

INTRODUCTION

Purpose of the Study : In the Agro-Economic Research Unit located at the Institute by the Ministry of Agriculture, it was decided to take up in the year 1971-72 a Socio-Economic Survey of 14 villages in Chafal Valley in Patan taluka from Satara district in Maharashtra State. The object of the Survey was to collect data about the physical resources with a view to prepare a development plan for the villages situated in the valley. We were prompted to take up the study as we came to know during the course of our other economic investigations in Satara district that some local leaders in the valley and particularly the Development Committee of the Shri Ram Temple Public Trust at Chafal were anxious to have a plan for economic development of the valley. We decided to focus our attention on the socio-economic aspects to build a picture of the economy as at the time of the Survey as we did not have at our disposal the technical expertise particularly in the field of forestry, animal husbandry and irrigation required for preparing a development plan. The present report, is, therefore, confined to presentation and to a certain extent analysis of the data collected during the survey.

Methodology : For the purpose of the study information was collected from the village records and records of schools, co-operative societies and other institutions in the villages. The main source of data, however, was the information collected in the Family Schedule which was canvassed to all the families. We had designed the schedule to record information about demographic as also socio-economic aspects of the family members and migration, income, assets and liabilities and livestock, livestock products and sales thereof, non-agricultural occupations, and other land

utilization, cropping pattern, inputs, agricultural productions and sales thereof and other aspects of the family. The schedule was filled in in respect of all the 2,799 families in the 14 villages including 38 hamlets included in the village boundaries. Our field staff had discussions during the course of field work with village officers, local leaders and others regarding the problems of the villagers as also what steps or execution of developmental activities they felt were feasible and desirable to bring about economic development. The notes kept by the staff on these discussions have been used in the report, particularly in Chapter VI.

The fieldwork was carried out in about 15 man-months between 15th November 1971 to 24th March 1972 under the supervision of a field inspector and a Research Assistant. The data was transferred on the 40 column unit cards. The coding and tabulation of data was carried out mainly between April 1972 and December 1973. The report was drafted during December 1973 to March 1974.

Even though the 14 villages have a separate ~~identity~~ identity as administrative unit, the whole valley may be considered as one socio-economic unit. The data collected from the village records is shown villagewise. The data collected by canvassing a schedule for all the families in the valley is presented on certain aspects treating the 14 villages in the valley as a single socio-economic unit. Wherever necessary, the data collected during the survey is shown villagewise for the 14 villages.

Presentation of Data : After giving a brief description of the region in Chapter I regarding geographical location, physical features, rainfall, climate, transport and communications, weekly foodgrains and cattle market, Gram Panchayats,

schools, co-operative societies and other institutions and such other information we have presented data from the Population Census and Village Records with brief comments to give a total picture of the valley as it emerges from the available records. The data collected during the socio-economic survey is presented in the subsequent chapters.

In Chapter II, we begin with a description of families by size, occupation, earners per family, per family and per capita income. In the light of this background information we have presented in the subsequent sections demographic and socio-economic data including migration outside the valley.

Chapter III describes ownership and cultivation of land, land use, cropping pattern, agricultural production and expenditure on certain important items and marketing of agricultural products. We have also subsequently dealt with use of manure and chemical fertilisers and agricultural improvements during the five years preceding the survey.

In Chapter IV we have presented data regarding number of livestock, livestock products, income from and expenditure on livestock, purchases and sales of livestock during the year prior to the survey and disposal of dead cattle. The information regarding the desire and ability to keep additional milch cattle as expressed by the respondents is also given here as it is felt that such information will be useful for preparation of dairy development plans. The data regarding agricultural implements is also presented in this chapter.

Chapter V deals with assets and liabilities including borrowings and indebtedness and investments and disinvestment.

In the last chapter we have drawn attention to the salient features of the economy and prospects of future

development. Our field staff during the course of field work had discussions with village leaders and some cultivators regarding the problems of the economy and the possibilities of taking up certain programmes for economic development. We have furnished whatever data emerged from the survey to support such proposals. It is necessary to get assistance from technical experts in the field of irrigation, dairy and forestry to find out whether such propositions are economically sound and feasible.

Merits of the Methodology : Finally, we may consider the merits of the methodology used in the present study. In the preparation of a development plan for a village or a region consisting of a small number of villages one can use either of the two methods.

The first method is to prepare plans for each family by taking into consideration its resources or for certain types of families which have broadly the same amount of resources. For preparing such plans it is necessary to collect comprehensive data from such families, prepare plans for the optimum utilisation of their resources, discuss the possibilities of implementing those plans and where necessary modify them with a view to make them feasible for the purposes of execution. Even when preparing such plans one has to keep in mind the characteristics of the region and the direction in which development of the region is feasible and desirable, and introduce in the family plans wherever necessary and possible, a part of the overall programme for the region, such as cultivation of certain crops, dairying, poultry farming and certain non-agricultural occupations. The family plans when added together will develop into an aggregate plan for the region. However, the process is time consuming and requires

the services of experienced and matured staff for preparation of family plans.

The second method is to take into consideration the resources of a village or a region and prepare a total plan for the region. The families in the region may participate in the total plan and derive benefits by utilising their resources.

In the present exercise we selected the second method. We obtained data from three sources, namely, 1) Village records and records of schools, co-operative societies and other institutions in the villages and population census, 2) Family schedule canvassed to all the families in the valley and 3) Notes kept by the fieldstaff based on their observations and discussions with the village officers, local leaders and some villagers.

The data obtained from the village records relates to land utilization, cropping pattern, livestock and agricultural tools and implements. The data regarding land utilization is considered useful as it gives some basic information regarding land use in the region. As regards the cropping pattern, which may change from year to year due to crop-rotations, we could not get data uniformly for one particular year for all the 14 villages. But apart from this drawback, the other serious consideration is the reliability of the data. It is physically impossible for the village officers to approach and obtain from each cultivator the figures of the area under different crops cultivated by him and add them up to give an aggregate cropping pattern for the village. Similarly, the inventory as it appears in the village records in respect of agricultural tools and implements and livestock relates to the year of the Census and as such is not upto-date. As regards the data obtained from the population census, though the 1971

population census coincided with the year of the survey, the data regarding female earners was not found to represent the true position. Because of these limitations as also to fill up certain gaps in respect of quantitative as well as qualitative data on a number of items, we decided to canvass a schedule for all the families in the valley to get the required information.

We have broadly described in the section on methodology the contents of the family schedule. From the schedule canvassed to all the families in the valley we were able to get information about occupation, income and outmigration of the population. We hope these data will prove useful in the preparation of schemes for introducing spinning and weaving units and such other occupations where experience of work or contact with Bombay may be of some advantage. The data regarding income shows, the distribution of families in different income groups and helps in identifying the families in the lower income groups for whom special efforts will have to be made to raise their income. We also obtained from the family schedule data regarding agriculture, dairying and poultry. Our efforts in collecting data on land-ownership, land utilization and cropping pattern, inputs and agricultural produce did not prove quite rewarding. As stated in Chapter III the land acreage figures obtained from the family schedule appear to be under-reported when compared with the village records. We have not been able, therefore, to use satisfactorily the input data and arrive at the net returns per acre under various crops. The information regarding marketing of agricultural produce collected in the family schedule throws light on the various foodgrains, pulses, oilseeds and other produce marketed, the quantum of sales within and outside the valley and receipts from

the sale of agricultural produce. In respect of livestock products, we could make only rough estimates of milk yield, milk sold as milk and milk converted into milk products like butter or Khawa during the year. We could get some account of the feed and fodder consumed by the plough and milch cattle. But we did not collect adequate data in the family schedule to work out the expenditure on milch cattle and net income from dairying per cow or per she-buffalo. The family schedules revealed information as at the time of the survey regarding their number of agricultural tools and implements as also the number of livestock and data regarding births, deaths, sales, purchases, expenditure on livestock and income therefrom and such other details.

The data collected in the family schedule also reveals the present position in respect of land, livestock, agricultural tools and implements and other assets, borrowings and indebtedness.

The conduct of a survey by canvassing family schedules to supplement the data available in the village records and institutions is justified in preparing a total plan for a region. Similarly the notes kept by the field-staff also proved very useful. The various proposals for development of the region, which according to the local people are feasible or the other felt needs of the people, could not have been incorporated in the report without these notes. But we should have collected some very specific information in respect of cultivation of certain crops and dairy enterprise by means of case studies. Without these details it is not possible to make specific suggestions for developing certain crops or dairy enterprise.

One must also take into consideration the time and money involved in canvassing the family schedules and

processing the data, collected therein. In the present study, for instance, the fieldwork in respect of about 2,800 families from 14 villages took about 15 man-months of field investigators and 4.5 months of field inspector. The scrutiny of schedules, coding and transferring data on punched cards also took considerable time and finances. The comprehensive family schedule that we had canvassed required some thirty sub-cards types to transfer the data on 40-column units cards. In all 87,466 40 column unit cards were prepared for 2,799 families. The tabulation of data with the help of a sorter and tabulator took several man/machine months to prepare some 60 basic tables that we have included in the present report.

The point to be considered for future guidance is whether it will be possible and desirable to get by means of sample surveys and case studies qualitative and quantitative data required to supplement the data available in the village records. If the objective is to prepare a total plan for a region and not plans for individual families, then to supplement the data from the village records, village institutions, population census and such other sources, it is felt that sample surveys and case studies will provide the required data at a considerable lower cost and will save a lot of time.

April 1974.

D. P. Apte

CHAFAL VALLEY : A SOCIO-ECONOMIC SURVEY OF 14 VILLAGES

C O N T E N T S

<u>Chapter</u>	<u>Particulars</u>	<u>Pages</u>
I	<u>Chafal Valley</u> : Physical Features, Location of the Villages, Transport and Communications, Weekly Markets for Foodgrains, Markets for Livestock, Fair Price Shops, Medical Facilities, Veterinary Services, Schools, Village Administration, Village Institutions, Gram Panchayats, Co-operative Societies, Temples and Festivals, Village Level Data, Population, Land Utilization, and Cropping Pattern, Livestock, Agricultural Tools and Implements.	1 - 27
II	<u>Population</u> : Size of Family, Family Occupation, Size of Cultivated Holding, Age and Sex, Education, Educands Studying Outside the Valley, Earner Status, Non-Earners - Reasons for Non-working, Occupational Distribution of Earners, Non-Agricultural Occupations in the 14 Villages, Outmigrants, Educational Status of the Outmigrants, Place of Migration, Occupational Distribution of Outmigrant Earners, Willingness to work in the Valley, Total Family Income, Ownership of Certain Durable Articles.	28 - 69
III	<u>Land</u> : Land Ownership, Land Leased In and Leased Out, Land Utilization, Cropping Pattern, Purchase of Seed, Use of Manure and Fertilizers, Value of Production Per Acre, Expenditure on Agriculture During 1970-71, Sale of Agricultural Produce, Place of Sales, Processing of Agricultural Produce, Land Improvement	70 - 93
IV	<u>Livestock and Agricultural Tools and Implements</u> : Livestock, Income from Livestock, Rearing Additional Milch Cattle, Changes in Livestock Holding, Development of Dairy Enterprise, Development of Poultry and Sheep and Goat, Agricultural Tools and Implements.	94 - 107
V	<u>Assets and Liabilities</u> : Assets, Borrowings and Indebtedness, Finance from the Co-operative Credit Societies.	108 - 123
VI	<u>Salient Features of the Economy and Prospects of Future Development</u> : Suggestions made by the Villagers, Agricultural Improvements, Transport and Communications, Other Felt Needs of the People, Development of Certain Industries	124 - 138

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
1.1	Villagewise Population in the 14 Villages as reported in the 1941, 1951, 1961 and 1971 Censuses	13
1.2	Occupational Distribution of Workers and Literate and Educated Persons in the 14 Villages as per the 1971 Census	15
1.3	Villagewise Landuse in the 14 Villages	18
1.4	Area under crops in the 14 Villages	19
1.5	Villagewise Area Under Irrigated Crops in the 14 Villages According to the Source of Irrigation	21
1.6	Villagewise Distribution of Wells and Bunds in the 14 Villages (1961-62)	23
1.7	Villagewise Number of Animals in the 14 Villages	24
2.1	Distribution of Families in the 14 Villages by Family Size	29
2.2	Distribution of Families in the Valley according to Main Occupation of the Family and Total Family Income	30
2.3	Distribution of Families in the Valley according to Size of Cultivated Holding and Total Family Income	34
2.4	Distribution of Population in the 14 Villages by Age and Sex	36
2.5A	Distribution of Educands and Non-Educands by Male/Female, Adult/Non-adult population in the Valley	38
2.5B	Distribution of Male/Female, Adult/Non-adult Educands studying at Places outside the Valley	40
2.6	Distribution of Population in the Valley according to Earner Status and Reasons for Not Working in the case of Non-Earners	42
2.7	Distribution of Male/Female Adult/Non-Adult Earners in the Valley according to their Main Occupation	45
2.8	Distribution of Earners in the Valley reporting Subsidiary Occupation according to Subsidiary Occupation	47
2.9	Non-Agricultural Occupations in the 14 Villages : Income and Investment	52
2.10	Earner Status of the Permanent Outmigrants	55
2.11	Distribution of Male/Female, Adult/Non-adult Outmigrants by their Educational Status	58

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
2.12	Place of Migration in respect of the Outmigrant Earners from the 14 Villages	59
2.13	Occupational Distribution of Outmigrant Earners	61
2.14	Composition of Total Family Income Classified According to Sources and Total Family Income	64
2.15	Ownership of Certain Durable Articles by the Farmers in the 14 Villages	69
3.1	Distribution of Families in the Valley according to Size of Cultivated Holding and Owned and Leased in Land	71
3.2	Distribution of Families in the 14 Villages According to Owned and Leased in Land	73
3.3	Land Utilisation in the 14 Villages	76
3.4	Area under different crops, Value of Seeds, and Fertilizers Purchased; Number of Cart Loads of Manure Used and Value of Main and Subsidiary Crops and Volume of Production of Main Crops in the Valley	77
3.5	Expenditure on Agriculture during the Year 1970-71	81
3.6	Volume and Value of Sales of Agricultural Produce, Expenditure on Marketing and Net Sale, Proceeds reported by the Cultivators in the Valley during 1970-71.	84
3.7	Villagewise Distribution of Sales of Major Agricultural Produce during 1970-71	85
3.8	Sale of Major Agricultural Produce in the Valley According to Commodity - Volume and Value and Place of Sales	87
3.9	Land Improvements During the Five Years prior to the Year 1970-71 in the 14 Villages	89
4.1	Distribution of Livestock Owned According to the Size of Cultivated Holding	95
4.2	Villagewise Distribution of Livestock Owned in the 14 Villages	97
4.3	Livestock Products and Sales thereof and Income from Carting in the 14 Villages	98
4.4	Families Willing to Bear Additional Milch Cattle in the 14 Villages	102
4.5	Distribution According to the Value of Livestock Purchased, Sold, Died and Consumed during the Year prior to the Survey in the 14 Villages	103

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
4.6	Distribution of Agricultural Tools and Implements Owned by the Families in the 14 Villages	107
5.1	Assets at the Time of Survey Reported by the Families in the 14 Villages and Investments and Disinvestments during the 5 Years Preceding the Survey	109
5.2	Amount Outstanding Due - Receivable and Payable including Amounts Borrowed During the Year and Amounts Borrowed in Previous Years in the 14 Villages.	114
5.3	No. of Loans and Amount Actually Received, Loans Repaid and Loans and Interest thereon Outstanding Due in the 14 Villages	116
5.4	Amount Borrowed and Of Which Repaid and Repayments towards Old Debts During the Year in the 14 Villages	118
5.5	Amount Actually Received, Principal Repaid and Interest Paid and Outstanding Dues on Account of Principal and Interest to Various Agencies	119
5.6	Date of Registration, Number of Members, Loans Disbursed and Loans Repaid during 1970-71, Loans Outstanding and Overdues on 30-6-1971 in respect of the Co-operative Credit Societies at the 12 Villages in the Valley	122
6.1	Composition of Total Incomes of all the Families in the valley according to Source of Income and Income per Reporting Family	129

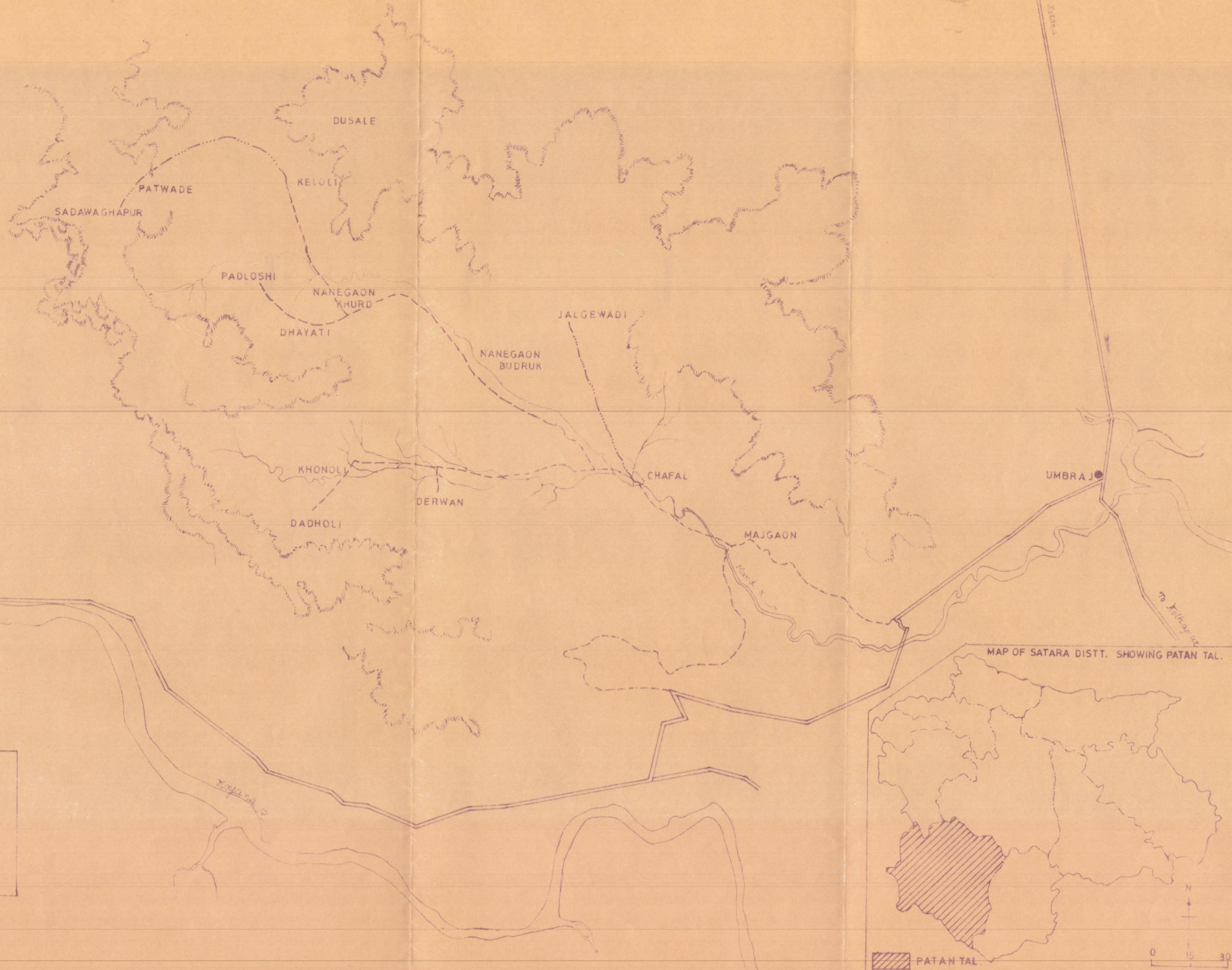
Chapter I
CHAFAL VALLEY

In the present chapter we give a brief description of the Chafal Valley and the 14 villages situated in the valley followed by official statistics for the villages and comments thereon. The 14 villages in the valley are :
1) Majgaon, 2) Chafal, 3) Jalgewadi, 4) Derwan, 5) Dadholi, 6) Khonoli, 7) Nanegaon Budruk, 8) Nanegaon Khurd, 9) Dhayati, 10) Keloli, 11) Padloshi, 12) Patwade, 13) Sadawaghapur and 14) Dusale.

Physical Features : The Chafal valley is formed by the Sahyadri ranges on the east of Sahyadri in Patan taluka of Satara district in Maharashtra State. There are two smaller valleys viz. Dadholi Valley and Padloshi Valley within the Chafal Valley. The approach to Chafal valley is from the east and the remaining three sides are surrounded by hills. The area of the 14 villages in the valley is 34.6 sq. miles. A map showing the location of the valley, the 14 villages in the valley and some of the neighbouring towns and markets appears on the following page.

The annual rainfall in the valley is around 100 cms. Most of the rain water is drained by streams and the river and streams dry up during the summer. River Mand originates from the valley near village Keloli and flows through the Padloshi valley. A few streams originating from the hills join the river. Chafal is situated on the banks of the river. At some distance outside the valley Mand joins the Krishna.

The rainfall is inadequate and uncertain for rabi crops. Hence the rabi crops are taken on a very limited area where water for irrigation is available.



- MAIN RD.
- - - MOTORABLE RD.
- · - · - SMALL RD. (not motorable)
- MARKET TOWN
- TALUKA H.Q.

0 1
1 KM.

MAP OF SATARA DISTT. SHOWING PATAN TAL.



0 15 30
KMS.

As the soil does not retain moisture, crops are taken mainly during the kharif season. Some parts of the villages situated on levelled land have black soil but by and large the soil is inferior. The land is undulating and at many a places, particularly in Dadholi and Padloshi valley, the cultivators have to terrace the land with rubble and prepare a strip of levelled land for cultivation. The soil is light reddish in most of the parts except in the eastern part of the valley at Majgaon, Chafal and Jalgewadi where there is black soil. At Sadawaghapur which is situated on the top of the hills, at many a places, there is not even a thin layer of soil on the rocky surface. The land revenue when related to cultivable land works at about Rs. 1.20 per acre. At Sadawaghapur, however, the soil is very poor and the land revenue per acre of cultivable land works out at Rs. 0.30 per acre.

The Chafal Valley did not escape the earthquakes in Koyna Valley in December 1967. A number of old houses in the villages collapsed due to severe shocks during the earthquakes. The State Government and many private agencies enabled such families to raise new structures, mainly with tin-sheet roofs.

Location of the Villages : The 14 villages in the valley on the basis of their geographical location and communication form four groups : I) Majgaon, Chafal and Jalgewadi, II) Derwan, Dadholi and Khonoli in Dadholi Valley, III) Nanegaon Bk., Nanegaon Kh., Dhayati, Keloli and Padloshi in Padloshi Valley and IV) Patwade, Sadawaghapur and Dusale on the top of the hills in Padloshi Valley.

Chafal is situated at a distance of about 50 kilometres from Satara, the district headquarters and about

150 Kms. from Poona on the Umbraj-Patan Road. It is about 10 Kms. west of Umbraj, a town located on the Poona-Bangalore National Highway. Majgaon is situated at the entrance of the valley. At Majgaon the village site is restricted due to Mand on one side and agricultural land on the other side. The population is concentrated within the residential area in the village and there are no hamlets included in Majgaon. Apart from the main village there are 7 hamlets included in Chafal. One of the hamlets is very close to the village, four are situated at a distance of about 3 Kms. from the village and are connected by a Kuchha road while the remaining two, situated to the north and south of Chafal respectively in the hills, have a Kuchha road upto the base of the hills and a foot path to reach the hamlets. About half the population of Chafal stays in the villages and the remaining half in the 7 hamlets. Jalgewadi is about 4 Kms. to the north-west of Chafal connected by a Kuchha road to Chafal. The road passes through fields and becomes unusable during monsoon. The houses are clustered in two groups about 0.2 Kms. from each other.

Derwan is situated about 4 Kms. to the west of Chafal on Gamewadi-Dadholi road, about a furlong off the road. It is connected to the Kuchha road by an approach road constructed by the villagers by contributing voluntary labour. There are 5 hamlets under Derwan, four of them situated within 2 Kms. from the village and connected by Kuchha roads. The fifth hamlet is situated in the hills about 4 Kms. from Derwan and is connected to one of the hamlets by a foot path. There is a Kuchha road about 6 Kms. between Gamewadi and Dadholi in Dadholi Valley. There is also a Kuchha road from Keloli to Sadawaghapur. Both the roads become unusable during monsoon. Khanoli is situated

6 Kms. to the west of Chafal and connected to Gamewadi-Derwan road by an approach road constructed by the villagers by contributing voluntary labour. There is only one hamlet in Khonoli, situated half way on the slope of a hill, to the west of the village. Dadholi, about 7 Kms. from Chafal, is at the end of Dadholi Valley and situated on the slope of the hills. There are 3 hamlets, about 2 Kms. from the village, connected by Kuchha roads.

Nanegaon Bk., about 5 Kms. to the west of Chafal on Chafal-Padloshi road, is situated at the base of Padloshi valley. River Mand flows between the road and the village site and communication becomes impossible during monsoon on some days when it rains heavily. The 4 hamlets under the village, within a Kilometre from the village, are connected to it by Kuchha roads. Nanegaon Khurd is similarly situated about 7 Kms. west of Chafal on the left bank of Mand. It is connected to Chafal-Padloshi road by a Kuchha approach road 0.4 Kms. in length. Of the three hamlets in the village, two situated within a kilometer are connected to the village by Kuchha roads while the third one is situated in the hills and connected by a Kuchha road climbing up the hills. Dhayati is on Chafal-Padloshi road about 10 Kms. west of Chafal and one Kilometre from Padloshi situated at the base of the hills. The two hamlets within about 0.2 Km. from the village are connected by Kuchha roads. Keloli is about 10 Kms. north-west of Chafal connected to Chafal by a road between Nanegaon Kh. and Keloli. The approach road about 2.5 Kms. in length was constructed by the villagers by voluntary labour. One of the hamlets about 2 Kms. from the village is situated to the north-west of the village on the top of the hill and is connected by a Kuchha road which goes winding up the hill. This road further

extends upto Sadawaghapur. The other hamlet is 0.4 Kms. to the east of Keloli connected by a Kuchha road.

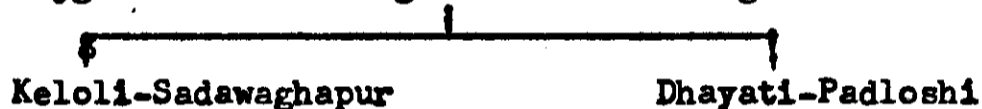
Padloshi, about 11.5 Kms. from Chafal, is connected to it by a Kuchha road. It is situated at the base of the hill by a stream. The four hamlets under Padloshi are connected to it by Kuchha roads. Patwade, 11 Kms. west of Chafal and 2 Kms. west of Keloli, is on the top of the hills. To reach the village one has to cross the Mand to the west of Keloli and climb up the hills by foot path. There is also a Kuchha road 4 Kms. in length of which 2 Kms. climbs up the hills. There is only one hamlet on the slope of the hills not far from the village. Sadawaghapur is situated on the top of the hills about 12 Kms. to the west of Chafal. There is a Kuchha road connecting Keloli to the village via Virewadi. The road is about 4 Kms. in length half of which is rather a stiff climb. There are five hamlets called 'Sade' and hence the village known as Sadawaghapur. The hamlets are situated far away from each other. The village and the five hamlets run semi-circular on the north-west boundaries of the valley. The hamlets are economically linked up with Dadholi, Khonoli, Dhayati, Derwan, Dusale, Chafal and Malharpeth rather than the village itself. Dusale is also situated on the top of the hills about 2.5 Kms. to the north of Keloli. One has to climb up the hills a distance of 2.5 Kms. The village really belongs to Tarale valley and is also socio-economically connected to some villages in Tarale valley. However, Dusale was included in the Chafal valley at the instance of the villagers who requested the Development Committee of Shri Ram Temple Public Trust for its inclusion for the purpose of economic development. There is a cart track between Chafal and Dusale via Jalgewadi and Chavanwadi. The other cart-track is from Tarale via Vajroshi. Both the approaches

pass through the climbing hills, the distance via Chafal being about 16 Kms. and from Tarale about 10 Kms. There is no hamlet attached to the village.

It will be thus seen that many of the villages and most of the hamlets are connected by Kuchha roads which become ~~xxx~~ unusable during monsoon.

Transport and Communications : The road which branches off from village Charegaon on the Umbraj-Patan road leads to Padloshi valley. It is a metalled road about 15 Kms. in length, between Majgaon and Padloshi. However, there are no culverts on the stream and the road cannot be used when it rains heavily during monsoon. The remaining villagers are connected to the metalled road by unmetalled road. The connections are as follows :

- 1) Majgaon-Chafal-Jalgewadi-some hamlets of Nanegaon.
- 2) Majgaon-Chafal-Derwan-Dadholi-Khonoli.
- 3) Majgaon-Chafal-Nanegaon Bk. and Nanegaon Kh.



A number of buses of the Maharashtra State Road Transport Corporation ply on the Poona-Bangalore National Highway as also on the Umbraj-Patan road within a distance of 10 Kms. from the Valley. Besides there is a regular bus service between Satara and Chafal. Between January and May additional buses ply between Dadholi-Karad, Padloshi-Umbraj, Padloshi-Patan, Keloli-Umbraj via Chafal. There is also a bus connecting Padloshi to Bombay which operates only in summer.

The nearest railway station is Masur about 15 Kms. from Chafal on the Southern Railway. The villagers, however, prefer to travel by bus as the service is more frequent and convenient.

There is a Sub-Post Office at Chafal and branch post offices at Majgaon, Nanegaon Kh. and Derwan. The remaining villages in the valley receive mail twice or thrice a week. The nearest telegraph office is at Umbraj about 10 Kms. from Chafal.

Weekly Markets for Foodgrains : In the valley, there are two weekly markets, on Thursdays at Chafal and on Sundays at Padloshi. The cultivators in the valley bring agricultural produce for retail sale at these markets. Besides a number of petty traders from neighbouring villages sell various commodities at the weekly markets. The turnover at Chafal is roughly twice the turnover at Padloshi as the latter is confined mainly to the population in Padloshi valley. Besides, there is a weekly market on Saturdays at Charegaon which is outside the valley at a distance of about 6 Kms. from Chafal. At the weekly market at Charegaon, sheep, goat and poultry is also sold and as such it attracts many villagers from the valley. There are weekly markets for foodgrains and other commodities at Patan and Umbraj, both situated on the National Highways at a distance of 10 Kms. from the valley. There are two more weekly markets at Tarale and Malharpeth within about 8 Kms. from the valley. Thus the population in the valley is very well served by two weekly markets in the valley and 5 weekly markets in the neighbourhood.

Markets for Livestock : There are weekly markets for cattle at Umbraj on Mondays about 10 Kms. from the valley, Shiravade on Fridays about 20 Kms. from the valley and Nagthane on Tuesdays about 25 Kms. from the valley. Most of the cultivators prefer these three weekly markets as the markets are located within a short distance. Besides

there are annual cattle fairs once in a year in Man and Atpadi talukas in Satara district and Sangola taluka in Sholapur district. Some cultivators visit these markets for plough cattle, particularly for the purchase of bullocks of 'Khillari' breed.

Fair Price Shops : There were seven fair price shops in seven villages in the valley at the time of the survey. Sadawaghapur and Dusale were served by the fair price shops situated outside the valley at Patan and Tarale respectively. At these shops sugar was mainly distributed on ration cards. During periods of shortage of foodgrains, wheat and hybrid jowar was also sold at these shops. The shop at Chafal was run by Patan Taluka Purchase and Sale Union, the shops in 4 other villages by the local co-operative societies, and the remaining two by a private trader who had a license to run the fair price shops. The village Talathi decided the persons eligible for buying at these shops and issued them ration-cards.

Medical Facilities : A female Field Worker, a Vaccinator and a Malaria Worker are stationed at Chafal under the State Government's Health Schemes. There is no Primary Health Centre in the valley. There are two registered medical practitioners at Chafal but for major illnesses the villagers have to go to Karad which is about 25 Kms. from Chafal.

It was reported that under the Family Planning Programme about 300 males and 100 females from the valley were operated upon until the time of the survey.

Veterinary Services : The Zilla Parishad has located a Veterinary Centre and an Artificial Insemination Centre at Chafal.

Schools : In the year 1971-72 there was a primary school in each of the 14 villages and in 17 out of 38 hamlets. The oldest school was established in the year 1870 at Chafal. There were in all about 2700 students in the schools, i.e. on an average one student per family in the valley at the time of the survey. Besides there was a nursery school and a separate school for girls at Chafal established in the year 1965. A high school was established at Chafal in the year 1953 and at Nanegaon Khurd upto 9th standard in the year 1965. The high school at Chafal was recognised as agricultural school in 1961. It has 14 acres of land, a pair of bullocks and improved agricultural tools and implements. It was, however, reported that it is not imparting instructions in agriculture since 1968 when the land went to the institution which originally founded the high school but later gave up the management in favour of another institution. There were 268 students in the two high schools. For higher education above S.S.C. level, some of the villagers send their children to Patan, Karad, Satara and Poona. Except one school, managed privately, all the schools are under the Government administration. There were 86 teachers i.e. one teacher for every 30 students. The classes were located in some 86 rooms, of which 60 rooms were built from out of the Government funds.

The distribution of the 2700 students in the seven standards was as follows :-

	<u>% age</u>
Standard I	33
" II	18
" III	13
" IV	11
" V	11
" VI	8
" VII	6
	<u>100</u> % = 2700 students.

It will thus be seen that the number of students taking education in the fourth standard and above declined very rapidly. Even though there are no schools in 21 hamlets, (many of the hamlets have only upto 10 families) the students from these hamlets are not required to cover a long distance to attend the schools as the schools are situated in different parts of the valley.

Village Administration : There was a Police Patil for each village and for revenue work, 4 Talathis and one Assistant Talathi. They were assisted by 19 peons called Kotwals.

Village Institutions :

Gram Panchayats : There were 8 Gram Panchayats for 8 villages and 3 Group Gram Panchayats for the remaining 6 villages viz. Dadholi and Khonoli, Dusale and Patwade, and Padloshi and Dhayati. The office staff, consisted of one Gram Sevak and 5 Assistant Gram Sevaks and peons. The oldest among the Gram Panchayats is the one established at Chafal in 1940. In the remaining villages the Gram Panchayats were established after 1956.

Co-operative Societies : There were cooperative Credit Societies at all the villages except Dusale and Sada-waghapur. The first society in the valley was registered in 1919 at Chafal followed by the societies at Majgaon and Derwan in 1921. In other villages the societies were registered after 1954. The societies at Dhayati-Padloshi and Keloli-Patwade are group societies. All the co-operative credit societies are now registered as multi-purpose societies to enable them to take up distribution of fertilizers and pesticides, improved seeds, foodgrains and other commodities. However, most of the societies still confine their activities to supply of agricultural credit.

In addition, there are following other societies :

1) Cooperative Housing Society for Backward Classes and
2) Milk Producers' Cooperative Society at Chafal. Both these societies were reported to be inactive at the time of the survey. At Keloli and Padloshi two youth organizations are registered, the one at Keloli runs a fair price shop for foodgrains and the other at Padloshi looks into problems of development of the village.

Temples and Festivals : The Chafal valley is known in Maharashtra for its temple of Shri Ram at Chafal built by Swami Ramdas in the 17th Century. Recently the temple has been rebuilt and a number of amenities are provided to the visitors. The annual festival begins on the new year's day of the Hindu Calendar and continues for 11 days. The income from the Inam lands is utilised for day to day expenditure as also for the annual festival. There is a Board of Trustees for the management of the temple which is registered as a Religious Trust under the Bombay Public Trusts Act of 1950. Due to some legal dispute among the descendants of Swami Ramdas the Trust is managed by the District Court as the property of the Court of Wards. The Trust has also appointed a Development Committee with a leading industrialist from Bombay as its Chairman. The members include some officials like the Collector of Satara district and some leading social workers and economists. It was learnt that the programme of development will include dairying and rearing of cows and a cooperative society of weavers.

There are a number of temples in the 14 villages in the valley. The total Inam land of the 15 temples in the valley comes to about 9300 acres. Of the annual revenue of Rs. 13,040 collected in respect of this land, a sum of

Rs. 2,428 is retained by the Government and the remaining sum of Rs. 10,612 by the temples. The annual festivals at different temples in the valley are spread over different months.

Village Level Data : In presenting villagewise data obtained from official record, we have kept the location of the village in view. The order of presentation is village Majgaon situated at the entrance of the valley followed by Chafal and Jalgewadi to the north-west of Majgaon, followed by villages from Dadholi and Padloshi valleys and at the end Patwade, Sadawaghapur and Dusale situated on the top of the hills. From the population Census, information regarding the number of households and population was obtained for the years 1941, 1951, 1961 and 1971. The data regarding male/female population and occupational distribution of earners was noted only for the 1971 Census. From the village records, it was possible to get for the village as a whole the following statistics : Land Utilisation, Cropping Pattern, Sources of Irrigation and Crops Irrigated, Live-stock and Agricultural Implements. The village level data are presented in Tables 1.1 to 1.8. In the following paragraphs we briefly note the important features as revealed by these data.

Population : In Table 1.1 villagewise population in the 14 villages as reported in the 1941, 1951, 1961 and 1971 Population Censuses is given. As per the 1971 Population Census, there were 2,955 households with a population 15,445 persons in the 14 villages in the valley. The total population in the 14 villages recorded a growth of 8.3 per cent during the decade 1941-51 and 20.1 per cent and 19.8 per cent in the following two decades. The growth of population in

Table 1.1 : Villagewise Population in the 14 Villages as reported in the 1941, 1951, 1961 and 1971 Censuses

Village	1941*	1951		1961		1971	
	Popu- lation	No.of House- holds	Popu- lation	No.of House- holds	Popu- lation	No.of House- holds	Popu- lation
1. Majgaon	933	194	1022	242	1281	266	1490
2. Chafal	2405	581	2687	650	3299	739	3848
3. Jalgewadi	597	123	563	137	706	168	901
4. Derwan	1098	276	1285	302	1579	370	1914
5. Dadholi	519	115	527	123	572	151	737
6. Khonoli	356	88	378	96	440	99	524
7. Nanegaon Bk.	706	173	758	178	843	197	1047
8. Nanegaon Kh.	850	213	932	226	1087	240	1291
9. Dhayati	289	68	295	72	375	85	405
10. Keloli	660	144	710	160	785	169	938
11. Padloshi	376	84	441	97	539	113	665
12. Patwade	156	34	153	40	222	56	278
13. Sadawaghapur	654	173	693	194	832	227	1005
14. Dusale	301	52	284	61	325	75	402
TOTAL	9900	2318	10728	2578	12885	2955	15445
Average Family Size			4.6		5.0		5.2

* Data regarding number of households not available.

the valley, 19.8 per cent during 1961-71 is lower than the average of 20.8 per cent for the decade for Satara district. There was no consistent growth of population to be found during 1961-71 in the 14 villages. Among the smallest three villages, Dhayati recorded a growth of 8 per cent while Patwade and Dusale recorded a growth of 25.2 per cent and 23.6 per cent respectively. The three largest villages Chafal, Derwan and Majgaon recorded a growth of 16.6 per cent, 21.2 per cent and 16.3 per cent respectively. The maximum growth rate of 28.8 per cent was noted at Dadholi. There did not appear any relation between the physical location of the villages in the valley and the growth of population during the decade 1961-1971. Over the three decades the average size of family slightly increased from 4.6 persons per family in 1951 to 5.0 in 1961 and 5.2 in 1971.

As regards the composition of the population as per the 1971 Census, there were 1089 ^{females} ~~families~~ per thousand male population in respect of the 14 villages. The male-female ratio in rural areas in Satara district was 1062 ~~males~~ females per thousand male population. The villagewise data indicate that in 4 of the villages viz. Dhayati, Patwade, Sadawaghapur and Dusale the number of females was about the same as the number of males. A larger number of females as compared to the male population was found in the remaining villages. At the largest village Chafal there were 1051 females per thousand male population.

In Table 1.2 is given occupational distribution of workers and literate and educated persons in the 14 villages as per the 1971 Census. It will be noted from the table that out of the total male population, 46 per cent males were classified as workers, while in respect of the females only about 13 per cent of the females were classified as workers.

Table 1.2 : Occupational Distribution of Workers and Literate and Educated Persons in the 14 villages as per the 1971 Census

Village	Total Workers		Workers in Industrial Categories																				Total Population		Literate & Educated Persons	
	M	F	Cultivators		Agricultural Labourers		Livestock Orchards etc.		Mining & Quarrying		Manufacturing etc Household Industry		Other than Household Industry		Construction		Trade & Commerce		Transport Storage & Communication		Other services		M	F	M	F
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F						
Majgaon	316	70	257	13	28	56	1	-	-	-	-	11	-	1	-	1	-	3	-	14	1	722	768	405	227	
Chafan	866	57	444	28	111	6	5	-	7	-	39	1	25	-	9	-	21	-	20	-	185	22	1,876	1,972	1,042	461
Jalgewad	176	3	137	1	1	1	-	-	-	-	9	-	7	-	2	-	2	-	-	-	18	1	419	482	199	65
Derwan	380	26	285	7	19	17	-	-	1	-	16	-	20	1	3	-	4	1	13	-	19	-	910	1,004	369	113
Dadholi	162	54	142	52	15	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	3	-	343	394	99	14
Khonoli	118	163	110	152	6	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	238	286	62	14
Nanegaon Bk	204	6	159	-	18	5	2	-	-	-	8	-	3	-	-	1	2	-	1	-	11	-	487	560	239	69
Nanegaon Kh	266	115	199	92	3	21	-	-	-	-	11	-	16	-	4	-	6	1	7	-	20	1	600	631	258	68
Dhayati	80	4	69	1	1	2	-	-	-	-	-	-	5	-	-	-	-	-	2	-	3	1	199	206	115	54
Keloli	193	53	160	43	13	9	-	-	-	-	10	-	2	-	-	-	2	-	-	-	6	1	437	501	157	33
Padloshi	147	19	98	15	14	3	-	-	-	-	24	-	5	-	-	-	2	-	-	-	4	1	318	347	138	32
Patwade	65	82	59	78	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	139	139	42	7
Sadawagnapur	323	307	312	304	5	3	-	-	-	-	-	-	1	-	-	-	5	-	-	-	-	-	494	511	52	2
Dusale	99	105	74	104	-	-	-	-	-	1	15	-	3	-	-	-	-	-	-	-	7	-	210	192	114	34
TOTAL	3,395	1,064	2505	890	238	140	8	-	8	1	132	1	100	1	19	1	45	2	46	-	294	28	7,392	8,053	3,219	1,193

M = Male
F = Female

3291

The number of female workers in the valley reported in the 1971 Census is less than one-third of the number reported in the 1961 Census, the number of female workers reported in the two Censuses being 1064 and 3677 respectively. Actually as per the 1961 Census the female workers in the valley exceeded the male workers by 420. This appeared consistent with the character of the region the reason being many of the able bodied males go to Bombay in search of employment, leaving behind a larger population of ^{female} families at the villages to work in agriculture. If we look into villagewise figures as reported in respect of the 14 villages in the 1971 Census, it is found that the female workers exceeded the male workers only in 3 out of 14 villages, namely, Khonoli, Patwade and Dusale and formed about 49 per cent of the total workers at Sadawaghapur. On the other hand, at Jalgewadi, Nanegaon Bk. and Dhayati, the female workers formed less than 5 per cent of the total workers and at Chafal and Derwan less than 10 per cent of the total workers. It is, therefore, felt that the number of female workers recorded in the 1971 Census is under-reported in most of the villages in the valley. We shall revert to this point when we consider in Chapter II data regarding the number of male and female earners reported in the family schedule canvassed during the survey to all the families in the village.

Of the 1064 female workers, 890 were classified as cultivators, 140 as agricultural labourers, 28 as engaged in other services and the remaining 64 in trade and industry.

The 3395 male workers fell in the following categories : Cultivators 74 per cent, agricultural labourers 7 per cent, manufacturing etc. 7 per cent, trade, transport and other occupations about 3 per cent and other services about 9 per cent. Chafal was the centre of trading and

other activities and 51 per cent of the total male workers in the valley reported in occupations other than agriculture and agricultural labour were found at Chafal. The remaining male workers in non-agricultural occupations and service were mainly recorded at Majgaon, Jalgewadi, Derwan, Nanegaon Bk. and Nanegaon Kh. and Padloshi.

The literacy rate for the total population in the valley came to 29 per cent, being 44.5 per cent for the male and 14.8 per cent for the females. The literacy rate for Satara district as per the 1971 Census was 38.32 per cent.

Land Utilisation and Cropping Pattern : In Table 1.3 are given data regarding land utilisation in the 14 villages. The total land in the 14 villages, consisting of 21,637.25 acres was classified as follows : (1) 79 per cent as cultivable, (2) 5 per cent unfit for cultivation, (3) assigned for public and special uses : a) 12 per cent as forests, b) 3 per cent as grass land and free pastures, c) 1 per cent village site, roads and other uses. The Inam land forms about 54 per cent of the total cultivable land and is mostly leased out on cash rent.

In respect of land available for cultivation, of the total area of about 17,000 acres in 14 villages about 10 per cent was reported as current fallow. Out of the total land available for cultivation, nearly one-third was reported to be under grass. In Table 1.4 is shown area under different crops in the 14 villages. The year of reference is one of the years between 1967-68 to 1970-71 in respect of 3 villages, as the data for the year 1970-71 was not available at the time of the survey. If we exclude the 5,361 acres under grass and consider the remaining area of about 11,350 acres under different crops, we find that about 60 per cent of the land was under cereals, about 32 per cent of the area

Table 1.3 : Villagewise Landuse in the 14 Villages

Land Use and Assessment	Maj-gaon 1964-65	Chafal 1969-70	Jalge-wadi 1969-70	Derwan 1969-70	Dadholi 1970-71	Khonoli 1969-70	
A. Land for Cultivation							
I. Assessed (a) i) Ordinary Tenure	1286	215	10	303	1316	2	
ii) Restricted Tenure	137	284	85	89	81	34	
(b) Unoccupied Government land	85	-	8	-	2	-	
(c) Inam Land	27	2601	891	1355	5	856	
Total Assessed	1535	3100	994	1747	1404	892	
B. Land not available for cultivation							
I. Uncultivable (a) Pot-Kharab	52	137	47	64	38	74	
(b) River and Nalas	28	41	8	17	2	3	
Total :	80	178	55	81	40	77	
II. Assigned for Public and Special Uses							
a - Forest	360	-	-	-	-	-	
b - Grazing land	-	-	-	-	-	-	
c - Free Pasture	-	32	2	158	-	-	
d - Village Site	23	28	11	4	3	3	
e - Paths	13	29	5	1	-	1	
f - Others	-	1	-	-	-	-	
Grand Total B	476	268	73	244	43	81	
Grand Total	2011	3368	1067	1991	1447	973	
Assessment in respect of							
Ordinary Tenure	Rs.	Rs. 2903	481	27	465	1097	4
Restricted Tenure	Rs.	406	1036	201	258	99	82
Unoccupied Govt. land	Rs.	253	-	32	-	7	-
Inam Land	Rs.	95	4870	1033	2064	10	633
Total	Rs.	3657	6387	1293	2787	1213	719

Source : Village Records, Form No. 1.

Table 1.4 : Area under crops in the 14 villages (in acres)

Crop	Village--	Majgaon	Chafal	Jalge- wadi	Derwan	Dadholi	Khonoli	Nanegaon Bk.	Nanegaon Kh.	Dhayati	Keloli	Padloshi	Patwade	Sada- waghapur	Dusale	Total
	Year--	1967-68	1970-71	1969-70	1970-71	1970-71	1970-71	1969-70	1969-70	1969-70	1969-70	1969-70	1970-71	1970-71	1970-71	
Jowar - Kharif <i>Kharif</i>		416	803	161	283	70	66	274	232	46	59	10	3	-	47	2470
Jowar - Rabi <i>Rabi</i>		190	271	75	142	96	31	120	109	2	70	4	5	-	4	1119
Paddy		21	108	28	131	163	68	25	98	40	161	79	39	38	27	1026
Small grains (Sawa, Rala, Nachani, Varai)		13	167	108	241	235	170	64	251	70	144	89	57	212	80	1901
Wheat		15	39	2	60	92	7	3	1	-	50	-	31	1	4	305
Maize		-	7	-	3	7	4	-	2	-	7	-	2	10	7	49
Total Cereals		655	1395	374	860	663	346	486	693	158	491	182	137	261	169	6870
Arhar		69	83	12	12	1	7	41	11	0	2	-	-	-	6	244
Black gram		5	143	22	14	-	1	111	34	5	4	3	-	-	1	343
Gram		11	40	4	6	-	2	6	-	-	-	-	-	-	1	70
Other pulses		-	4	1	1	3	-	-	0	-	0	-	2	-	5	16
Total Pulses		85	270	39	33	4	10	158	45	5	6	3	2	-	13	673
Vegetables		7	3	-	1	-	0	0	0	-	1	0	2	0	1	15
Sugarcane		12	16	4	2	-	-	6	6	2	8	6	5	-	1	68
Groundnut		578	579	152	443	336	146	336	318	147	184	216	31	2	44	3512
Other Oilseeds		32	41	1	4	-	4	2	1	0	0	0	-	-	-	85
Other crops		20	62	1	24	-	1	13	5	0	2	0	0	0	0	128
Total Area under Crops		649	701	158	474	336	151	357	330	149	195	222	38	2	46	3808
Gross		172	1047	488	576	582	472	279	793	204	54	150	139	215	190	5361
Total Cropped Area		1561	3413	1059	1943	1585	979	1280	1861	516	746	557	316	478	418	16712
Less: Double Cropped		30	344	65	209	185	88	130	105	18	115	3	36	-	10	1338
Net Sown Area		1531	3069	994	1734	1400	891	1150	1756	498	631	554	280	478	408	15374
Cultivable Fallow		4	31	-	13	3	1	59	73	18	570	511	257	14	196	1750
Total cultivable land		1535	3100	994	1747	1403	892	1209	1829	516	1201	1065	537	492	604	17124

Source : Village rural form No. XIII.

under oilseeds, mainly groundnut, about 6 per cent of the area under pulses and the remaining 2 per cent under vegetables, sugarcane and other crops. In respect of the cereals, kharif jowar and rabi jowar accounted for about 16 per cent and 36 per cent respectively of the total area under cereals; area under paddy formed about 15 per cent; the area under small grains 28 per cent and the remaining 5 per cent under wheat and barley. In respect of the pulses, Arhar and black gram formed about 87 per cent of the area under pulses.

The most common crop rotation is a two-year rotation of groundnut in the first year followed by kharif jowar in the second year. This results in about 3,500 acres under groundnut every year. In respect of about 1,000 acres under paddy, where possible rabi jowar, wheat or gram is taken as the second crop. In some land of about 400 acres with a ~~taxi~~ better quality of soil, urid is grown during the kharif season followed by rabi jowar during the same year. On the slope of the hills where the soil is inferior, small grains like Sawa, Varai, Nachani are cultivated on about 1,700 acres of land. After cultivating such land for an year or two it is left fallow for about seven years.

In Table 1.5 villagewise area under irrigated crops in 14 villages according to source of irrigation is shown. The area under irrigated crops, about 1,500 acres, formed about 13 per cent after excluding area under grass. Out of the 1,508 acres under irrigated crops, 457 acres were noted as double cropped area, leaving 1,051 acres as the net irrigated area. The irrigated crops included paddy 795 acres, wheat 273 acres, jowar 216 acres, sugarcane 66 acres, and vegetables and other crops 156 acres.

Table 1.5 : Villagewise Area Under Irrigated Crops in the 14 Villages According to the Source of Irrigation

Village--		Majgaon	Chafal	Jalge- wadi	Derwan	Dadholi	Khonoli	Nanegaon Bk.	Nanegaon Kh	Dhayati	Keloli	Padloshi	Patwade	Sada- Waghapur	Dusale	Total
Year --		1967-68	1970-71	1969-70	1970-71	1970-71	1970-71	1969-70	1969-70	1969-70	1969-70	1969-70	1970-71		1970-71	
(In Acres & Gunthas)																
Source of Irrigated Crops																
By Private Canals	Wheat	9	25	-	14	92	7	-	-	-	51	-	19	24	3	244
	Paddy	1	70	-	65	89	30	24	78	40	160	81	50	42	24	754
	Sugarcane	5	-	-	1	-	-	-	-	2	6	6	5	-	1	26
	Jowar	-	70	20	17	16	10	25	18	-	23	2	-	-	3	204
	Other	10	28	31	6	11	5	3	3	2	9	0	2	-	3*	119
	Total	25	193	51	103	208	52	52	99	44	249	89	76	66	43	1350
By Wells	Wheat	-	3	2	-	-	-	3	1	-	-	-	-	-	-	9
	Paddy	3	10	-	-	-	-	-	19	-	-	-	-	-	-	32
	Sugarcane	1	-	4	-	-	-	6	5	-	1	-	-	-	-	17
	Jowar	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2
	Other	6	5	-	-	-	-	4	3	-	-	-	-	-	-	18
	Total	10	18	6	-	-	-	15	28	-	1	-	-	-	-	78
By Lift Irrigation	Wheat	5	12	-	3	-	-	-	-	-	-	-	-	-	-	20
	Paddy	-	2	-	7	-	-	-	-	-	-	-	-	-	-	9
	Sugarcane	6	15	-	2	-	-	-	-	-	-	-	-	-	-	23
	Jowar	-	-	-	7	-	-	-	-	-	-	-	-	-	-	7
	Other	4	11	-	6	-	-	-	-	-	-	-	-	-	-	21
	Total	15	40	-	25	-	-	-	-	-	-	-	-	-	-	80
Total Irrigated Area		50	251	57	128	208	52	67	127	44	249	89	76	66	43	1508
Of which Double Cropped		-	150	12	44	107	19	19	20	12	50	2	20	-	1	456
Net Irrigated Area		50	101	45	84	101	33	48	107	32	199	87	56	66	42	1052
Fruit Trees																
By Private	Mango	228	775	137	315	250	107	141	142	85	92	95	136	-	18	2521
	Tamrind	6	10	9	4	6	-	3	12	4	38	4	-	-	-	96
	Coconut	2	56	2	-	-	-	41	4	-	1	2	-	-	-	108
	Jack-fruit	2	14	2	21	29	14	5	7	5	67	9	7	-	40	222
	Total	238	855	150	340	285	121	190	165	94	198	110	143	-	58	2947

As per the village records out of the total irrigated crops, 1,350 acres were irrigated by private canals and about 80 acres each by wells and lift irrigation. Our field staff estimated that about 950 acres receive water from about 130 Pucka and Kachha bunds raised on the streams and the river and about 50 acres each by wells and lift irrigation.

In Table 1.6 is given villagewise distribution of wells and bunds in the 14 villages. This information was noted from the village records and relates mostly to the year 1961-62. As per the village records there were 45 Pucka and 37 Kachha bunds. During the course of field work for the survey it was reported that in the year 1971-72 there were many more bunds, about 130, in use than the number reported in the village records.

The area under forest was to be found only at Majgaon, Dhayati, Sadawaghapur and Dusale. The forest land at Sadawaghapur accounted for nearly 90 per cent of the total forest land and about 75 per cent of the total area of the village. The grass land and free pastures were also to be found only in 3 villages to a sizeable extent and in small areas in two more villages.

Livestock : In Table 1.7 we have given villagewise number of animals in the 14 villages. There were 1,904 bullocks and 18 he-buffaloes of which 1,532 bullocks and 5 he-buffaloes were used for agricultural purposes. Thus the 768 pairs of plough cattle when related to 11,350 acres of area under different crops give an average of about 15 acres per pair of plough cattle. It may, however, be stated that in some parts of Majgaon, Chafal, Nanegaon Budruk and Nanegaon Khurd and Jalgewadi where soil is deep black, ploughing is done

Table 1.6 : Villagewise Distribution of Wells and Bunds in the 14 Villages (1961-62)

Village	For Irrigation		Wells		In disuse		Kachha bunds for irrigation	Land bunds for irrigated (In acres)
	Pucka	Kachha	For drinking supply not for irrigation (Pucka)		Pucka	Kachha		
1. Majgaon	4	10	4 +2 for cattle		9	-	14	33
2. Chafal	19	10	35 + 4 Kachha		18	2	40	153
3. Jalgewadi	2	1	1		1	3	6	37
4. Derwan	9	2	3		7	1	16	44
5. Dadholi	-	-	1		-	-	15	Not available
6. Khonoli	-	-	2 (Kachha)		1	1	5	25
7. Nanegaon Bk.	11	6	2		-	2	6	58
8. Nanegaon Kh.	-	6	1		-	2	5*	60
9. Dhayati	-	-	1		2	-	9	66
10. Keloli	-	2	2		-	-	2	Not available
11. Padloshi	-	-	-		-	-	6	"
12. Patwade	-	-	-		-	-	4	19
13. Sadawaghapur	-	-	-		-	-	-	-
14. Dusale	-	-	1		-	-	3	127
Total for 14 villages	45	37	59		38	11	131	622

* Including One Pucka Bund.

There were 5 Kachha Bunds in disuse, one each at Jalgewadi, Nanegaon Kh. and Padloshi and two at Dhayati.

Table 1.7 : Villagewise Number of Animals in the 14 villages

Type of Animal	Majgaon	Chafal	Jalge-wadi	Derwan	Dadholi	Khonoli	Nanegaon Bk.	Nanegaon Kh	Dhayati	Keloli	Padloshi	Patwade	Sada-waghapur	Dusale	Total
Bullocks Above Three Years - For Breeding	-	3	1	-	-	-	-	-	-	-	-	-	-	-	4
For Agriculture	171	309	70	214	102	92	94	116	39	87	58	37	89	54	1532
Old	-	3	48	8	6	-	48	60	18	39	23	18	72	25	368
Total	171	315	119	222	108	92	142	176	57	126	81	55	161	79	1904
Cows Above Three Years In Milk	52	74	12	63	30	24	20	24	14	26	15	16	45	27	442
Dry	98	186	55	102	43	49	73	112	39	84	35	13	43	18	950
Old	27	82	11	6	30	15	5	9	4	6	6	6	22	2	231
Total :	177	342	78	171	103	88	98	145	57	116	56	35	110	47	1623
Calves Under One Year Male	18	24	5	36	-	-	6	10	6	14	4	8	26	11	168
Female	22	19	13	38	-	-	14	14	13	6	10	8	17	16	190
Calves within 1 to 3 Yrs. Male	45	19	22	8	-	-	17	25	8	38	11	5	21	4	223
Female	45	23	34	23	-	-	19	44	17	24	9	8	30	15	291
He-buffaloes For Breeding	-	8	2	-	-	-	-	-	1	1	-	-	-	-	12
For Agriculture	-	1	-	-	-	-	-	-	2	-	-	-	2	-	5
Old	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Total	-	10	2	-	-	-	-	-	3	1	-	-	2	-	18
She-buffaloes In Milk	43	98	12	58	25	14	30	24	19	30	21	28	165	25	592
Dry	51	137	32	87	38	50	37	56	18	70	37	10	71	11	705
Old	14	32	12	4	4	14	20	13	8	9	5	9	66	11	221
Total	108	267	56	149	67	78	87	93	45	109	63	47	302	47	1518
Young ones of Buffaloes Under One Yr.- Male	8	20	4	33	-	-	7	16	5	12	9	14	74	10	212
Female	23	41	17	41	-	-	21	23	11	27	19	13	77	17	330
Young ones of Buffaloes Within One to Three Yrs. Male	6	3	7	5	-	-	5	9	6	10	2	4	33	-	90
Female	31	30	35	13	-	-	27	27	12	23	10	6	37	9	260
Total Cattle Population	654	1113	392	739	278	258	443	582	240	506	274	203	890	255	6827

225

Table 1.7 : (Contd.)

Type of Animal	Majgaon	Chafal	Jalge-wadi	Derwan	Dadholi	Khonoli	Nanega Bk.
Sheep upto One Year Male + Female	-	-	53	-	-	9	52
Above One Year Male	-	-	8	72	-	72	5
Female	-	-	104	185	185	185	185
Goat upto One Year Male + Female	59	37	78	-	2	-	104
Above One Year Male	24	42	6	18	4	18	7
Female	147	222	113	105	43	105	146
Mares and Donkey Female	-	-	-	-	-	-	-
Male	-	-	-	-	-	-	-
Cocks and Hens Cocks	373	1418	202	702	83	119	247
Hens	25	878	26	80	27	33	27
Chicken	130	83	132	143	34	20	279
Total Poultry	528	2379	360	925	144	172	553

Table 1.8 : Villagewise Number of Agricultural Implements in the Villages

Wooden Ploughs	11	15	-	10	-	-	-
Iron Ploughs	13	13	6	4	4	4	5
Bullock Carts	36	47	23	27	2	2	28
Sugarcane Crushers Wooden	-	-	-	-	-	-	-
Iron	1	-	-	-	-	-	-
Oil Engines and Pumps for Irrigation	1	2	-	-	-	-	2
Leathe Water Lifts	-	-	-	-	-	-	4
Oil Presser	-	2	-	-	-	-	-

with iron ploughs (Kirloskar No. 9 or Cooper No. 1) with 8 or 10 bullocks. The land situated at the foot of the hills and where the soil is inferior is ploughed with 4 to 6 bullocks with iron ploughs (Kirloskar No. 6 or 7). On the slopes the land is ploughed with a pair of bullocks by a wooden plough. The flat land is ploughed every year. This includes irrigated land, paddy fields and light soil dry land. On the other hand, parts of Keloli and Sadawaghapur, where the soil is inferior, the land is kept fallow for six to seven years. Small grains like Sawa, Nachani are grown for 2 or 3 years. The soil is prepared, not by ploughing or harrowing, but by digging with a pickaxe. Our field staff reported that on an average four pairs of bullocks are required for ploughing which means that on an average four pairs have to plough about 60 acres of land.

There were 1,623 cows above 3 years and 481 female calves under three years, while there were 1,518 she-buffaloes and 590 female calves under three years. The cows were maintained for milk as also for breeding purposes while she-buffaloes were reared as milch cattle. The largest number of she-buffaloes, about 28 per cent of the total in the valley, were reported at Sadawaghapur. In the village records, area under grazing land and free pastures, about 80 acres and 645 acres respectively, appeared only at 5 villages, viz. Chafal, Derwan, Nanegaon Bk., Keloli and Sadawaghapur. Of the total cows and she-buffaloes in milk and dry, these villages accounted for about 50 per cent and 66 per cent respectively of the total.

The sheep were reported mainly in 4 villages viz. Jalgewadi, Khonoli, Nanegaon Bk. and Nanegaon Kh. Goat were reported in all the 14 villages wherein the 4 villages had about 40 per cent of the goat population. Similarly,

the poultry was reported in all the villages, Chafal having the largest number, about 27 per cent of the total birds.

As the data in the village records regarding live-stock relate to the year 1960-61/1965-66 we shall consider the data collected in the Family Schedule at the time of the survey in Chapter IV and also in the last Chapter.

Agricultural Tools and Implements : In Table 1.8 is given villagewise number of agricultural tools and implements in the 14 villages. The data show a large number of wooden ploughs. The data from the village records relate to the year 1960-61. We shall, therefore, consider this item also in Chapter IV.

To conclude, the data from the village records show that it is an agricultural economy with predominance of dry crops. We shall consider in the following chapters the data collected during the field work carried out for the purpose of the present study during the year 1971-72.

Chapter II

POPULATION

We shall consider in this chapter data on population collected in the Family Schedule canvassed in respect of 2,799 families in the valley. In the first half of the chapter we shall consider size, income, occupation and land holding in respect of families in the valley. The data relating to the population is presented in the latter half of the chapter.

Size of Family : In Table 2.1 is given a distribution of families in the 14 villages by family size. The average family size for the 2,799 families came to 5.6 persons per family excluding such members of the family as were reported to be permanent migrants. The permanent migrants visit the local families and/or send remittances and certain commodities to them and hence are considered as attached to the families. As per the 1971 Census data, the average size for the valley came to 5.2 persons per family which is slightly lower than the average of 5.6 persons per family as revealed by the Survey. The number of families concentrated in the size groups 3-4, 5-6 and 7-9 persons accounted for 76 per cent of the total families. The large families with 10 or more members formed 9 per cent and the unimember or two member families formed about 15 per cent of the total families.

Family Occupation : We had asked the respondent heads of families to state the occupation which they considered as the family occupation. In Table 2.2 is given a distribution of families in the valley by family occupation and total family income. The families reporting cultivation of mainly owned land as their family occupation formed 83 per cent of the total families. The next largest group was of the families

Table 2.1 : Distribution of Families in the 14 Villages by Family Size

Village	No. of Persons							Total No. of Families	No. of persons per family
	1	2	3-4	5-6	7-9	10-14	15 & above		
1. Majgaon	2	14	49	80	62	25	6	238	1,53
2. Chafal	41	67	162	211	143	49	11	684	3,86
3. Jalgewadi	3	8	38	50	40	13	-	152	88
4. Derwan	15	22	91	102	70	23	10	333	1,95
5. Dadholi	10	19	47	41	27	8	-	152	74
6. Khonoli	4	7	31	27	18	9	1	97	54
7. Nanegaon Bk.	9	20	56	66	40	6	2	199	1,04
8. Nanegaon Kh.	14	24	59	63	50	22	2	234	1,32
9. Dhayati	4	11	20	25	12	6	3	81	49
10. Keloli	6	13	42	60	28	15	4	168	96
11. Padloshi	4	11	27	31	22	12	4	111	68
12. Palwade	2	7	11	13	11	3	1	48	27
13. Sadawaghapur	12	47	73	53	35	5	2	227	1,01
14. Dusale	2	6	19	22	18	7	1	75	43
TOTAL	128	276	725	844	576	203	47	2799	15,76

Total population 15769 persons

* This figure includes 247 children living outside the valley with permanent outmigrants.

Table 2.1: Distribution of Families in the Valley according to Main Occupation of the Family and Total Family Income

Main Occupations	Total Family Income Rs.									Total
	Upto 500	501 to 1000	1001 to 1500	1501 to 2000	2001 to 5000	5001 to 7500	7501 to 10000	10001 to 15000	15001 and above	
1) Cultivation of mainly owned land	90	548	617	437	569	57	9	7	1	2335
2) Cultivation of mainly unowned land	-	2	-	-	-	-	-	-	-	2
3) Casual Agricultural Labour	39	107	49	13	9	-	-	-	-	217
4) Agricultural Rent Receiver	1	-	-	-	-	-	-	-	-	1
5) Quarrying	-	-	1	-	1	-	-	-	-	2
6) Slaughter	-	-	-	1	-	-	-	-	-	1
7) Vegetable Oil Presses	-	-	1	-	4	-	-	-	-	5
8) Dairy Products	-	2	1	-	-	-	-	-	-	3
9) Tailors	-	2	4	1	1	-	-	-	-	8
8) Service in Cotton Mills	1	1	-	1	-	-	-	-	-	3
9) Manufacture of Rope	3	4	2	1	-	-	-	-	-	10
8) Cobblers	-	2	4	-	4	1	-	-	-	11
3) Blacksmiths	-	2	4	1	2	-	-	-	-	9
4) Engineering workshops	-	-	1	-	-	-	-	-	-	1
5) Trade in Fertilizers	-	-	1	-	-	-	-	-	-	1
6) Goldsmiths	-	5	-	1	-	-	-	-	-	6
7) Potters	2	1	2	1	-	-	-	-	-	6
8) Carpenters	1	7	2	-	1	-	-	-	-	11
9) Basket Makers	-	1	1	-	-	-	-	-	-	2
7) Transport equipment making	-	-	1	-	-	-	-	-	-	1
1) General Storekeepers	-	-	-	-	2	1	-	-	-	3
2) Hawkers & Street Vendors	-	2	-	1	-	-	-	-	-	3

Contd...

Table 2.2: (Contd.)

Main Occupations	Total Family Income Rs.									Total
	Upto 500	501 to 1000	1001 to 1500	1501 to 2000	2001 to 5000	5001 to 7500	7501 to 10000	10001 to 15000	15001 and above	
3) Retail Trade in Foodstuffs	-	1	-	1	3	-	-	-	-	5
4) Sweet Meats and Dairy Products	-	-	1	-	2	1	-	-	-	4
5) Retail trade in animals & fish for food	-	1	-	-	-	-	-	-	-	1
5) Tobacco, Pan, Biri	-	1	-	-	-	-	-	-	-	1
7) Trade in other commodities	-	-	1	-	-	-	-	-	-	1
3) Mechanical Transport on road	-	-	1	1	1	-	-	-	-	3
9) Dock Workers	-	-	1	-	-	-	-	-	-	1
2) Building Construction	-	3	2	1	4	2	1	-	1	14
1) Labour on roads	-	-	-	-	3	-	-	-	-	3
2) Medical services	-	-	-	1	8	-	-	-	-	9
3) Educational Services	-	-	-	2	26	8	-	-	-	36
4) Village Officers & Servants	1	1	1	1	8	-	-	-	-	12
5) Employees of P.&F. Z.P. & State Govt.	-	2	-	2	4	-	-	-	-	8
5) Police	-	-	-	1	2	-	-	-	-	3
7) Post, Telephone & Telegraph	-	-	-	1	1	-	-	-	-	2
3) Domestic services	1	2	2	1	-	-	-	-	-	6
9) Barbers	-2	1	1	-	-	-	-	-	-	4
0) Tea Shops	-	1	2	1	1	-	-	-	-	5
1) Religious & Charitable services	1	2	7	1	2	-	-	-	-	13
2) Other Services	-	1	-	-	1	-	-	-	-	2
3) Pensioners	-	-	-	1	-	-	-	-	-	1
4) Non-Agri. Manual Labour	1	2	1	1	-	-	-	-	-	5
5) No occupation	6	7	1	1	3	-	1	-	-	19
Total	149	711	712	475	662	70	11	7	2	2799

reporting casual agricultural labour as their family occupation and formed about 8 per cent of the total families. The remaining about 9 per cent of the total families were engaged in non-agricultural occupations and services.

Among the families reporting non-agricultural occupations and services as their family occupation, those reporting educational services (13%) and village servants, employees of the Zilla Parishad and the State Government (12%) accounted for about one-fourth of such families. The families reporting the occupations of village artisans such as cobblers, blacksmiths, goldsmiths, carpenters, potters and barbers as their family occupation formed about 17 per cent. About 10 per cent of the families reported some kind of trading activity while about 20 per cent reported manufacturing and processing as the family occupation. Leaving aside about 7 per cent of the families of pensioners and others without any occupation the remaining about 21 per cent, followed religious, domestic and other services as family occupation.

Thus it is predominantly an agricultural economy with hardly 9 per cent of the families reporting non-agricultural occupations and services as their family occupation.

The average family income was Rs. 1,731. A little over one-third of the families had total family income above the average family income. Among the families reporting agricultural labour as the family occupation, hardly 7 per cent of the families had total family income above the average for the valley. Of the families reporting occupations other than agriculture and agricultural labour as their family occupation, nearly half of them had family income above the average for the valley. This was due to the families reporting salaried jobs of teachers and other

employment under the Zilla Parishad and the State Government as their family occupation. The families of village artisans, petty traders and following other service occupations had most of them family income below the average for the valley.

Size of Cultivated Holding ; As a large majority of the families followed agriculture as ~~the~~ either the main or subsidiary occupation, while presenting data on families, it was felt that it will be interesting to note the relation between the cultivated holding and total family income. In Table 2.3 is given a distribution of families in the valley according to size of cultivated holding and total family income. It will be noted from the table that of the 2,799 families in the valley 84.5 per cent were cultivating some land, 5.9 per cent of the families owned land but were not cultivating any land at the time of the survey, and the remaining 9.6 per cent of the families were non-cultivating families. Among the cultivating families, nearly three-fourths of the families had holdings upto 5 acres, there being 42.5 per cent of the families having cultivated land upto 2.5 acres and 31.2 per cent of the families in the group 2.6 acres to 5.0 acres. At the other end, less than three per cent of the families had \geq each more than 15 acres of cultivated land. The remaining, about 28 per cent of the families, had cultivated land between 5.1 to 15 acres per family.

The total family income included income from cultivation and livestock, agricultural labour, non-agricultural occupations as also remittances. As such it can not be related directly to the size of the cultivated holding. However, we can deduce from the data that nearly three-fourths of the families with cultivated holding upto 5 acres

Table 2.1 : Distribution of Families in the Valley according to Size of Cultivated Holding and Total Family Income

Size of Cultivated Holding (Acres)	U No. of families in Income Groups Rs.									Total No.	%
	Upto 500	501 to 1000	1001 to 1500	1501 to 2000	2000 to 5000	5001 to 7500	7501 to 10000	10001 to 15000	15001 and above		
Upto 2.5	77	382	321	134	87	3	-	-	-	1004	42.5
2.6 to 5.0	10	132	210	171	207	8	-	-	-	738	31.2
5.1 to 7.5	1	26	57	64	122	7	-	-	-	277	11.7
7.6 to 10.0	1	12	26	49	81	9	1	1	-	180	7.6
10.1 to 15.0	-	4	9	19	46	22	3	2	-	105	4.4
15.1 to 20.0	-	1	1	5	19	5	3	1	-	35	1.5
20.1 to 25.0	1	-	-	-	6	2	1	-	-	10	0.4
25.1 to 30.0	-	-	1	-	5	2	1	1	-	10	0.4
30.1 and above	-	-	-	-	3	-	-	2	1	6	0.3
Land owned but not cultivated	27	65	39	17	17	-	1	-	-	166	-
Non-cultivating families	32	89	48	16	69	12	1	-	1	268	-
Total No. of families	149	711	712	475	662	70	11	7	2	2799	(100.0 = 2365)

43

had income below the average income for all the families in the village. The proportion of families below the average family income for the valley declined to about 40 per cent in the size group 5.1 to 15.00 acres and to about 10 per cent in respect of the families with cultivated holding above 15 acres. It appeared that the families with low cultivated holdings also had low income from other sources. We have considered in details composition of the family income in a later section in the present chapter.

Age and Sex : In Table 2.4 is given a distribution of population in the 14 villages by age and sex. The total population of 15,769 shown therein includes 247 children who had migrated with their parents, and 140 boys and girls who stayed at places outside the valley for pursuing education. The total population, therefore, may be considered as consisting of 15,382 persons. Though the overall male/female ratio was 1,091 females per 1,000 males, in the age-groups 25-34 and 35-44, the ratio was 1,772 and 1,380 females respectively per 1,000 males, indicating thereby that many of the young able bodied males had migrated outside the valley. These high ratios were found in varying degrees in all the villages except Sadawaghapur and Dusale which are situated on the hills. On the other hand in the age-group 10 to 14 and 55 to 64, the male population exceeded the female population. The higher proportion of males in the age-group 55 to 64 may be due to the males returning to the villages after retirement or after active employment outside the valley.

The villagewise distribution of the male/female population shows that the female population exceeded the male population in 11 out of 14 villages and in the remaining three villages the male population exceeded the female population

Table 2.4 : Distribution of Population in the 14 villages by Age and Sex

Villages	Age groups		5 - 9		10-14		15-24		25-34		35-44		45-54		55-64		65 & above		Total			
	Below 5 years		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Males	Females		
	M	F																				
1. Majgaon	120	116	116	119	117	95	140	95	61	113	66	75	60	59	40	52	48	40	768	764		
2. Chafal	341	312	312	335	305	270	245	239	143	272	129	214	143	187	129	92	81	114	1828	2035		
3. Jalgewadi	66	60	67	72	86	55	47	57	38	68	29	40	35	52	38	31	22	23	428	458		
4. Derwan	185	161	168	171	161	109	98	151	74	134	64	97	76	103	58	59	38	47	922	1032		
5. Dadholi	61	73	66	63	44	22	32	53	52	86	40	34	27	39	21	19	3	11	346	400		
6. Khonoli	42	51	57	38	26	30	25	43	27	46	26	36	22	29	21	10	5	12	251	295		
7. Nanegaon Bk.	95	97	84	84	89	52	41	73	36	79	43	59	37	48	38	37	24	31	487	560		
8. Nanegaon Kh.	97	124	118	119	97	57	72	104	56	93	55	80	69	66	44	40	16	24	624	707		
9. Dhayati	50	43	44	30	38	29	29	24	13	33	23	41	20	18	10	14	11	20	238	252		
10. Keloli	87	80	78	83	62	41	50	74	46	72	36	64	53	46	23	27	16	23	451	510		
11. Padloshi	59	59	55	64	64	25	36	46	26	55	29	42	33	30	22	16	10	17	334	354		
12. Patwade	23	22	29	26	22	10	10	12	12	30	13	9	14	17	8	8	2	5	133	139		
13. Sadawaghapur	69	55	62	60	52	45	49	57	71	87	83	90	54	50	47	31	23	32	510	507		
14. Dusale	33	36	44	30	37	25	27	32	23	34	17	20	20	19	10	8	9	12	220	216		
Total	1328	1289	1300	1294	1200	865	901	1060	678	1202	653	901	663	763	509	444	308	411	7540	8229		
	*2617																				*15769	

* This figure includes 247 children living outside with permanent migrants.

M = Male
F = Female

only marginally.

The composition of adult (14 and above)/non-adult (13 and below), male/female population was as follows :-

Male adults	24 %
Male non-adults	24 %
Female adults	30 %
Female non-adults	22 %
	<u>100 %</u>

Education : The population in the valley at the time of the survey is classified into E educands and non-educands. ~~The~~ (Educands : Those who were going to school/college at the time of the Survey.) The children below five years of age were excluded from this classification. The data regarding educational status and level of education in respect of male/female, adult/non-adult population is presented in Table 2.5A.

. In the adult population about 7 per cent of the male adults and 4 per cent of the female adults were in school at the time of the survey except one male adult who was studying at the undergraduate level. In the non-adult population, excluding children below 5 years of age, 70 per cent of the boys and only 37 per cent of the girls were in school. 68 per cent of the boys and 80 per cent of the girls among the educands were studying in the ~~pxx~~ primary school.

Nearly 50 per cent of the male adults and 87 per cent of the female adults were illiterate. The proportion of illiterates in the non-adult population, excluding children below 5 years of age, was also high being 25 per cent among male non-adults and 55 per cent among female non-adults though there was a separate school for girls at Chafal and primary schools in all the villages and 17 out of 38 hamlets.

Table 2.5^A: Distribution of Educands and Non-Educands by Male/Female, Adult/Non-adult population in the Valley

	Education														Blank	Total	
	Non-educands							Educands									
	Illi- terate	Lite- rate	Upto 4th Std.	Upto 7th Std.	Upto S.S.C.	Above S.S.C. below Grad.	Gra- duate	Total Non- Edu- cands	Upto 4th Std.	Upto 7th Std.	Upto S.S.C.	Above S.S.C. Below Grad.	Gradu- ate	Total Edu- cands			
Male Adults	1797	48	633	579	252	18	5	3332	6	41	218	1	-	266	3	3601	
Male Non- Adults	614	2	65	54	4	-	-	739	1181	497	65	-	-	1743	2	2484	
Female Adults	4194	24	249	223	47	2	1	4740	1	8	23	-	-	32	1	4773	
Female Non- Adults	1173	1	107	55	4	-	-	1340	648	134	25	1	-	808	6	2154	
Total	7778	75	1054	911	307	20	6	10151	1836	680	332	1	-	2849	12	13012	
																Children below 5 years	2370
																	----- 15382

Among the literate non-educands, most of them had studied upto the middle school level, about 45 per cent had studied upto the 4th standard, another about 40 per cent had studied upto the 7th standard, about 14 per cent upto the S.S.C. and only about one per cent had studied above the S.S.C. level. The last two groups possibly include 86 teachers in the valley.

Among the educands also, nearly 64 per cent were in the primary school, about 24 per cent were in the middle school and the remaining 12 per cent were in high school.

One of the daily newspapers published at Poona from among Kesari, Sakal, Vishal Sahyadri and Tarun Bharat was subscribed to by about 50 families from Chafal. At other villages also there were a few families which regularly bought one of these newspapers. These newspapers were also available for reading for the local population in the offices of the Gram Panchayats or reading rooms.

Educands studying outside the Valley : In Table 2.5B is given distribution of Male/Female, adult/non-adults from the valley studying at places outside the valley at ^{the} time of the survey. Out of 140 students only 13 were girls and 15 male non-adults. The remaining 112 were boys above 14 years of age. About 45 per cent of the male adults were studying at the college level and only 3 at the graduate level. Less than 10 per cent of the students were studying in classes upto the 7th standard. Though there is a high school upto S.S.C. classes at Chafal and a high school upto 9th standard at Nanegaon Khurd, 67 boys and girls studied at the high schools outside the valley possibly with the intention to continue higher studies at the college level after passing the S.S.C. examination. The students

**Table 2.5 B : Distribution of Male/Female, Adult/Non-adult
Educands studying at Places Outside the Valley**

	Upto 4th Std.	Upto 7th Std.	Upto S.S.C.	Above SSC be- low Grad.	Gradu- ate	Above Gradu- ation	Total
Male Adults	-	2	45	62	2	1	112
Male Non-Adults	4	1	10	-	-	-	15
Female Adults	-	1	5	3	-	-	9
Female Non- Adults	1	2	1	-	-	-	4
Total	5	6	61	65	2	1	140

were mainly found at Patan (29), Karad (34), Satara, Kolhapur and Sangli (23), Bombay (17) and Poona (8) and other places in Maharashtra (28). Only one student was reported to be studying in U.S.A. for postgraduate courses in Engineering.

We had asked about the remittances sent to the students by their parents in the valley. The information was reported by 106 out of 140 students. It was noted that 106 students received Rs. 50,801 from their parents during the course of the academic year to meet their expenses on education and maintenance. Though the average amount received comes to Rs. 48 per reporting student, the amount of the remittances varied between Rs. 10 to Rs. 1600 there being 16 students who received between Rs. 1000 to Rs. 1600 by way of remittances from their parents.

Earners Status : In Table 2.6 is given a distribution of population in the valley according to Earner status and reasons for not working in the case of non-earners. The 'Earners' included those persons who worked in the family occupation or followed their own individual occupation. About 47 per cent of the total population was reported as earners, there being on an average 2.7 earners per family. The composition of earners among the male/female, adult/non-adult population, however, revealed that the female adult earners exceeded the male adult earners by about 31 per cent. The non-earners in the adult population formed about 18 per cent among the male adults and about 16 per cent among the female adults. In the non-adult population only about 4 per cent of the male non-adults and 7 per cent of the female non-adults were reported as earners.

It may be noted here that while we were considering the Population Census data in Chapter I, we had stated that the

Table 2.6 : Distribution of Population in the Valley according to Earner Status and Reasons for Not Working in the case of Non-Earners

	Earner Status			Reasons for Not Working in the case of Non-Earners					
	No. of Earners	No. of Non-Earners	Total Population	Age below 5 yrs.	Educa- tion	House- hold work	Oldage/ physical dis- ability	Reasons not stated	Total Non-Earners
Male Adults	3039	674	3713	274	374	21	224	75	674
Male Non-adult	130	3696	3826	1328	1761	-	6	601	3696
Female Adults	3992	789	4781	-	40	261	466	22	789
Female Non-adults	244	3205	3449	1289	819	67	-	1030	3205
Total	7405	8364	15769	2617	2994	329	696	1728	8364

42

census figure of 13 per cent of the females classified as earners appeared to be under-reported. For the sake of information we given below from the data collected during the Survey, villagewise figures regarding total male and female workers which when compared with the first two columns in Table 1.2 support our statement.

Village	Total Earners	
	Male	Female
Majgaon	308	343
Chafal	695	895
Jalgewadi	174	259
Derwan	343	555
Dadholi	170	223
Khonoli	121	172
Nanegaon Bk.	186	313
Nanegaon Kh.	277	384
Dhayati	87	124
Keloli	196	278
Padloshi	135	189
Patwade	54	69
Sadawaghapur	329	321
Dusale	94	111
Total :	<u>3169</u>	<u>4236</u>

The proportionately larger number of female earners is due to the outmigrant male adults to places outside the valley in search of employment requiring the female at home to look after cultivation in the villages. We have dealt with outmigrants in a separate section in this chapter.

Non-Earners - Reasons for Non Working : From Table 2.6 it will be noted that the non-adult non-earners consisted mainly of educands or children below 5. However, about 16 per cent boys and 32 per cent of girls who were above 5 years of age

and were not going to school were reported non-earners without stating any reasons for not working.

In the case of the non-earner adults, 55 per cent of the males were educands and 33 per cent were unable to work due to old age or physical disability. The remaining 11 per cent did not state any reasons for not working. In the case of female adult non-earners 58 per cent did not work due to old age or physical disability. (This appears consistent with age data wherein 411 females were reported to be + 65 years and hence not likely to work due to old age.) About 34 per cent were busy with household work and only about 5 per cent were educands. The remaining about 3% did not state any reasons for not working.

Thus if we consider the adult population in the valley only 75 male and 22 female non-earners i.e. less than one per cent of the total adult population did not state any reasons for not working. The rest of the adult population consisted either of earners or educands and others who did not work due to old age or physical disability. There was thus no labour force classified as 'unemployed' at the time of the survey. It is true that many of the earners may be under-employed and could be available to take up additional work if available locally. We had sought information regarding their experience outside the village in non-agricultural occupations and whether they would be willing to work if such employment was locally available. Before we consider these data we may consider the occupational pattern at the time of the survey.

Occupational Distribution of Earners : In Tables 2.7 and 2.8 is given a distribution of male/female, adult/non-adult earners in the valley according to the main and subsidiary occupations respectively. The position regarding persons

Table 2.7 : Distribution of Male/Female Adult/Non-Adult Earners
in the Valley according to their Occupation

/Main

Occupation	Male adults	Male Non- adults	Female adults	Female Non- adults	Total
1) Cultivators of mainly owned land	2528	91	3444	192	6255
2) Cultivators of mainly unowned land	3	-	2	-	5
3) Attached agricultural labour	-1	-	3	-	4
4) Casual Agricultural labour	147	7	458	35	647
5) Cattle rearing	21	23	23	16	83
6) Rearing of goat, sheep etc.	7	-	1	1	9
7) Fishing	2	-	-	-	2
8) Quarrying	1	-	-	-	1
9) Slaughter	1	-	1	-	2
10) Flour-grinding	9	-	-	-	9
11) Tailors	12	-	6	-	18
12) Manufacture of rope	12	-	8	-	20
13) Cobblers	13	-	2	-	15
14) Blacksmiths	21	-	5	-	26
15) Fitters, plumbers etc.	2	-	-	-	2
16) Goldsmiths	6	-	-	-	6
17) Potters	9	-	4	-	13
18) Carpenters	28	2	-	-	30
19) Basket etc. making	2	-	3	-	5
20) General Shop-keepers	2	-	1	-	3
21) Hawkers	4	-	1	-	5
22) Retail trade in grains and pulses	15	-	1	-	16
23) Sweetmeats, sugar and dairy products	10 8	- -	2 2	- 2	12 9
24) Tobacco-Pan shop	2	1	-	-	3
25) Wholesale trade	1	-	1	-	2
26) Road Transport	1	-	-	-	1
27) Building Construction	24	1	2	-	27

Contd...

Table 2.7 : (Contd.)

Occupation	Male adults	Male- non- adults	Female adults	Female non- adults	Total
28) Transport	2	-	1	-	3
29) Medical and Health Services	7	-	1	-	8
30) Educational Services	69	-	13	-	82
31) Village Officers and Servants	23	-	2	-	25
32) Employees of Z.P., State Govt.	18	-	1	-	19
33) Post and Telegraph	3	-	-	-	3
34) Domestic Services	2	-	-	-	2
35) Barbers	10	-	-	-	10
36) Tea shops	5	1	2	-	8
37) Religious and charitable services	12	1	4	-	17
38) Other services	4	-	-	-	4
TOTAL	3039	128	3992	244	7402

**Table 2.8 : Distribution of Earners in the Valley reporting
Subsidiary Occupation according to Subsidiary Occupation**

Occupations	Male adults	Male non- adults	Female adults	Female non- adults	Total
1) Cultivators of mainly owned land	22	-	5	-	27
2) Attached Agricultural labour	1	-	2	-	3
3) Casual agricultural labour	1210	19	2258	76	3563
4) Cattle rearing	68	18	32	19	137
5) ^{Rearing} Raising of goat, sheep, etc.	11	2	4	-	17
6) Quarrying	1	-	-	-	1
7) Slaughter	2	-	-	-	2
8) Oil Presses	1	-	-	-	1
9) Flour grinding	11	-	3	-	14
10) Tailors	43	-	4	-	47
11) Manufacture of rope	18	-	8	1	27
12) Cobblers	10	-	-	-	10
13) Blacksmiths	11	-	-	-	11
14) Electricians	2	-	-	-	2
15) Chemicals, Pharmaceuticals preparations (die, ink, soap etc.)	1	-	-	-	1
16) Potters	11	-	8	-	19
17) Brick manufacture	2	-	-	-	2
18) Carpenters	36	-	-	-	36
19) Basket etc. making	2	-	-1	-	3
20) Cycle and other repairs	2	-	-	-	2
21) General Shop keepers	3	-	-	-	3
22) Hawkers	5	-	3	-	8
23) Retail trade in grain and pulses	27	-	3	-	30
24) Sweetmeats, dairy products	4	-	2	-	6
25) Retail trade in animals	3	-	-	-	3
26) Tobacco-Pan shop	5	-	-	-	5
27) Retail dealer in firewood	-1	-	-	-	1

Contd....

Table 2.8 : (Contd.)

Occupations	Male adults	Male non-adults	Female adults	Female non-adults	Total
28) Cloth shops	3	-	-	-	3
29) Retail trade in leather goods	1	-	-	-	1
30) Bullock Cart transport	4	-	-	-	4
31) Building Construction	11	-	1	-	12
32) Transport	2	-	-	-	2
33) Educational services	1	-	-	-	1
34) Village Officers and servants	16	-	-	-	16
35) Employees of Z.P. and State Government	5	-	-	-	5
36) Post and Telegraph	5	-	-	-	5
37) Domestic services	3	-	1	-	4
38) Barbers	11	1	-	-	12
39) Washermen	4	-	3	-	7
40) Tea shops	4	-	-	-	4
41) Religious and Charitable services	8	-	3	-	11
42) Other services	14	1	-	-	15
43) Non-Agricultural Labour	6	-	4	-	10
TOTAL	1611	41	2345	96	4093

reporting one or more occupations may be summed up as follows :

No. of Earners reporting	Male adults	Male Non-adults	Female adults	Female non-adults	Total
1) Only one Occupation	1,427	87	1,647	148	3,309
2) Two or more Occupations	1,611	41	2,345	96	4,093

It will be thus noted that out of 7,402 earners 3,309 earners followed only one occupation while 4,093 earners i.e. 55 per cent of the total earners followed two occupations.

As regards the main occupation, 6,255 earners i.e. about 84 per cent of the earners were reported as cultivators of mainly owned land and about 9 per cent were casual agricultural labour. The wage rate was more or less constant throughout the year being Rs. 2.50 for males and Rs. 1.50 for females per day during the year 1971-72 except during harvesting season at Majgaon and Chafal when it increased to Rs. 3 for males and Rs. 2 for female perday. It appeared, therefore, that the labour supply was adequate particularly as a large number of females worked on their own farms or as agricultural labour. If we add to this the earners engaged in rearing cattle and goat, fishing and quarrying which together forms a little over one per cent of the total earners, then we find only about 6 per cent of the earners in non-agricultural occupations. One-third of these were employees of Zilla Parishad or State Government; about one-sixth in retail trading, tea-shops, etc., and the remaining in tailoring, building construction and other activities, mainly as village artisans.

It may be noted that only 2 per cent of the female adult earners were engaged in non-agricultural occupations as against 11 per cent of the male adult earners in non-

agricultural occupations. The female adults engaged in cultivation of owned land or as agricultural labour outnumbered the male adults in agriculture by about 50 per cent and shared considerable work in agriculture.

In the case of subsidiary occupations, casual agricultural labour was reported by 87 per cent of the earners reporting subsidiary occupations. Another 4 per cent pursued cattle rearing and other agricultural occupations leaving only 9 per cent in non-agricultural occupations. It may further be noted that among those reporting subsidiary occupations about 20 per cent of the male adults and only 2 per cent of the female adults reported non-agricultural occupations.

The earners in the valley followed mainly agricultural occupations and some traditional occupations, particularly, of village artisans. There did not exist at the time of the survey any non-agricultural occupation which involved use of electric or other power and machinery except the flour mills and oil presses and sewing machines. It is, however, interesting to note that many of the male adult earners had worked in the past at Bombay in the textile mills or manufacturing industries. About 175 male adults had worked in the textile mills, another 115 had worked in different manufacturing industries and another 50 had worked in different office establishments. In all there were about 400 persons in the valley in the year 1970-71 who had worked outside the valley in the past and had acquired some technical skill and experience of working in manufacturing industries. On their return to the valley they had not been able to get employment suitable to the skill or experience gathered by them and hence worked in agriculture or caste/ hereditary occupation. These persons will be found useful

in the spinning and weaving unit proposed to be established at Chafal.

Non-Agricultural Occupations in the 14 Villages : In Table 2.9 is given the number of families reporting non-agricultural occupations, income therefrom and investment therein in the 14 villages. It will be seen from the data that there were no such families at Patwade and Sadawaghapur. The families in the remaining 12 villages reported occupations of tailors, carpenters, black-smiths and other village artisans, and as proprietors of the flour mills, retail traders, tea-shops and such other establishments which cater to the needs of the villagers. There were, however, no non-agricultural occupations followed by the families which could be considered as a special feature of the valley or which could be of special significance in the future economic development of the valley. There were about 400 families in 28 non-agricultural occupations. The average income per family from the non-agricultural occupations was Rs. 750 and the average investment per family in the non-agricultural occupations was Rs. 730/- per family.

The tailors were to be found in 12 villages and had the largest number in a single non-agricultural occupation. The income reported by the families engaged in building construction was the maximum and worked at about Rs. 5,430/- per family. However, this can not be considered as representative of the valley as the construction activity was taken up by Shri Ram Temple Trust at Chafal as a special programme for the renovation of the old temple and additions thereto. The families which reported such large income were also immigrant families of skilled artisans which came from Rajasthan to carry out marble and other decorative construction. The next in order of income was retail trading

Table 2.9 : Non-Agricultural Occupations in the 14 Villages : Income and Investment* (in Rs.)

Village	Rearing Sheep & Goat			Fishing & Quarrying			Butchers			Flour Mills			Sweetmeats & dairy			Tailors			Manufacture of Rope		
	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment
1.Majgaon	-	-	-	1	1,250	100	-	-	-	2	2,250	10,000	-	-	-	4	1,850	2,100	4	1,000	-
2.Chafal	-	-	-	2	5,000	500	2,	1,780	300	6	6,500	21,000	1	1,200	500	20	10,430	8,200	18	4,680	500
3.Jalgewadi	8	3,250	9,700	-	-	-	1	520	100	1	1,200	7,500	1	300	-	3	1,330	1,300	-	-	-
4.Derwan	4	1,000	6,100	-	-	-	-	-	-	1	900	7,500	2	7,240	1,300	10	2,200	3,400	-	-	-
5.Dadholi	-	-	-	-	-	-	-	-	-	-	-	-	1	360	100	2	400	600	-	-	-
6.Khonoli	-	-	-	-	-	-	-	-	-	1	500	4,000	1	200	400	2	500	900	-	-	-
7.Nanegaon Bk.	-	-	-	-	-	-	-	-	-	1	600	4,000	-	-	-	9	1,930	2,900	-	-	-
8.Nanegaon Kh.	3	1,010	3,900	-	-	-	-	-	-	2	1,300	14,500	-	-	-	5	900	1,700	-	-	-
9.Dhayati	-	-	-	-	-	-	-	-	-	1	2,020	8,500	1	720	200	1	300	500	-	-	-
10.Keloli	-	-	-	-	-	-	-	-	-	3	1,600	10,000	-	-	-	7	1,680	2,500	2	210	-
11.Padloshi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	200	900	4	1,570	400
12.Patwade	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.Sadawaghapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.Dusale	-	-	-	-	-	-	-	-	-	2	2,000	12,500	-	-	-	1	100	400	-	-	-
TOTAL	15	5,260	19,700	3	6,250	600	3	2,300	400	20	18,870	99,500	7	10,020	2,500	66	21,820	25,400	28	7,460	900

Village	Cobblers			Blacksmiths			Bicycle and other repairs			Goldsmiths			Potters			Carpenters			Basket making		
	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment
1.Majgaon	1	900	500	1	1,950	800	1	200	100	4	1,330	600	-	-	-	5,	2,930	1,600	-	-	-
2.Chafal	5	3,380	2,100	1	900	200	2	950	400	5	2,220	610	8	4,390	700	4	2,900	500	3	1,400	200
3.Jalgewadi	2	1,380	200	-	-	-	-	-	-	-	-	-	-	-	-	9	3,730	1,400	-	-	-
4.Derwan	4	3,560	900	3	2,660	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.Dadholi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2,600	1,000	-	-	-
6.Khonoli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.Nanegaon Bk.	3	1,300	200	1	170	100	-	-	-	1	600	100	-	-	-	1	30	400	-	-	-
8.Nanegaon Kh.	-	-	-	3	1,570	800	-	-	-	4	-	-	8	2,550	500	4	2,030	800	-	-	-
9.Dhayati	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	400	200
10.Keloli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	5,260	2,000	-	-	-
11.Padloshi	5	1,520	1,000	4	1,700	1,400	-	-	-	-	-	-	-	-	-	5	3,600	1,500	-	-	-
12.Patwade	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.Sadawaghapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.Dusale	2	680	200	7	1,870	1,300	-	-	-	-	-	-	-	-	-	9	5,300	2,300	-	-	-
TOTAL	22	12,720	5,100	20	10,820	5,300	3	1,150	500	10	4,150	1,310	16	6,940	1,200	50	28,380	11,500	4	1,800	400

Contd....

Table 2.9 : (Continued)

Village	General Store-keepers			Hawkers			Retail trade in foodstuffs			Retail trade in animal and fish for food			Tobacco, Pan, Biri		Retail dealers in firewood & coal		Retail trade in textiles				
	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment
1. Majgaon	2	2,600	1,900	-	-	-	3	1,900	800	1	3,000	500	1	600	100	-	-	-	-	-	-
2. Chafal	2	3,200	7,000	7	2,950	1,200	17	21,900	36,830	2	1,050	1,100	5	2,150	700	1	600	200	3	4,500	17,100
3. Jalgewadi	-	-	-	1	300	1,000	2	1,650	1,800	-	-	-	-	-	-	-	-	-	-	-	-
4. Derwal	-	-	-	-	-	-	5	3,310	2,900	-	-	-	-	-	-	-	-	-	-	-	-
5. Dadholi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Khonoli	-	-	-	-	-	-	1	200	600	-	-	-	-	-	-	-	-	-	-	-	-
7. Nanegaon Bk.	-	-	-	-	-	-	3	1,030	1,300	1	160	100	-	-	-	-	-	-	-	-	-
8. Nanegaon Kh.	-	-	-	-	-	-	4	1,980	3,000	-	-	-	-	-	-	-	-	-	-	-	-
9. Dhayati	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10. Keloli	-	-	-	1	200	-	4	2,100	6,330	1	300	200	-	-	-	-	-	-	-	-	-
11. Padloshi	-	-	-	-	-	-	4	750	3,500	-	-	-	1	300	100	-	-	-	-	-	-
12. Patwade	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13. Sadawaghapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14. Dusale	-	-	-	-	-	-	1	250	300	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	4	5,800	8,900	9	3,450	2,200	44	35,070	57,360	5	4,510	1,900	7	3,050	900	1	600	200	3	4,500	17,100

Village	Wholesale/Retail Trade in other commodities		Building Construction		Medical Services		Barbers		Washermen		Tea shops		Recreation services		Total									
	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment	No.	Income	Investment						
1. Majgaon	-	-	-	1	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2. Chafal	3	1950	10700	9	67950	1600	2	8600	8800	10	4090	1800	4	2550	300	3	2400	500	3	1600	600			
3. Jalgewadi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4. Derwal	1	400	-	1	1000	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
5. Dadholi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
6. Khonoli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7. Nanegaon Bk.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
8. Nanegaon Kh.	-	-	-	1	200	100	-	-	-	2	880	400	-	-	-	-	-	-	-	-	-			
9. Dhayati	-	-	-	-	-	-	-	-	-	2	320	100	-	-	-	-	-	-	-	-	-			
10. Keloli	-	-	-	-	-	-	-	-	-	2	400	200	-	-	-	-	-	-	-	-	-			
11. Padloshi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
12. Patwade	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
13. Sadawaghapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
14. Dusale	-	-	-	1	400	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Total	4	2350	10700	13	70,550	1900	2	8600	8800	20	8340	3000	4	2550	300	9	7850	2400	5	1900	1000	397	2,97,060	2,90,970

from which 44 families derived an income of Rs. 35,070, i.e. on an average Rs. 800 per family. The maximum investment of Rs. 99,500 was found in the 20 flour mills situated in 10 villages. Among the village artisans, families of carpenters were found in 9 villages, of blacksmiths and cobblers in 7 villages, of barbers in 6 villages, of goldsmiths in 3 villages and of butchers and potters in 2 villages. Most of the families engaged in non-agricultural occupations were found at Majgaon and Chafal accounting for about 50 per cent of the total.

Outmigrants : Outmigration by young and able bodied persons to earn their living and to support the families back home has an important effect on the economy of the valley. Besides, some of the outmigrants after working outside the valley return to the village to spend the years after retirement. From the point of view of the future development of the valley, the outmigrants who may return to the valley, in the course of years may be able to contribute their technical skill and experience towards the developmental activities in the valley. Therefore, we shall consider in the following sections some information about the outmigrants. While referring to the male/female ratio of the population as per the 1971 census in the valley in Chapter I and also the age and sexwise distribution of the population in Chapter II we had referred to the outmigration of a many of the able bodied persons. We had asked the respondents to give information regarding the family members who had permanently migrated to places outside the valley yet considered as family members in view of the financial or other ties such as remittances to the local residents or visiting the local families periodically. The remittances sent by the outmigrants formed 16.8 per cent of the total

income reported by the families in the valley during the year 1970-71. The outmigrants were thus an important force in the economy of the valley. The tabulation of data collected during the fieldwork revealed that out of 2,799 families 44 per cent of the families considered some outmigrants as the family members. In the following is the data regarding the number of outmigrant ~~family members~~ earners reported by families in the valley :

				<u>Total outmigrant Earners</u>
805	families	reported	one outmigrant earner	805
279	"	"	two outmigrant earners	558
103	"	"	three " "	309
44	"	"	four or " " more	186
<u>1231</u>				<u>1858</u>

The data regarding the permanent outmigrants classified by their earner status is presented in Table 2.10. In the outmigrant population, there was one earner for every 1.5 non-earners whereas in the total population, there was one earner for every 2.1 non-earners.

Table 2.10 : Earner Status of the Permanent Outmigrants

	Earners		Non-Earners					Total
	Ear- ners	In sear- ch of employ- ment	Edu- cands	Non- edu- cands	Old age	House- hold work	Age below 5 yrs	
Male adults	1743	61	24	-	2	-	-	1830
Male Non- adults	14	5	106	33	-	-	*	158
Female adults	30	1	10	-	345	-	-	386
Female non- adults	4	-	76	51	-	-	*	131
Children below 5 Yrs							247*	247
<u>1</u> TOTAL	1791	67	216	84	347	-	247*	2752

The outmigrant population consisted mainly of the adult population, the male adults accounting for about two-thirds of the outmigrants and the female adults, for about 14 per cent of the outmigrants. The non-adult population formed about 19% of the total outmigrant population. It may be recalled that in the local population in the valley the male adults formed about 24 per cent, female adults about 30 per cent and the non-adult population the remaining 46 per cent of the total population. The outmigration thus very much affected the age-sex composition of the population.

The age composition of the local population was different from that of the outmigrant members as will be noted from the following :-

<u>Age Group</u>	<u>% of total population in the valley</u>	<u>% of Outmigrant members</u>
Below 5 years	15.98	9.02
5- 9	16.57	6.35
10 - 14	13.21	4.16
15 - 24	12.53	28.38
25 - 34	12.02	29.22
35 - 44	9.95	14.98
45 - 54	9.14	6.21
55 - 64	6.04	1.39
65 and above	4.56	0.29
	<u>100.00</u>	<u>100.00</u>

Among the outmigrant members, those between the age of 15 to 45 years formed 72 per cent of the total outmigrants while the total population in the same age-group formed only 34 per cent of the total population in the valley. Among the older people, those 55 years and above formed about 10.6 per cent in the total population as against 1.7 in the migrant population.

Educational Status of the Outmigrants : Of the 2,752 persons reported as outmigrant members of the families from the valley nearly two-thirds were male adults. Of the remaining, about 14 per cent female adults and 20 per cent boys and girls, most of them had migrated with the male adult earners. The distribution of male/female, adult/non-adult outmigrants by their educational status is given in Table 2.11. The proportion of illiterates was low and the level of education was higher among the outmigrants as compared to the population in the valley. The relevant information in respect of the adult population is summarised below :

		<u>Local population</u>	<u>Outmigrants</u>
Illiterates	Male adults	50%	24%
	Female adults	88%	56%
Non-Educands excluding illiterates	Upto 4th Std.	47%	30%
	Upto 7th Std.	38%	39%
	Upto S.S.C.	12%	28%
	Above S.S.C.	3%	3%
		<u>100%</u>	<u>100%</u>

Place of migration : In Table 2.12 is shown the place of migration in respect of the outmigrant earners from the 14 villages. About 70 per cent of the outmigrants earners had gone to Bombay and only about 3 to 4 per cent each to Ahmedabad, Poona and Satara-Kolhapur region. About 10 per cent had migrated to different places within Maharashtra State or to various parts of the country. About 7 per cent were in the armed forces. The place of migration was not reported in the case of about 3 per cent of the total outmigrant earners. Three outmigrants were reported to be abroad in pursuit of higher education.

The usual phenomenon is that when an outmigrant gets settled at some place he manages to find out employment in the same town for his relatives. Bombay is the centre of attraction to most of the outmigrants not only from the valley but also to the outmigrants from other parts of Satara district. From Derwan and Keloli a slightly larger proportion, about 10 per cent of the outmigrant earners, went to Ahmedabad possibly because the original migrants could secure employment to the new outmigrants.

Occupational Distribution of Outmigrant Earners : In Table 2.13 is given the occupational distribution of outmigrant earners. The 1,860 cases included 69 persons in search of employment. As stated earlier, 1,806 out of 1860 were male adults. Before considering the occupations followed by them we shall consider the remaining cases of female adults, and children. Of the 30 female adults, 11 did not state the occupation; 11 were in educational services, 2 in cotton mills and the remaining 6 in trade and other services. Of the 18 children, occupation was not stated in 6 cases and the remaining 12 were found in 8 occupations.

The smaller proportion of the nonadult and female adult earners in the outmigrant earners suggests that having accompanied the male adult earners, they took some employment. The data do not show their concentration in any particular occupation.

The male adult earners were distributed into some major groups : i) engaged in manufacturing, ii) transport, iii) trading and other occupations, iv) Non-agricultural manual labour, and v) service. The first group of 850 earners included 381 persons engaged in textile mills in spinning and weaving. The two other large groups were of 131 workers engaged in metal processing and manufacturing and 78 carpenters.

Table No. 2B: Occupational Distribution of Outmigrant Earners

Occupations	Male adults	Male non-adults	Female adults	Female non-adults	Total
Cultivators of mainly owned land	2	-	-	-	2
Casual agricultural labour	3	-	-	-	3
Vegetable oil pressers	4	-	-	-	4
Flour grinding	2	1	-	-	3
Beverages manufacturers	2	-	-	-	2
Tobacco manufacturing	1	-	-	-	1
Tailors	6	-	-	-	6
Cotton weaving	381	-	2	-	383
Cobblers	22	-	-	-	22
Factory workers	17	-	-	-	17
Metals - processing manufacture	132	2	-	-	134
Electrical machinery	4	-	-	-	4
Welders, Fitters, Plumbers	33	1	-	-	34
Chemicals - paints etc.	48	-	-	-	48
Makers & repairers of watches	2	-	-	-	2
Potters	1	-	-	-	1
Glass manufacture	49	-	-	-	49
Rubber & plastic product	6	-	-	-	6
Carpenters	78	-	-	-	78
Paper manufacturing, Printing and allied industries	9	1	-	-	10
Transport equipment making	3	-	-	-	3
Bicycle repairs	2	-	-	-	2
Trading	15	-	1	-	16
Medhanical transport on road	44	-	-	-	44

contd.

Table No. 2. (3) : (contd.)

Occupations	Male adults	Male non-adults	Female adults	Female non-adults	Total
Water transport	1	-	-	-	1
Railway	7	-	-	-	7
Crane driver	2	-	-	-	2
Dock workers	26	-	-	-	26
Building construction	7	-	-	-	7
Electric gas and telephone services	21	-	-	-	21
Painting (Buildings and structures)	20	-	-	-	20
Medical services	5	-	1	-	6
Educational services	45	-	11	-	56
Village officers	19	-	-	-	19
Employees of municipality, stall boards govts.	81	-	1	-	82
Police	64	-	-	-	64
Fire brigade and fireman	3	-	-	-	3
Postal, telegraph wireless services	13	-	-	-	13
Bank employees	2	-	-	-	2
Domestic services	4	-	-	-	4
Barbers	14	-	-	-	14
Hotels, Restaurant	14	2	2	-	18
Other services (including military services)	314	4	-	-	318
Non-agricultural manual labour	171	1	1	-	173
Apprentice	14	-	-	-	14
Occupation not stated	30	2	11	4	46
Total	1743	14	30	4	1791
In search of employment	63	5	1	-	69
Grand total	1806	19	31	4	1860

The remaining about 250 were found in a number of manufacturing industries.

These 850 outmigrant earners engaged in manufacturing industries can provide a base for the young generation in the valley to seek employment in some manufacturing process.

Willingness to work in the Valley : We had asked the respondents to state whether the outmigrants would be prepared to work in the valley if employment was available. The replies to this question really represent the opinion of the head of the family as the reply was given ~~xxx~~ without consulting the outmigrants. As stated by the head of families only 206 out of the 1,860 outmigrant earners would be willing to work in the valley. These included 58 persons working in textile mills, 36 working in various services, 53 persons working in different manufacturing industries and 12 carpenters and the remaining 47 mainly non-agricultural labour. 173 of them were between 15 to 40 years of age and only 33 others between 40 to 55 years of age. If the proposed plans for development of the valley are initiated by the Development Committee of the Shri Ram Temple at Chafal, it will be possible to absorb these experienced hands in the power looms and other manufacturing activities.

Total Family Income : We may conclude the discussion on population by considering the total family income. In Table 2.14 is shown distribution of families in different income groups and composition of total family income classified according to sources of income. Before we consider the details we may state how the total family income was arrived at. We asked all the respondent families to report income for the year 1970-71 from 1) the family

Table 2.14 : Composition of Total Family Income classified according to Sources and Total Family Income (in Rs.)

Source	Total Family Income (Rs.)									Total
	Upto 500	501 to 1000	1001 to 1500	1501 to 2000	2001 to 5000	5001 to 7500	7501 to 10000	10001 to 15000	15001 and above	
Total Families	148	712	712	475	662	70	11	7	2	2799
Total Income Rs.	56,130	5,52,657	8,80,458	8,28,577	19,08,872	4,13,650	94,346	76,824	36,044	48,47,558
Agriculture										
No. of families	89	557	625	442	578	57	9	7	1	2365
Rs.	16,248	1,83,178	3,46,676	3,79,976	8,23,679	1,75,391	52,766	50,963	11,974	20,40,851
Livestock										
No. of families	24	285	436	335	482	53	10	7	1	1633
Rs.	3,059	54,529	1,14,364	1,11,017	2,27,985	35,185	8,490	3,378	900	5,58,907
Poultry, Sheep etc.										
No. of families	52	393	482	351	506	47	7	6	1	1845
Rs.	1,817	15,684	24,519	22,304	38,902	5,223	645	1,415	1,600	1,12,109
Fruit & other Trees										
No. of families	12	29	21	38	64	7	2	2		175
Rs.	355	1,413	1,020	2,325	4,360	790	300	400	-	10,963
Income from Non-Agricultural Occupations										
No. of families	14	113	112	77	194	36	4	3	2	555
Rs.	3,970	40,870	61,540	54,790	3,15,830	1,25,610	18,820	13,790	20,870	6,58,290
Agricultural Labour										
No. of families	112	602	567	335	356	13	-	-	-	1985
Rs.	22,474	1,64,120	1,51,006	83,670	1,01,975	3130	-	-	-	5,26,375
Remittances										
No. of families	16	179	284	238	384	36	3	-	1	1141
Rs.	3,820	76,985	1,61,975	1,57,010	3,53,770	54,910	3,650	-	700	8,12,820
Carting etc.										
No. of families	-	4	13	17	42	4	1	-	-	81
Rs.	-	420	2,282	2,326	7,195	720	25	-	-	12,968
From hiring of implements, equipments etc.										
No. of families	-	4	8	19	33	9	2	1	-	76
Rs.	-	152	295	753	1,273	837	410	60	-	3,780
Unearned Income										
No. of families	24	71	63	38	78	13	5	1	-	293
Rs.	4,398	15,310	16,879	14,433	33,889	11,842	9,240	6,820	-	1,02,821

main occupation, 2) family subsidiary occupations, 3) independent occupations of individual members, 4) fruit and other trees and kitchen garden, 5) unearned income and 6) remittances received from outside the valley.

Where agriculture was reported as the occupation we found out the value of the agricultural produce by applying harvest prices and deducted therefrom the value of the agricultural produce given to the landlord if land^{was} leased-in on share rent basis, expenditure on purchases of seed, manure, chemical fertilizers and pesticides, wages to casual labour, annual farm servants, cash rent, repairs of agricultural tools and implements, fencing, rent paid for agricultural tools, livestock, etc. hired in and expenditure on oil etc. for oil engine and land revenue. The expenditure on fodder purchased, cattle grazing and rearing was also considered as expenditure on agriculture except in cases where no income was reported from agriculture. (In such cases expenditure on fodder was deducted from the value of livestock products.) The balance was considered as income from agriculture.

In respect of manufacturing and trading activity as also service occupations we noted whatever figure was reported as income by the respondents as we did not have any details to calculate their income.

As regards the income from livestock, we included in it the value of milk produced and value of eggs in the case of poultry, value of manure sold and cow dung cakes sold as fuel, and value of sale proceeds on account of sheep and goat, poultry, birds and wood. Value of farm yard manure used on one's own farm was neither deducted as an expenditure from value of agriculture produce nor was it shown as income from livestock. Similar value of cowdung cakes used by the

families was not shown as income. We neither included in the receipts the value of sales of milch and plough cattle or young stock thereof, nor showed the purchases thereof as expenditure. We only deducted the expenditure on the fodder purchased (where no income from agriculture was reported), expenditure on cattle rearing, veterinary services, etc. However, fodder grown on the farm and consumed by the livestock was not shown as an expenditure either in agriculture or in livestock; The unearned income consisted of Pension, Cash rent (in respect of leased out land), receipts from hiring of cattle and agricultural tools and implements and value of sale proceeds on account of dead cattle.

We may now consider the income data. The average family income for 2,799 families in the valley for the year 1970-71 came to Rs. 1,731/- and for 15,522 persons to Rs. 332/- per capita. We have divided the families into 9 income groups beginning with income upto Rs. 500 and ending with a group of families with income above Rs. 15,000/-. The fourth income group consists of families with income between Rs. 1,501 to Rs. 2,000. As the average family income is Rs. 1,731 that is, about the mid point of the group, we can consider half the number of families in this group as falling below the average and the remaining half having income above the average. On this assumption it may be said that nearly 65 per cent of the total families in the valley had income below the average. The families with income above the average and upto Rs. 5,000 formed about 32 per cent and the families with income above Rs. 5,000 only 3 per cent of the total families in the valley.

Agriculture, agricultural labour and livestock formed important sources of income accounting for 42.1 per cent 11.5 per cent and 10.9 per cent respectively of the total

income in the valley and income therefrom was reported by 85 per cent, 58 per cent and 71 per cent respectively. In the lower income groups, particularly in respect of the families with income below the average, agricultural labour was an important source of income accounting for about 40 per cent of the total income in the first income group, about 30 per cent in the second income group and about 17 per cent in the third income group. The income from livestock formed about 5 per cent in the case of the first and the last income groups and varied between 10 per cent and 20 per cent in the other groups. The income from poultry though reported by about 66 per cent of the families came to only Rs. 66 per reporting family. The dependence upon remittances was found in different proportions in different income groups. It was negligible in the last three income groups. The remittances formed about 6 per cent of the total income in the first income group and the proportion increased upto 18 per cent in the next four income groups.

The income from non-agricultural occupations and services was reported by about 20 per cent of the families. The income from fruit and other trees, carting and hiring of agricultural tools and implements formed a minor proportion in the total income of the valley.

Ownership of certain Durable Articles : The data regarding family income throws light on the economic conditions of the families in the valley. We thought it will be useful to supplement this information by giving an account regarding the ownership of certain durable articles. We had asked the families in the valley to report ownership of certain durable articles which included furniture like tables, chairs and cots, some household goods like stoves and lanterns and for the better off families alarm clocks, wristwatches,

gramophones, radios, sewing machines, bicycles, battery torches and guns. The data is presented in Table 2.15. It will be noted from the table that lanterns was the largest reported item by about two-thirds of the families in the valley. It means that the remaining one-third of the families did not own even a lantern. Only about 40 families owned two or more lanterns. The items of furniture, stoves, alarm clocks and radios were mainly reported at Majgaon, Chafal, Derwan and Nanegaon Budruk. Less than 5 per cent of the families had a table, chair, cupboard or a radio. About 17 per cent of the families had a wooden/steel bed. The 97 sewing machines reported by 95 families included the machines used by 47 tailors in 66 establishments in the 12 villages. The families at Patwade and Sadawaghapur did not own most of the items included in our list. At Sadawaghapur, grinding was done at home as there was no flour mill. The school functioned mainly on record. There was no reading room or a radio set and no newspaper was subscribed to by the local families. There were in all 225 bicycles owned by about 8 per cent of the families in the valley. Many of the bicycles at Majgaon and Chafal were used by the villagers to go to Umbraj or other places outside the valley. In 10 other villages also there were a few bicycles mainly used for carrying milk to the teashops at Chafal or Umbraj. Less than 4 per cent of the families owned alarm clocks and less than 20 per cent of the families reported wrist watches. At Chafal, 11 families used Esso Gas for heating stoves. They have to obtain gas cylinder from Satara. The data indicates the level of living of the families in the valley and in a way suggest that considerable effort will have to be made to bring many of these items in the list within reach of the families in the valley.

Table No. 2.15: Ownership of Certain Durable Articles by the Farmers in the 14 Villages

F = Number of Reporting Families

N = Number of Articles

Articles		Maj- gaon	Cha- fal	Jalge- wadi	Der- wah	Da- dholi	Kho- noli	Nane- gaon Bk.	Nane- gaon Kh.	Dha- yati	Ke- loli	Pad- loshi	Pat- wade	Sada- wagha- pur	Dusa- le	Total
Tables	F	4	35	1	1	-	-	2	2	1	1	-	-	-	-	47
	N	4	50	1	1	-	-	3	3	1	1	-	-	-	-	64
Chairs	F	12	56	6	9	1	1	9	1	2	5	-	1	-	1	104
	N	20	81	6	9	1	1	9	1	3	5	-	1	-	1	138
Cupboards	F	17	55	7	10	2	-	6	10	1	-	3	-	1	-	112
	N	18	73	7	12	2	-	6	11	1	-	3	-	1	-	134
Cots	F	72	130	31	46	6	15	50	43	18	29	15	6	12	14	487
	N	82	138	31	49	6	15	50	43	19	29	15	6	12	14	509
Stoves	F	42	147	10	32	4	1	14	13	4	8	5	-	-	1	281
	N	45	162	10	33	4	1	14	13	4	8	5	-	-	1	300
Lanterns	F	156	518	126	211	82	54	150	149	53	113	72	18	82	47	1831
	N	164	545	126	213	82	54	151	152	56	113	73	18	82	47	1876
Petromax	F	8	37	5	19	5	4	6	11	6	8	9	4	-	8	130
	N	9	42	5	19	5	4	6	11	6	8	9	4	-	8	136
Alarm watches	F	10	66	4	5	-	1	2	1	3	1	2	-	-	1	96
	N	10	66	4	5	-	1	2	1	3	1	2	-	-	1	96
Wrist watches	F	60	172	20	60	15	11	30	37	6	27	15	6	15	13	487
	N	73	191	21	61	15	11	30	38	7	28	15	6	15	14	525
Gramophones	F	1	3	-	-	-	-	-	-	-	-	-	-	-	-	4
	N	1	3	-	-	-	-	-	-	-	-	-	-	-	-	4
Radios	F	16	65	3	8	-	2	2	3	4	3	1	-	-	3	110
	N	16	66	3	8	-	2	2	3	4	3	1	-	-	3	111
Sewing Machines	F	7	34	4	15	3	3	8	9	2	7	2	-	-	1	95
	N	7	36	4	15	3	3	8	9	2	7	2	-	-	1	97
Bicycles	F	62	57	8	34	5	3	18	11	4	7	2	-	-	1	212
	N	62	69	8	34	5	3	18	12	4	7	2	-	-	1	225
Battery Torches	F	28	119	15	76	21	5	15	15	1	20	8	2	9	6	340
	N	29	132	16	76	21	5	15	16	1	20	8	2	9	6	356
Guns	F	1	7	-	-	-	-	1	3	1	-	4	-	-	1	18
	N	1	7	-	-	-	-	1	3	1	-	4	-	-	1	18
No. of families in the village		238	684	152	333	152	97	199	234	84	168	111	48	227	75	2799

Chapter III

LAND

In the present chapter we shall consider land ownership, cropping pattern, agricultural produce and sales thereof and expenses. We begin by considering land ownership as shown in Table 3.1. However, before we consider the data collected during the survey, we must state some serious limitations of the data regarding land acreage. During the course of fieldwork, our fieldstaff sought information from the families regarding 1) the land owned, leased in and leased out by them, 2) land utilisation such as irrigated land, paddy fields, dry land, inferior land, total area under crops, current fallow and permanent fallow and lastly 3) area under different crops, agricultural produce and certain important inputs. While recording the acreage under these three items of information in the schedule, the fieldman checked the figures for internal consistency so that the total of owned land cultivated plus land leased in tallied with the total cultivated land; the total of land utilisation under different heads as stated above tallied with the total cultivated land and the total of area under different crops tallied with the total cropped area shown under the item land utilisation. The data collected during the course of the fieldwork was subsequently tabulated. It was then found out that the area of land owned was under-reported to a considerable extent as compared to the figures obtained from the village records. For instance, as per the village records, as shown in Table 1.3, 17,124 acres of land in the valley was classified as assessed land including 9,299 acres of Inam land which was concentrated in 7 villages and unoccupied government land 214 acres. As per Table 3.1, the total owned land is only 10493.3 acres. In the village

Table 3.1 : Distribution of Families in the Valley according to Size of Cultivated Holding and Owned and Leased in Land

N = Number of reporting cases

Cultivated holding	No. of families	Owned land		Owned land cultivated		Leased in on cash rent		Leased in on share rent		Total cultivated land		Land revenue (on owned and leased land)	
		N	Acres	N	Acres	N	Acres	N	Acres	N	Acres	N	Rs.
1) Upto 2.5	1004	974	1585.2	973	1373.0	60	48.8	76	69.5	1004	1489.5	974	6,871
2) 2.6 to 5.0	738	728	2660.0	728	2530.4	65	113.9	101	158.3	738	2802.6	728	11,164
3) 5.1 to 7.5	277	271	1578.5	271	1539.4	26	51.8	57	162.2	277	1753.4	271	6,513
4) 7.6 to 10.0	180	176	1478.6	176	1417.2	16	58.4	44	156.2	180	1631.8	176	5,775
5) 10.1 to 15.0	105	104	1188.7	104	1152.8	13	38.9	29	112.7	105	1304.4	104	4,765
6) 15.1 to 20.0	35	35	581.6	35	576.6	5	23.5	5	32.0	35	632.1	35	2,038
7) 20.1 to 25.0	10	10	238.0	10	227.0	1	1.5	-	-	10	228.5	10	914
8) 25.1 to 30.0	10	10	299.0	10	294.0	-	-	-	-	10	294.0	10	1,130
9) 30.1 & above	6	6	348.4	6	323.4	-	-	-	-	6	323.4	6	896
10) Land owned but not cultivated	166	164	535.3	-	-	3	6.9	2	14.0	-	-	164	2,546
Total for cultivating families	2531	2478	10493.3	2313	9433.8	189	343.7	314	704.9	2365	10459.7	2478	42,612
Non-cultivating families	268												
Total number of families	2799												

11

records 17,124 acres are shown as cultivable land while as per our tabulation as shown in Table 3.2 the total cultivable area comes to about 10,460 acres, i.e. about 6,500 acres less than the village records. Even if we compare village-wise totals from Table 3.2 with Table 1.3 (total of Item A I) we find that there is under-reporting in all the 14 villages and the under-reporting is not necessarily confined to the villages which had large acreage of Inam lands.

Further due to under-reporting of owned land the area under different crops automatically got under-reported. As per the tabulation of data collected during the field-work, the gross cropped area was about 8,260 acres during 1970-71 as against about 11,350 acres (excluding grass) as shown in the village records. The double cropped area as reported in the family schedules came to 950 acres as against 1,338 acres reported in the village records. We feel that even though acreage is not reported satisfactorily data regarding physical inputs, expenditure, output and sales might have been reported with greater accuracy. Even then it cannot be utilised with precision to study per acre inputs and output as the acreage figures appear to be under-reported.

We could have overcome this difficulty if we had first recorded in the family schedules information about owned, leased in and leased out land from the village records, and later approached the families to get details of land utilisation and cropping pattern. However, it would have taken considerable time. Since it is too late to rectify the error, we have to use the data bearing in mind the limitations.

Table 3.2 : Distribution of Families in the 14 Villages According to Owned and Leased in Land

N = Number of reporting tax cases

Village	No. of families in the village	Owned land		Owned land cultivated		Leased in on cash rent		Leased on on share rent		Total cultivated land		Land revenue (on owned land)	
		N	Acres	N	Acres	N	Acres	N	Acres	N	Acres	N	Rs.
1) Majgaon	238	209	1169.9	194	1022.4	19	56.5	31	118.1	198	1183.0	209	6,341
2) Chafal	684	538	2140.6	477	1819.5	54	124.4	83	266.8	495	2208.3	538	11,372
3) Jalgewadi	152	146	512.4	140	469.8	10	15.0	28	46.0	141	530.8	146	2,613
4) Derwan	333	312	1075.9	294	952.7	36	35.7	27	56.7	298	1045.1	312	4,860
5) Dadholi	152	149	575.3	140	524.8	9	10.5	4	10.0	140	545.3	149	1,857
6) Khonoli	97	94	385.1	88	353.9	1	2.0	2	2.0	88	357.9	94	1,101
7) Nanegaon Bk.	199	177	651.6	163	602.0	19	37.4	27	47.2	166	680.6	177	3,132
8) Nanegaon Kh.	234	219	856.8	211	786.4	14	15.0	20	29.3	211	830.7	219	3,187
9) Dhayati	81	66	292.2	61	256.2	1	2.0	8	13.7	64	271.9	66	1,207
10) Keloli	168	161	812.7	156	753.3	4	6.2	28	37.3	156	796.8	161	2,929
11) Fadlosi	111	91	667.1	86	618.2	2	3.8	20	19.2	93	640.9	91	1,713
12) Fatwade	48	34	363.2	34	355.7	-	-	11	19.2	38	374.9	34	850
13) Sadawaghapur	227	212	572.4	209	558.9	19	33.2	14	21.1	216	613.2	212	639
14) Dusale	75	70	418.4	60	360.0	1	2.0	11	18.3	61	380.3	70	811
TOTAL	2799	2478	10493.3	2313	9433.4	189	343.7	314	704.9	2365	10459.7	2478	42,612

Land Ownership : In Table 3.1 is given a distribution of families in the valley according to different size groups of cultivated holding showing the land owned, owned land cultivated, land leased in and total cultivated land. It will be noted from the table that 2,478 out of 2,799 families i.e. 88.5 per cent of the families owned land, on an average 4.24 acres. Of these about 6.5 per cent did not cultivate land even though they owned it. If we exclude these families, then from out of the remaining 2,314 families, 1,702 or 74 per cent of the land owning families owned less than 5 acres each and between themselves 40 per cent of the total owned land. In fact more than half of them owned on an average only 1.5 acres of land. About 19 per cent of the families owned between 5 to 10 acres of land and 29 per cent of the total owned land. The remaining 7 per cent of the families owned on an average 16 acres each.

During the course of fieldwork it was noted that the land shown as Inam lands appeared as owned land in respect of individual cultivators who cultivated such land. However, the land revenue collected in respect of such land was remitted by the Government to the temple authorities to enable them to meet the expenditure on management of the temples. It was reported that out of the land revenue of Rs.13,040/- collected every year in respect of Inam land of about 9,500 acres, the Government retains Rs. 2,428/- and pays Rs. 10,612/- to the temple management.

Land Leased in and Leased Out : In the case of Inam lands, about 500 acres at Chafal were like 'Sheri-Inam' lands with the Court of Wards and the tenants ^{to} of whom this land was leased out paid cash rent to the Court of Wards. In addition to such land leased out, there was additional land also leased

out by individual cultivators. It will be noted from Table 3.2 that the total land leased out on cash rent was 31.6 acres and on share-rent 517.8 acres. Further 361.2 acres were reported as mortgaged and 77.58 acres were reported as mortgaged and leased out on share rent. The total leased out land added to 1,072.2 acres. As against this the land leased in on cash rent was 343.7 acres and on share rent 704.9 acres, that is, in all 1,048.6 acres. However, the land leased in and leased out also appears to be under-reported. For instance at Chafal, though Sheri-Inam land of about 500 acres was leased out, our data reveals only 321.5 acres as leased out and 391.2 acres as leased in.

Land Utilization : In Table 3.3 is shown irrigated land, paddy fields, dry and inferior land, which together represent the net area sown, permanent and current fallow land and total cultivable land in the 14 villages. The irrigated land formed less than two per cent of the total cultivable land and was mainly reported at Chafal and Majgaon. It was reported that additional area can be brought under irrigation by constructing pucca bunds on river Mand. The paddy land formed less than 10 per cent of the total cultivated area. The permanent fallow land formed about one-fourth of the total cultivable land. The proportion of the permanent fallow land was lower in the eastern parts of the valley. The current fallow land was about 620 acres in the 14 villages of which 373 acres was reported in Padloshi, Keloli and Nanegaon Khurd.

Cropping Pattern : In Table 3.4 is shown the area under different crops during the year 1970-71 together with data regarding purchases of seeds, fertilizers and cartloads of manure used and production, volume and value, of the main crop and value of the subsidiary crops. As noted in the

Table 3.3 : Land Utilisation in the 14 Villages

N = No. of families
Area in Acres

Village	Irrigated Land		Paddy Land		Dry & inferior land		Net Area Sown		Permanent Fallow		Current Fallow	Total Cultivable	
	N	Area	N	Area	N	Area	N	Area	N	Area	Area	N	Area
1. Majgaon	40	33.9	1	3.0	198	948.9	198	985.8	104	197.6	-	198	1183.0
2. Chafal	60	51.5	143	77.4	488	1704.8	495	1833.7	240	364.4	10.2	495	2208.3
3. Jalgewadi	9	2.8	66	14.5	141	477.9	141	495.2	43	35.6	-	141	530.8
4. Derwan	23	11.8	157	55.5	297	749.6	298	816.9	151	225.0	3.2	298	1045.1
5. Dadholi	-	-	139	117.1	128	261.3	140	378.4	108	142.7	24.2	140	545.3
6. Khonoli	-	-	75	34.3	87	160.9	88	195.2	78	154.3	8.4	88	357.9
7. Nanegaon Bk.	1	1.0	22	10.6	166	538.3	166	549.9	82	130.2	0.5	166	680.6
8. Nanegaon Kh.	4	2.7	164	81.1	207	453.7	211	537.5	150	197.0	96.2	211	830.7
9. Dhayati	-	-	51	25.2	62	127.5	64	152.7	58	89.7	29.5	64	271.9
10. Keloli	60	11.4	147	109.5	146	280.5	156	401.4	145	268.0	127.0	156	796.8
11. Padloshi	37	6.0	84	62.7	88	190.0	93	258.7	82	231.4	150.8	93	640.9
12. Patwade	20	6.5	37	43.6	32	86.5	38	136.6	32	181.7	56.6	38	374.9
13. Sadawaghapur	-	-	88	23.5	216	343.8	216	367.3	175	202.3	43.6	216	613.2
14. Dusale	7	1.2	56	50.2	60	149.7	61	201.1	57	109.0	70.2	61	380.3
TOTAL	261	128.8	1230	708.2	2316	6473.4	2365	7310.4	1505	2528.9	2365 620.4	2365	10459.7

76

Table 3.4 : Area under different crops, Value of Seeds, and Fertilizers Purchased, Number of Cart loads of Manure Used and Value of Main and Subsidiary Crops and Volume of Production of Main Crops in the Valley

Crop	Area under Crop (Acres)	Seeds Purchased (Rs.)	Manure (Cartloads)	Fertilizers used (Rs.)	Production (Kilos)	Production (including fodder) (Rs.)	Subsidiary crop (Rs.)
<u>Paddy</u>	<u>811.2</u>	<u>205</u>	<u>2,641</u>	<u>17,074</u>	<u>4,78,480</u>	<u>2,68,000</u>	<u>350</u>
Kharif Jowar - Dukari	1649.3	23	187	694	2,34,710	3,03,130	30,050
" - Gidgaon	484.0	94	228	184	96,140	1,24,220	14,360
" - Mahamadapuri	500.9	16	142	200	1,05,310	1,36,360	14,610
" - Other Kharif	632.9	11	233	335	1,19,150	1,57,590	16,440
<u>Total Kharif Jowar</u>	<u>2667.1</u>	<u>144</u>	<u>790</u>	<u>1,413</u>	<u>5,55,310</u>	<u>7,21,300</u>	<u>75,460</u>
Rabi Jowar - Shalu	264.8	199	31	-	29,750	44,260	1,720
" - For fodder	15.1	8	-	-	2,400 (bundles)	680	10
" - Maladandi	6.3	-	-	-	690	1,120	80
" - Hybrid	72.4	1,110	66	2,224	23,590	21,190	290
<u>Total Rabi Jowar</u>	<u>358.6</u>	<u>1,307</u>	<u>97</u>	<u>2,224</u>	<u>-</u>	<u>67,250</u>	<u>2,100</u>
Wheat Khapali	35.0	13	32	205	11,590	5,850	-
" Other	271.5	71	5	43	27,080	27,020	160
<u>Total Wheat</u>	<u>306.5</u>	<u>84</u>	<u>37</u>	<u>248</u>	<u>38,670</u>	<u>32,870</u>	<u>160</u>
<u>Maize</u>	<u>14.4</u>	<u>-</u>	<u>35</u>	<u>-</u>	<u>1,710</u>	<u>1,360</u>	<u>180</u>
<u>Small grains</u>	<u>885.2</u>	<u>8</u>	<u>897</u>	<u>56</u>	<u>1,45,850</u>	<u>1,01,760</u>	<u>180</u>
<u>Total Cereals</u>	<u>4943.0</u>	<u>1,758</u>	<u>4,497</u>	<u>21,015</u>	<u>-</u>	<u>11,92,540</u>	<u>78,430</u>
Black Gram	81.9	-	132	14	8,160	9,000	240
Gram	61.2	17	6	-	6,290	6,410	20
Other pulses	3.6	-	-	-	240	240	-
<u>Total pulses</u>	<u>146.7</u>	<u>17</u>	<u>138</u>	<u>14</u>	<u>14,690</u>	<u>15,650</u>	<u>260</u>
Groundnut - Pasarya	2942.5	2,083	9,129	2,509	7,34,270	10,47,350	56,320
" - 411 Karhad	19.8	-	85	15	6,000	8,480	800
" - Other	24.3	123	27	52	5,780	8,270	560
<u>Total Groundnut</u>	<u>2986.6</u>	<u>2,206</u>	<u>9,241</u>	<u>2,576</u>	<u>7,46,050</u>	<u>10,64,100</u>	<u>57,680</u>
Other Oilseeds	2.9	-	3	-	220	270	10
Other Oilseeds	2.9	-	3	-	220	270	10
<u>Total Oilseeds</u>	<u>2989.5</u>	<u>2,206</u>	<u>9,244</u>	<u>2,576</u>	<u>7,46,270</u>	<u>10,64,370</u>	<u>57,690</u>
Sugarcane	7.1	1,000	89	2,385	184 (Tonnes)	14,030	-
Sugarcane processed into Gur	44.7	1,473	690	2,933	58,450	59,620	-
<u>Total sugarcane</u>	<u>51.8</u>	<u>2,473</u>	<u>779</u>	<u>5,318</u>	<u>-</u>	<u>73,650</u>	<u>-</u>
Vegetables	18.5	762	107	253	32,060	17,000	-
Other crops	10.0	3	29	-	-	9,950	-
Grass	-	-	-	-	-	75,180	-
<u>Grand Total</u>	<u>8159.5</u>	<u>7,219</u>	<u>14,794</u>	<u>29,176</u>	<u>-</u>	<u>24,48,340</u>	<u>1,36,380</u>

introductory sections, the area under crops is under-reported and hence it will not be meaningful to work out the per acre inputs and output. However, it will be of interest to note the crops for which expenditure on seed or fertilizers is reported or where manure is used.

The cropping pattern shows the largest acreage under groundnut, about 37 per cent of the total area under crops followed by kharif jowar, about 32 per cent of the total area under crops. Paddy and small grains accounted for about 10 per cent each, rabi jowar 4 per cent, wheat and maize about 4 per cent, pulses 2 per cent and sugarcane, vegetables and other crops together, one per cent. Our fieldstaff reported that the local production of foodgrains and pulses was barely enough for six months in a year to meet the requirements of the local population. The cropping pattern as revealed by the survey data differed from the village records in respect of the area under kharif and rabi jowar. Though the data obtained from these two sources showed about 60 per cent of the total cropped area under cereals, kharif jowar and rabi jowar formed about 16 per cent and 36 per cent respectively as per the village records and 32 per cent and 4 per cent respectively as per the survey data. Similar differences are found in respect of the percentage area under small grains, namely varai, nachani, rala and sawa. No area under Arhar was reported in the survey data while about 250 acres were reported in the village records. We may recall that the village records in respect of the 14 villages related to one of the years between 1967-68 and 1970-71. Besides variations in acreage from year to year may occur due to crop rotations. While showing the area under different crops we have given the figures for certain varieties of major crops. In fact there were a number of

varieties in respect of paddy and kharif jowar. For instance, there were 13 varieties of paddy including three improved varieties. There were twelve varieties of kharif jowar, eight of wheat and six of sugarcane.

Purchase of Seed : The purchases of seed were reported mainly in respect of sugarcane, groundnut, hybrid jowar and vegetables accounting for 90 per cent of the total purchases of seeds. In respect of the other crops, the cultivators used the seeds preserved from the previous year's produce.

Use of Manure and Fertilizers : Of the 14,794 cartloads of manure, nearly 63 per cent went to groundnut, 18 per cent to paddy and about 5 per cent each to kharif jowar, sugarcane and small grains. The remaining 4 per cent was ~~xxxxx~~ applied to the other crops. The per acre inputs show that sugarcane received about 15 cartloads per acre, vegetables 6 cartloads per acre, groundnut as well as paddy a little over 3 cartloads per acre while kharif jowar received only 0.33 cartloads per acre.

The expenditure on fertilizers for sugarcane was the maximum being about Rs. 100 per acre, followed by paddy Rs. 20 per acre. ~~The fertilizer inputs for sugarcane are about _____ worth about Rs. _____ per acre. The expenditure on fertilizers used for sugarcane also seem to be under-reported.~~ The average expenditure on fertilizers per acre in respect of jowar and groundnut amounted to less than a rupee per acre.

Value of Production per Acre : As stated earlier we do not propose to work out quantum of physical production per acre. However, it is felt, that it will be useful to study the value of production including subsidiary crops per acre. The average value of agricultural production per acre

(excluding grass) came to Rs. 307 per acre. Among the individual crops, sugarcane topped the list with Rs. 1,421 per acre followed by turmeric and other crops Rs. 995 per acre and vegetable Rs. 918 per acre. There was a considerable difference in the value of production per acre between the irrigated and the dry crops. Among the dry crops, groundnut topped the list with Rs. 375 per acre followed by paddy Rs. 330 per acre and kharif jowar Rs. 310 per acre. The value of production per acre of rabi ~~ex~~ jowar was much less being Rs. 193 per acre. Wheat, pulses, small grains and maize were at the bottom of the list, the value of production varying between Rs. 115 to Rs. 94 per acre.

If in future the irrigation facilities are increased it will be possible to devote larger area to sugarcane, turmeric and vegetables and add to the income of the cultivators. The cultivators in the valley where soil is fertile seem to have acquired the necessary experience for growing such crops and irrigation facilities appear to be the bottleneck. For the purpose of a very rough calculation to find out the profitability of dry crops we may deduct the actual expenditure on purchases of seeds and fertilizers and value of manure at Rs. 15 per cent load from the value of the produce. The value of production per acre net of these deductions in respect of groundnut, paddy and kharif jowar comes to Rs. 321, Rs. 260 and Rs. 305 respectively. The wages on account of cultivation of ~~jowar, thus bringing on~~ ~~par-the-net-returns-from-groundnut-and-jowar~~ groundnut may exceed the wages paid for cultivation of jowar, thus bringing on par the net returns from groundnut and jowar.

Expenditure on Agriculture during 1970-71 : In Table 3.5 is shown the expenditure on various items on agriculture during the year 1970-71 in the 14 villages. It may be noted

Table 3.5 : Expenditure on Agriculture during the Year 1970-71

Village		Area under crop (Acres)	Total production	Seed purchased	Manure purchased	Fertilizer purchased	Wages	Annual Farm Servants	Carting	Hiring of		Bullocks He-buff-aloes etc.	Land reve-nue	Share to land-lord	Oil	Fodder	Fencing	Re-pairs	Total expenditure
										Imple-ments	Machi-nery								
Majgaon	No.	198	198	29	34	55	174	4	-	109	8	127	193	34	15	38	10	2	198
	Value	985.8	442650	2120	2560	5700	40430	2030	-	1100	670	2240	6350	15790	2770	2530	240	60	84590
Chafal	No.	495	495	68	122	117	449	5	7	143	7	211	417	114	1	180	138	16	495
	Value	1833.7	603490	2950	8630	7150	66460	3290	190	2340	1720	20250	10260	41580	30	10850	1890	570	178160
Jalge-wadi	No.	141	141	12	23	41	124	-	-	59	-	20	129	28	-	65	26	6	141
	Value	495.2	155040	280	1180	1090	11980	-	-	590	-	1640	2640	6690	-	2700	280	60	29130
Derwan	No.	298	298	9	26	106	280	1	-	125	-	85	292	29	-	102	46	-	298
	Value	816.9	290150	300	1210	2520	22390	860	-	1250	-	5160	5320	6030	-	4390	580	-	50010
Dadholi	No.	140	140	-	-	74	125	-	-	10	-	41	130	5	-	27	1	-	140
	Value	378.4	99480	-	-	1820	7120	-	-	100	-	1760	1990	920	-	1030	10	-	14750
Khonoli	No.	88	88	1	-	24	75	-	-	21	-	12	74	3	-	17	1	-	88
	Value	195.2	77560	10	-	480	5940	-	-	230	-	440	1170	240	-	580	10	-	9100
Nanegaon Bk.	No.	166	166	15	8	18	154	-	-	37	-	30	150	34	5	50	25	4	166
	Value	549.9	184330	290	520	600	16720	-	-	380	-	2150	3200	6660	910	2590	340	200	34560
Nanegaon Kh.	No.	211	211	16	12	81	167	-	-	40	-	26	185	30	-	54	4	1	211
	Value	537.5	219690	540	710	3600	21440	-	-	400	-	1590	3290	4100	-	2350	80	200	38300
Dhayati	No.	64	64	3	-	29	58	-	-	16	-	7	51	8	-	9	2	-	64
	Value	152.7	66030	40	-	840	6050	-	-	160	-	420	1090	2240	-	460	20	-	11320
Keloli	No.	156	156	10	3	36	146	-	-	13	-	5	142	28	-	27	9	1	156
	Value	401.4	148080	100	170	1200	13510	-	-	130	-	140	2940	3540	-	1080	110	10	22930
Padlo-shi	No.	93	93	12	1	46	73	-	-	8	-	9	77	21	-	10	1	-	93
	Value	258.7	94390	230	20	1930	9190	-	-	80	-	250	1760	2500	-	210	20	-	16190
Patwade	No.	38	38	4	1	20	34	-	-	1	1	3	31	11	-	7	2	-	38
	Value	136.6	42710	40	30	770	5340	-	-	30	20	160	860	2090	-	500	70	-	9910
Seda-waghapur	No.	216	216	3	1	2	147	-	-	-	-	55	78	31	-	159	-	51	216
	Value	367.3	83740	90	40	20	5480	-	-	-	-	1600	780	1500	-	8150	-	520	18180
Dusale	No.	61	61	5	2	38	51	1	-	12	-	6	51	10	-	9	2	-	61
	Value	201.1	64720	100	190	1700	5540	1040	-	120	-	380	770	1200	-	380	40	-	11460
Total	No.	2365	2365	187	233	687	2057	11	7	594	16	537	2000 (2313)	386	21	754	267	81	2365
	Value	7310.4 (6122)	2572060	7090	15260	29420	237590	7220	190	6910	2410	38180	42420	95080	3710	37800	3690	1620	528590

that the expenditure does not include home-grown seeds, farm yard manure, value of family labour and inputs of plough cattle owned by the cultivators. If we deduct the total expenditure of Rs. 5,28,590 from the value of agricultural production (excluding grass), the net income from agriculture comes to about Rs. 240 per acre. The composition of the expenditure was as follows :-

<u>Item of Expenditure</u>	<u>Rs.</u>	<u>As % of total Expenditure</u>
1) Seed purchased	7,090	1.34
2) Manure purchased	15,260	2.89
3) Fertilizers	29,420	5.56
4) Wages	2,37,590	44.96
5) Annual farm servants	7,220	1.36
6) Carting and hiring of agricultural tools and implements	9,510	1.80
7) Hiring of plough cattle	38,180	7.22
8) Land revenue	42,420	8.02
9) Share to landlord	95,080	18.00
10) Oil	3,710	0.70
11) Fodder	37,800	7.15
12) Fencing and repairs	5,310	1.00
	<u>5,28,590</u>	<u>100.00</u>

In concluding, we may observe that the expenditure on modern inputs such as fertilizers or oil is quite low. The average expenditure on the various items included in the Table comes to Rs. 72, per acre. The data also bring out such features as very little dependance on annual farm servants or carting by hired cart and driver, larger amount of expenditure on fodder at Chafal and Sadawaghapur, the two villages accounting for 50 per cent of the total expenditure on fodder in the valley. The data have been

presented villagewise with a view to bring out some such features.

Sale of Agricultural Produce : We had asked information regarding the sale of agricultural produce during the year 1970-71. The number of sales, value of sale proceeds, expenditure on sales and the net sale proceeds for the ~~year 1970-71 were recorded.~~ The data are presented crop-wise for the valley in Table 3.6. It will be noted from the table that sales were reported in respect of about 10 crops and fodder (of jowar and other crops), the total sale proceeds being Rs. 2,65,216. Groundnut, gur and sugarcane and rice were the three major items accounting for about 64 per cent, 15 per cent and 10 per cent respectively of the total sales. The remaining about 11 per cent of sale proceeds were on account of vegetables and fruits, jowar, coriander and fodder and a very small amount on the sale of turmeric.

The largest number of sales were on account of groundnut, fodder, gur and rice forming about 86 per cent of the total sales. The information regarding the expenditure on sales revealed that the total expenditure on sales formed less than one per cent of the gross sale proceeds, as most of the sales took place within the valley. The cultivators reported such expenditure on sales of groundnut, gur, rice, fruits and vegetables. It was only in the case of sale of fruits that the expenditure formed as high as about 9 per cent of the gross sale proceeds.

In Table 3.7 we have shown sales of major agricultural produce reported by the families in the 14 villages during 1970-71. It will be noted from the table that Majgaon which is situated at the entrance of the valley and within close vicinity of the national highway reported the

Table 3.6 : Volume and Value of Sales of Agricultural Produce, Expenditure on Marketing and Net Sale Proceeds reported by the cultivators in the valley during 1970-71

Commodity	No. of sales	Quantity Kg.	Sale Proceeds Rs.	Expenditure on sales Rs.	Net Sale Proceeds Rs.
Groundnut	500	1,05,828	1,68,818	859	1,67,959
Gur	118	28,620	31,299	468	30,831
Sugarcane	11	124 (Tons)	9,411	-	9,411
Vegetables	37	-	7,605	32	7,573
Fruits	15	-	5,720	523	5,197
Rice	108	16,985	25,102	291	24,811
Paddy	4	570	430	-	430
Kharif jowar	12	5,530	4,803	-	4,803
Hybrid Jowar	1	300	180	-	180
Coriander	70	1,930	3,056	-	3,056
Turmeric	2	100	460	10	450
Total	878	-	2,56,884	2,183	2,54,701
Fodder					
Kharif Jowar	122	-	6,188	-	6,188
Rabi Jowar	3	-	41	-	41
Hybrid Jowar	2	-	115	-	115
Paddy	19	-	334	-	334
Groundnut	22	-	232	-	232
Other	15	-	288	-	288
<u>Grass</u>	58	21,250 (bundles)	1,134	-	1,134
Total	241	-	8,332	-	8,332
Grand Total	1115	-	2,65,216	2,183	2,63,033

Table 3.8 : Villagewise Distribution of Sales of Major Agricultural Produce during 1970-71

Village	No. of sales	Total sales	Ground-nut	Gur	Sugar-cane	Vegetables	Fruits	Rice	Ccrist-ander	Kharif Jowar	Jowar Fodder	Grass	Other Crops
1. Majgaon	259	1,02,261	76,682	4,259	9,411	6,620	-	-	1,513	2,330	1,143	120	183
2. Chafal	256	59,647	40,140	12,041	-	815	-	-	948	1,973	2,801	23	906
3. Jalgewadi	56	9,822	8,960	-	-	80	-	-	122	-	302	118	240
4. Derwan	102	18,172	9,262	1,980	-	20	5,320	-	-	-	877	310	403
5. Dadholi	37	2,270	1,775	-	-	-	-	-	-	-	40	265	190
6. Khonoli	19	4,770	4,720	-	-	-	-	-	-	-	50	-	-
7. Nanegaon Bk.	58	10,503	8,730	190	-	-	400	-	81	400	444	83	175
8. Nanegaon Kh.	95	15,963	10,888	985	-	70	-	2,625	392	100	336	85	482
9. Dhayati	26	4,233	3,570	-	-	-	-	475	-	-	100	55	33
10. Keloli	111	19,203	1,030	6,402	-	-	-	11,612	-	-	55	45	59
11. Padloshi	27	6,142	1,680	1,352	-	-	-	3,070	-	-	40	-	-
12. Patwade	28	5,632	-	4,065	-	-	-	1,455	-	-	-	30	82
13. Sadawaghapur	7	465	438	-	-	-	-	-	-	-	-	-	27
14. Dusale	34	6,133	943	25	-	-	-	5,165	-	-	-	-	-
All Villages	1115	2,65,216	1,69,373 8,818	31,299	9,411	7,605	5,720	24,542 402	3,056	4,803	6,188	1,134	2,780

85

maximum sales, accounting for about 40 per cent of the total sales reported by the cultivators in the valley. The sales included a variety of crops. Out of the total sales of vegetables, Majgaon accounted for about 90 per cent. The sale of sugarcane was reported only at Majgaon as the sugar factories at Karad and Wai could conveniently buy and transport it to the factories from Majgaon. In other villages sugarcane was converted into gur. Groundnut sales were reported in all the villages but here also the villages with better road conditions, namely, Majgaon, Chafal, Derwan, Nanegaon Ek. and Nanegaon Kh. and Keloli accounted for more than 80 per cent of the total sales. The sale of rice was reported at Keloli, Nanegaon Kh., Padloshi, Dusale, Patwade and Dhayati.

The villages situated in the interior and where communication is difficult, for instance, Dadholi, Khonoli, Dhayati and Sadawaghapur accounted for only about 4 per cent of the total sales. The sales are no doubt dependent upon the output and the output is dependent upon soil, cropping pattern, use of fertilizers and a number of other factors. The fact, however, remains that the villages without proper communication facilities can not grow vegetables and other crops which require quick transport facilities. Sadawaghapur which has inferior soil and had communication, had very little to report.

Place of Sales : In order to find out whether the cultivators sold the produce locally or at the markets situated outside the valley we had sought information regarding the place of sales. The data regarding place of sales in respect of major agricultural produce is shown in Table 3.8. It will be seen from the data that about 60 per cent of such sales were local, that is, in the village itself and about

Table 3.7 : Sale of Major Agricultural Produce in the Valley according to Commodity
- Volume and Value and Place of Sales

Crops	Market	In the village		Local Markets in the valley		Umbraj		Patan, Karad, Satara, Sangli, Masur		Total	
		No. of sales	Gross sale proceeds Rs.	No. of sales	Gross sale proceeds Rs.	No. of sales	Gross sale proceeds Rs.	No. of sales	Gross sale proceeds Rs.	No. of sales	Gross sale proceeds Rs.
1. Groundnut		352	1,24,112	50	9,342	97	31,959	22	7,627	521	1,73,040
2. Rice		1	700	75	18,437	1	600	7	1,143	84	20,880
3. Gur		49	14,813	43	7,734	17	3,285	9	5,467	118	31,299
4. Vegetables		17	2,520	19	5,015	1	70	-	-	37	7,605
5. Coriander		61	2,802	5	254	-	-	-	-	66	3,056
6. Turmaric		-	-	-	-	1	160	1	300	2	460
7. Fruits		-	-	15	5,720	-	-	-	-	15	5,720
Total		480	1,44,947	207	46,502	117	36,074	39	14,537	843	2,42,060

20 per cent were in the markets in the valley. The sales at Umbraj which is located on the highway outside the valley accounted for about 15 per cent of the total sales. Only 5 per cent of the sales took place at other markets situated beyond a distance of 25 Kms. from the valley.

It may, however, be noted that many of the traders from outside the valley went to the villages or local markets in the valley to purchase groundnut. Hence the place of sale is recorded as the village or markets in the valley even though many of the purchasers are from outside the valley.

Processing of Agricultural Produce : During the course of fieldwork, the fieldstaff noted that there were adequate arrangements for processing paddy into rice locally. As regards processing of sugarcane into gur, it was noted that being situated away from the main road, the cultivators preferred to process sugarcane into gur rather than selling it to sugar factories. As regards groundnut, it was mainly sold as dry pods. Only a small quantity was processed for obtaining cooking oil at the oil presses located in the valley. The volume of groundnut available for sale, about 1,060 quintals, is not considered adequate to expand the existing facilities for processing it into oil. Taking into consideration the present cropping pattern and the volume of agricultural produce sold it seems that it will not be economic to provide any additional facilities for processing of agricultural produce in the valley.

Land Improvements : In Table 3.9 is shown expenditure on land improvement during the five years prior to the year 1970-71 in the 14 villages. We have shown and included in the total expenditure value of family labour and materials used

Table 3.9 : Land Improvements during the Five Years prior to the year 1970-71 in the 14 villages

Area : Area concerning the particular item in Acres - figures in brackets in that column represent the number of cases reporting the acreage.

Expenditure in Rs.

Village	Area	Value of material	Of which from the cultivators resources	Labour charges	Of which value of Family Labour	Total Expenditure	No. of cases
<u>Majgaon</u> (1) <u>Bringing under Cultivation Fallow Land</u>							
Majgaon	1.3	-	-	600	200	600	1
Chafal	24.2	300	100	6780	2050	7080	27
Jalgewadi	3.6 (8)	-	-	1170	450	1170	10
Derwan	3.1	200	200	2030	810	2230	5
Nanegaon Bk.	4.0	-	-	1600	200	1600	5
Nanegaon Kh.	2.9	100	-	900	150	1000	3
Keloli	3.3	-	-	1750	900	1750	5
Padloshi	3.5	-	-	1600	450	1600	2
Patwade	0.8	-	-	500	200	500	1
Sadawaghapur	2.5	-	-	1140	700	1140	7
Dusale	1.5	-	-	800	500	800	2
TOTAL	50.7(66)	600	300	18870	6610	19470	68

(2) Building & Levelling Land

Majgaon	21.8 (9)	5000	-	3480	1980	8480	11
Chafal	61.3 (40)	1150	130	8120	2870	10680	49
Jalgewadi	7.1 (11)	200	200	1610	150	1810	12
Derwan	20.4 (21)	750	350	3560	1480	4310	24
Dadholi	0.9	100	-	1050	200	1150	3
Nanegaon Bk.	3.9	250	200	910	180	1160	7
Nanegaon Kh.	11.5 (21)	720	-	5230	2080	5950	22
Dhayati	1.0	-	-	600	150	600	2

Contd....

Table 3.9 : Contd.

Village	Area	Value of material	Of which from the cultivators resources	Labour charges	Of which value of Family Labour	Total Expenditure	No. of cases
Keloli	9.1	-	-	5330	1780	5330	18
Padloshi	15.2	-	-	7300	1560	7300	18
Patwade	14.2	150	-	5900	1750	6050	13
Sadawaghapur	10.1	-	-	3640	1510	3640	14
Dusale	25.1	-	-	8650	2640	8650	23
TOTAL	201.6 (200)	8320	880	55380	18330	65110	216

(3) Digging and Constructing New Wells

Majgaon	9.0 (2)	-	-	25000	-	28000	4
Chafal	3.0 (1)	2500	-	2650	500	5150	2
Derwan Nanegaon Bk.	-	-	-	1000	300	3500 1000	5 1
Nanegaon Kh.	6.1 (3)	-	-	3400	100	3400	5
Padloshi	-	1500	-	5000	-	6500	1
TOTAL	18.1 (6)	4000	-	37050	900	47550	18

(4) Repairs to Old Wells

Majgaon	-	6000	-	7000	-	13000	1
Chafal	-	-	-	400	-	400	1
Derwan	1.0 (1)	-	-	600	200	600	2
Nanegaon Kh.	17.0	-	-	280	50	280	2
Keloli	1.0	-	-	-	-	100	1
TOTAL	19.0 (4)	6000	-	8280	250	14380	7

(5) New W Orchards

Chafal	0.1 (1)	220	-	30	-	250	3
Derwan	0.8	100	-	100	50	200	2
TOTAL	0.9 (3)	320	-	130	50	450	5

Contd....

Table 3.9 : Contd.

Village	Area	Value of material	Of which from the cultivators resources	Labour charges	Of which value of Family Labour	Total Expenditure	No. of cases
<u>(6) Additions to the Irrigated Acreage</u>							
Chafal	2.3	700	-	800	500	1500	3
<u>(7) Cattle Shed, Repairs to Sheds in the Field</u>							
Majgaon	-	-	-	-	-	10500	1
Chafal	1.1 (2)	2990	700	2870	1100	5860	9
Derwan	-	200	-	1250	350	5450	8
Nanegaon Kh.	-	1990	-	110	-	2100	4
TOTAL	1.1 (2)	5180	700	4230	1450	23910	22

Total expenditure includes value of material and labour charges as also payment for contract jobs. However, in the contract jobs the value of material and labour could not be ascertained separately. The difference between the total expenditure and the value of material and labour charges represents the payment on account of contract jobs.

Summary :

1. Bringing under cultivation fallow land	50.7 (66)	600	300	18870	6610	19470	68
2. Bunding of levelling land	201.6 (200)	8320	880	55380	18330	65110	216
3. Digging and Constructing New Wells	1881 (6)	4000	-	37050	900	47550	18
4. Repairs of old wells	19.0 (4)	6000	-	8280	250	14380	7
5. New Orchards	0.9 (3)	320	-	130	50	450	5
6. Additions to the irrigated acreage	2.3 (3)	700	-	800	500	1500	3
7. Cattle shed, Repairs to shed in the field	1.1 (2)	5180	700	4230	1450	23910	22
TOTAL	293.7 (284)	25120	1880	124740	28090	172370	339

from the resources of the cultivator to show the extent of such contributions in the total expenditure. The major items of land improvement on which information was sought included 1) bringing under cultivation fallow land, 2) bunding and levelling land, 3) digging and constructing new wells, 4) repairs to old wells, 5) new orchards, 6) additions to the irrigated acreage and 7) construction of and repairs to cattle sheds and sheds in the field.

Bunding and levelling of land was the largest reported item, (by about 3 per cent of the cultivators) on an area of about 200 acres. The average expenditure per acre was about Rs. 325 most of which was on account of labour. During the five year period, about 50 acres of land were brought under cultivation at a cost of Rs. 19,470 which also included a large proportion on account of labour. The expenditure on construction of new wells Rs. 47,550 and repairs to old wells Rs. 14,380 related to an area of 18.1 acres and 19.0 acres respectively. There was not much expenditure on laying new orchards or addition to the irrigated acreage. The expenditure on cattle sheds and repairs to sheds in the field was reported by 22 families and ⁱⁿ 4 villages.

The total expenditure during the five years came to Rs. 1,74,370, that is, Rs. 34,474 per year. The value of land in the 14 villages was reported at Rs. 1,18,98,050. (Ref. Table 5.1). It will thus be seen that the annual expenditure on land improvements worked out to hardly 0.3 per cent of the value of land and is certainly very low. If the capital expenditure on land improvements of Rs. 34,474 per year is compared with the income from agriculture, which is about Rs. 20,00,000, (Refer Table 2.14) then also it turns out that the capital expenditure is hardly 1.5 per cent of income from agriculture. Even though the per family income is below poverty line in a majority of cases, the

rate of investment in agriculture will have to be increased substantially by some means in order to improve agriculture and income therefrom.

Chapter IV

LIVESTOCK AND AGRICULTURAL TOOLS AND IMPLEMENTS

In the preceding two chapters we considered two important resources, namely, labour force and land. In the present chapter we shall consider livestock and agricultural tools and implements. We shall consider livestock owned at the time of the survey, purchases, sales, deaths and consumption thereof and income from ^{and} ~~the~~ expenditure on livestock. We shall also consider the agricultural tools and implements owned by the cultivators in the valley at the time of the survey.

Livestock : In Table 4.1 is given distribution of livestock owned by the families in the valley according to the size of cultivated holding in respect of the cultivators in the valley.

Bullocks were used as plough cattle. About 56 per cent of the cultivators and only one per cent of the non-cultivators owned bullocks, on an average 1.3 bullocks per reporting cultivator. Among the smallest cultivators holding upto 2.5 acres of land, only 30 per cent owned a bullock each. The proportion of cultivators owning bullocks as also the average number of bullocks owned increased with the size of cultivated holding. There were only 37 he-buffaloes owned by 33 cultivators. During the year 1971-72, the area under crops was about 8,200 acres as reported in the survey. As the land is ploughed on an average by 4 pairs of bullocks the average cropped area per 4 pairs of bullocks came to about 38 acres.

Cows were reported by about one-third of the families and she-buffaloes by about 42 per cent of the families. The former were kept both for breeding purposes as also for milk while the latter were kept mainly as milch cattle. The cows and she-buffaloes were maintained even by some of the

Table 4.1 : Distribution of Livestock Owned according to the size of Cultivated Holding

Size of Cultivated Holding (acres)	No. of families	Bullocks and Bulls		He buffaloes		Cows		Calves		She-buffaloes		Calves		He-goats		She-goats & young ones		Sheep		Poultry		Other animals	
		F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N
Upto 2.5	1004	319	342	8	8	284	346	264	376	360	484	308	410	7	18	332	737	4	50	643	3126	1	1
2.6 to 5.0	738	483	562	10	10	297	366	276	349	409	587	348	502	6	17	308	741	12	201	548	3191	-	-
5.1 to 7.5	277	230	316	3	3	140	171	139	179	161	239	151	221	2	3	123	317	5	97	214	1338	2	2
7.6 to 10.0	180	153	224	2	2	93	137	89	123	126	185	116	166	4	4	100	266	4	83	147	1135	3	5
10.1 to 15.0	105	95	156	6	9	55	82	50	68	80	122	62	97	3	12	58	128	1	20	80	614	-	-
15.1 to 20.0	35	33	62	1	1	22	41	21	36	24	43	21	32	-	-	19	62	1	30	31	225	-	-
20.1 to 25.0	10	9	18	2	2	8	11	7	11	8	17	8	15	-	-	5	17	-	-	8	63	-	-
25.1 to 30.0	10	9	19	-	-	5	8	6	11	8	13	5	6	-	-	6	18	-	-	6	42	1	1
30.1 & above	6	5	18	-	-	4	7	4	7	6	15	5	9	-	-	5	32	1	60	3	85	-	-
Non-cultivating families	434	4	4	1	2	32	34	39	44	41	48	41	50	2	8	80	156	-	-	176	818	1	5
Total	2799	1340	1721	33	37	940	1203	895	1204	1223	1753	1065	1508	24	62	1036	2474	28	541	1856	1837	8	14

F : relates to the number of reporting families

N : relates to the number of Livestock

smallest cultivators.

Goats, sheep and poultry were found mainly with the small cultivators, though the average number of animals or birds owned by the reporting cultivators was quite small.

The data regarding ownership of livestock is also presented villagewise, in Table 4.2 with a view to indicate the villages where there is a concentration of milch cattle or sheep and goat. Chafal, the largest village, had a larger proportion, as compared to the other villages, of families engaged in non-agricultural occupations. Naturally Chafal had also a lower proportion, slightly below the average for the valley, in respect of families reporting ownership of plough cattle. There being great demand for milk by families engaged in service occupations or salaried earners, at Chafal, there was the largest number of cows and calves and she-goats and the second largest number of she-buffaloes and calves. Sadawaghapur had the largest number of she-buffaloes and calves. Even though the village does not have good transport facilities, because of the grazing facilities in the forest and grazing land and also land for cultivation ~~being~~ being low, the villagers prefer to rear cows and she-buffaloes. The milk was converted into 'Khawa' whenever it could not be transported and sold as milk. The sheep were reported mainly at Jalgewadi, Derwan and Nanegaon Khurd. The poultry birds were reported at all the villages and the average number of birds owned varied between 3 to 10 birds per reporting family in different villages.

Income from Livestock : Livestock products was an important source of income to nearly sixty per cent of the families in the valley. The income from livestock products and carting accounted for 11.5% of the total family income for the valley. In Table 4.3 is presented data regarding livestock

Table 4.2 : Villagewise Distribution of Livestock Owned in the 14 Villages

Village	Fami- lies	F = No. of Families										N = No. of Livestock											
		Bullocks and Bulls		He- buffaloes		Cows		Calves		She- buffaloes		Calves		He- goats		She goats & young ones		Sheep		Poultry		Other animals	
		F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N
Majgaon	238	116	169	5	5	113	165	97	130	94	137	83	128	3	13	95	195	1	6	127	706	-	-
Chafal	684	224	298	7	11	194	246	168	252	226	297	174	223	7	14	245	455	1	1	414	2123	5	9
Jalgewadi	152	94	115	1	1	70	83	50	60	63	76	58	72	1	10	91	236	9	191	132	998	-	-
Derwan	333	154	196	5	5	82	96	90	112	175	236	128	166	3	3	104	307	8	174	264	1547	-	-
Dadholi	152	63	79	1	1	39	52	51	69	68	79	62	73	-	-	21	97	1	19	85	250	-	-
Khonoli	97	63	72	-	-	39	54	39	53	47	58	46	54	-	-	14	58	1	13	70	250	-	-
Nanegaon Bk.	199	101	136	1	1	63	78	63	80	62	73	64	81	1	1	102	222	2	31	155	991	-	-
Nanegaon Kh.	234	138	175	4	4	84	110	82	109	84	112	81	105	8	20	131	240	5	106	162	841	-	-
Dhayati	81	40	47	-	-	32	43	33	42	37	47	32	46	-	-	42	79	-	-	37	151	-	-
Keloli	168	111	139	-	-	77	89	68	93	80	101	76	95	1	1	90	225	-	-	131	1292	1	3
Padloshi	111	58	77	1	1	30	38	39	51	46	64	47	61	-	-	48	157	-	-	77	512	1	1
Patwade	48	25	35	1	1	10	16	10	17	22	36	18	30	-	-	10	21	-	-	13	89	1	1
Sadawagha- pur	227	111	130	7	7	80	100	79	106	198	410	179	353	-	-	6	73	-	-	144	568	-	-
Dusale	75	42	53	-	-	27	33	26	30	21	27	17	21	-	-	37	109	-	-	45	219	-	-
Total	2799	1340	1721	33	37	940	1203	895	1204	1223	1753	1065	1508	24	62	1036	2474	28	541	1856	10537	8	14

Table 4.2 : Livestock Products and Sales thereof and Income from Carting in the 14 villages

Village	No. of fami- lies	Milk and Milk Products		Of which Sold		Poultry, wool Sales of Sheep etc.		Of which sold		Manure, Cow dung cakes Produced		Of which sold		Income from Carting		Total Income from Livestock Products and Carting Rs.
		F	Rs.	F	Rs.	F	Rs.	F	Rs.	F	Rs.	F	Rs.	F	Rs.	
Majgaon	238	138	39,750	33	8,290	120	6,640	51	2,550	203	17,620	16	480	17	1,350	65,360
Chafal	684	325	1,25,010	123	39,060	415	29,380	300	16,730	453	44,200	27	1,200	61	11,020	2,09,610
Jalgewadi	152	99	32,680	38	15,510	134	12,210	125	9,790	133	15,070	5	350	13	670	60,630
Derwan	333	188	80,040	119	35,370	250	15,710	161	8,810	280	29,780	13	500	8	600	1,26,130
Dadholi	152	74	18,820	26	4,670	82	3,040	24	1,090	116	7,360	3	260	4	290	29,510
Khonoli	97	55	15,750	27	4,450	75	3,350	51	2,050	82	5,770	1	50	1	30	24,900
Nanegaon Bk.	199	126	30,150	43	10,610	152	9,310	106	5,980	152	12,910	9	410	9	600	52,970
Nanegaon Kh.	234	124	30,340	36	4,530	169	11,010	121	7,030	193	15,050	4	90	1	60	56,460
Dhayati	81	47	14,600	18	3,580	47	3,090	41	2,350	59	4,760	5	140	2	40	22,490
Keloli	168	123	30,080	51	7,250	135	10,380	104	6,840	141	11,840	2	60	3	260	52,560
Padlosh	111	60	17,940	23	4,240	72	5,180	45	3,430	83	6,390	2	70	1	10	29,520
Patwade	48	29	9,440	14	1,700	12	900	8	550	32	2,940	1	30	1	40	13,320
Sada-waghapur	227	197	1,03,250	193	61,320	122	4,430	84	2,120	212	16,140	5	140	4	110	1,23,930
Dusale	75	35	8,860	10	870	48	3,320	35	2,310	56	4,610	-	-	3	120	16,910
TOTAL	2799	1620	5,56,710	754	2,01,550	1833	1,17,950	1256	71,630	2195	1,94,440	93	3,780	128	15,200	8,84,300

F = Number of Reporting Families.

products and sales thereof and income from carting in the 14 villages. It will be noted from the table that income from milk and milk products formed about 63 per cent and manure and cowdung cakes about 22 per cent; the income from poultry and sheep accounted for 13 per cent and carting for the remaining, about 2 per cent of the total income from livestock.

We may note that milk and milk products were reported in larger quantities at Chafal, Sadawaghapur and Derwan accounting for about 55 per cent of the total milk and milk products in the valley. Chafal, Derwan, Jalgewadi, Nanegaon Khurd and Nanegaon Bk. and Keloli recorded about 75 per cent of the total income from poultry and sheep. Carting appeared to be important only at Chafal which recorded about three-fourths of the income from carting reported in the 14 villages.

From the point of view of future development we may consider the first two items, namely, income from livestock and income from poultry and sheep. We had obtained information regarding the total milk yield from the milch cattle during the twelve months prior to the survey. The produce was in most of the cases valued at Rupee one per litre of cows or she-buffalow's milk except where it was specifically reported as Re. 0.75 per litre as in some cases. The total milk yield in the valley during the year worth Rs. 5,56,710 may be estimated at about 6,00,000 litres or on an average 50,000 litres a month. However, there is variation from season to season there being more yield in the months of August, September, October and November and lower yield in summer, i.e. March, April, May and June. Of the total milk production about 40 per cent was sold either as milk or milk converted into 'Khawa' for preparing sweets or butter. Our fieldstaff had discussions with the

villagers during the course of fieldwork and estimated that about two-thirds of the sales were of 'Khawa' and the remaining about one-third of milk. For the sake of estimation and also on the basis of the information gathered by the fieldstaff it was found that for conversion of milk into one Kg. of 'Khawa' ~~xxxxxxx~~ about 5 to 6 litres of milk is required and 'Khawa' is sold at about Rs.5 to 6 per kilo. Hence it is presumed that sale worth a rupee of milk products represents one litre of milk and the sum of Rs. 2,01,550 on account of the sale proceeds of milk and milk products may be considered to represent about 2,00,000 litres of milk. It may also be noted that out of the total sale of milk, some milk was sold to families in the villages which did not own any milch cattle and some to the tea-shops at Chafal.

As estimated above
~~It was reported that~~ about 2,00,000 litres of milk was sold of which it is estimated that only about 65,000 litres was sold as milk and the remaining milk converted in to 'Khawa'. Our fieldstaff estimated that suppliers of milk, either for sale as milk or Khawa varied considerably from about 10,000 litres per month in summer to about 25,000 litres per month when the supplies were at peak. It will be thus noted that even if milk is sold as milk and not converted into Khawa, the quantum of milk available for daily sales at present is not adequate to operate a scheme for milk collection. The wide seasonal variation is one factor the other being the difficulties of transport and communication during monsoon.~~xxxx~~

Rearing Additional Milch Cattle : There were at the time of the survey 940 cows and 1,223 she-buffaloes in the valley. (Ref. Table 4.1). From Table 4.3 it will be noted that at the time of the survey, 1,620 out of 2,799 families had received some income from milk and milk products. We had

asked the families whether they would be willing to rear additional milch cattle with a view to add to their income. In reply to this question 1,917 families stated that they would be willing to rear another 2,540 milch cattle of improved varieties. Of these, 1,809 families stated that they could make arrangements for fodder required to maintain the additional milch cattle. The data is presented in Table 4.4. These data only indicate the desire on the part of the local population to participate in the programme of increasing milk production and adding to their income. It will be necessary to plan systematically for the supply of improved varieties of milch cattle, feed and fodder, finance required for purchase of cattle as also feed and fodder and arrangements for collection and sale of milk. The Veterinary Centre and the Artificial Insemination Centre at Chafal will prove of some use in carrying out programmes of cattle breeding and rearing.

Changes in Livestock Holding : We had recorded changes in value of livestock due to purchases and sales and deaths of livestock and consumption of meat and poultry. The data is presented in Table 4.5 for the 14 villages. The total purchases of livestock in the 14 villages amounting to Rs. 1,96,358 exceeded the sales by about Rs. 32,600. We had noted the value of the livestock which died during the course of the year 1970-71. However, we did not record the value added due to births of livestock during the same period, or appreciation or depreciation in the value of livestock. As such we cannot compare the value of purchases and value of additions due to birth with the value of sales and value of consumption in order to find out whether there was a net increase or otherwise in the value of livestock due to these changes.

Table 4.4 : Families willing to Rear Additional Milch Cattle in the 14 Villages

Village	Total no. of families	Families willing to rear additional milch cattle		No. of families from Col.(3) who had arrangements for fodder
		No. of families	No. of cattle	
1	2	3	4	5
1. Majgaon	238	179	254	171
2. Chafal	684	441	592	434
3. Jalgewadi	152	113	148	113
4. Derwan	333	204	225	198
5. Dadholi	152	113	146	112
6. Khonoli	97	80	98	80
7. Nanegaon Ek.	199	144	185	115
8. Nanegaon Kh.	234	174	233	168
9. Dhayati	81	55	67	49
10. Keloli	168	106	163	105
11. Padloshi	111	78	102	74
12. Patwade	48	36	55	30
13. Sada-waghapur	227	130	180	96
14. Dusale	75	64	92	64
TOTAL	2799	1917	2540	1809

Table No.4.K: Distribution according to the Value of Livestock Purchased, Sold, Died and Consumed during the Year Prior to the Survey in the 14 villages

Village	No. of reporting families	Purchased Rs.	Sold Rs.	Died Rs.	Consumed Rs.
Majgaon	92	11,727	9,799	13,350	52
Chafal	401	19,070	31,002	24,553	450
Jalgewadi	101	9,565	9,892	4,638	61
Derwan	253	14,689	16,135	10,058	658
Dadholi	76	14,553	7,100	1,586	12
Khonoli	53	9,075	6,280	2,845	36
Nanegaon Bk	147	17,676	14,744	11,206	548
Nanegaon Kh.	166	23,028	16,417	5,216	658
Dhayati	50	6,565	5,751	768	132
Keloli	133	15,281	11,850	4,685	256
Padloshi	85	13,142	11,469	2,176	244
Patwade	28	2,686	490	1,997	142
Sadawaghapur	146	28,848	13,601	2,665	459
Dusale	50	10,453	9,240	585	217
Total	1781	1,96,358	1,63,770	86,328	3,916

Development of Dairy Enterprise : In Chapter I we have noted from Table 1.3 that about 726 acres of land was classified as grazing land or pastures and such area was found in Nanegaon Bk., Derwan, Keloli, Sadawaghapur and Chafal. It was reported that the government land classified as grazing land and pastures was neglected and did not raise enough or good quality grass. From Table 1.4 it was noted that 5,361 acres amounting to about one-third of the total cropped area in the valley was under grass. The area under grass varied from village to village being 1,047 acres in Chafal and 54 acres in Keloli. Our field-staff reported that this area was in fact fallow land where no special efforts were made to grow grass. The milch cattle were let loose to feed on whatever grass grew on the plain land or on the slope of the hills. From the information obtained regarding the sale of fodder (Ref. Table 3.6) it was found that during the year prior to the survey only 58 sales of grass were reported worth Rs. 1,134 (about 21,250 bundles) in 10 out of the 14 villages. It, therefore, appears that an area measuring 6,000 acres in the valley, classified as pastures, grazing land or area under grass is completely neglected. This area has a great potential. It will be necessary to consult the Department of Agriculture and develop schemes for raising special varieties of grass suitable for consumption by milch cattle. The additional yield of grass can feed better the existing cattle and also a large number of additional milch cattle. It may also be possible to harvest, pack in bundles and sale such grass outside the valley, particularly, because of the milk collection centre at Karad within a distance of 25 Kms. from the valley. The milk-cultivators in the area of the Karad Milk Supply Scheme may want additional grass for milch cattle owned by them.

Development of Poultry and Sheep and Goat : It will be noted from Table 4.2 that 1,856 families, that is nearly two-thirds of the families in the valley, owned poultry. Even though the average number of birds owned by them was small, about 6 birds per family, it indicates that these families have some experience of rearing poultry birds. If the poultry farming is to be developed as a subsidiary occupation with a view to bring in additional income to the families in the valley it will be necessary to provide facilities for the supply of improved varieties of poultry birds, poultry feed, technical guidance regarding prevention of diseases and lastly, marketing of eggs and table-birds. There are difficulties in securing poultry feed - timely supply as well as at reasonable rates, due to overall shortage of foodgrains in the country. The problem of marketing is also serious, particularly because of inadequate transport and communication facilities within the valley as also distance from the large consumer centres like Poona and Bombay. In the circumstances, it will be useful to consult the Poultry Development Officer at the District Zilla Panch Parishad, the Central Hatchery, Kirkee, Poona, and MAFCO or such other organisations to get proper guidance regarding poultry development in the valley.

In the case of sheep and goat, it will be noted from Table 4.2 that about 37 per cent of the total families in the valley and particularly a large number of families at Majgaon, Chafal, Jalgewadi, Derwan, Nanegaon Bk. and Nanegaon Kh. and Keloli owned she-goats. She-goats are maintained for milk as well as mutton. The yield of milk is low and is consumed at home. The number of families reporting sheep was very small, only 28 families reporting 541 sheep. There is a large area for grazing sheep and goat in the valley. However, it will have to be found out from the experts

whether it will be feasible to introduce better breeds and larger number of sheep and goat with a view to increase the production of milk, mutton and wool.

Agricultural Tools and Implements :

In Table 4.6 is given a distribution of agricultural tools and implements owned by the families in the 14 villages. We had given in Chapter I, in Table 1.8 village-wise number of agricultural implements as it appeared in the village records. It may be observed that the data obtained from the two sources differed considerably. For instance, as per the Survey data there were 150 iron ploughs, 61 wooden ploughs, and 935 small wooden ploughs and 410 bullock carts. The corresponding figures in the village records were 61 iron ploughs, 276 wooden ploughs and 249 bullock carts. The water lifts (leather 37, iron 27 and wheel type 9) reported during the Survey far exceeded the 4 leather water lifts, appearing in the village records. The Survey data, being more recent, may be considered as representing the latest position.

It may be observed that a majority of the cultivators did not own such implements as iron or wooden ploughs. Harrows and seed drills were reported in large numbers but there too it appeared that more than 40 per cent of the cultivators had to borrow or obtain on hire harrows or seed drills. The traditional tools and implements were mainly in use. The oil engines were mainly reported at Majgaon and Chafal where vegetables, turmeric, sugarcane and other crops were cultivated.

If in future the irrigation facilities and consequently the irrigated area is increased it will be necessary to provide additional pump sets or water lifts for irrigation. The additional requirements can be worked out only after the plans for increasing irrigation facilities are prepared.

Table 4.6 :

Agril. tools & imple-ments	Mdloshi		Patwade		Sadaywaghapur		Dusale		Total		
	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	
Total No. of Cultivators	93		38		216		61		2365		d,
Iron ploughs	8	7	8	2	-	-	2	2	158	150	se
Wooden "	7	8	4	4	3	3	5	5	62	61	he
Small (wooden)	5	61	25	25	122	124	37	37	922	935	ed-
Harrows	19	19	10	10	15	15	28	28	863	848	ities
Small Harrows	19	50	20	20	92	92	33	33	1128	1116	
Seed Drill (3 rows - big)	4	4	2	2	1	1	2	2	335	325	assets
Seed Drill (3 rows-small)	7	28	2	2	10	10	23	23	777	763	se and
Hoes	17	64	17	22	56	77	20	32	1216	2087	
Ridger	8	42	11	17	59	64	17	25	210	285	Per reporting family (in Rs.)
Water lift (leather)	9	17	1	1	-	-	-	-	40	37	
Water lift (iron)	-	-	-	-	-	-	-	-	27	27	4,770
Water lift (wheel)	-	-	-	-	1	1	1	1	9	9	3,668
Bullock-cart (two bullocks)	-	-	3	3	35	32	1	1	435	410	228
Pullock cart (one bullock)	-	-	-	-	-	-	13	11	16	14	
Sugarcane Crusher	7	2	9	3	-	-	2	2	21	10	820
Boiling Pan	7	2	2	2	-	-	1	1	14	9	490
Steel Tank for Juice	7	2	1	1	-	-	1	1	10	5	
Bullocks for Gur making	5	6	2	14	-	-	1	6	9	39	368
Oil Engine	1	1	-	-	-	-	-	-	47	40	1,004
Pump	-	-	-	-	-	-	-	-	7	7	964
Other imple-ments	-	-	-	-	-	-	-	-	4	4	9,086
Seed Drill (4 rows-big)	-	-	-	-	-	-	-	-	21	21	1,209
Seed Drill (4 rows small)	-	-	-	-	-	-	-	-	35	35	
Tractor	-	-	-	-	-	-	-	-	1	1	1,332

F = Families

Table 4.ê : Distribution of Agricultural Tools and Implements Owned by the Families in the 14 villages

Agril. tools & implements	Majgaon		Chafal		Jalgewadi		Derwan		Dadholi		Khnoli		Nanegaon Bk.		Nanegaon Kh.		Dhayati		Keloli		Padloshi		Patwade		Sada, waghapur		Dusale		Total	
	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I	No. of F	No. of I
Total No. of Cultivators	198		495		141		298		140		88		166		211		64		156		93		38		216		61		2365	
Iron ploughs	35	35	34	34	11	11	18	18	5	5	2	2	9	9	17	16	3	3	6	6	8	7	8	2	-	-	2	2	158	150
Wooden "	4	4	17	17	2	2	1	1	-	-	-	-	2	2	3	3	-	-	14	12	7	8	4	4	3	3	5	5	62	61
Small (wooden)	11	11	107	101	56	55	80	79	75	77	56	58	36	39	118	126	40	41	104	101	55	61	25	25	122	124	37	37	922	935
Harrows	110	113	173	160	81	78	106	102	33	33	24	25	86	86	98	100	28	28	52	51	19	19	10	10	15	15	28	28	863	848
Small Harrows	107	108	217	204	78	77	104	100	67	67	52	53	82	84	108	113	38	38	81	77	49	50	20	20	92	92	33	33	1128	1116
Seed Drill (3 rows - big)	19	19	83	77	39	37	45	44	6	6	7	7	44	44	48	49	9	9	26	24	4	4	2	2	1	1	2	2	335	325
Seed Drill (3 rows-small)	24	24	199	185	70	67	92	88	33	34	34	34	81	83	104	109	33	33	45	43	27	28	2	2	10	10	23	23	777	763
Hoes	117	256	238	504	100	170	157	260	53	71	50	54	102	192	136	209	43	55	90	121	37	64	17	22	56	77	20	32	1216	2087
Ridger	3	7	4	12	1	1	5	8	18	27	30	37	-	-	6	12	1	1	27	32	28	42	11	17	59	64	17	25	210	285
Water lift (leather)	7	7	11	10	-	-	1	1	-	-	-	-	-	-	1	1	-	-	-	-	19	17	1	1	-	-	-	-	40	37
Water lift (iron)	6	6	8	8	-	-	8	8	-	-	-	-	4	4	-	-	-	-	1	1	-	-	-	-	-	-	-	-	27	27
Water lift (wheel)	-	-	3	3	-	-	3	3	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	9	9
Bullock-cart (two bullocks)	32	31	99	88	38	38	60	57	10	10	9	9	40	40	55	54	16	15	37	32	-	-	3	3	35	32	1	1	435	410
Bullock cart one bullock)	1	1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	11	16	14
ugarcane rasher	-	-	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	7	2	9	3	-	-	2	2	21	10
Boiling Pan	-	-	2	2	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	7	2	2	2	-	-	1	1	14	9
Steel Tank for Juice	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2	1	1	-	-	1	1	10	5
Buckets for Gur making	-	-	1	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	6	2	14	-	-	1	6	9	39
Oil Engine	17	12	14	13	-	-	4	4	-	-	1	1	6	6	4	3	-	-	-	-	1	1	-	-	-	-	-	-	47	40
Pump	2	2	2	2	-	-	-	-	-	-	-	-	-1	-1	2	2	-	-	-	-	-	-	-	-	-	-	-	-	7	7
Other implements	3	3	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4
Seed Drill (4 rows-big)	21	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	21
Seed Drill (4 rows small)	35	34	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	36	35
Tractor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1

F = Families I = Implements

Chapter V

ASSETS AND LIABILITIES

In the preceding chapters we have considered the major resources in the valley, namely, population, land, livestock and agricultural tools and implements. In the present chapter we shall consider the assets held by the families in the valley and their borrowings and indebtedness at the time of the Survey. The assets and liabilities represent the cumulative effects of the working of the village economy over all these years.

Assets : In Table 5.1 we have given a distribution of assets reported by the families in the 14 villages and increase and decrease in assets during the five years preceding the survey. In the following is a summary of the assets :

Assets	No. of Report- ing fa- milies	% of Total	Rs.	% of Total	Per reporting family (in Rs.)
Land	2,484	88.7	1,18,98,050	46.9	4,770
Residential Houses & Cattle Sheds	2,672	95.4	98,02,330	38.6	3,668
Shares, deposits etc.	1,387	49.5	3,16,940	1.2	228
Investment in Non- Agricultural Occupations	354	12.6	2,90,430	1.1	820
Ornaments	338	12.1	1,65,730	0.6	490
Implements & Machinery	1,448	51.7	5,32,970	2.1	368
Other Items	81	2.9	81,400	0.3	1,004
Livestock	2,432	86.9	23,46,792	9.2	964
Total	<u>2,799</u>		<u>2,54,34,042</u>	<u>100.0</u>	<u>9,086</u>
Additions during 5 years	69	2.5	83,430		1,209
Decrease during 5 years	23	0.8	30,650		1,332

Table 5.1 : Assets at the time of the survey Reported by the Families in the 14 villages and Investments and Disinvestments during the 5 Years preceding the Survey

F = No. of reporting families

Village	Families	Land		Houses & Cattle sheds		Shares and deposits etc.		Investment in non-agri. occupn.		Ornaments		Implements and Machinery	
		F	Rs.	F	Rs.	F	Rs.	F	Rs.	F	Rs.	F	Rs.
1. Majgaon	238	207	17,36,980	229	7,24,480	152	35,720	38	18,830	26	15,200	138	87,250
2. Chafal	684	537	27,87,160	620	20,28,420	321	1,37,410	111	1,26,560	81	48,480	264	1,12,390
3. Jalgewadi	152	146	6,32,250	149	5,26,270	95	10,480	30	23,150	30	11,800	100	28,900
4. Derwan	333	314	10,11,410	323	11,42,800	165	23,240	32	15,840	63	30,400	167	59,770
5. Dadholi	152	149	6,78,240	149	4,46,900	101	11,000	13	3,530	22	7,300	79	11,620
6. Khonoli	97	95	3,46,330	95	3,83,500	55	6,520	5	5,810	16	7,150	56	13,270
7. Nanegaon Bk.	199	180	7,59,530	192	6,49,200	102	16,420	23	9,750	9	4,000	106	54,740
8. Nanegaon Kh.	234	219	9,65,650	223	9,15,800	139	24,380	29	25,040	18	11,300	141	62,630
9. Dhayati	81	66	2,97,880	78	3,95,000	33	10,020	5	9,590	1	400	44	12,960
10. Keloli	168	161	8,50,330	164	7,52,800	93	17,110	26	25,940	9	3,300	110	27,630
11. Padloshi	111	94	6,18,980	107	5,09,100	63	14,190	25	9,440	15	7,400	56	20,160
12. Patwade	48	34	3,26,110	45	2,84,760	28	3,280	-	-	2	1,200	24	6,950
13. Sadawaghapur	227	212	4,73,620	226	8,22,900	2	550	-	-	35	13,300	125	23,640
14. Dusale	75	70	4,13,580	72	3,20,400	38	6,620	17	16,950	11	4,500	38	11,060
TOTAL	2799	2484	1,18,98,050	2672	98,02,330	1387	3,16,940	354	2,90,430	338	1,65,730	1448	5,32,970

Contd....

Table 5.1 : Contd.

Village	Other Items		Value of Livestock		Total Assets		Investment during the 5 years		Disinvestment preceding the survey	
	F	Rs.	F	Rs.	F	Rs.	F	Rs.	F	Rs.
1. Majgaon	2	1,340	214	2,08,354	28,28,154	8	9,060	1	3,000	
2. Chafal	35	43,990	533	4,15,972	57,00,382	23	44,110	17	23,320	
3. Jalgewadi	2	1,300	144	1,43,904	13,78,054	2	3,500	-	-	
4. Derwan	18	12,650	304	2,76,940	25,73,050	2	3,300	-	-	
5. Dadholi	1	1,110	124	94,440	12,54,140	-	-	-	-	
6. Khonoli	2	2,120	84	89,415	8,54,115	-	-	-	-	
7. Nanegaon Bk.	5	2,750	175	1,64,131	16,60,521	1	3,000	-	-	
8. Nanegaon Kh.	6	5,530	213	2,26,354	22,36,684	24	10,250	3	1,730	
9. Dhayati	2	1,900	68	69,898	7,97,648	1	3,000	-	-	
10. Keloli	2	4,140	157	1,72,340	18,53,590	1	660	1	1,900	
11. Padloshi	3	1,340	102	1,00,132	12,80,742	1	4,000	-	-	
12. Patwade	-	-	33	38,514	5,60,814	-	-	1	700	
13. Sadawaghapur	-	-	217	2,81,888	16,15,898	6	2,550	-	-	
14. Dusale	3	3,230	64	63,910	8,40,250	-	-	-	-	
TOTAL	81	81,400	2432	23,46,192	2,54,34,042	69	83,430	23	30,650	

It will be noted from the summary that residential houses and cattle sheds was the most common item owned by the families. It was only at Chafal that about 10 per cent of the families did not own residential houses or cattle sheds as there were a number of salaried earners in schools or elsewhere who had come from outside the valley. The other two items, land and livestock, were also reported by most of the families. It may be noted here that livestock includes plough and milch cattle as well as sheep, goat and poultry and hence the large percentage of families reporting ownership of livestock. Only about 52 per cent of the families reported ownership of implements and machinery.

About half the families in the villages reported ownership of shares and deposits. In this connection it may be ~~xxx~~ stated that the first co-operative credit society in the valley was established at Chafal in 1919. Since then co-operative credit societies have been established in all the villages except Dusale and Sadawaghapur. Besides a co-operative housing society and a milk producers' society are also established at Chafal. Only those persons who are members of the co-operative society can borrow from the society. At the time of disbursement of loans a certain amount is deducted as deposit. Besides there may be some families holding accounts at the District Central Co-operative Bank or other Banks or Saving Bank Accounts in Post Offices. Hence we find that about 50 per cent of the families in the valley reported this item, though the per family shares and deposits were worth Rs. 228 only.

Even though we knew that ornaments will not be reported by many of the families we had included the item in our schedule to record information in respect of all the important assets. The small percentage of families, namely, 12.1 per cent, may not be considered as representing the true position.

Lastly, we consider the number of families reporting investments and disinvestment during the five years preceding the year of the survey. The number of families reporting investment is small, so is the number of families reporting disinvestment. Compared to the total assets, the investments or disinvestment during the five year period formed less than 0.4 per cent and 0.2 per cent respectively of the total assets. The investment per annum appears to be small about 0.1 per cent in the context of the annual income of the villagers. For the purposes of economic development of the valley, the annual investments as per cent of the annual income will have to go up considerably without which the economy will stagnate.

As regards the value of the assets, it may be stated that the land was valued at the prices prevailing at the time of the survey. The prices varied as follows :-

Paddy land Rs. 1,200 to Rs. 2,000 per acre.

Irrigated land Rs. 2,400 to Rs. 4,000 per acre.

Dry land good quality Rs. 1,000 to Rs. 1,600 per acre.

Dry land inferior quality Rs. 600 to Rs. 1,000 per acre.

Fallow land Rs. 250 to Rs. 500 per acre.

The land at Chafal, Majgaon, Derwan and Jalgewadi, that is, in the eastern parts of the valley, was considered superior and valued more than the land in the western parts of the Valley.

The value of the residential houses and sheds was determined by taking into consideration the condition of the structure at the time of the survey. The following was the basis for calculation :

House with Tin roof per 50 sq.ft. Rs. 400/-.

House with Tiled roof per 50 sq.ft. Rs. 300/-.

House with Thatched roof per 50 sq.ft. Rs. 50/-.

The livestock was valued by asking the respondents the worth of the livestock at the time of the Survey. The

ornaments and investment in non-agricultural occupations was also estimated in a similar way. The actual price paid for the shares and the amount of deposits was recorded in respect of shares, securities and deposits.

From the summary of the assets, it will be noted that land accounted for about 47 per cent of the total assets followed by residential houses and cattle sheds 39 per cent and livestock 9 per cent. The three assets together accounted for 95 per cent of the total assets. The average assets per family in the valley came to Rs.9,086 per family. The average must be considered in the context of the ownership of land. We had noted in Chapter III that about 40 per cent of the families owned less than 2.5 acres and another about 30 per cent of the families owned between 2.6 to 5 acres of land. Thus a large majority of the families owned assets below the average of Rs.9,086/-.

In addition to the assets shown in Table 5.1, we may take into consideration the amounts receivable on account of loans given to others. The data appears in Table 5.2. Only 89 families, that is about 3 per cent of the total families in the valley reported Rs. 1,06,400 i.e. Rs.1,195 ^{per reporting family} on an average as outstanding receivable by them on account of the loans given to others.

Borrowings and Indebtedness :

It will be noted from Table 5.2 that 1,288 families, i.e. 46 per cent of the total families were indebted to the extent of Rs. 12,95,730, that is, Rs. 1,006 per indebted family. The proportion of indebted families varied between 40 to 60 per cent of the total number of families in the 14 villages. Compared to the total income of families during the year 1970-71, it is found that the total outstanding debts formed about one-fourth of the annual income. It may

Table 5.2 : Amount Outstanding Due - Receivable and Payable including Amounts Borrowed During the Year and Amounts Borrowed in Previous Years in the 14 Villages

Village	Total No. of families	Amount receivable for Loans made to others		Amount payable Outstanding Dues including interest		Of which			
						Amounts borrowed during the year (Principal)		Borrowings in previous years (Principal)	
		No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
1. Majgaon	238	1	1,000	86	1,48,620	91	64,353	55	1,05,750
2. Chafal	684	41	54,450	287	2,85,730	151	1,03,440	200	2,04,360
3. Jalgewadi	152	9	7,400	81	65,350	58	21,132	55	39,490
4. Derwan	333	21	32,750	155	1,84,720	57	55,850	121	1,26,680
5. Dadholi	152	8	2,350	93	1,16,800	34	17,175	70	66,030
6. Khonoli	97	-	-	33	54,570	37	10,775	26	29,030
7. Nanegaon Bk.	199	4	2,750	88	54,610	86	27,655	63	39,490
8. Nanegaon Kh.	234	2	3,250	100	89,760	93	30,200	80	50,830
9. Dhayati	81	-	-	38	34,430	24	9,300	28	26,100
10. Keloli	168	2	450	97	85,480	30	18,100	70	46,110
11. Padloshi	111	-	-	43	27,920	29	9,500	35	18,100
12. Patwade	48	-	-	32	23,840	18	4,550	26	19,260
13. Sadawaghapur	227	-	-	111	37,530	42	26,000	69	44,400
14. Dusale	75	1	2,000	44	36,370	22	17,600	28	16,920
Total	2799	89	1,06,400	1288	12,95,730	772	4,15,630	926	8,32,550

No. = No. of families

also be noted that of the total ^{amount} outstanding payable, nearly one-third was on account of the loans borrowed during the year and the remaining two-thirds on account of borrowings in previous years.

About 28 per cent of the families reported borrowings during the year of the Survey. The proportion varied between 18 to 45 per cent in different villages. The eligibility to borrow, particularly, from the co-operative credit society, depends upon the amount outstanding due to the lender. In this context we may consider the data presented in Table 5.3 regarding the amount actually received by way of loans and the amount repaid during the year of the survey. The co-operative credit societies while granting loans often deduct some amount by way of deposits or on account of shares. Some of the moneylenders deduct in advance the interest payable at the time of giving the loan. Hence, there is a difference between the amount of the loan i.e. the principal and the amount actually received by the borrowers. It was reported that the borrowing families actually received Rs. 12,10,490 as against Rs. 12,48,180 i.e. about Rs. 38,000 or 3% less than the amount of the principal. On an average the indebted families had about 1.6 loans per indebted family.

It will be further noted from Table 5.3 that Rs. 1,66,740 in respect of 485 loans were repaid on account of principal during the year. The repayments amount to less than 15 per cent of the amount outstanding due at the beginning of the year. Besides there was a sum of Rs. 1,40,010 paid upto the year of the Survey on account of interest on the amount of loans outstanding payable. There were outstanding dues on account of interest also. It will be noted from Table 5.3 that a sum of Rs. 1,73,970 was due outstanding on account of

Table 5.3 : No. of Loans and Amount Actually Received, Loans Repaid and Loans and Interest thereon Outstanding Due in the 14 Villages

Village	No. of indebted families	Amount actually received		Amount of principal repaid upto the year of survey		Interest paid upto the year of the survey		Amount of principal outstanding		Interest outstanding	
		No. of loans	Rs.	No. of loans	Rs.	No. of loans	Rs.	No. of loans	Rs.	No. of loans	Rs.
1 Majgaon	86	178	1,46,510	76	35,290	57	2,480	127	1,24,570	75	22,080
2 Chafal	287	416	3,02,850	107	59,500	106	19,190	366	2,74,440	146	32,280
3 Jalgewadi	81	124	59,610	24	3,850	53	6,860	105	56,690	49	7,030
4 Derwan	155	203	1,75,640	24	10,060	60	19,200	191	1,70,800	61	19,970
5 Dadholi	93	111	83,220	11	3,030	22	4,650	101	80,350	58	32,550
6 Khonoli	33	69	39,450	30	5,420	35	5,450	39	34,250	20	10,330
7 Nanegaon Bk.	88	165	66,910	68	16,190	99	10,870	102	51,390	41	3,220
8 Nanegaon Kh.	100	195	81,330	85	16,250	138	15,440	115	65,650	76	5,090
9 Dhayati	38	53	35,200	15	3,300	29	5,240	38	32,100	22	2,740
10 Keloli	97	108	63,930	5	2,090	62	21,060	106	62,570	87	14,610
11 Padloshi	43	67	27,050	19	5,600	47	4,430	48	22,000	40	6,770
12 Patwade	32	52	23,420	14	2,700	29	4,260	38	21,010	29	5,030
13 Sadawaghapur	111	115	71,090	2	800	65	15,210	115	70,300	99	17,490
14 Dusale	44	53	34,280	5	2,660	24	5,670	51	31,930	42	4,780
Total	1288	1909	12,10,490	485	1,66,740	826	1,40,010	1542	10,98,050	845	1,93,970

interest payable on the amounts borrowed.

In Table 5.4 is shown the amount borrowed vis-a-vis the amount repaid during the year and amount repaid during the year in respect of loans taken in previous years. Of the 772 families which had borrowed during the year only 392 i.e. about 50 per cent repaid the loan the repayment being only about 21 per cent of the borrowings during the year. The repayment on account of borrowings in previous years ^{was} still less being only Rs. 72,656 as against the outstanding dues of more than Rs. 8 lakhs. The amount repaid thus appears to be no more than the interest on outstanding dues as it forms only 9 per cent of the amount outstanding due. At this rate the outstanding dues will increase at a faster rate as also the amount overdue.

In Table 5.5 is shown according to agency of finance, the amounts actually received on account of loans, the amounts repaid, interest paid and outstanding dues on account of principal and interest to various agencies. The official agencies like co-operative societies, banks and government accounted for 11.5 per cent, 9.4 per cent and 4.1 per cent respectively of the total loans received. The farmers, that is the friends of the borrowing families were the major source of finance accounting for nearly half of the total loans. The loans received from traders and money-lenders formed about 18 per cent of the total loans.

It is interesting to note the repayments and payments on account of interest. Out of the total amount borrowed, only about 14 per cent had been repaid. However, the proportion of the amount repaid to total loans taken from the agency varied from agency to agency, being about 60 per cent in the case of co-operative societies, 36 per cent in the case of Government as well as banks, 30 per cent in

Table 5.4 : Amount Borrowed and of which Repaid and Repayments towards Old Debts During the Year in the 14 Villages

Village	Amount borrowed last year		Of which repaid last year		Repayments during last year towards old debts		Total repayments during last year	
	Families	Rs.	Families	Rs.	Families	Rs.	Families	Rs.
1 Majgaon	91	64,353	53	17,210	6	4,883	59	22,093
2 Chafal	151	1,03,440	60	14,365	65	22,590	116	36,955
3 Jalgewadi	58	21,132	31	4,470	20	2,366	41	6,836
4 Derwan	57	55,850	19	4,649	23	3,304	41	7,953
5 Dadholi	34	17,175	12	3,286	7	1,375	19	4,661
6 Khonoli	37	10,775	30	5,922	5	950	32	6,872
7 Nanegaon Bk.	86	27,655	63	12,371	27	4,820	86	17,191
8 Nanegaon Kh.	93	30,200	65	11,780	50	5,930	106	17,710
9 Dhayati	24	9,300	15	3,599	14	1,672	27	5,271
10 Keloli	30	18,100	5	1,208	55	7,173	60	8,381
11 Padloshi	29	9,500	19	5,696	27	2,709	39	8,405
12 Patwade	18	4,550	14	2,938	12	2,200	22	5,138
13 Sadawaghapur	42	26,000	4	198	59	9,143	63	9,341
14 Dusale	22	17,600	2	1,635	21	3,541	22	5,176
Total	772	4,15,630	392	89,327	391	72,656	733	1,61,983

Table 5.5 : Amount Actually Received, Principal Repaid and Interest Paid and Outstanding Dues on account of Principal and Interest to Various Agencies

Agency	Amount actually received	Principal Repaid	Interest R Paid	Principal Outstanding Due	Interest Outstanding Due
	Rs.	Rs.	Rs.	Rs.	Rs.
Farmer	5,69,560	5,420	85,670	5,65,400	1,14,740
Society	1,39,450	80,490	11,370	68,810	7,850
Money-Lender	1,40,500	2,100	23,890	1,38,390	17,100
Trader + Money-Lender	76,260	3,630	1,010	72,260	5,130
Bank	1,14,760	39,330	4,320	96,880	22,090
Mamlatdar Government	49,410	18,780	2,400	29,520	11,470
Others	1,20,550	16,990	11,340	1,19,090	15,590
Blank	-	-	10	7,500	-
TOTAL	12,10,490	1,66,740	1,40,010	10,97,850	1,93,970

the case of traders and moneylenders and only one per cent in respect of farmers. The very low figure in respect of farmers raises some doubts in our mind regarding the reliability of data. The payment of interest, however, shows that farmers had received the maximum, about 60 per cent of the interest paid.

The position in respect of the outstanding dues on account of principal was as follows :-

Agency to whom amount payable	% of total amount outstanding due
1) Farmers	51.5
2) Society	6.3
3) Banks	8.8
4) Government	2.7
5) Traders & Moneylenders	19.2
6) Others	11.5
TOTAL :	100 % = Rs.10,97,850

We had classified the loans according to the purpose of borrowing. The position/summed up below : ₹is

<u>Purpose</u>	<u>No. of loans</u>
Domestic Expenditure	802
Construction of House	66
Medical Care	83
Repayment of debt	36
Agriculture	361
Livestock	75
Business	23
For more than one of the above purposes	462
Total :	<u>1,908</u>

We can deduce from the above information that nearly half of the loans were taken for meeting domestic expenditure on account of consumption, religious ceremonies, medical care, education and other purposes. In the remaining cases, the loans were taken mainly to meet expenditure on agriculture.

As regards the duration of loans 734 loans i.e. nearly 38 per cent of the total loans were taken for a duration of one year, 58 loans for 1-3 years, 27 for 3-5 years and 76 for 5-10 years. The period was not stated in the case of about 650 loans i.e. about one-third of the total while in the case of another 364 loans the duration was stated as unlimited.

We had asked the families whether they were unable to obtain loans and the purpose for which the loans were required. Only 12 families out of 2,799 families in the valley gave information on this point. All but one loan were required for business purposes. The total amount required was about Rs. 10,000 for construction of a well, and about Rs. 2,00,000 for agriculture and other business purposes by 11 families. We may deduce from this that the families in the Valley did not have much difficulty in obtaining loans.

Finance from the Co-operative Credit Societies : In Table 5.6 we have given details regarding the data of registration, number of members, loans disbursed and loans repaid during 1970-71, loans outstanding and overdues as on ³⁰ 6-1971 in respect of the Co-operative Credit Societies in the valley. There were 10 Co-operative Credit Societies of which two were joint co-operative societies for 1) Dhayati and Padloshi and 2) Keloli and Patwade respectively. There was no co-operative credit society at Dusale and Sadawaghapur.

The society at Chafal was registered in 1919 and the societies at Majgaon and Derwan in 1921. The other societies were registered between 1954 and 1959. The ten societies for 12 villages had 1,707 members, that is nearly two-thirds of the members, cultivating families in the 12 villages. About half of these were borrowing members having either borrowed in the past or in the year 1970-72. It will be noted from the table that the oldest societies were also quite active in the matter of disbursement of loans as well as recovery during 1970-71. The loans disbursed amounted to about Rs. 1,19,000 and the recovery was also of the same order which suggests that the loans given being in the nature of crop loans were repaid at the end of the year in order to be eligible for borrowing during the year 1971-72. This transaction is reflected in the amounts outstanding due on 30-6-1970 and 30-6-1971 which were about the same being Rs. 1,65,725 and Rs.1,66,603 respectively.

The average amount of the loan disbursed during the year 1970-71 comes to about Rs. 320 per member. The total loans disbursed by the co-operative credit societies were about one-fourth of the total borrowings during the year

Table 5.6 : Date of Registration, Number of Members, Loans Disbursed and Loans Repaid during 1970-71, Loans Outstanding and Overdues on 30-6-1971 in respect of the co-operative Credit Societies at the 12 Villages* in the Valley.

	Majgaon	Chafal	Jalge-wadi	Derwan	Khonoli	Dadholi	Nanegaon Bk.	Nanegaon Kh.	Dhayati Padloshi	Keloli Patwade	Total
Date of Registration	5-1-21	31-1-19	17-2-59	30-7-21	31-3-54	21-3-54	31-3-54	17-2-59	17-3-59	27-7-59	
No. of Members	184	341	107	265	71	107	175	162	140	155	1,707
No. of Borrower-Members	79	169	73	105	45	70	83	98	52	42	816
As on 30-6-1970 :											
Loans outstanding due to the Society (Rs.)	30,441	27,255	13,307	13,414	9,811	19,279	15,742	17,380	14,050	5,050	1,65,725
No. of borrower-Members	89	168	73	50	N.A.	6	83	99	50	40	658
Loans disbursed in 1970-71 (Rs.)	26,575	15,025	8,860	5,575	N.A.	13,250	12,307	17,524	15,250	4,566	1,18,932
xxxxx No. of Members	59	77	N.A.	30	32	N.A.	N.A.	92	47	33	370
Recovery during '70-71 Rs	26,083	16,846	8,849	6,035	N.A.	11,051	12,243	18,377	14,707	5,065	1,19,258
No. of Members	69	84	N.A.	30	33	N.A.	N.A.	93	52	34	395
As on 30-6-1971 :											
Loans outstanding due to the Society (Rs.)	30,933	25,184	12,708	12,554	9,711	21,129	17,321	17,524	14,988	4,551	1,66,603
No. of borrower-Members	79	169	N.A.	N.A.	40	N.A.	N.A.	98	52	40	478
Amount outstanding overdue	8,100	14,500	3,754	5,639	3,600	752	5,089	2,712	2,270	601	47,017
No. of borrower-members	25	79	32	N.A.	14	44	N.A.	21	19	12	246

* There was no co-operative credit society at Dusale and Sadawaghapur

N.A. = Not available

reported by the families in the valley.

As regards the outstanding loans, the number of members from whom the loans were due ~~w~~ could not be obtained for 4 out of the 12 societies. As such it is not possible to work out the average amount outstanding due per borrowing member. It was about Rs. 390 per borrower member at Majgaon and varied between Rs. 150 to Rs. 300 per borrowing member at other villages. The amount outstanding due on 30-6-1971 by the borrowing members formed about 20 per cent of the total indebtedness of the families in the valley.

The loans overdue for repayment formed about 22 per cent of the total loans outstanding due to the 12 societies. The overdues formed the largest proportion ~~and~~ about 58 per cent at Chafal where the society is the oldest and 45 per cent at Derwan where the society is the second oldest in the valley.

Chapter VI

SALIENT FEATURES OF THE ECONOMY AND PROSPECTS OF FUTURE DEVELOPMENT

We shall first review the salient features of the economy in this chapter. At the time of the survey in the year 1971-72 there were 2,799 families in the 14 villages in Chafal valley with an average size of 5.6 persons per family excluding the permanent migrants. Though the overall male/female ratio was 1,091 females per 1,000 males, in the age-groups 25-34 and 35-44 the ratio was 1,772 and 1,380 females respectively per 1,000 males indicating thereby that many of the young able bodied men had migrated outside the valley. 83 per cent of the families reported agriculture, another 8 per cent of the families reported agricultural labour and the remaining 9 per cent reported non-agricultural occupations and services as the family occupation.

On an average there were 2.7 earners per family consisting of 1.1 male earners and 1.6 female earners. Among the female adult population as many as 83 per cent were reported as earners mainly engaged in cultivation or as agricultural labour. 55 per cent of the total earners in the valley followed a second occupation in addition to their main occupation. The non-agricultural occupations reported by the population in the valley consisted mainly of the traditional occupations of village artisans, trade to meet the requirements of grocery, cloth, etc. and services in schools, co-operative societies, village panchayats and other institutions. There were no non-agricultural occupations which could be considered as a special feature of the valley. However, there were at the time of the present survey about 400 persons in the valley who had in the past worked at Bombay in cotton textile mills and other manufacturing industries. The technical skill and experience of

these workers may prove useful in running a spinning and weaving unit or establishing certain other industries.

44 per cent of the families in the valley reported permanent outmigrants, there being about 1.5 outmigrant earners per reporting family. About 70 per cent of the outmigrants were at Bombay and 7 per cent in the armed forces. About 50 per cent of the outmigrant earners were engaged in various manufacturing industries and nearly half of them in spinning and weaving units. Their experience in textile is likely to prove useful in the proposed establishment of a spinning and weaving unit at Chafal as some of them may come back after retirement or even earlier to the valley and work in this unit.

As regards land ownership and cultivation, 82.6 per cent of the families in the valley were owner cultivators and another 5.9 per cent of the families were non-cultivating owners. Among the 2,365 cultivating families, 42.5 per cent of the families cultivated less than 2.5 acres each, another 31.2 per cent of the families cultivated between 2.6 acres to 5 acres each, 23.8 per cent of the families cultivated between 5 to 15 acres each and the remaining about 2.5 per cent of the cultivating families cultivated more than 15 acres each. Even though as many as 90 per cent of the families own some land it is predominantly a region of marginal farmers and small cultivators, about three-fourths of the farmers cultivating each less than 5 acres of land and 40 per cent of the total cultivatable land in the valley.

The total land in the valley consisting of about 21,640 acres is classified as follows in the village records: 79 per cent as cultivable, 5 per cent as unfit for cultivation, 12 per cent as forests, 3 per cent as grass land and the remaining one per cent as village site, roads and such other uses.

Of the 17,000 acres of land classified as cultivable nearly one-third is reported under grass. In fact, no special efforts are made to grow grass on this land, as also the land classified as grazing land and pastures. This land has great potential for growing grass of improved quality and the increased production could be used for developing dairy enterprise and/or sale of grass as fodder outside the valley.

As per the village records, about 11,350 acres are sown to different crops. On the basis of the data collected during the survey only about 110 acres were under well irrigation or lift irrigation on bunds constructed on the streams and river, 708 acres as paddy land and 6,473 acres as dry and inferior land mainly for cultivation of Kharif crops.

The cropped area during 1970-71 as reported in the family schedules included groundnut 37 per cent, kharif jowar 32 per cent, paddy and small grains 10 per cent each, other foodgrains and pulses 10 per cent and sugarcane, vegetables and other cash crops one per cent. Of the total cropped area of 8,259 acres, 949 acres were double cropped, most of it being sown to paddy in kharif and wheat, gram and pulses during rabi season and also included the area irrigated by well and bunds in the river being about 130 acres. The cultivation was carried on with the traditional tools and implements. Only a few families tried improved varieties of paddy and jowar. However, in respect of sugarcane, the newly established varieties were in use. Though nearly 30 per cent of the cultivators reported use of fertilizers, the expenditure on fertilizers per reporting family came to Rs. 42 only. Many of the cultivators at Majgaon and Chafal are familiar with the cultivation of sugarcane and vegetable. It will be possible to put larger area to these crops if the

irrigation facilities are increased. The income from agriculture came to about Rs. 120/- per acre of cropped area.

From the data regarding sale of agricultural produce it is found that groundnut, gur and sugarcane, and rice accounted for 64 per cent, 15 per cent and 10 per cent respectively of the total sales. The sales formed about 10 per cent of the total agricultural produce and about 13 per cent of the income from agriculture during the year 1970-71.

In the latter half of the present chapter we have mentioned the schemes for increasing irrigation facilities which the local population feel are feasible. We find from the data in the previous chapter that there is enough labour force, livestock, agricultural tools and implements and knowledge and experience of cultivating irrigated crops like sugarcane, turmeric and vegetables. It will be possible to increase the income from agriculture by increasing the irrigation facilities and cultivating sugarcane, turmeric, vegetables and such other cash crops. We could not ascertain whether additional land could be brought under cultivation by terracing, bunding, levelling and other measures. It will be useful to consult the agricultural officers in the matter.

As regards the ownership of livestock about 56 per cent of the cultivating families owned bullocks. The average gross cropped area in the valley in the year 1970-71 came to about 11 ~~pxx~~ acres per pair of bullocks. Cows were reported by about one-third and she-buffaloes by about two-fifths of the families, on an average 1.3 cows and 1.4 she-buffaloes per reporting family. Nearly 40 per cent of the families owned she-goats, on an average 2.5 she-goats per reporting family. As regards the poultry, nearly two-thirds of the

families owned poultry, on an average 6 birds per reporting family. Income from livestock products was an important source to 60 per cent of the families in the valley. Livestock was also an important source for the supply of manure. The livestock yielded about 15,000 cart-loads of manure during the year 1970-71. We have indicated in Chapter IV the possibilities of developing dairy enterprise by utilising the available resources in milch cattle, grazing and pastures and land reported to be under cultivation of grass. Similarly, we have indicated in the same chapter, the possibilities of developing poultry, sheep and goat. As suggested therein the possibilities of development may be further explored by consulting the experts in the field. With the present shortage of electricity, coal and fuel the possibilities of installing Gobar Gas Plants ~~ms~~ at a few places in the valley may be explored. The cultivators will be able to get manure supplies as at present and in addition obtain gas for cooking and lighting purposes. The Government seems to be in a mood to encouraging the schemes by giving loans/subsidy and the Khadi and Village Industries Board may be approached to get the necessary guidance in the matter.

We shall next consider the income during the year 1970-71 reported by families in the valley. The 2,799 families in the valley had an average family income of Rs. 1,731. Nearly two-thirds of the families had an income below the average, about half of them having an income below Rs. 1,000, and the remaining families having an income between Rs. 1,001 and Rs. 1,731.

The composition of total family income of all the families in the valley according to source of income and income per reporting family is shown in Table 6.1.

Agriculture, livestock and agricultural wages formed the main source of income in respect of more than 70 per cent of the families. The composition of the total income shows that these three sources accounted for two-thirds of the total income. The dependence on remittances was found in about 40 per cent of the families many of them having total family income between Rs. 1,000 to Rs. 5,000. The remittances formed 16.8 per cent of the total income of the families in the valley. About 20 per cent of the families reported income from non-agricultural occupations including service occupations and salaried jobs, the income therefrom being about 13.5 per cent of the total income of the families in the valley.

Table 6.1 : Composition of Total Income of all the Families in the Valley according to Source of Income and Income per Reporting Family

	No. of reporting families	(1) as % of total families	Income from the source as per cent of total income	Income per reporting family (Rs.)
Agriculture	2,365	85	42.1	863
Livestock	1,633	58	11.5	342
Poultry	1,845	66	2.3	61
Fruit and other trees	175	6	0.2	63
Carting	81	3	0.3	161
Hiring of implements	76	3	0.1	497
Agricultural Labour	1,985	71	10.9	265
Non-agricultural Occupations	555	20	13.5	1,177
Remittances	1,141	41	16.8	712
Unearned income	293	10	2.3	385
TOTAL	2,799	100	100.0	1,731

As regards the financial resources, the data collected during the survey revealed that the value of assets came to Rs. 9,086 per family. However, about 47 per cent of the assets were in land and another 39 per cent in residential houses followed by livestock about 9 per cent. Of the remaining 5 per cent, there was very little in terms of liquid assets. The data regarding indebtedness revealed that 46 per cent of the total families had an outstanding debt of about Rs. 12.5 lakhs (which formed about 25 per cent in relation to the total income of the families during the year 1970-71). We have already observed that the average income per family was about Rs. 1,700 and that nearly two-thirds of the families had income below the average. The data regarding land improvements during the five years prior to the survey also revealed that hardly about 10 per cent of the families had reported such expenditure. The total expenditure of Rs. 1,72,370 for the five year period works out to Rs. 34,474 per year which is very low even to maintain the present level of productivity of land. In the circumstances, it is felt that considerable financial assistance by way of long term loans, grants and subsidies will have to come from outside the valley to bring about economic development.

As regards the institutional set up, there are schools, Gram-Panchayats and Co-operative Credit Societies established in the valley. Besides, there is Samartha Seva Mandal and Shri Ram Temple Public Trust at Chafal. The Trust has appointed a Development Committee and is in a position to muster financial resources for the economic development of the valley. At the district headquarters, Satara, about 50 kilometers from Chafal there are offices of the Zilla Parishad, District Co-operative Credit Bank, District Development Bank, Commercial Banks and other organizations.

It appears, therefore, that there will be no difficulty in getting the necessary assistance/advice from these institutions due to their close vicinity.

There is evidence of some developmental work carried out by the Gram Panchayats such as construction of approach roads, Pucka bunds, public wells for drinking water supply, and tap water supply. For instance, Gram Panchayat at Dadholi constructed a Pucka Bund at a cost of Rs. 12,000 for which it received some financial assistance from the Government. It had also taken up during the year 1971-72 construction work for tap water supply at an estimated cost of Rs.29,000. The tap water schemes at Dhayati and Keloli have already been completed. The Gram Panchayat at Majgaon had constructed 4 public wells in the village for improving supply of drinking water at a cost of Rs. 15,000 with some financial assistance from Government. It had planned a scheme for supply of tap water and collected during 1970-71 contributions from the local people. It had also constructed an open air stage in the village with some financial aid from the Government. There are instances of some such activities carried out at other villages in the valley. The local population has contributed voluntary labour as well as finance which when supplemented by the assistance from the Government has enabled the Gram Panchayats to carry out some development programme. This suggests that if a systematic programme for economic development of the valley is taken up, the local population will respond favourably and enthusiastically.

Suggestions made by the Villagers : During the course of fieldwork our field staff had discussions with the village leaders and some of the respondents. The suggestions which emerged from the discussions can be classified broadly into 4 categories :

- I) Suggestions regarding agricultural improvements,
- II) Suggestions regarding transport and communications,
- III) Suggestions relating to schools, dispensaries and such other facilities, and
- IV) Suggestions for starting new industries based on local resources.

We shall consider the suggestions in the following sections :

I) Agricultural improvements : The suggestions mainly related to lift irrigation facilities to be provided at the places shown below :-

- 1) Chafal : i) near Jalgewadi to irrigate about 35 acres and ii) near Kasaraki.
- 2) Majgaon : i) near the bridge and ii) near Kasaraki
- 3) Derwan : i) near Pasodi to irrigate about 15-20 acres, ii) near Gurhalghar to irrigate about 25-30 acres and iii) near Madhaliwadi.
- 4) Jalgewadi : i) On river Mand at Limboni Doaha to irrigate about 40-50 acres.
- 5) Nanegaon Bk. : About 150 acres at Malyache Dharan, Jamdad, Bonavar, Sheriche, Dharan, Near Survey No. 33, Near Vetalaba.
- 6) Nanegaon Kh. : Near Ghanwad fields to irrigate about 300 acres.

The villagers also suggested that tanks may be constructed one each near the school at Jadhaywadi (Chafal) and at Keloli near Keloli Phata and at Dusale near Pabewadi.

It was also suggested that a well may be constructed at Chafal for irrigating about 15 acres owned by 9 persons and another well at Dusale near Janai temple to irrigate about forty acres. It was also suggested that a bund may be constructed near Samathi to store water for cattle and for washing and other uses.

It was suggested that a Pucka bund may be constructed at Khonoli and at Dadholi near Paratki to irrigate about 35 acres. It was also suggested that the existing bunds at Dusale may be converted into Pucka bunds and a bund

may be constructed at Keloli near Mortek at Pirewadi.

Electricity is available in a number of villages for street lighting, domestic use and also for the purposes of irrigation. However, where it is not available, it was suggested by the villagers that supply of electricity may be made available at various hamlets and for irrigation at Chafal, Derwan, Jalgewadi, Nanegaon Bk. and Nanegaon Kh. and Padloshi.

At many a places in the villages and hamlets in the valley, there is not adequate water for human and consumption as also for cattle as many of the wells go dry. It is necessary to make some arrangements to have adequate supply of water round the year if the number of livestock is to be increased under the programme of dairy development.

II) Transport and Communication : We have already referred in Chapter I to the present status of the roads and difficulties of communication in monsoon. We have also emphasized in Chapter IV the need to develop the roads and transport facilities if a programme of dairy development is to be taken up. In this context, it will be useful to consider the suggestions made by the local population which included the following :-

- 1) The approach road to Derwan may be repaired and a culvert/Shahabad stone laid on the stream ;
- 2) Pucka roads may be constructed at the following places:
 - i) Keloli - Virewadi - Sadawaghapur
 - ii) Dusale - Chavanwadi - Jalgewadi - Chafal
 - iii) Keloli - Patwade - Sadawaghapur
 - iv) Chavanwadi - Nanegaon Khurd
 - v) Gamewadi - Dadholi
 - vi) Padloshi - Chafal.

- 3) A bridge may be constructed between Nanegaon Khurd and the main road as repairs to the existing roads and the construction of the bridge will facilitate communication, particularly, during monsoon.
- 4) State Transport bus services may be made available between Umbraj and Jaḡgewadi and Keloli - Patwade - Sadawaghapur.

III) Other Felt Needs of the People : The other suggestions included construction of additional rooms or buildings for schools, libraries and Gram Panchayats R:

- 1) School Building : Majgaon, Derwan (Bhairewadi), Khonoli, Dadholi, Padloshi.
- 2) Library Building : Majgaon
- 3) Office Building for Gram Panchayat : Majgaon, Khonoli, Dadholi, Jalgewadi, Patwade and Dusale.
- 4) Buildings for Samaj Mandir : Chafal, Derwan, Bhairewadi (Derwan) and Padloshi.

The other felt needs are as follows R:-

- 1) A High School at Keloli for the benefit of the students in the surrounding area.
- 2) Tap water supply schemes at Patwade, Jalgewadi and Majgaon.
- 3) Medical facilities at Nanegaon Bk. and Padloshi for the benefit of the residents in the neighbouring areas.
- 4) A Jotirlinga temple to be constructed at Nanegaon Kh.
- 5) A Talim (gymkhana) at Dusale and
- 6) A public radio set at Bhairewadi near Derwan.

These suggestions indicate the needs felt by the local population and are based on what they think are feasible propositions. It is necessary to consult the technical people, particularly in respect of the development of irrigation facilities, to find out whether these proposals are viable. It was reported that at present Kuchha bunds

are raised every year on the streams and river. The bunds are washed away twice or thrice every year in monsoon due to rain water and are required to be raised again. The cost of constructing Pucka bunds, the area that can be irrigated and the crops that may be raised in the irrigated land will have to be found out from the concerned technical experts. Similarly the proposals for repairs to road, metalling the surface on certain roads, construction of a bridge and a culvert and such other proposals may be taken up with the Panchayat Samiti. Many of the villages and hamlets are for some time cut off during monsoon from certain villages in the valley/villages and market outside the valley. If a scheme for the collection of milk is to be implemented in the valley, it will be necessary to have roads which can be used throughout the year.

For certain other proposals also such as development of schools, Gram Panchayats, Samaj Mandir, medical and other facilities, it will be useful to discuss the matter with the Panchayat Samiti and prepare a phased programme for providing the facilities from the funds available with the Zilla Parishad. It will be necessary to work out the details and see if it is really necessary to include the proposed schemes in the development programme. For instance, the villagers at Keloli have expressed that there should be a high school at Keloli. During 1971-72, there were in all 147 educands in the village of whom 95 were upto the 4th standard, 37 between 5th and 7th, 13 between 8th to 11th and 2 above S.S.C. Out of the neighbouring villages, Patwade had only 29 educands during 1971-72. These numbers are too small to justify the establishment of ^a high school. At Nanegaon Khurd there is a high school upto the 9th Standard. Even if it is a little inconvenient for the boys and girls

from Keloli to go to Nanegaon Kh. it will be good to have a large number of students at that school so as to develop it upto 11th Standard.

IV) Development of Certain Industries : In the course of discussions with the villagers at Keloli it was stated that Charcoal may be obtained from the neighbouring forests. It was also stated that there were iron deposits to be found in the neighbouring hills, and may be explored. It was told that the soil at Keloli and Sadawaghapur is suitable for manufacture of Mangalore tiles and bricks.

As regards the suggestions regarding charcoal making, , exploitation of iron deposits and manufacture of Mangalore tiles and bricks, it is difficult to say whether these propositions are physically and economically viable. However, as more than 2,500 acres in the valley are classified as forest land, it will be useful to explore whether charcoal making is feasible. We did not get much information about the forest products at present obtained from the valley. Our fieldstaff estimated that about 100 cartloads of mangoes (local variety) from Chafal, Jalgewadi, Nanegaon Bk. and Nanegaon Kh., Padloshi, Keloli, Patwade and Dusale were sent outside the valley for sale. Jackfruit about 45 cartloads was also sent outside the valley for sale. There is a good market for Alphanso and other varieties of mango and jackfruit at Bombay and Poona. The possibilities of planting better varieties of mango like Alphanso from Ratnagiri as also better variety of jackfruit may be explored. Karanj^{*} about 5 bags were reported to have been sent from Nanegaon Kh. outside the valley. Besides from Sadawaghapur about 100 headloads of firewood were collected every day for about 4 months during the year, from the forest and sold in the valley.

* Pongamia pinnalā

It was reported that at Dusale and Sadawaghapur some farmers cultivate part of the forest lands to grow Nachana as there is not enough cultivable land in the village. The cultivation is carried out jointly by groups of cultivators and the grain and fodder is shared by the participants. During 1971-72 some 64 families had ~~xx~~ sown Nachana in the forest area and each of them had obtained a bagfull, about 80 Kg. of Nachana. Though the cultivation of forest lands is not legal, it is connived at by the Forest Department. ~~It~~ The cultivable land in the village can be supplemented by allowing a part of the forest to be officially converted into cultivable land. We have neither data nor the expertise to estimate the potential of development of forest and forest products. It will be useful to discuss the problems with the Forest Department of the State Government for developing and utilisation of forest resources in respect of fruit trees, timber, firewood, grazing pastures and converting part of the forest into cultivable land.

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As regards the iron deposits, it was reported that the iron deposits at the hills near Keloli (at Dhavad Khan) were once upon a time utilised for manufacturing cast-iron goods. It may just turn out to be a local ^{myth} belief, but it will be useful to find out whether such deposits exist at present and can be profitably explored in the near future.

Similarly, manufacture of Mangalore tiles and bricks near Keloli may not turn out to be an economically sound scheme. Even though the local soil is reported to be suitable, there are other inputs and costs involved. Also the problem of marketing the produce will have to be considered. The Khadi and Village Industries Board or such other agency may be consulted to find out if a scheme for the manufacture of Mangalore tiles and bricks can be implemented.

To conclude : As stated in the Introduction, the present study was carried out with a view to collect some data which may prove useful for preparing a plan for the economic development of the valley. The data collected during the Survey reveal that in terms of labour force, land and other resources there is a great potential for the development of agriculture, dairying, poultry and sheep, forestry and certain non-agricultural occupations in the valley. The specific schemes in these fields will have to be developed in consultation with the experts in various fields. We shall consider the purpose of the report as fulfilled if the data presented in this report is found useful for developing such schemes for the economic development of the valley. A considerable amount of raw and tabulated data which is not presented in the report can be utilised if required for formulating specific schemes.