in this respect. It can certainly be pleaded that since there is no worthwhile infra-structure facilities and since behavioural attitudes and motivations of the Adivasis of this taluka are not conducive to the creation of units of manufacturing industries, nothing could be done in this respect. But the fact remains that no proper attempt has been made in this direction. Thus it can be easily seen that the efforts needed to be made in tackling rural unemployment and under-employment in this taluka and solving the problem of raising the level of income of the people have been almost fruitless for want of creation of manufacturing industries. In this respect this taluka presents a dismal picture.

The performance of the District Industry Centre, in boosting up the industrial activities in this taluka have

been, so far, quite limited. Its activities in this taluka have already been discussed earlier in Chapter III. It should be explained that this centre has a vital role to play. Organizing small scale industries in this taluka should be taken up by this centre in a challenging manner. As we all know it is quite easy to organize such industries in a developed region but in chronically backward region like Sagbara, where the population is different so far socio-economic conditions are concerned, creation of industries involving the local people, particularly belonging to lower wrung, is not an easy task. In view of this it is likely that the centre may not take up many programmes in this taluka. But we feel that centre should give special attention to this taluka and all the expertise available at this centre should be put to maximum utilizations in organizing small scale industries with the involvement of the Adivasi population in this taluka. Since the social structure and the value system of the Adivasis may prove to be a handicap in the development of entrepreneurship among them, the centre will face an uphill task. Due to this reason, it will have to chalk out the strategies for entrepreneurial development in a well-thought-out and realistic manner. The Adivasis, though they appear to be extremely conservative in adopting changes, actually possess more potentiality for change than generally expected. But change inevitably involves risk. The Adivasis must be made to understand the relation of risk to achievement. The centre's personnel should provide sound information to the people and help them to make conscious and calibrated planning.

In the context of the block level planning, much of the success in the implementation of the programmes concerning setting up of small industries and development of entrepreneurial activities will depend upon the performance of the District Industrial Centre in this taluka. The Regional or Taluka Employment Officer who will be

entrusted for the implementation of the programmes will have to remain in constant touch with the centre for its involvement, guidance and expert consultation.

Manufacturing Industries

This taluka does not have any manufacturing industry. In fact, looking to the backwardness of this taluka in respect of availability of electricity and water it is difficult to foresee that in near future any manufacturing industry can come of its own in the private sector. Moreover, as the taluka is quite interior, the transportation problem is another major bottleneck for starting any manufacturing industries. Due to these factors, none has ventured to start any manufacturing industry although there is plenty of cheap labour available there. In such a situation it is necessary to create the necessary infra-structure facilities for facilitating the opening of some manufacturing industries for which raw material is available there. As nobody in the private sector will be interested to start any manufacturing industry in this backward region, only possibility at the moment to start such industry is through either the cooperative sector or under the sponsorship of the government department. Even if such a project is not viable from the profit point of view, it should be undertaken from the point of view of its social cost. Further, once the ice is broken, there is always better chance that others will follow suit. Who had imagined ten or fifteen years back that Ankaleshwar, Vapi, Kalol, Umbergaon, Pardi, Songadh, etc. could emerge as important industrial centres in the state? As such, the initiative must come from the official agency to develop this backward region industrially. It is vitally important from the social welfare point of view for the Adivasis.

Small Industries

Like manufacturing industry, the situation regarding the small industries in this taluka is also dismal. Here and

there one may find the small flour mill in some villages. All together there are 17 flour mills in the taluka, details about which have been given in Chapter III. In these flour mills 20 persons have been employed but that as casual labourers only.

Apart from this, if we consider fishing industry as a small industry venture, 380 persons are engaged in this either on full time or part time basis. This industry has been started under the cooperative sector. As mentioned in Chapter III, a Fishermen cooperative society has been formed in this taluka.

Besides these two industries there is hardly any industry in this taluka coming under the category of small industries. There is ample scope for starting small industries in this taluka. This has been discussed in Chapter VIII.

Coming to the cottage industries, 11 different cottage industries are found to be existing in this taluka. Among these cottage industries, the important ones are manufacturing of bamboo products, carpentry, sewing, brick-making, ambar-charkha, tiles-making and pottery-making. Apart from these, the other cottage industries in which some households are engaged are bidi making, leaf-plates and leaf-cups-making, fishing net-making and black-smithy. According to the information supplied by the District Industries Centre, Bharuch 1708 persons in this taluka earn income through these industries- 40 persons have also received training for starting the trade of electric wireman and 10 persons have learnt motor-driving through the financial assistance of ITDP, Rajpipla. Thus, altogether 1758 persons in this taluka are technically equipped to start their own cottage industry in respective fields.

The figures given in the next Table give an idea regarding the number of persons engaged in different types of cottage industries and other trades.

Table 114

Number of persons engaged in different type of cottage industries

Sr. No.	Name of Industry	Unit	Number of persons engaged
1.	Carpentry	—	250
2.	Bamboo-work	150	350
3.	Bidi-making	—	13
4.	Leaf plates-making	—	125
5.	Sewing	—	300
6.	Electric wiremanship	—	40
7.	Brick-making	—	80
8.	Ambar-charkha	—	250
9.	Motor driving	—	10
10.	Fishing net-making	—	60
11.	Tiles-making	—	200
12.	Black smithy	—	30
13.	Pottery-making	—	50
Total		—	1758

In the fishing industry there is enough scope for further development. The cooperative which has been organized for this purpose has no facility for transportation. Due to this, the goods have to be sold to the local traders who arrange transportation to Howrah. The traders earn a commission of 0-25 paise per kilogram. If the cooperative makes its own arrangement for transporting the fish caught by the Adivasi members to Howrah, it will defi-

nately earn much more income and consequently the members will have better profit.

There is also a need to enforce the Boating and Fishing Act in the waters of Ukai dam reservoir. As this is not done, illegal catching of fishes is pursued by many persons belonging to the villages of Maharashtra State. With an aim to develop the fishing cooperative society of Sagbara this illegal fishing must be prevented.

Majority of the members of the fishing cooperative society are those who have been uprooted on account of the Ukai Dam. Their villages had been submerged in the catchment area. In order to rehabilitate them, this cooperative society was started and fishing as an industry took form. During the months of June to August, the members are not permitted to catch fishes as this period is considered as breeding period for the fishes. But although this is so, illegal fishing goes on even during this period. It is reported that the women of the family members remain idle for most part of the year. When they were agriculturists in their original village, the women had work in the agricultural fields. But now they are without work as they do not participate in catching fishes. They should be encouraged to take up poultry farming and all assistance should be provided to them.

The Adivasis of this taluka are born carpenters in the sense that almost everybody in the society knows something in carpentry. But their knowledge is confined mostly to repair of plough, making musical instruments and making string-cot. Since they lack training for making sophisticated furniture, their products are usually crude. But they have the potentiality of learning this trade fast and hence should be encouraged in all possible manner. First requirement is to arrange for training, secondly they should be provided with all necessary tools and regular supply of wood, implements and thirdly marketing arrange-

ments for their product should be made. As forest based industry, this has tremendous scope in this taluka. At present some persons make almirahs, chairs, stools, etc. according to the local demand which at any rate is very low. It is quite understandable then that very few households have taken up this trade as an independent source of earning livelihood. Most of the persons who are engaged in this trade are doing it to supplement their meagre income from other source which may be either agriculture or agricultural labour.

For getting wood for making furnitures etc. the carpenters have to face a lot of difficulty. In fact it has been reported that in most cases they procure wood in illegal manner i.e. by cutting forest trees unlawfully. Thus if we want to boost up carpentry as a viable cottage industry involving a large number of Adivasi households, the problem of supplying wood to the trained carpenters must be solved on urgent basis. Due to this problem, many of the trained persons could not start this trade. Even the set of tools and implements which had been given to them after the completion of training was sold to somebody else.

There are 140 Kotwalia households in the taluka whose traditional occupations have been making bamboo products such as baskets, winnowing fan, mats, etc. As mentioned elsewhere in this report, a cooperative society of these workers has been formed in the taluka in which 150 households have been enrolled as members. Apart from the Kotwalias, a few Vasava households have also joined this society. After the formation of this society, these households get a regular income but not much. Due to the low income of these households their living standard is very poor. One of the main reasons for the low income is that still they are engaged in making only old types of products whose demand is not much and also which does not fetch good price. What is needed is to train these Kotwalias

and other members to make such products whose commercial value is good. A number of such products can be manufactured for the urban markets. But for this it is essential to organize suitable training programmes for them.

The potentiality of organizing the bidi-making industry on a sound basis involving a large number of Adivasis, particularly girls and women exists in this taluka in sufficient measure. In the forests of this taluka, "Timru" leaves are available in abundant quantity and there is no dearth of manpower. But till now only 13 persons have been given training in this craft. In view of this it is suggested to approach the Gujarat State Forest Development Corporation to organize the industry on a good scale. This will take shape as an important forest-based industry in this taluka.

Like the bidi-making work, the leaf-plates and leaf-cup making work too has a good scope to be developed as a forest-based industry. At present only 125 persons are engaged in this trade. As there is good availability of Sag leaves in the forests of this taluka, quite a large number of persons can take up this trade as a cottage industry. The most important aspect of this industry is to find out the markets for these products. The Adivasis by themselves can't solve this problem. Training programme for making decent and strong leaf-plates and leaf-cups should be organized for those who are to be involved in this trade. This again should prove to be a good source of earning income for the Adivasi women who have a natural knack of making these products.

Tailoring is gradually assuming an important source of income. Presently 300 persons in the taluka have taken up this trade. To expand this into a viable cottage industry, more persons should be trained in this craft. The dresses made by those who are engaged in this are

usually sold in the local markets or they cater to the needs of their co-villagers. It will prove to be more profitable trade only when their materials find ways into outside markets. Serious attempts will have to be made for searching out markets. But before this is done it will have to be seen that they receive the necessary training for making marketable dresses. Those who have already under-gone training may be given refresher training in order to equip them for making good quality garments.

Brick-making is a useful and remunerative trade but in this taluka it has severe limitations as the demand for bricks is not much. The Adivasis, who are in overwhelming number in this taluka live in 'Kachcha' house. Therefore brick has no market so far house construction activities are concerned. But now the demand of bricks is bound to increase in this area because of the construction activities going on for Narmada Dam. It is possible now to involve more persons in the brick-making industry.

Through the Khadi Gram Udyog Board, 259 persons have been given training for spinning on Ambar Charkha. They have also been provided with Ambar Charkha. It is, of course, difficult to know how much income they are earning from this source. But it appears that this activity has not been organized in a suitable manner by which the households can earn a good income. In view of this it is suggested to organize this activity on a sound basis, plugging all loopholes such as regular supply of cotton, good arrangement for repair of the Charkhas in case of break-down, collection of spun yarn from individual houses and finally regular payment to the individual spinners.

As fishing industry will assume more importance in near future, making of fishing nets will also have better prospects. In view of this, financial assistance to more

and more persons in this taluka may be provided for taking up this work. In fact, if they are given training to weave excellent fishing nets, their products may have the chance to be sold outside. Hence, it will be in the fitness of things to give more encouragement to the individuals engaged in this cottage industry.

Making of tiles does appear to have a lucrative proposition as a cottage industry. It will be more appropriate to organize the persons engaged in making tiles in the co-operative sector. With the financial and technical assistance provided by the District Industries Officer, a cooperative unit of Sagbara Tile-makers can be easily organized. If this is done, it is bound to bring better income to those engaged in this cottage industry.

On the same pattern a cooperative unit of persons engaged in pottery making can be organized. Already 100 persons are engaged in this work. There should be no problem in organizing them under the cooperative sector.

From the foregoing discussion it is clear that some of the cottage industries listed above have a better prospect and if organized on a sound basis it will certainly help a lot in improving the economic condition of the people. Till now, these works are largely taken as subsidiary ones. Our endeavour should be to make this so lucrative that the Adivasis start taking up these as their main occupations.

CHAPTER VII

ON-GOING PLANNED ACTIVITIES AND THEIR
IMPACT ON POORER SECTIONS

In this Adivasi belt, the first Community Development Block was started in the year 1953 but its activities were mainly confined to the villages of the then Valia Mahal and Jhagadia taluka. Later, the National Extension Service Scheme was launched in Nandod taluka in the year 1955. In Sagbara taluka, the development activities actually started with the opening of Tribal Development Block, Sagbara on 1-4-1962. Through the activities of this Block, attempts had been made to spread the use of improved seeds, fertilizers and improved agricultural implements among the Adivasi farmers who were generally practising agriculture on traditional line in which these improved practices had no places. The farmers of this taluka were also taken on tours of non-tribal areas in order to see by themselves the improved ways of doing cultivation. In the taluka itself, demonstration plots had been established to inculcate among the Adivasi farmers the use of improved seeds, spacing, application of fertilizers and insecticides. Efforts had also been made to bring more and more cultivable land under irrigation. And within a decade after the Tribal Development Block was started, more than 1700 hectares of the cultivable land was brought under irrigation. Under the Land Improvement Act of 1942, soil conservation schemes were also introduced in this taluka, although very few cultivators took benefit of the scheme.* Similarly to improve the yield of cotton, the taluka, alongwith the neighbouring Adivasi talukas, was

brought under the Cotton Zone Act of 1952.* In order to maintain the purity of the cotton produced in this region, the area was declared as Digvijay Cotton Zone. The cultivators were given facilities to grow only Digvijay and other improved hybrid variety of cotton. On account of the efforts made in this direction, the acreage of land in which cotton was cultivated went up considerably.

Due to introduction of these schemes for the improvement in agricultural practices, some cultivators started using chemical fertilizers, such as ammonia sulphate, urea, super phosphate and ammonia sulphate-phosphate. Use of green manure was also adopted by some. Although the number of such cultivators who adopted these changes was not much, atleast the schemes helped to break the ignorance of a large number of cultivators. In terms of achievements of the Tribal Development Block's programmes, it is difficult to say how much impact these had made on the poor tribals of this taluka. But on the whole it is apparent that not much substantial progress has been achieved so as to make any concrete impact on the agricultural economy of the tribals of this taluka. During the field work it came to be known that in a number of villages, particularly those located in the hilly and forest tract, the tribals have never used improved variety of seeds and implements and chemical fertilizers. Irrigation facilities are still lacking in a large number of villages. This suggests that in actual terms the Block's programmes did not improve the existing situation to an appreciable extent. The major items of the agricultural development programmes reached only a small number of tribal cultivators.

In the sphere of animal husbandry programmes, a good number of improved variety of one-day bird and 4 months' birds had been supplied free of cost to the tribals. Steps were also taken to improve the breed of

* Ibid

* ITDP Report, Rajpipla, Vth five year plan, 1975

local cattle and to keep them free from diseases. There were number of other facilities in terms of subsidy for purchase of bullocks etc. which had been also introduced. Veterinary services were made available to the tribals. But it was very inadequate looking to the terrain and the livestock population. The poultry development programmes also did not prove to be successful for variety of reasons.

In terms of developing infra-structure facilities, 3 km of pucca road was constructed after the Block came into existence. Several approach roads had been constructed through the Block's programmes, but were washed away in the rainy seasons. As such, not much progress was achieved so far communication facilities were concerned.

The number of cooperatives before the Block came into existence had been 16. It went down to 15 during the period of Block's existence. However, the number of members which was only 910 before the Block was started, went up to 1196 in a decade. All these members were of Primary Agriculture Credit and Multi-purpose Societies. Through these societies, the members received loan for productive purposes. On account of the forest area being in dispute, not a single Forest Labourers' Cooperative Society could be organized in this taluka. But the overall picture which emerged during the field-work was that although cooperative movement had spread in the taluka it hardly proved to be of real use to the tribal agriculturists, particularly belonging to the poorer section, mainly because of the rules regarding giving loans, poor membership in these societies, and non-representation of the tribals in the various committees of the societies. On account of these factors, the maximum advantage of the societies was taken away by the non-tribal cultivators who were holding the key posts in these societies.

During the period of Block's existence, seven more primary schools were opened. Formerly the number was 72, which went upto 79 after the Block came into exist-

tence. Of these, 61 were one teacher schools, while 18 were multi-teacher schools. The number of students in the one teacher primary schools actually went down. In 1960-61 i.e. before the Block came into existence, the number of students in the single teacher primary schools was 2111 which in 1970-71 was reduced to 1990. But in the more than one teacher schools the number went up from 1316 to 2831. During the Block's period a high school was started at Sagbara. Thus, although several schemes had been put into operation for attracting tribal children to schools, not much improvement in the enrolment of students appears to take place during the Block's existence.

In the sphere of health services, a Primary Health Centre had been started by the Block in the year 1965. Beside this, six sub-centres and two Rural Health Centres had been started during the period of Block's existence. Detail discussion about the growth of health services in this taluka has been made earlier in Chapter III.

The poor economic conditions of the majority of the tribals in this taluka clearly suggests that although a substantial amount of money (nearly Rs. 35 lakh) had been spent during the period of the existence of the Tribal Development Block, there was no worthwhile impact on them. Still the area is poorly developed with inadequate physical and social infra-structure facilities, as has been reviewed in the Chapter III. In the I.T.D.P. Rajpipla's report prepared during the fifth five year plan the following remark has been made (P.74) regarding the performance of Tribal Development Block, Sagbara.

"The Tribal Development Block schemes suffered from various shortcomings viz. coverage of limited population, absence of socio-economic surveys, expenditure on large rather than minor development programmes, etc." From the commercial point of view too, the region is much underdeveloped. The grip of local traders on the tribals continue and hence exploitation continues. The expenditure made during the Block's period was mainly on construction, purchase of equipment, payment of stipend,

pay of Instructors, etc. The expenditure incurred on the construction of fair weather roads was totally wasted as in the absence of any provision for their maintenance, the roads became as good as non-existent. Similarly in the field of education, one can see by the deplorably low number of students that not much impact was brought by the programmes of the Block.

On discussion with the local leaders it was learnt that most of the achievements of the Block work were concentrated in the villages of the plain region i.e. on the south eastern area. For doing things quickly and with least trouble and with an aim to fulfil the target, only those villages were approached where there have been possibility of doing things quickly and easily.

After the Block's period was over and the tribal development's programmes was undertaken under the tribal sub-plan, several schemes had been implemented in this taluka. In the field of agriculture, inputs kits were distributed to several farmers. Subsidies (50 %) were given to these farmers for chemical fertilizers, pesticides, implements, oil engines and electric motors. At the Farmers Training Centre which was started by the I.T.D.P. Rajpipla at Rajpipla, several tribal farmers of this taluka received training. They were further given assistance to take up improved methods of agriculture. Two units of soil testing were created by the I.T.D.P., one stationery and the other mobile. The mobile one helped the tribal agriculturists to know the type of soil and to use the right way of fertilizers in order to remove the deficiency of soils.

It had been proposed to cover 1800 and 300 farmers from this taluka for distributing, at subsidized rates, Baroda hoe and plant puller. 4000 compost pits had been planned to be dug during the fifth five year plan period. In the same manner, 500 farmers were to be given assistance on subsidized rates for purchasing chemical fertilizers and 3,000 for improved seeds. Further 10,000 seed packets, 20000 grafts of fruits were to be distributed. 200 demon-

stration plots for the improved varieties of seeds and modern agricultural practices had been planned to organize in this taluka. 5400 hectares and 7900 hectares of land were to be brought under terracing and contour bunding respectively.

These were the major programmes designed in the field of agriculture by the I.T.D.P. It will be difficult to say how much of these have been implemented and if implemented what impact has been brought on the tribal farmers, particularly belonging to the poorer sections.

In the field of irrigation, 5 lift-irrigation schemes, 20 check-dams, construction of 50 wells and instalation of oil-engines had been planned for the fifth five year plan. But as has been reviewed in Chapter II regarding the position of irrigation in this taluka, not much has actually been implemented.

Without going into further details of the schemes in other spheres, it can be safely assumed that although the programmes chalked out for the Sagbara taluka was quite ambitious, these were not implemented into and in case of some schemes which were implemented, the benefits did not reach the poor people. This is very much clear when we find that large number of households in the sample survey are still below the poverty line. The only scheme which appears to have benefited poor section of the taluka's population is the organization of the 'Sagbara Bans Sahkari Mandli (cooperative society for the manufacturers of bamboo products). Due to the organization of this society the Kotwalias who had to live on mercy of the traders, could find a source to have a steady and reasonable income. It has helped them to earn a little bit better income although they still continue to have a poor living.

Now let us turn to schemes which have been recently undertaken by the I.T.D.P. Rajpipla under the tribal sub-year plan schemes. A list of the schemes is given below. These schemes have been implemented during the year 1977-78 and 1978-79.

Sr. No.	Name of the Scheme	No. of beneficiaries
1.	Construction of grain godowns	— 408
2.	Land conservation scheme	— 63
3.	Grain Bank	— 254
4.	Purchase of milch cattle	— 190
5.	Assistance for learning work experience to the Secondary School's students	— 1 School
6.	Adult education	— 32 centres
7.	Supply of uniform to Gram Rakshak Dal	— 480
8.	Construction of rooms for primary schools	— 3 villages
9.	Supply of Community Radio set to village panchayat	— 23 Panchayats
10.	Supply of Gujarati language journal to village panchayats	— 54 Panchayats
11.	Supply of employment news magazine to educated unemployed youths	— 33
12.	Supply of materials to Bhajan Mandli	— 5 Mandlies
13.	Construction of well	— 9
14.	Construction of godowns	— 1
15.	Farmer's tours to Delhi's Agricultural Fair	— 18

Sr. No.	Name of the Scheme	No. of beneficiaries
16.	Assistance for starting bee keeping industry to those who received training in bee-keeping	— 6
17.	Supply of materials to trained persons in bee-keeping	— 3
18.	Supply of Fridge to P.A.V.C. unit.	— 1
19.	Financial assistance for purchase of buffaloes	— 18
20.	Financial assistance for purchase of fishing-nets	— 104
21.	Financial assistance for vaccination of cattles	— 50 units
22.	Balvadis for Kotwalia's children	— 7
23.	Supply of grains to Kotwalia families who are sending their children to school	— 400
24.	Supply of uniform to Kotwalia's children	— 320
25.	Supply of tools to Kotwalia's for basketry	— 94
26.	Running of male sewing classes	— 1 unit
27.	Assistance for wiremen training	— 30
28.	Assistance for training in diamond cutting	— 11
29.	Stipend to trainees taking training at Ankleshwar Training Institute	— 60

Sr. No.	Name of the Scheme	No. of beneficiaries
30.	Financial assistance to member of 'Sagbara Bans Sahkari Mandli' for purchasing bamboo	— 94
31.	Supply of sewing machines to trained persons	— 25
32.	Short term loan to cooperative societies	— —
33.	Financial assistance to Fishing Cooperative Society for purchase of a 'Tempo'	— 1
34.	Financial assistance to Adivasi students for purchasing bicycles	— 3
35.	Supply of material to Kindergarten Schools	— 12
36.	Electrification of hospital	— 2 units
37.	Supply of 'Atharpat'	— 100
38.	Construction of godown-cum store for poultry units	— 1
39.	Supply of graft of Mahuda trees	— 5000
40.	Subsidy to Bharuch Dairy	—
41.	Electrification of wells	— 25
42.	Training in typing	— 15
43.	Scheme for improvement of Secondary School	— 1
44.	Additional	— 632
45.	Construction of road	1 unit

On a careful look at the nature of the schemes listed above which are being implemented under the tribal sub-plan, it is easily revealed that a majority of the schemes are, such as supply of fridge to a centre, construction of godowns, supply of uniforms to Gram Rakshak Dal, etc. such which will not in any way directly help in improving the economic life of the tribal masses of this taluka. The failure to accomplish the goals of tribal development stems from implementing such schemes in a piecemeal manner which hardly touch even the fringe of the vast task. This taluka has a vast number of persons engaged in agriculture or in labour work. From the above lists, it is abundantly clear that hardly any attempt is being made to cover these persons on a large scale. Some of the schemes such as Farmer's tour or training programme at the Farmer's Training Centre will benefit the well-to-do agriculturists. There are practically very few schemes through which the army of landless labourers may be absorbed in gainful employment.

A great deal more information is necessary to assess the real impact of these schemes on the people, particularly regarding those belonging to the poor sections. Only through a series of carefully conducted evaluation studies, the impact of the schemes, so far implemented, can be known.

Regarding the programmes undertaken by the Integrated Rural Development Project and Small Farmers Development Agency, these have already been discussed in Chapter III. These agencies have implemented only a few schemes which hardly would have made any worthwhile impact on the poor people. Similar is the situation concerning the schemes undertaken in this taluka by the District Industry Centre, Khadi and Village Industry Board and voluntary agencies. The schemes of all these agencies have been mentioned in Chapter III.

Since about last 25 years, efforts have been made and are being made to raise the standard of living of the tribals in this taluka but despite so many schemes majority of the tribals are in poverty. The fact of the matter is that all the money spent, and efforts of all the so-called expert officials have meant almost nothing so far improvement in the socio-economic conditions of the poor tribals is concerned.

CHAPTER VIII

SUGGESTED ACTIVITIES FOR FULLER EMPLOYMENT

We have attempted to explore the possibilities of introducing more labour intensive technique schemes in the non-agricultural sector. Since small scale and cottage industries, largely based on the natural resources of the region and with which the tribal families are supposed to be familiar, will provide immediate solution to the grave problem of under-employment on a large scale and makes for a more equitable distribution of capital allocation, mobilizing idle resources, and helps to avoid a large migration of the tribals to outside, we are suggesting several schemes of this nature. Programmes of agro-forestry have also been given due weightage, due to the depletion of the forest wealth of the region, which itself has tremendous scope of generating enough employment opportunities. We are also suggesting to concentrate on vegetable production, poultry, fishery and apiary. Looking to the fact that in very near future, there is going to be huge development of Ankleshwar and Bharuch, marketing of the above mentioned products won't have any problem. In fact there would be so much demand of the above products that the supply position would certainly deteriorate unless advance action is not taken up. The Sagbara taluka's villages can contribute significantly to supply vegetables, eggs, chicken, honey, fish etc., to these towns.

In view of this it will be in the fitness of things to popularize the production of these items among the Adivasis of Sagbara taluka right from now. Our aim should be to link the expanding industrial and urban economy of Ankleshwar and Bharuch with the rural economy of areas

like Sagbara. This is one sure way to boost up the backward economy of the Adivasis to grow fast.

Plan of Action :

1. Increase in the Acreage of Pulse (Tuver Dal) Cultivation

Sagbara taluka has great potential for cultivation of 'Tuver dal'. The cultivators are already familiar with growing of 'Tuver dal' crop and quite a substantial portion of the cultivable land is being put for this crop. As 'Tuver dal' fetches good price in the market it is proposed to make an increase in the production of 'Tuver dal'. This can be done by increasing the acreage of cultivable land under 'Tuver dal' crop. At present about 1500 hectares of land is being put under this crop. It should be our effort to increase this acreage to at least 3000 acres in a period of 5 years. In the first year itself at least 500 hectares more should be brought under the cultivation of this crop. It is suggested to cover 250 cultivators and each one should be assisted to increase 2 hectares. If this is achieved, it will result in an increase in the production by 2,00,000 quintals which in turn, will generate an additional income of Rs. 250/- per annum to each household. It will generate an additional 13415 man days of work per year. The expenditure on this would come as follows :—

- (1) Supply of improved variety of seeds to 250 cultivators, @ 5kg. per cultivator i.e., 1250 kg. The expenditure of Rs. 5000 on this should be met from the BLP Fund on fully subsidized basis.

2. Establishment of a Mini Pulse Mill

At present almost the entire produce of 'Tuver' is being exported outside the taluka as there is no pulse mill in the taluka itself. Since it is being proposed to increase the production of 'Tuver', the presence of a pulse mill in the taluka itself will give lot of impetus to the cultivators to take up 'Tuver' cultivation on a larger scale. Hence, it is proposed that a pulse mill should be established in the taluka. This

venture should be undertaken under the cooperative sector. In the beginning, 100 cultivators should be enrolled as primary members of 'Sagbara Pulse Mill Cooperative Society.' Each of them will be allotted one share of Rs. 100 each.

Under this scheme it is proposed to form five units within a period of five years.

The expenditure to establish one unit of pulse mill will be as follows:—

(i) Share capital @ Rs. 100/—		
100 members	... Rs.	10,000
(ii) Cost of machinery	... Rs.	35,000
(iii) Cost of construction of godown and shed	... Rs.	50,000
(iv) Working capital	... Rs.	50,000
	Total.....	Rs. 1,45,000

If properly run, the mill will generate a profit of Rs. 20,000 per year. It will give employment to 12 persons. In case it is run for two shifts per day, it will further give employment to more persons. However, it is suggested to run the proposed mill in one shift only.

The following staff will be needed :—

(i) Supervisor	1
(ii) Assistant	1
(iii) Workers	10
Total	<u>12</u>

The yearly expenditure towards meeting the salary of the staff and labour charges will be in the vicinity of Rs. 30,000/-. In the first year this expenditure can be met from the working capital. Subsequently, when the proposed mill becomes a viable unit, the recurring expenditure for running the proposed mill can be met from its own income.

Thus the proposed mill will serve two purpose, first it will bring regular income of more than Rs. 200 per annum in the shape of dividend to its share holders. In this way it will generate additional 2000 mandays in a year. Secondly, it will provide regular employment to 12 persons, thus creating 3600 additional mandays of employment. Altogether 5600 mandays of work in a year will be created through this scheme.

The capital needed for purchasing the machinery and constructing the godown and shed i.e. an amount of Rs. 85,000 should be obtained from a Bank on loan but the rate of interest must be very low. The remaining sum of Rs. 60,000 will have to be contributed from the BLP Fund. Of this amount Rs. 10,000 i.e. the amount for purchasing shares by 250 share holders should be given to the share holders on subsidy basis. The rest of the amount i.e. Rs. 50,000 should be given from the BLP Fund on interest free loan.

Thus the total amount of expenditure of Rs. 1,45,000 to be incurred on the establishment of one unit of pulse mill should be split in the following manner:

(i) Assistance from the BLP Fund ..	Rs. 60,000
(ii) Loan from Bank ..	Rs. 85,000
	Total: Rs. 1,45,000

The proposed mill should be located at Selemba which is already developed as the main marketing centre in the taluka.

3. Establishment of Small Milling Units for Processing Paddy

Rice is an important crop in this taluka, next in importance of Jowar. Traditionally, the tribals have been husking the paddy by hand pounding method. In this manner, every day the quantity needed for cooking used to be

husked by the women of the family. Those cultivators who needed to sell certain amount of the produce for earning cash income have been in the practice of selling the paddy itself without processing it. Naturally, it fetched poor income when sold to traders. If they adopt the practice of selling the processed paddy, they are bound to get better income. Apart from this, the women would be saved from the drudgery of processing it through hand-pounding method which as a consequence would enable them to have more time to utilize in some other productive work.

In view of this, it is suggested to establish 5 such small milling units at five different places in the taluka. The expenditure towards starting one unit of such a processing mill will be as follows:—

1. Cost of Paddy dehusker 3 qtls. capacity with 2 H. P. Motor Rs. 5,000
2. Cost of Rice polishers 210 kgs. capacity with 1.5 H. P. Motor Rs. 4,500
3. Transportation & other charges Rs. 500
4. Working capital (This will include electricity charges, maintenance & repairs, rental & miscellaneous charge, labour charges, etc) Rs. 1,000
5. Share capital @ Rs. 25 per share for 25 members Rs. 625
	Total Rs. 11,625

The total expenditure for establishing 5 such proposed units will be Rs. 11,625 × 5 = Rs. 58,125. Of this amount Rs. 3,125 needed for the share capital in the 5 units and Rs. 5,000 which would be needed for the working capital, should be contributed from the BLP Fund in the first year. The rest of the amount i.e. Rs. 50,000 which would

be required for purchasing the machinery, should be obtained from a Bank as loan on low rate of interest.

The daily net income, (after deducting the cost of running the unit) likely to be made by each unit will be about Rs. 30. It is estimated that at least for 200 days in a year these units will remain in operation. Thus, total income per annum of each unit will be about Rs. 6000. If divided into 25 share holders, each of them would have an additional income of Rs. 300 per annum.

Apart from this, each unit will be employing 5 workers, who will be able to earn a daily income of Rs. 7.00 per day. Thus, 1000 additional mandays work will be created in one unit itself and taking all the 5 units together, there will be 5000 additional mandays. When the income of the share holders is computed for calculating the mandays to be generated, the total number of additional mandays of work created through this scheme will be in the vicinity of 8000.

The unit will be operated in a rented house and will be supervised in rotation by each of the share holders.

For implementing this proposal, a separate cooperative organization will have to be created. The membership of each of the cooperative unit will be restricted to the families of the village where the proposed milling unit will be established.

Thus, the total amount of expenditure to start these 5 units will be split in the following manner:—

(i) Assistance from the B.L.P. fund	
(a) as subsidy to share holders	
25 × 25 × 5	Rs. 3,125
(b) as loan for the working capital	Rs. 5,000

(ii) Loan obtained from Bank for purchasing the machinery for the 5 units	Rs. 50,000
	...
Total	Rs. 58,125

It is suggested to start these units in the following villages (i) Sagbara, (ii) Bhorambli, (iii) Chopadvav, (iv) Kankhadi and (v) Pankhals.

4. Manufacturing of Stone-chips

In several parts of the taluka, particularly in the hilly terrain in the western and northern parts, there is a great potentiality of manufacturing stone chips. The demand for stone chips is also quite encouraging. Due to the construction activities taking place in great stride at Narmada dam site and also in Bharuch and Ankleshwar, the marketing of stone chips will not pose any problem. On the line of the fishermen cooperative units, cooperative societies for the units for manufacturing of stone-chips too should be organized. Thus, this activity too will be in the cooperative sector.

It is proposed to start three such units in the current year in the taluka. Each unit will be organized within a separate cooperative unit. In each of the cooperative units, 50 persons will be enrolled as primary members. If the experience of running the units gives encouragement, one or two units may be started each year in the subsequent years.

The estimated expenditure for starting one unit will be as follows:—

(1) Share capital @ Rs. 21 for 50 members	Rs. 1,050
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(2) Salary of one supervisor for 12 months @ Rs. 400 per month	Rs. 4,800
(3) Cost of one crusher 14"×14" (granular)	Rs. 19,000
(4) Cost of one diesel oil engine 26-30HP	Rs. 23,000
(5) Cost of extra tools & equipments	Rs. 5,000
(6) Construction of katcha shed having one engine room, one store-cum-office room	Rs. 6,000
(7) Transport, erection and other preliminary expenses	Rs. 4,000
(8) Working capital for 3 months	Rs. 1,500
Total :	Rs. 64,350

The total investment for the proposed three units will be $3 \times 64,350$... Rs. 1,93,050

Out of this amount, the amount which would be needed for working capital, and for share-capital should be allocated from the B.L.P. funds. The remaining sum, which would be needed for the purpose of purchasing machinery, diesel oil engine, tools, & equipments, transport & erection charges and construction of katcha shed should be obtained as loan from a Bank on a low rate of interest.

The amount of share capital to be contributed from the B.L.P. fund should be granted to the shareholders on fully subsidized basis while the amount for working capital should be given on interest free loan to each of the cooperative units. Thus, the total investment of Rs. 1,93,000 has to be split up in following fashion:

(i) Allocation from the B.L.P. fund	
(a) Subsidy to 150 share-holders @ Rs. 21 per member	Rs. 3,150
(b) Interest free loan for the working capital of three units @ Rs. 1500 per unit	Rs. 4,500
Total :	Rs. 7,650
(ii) Bank's loan for purchasing machinery, diesel engine, etc. for three units @ Rs. 61,800 per unit...	Rs. 1,85,400

It is expected that if the units are run properly, each of them will be able to produce on an average 10 tonne of chips. At the prevailing rate of one bag of the chips in the market which is Rs. 4.00 the amount of profit made in a year will be about Rs. 20,000, after deducting the expenses for running the unit. In this manner in one unit, there will be scope for an individual shareholder to earn an annual income of Rs. 400 from this source. Apart from this each one will be getting employment in the stone crushing operation. Supposing that the unit works for 25 days in a month, each one will be earning a monthly income of Rs. $25 \times 7 = 175.00$. The annual income will be Rs. $175 \times 12 = 2100.00$. If the income derived from the profit earned by the unit is added to this the total income earned by one member will become Rs. 2500 per annum.

Each unit will be able to release 16,500 mandays of labour and when all the three units are combined together, the total number of mandays of labour generated under this scheme will be 49,500.

For operational purposes, a working committee should be formed from amongst the primary members of each

unit. From amongst the members of the working committee a Secretary should be elected. Here again, a Bank account of the unit should be opened. The Employment Project Officer for the implementation of the schemes of Block Level Planning should be on this committee and he should be specifically entrusted to arrange for the marketing of the stone-chips.

(5) Carpentry

As the Adivasis are born carpenters, they can start this industry without much difficulty. In the forests of Sagbara, the raw material, i.e. wood needed for this industry is in plenty. These two factors hold a good promise for the successful operation of a carpentry shop. The only snag is regarding the problem of marketing the products made at the individual's shop. The simple Adivasis cannot solve this problem by themselves. As such, the responsibility of marketing the products will have to be shouldered by an organization, specially created for this purpose.

It is proposed to cover 100 Adivasi households under this scheme. Each household will be given financial and technical assistance to establish a carpentry shop for making simple and cheap stools, chairs and tables and undertaking repair works for plough, cart-wheel, etc. The financial assistance will be given for the following purposes:

(1) Purchase of 3 Hand shapers	Rs. 150
(2) Purchase of 4 Hand saws (different size)	Rs. 75
(3) Purchase of 3 Vices	Rs. 175
(4) Purchase of minor tools:	
4 Hammers	
3 Hand operated drill	
1 Tessa (for shaving)	Rs. 475

(5) Erecting a platform for working	Rs. 225
(6) Working capital (for 15 days)	
(i) Wood-one log would be needed for 2 days which means 8 logs would be needed for a fortnight. The price of one log being in the vicinity of Rs. 150 the amount which would be needed to be given to each house-hold for this purpose would be	Rs. 1,200
(ii) Miscellaneous materials like nails, sandpaper, polish, spirit, varnish and fevicol, etc.	Rs. 100
<u>Total:</u>	<u>Rs. 2400</u>

Since 100 households are to be covered, the total amount of investment to be made under this scheme will be $Rs. 100 \times 2400 = 2,40,000/-$.

Out of the total amount to be given to each unit, i.e. Rs. 2400, the amount needed for purchasing tools & equipment i.e. Rs. 1,100 should be obtained from a Bank on loan at a low rate of interest. Thus, the total amount to be obtained as loan from the Bank for covering 100 households will be Rs. 1,10,000/-.

The amount of Rs. 1,300 needed as working expenses for a fortnight should be allocated from B.L.P. funds to each house-hold on 50% subsidy basis. The remaining 50% will be given on interest free loan to be recovered in easy instalments. The allocation from the B.L.P. fund for implementation of this scheme will beRs. 1,30,000/-.

All these 100 units will be organized under a co-operative body which will undertake the responsibility of

marketing the products. A working committee from amongst the primary members of the body will be formed to guide the members, to search the potential market for the products and also to take advance orders from the potential customers. Each member will be required to purchase a share of Rs. 10/-. The membership fee will be Re. 1/-. This sum of Rs. 11 will have to be paid by the members. But the payment of this amount may be realized after a month or two of the establishment of the carpentry workshop.

It is suggested that the households to be covered under this scheme should be selected from the villages lying in the western, northern and southern parts of the taluka.

If properly organized, each household will be able to earn an annual income of Rs. 6,000 @ Rs. 40 per day for 150 days work in a year. During agriculture season the shop will almost remain idle.

Each unit will be able to generate 400 mandays of labour. Taking together the 100 units, 40,000 mandays of labour will be generated in a year.

6. Furniture Making

This scheme is meant for such landless Adivasis or small farmers for whom it will be the major source of income. This scheme will give encouragement for the development of entrepreneurship among the Adivasis of the Sagbara taluka.

In the current year it is proposed to start 5 units. The capital investment needed for starting a unit will be Rs. 9500. The break-up of the capital investment will be as follows:

	(Rs.)
1. Purchase of one wooden Cutter	1,600
2. Purchase of one fixed Drill with 0.5. H.P. motor	1,375

3. Purchase of one Bend saw with 3 H.P. Motor	4,200
4. Erection of three working platforms @ Rs. 225 each	675
5. Purchase of three set of minor tools @ Rs. 550 each.	1,650
	<hr/>
	Total Rs. 9,500

Apart from this amount, each unit will be provided with financial assistance for running the unit for 15 days by which time, it is expected that the units will start earning income by the sale of the manufactured goods. The total amount to be allocated as working capital to one unit will be Rs. 9600. The break-up of the amount needed as working capital of one unit will be as follows:—

1. Supply of 3 logs per day for 15 days @. Rs. 150 per log + transportation charges	Rs. 7,500
2. Electricity charges	225
3. Labour charges for 5 workers @ Rs. 15 per day for 15 days	1,125
4. Miscellaneous materials like nails, sand paper, polish and fevicol, etc for 15 days @ Rs. 50 per day.	750
	<hr/>
	Total Rs. 9,600

Thus, the total investment for starting 5 units will be $(Rs. 9500 + Rs. 9600) \times 5 = Rs. 95,500$. Of this amount, loan on a low rate of interest should be obtained from a Bank to the tune of Rs. 47,500 for financing the purchase of tools, equipment, electric motors and for erecting working platforms. The remaining balance of Rs. 48000 should be allocated from the B.L.P. fund. Each unit will be granted the amount of Rs. 9600 on 50% subsidy basis, and 50% on interest free loan basis to be recovered in easy instalments.

The marketing of the manufactured goods will have to be arranged on the same lines as suggested in the previous item i.e. carpentry.

This scheme should be operated in only those villages where electricity is available. In view of this it is suggested that the entrepreneurs should be selected from Sagbara, Chopadvav, Bhorambli, Pankhala and Kankhadi villages. On the experience gained from running these units if it seems to be worthy of extension, other villages where electricity is available should be covered in the subsequent operations.

It is expected that these units, after deducting the working expenses, will be able to earn a profit of Rs. 70/- per day per unit. In this manner, the annual profit earned by one unit will be Rs. 14000. Thus, the annual profit accruing from all the 5 units will be Rs. $14000 \times 5 =$ Rs. 70,000. This scheme will be able to generate 7000 mandays of labour per year. Besides this, each unit will give employment to 5 workers which, all the units taken together, will generate 7500 mandays of labour. On the whole, therefore, under this scheme, 14500 mandays of labour will be generated in a year.

7. Wooden Packing Cases Making Units

This scheme is intended to manufacture all kinds of packing cases and boxes, required in various firms and factories, out of soft wood. The scheme is planned to work on small scale industry basis employing 50 persons. It is suggested to form a cooperative unit of 50 persons who will be working in the unit as employees. With suitable training provided to the Adivasis, they can be expected to operate the unit by themselves. The share capital money @ Rs. 51 per primary member should be raised to the tune of Rs. 2550.

The capital investment for purchase of equipments and erecting a building will be as follows: Rs.

1. Land site-1/2 acre-to be granted from Govt. or panchayat owned land.	—
2. Construction of a shed.	4,000
3. Building-140×45 ft.-6,300 sq. ft @ Rs. 10 per sq. ft.	63,000
4. Purchase of one 48" Horizontal Band saw machine with rack and penion, hand driven trolley, motor of 15 H. P. 3 phase 50 cycles, 440. volts	20,000
5. One 42" verticle band saw with table, motor 10 H.P. 3 phase, 440 volts 50 cycles	7,500
6. One 24" circular saw bench-10 H.P. motor 3 phase 50 cycles, 440 volts	4,000
7. One 10" circular saw bench 5 H.P. motor.	2,500
8. One 12" cross cutting bench, with wide travelling carriage, for cross cutting, power 3 H.P.	5,000
9. One 14" (DC walt) all purpose power saw or radial arm saw—5H.P.	6,000
10. One 24" Planer and thicknesser-power 7.5 H.P.	12,000
11. One 9" jointer.	2,500
12. One Bench type spindle moulder 2. H.P.	2,500
13. One Dovetailing machine	2,500
14. One saw sharpener and setter combined H.P. 1.5 to take Band Saw up to 5" and circular saws up to 24"	4,000
15. One electric Brazing machine, capacity 3" blade	625

16. One double ended bench grinder 15" x 1" stone dia.	1,250
17. One 7" Mall saw electric	625
18. One 150 feet trolley line (7 lbs. per foot rail)	2,500
19. Electric installation for power and lighting for factory and machines	10,000
20. Office equipment	25,00
TOTAL	1,53,000

The working capital needed for running the unit to meet the expenses towards wages of workers, purchasing of raw materials and other items of recurring expenditure will be as follows :

1. Supervisor (Technical)	1	..Rs.	500 P.M.
2. Accountant cum Cashier	1	..Rs.	400 P.M.
3. Store keeper @ Rs. 250 each p.m.	2	..Rs.	500 P.M.
4. Skilled workers for various jobs @ Rs. 250 p.m. each	38	..Rs.	9500 P.M.
5. Watchman @ Rs. 150/- p.m.	3	..Rs.	450 P.M.
6. Carriers @ Rs. 150 p.m.	5	..Rs.	750 P.M.
7. Purchase of soft wood 300 cft. per day per month 300×25 =7500 cft. @ Rs. 3 per cft.		Rs.	22500
8. Purchase of 1/2 cwt. wire nails per month		Rs.	750
9. Electricity charges		Rs.	450
10. Miscellaneous @ Rs. 30 per day for one month 30×25		Rs.	750
Total :		Rs	36,550

This amount needed for the working capital will have to be granted for three months' duration, after which the unit will be able to meet its working expenses from the profit earned by the sale of the goods manufactured at the unit.

It is expected that after deducting the working expenses and interest charges etc. the unit will be able to earn an annual profit of Rs. 40,000.00 which may be distributed as dividend among the primary members of the co-operative unit, @ Rs. 800 per member. Besides, 50 employees will earn an annual income of Rs. 1,45,200. These employees will be share holders too.

A working committee should be formed from amongst the primary members which will supervise the functioning of the unit.

The capital investment needed for purchasing equipments, machinery and constructing a building i.e. Rs. 1,53,000.00 should be obtained as loan from a Bank on low rate of interest. While the amount needed as working expenses for 3 months @ Rs. 36550, p.m. should be allocated from the B.L.P. fund on 50% subsidy basis and 50 per cent interest free loan basis. Thus the total amount to be allocated from the B.L.P. fund will be. Rs. 1,09,650.00.

It is expected that under this scheme 20000 mandays of labour will be generated.

The problem of marketing the boxes should be tackled in the same manner as suggested in item No. 6 and 7. As there is going to be a great demand of packing boxes at Ankleshwar and Bharuch, there should not be any problem in marketing the products.

This unit may be located at Sagbara.

8. Scheme for the Manufacture of Straw Boards from Grass and Straw

There are a few factories manufacturing straw boards at present on large scale basis using grass and straw as raw material. This scheme envisages the manufacture of 5 tons per day of 24 hours of straw boards economically on small scale basis in the taluka where sufficient quantities of grass, straw, water, electricity and labour are available.

The total investment on this scheme will be :—

(i) Machinery and equipment and building	Rs. 3,80,000.00
(ii) Working capital for 3 months i.e. Rs. 62,150 × 3	Rs. 1,86,450.00
Total	Rs. 5,66,450.00

Out of this amount, Rs. 3,80,000 which would be needed for fixed capital investment should be obtained from a Bank as loan on low rate of interest. While the amount needed for working capital for 3 months should be allocated from the B.L.P. fund on 50% subsidy and 50% interest free loan basis.

The marketing of the products will have to be arranged in the same manner as envisaged in item No. 6, 7 and 8.

It is suggested to form a co-operative unit enrolling 100 primary members, who will be employed in the unit as skilled and as other staff members of lower category. Each primary member will have to subscribe as a share holder. The rate of share per member will be Rs. 51. Thus the total amount as share capital will be Rs. 5100.00. This amount should be granted to the share holders on subsidized basis from the B.L.P. fund. Thus, the total allocation from B.L.P. fund will be:—

(i) Working capital for 3 months @ Rs. 62,150 per month	Rs. 1,86,450.00
(ii) Share capital	Rs. 5,100.00
Total :	Rs. 1,91,550.00

It is expected that this unit will be earning an annual profit of Rs. 72,000.00 after deducting the working expenses, interest charges and transportation charges, etc. Besides 102 employees will earn a monthly income of Rs. 18,400 i.e. Rs. 2,20,800 per annum. This scheme will be able to generate 37200 mandays of labour in a year.

This unit may be located at either Pat village or Chopadvav village or at a place where sufficient quantity of water is available.

With the industrial expansion in various fields at Ankleshwar and Bharuch, the use of straw board is likely to multiply several times and if such a unit is put up in Sagbara taluka where above facilities are available, several households will get benefit of employment.

The capital investment needed for purchase of equipments, machinery and erecting a factory building will be Rs. 3,80,000.00. The break up of the expenditure on this amount of fixed capital investment will be in the following fashion.

1. Land—2 acres—To be allotted by the Taluka Panchayat or by Government.	
2. Building—5000 sq. ft.	Rs. 55,000.00
3. Machinery and equipment	
(i) pulper	4
(ii) straw cutter	3
(iii) beaters	3
(iv) agitators	2
(v) digester	1
(vi) agitation tank	2
	Rs. 140,000.00

(vii) fourfrinier machine complete with, acce- ssories.	1	
(viii) hydraulic press		
(ix) calendering machine		
(x) Rotary cutting machine		
4. Boiler		Rs. 15,000.00
5. Electric motor and pumps		Rs. 40,000.00
6. Pipe fitting		Rs. 5,000.00
7. Erection and foundation		Rs. 25,000.00
8. Truck		Rs. 100,000.00
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Total :		Rs. 380,000.00

The working capital needed for running the unit will be as follows :—

1. Manager-cum-Chemical Engineer	1	Rs. 1000.00 P.M.
2. Supervisor @ Rs. 400.00 P.M. each	3	Rs. 1200.00 ,,
3. Skilled workers @ Rs. 200 P.M.	30	Rs. 6000.00 ,,
4. Unskilled workers @ Rs. 150 P.M. each	60	Rs. 9000.00 ,,
5. Watchman @ Rs. 150 P.M. each	3	Rs. 450.00 ,,
6. Driver @ Rs. 150.00 P.M.	1	Rs. 150.00 ,,
7. Clerk cum Typist	2	Rs. 300.00 ,,
8. Store keeper @ Rs. 150.00	2	Rs. 300.00 ,,
9. Raw material (per month) grass 350 tons @ Rs. 75 per ton including transport charges		Rs. 26250.00 ,,

10. Chemical lime, rosin, sodium, silicated yellow ochre etc.	Rs. 5000.00 ,,
11. Other items of expenditure such as fuel, electricity, water etc.	Rs. 12500.00 ,,

Total : Rs. 62,150.00

9: Leaf plants and Leaf cups Making Unit

Khakhra leaves are excellent for making leaf plates and leaf cups. These leaves are available in plenty in this taluka. As a forest based industry this can help several Adivasi families to raise their level of income. This activity should be promoted on household basis. Each household will need a capital of Rs. 800.00 only to start this cottage industry.

It is proposed to cover at least 100 households in the current year. The households to be covered should be selected from the villages of hilly and forest tract i.e from the northern and western part of the taluka.

The total capital investment on this scheme, covering 100 households will be $800 \times 100 = \text{Rs. } 80,000.00$. As this is a bankable scheme and loan upto Rs. 300.00 can be obtained for each household, the total investment can be split in the following manner :

(i) Bank loan @ Rs 300.00 per house- hold for 100 households	Rs 30,000.00
(ii) Allocation from Block Level Planning fund on subsidy basis	Rs 50,000.00
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Total : Rs 80,000.00	

For marketing the goods arrangement will have to be made through the office of the Employment Officer to be posted for implementing the B.L.P. schemes.

It is expected that each household will be able to make about 25000 leaf plates and leaf cups in a month and at the prevailing rates, a monthly income of about Rs. 350.00 can be earned after deducting the working expenses. Thus, each household will have an annual income of Rs. 4,200.00. It is expected to generate 42000 mandays of labour, if the income of all the units is computed together.

10: Bee-rearing and Honey Making

Honey collection is an important activity of the Adivasis living in the forest region of the Sagbara taluka. But they are not aware of the process of bee-rearing. Since the northern and western regions of the taluka have natural forest, the bee-rearing activities can be pursued without much difficulty. As there is good demand of honey, there won't be any problem of marketing the honey. Without spending much time, the Adivasi families can raise their level of income by adopting this scheme. In view of this it is suggested to undertake this scheme under the Block Level Planning Programmes in this taluka. Some of the crops, such as 'Tuver dal' will get indirect benefit from bee-rearing. Apart from the honey, another by-product of Bee-keeping is the Bees'-wax, which is an important element in comb-foundation of artificial hives, for furniture and floor polishes, dressing and water proofing of leather goods etc.

It is proposed to cover 100 households under this scheme. Each household will need Rs. 1,200 to start Bee-keeping industry. The total capital investment for covering 100 households under this scheme will be to the tune of Rs $1200 \times 100 = 1,20,000.00$. The break up of the investment is given below:

1. Fixed capital investment for one unit	
(i) Cost of 10 honey boxes @ Rs. 600.00	Rs. 600.00
(ii) Cost of frames, wax sheets and accessories	Rs. 175.00

(iii) Cost of 10 bee colonies @ Rs. 7 each	Rs. 70.00
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Total :	Rs 845.00
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(Bank Loan)

2. Working expenses (yearly) for one unit

(i) Cost of feeds (sugar) 2 kgs. per box @ Rs. 6.00 per kg. $2 \times 6 \times 10$	Rs. 120.00
(ii) Cost of bottles, etc.	Rs. 80.00
(iii) Marketing and labour chartes etc. @ Rs. 8.00 each box	Rs. 80.00
(iv) Other expenses	Rs. 75.00

Total :	Rs. 355.00
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(B.L.P fund)

Grand Total ..	Rs. 1200.00
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It is expected that the total production per box in a year will be 7.5 kg. which means that a household will be able to produce 75 kg. of honey per year. At the prevailing market price of Rs. 15 to 20 for one kg. of pure honey, a household will be able to earn (taking Rs. 15 as the minimum price) $75 \times 15 = \text{Rs. } 1125$. Deducting the amount of working expenses, which will be Rs. 355, the net income which will accrue to a household will be $\text{Rs. } 1,125 - 355 = \text{Rs. } 770.00$. Taking the 100 households together, the total amount of income earned by these households will be $\text{Rs. } 770 \times 100 = \text{Rs. } 77,000.00$. Thus it will be possible through this scheme to generate 7700 mandays of work.

It will be highly desirable if all the 100 households to be covered under this scheme are made primary members of a cooperative society, specially created for this

purpose: "Sagbara taluka Honey Producers Cooperative Society". Through this society arrangements for the sale of the honey as well as for imparting training to the beneficiaries can be arranged.

The allocation of the total investment to be made for starting 100 units will be as follows :—

(i) Loan from a Bank	Rs. 84,500
(ii) Subsidy and interest free loan from the B.L.P fund	Rs 35,500
Total :	<u>Rs 1,20,000</u>

In subsequent years a target of 50 households should be earmarked to be covered under this scheme.

11: Poultry Farming

Traditionally, the Adivasis have been raising poultry in their households. But that was meant specially for the purpose of entertaining guests and for the ritual sacrificial offerings to their deities. On and often they also consumed the chicken-birds. Poultry-raising for earning income has been unknown to the Adivasis. Due to this reason, although they have always raised poultry, they fail to undertake the government sponsored scheme for poultry farming for the sake of earning income. One of the bottlenecks of making poultry farming popular among the Adivasis as a potential source of earning regular income has been the absence of marketing facilities. Although about 20-25 pc. of the eggs sold in Bombay and Delhi markets are supplied from unorganized poultries especially of Gujarat, Andhra Pradesh, Kerala and other states. We have not been successful in bringing such facilities to the Adivasis. The marketing facilities in Adivasi areas require to be given serious attention.

In view of the fact that poultry raising has been a significant activity for the Adivasis, it is being suggested

to cover 300 households in the current year under the scheme of poultry farming.

Poultry development programmes have already been implemented by the Integrated Tribal Development Project. In the fifth five year plan, a target of 3000 beneficiaries had been earmarked and a financial outlay of Rs.4.5 lakhs had been earmarked.

The Small Farmer Development Agency has also initiated such a scheme in Sagbara taluka and in the year 1979-80, 40 beneficiaries have been covered. If this has been achieved, poultry farming must have become popular in the taluka. In the absence of any evaluation study it is difficult to say how much success has been achieved in this regard. Nevertheless, there is still tremendous scope to push poultry farming programme in this taluka. As such under the B.L.P scheme too, the programmes need to be taken up vigorously.

Under this scheme, each of the beneficiary should be enrolled as primary member of the Poultry Breeders Society, Valia by purchasing a share. On becoming a member he will be able to get birds free.

On the lines of Kerala poultry into backward areas, it is proposed that each household to be covered under this scheme should be encouraged to have a unit of only 20-25 birds. For such a unit no equipment is needed. The investment for such a unit is to be made in the following manner :—

(1) Cost of 40 day old chicks (unsexed) at the rate of Rs. 1.25 each	Rs. 50.00
(2) Feed bill for 20 layers for 18 months 30 kg. at the rate of Rs. 1.25 per kg. :	Rs. 750.00
(3) Part feeding bill for 20 males for 6 months—3kg.	Rs. 75.00

(4) Medical & Misc. charges at the rate of Re. 1.00 per bird	Rs. 20.00
(5) Share capital	Rs. 21.00
<u>Total :</u>	<u>Rs. 916.00</u>

With the provision of cheaper feed and institutional care under the schemes of tribal sub-plan, a saving of Rs. 100 to Rs. 150 per annum in the feed and medical charges can be realised, which in turn will boost the income of the household up from this source.

To start this scheme, each household should be given free birds. As suggested earlier, if the beneficiary is enrolled as a member of the Poultry Breeders Society, Valia, he will be getting birds free. Thus, the amount of Rs. 21.00 per household for purchasing the share of the said society should be given on fully subsidized basis. Apart from this, each household should be granted a sum of Rs. 200.00 as working capital on fully subsidized basis. The total budgetary requirement for implementing this scheme in Sagbara taluka will be :

(1) $21 \times 300 =$ Rs.	6300.00
(2) $200 \times 300 =$ Rs.	60,000.00
	<u>66,300.00</u>

This entire amount should be allocated from the B.L.P. fund.

If adequate marketing arrangements for the sale of eggs, sale of males at 5-6 month age, weighing 1 kg. and sale of 16 old layers are made, a household is likely to earn an income of about Rs. 1000 per annum. For the marketing arrangement, any private agency from the city of Bharuch and Ankleshwar, which deals in this business, should be contacted and be given contract on commission basis. As a godown and five store rooms have been constructed under the tribal sub-plan programmes, the storage

problem can be tackled to a great extent. Further, a poultry feed plant has started functioning at Valia due to which supply of feed to the beneficiaries can be maintained regularly without much difficulty.

This scheme will generate 30,000 mandays of work in the taluka.

The beneficiaries of this scheme should be selected from the landless, small and marginal farmer families in the ratio of 40:30:30.

After the units start functioning, arrangement for a close watch on the beneficiary households should be made. For this purpose a committee should be formed from amongst the beneficiaries themselves with the Employment Officer as its Chairman. The committee's task will be to see that units function smoothly. The committee will also look into the marketing of the products.

12. Cane And Bamboo Products

There are 140 households belonging to Kotwalia tribal group whose traditional occupation has been making, baskets, etc. from bamboo. A number of schemes have been put into operation to help this community under the tribal sub-plan. As this community has been declared as one of the five primitive communities in the state, special schemes are being framed for them. In view of this, it is suggested that under the Block Level Planning Programmes too, one scheme should be undertaken to enable them to raise their level of income.

Under this scheme, 50 Kotwalia households should be covered. A sum of Rs. 317.50 should be given to each household on subsidy basis to get the supply of 1500 bamboos for the whole year @ 5 bamboo per day for 300 days in a year. Thus, the total investment on this scheme will come to Rs. 15,875. Only such families should be selected who have already been engaged in basketry

making occupation. Such families would not need financial assistance for purchase of implements needed for basket-making.

The amount of Rs. 15,875 to be invested under this scheme should be allocated from the B.L.P. fund.

In the selection of the families care should be taken to select only those families who have already been enrolled as primary members of the "Sagbara Bans Kamdar Sahkari Mandali". For such families, the marketing of their products won't be having any problem as this society looks after this function.

It is expected that each family will be able to have an additional income of Rs. 7,500 per year. Thus, the total amount of money generated through this scheme as income of all the beneficiaries covered in this scheme will be Rs.3,75,000. In this way, an additional 37,500 mandays of labour will be generated by implementation of this scheme.

13: Flour Mill

Majority of the people in this taluka consume jowar which is consumed in the form of whole meal flour, popularly called 'lot'. The grinding of jowar is done through the stone grinding wheel by the Adivasis. It is suggested to give assistance to some Adivasi households to start flour mills. At the first instance 5 units are proposed to start in the current year. These units will be started in only those villages of the taluka which have electricity. As such, it is suggested that one unit each in Sagbara, Bhorambli, Chopadvav, Pankhala and Kankhadi should be started. The beneficiaries to be selected should be from the landless or small farmers category.

The total investment of this scheme will be Rs. 9,125 per unit. The item-wise break-up is given below:—

(1) Fixed capital	
(i) Cost of small flour mill 8 qtl. capacity	Rs. 1,500
(ii) Cost of 5 HP motor and accessories	Rs. 4,250
(iii) Construction of a shed	Rs. 3,000
	Total Rs. 8,750
(2) Working expenses:	
(i) Electricity charges	Rs. 225
@ Rs. 3.00 per month for 3 months (25 day working)	
(3) Other expenses	Rs. 150
@ Rs. 2.00 per day for 3 months (25 days)	
	Total Rs. 375
	Grand Total Rs. 9,125

Thus, the total amount to be invested for starting 5 units will be $9125 \times 5 = \text{Rs. } 45,625$.

Out of this amount the amount needed for fixed capital i.e. Rs. 43,750 can be obtained from a Bank as loan on low rate of interest. The remaining balance of Rs. 1,875 needed as working expenses should be allocated from the B.L.P fund on fully subsidized basis.

The net income which the beneficiary household will earn will be Rs. 12.00 per day which means an annual income of Rs. 3,600 per unit. (When the mill functions for 25 days in a month). It will generate 18,00 additional mandays of work.

In subsequent years of the VI five year Plan, one or two units may be started in other villages which get electrified.

14: Goatry

Adivasis of this taluka, as elsewhere too, are very fond of raising goats. It provides them manure for the field and at the time of crisis to meet some unexpected expenditure. Goats become very useful to them. There is enough potentiality in raising the level of income of the poor Adivasi households. If they are coaxed to sell the milk, it will give them regular income.

Goat breeding is very much suited to the tribal economy. The goats fit into their environment and socio-economic conditions that may be quite unsuitable for the dairy cattle or buffaloes.

It is proposed to cover 100 beneficiaries under this scheme. The households to be covered under this scheme should be selected from the villages where there is no forest nearby. In case some beneficiaries are to be selected from such villages, where there is a forest nearby the beneficiary households will have to be persuaded to stall-feeding of the goats. But it will be safer to select the beneficiaries from the villages situated in the extreme south east of the taluka.

It is suggested that each beneficiary household should be supplied 5 goats—3 she-goats and 2 he-goats of 1-2 month age. The total investment per household for purchasing 5 goats will be Rs. 500/- @ Rs. 100/- per goat.

Apart from this amount of fixed capital each household should also be given financial assistance toward the cost of food bill for the goats. The break-up of the investment will be in the following manner:

- | | |
|---|------------|
| 1. Fixed capital: cost of five goats
@ Rs. 100/- per goat | Rs. 500.00 |
| 2. Expenditure towards food bill
for the goats for 12 months
(Growing period) a 0.50 per goat | Rs. 912.50 |

Total :	Rs. 1412.50
Say :	Rs. 1400.00

Thus the total investment under this scheme will be $1400 \times 100 = \text{Rs. } 1,40,000$

This amount should be allocated from the B.L.P. fund on 50% subsidy and 50% interest free loan basis. At the end of four years, out of this unit of 5 goats, there will be 9 female kids and 9 males. By the sale of 9 males @ Rs. 200 each the family will have an income of Rs. 1,800. Subsequently, each year the family will have a definite source of income. Apart from the income from the sale of male kids, the family can also earn regular income by selling the milk yield which will be more than Rs. 1,000/- per year. Thus the total income the family will be earning by this source may go upto Rs. 2500 per year. This scheme will generate 25,000 mandays of work after the end of fourth year.

15 : Tailoring

It is proposed to cover 30 young couples (60 persons) from the Adivasi community under this scheme. A sum of Rs. 2,500/- would be required by each couple towards purchase of sewing machine, stool, other accessories and working expenses. The total requirement will be Rs 75,000. Out of this amount Rs. 58000 should be obtained from a Bank as loan on low rate of interest and the remaining balance of Rs. 17000 from B.L.P. fund on fully subsidized basis. The beneficiaries should be selected from 30 different villages. They will have to be given training for two months which can be arranged through the I.T. D.P., Rajpipla. After training they will be able to run their own establishment in their own village. Each couple will then be able to earn Rs. 12 per day i.e. $300 \times 12 = \text{Rs. } 3,600/-$ per annum. The number of mandays of work created through this scheme in a year will be 18,000/-.

The investment to be made on this will be from the following sources :—

(i) Bank loan	Rs. 58,000/-
(ii) B.L.P. fund	Rs. 17,000/-
	Total : Rs. 75,000/-

16: Vegetable Production in the Kitchen Garden

Every Adivasi household has open spaces in the front as well as in the back of their houses which can be used as kitchen garden to grow vegetables. Proper encouragement is needed to be given to them to take up growing vegetables. It is proposed to cover 1,000 households in the taluka under this scheme. Since this scheme is being pushed through the I. T. D. P. too, care should be taken to select only such households which could not be covered under the I. T. D. P. schemes.

It is suggested to supply 4 packets of seeds of 4 different vegetables to each of the beneficiaries. The total investment on this scheme will be $1000 \times 4 \times 2 = \text{Rs. } 8,000.00$. This amount should be allocated from the B. L. P. fund. To encourage the Adivasis to grow vegetables, the supply of the seed packets should be made on fully subsidized basis. This scheme should be operated among the small, marginal farmers and landless labourers.

Allocation from B. L. P. Fund-Rs. 8,000/-

17. Supply of Grafts of Fruit Trees

As an agro-forestry programme, this scheme should be pushed through vigorously. Two important fruit bearing trees i.e. Sitaphal (Custard apple) and Bor (*Zyzyphus jujuba*) can grow easily in the taluka. It is suggested that the planting of trees of these two fruits should be taken up on a large scale. It is bound to give

substantial income to the house-holds which take up this scheme. It is proposed to cover 1,000 households of the taluka in the current year. Each household should be supplied 10 grafts, 5 each of sitaphal and Bor. The total investment on this scheme will be $1,000 \times 10 \times 3 = \text{Rs. } 30,000.00$ @ Rs. 3 per graft. This amount should be allocated from the B. L. P. fund.

Allocation from B. L. P. fund- Rs. 30,000/-.

18: Fishery

More than 900 persons have been reported to be engaged in fishing in the Sagbara taluka. Of these, 380 are enrolled as members of the Fishermen Cooperative Society. There is, thus scope to enrol more persons, from amongst those who are engaged in catching fishes on individual basis, in the cooperative society. It is therefore suggested to enrol 100 more persons under the schemes of Block Level Planning. To meet the expenditure needed for getting subscribed and buying share, each one should be given financial assistance on fully subsidized basis @ Rs. 31 per member. Of these, 100 newly enrolled members 20 should be given training at the Ukai Training Centre and for this a sum of Rs. 15,000 should be allocated from the B. L. P. fund.

Thus, the total expenditure of Rs. 18,100 should be made in the following manner:

(i) Membership subscription and share capital @ Rs. 31 per member for 100 persons	Rs. 3,100
(ii) Training to 20 new members.	Rs. 15,000
	Total : Rs. 18,100

After receiving training each of the 20 members is expected to earn an annual income of Rs. 1000.00. Thus the total annual income generated by implementation of

this scheme will be more than Rs. 20,000 (including the income of the untrained ones too).

The training of the remaining 80 new members will be phased in subsequent four years, 20 persons per year. Further, in each of the subsequent four years, 50 new members will be enrolled. Thus at the end of fifth year, 300 new members will be enrolled in the cooperative society, out of which 100 will receive training at the Ukai training Centre.

As Fishery department has several schemes to implement for culture fishery, all these trained personnel as well as the untrained ones will have ample scope to earn regular income through fishing.

In terms of mandays work, it will generate 2,000 mandays in a year.

Several of the schemes suggested here can in one way or other be linked with the schemes or programmes of other agencies such as Integrated Tribal Development Project, Small Farmers Development Agency, Integrated Rural Development, Khadi and Village Industries and Taluka Panchayat. Such schemes are poultry-farming, Bamboo products, Bee-rearing and Honey-making, Tailoring, Carpentry, Vegetable production, supply of graft of fruit trees and Fishery. The I.T.D.P., I.R.D.P. and S.F.D.A. have been conducting poultry-farming schemes. As such, poultry farming schemes to be undertaken under the Block Level Planning may be either dovetailed or if run independently should take into account the experience gained by the above agencies. Manufacture of bamboo products is already in operation among the Kotwalias, the weakest group in the taluka under the agis of the Sagarbara Bamboo cooperative society which has been receiving financial assistance, are from various sources. The scheme suggested by us is of similar nature and hence may be dovetailed with the programmes of the above mentioned society.

For bee-rearing and honey-making, some of the Adivasis in this taluka have been trained and given financial assistance. For this scheme, the training programme for the beneficiaries may be organized by the I.T.D.P. Similarly for carpentry, furniture making and tailoring the beneficiaries should be given adequate training. The training programmes should be conducted and financed under the programmes of either I.T.D.P. or District Industries Centre, Bharuch. The scheme regarding leaf-plates and leaf-cups making units and Bidi-making should be organized with the assistance of expertise available with Gujarat State Forest Development Corporation. This agency should also be approached for the supply of raw material and for organizing training classes for making quality products.

Some of the schemes, such as establishment of pulse mill, small milling units for processing paddy, manufacture of stone clips, wooden packing cases making units, and manufacture of straw boards are innovative ventures for a backward region like this taluka, atleast for those undertaking them. These have been suggested in order to develop entrepreneur skill among the Adivasis and to achieve diversification in the occupational structure. The cottage and small scale industries is undoubtedly next important sector after agriculture which can generate a large number of employment opportunities.

OPERATIONALIZATION OF BLOCK PLAN-
ACTION PLAN**Importance of Cultural Background**

It is generally recognized that the three basic requirements for economic growth are natural, human and capital resources. Man may alter his environment through technological ingenuity but ecological repercussions amply demonstrate that there are obvious limitations to the manipulation of physical space. As for financial resources large-scale allocation of capital through community development and tribal development programmes over the last three decades indicates its limited impact in terms of economic development of the scheduled tribes and other weaker sections of rural population. The fuller exploitation of natural resource endowment and effective utilization of capital, indeed, is very much the function of the quality of population.

However, the appreciation of human resource as the strategic element in economic development is not a new idea. Adam Smith noted in 1776 that the basis of national wealth were the skill, dexterity, and competence of individuals. Although Smith allowed for three agents of production—land, capital and labour—it was really in the last that he expected to find the basic dynamics of economic development. The fourth factor of production—entrepreneur—we realize is also very much a part of social attitude and opportunity. In the context of Block Level Planning for full employment, which is one of the important social goals towards eradicating poverty and raising the over all

quality of life of the weakest of the poor people the above considerations assume much significance. When social goals are accepted as a legitimate future of planning process, there are very serious risks of arbitrary interference with production and consumption in ways which are not suited to the socio-cultural milieu of the community. Each community has its own tradition and own particular history and direction and these differences will affect the form that economic development takes in any society. The cultural differences between the communities and the variety in the historical circumstances would seem to invalidate the notion which outlines a uniform process of economic development and change for all the communities.

Variation among the rural and tribal communities are enormous and hence their personality and proclivity presents a wide range of diversity, bearing on their assimilative power and reaction to the process and exercise of Block Level Planning for full employment. In view of this, any development plan which originates in one culture and is moulded to fit the ideals and patterns of that culture will not be necessarily acceptable to people who have a different way of life and pattern of behaviour. Since most of us who are engaged in the Block Level Planning exercise fail or ignore to grasp the importance of human and cultural elements in the development processes, we fail to understand, for example, why the weaker sections of the society, plagued with malnutrition, do not double or triple their food output by applying insecticides and fertilizers, even when these are, at times, provided free. We must try to learn that when the expected does not happen in the communities for whom we draw a magnificent plan, it is not always because the people in those communities are irrational or stupid. On the contrary, most likely they are perfectly rational and intelligent but take into account many factors whose significance we do

not understand or even know, however well-meaning or well versed we are. Due to this gap, we fail to reflect the socio-economic aspirations of the people of the area, forgetting that the degree to which people would like to advance and the directions of advancement depend upon the existing socio-cultural life of the people themselves. This is very important for operationalizing the schemes in a meaningful and desired manner. For instance, in many cases the programmes introduced for tribals' benefit seem to have been that the development prescriptions for non-tribals were sought to be applied verbatim to the tribal context.

Ushering development plans along stereotype lines based on our ethno-centrism become purposeless, inefficient and demoralizing as well. It is erroneous to assume confidently that all societies will not only become like us but wish to do so. For that matter it is one of the greatest needs in our Block Level Planning exercise to understand that cultural and historical differences may modify the development process among different communities, by varying its mode and adjusting its tempo depending upon the social, psychological, technological and cultural milieu of the communities.

Block Level Planning has evolved a different approach keeping in mind that in the development process the individual family is to be the focus in the planning. The earlier approach in which programmes like road-building, creating new institutions like cooperatives and panchayat, providing social services etc., have been discarded in our new approach. Now, we have taken up family oriented approach in which we have to concentrate on the individual human beings. Thus, human variables, which had been rarely given sufficient weightage in the planning and implementation of change projects, will have to be given due consideration. If we go on putting our focus on 'hard' economical and technological variable of the sort that

economic planners prefer, conveniently ignoring the human and social structural factors and distributive structure in economic sector, our whole purpose of Block Level Planning exercise will be defeated.

The situation of avoiding these factors stems from the difficulty of measuring and weighing attitudes, values, and beliefs. Despite this, socio-cultural variables must be seriously considered for Block Level Planning exercise to succeed. The perceptions of all affected group must be studied and weighed against one another for the purpose of devising meaningful schemes. Block Level Planners should be specially sensitive to potential conflicts between a local group's autonomy and its desire for material prosperity, keeping in view the fact that change operates within a cultural context. Hence, gaining greater knowledge and understanding of the people and their culture is an essential requisite in the operation of schemes to be taken up in the Block Level Planning exercise. It is necessary to know the traditional way of life and its social institution that are functional in a small community setting. Only such a knowledge would provide insights into the constraints and inhibitions found in the social and cultural milieu of the community. It would be presumptuous to evolve schemes on the naive assumption that they would receive acceptance by the people of the community because of the material return they offer. It follows then that any plan of action designed to modify the socio-economic conditions of the weaker sections of the tribal and rural population would be doomed to failure if it was not based on a prior detailed knowledge of the institutions and patterns of socio-cultural system involved, its traditions, system of values and internal and external social relationships. It is very important to understand the adaptive nature of the culture of the community and the role of subsistence social organization in adaptation.

Socio-Cultural Life of Adivasis of Sagbara Taluka

In order to be helpful to the implementors for operationalizing the schemes suggested in the previous chapter let us briefly scan the historical and socio-cultural background of the tribal people living in the villages of Sagbara taluka. The main tribal group in this taluka is known as "Vasavas". Besides them, there are Tadvis, Mawchis, Gavits, Valvis, Padvis, and Kotwalias. Except the Kotwalias, the other above mentioned tribal groups try to pass themselves as Vasavas. As there is a lot of common elements between the socio-religious customs of those groups and the Vasavas, it can be safely assumed that they belonged to one common stock in distant past but in course of time some of the lineage groups emerged as separate independent sub-groups.

Vasavas have been recorded in 1961 census as a sub-tribe of the main tribe—the Bhils. As such, no separate figures have been provided for the Vasavas in the 1961 as well as in the 1971 census. In all the earlier literatures pertaining to the Khandesh region, (Sagbara was almost a part of the Khandesh region in earlier days) there is no reference to the name of the Vasavas. Even Dr. T. B. Naik does not mention the Bhils of the west Khandesh as Vasavas (T. B. Naik; *The Bhils*:1956). In the earlier literature, the Bhils have been recorded as the aboriginal community living in Khandesh to whom the Muslims, the Marathas and the Britishers confronted in course of their (rulers) extension in the western and northern Khandesh region. Since how long the Bhils have been occupying the Khandesh region and since what time they have begun to be known as Vasavas?—these are questions whose answers are not easy to derive. But on the basis of their description given by Dr. T. B. Naik in his above mentioned work, it can be assumed that till twenty five years ago the term Vasava was not in vogue in an universal manner,

though the head-man of the village used to be referred as Vasava. In earlier times, the chiefs in the Bhil villages of this region were known as 'Vasavo' or 'Vahavas.' It appears that gradually this family name was adopted by the families of the succeeding generations. Later, other families too, who did not belong to the lineage of chiefs or headman, borrowed and adopted the name of Vasavas as it was a prestige and status giving nomenclature. For persons of such families, the meaning of the term Vasavas as interpreted by the people themselves, was that—one who has settled at a place after having migratory and nomadic type of life, i.e. distorted version of the vernacular word 'Vasya'. In support of this they started claiming that they are descendents of Marathas (Rajputs) who were employed in the army of Shivaji and Baji Rao and who, after the army got disbanded and there was anarchy every where in this region, settled in the forest and hills to hide themselves away from the fury of the enemies.

Whatever may be the truth, it is a fact that the Vasavas now do not feel comfortable if referred to as Bhils. Since after the country got independence, there is a great desire among them to get assimilated in general Hindu population. This is mainly on account of the process of sanskritization operating among them. Here the model is not the Brahman community but the Rajputs and hence we may assume that the process of Rajputization has been operating among them. Due to this the Vasavas consider themselves superior in social status to the Bhils, Warlis, Naikdas, Kotwalias, Konknas and other tribal groups of South Gujarat. By their physical features the Vasavas do not confirm to those of the features of a typical Bhil. Vasava men are tall in stature, with a well pointed nose and broad forehead while the women are slightly short in stature but with sharp features. The Vasavas are generally fair in complexion and quite charming in appearance. Thus, they hardly resemble in their physical

features the typical Bhil. But we know that there is no uniform Bhil type and many Bhils approximate the physical type prevalent among their non-tribal neighbours.

Vasava Society is patrilineal i.e. descent is traced through the line of father and patrilocal i.e. married girls go to reside in the husband's father's house. Each individual in their society is intimately affiliated with the members of his lineage group from birth to death, and supposedly even after death when he joins his ancestors. Members of this lineal group are in dominant-subordinate roles and are linked together in a complex of reciprocal ritual, social and economic obligations. An individual can rely on members of his lineage for assistance occurred at birth, marriage, death and for help in the affairs of daily life and he, in turn, is obligated to help them. Thus, the pattern of living is woven by the kinship system. From birth to death, no one stood alone.

But although an individual life is closely interwoven into kinship group, the Vasava family consisting of husband, wife, and their unmarried children constitute a social and economic unit of great independence. Inherent in the settlement pattern is the need for the individual's family reliance and divorce from the support as well as from the fetters of kinship ties over prolonged periods. The Vasava family is not permanently embedded in a web of close circle of kins. From the moment of its establishment as a separate unit, a moment which coincides usually not with the inception of the husband-wife relationship but with the husband's separation from the parental household, a married couple stands by itself.

In general, there is among the Vasava, no joint family system and the general principle, modified only in such cases as that of an only or youngest son staying in the parental house, demand that every married couple should set up an independent household, even if at first

this aim can only be achieved by partitioning the living room of the household's parents. The emphasis laid on the self-sufficiency of the primary family stems partly from the very nature of the marital relationship which is freely entered and terminable association between two equal partners each of whom retains the right over the property he or she contributed to this association. This is clearly illustrated when at the death of a Vasava man or woman, all his or her personal belongings are also buried or cremated with him or her.

As a rule, each primary family lives in a separate household. Only unmarried brothers and sisters live in the same household with their elder married brother in case the parents were dead.

The kins are called 'Saga' particularly the kins from the paternal side while those from marriage are referred as 'Sagawala'. The terminology used for the various kins are more or less classificatory in nature.

Their religious life is inextricably linked with animistic belief and superstition in a mosaic of ritual fantasies which is mixed with witchcraft, sorcery, ghost affliction and ancestor worship. These non-rational beliefs at the core of the Vasava's values exert profound influence on daily life of these people.

Thus, the Vasava society as a totality exhibits strong patterns of traditional beliefs, customs and norms. Their historical experiences have developed a mistrust of outsiders and dislike of strange or new ways. In the implementation of any plan for employment it will be necessary as a first and most vital step, to bring a change in their mentality. To make the operation of the schemes in successful manner, an approach of a human catalyst is essential. The person or persons involved in the implementation of the plans must have change-agent mentality as the historical experiences and tradition bound social values

of the people are bound to prove difficult in involving these people in the development schemes. The psychological effect of the dependence on members of the lineage group has almost eliminated competition between the households of the same lineage group. The strong solidarity exhibited within lineage group results in a subordination of individual needs and desires to the prescribed allocative determination of the lineage elders. Such a historical and socio-cultural background prevents him to come out from the certainty and the constraints of his traditional world into a milieu of modernity characterized by a complex set of change forces. His involvement in the plans for their economic development becomes threatening and personally upsetting. When faced with such a conflicting situation, he usually is dominated by his cultural background in taking decisions which normally brings less-than-effecting results for us in the implementation of the schemes. The chances are that he becomes indecisive, mixing traditional and changed situation in a manner he can little understand or articulate to himself or others.

Viewing the traditional pattern of the socio-cultural life of the Vasava peoples of the Sagbara taluka it is vitally important for the implementors of the plan to know the people in a realistic and deep sense. It is easy to create infra-structure facilities, to create growth centres and to chalk out sectoral programmes but what is really important is to discover how the system of this type of planning based on economic compulsion can successfully fit into the matrix of values and structural relation of the Vasava society. The principle of economic compulsion and urban bias upon which Block Level Planning is generally founded will not succeed during operation amongst people of Sagbara taluka because their beliefs, value-orientations and social relations are still oriented towards traditional scheme of their social and cultural life. Acceptance of the programmes itself or its constituent

parts, is bound to be determined to a considerable extent by a variety of complex factors, ranging from simple habits and accepted social practices to intricate patterns of beliefs, social structure and world view of the community members and pattern of external relationships with outside world based on the historical experiences. If the planner and implementors have to make a really meaningful operation of the schemes for the community, they will have to have a sound knowledge of these non-economic variables. Here again, static material won't be of much use. What is needed for the planner and the implementors to grasp is the dynamism of the pattern of culture of the Vasava community. Over emphasizing the economic variable at the expense of the socio-cultural traits will bring frustrating experience at the time of operationalizing the schemes. The socio-cultural constraints are not such which cannot be overcome. Apart from this, the Vasavas have valuable strength-balanced, practical skill sets, intuitive knowledge and instincts that make them potentially more change-oriented than many have assumed. There is a greater social unity among them which is an excellent set-up for bringing change in an entire community. Further, they are not operating in a vacuum. They have pretty good idea of the values of the wider society.

As has been described in the earlier chapters, the occupational distribution of the working force in Sagbara taluka is conspicuous by its lack of diversification. More than 95 percent of the total working force is in the primary sector. One-third of the total working force may be considered as wage earners. Out of the wage earners, large majority are agricultural labourers, who are mainly seasonal workers, while the remaining comprises of workers in construction, petty shop-keepers and self-employed artisans.

This economic situation of Sagbara with the heavy bias towards agricultural income and employment, has to be kept in mind in assessing the nature of employment and unemployment in the economy. Associated with the heavy bias in agriculture is the predominance of household production which makes it very difficult to estimate the volume of employment and unemployment even in the limited sense. The problem of employment in a backward and under-developed region like Sagbara consists primarily of the accumulation of labour in occupation and in types of work with low or negligible productivity. The amount of land available being more or less fixed, and the rate of capital accumulation and technical change, being low, the growth of population in Sagbara is seen as causing diminishing returns to set in; this forces new entrants at each stage into lines of work with lower and lower productivity until a point is reached when the absorption of labour by the system reduces its marginal product in many cases to zero or even to a negative figure. This is more or less true of any agricultural community. The institutional frame work in the tribal community of Sagbara is supposed to permit in the absorption of labour to this point and even beyond, their techniques, customs, and conventions adapting themselves to the required extent and there is, therefore, no open unemployment, but various forms of disguised unemployment. The results of the sample survey have clearly shown that of the total number of 1414 persons in the working age-group of 15-59, as many as 1324, forming 93.64 percent have been economically active. Only 90 persons i.e. 6.36 percent reported to be economically inactive which may be interpreted as unemployed at the time when the survey was being conducted. Some of them may be too old to work. The grim struggle the households have to put for earning livelihood is also reflected by the fact that out of the total number of 1420 in all the age groups

who reported to be economically active, 6.76 percent have been from the age-group of 11-14 which meant that children too were inducted in the labour force of the working people. Again, out of 71 persons in the old age group of 60 and above, as many as 66.2 percent have been economically active. It has been observed that every person in the households, whether young or old, male or female, but capable of doing work in the agricultural field or in other economic pursuits was found to contribute in the household's earnings.

Thus, the institutional and sociological factors of the framework of tribal economy in Sagbara are such that the problem of open unemployment is not acute but the problem of under-employment for a much larger number of persons certainly exists. This becomes more evident from the pattern of employment in the tribal economy of the Sagbara: the predominance of households as units of production, especially in agriculture; the social organisation built around the family, clan and kins and the villages which give each individual his allotted task and share of output; and the growing size of the population and the labour force with relatively inadequate employment opportunities.

In the conventional theory under employment is supposed to exist when the marginal productivity of labour is zero or even if positive, less than the institutional wage rate. Under this concept, the measurement of under employment is extremely difficult in Sagbara, because as the population grows faster than the employment opportunities in the agricultural sector and outside it, the surplus working age population gets absorbed (disguised) in the same sector and in other sectors. This absorption takes place in the form of (i) reduced intensity of labour to provide room for the surplus working population, (ii) reduced productivity of labour, (iii) increased cultural, social and religious activities and (iv) a movement

towards outside for regular/irregular work. It may be noted here that among the tribal people of Sagbara under-employment has taken all the above four forms and with observed data it would be very difficult to find out if the marginal productivity of labour is zero in a sector stricken with under-employment. But if we accept the fact that surplus working age population in Sagbara taluka are mostly found in the form of disguised unemployment rather than open unemployment in the subsistence agricultural sector, then the extent of under employment over time may be measured. Although difficult to measure quantitatively, it is important to bear in mind that in Sagbara not only the problem of unemployment is growing but there is a much larger pool of persons who are under employed and who can be expected increasingly to seek entrance into the labour market as a consequence of socio-economic changes.

As indicated above, in Sagbara taluka underemployment is relatively more important than open unemployment. Under employment in the sense of low productivity jobs is very common there. More individuals are forced to take an extremely low productivity jobs rather than remain unemployed for long. Thus, in Sagbara taluka where large majority of the working force is either self-employed or family workers, low productivity is closer to the heart of the problem. In this connection it should be pointed out here that under employment in the sense of low productivity is difficult to estimate through statistical studies but an income approach to estimate the adequacy of employment opportunities in Sagnara will be more meaningful. In this approach, the household rather than the individual is considered as a unit of labour. There are obvious economic and social reasons for this, such as both income and employment are shared by individuals within this unit. Further, for welfare purposes the adequacy of employment opportunities judged by

income or household value added is more important than the number of hours individuals are working.

Given these considerations plus observation made in course of the study, we are inclined to conclude that in Sagbara taluka, where open unemployment rates are very low, the overall problem is quite serious, but it is more of inadequate rather non-existent jobs. Put this way the unemployment problem in Sagbara taluka is seen to be the problem of poverty, manifestation of the general development problem. It is necessary then that in any plan of action for full employment, in an area like Sagbara, more emphasis must be placed on equity in the distribution of income, wealth and economic opportunities. Since our principal concern is with the welfare of those tribals who are at the very low end of the economic scale, the emphasis on equality as a policy variable must become stronger. As we have seen most persons in this group are either incapable of working (and therefore are classified as outside the labour force) or are doing something, no matter how little it returns. To help this low and poverty group requires more than the provisions of jobs. They must be rehabilitated, so they become capable of undertaking productive work and those who are working need more productive work. In other words, to help this group requires a redistribution of income—more important, a redistribution of the means to acquire income—that is, more pervasive than is involved in the provision of jobs per se.

From the discussions made in earlier chapters, it is apparent that there is a chronic problem of under employment among agricultural labourers, casual labourers (non-agricultural), artisans and those operating land below 5 acres and even upto 10 acres. Agricultural and non-agricultural labourers are employed for only 50-150 days a year. Thus it could be estimated that a good number of persons in Sagbara who suffer seriously from partial unemployment could be employed for 3 to 5 months a year or

more. Even a large number of persons that are employed do not suffer so much from unemployment as from low earnings. The results of the survey conducted by us amply supported the fact of their extremely low earnings. As it can be clearly seen from the figures given in the Table 86, a large proportion of the surveyed households, to the tune of 83.50 percent of the total have less than Rs. 5000/—annual income. More than half of the households (54.2 percent) are in the income bracket of Rs. 01-3000. If income is taken as criteria for considering the number of households living below poverty line, over 80 percent of the households in Sagbara taluka has a per capita per month income which clearly put them below poverty line (an income of Rs. 62.00 or less per month by an individual marks him as one living below poverty line). In Sagbara the average size of the household is of 6.1 members which means that an average household in Sagbara must have an annual income of more than Rs. 4538 ($6.1 \times 62 \times 12$) to get out of the poverty line. At present it is only Rs. 3,514.

Viewing from the point of view of expenditure criteria too, 94.25 percent of the total surveyed households have been living below the poverty line. The average expenditure in a year per household comes to Rs. 3,880 only.

Here again, an expenditure of Rs. 62 or less per month by an individual has been taken for computing the number of households below the poverty line. In this respect agriculture in a region like Sagbara taluka is characterized not only by chronic under employment, but is also, bearing in mind the domestic services and petty traders, the least remunerative of all occupations for the small holders.

In order to solve these problems of under employment, low productivity and an extremely poor income, there can't be two opinions that a comprehensive planning package that include the generation of better employment oppor-

tunities is required. As agriculture continues to remain the most important sector of the economy with regard to both income and employment, concerted efforts must be made in the agricultural sector which is the largest employment creating sector in Sagbara taluka and will remain so for a couple of decades to come. As discussed elsewhere in this report, a number of schemes have been put into operation under the tribal sub-plan to bring improvement in the agricultural system of the region. Except for suggesting a couple of activities in agriculture sector, under our plan of action, we have refrained ourselves from taking duplication of the programmes which have already been chalked out by the Integrated Tribal Development Project as well as those of Sagbara Taluka Panchayat. However, it is suggested here that any technological improvement in agriculture, at the present stage of economic development of the tribal people of Sagbara, should be labour intensive in context but it is also necessary to make more intensive use of other technical inputs, such as fertilizers, new and better seeds, better implements, more and continuous supply of water, etc. Several schemes have been planned by the I.T.D.P. and if properly implemented, the problem of partial employment or under employment in the agriculture sector can be tackled to a great extent. But the application and success of the schemes will depend on the institutional and organizational and administrative factors, on adequate supply of labour actually to be put in, on getting hundreds of tribal cultivators to do things rather differently, to make them work harder, adopt new practices, and market their surpluses. The very multiplicity of variables in an average cultivator's situation makes him less responsive. His natural conservatism in general, and in poor agricultural environment in particular, is compounded by the fact that in his realm he is risking his family subsistence when he responds. The tribal cultivator wants to be sure

of being remunerated enough from the benefits of the response. Tribal cultivator families in Sagbara, in general, live in a socio-cultural environment that lacks incentives and security, adequate marketing and transport facilities and financial institutions. In other words, it is an environment that rewards less and allows the cultivators to be exploited by non-tribal cultivators and moneylenders or other intermediaries and thus offers him little incentives to improve land and care more. All these human and cultural factors involved in the development process will have to be tackled in a competent and efficient manner. In this situation it seems unlikely that technological inputs will have the desired effects on both, increasing output and employment unless institutional and organizational bottlenecks are removed.

Nature of Organization

The successful implementation of the schemes entirely depends upon the nature of organization built for this purpose. The task is over-whelmingly full of hazards because the nature of the schemes is beneficiary-oriented. Had it been like those of minimum based programmes for creating infra-structure facilities, it would have been comparatively less difficult to put into operation. But since these are beneficiary-oriented, one of the major hurdles to overcome is the mobilization and organization of the poor Adivasis of this taluka, from amongst whom the beneficiaries are to be recruited. At present there does not exist any viable organization in this taluka to whom this task can be entrusted. In view of this it is suggested to create a new organization at the taluka level, comprising of the panchayat and youth leaders, representatives from the cooperative organizations, official agencies which are involved in the development of this taluka, and educational institutions. Adequate representation of the poor Adivasis should also be made and to

achieve this, traditional leaders, such as effective members of the village Panch (traditional panchayat), and even village priests should be nominated as members of this organization. The chairman of such an organization should either be the District Collector or any other senior officer at the district level who is sufficiently enlightened as well as knowledgeable about the Adivasi's socio-cultural characteristics.

With the help of this organization a vigorous effort to conscientize the target front should be made. The process of conscientization* is a critical ingredient of developing the necessary capacity among a traditional-oriented community like the Adivasis of the Sagbara taluka. Through systematic efforts at collective examination and reflection the process of conscientization or awareness raising can be operationalized. Through the conscientization process serious efforts in the direction of organizing the poor Adivasis must be carried out. The need to organize discussion groups of the Adivasis for initiating a process of collective dialogue, in the light of their socio-economic reality and development experiences, is supreme to operationalize the process of conscientization.

Another organization needed and which is of vital importance for the effective solution of the problems which is to be faced in operationalizing the schemes is concerning a comprehensive and active marketing system for the products. This aspect has been sadly neglected by the official agencies conducting several schemes for the economic development, resulting in non-acceptance of the schemes by the people after initial experiences. Unless adequate channels for marketing the products are not evolved, the Adivasis cannot be convinced about the effectiveness of the scheme in promoting their economic well-being. The

* We are grateful to Dr. T. Naik for drawing our attention to this vital stimulant for effective operation of the schemes.

District Industries Centre, the I. T. D. P. and the Taluka Panchayat, all these three bodies should pool their resources to evolve a viable marketing organization. The services of the Block Employment Officer will have to be fully and specifically utilized for this purpose. Financial assistance for organizing such a body—'Rural Marketing Centre'—may be sought from the District Industries Centre or I. T. D. P.'s nucleus budget.

The District Industries Centre has a key role to play in operationalizing the schemes. This centre has to act as a model agency to draw together the various personnel working under different organizations so as to weave a coherent pattern of economic development. In the context of the schemes suggested in the previous chapter the District Industries Centre will form a bridge-head to make a dent on the intractable problem of carrying forward the process of rural industrialization in this taluka. Since one of the objectives in the creation of District Industries Centre is to provide through it a viable mechanism for marketing the products, it is all the more important to seek the active association of this centre in operationalizing the schemes. In fact, the Block Employment Officer ought to be a personnel from this centre. In any case, the Block Employment Officer, should be made responsible to be in constant touch with the centre for securing the services of the experts.

The District Industries Centre will also prove to be an excellent agency for organizing production-cum-training shop for the different trades. As pointed out earlier training programme for skill development of the Adivasis is a vital requirement in the operation of the schemes in an effective and desired manner. This centre and I.T.D.P. will have to play an effective role in meeting the requirement of training. The funding of the training programmes should also be met from the budget of these two agencies.

Considering the background of the Adivasi society in which the members have been practising 'primitive type' technology the training component in the operationalization of the programmes assumes a serious and challenging task. Since both the above mentioned organizations have the necessary expertise and experience in conducting such training programmes, these should be left entirely to them. The Block Employment Officer will make the move to thoroughly consult these agencies to run the training courses for the skill development of the Adivasis in the different trades.

The schemes suggested depend almost entirely on local resources concerning manpower and raw material. These two are important ingredients for operationalizing the schemes. Looking from this way the schemes appear to be very much feasible. The Schemes are such which easily secure credit facilities from the Bank. But feasibility is one thing and the operation is quite another. Hence, even feasible proposition can go to drains if the necessary steps are not taken in the operationalization of the schemes.

It has been amply shown that a huge majority of the entire population of the taluka is reeling under abject poverty. In such a situation, there does not remain much to indentify concentration of families below poverty line. They are ubiquitous. However, the population living in the villages of northern, westren and south-western regions is economically less developed in comparison to the population living in the villages of south-eastern region (adjoining to the boundary of Maharashtra). Hence, recruitment of persons for the schemes may be done in greater number from the regions other than the south-eastern. But it does not mean that those Adivasi families from this region who are having below the poverty line existence should be left out.

It has been pointed out that the major handicaps in this taluka are three: rocky strata, soil erosion and a

simple and largely illiterate community. For the first handicap precious little can be done. As far as the second one is concerned measures are being taken by the I.T.D.P. and the Agricultural department the Divisional Soil Conservation, officer with necessary staff has been recommended to take up the soil conservation work in the taluka of Rajpipla sub-division. However, the Agricultural department will have to give serious attention to tackle this problem in this taluka.

Regarding the third handicap it has already been suggested to undertake the conscientization work and vigorous training programme. The spread of literacy takes it own time, one can't wait for the time when the masses get literate. The only effective alternative is to organize them, conscientize them, and train them in the skills needed. So long they do not get organized and conscientized, representatives of the micro-level region will go on exploiting them at the micro-level. During the field work story of unhindered exploitation of Adivasis of the taluka at the hands of an 'outsider' (settled in Sagbara taluka since last 30 years) was brought to our notice. It was alleged that this 'outsider', who in course of time became a prominent leader in the taluka, successfully prevented the development programmes meant for the Adivasis and the area to take concrete shapes. This he did with the motive to keep them backward so that he could go on amassing wealth by exploiting them. The Adivasis, though illiterate, are not pig-headed. They are quite intelligent to grasp things quickly.

If training programmes are organized properly, the schemes will turn into seedbeds of entrepreneurs in the Adivasi villages.

The institution of cooperative will have to be strengthened as most of the schemes suggested are in cooperative sector. To undertake programme with an aim of distribut-

ing equal employment opportunities to as many persons as possible, this is the only way through which the above aim can be achieved. In this regard the Block Employment Officer will have to make adequate efforts in collaboration with the cooperative department. Here again, in case financial assistance is needed, it can be secured from the funds of the cooperative department.

CHAPTER — X

SUMMARY—FINDINGS AND RECOMMENDATIONS

Sagbara taluka is one of the eleven talukas of Bharuch district and is the farthest taluka from the district head-quarter Bharuch, in the south-east. It is sprawled in the hilly tract of the Rajpipla sub-division of the district. Sagbara owes its name to the fact that 'Sag' (teak) trees is in abundance in the forests of this region. This taluka being the frontier of the Bharuch district in south-east has the Kandesh region of the Maharashtra state as its immediate neighbour in the east. To its north and west lies the Dediapada taluka of the Bharuch district while in the south its boundary adjoins the boundary line of Surat district.

Before independence, Sagbara was a feudatory State under the rule of Adivasi chieftains. In the pre-independence period, this tract was virtually isolated from the outside world. The economy of the people was very much forest-oriented in which dependence on forest for the quest of food was heavy. Due to this, by and large, the economic life revolved round food-gathering and hunting. Agriculture, though being practised, did not play a crucial role.

After the merger of the State with the union of India its isolation was broken and the Adivasis living there started interacting with the outside world, the tempo of which was accelerated when in 1960, this region became part of the newly created State of Gujarat. Since that period development programmes of the nation started reaching them.

The taluka has an area of 400 sq. km. and at present it is comprised of 105 villages, mainly inhabited by Adivasis. According to 1971 census, 90.77 percent of the total population of 52,576 souls belonged to scheduled tribes, the generic name for whom is 'Adivasis'. The taluka is not a densely populated region, the density being only 131 persons per sq. km. Since a larger part of the taluka is under forest (29.11 percent of the total land) and hills the population density is low. Majority of the villages have a population of less than 500 persons. There is no urban centre. Only one village has more than 2000 persons.

Topographically, Sagbara is a region of plateaus, residual hills and intermittent valleys. Only the area near the Ukai dam reservoir in the southern and south-eastern sides is flat.

No perennial river flows through this taluka. The Tapi river, however, flows on the border in the south-east. There are several rivulets in which water flows only during monsoon season. The average rainfall here is 1305 mm. The soil is alluvial and light brown to greyish black in colour in the valleys while in the hilly portion, it is very shallow and largely rocky in nature. On account of the rocky strata and the forest more than half of the total land is unusable for cultivation. Only 41.63 percent of the total 40,031 hectares is used for cultivation.

The main food crop is jowar followed by paddy. Another important crop is tuber-Cultivation of any other cash crop is almost non-existent. Earlier, cotton has been an important cash crop which was being cultivated extensively. But now agriculturists have lost interest in growing cotton. As irrigational facilities are very much poor wheat is grown on quite a small scale. Only 4.24 percent of the net cropped area has been put to irrigation in 1978. Even to this day wells remain the principal source of irrigation. Minor irrigation schemes and canals are few and

far between. Under minor irrigation schemes, lift irrigation schemes and check dams have been constructed in recent years.

Forest has always played a vital role in the life of the Adivasis of this taluka. The major product found in the forest of this taluka is 'Sag' (teak). Among the minor forest products, apta (leaves for bidi-making), bamboo (for making baskets etc.), chilari (bark for tanning), kadaya (for gum), mahuda (flowers for eating and seeds for extracting oil), timru (for bidi-making the leaves are used). Wild animals have declined in number to a great extent.

The area is poor in mineral deposits. Among the minerals available are agtate, building stone, cale tufa, clays and lime-stone.

The taluka has, at present, 86 primary schools, 3 secondary schools and 2 Ashram schools. Spread of education caught momentum only after the taluka became part of the Gujarat state. On account of the attempts made in this direction, the literacy rate has gone up to 14.4 percent in this taluka. Among the Adivasi population, the literacy rate is 12.25 percent which is comparatively lower than the other remaining Adivasi talukas (except Dediapada) of the district.

In the 86 primary schools and 2 Ashram-shalas, altogether 82.11 boys and girls are receiving education, the number of boys being 54,04 while that of girls 2,807. From 1970-71 to 1977-78, an increase of 171.44 percent in the number of students in the primary schools has been recorded while in secondary schools the corresponding increase is to the tune of 20.70 percent. This gives an idea about the rate of growth of education in this taluka. But although the number of students has increased substantially a large number of them do not reach beyond IVth grade which means that rate of wastage in primary education is considerable.

The taluka has one Primary Health Centre located at Sagbara, the taluka headquarter and six sub-centres, one each at Chopadvav, Taval, Dhavliber, Selemba, Kolwan and Patlamau. The number of patients being treated at the P.H.C. is increasing from year to year which means that modern way of treatment is becoming popular among the Adivasis who in the past mainly depended on their 'Bhagats' for propitiation of evil spirits whose wrath brought diseases. They have been also using herbal medicines. Through the maternity centre, three in the taluka, the Adivasi women now receive proper care, both during the pre-natal and post-natal period. Family planning work is also being done for the last 15 years and has met with appreciable success. According to the figures available at the P.H.C., between 1970-71 and 1978-79, 87,84 persons have been operated upon for birth control.

The most common diseases among the Adivasis of this taluka are skin diseases, liver troubles, disorder of digestive system and lymphatic system diseases. Incidence of leprosy and T.B. are not much.

The number of villages having no source of water supply are 6. Although wells are available in several villages, particularly those of the hilly tracts, the well dries up in summer due to which the villagers have to face the problem of inadequate water supply.

Communication facilities are very poor in this taluka. Only 5 of the 105 villages can be reached by metalled road. However, bus facilities are available to 40 villages but not throughout the year. During the monsoon, a large number of villages get cut off from outside.

The taluka is equally poor in matter of electrification. Out of 105 villages electricity has reached only to 6 villages. Poor state of electrification has affected the

progress in irrigation by power. So far only 11 agriculturists have installed electric motor.

Cooperative organizations had come into existence in the very beginning when the development activities were ushered into the taluka. Presently there are 13 different type of cooperative societies having a total membership of 2,313. But several important type of cooperative organizations like forest labourers' cooperative society are still non-existent in the taluka. The desired progress in the development of cooperative organization has not taken place due to various reasons.

Banking activities in the taluka had started in 1962 with the establishment of a branch of Bharuch District Central Cooperative Bank. Bank of Baroda, which is the lead bank for the taluka, opened its branch in 1975. This is the only commercial bank operating in the taluka.

The Adivasis' population of this taluka is covered for the purpose of tribal sub-plan under the Integrated Tribal Development Project, Rajpipla. Apart from this important agency other official agencies through which development programmes are being carried out in this taluka are Small Farmers Development Agency, Integrated Rural Development Project, District Industry Centre. Certain voluntary organizations like 'Sagbara Vibhag Kelavani Mandal', Hari Om Ashram, Care and Unicef have also been active in initiating programmes for the development of the Adivasis of this taluka. But in comparison to other tribal areas, voluntary organizations' contribution in this taluka is very insignificant. Industrial houses have not cared to take up rural development programmes in this far flung Adivasi area.

Demographically, the population (1971 census) of the male and female is almost in equal proportion. This is almost in tune with general demographic characteristics of Adivasai

communities where females outnumber males in number. Among the Adivasis which form bulk of the population, the Vasava community is the largest one. Others are Tadvi Bhils, Gavits, Dhankas, Kotwalias and Naikas. The average size of households, as indicated by 1971 census figures, is 5.92. Of the total population 35.59 p.c. have been recorded in 1971 census as workers. This percentage was high at the time of 1961 census (49.26 p.c.) Large majority of the workers are self-employed since 92.50 per cent of them (1971 census) are absorbed in economic activities falling under primary sector. On comparison of the figures of 1971 with that of 1961 it emerges that on one hand the number of owner cultivator is declining sharply, the number of agricultural labourer is rising sharply on the other hand.

Majority of the cultivators have less than 5 hectares of land. A small percentage (4.18 of the total cultivators) own more than 20 hectares of land. The descendants of the last chieftain family have bigger size of land holding, more than 50 hectares. But size of the holding of the cultivators in this taluka is very deceptive to measure the economic well-being of the house-holds. This is mainly because the land under actual cultivation is far less than the total area of cultivable land available to the house-holds. Of the total cultivable land in the taluka, percentage of net area and gross area sown has been only 56.29 and (57.00) percent respectively. This clearly shows that due to the nature of land and other factors it is not possible for the owners to put entire area of cultivable land under use. Thus there is a clear case of under utilization of the cultivable land.

In comparison to the district average and state level figures regarding production of different crops per hectare this taluka's figures are quite poor. For instance, in case of jowar (Kharif) which is the principal crop, the figures for the district and state levels indicate the average

production per hectare to be 568 and 494 kilogram respectively while only 225 kilogram in Sagbara taluka. This clearly suggests that there is lot of room for improvement in agricultural production. The factors responsible for low rate of production is lack of use of chemical fertilizers, improved variety of seeds and improved variety of agricultural implements.

Although the Adivasis keep cattles and raise poultry in good number, they are hardly for the purpose of any economic earning. Veterinary services being not organized effeciently, the Adivasis fail to utilize the veterinary aid. Due to availability of grass in abundance, the problem of cattle grazing is not much there. In summer season only they have to face difficulty. Fodder is not grown in the cultivable land in a systematic manner.

Milk cooperative societies have been started in the year 1976-77 but the coverage is still quite poor. Only 5 societies are functioning involving 640 members. Poultry development programmes have been undertaken by several official agencies but has not met with much success. The reason for this is lack of a viable marketing channel. While poultry schemes are yet to become popular, fishery has caught the right tempo. Several families have started earning good income out of this. This new economic activity for earning cash income needs to be given more encouragement and the handicaps faced by the Adivasis in this regard should be removed. Here again transportation problem is the main one for the society to earn more profit.

The economy of the Adivasis in this taluka has been a subsistence one in the past. Due to this, even today there is not much diversification in the occupational pattern found among the Adivasis of this taluka. It has alerady been observed that more than 90 percent of the workers are engaged in primary sector of economic activity. Due

to this, there is almost a complete absence of industrial activities in this taluka. However in recent years some of the cottage industries like carpentry, bamboo-product making, tiles-making, sewing, ambar charkha, etc. have been promoted among the Adivasis of this taluka but the coverage is quite on a small scale. For some of the cottage industries such as carpentry and bamboo-products making the Adivasis have traditional skills. They need training to manufacture these products for commercial purpose.

Several schemes have been implemented to improve the socio-economic conditions of the Adivasis and due to these some changes have become noticeable. But the overall impact of these schemes does not appear to be much as, by and large, the present economic condition of the people does not indicate toward this.

As has been found in the sample survey a large majority of the households do not yet earn an annual income of more than Rs. 5000. 83.5 percent of the households covered under the survey belong to this category. The per-capita per month income for these households does not exceed Rs. 48. There are some households which have only Rs. 22 as the per capita per month income. It has been amply illustrated that more than 90 percent of the households live in dire poverty which we recognise as 'below the poverty line'. Only a small percentage (1.75) of households is having sufficient income to put them much above the proverty line. Thus, majority of the Adivasis have to put a hard struggle for existence.

Pervasiveness of the rampant poverty is also supported by the amount of expenditure found among the sample households. Here again, only 5.75 percent of the households have the per capita per month expenditure of more than Rs. 62. The fact that an overwhelming majority of the households (94.25 percent) are below the

poverty line becomes very much apparent. For the Adivasis, as well as for the non-Adivasis too, the highest expenditure is made on food and lowest on education. Of course, there is some variation in degree between the Adivasis and the non-Adivasis.

On account of the extremely low income, more than 70 percent of the Adivasis households in the sample are indebted, the amount of debt per household, (from amongst the indebted households) being Rs. 528. The problem becomes more complex as the indebted Adivasis remain indebted perpetually because of the extremely poor repaying capacity. The more tragic situation in this regard is this that the Adivasis have to, in general, incur debt for meeting household expenditures and for expenditure towards social ceremonies, not for productive purposes.

We have seen that there is extremely low income as well as low consumption per head which clearly show the extent of poverty among the Adivasis of this taluka. Poor and crude technology of production, absence of industrial sector, inadequate physical and social infrastructure, low out-put per hectare, weak acquisitive motivation, unwillingness to bear risks, poor achievement in the implementation of development programmes by an inefficient and unconcerned development administration are the major causes for such a large majority of the households in this taluka to be living below the poverty line. Such an existence obviously compels the households to use the labour of all the members, even children below the age of 15, (6.76 percent of earning persons in the sample survey are children from the age group of 10-14) in the economic activities. The households have to take up subsidiary occupations too to supplement the meagre income gained from the main occupation. 78.70 percent of the sample households are having subsidiary occupations of one nature or other. But here again opportunities for employment are few and far between due to over-whelming importance

of agriculture in the economic life of the people in this taluka.

Due to this dominance of agricultural economy and extremely limited opportunities in the non-agricultural sector, there is obviously a surplus of labour, which remain unemployed or under-employed during a part of the year, although without being redundant. On one hand all the able bodied members in the households, including women and children, are available for agricultural operations, while on the other hand the poor agricultural out-put (resulting in low income) suggests that actual labour requirement should be low. This means that there is an excess of labour availability over labour requirement in the current level of agricultural productivity. The high percentage of working force among the surveyed household's population above 15 years of age (93.63 percent) and even children in the age-group of 10-14 (6.76 percent), obtaining an average annual income of only Rs. 3497 per household clearly suggests that there is significant level of surplus labour. But since the surplus labour has work, even though the return is poor, in agricultural seasons it can't be labelled as unemployed. It is, of course, under-employed. Thus, among the population of Sagbara taluka, unemployment is not the major problem. The real and chronic problem in this taluka is of under employment or partial employment among the agriculturists operating holdings below 5 acres, the agricultural and casual labourers and artisans. The upshot of this is that the real problem is the chronic poverty among vast majority of the taluka's population. In view of this, any development planning for this taluka will be in the direction of effective utilization of surplus labour which, in the context of Sagbara taluka, cannot be achieved without certain changes in economic organization. As has been clearly shown, agriculture in this taluka had for a long time past been based on under employment and due to this, work habits

of the Adivasis were adjusted to this situation. If part of the labour force is withdrawn from such a system, those remaining will have to change in the manner and organization of their agricultural operations. In fact this is happening in area like Valsad-Vapi region where part of surplus labour force finds employment in the industrial organizations. The agriculture production has also improved there because of the changes ushered in the organization of agricultural operations.

Keeping this fact in our view, we have treated the planning problem in this taluka as essentially one providing employment opportunity to the surplus labour in non-agricultural sector. This reflects an emphasis on equity in the distribution of income and economic opportunities i.e. redistribution of the means to acquire income. As can be observed from the following list of the schemes, an attempt has been made to create more mandays of work for the surplus labour as well as in raising the income level of those who are at the low end of the economic scale. If implemented properly, more than 95 mandays of labour per head will be created and an additional income of about Rs. 17 per capita per month. The survey result has shown that on an average the per capita per month income is only Rs. 48. If we are able to generate the estimated income, through implementation of these schemes, large section of the households can be helped to come out from the below poverty line.

The salient features of the schemes are given in the next pages.

Statement Regarding Schemes Suggested For Block Level Planning in Sagbara Taluka

Sr. No.	Name of the scheme	Number of beneficiaries to be covered	Annual estimated income to be generated (in Rs.)	Estimated number of mandays in a year	Loan from Bank (in Rs.)	Allocation from B.L.P. fund (in Rs.)	Total investment (in Rs.)
1.	Increase in the acreage of pulse cultivation	250	8,00,000	13,415	—	5,000	5,000
2.	Establishment of a pulse mill	112	50,000	5,600	85,000	60,000	1,45,000
3.	Establishment of small milling units for processing paddy	155	65,000	8,000	50,000	8,125	58,125

	1	2	3	4	5	6	7	8
4. Manufacture of stone chips	150	2,02,100	53,550	1,85,400	7,650	1,93,050		
5. Carpentry	100	6,00,000	40,000	1,10,000	1,30,000	2,40,000		
6. Furniture making	5	70,000	14,500	47,500	48,000	95,500		
7. Wodden packing cases making units	50	4,78,600	20,000	1,53,000	1,09,650	2,62,650		
8. Manufacture of straw boards from grass and straw	100	8,17,800	37,200	3,80,000	1,91,550	5,71,550		
9. Leaf plates and Leaf cups making units	100	4,20,000	42,000	30,000	50,000	80,000		

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	1	2	3	4	5	6	7	8
10. Bee rearing and Honey making	100	77,000	7,700	84,500	35,500	1,20,000		
11. Poultry farming	300	3,00,000	30,000	—	66,300	66,300		
12. Cane and Bamboo products	50	3,75,000	37,500	—	16,875	16,875		
13. Flour mill	5	18,000	1,500	43,750	1,875	45,625		
14. Goatry	100	2,50,000	25,000	—	1,40,000	1,40,000		
15. Tailoring	60	1,08,000	18,000	58,000	17,000	75,000		
16. Vegetable production	1000	—	—	—	8,000	8,000		
17. Graft of fruit trees	1000	—	—	—	30,000	30,000		
18. Fishery	100	20,000	2,000	—	18,100	18,100		
Total	3737	46,51,500	3,55,965	12,27,150	9,43,625	21,70,775		

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To achieve the desired results for effective utilization of the surplus labour in the economic opportunities created through the schemes, it is necessary to create organizations for mobilization, organization and conscientization of the Adivasis of the Sagbara taluka. Intensive training programmes will have to be organized by District Industry Centre, I. T. D. P., Taluka Panchayat and District Planning Office for developing the necessary technical and managerial skills among the Adivasis. The official agencies like District Industry Centre, I. T. D. P., Taluka Panchayat Administration, S. F. D. A., I. R. D. P. and etc. will have to organize their activities in the taluka in committed ways to achieve the social welfare objectives of the schemes. Special attention has to be paid by the development administration at the local and district level to check the exploitation of the Adivasis by outsiders but settled down in Sagbara taluka.

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