

Executive Summary
Rural Non Farm Employment in Maharashtra

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1 Introduction

The latest data on employment (NSS) at All India level shows a declining trend in the rate of growth of current daily status employment from 2.7 percent in 1983-84 to 1.07 percent 1999-2000 and an increase in the growth rate at which the number of unemployed people was growing. This is inspite of the comparatively higher growth in GDP in this period. It was noted that the post reform period exhibited growth in employment for some sectors of the economy but these improved growth rates do not compensate for declining rates of growth in many other sectors. This was because the number of such sectors was small and these were not the major absorbers of workers. One of the major characteristics of the employment is that it is basically rural in nature. At all India level, 73.34 percent of the total main workers were in rural areas according to the Census 2001. However, it was found that the employment elasticity of agriculture which was 0.70 during 1983-1993-94, declined to 0.01 during 1993-94 and 1999-00. The deteriorating capacity of the sector also points towards rural -urban divide in this regard. It has been noted that during the 1990s, the employment growth was concentrated in the urban areas. Thus, it is clear that in the 1990s, the largest employment providing sector- the rural/ agricultural sector exhibited a declining capacity of employment generation. The present scenario therefore definitely calls for a strong initiative for creating conducive environment for generation of rural non-farm employment.

The recognition of the growing importance of Rural Non Farm Sector (RNFS) employment by the researchers and policy makers stems firstly from the growing share of non-farm income and employment in the total income and employment of the rural households in the developing countries. Secondly, it has been noted is that the productivity and profitability is generally higher in the non-farm sector and therefore, it is

considered to be important for maintaining / increasing purchasing power and food security of the rural households. The working conditions and wages in RNFS enterprises are found to be on an average better than in the agricultural sector (Fisher et al (1997)). Therefore, this sector assumes significance with regard to poverty alleviation as well as prevention of excess urbanisation.

The approach for studying RNFS with an objective to look for proper policies rests on a few things. Firstly, it has to be noted that it is difficult to exactly define the RNFS activities as it includes several heterogeneous non-farm activities or enterprises of different sizes and from different industry groups in rural areas. These various activities might be having different demand and supply conditions in their input and output markets, different levels of profitability, working conditions of labourers etc. Secondly, for understanding the participation of rural households in a particular non-farm activity, the motivation behind the decision as well as the ability of the households to participate therein has to be studied. Thus, the factors determining relative risk or profitability of a particular non farm activity and those determining ability of households need to be looked into. The approach and the policies therefore have to be sector (i.e. within the broad RNFS) and region specific.

The studies dealing with these issues try to analyse the hypotheses governing emergence of RNFS activities in particular regions, the growing and lagging sectors within RNFS, composition of workers etc. The focus in majority of the studies is on finding the determinants / correlates of RNFS employment, farm - non-farm linkages and whether and in what way agricultural sector affects the RNFS activity. These studies bring out the importance of RNFS employment in promoting incomes and reducing variability in the incomes of the rural population. However, a few disturbing trends such as expansion of RNFS employment accompanied by a contraction in the traditional labour services, fall in the share of disadvantaged groups in the non-farm employment due to inability to participate in the RNFS, falling male- female workers ratio etc. are also noted.

One of the important issues pertaining to the RNFS employment is whether this sector expands due to the distress diversification of the rural households or due to some positive stimulus provided to the economy. For understanding the participation of

households in the RNFS activities, therefore, one has to look into the factors that motivate the rural households to participate in these activities. These can be classified as pull or push factors. The pull factors emanate from some stimulus such as agricultural development which through various types of linkages through production, capital and consumption / expenditure with the other sectors, leads to the expansion of RNFS. Here again, the nature of this stimulus and the capacity of the households to participate in these activities will determine the nature and composition of RNFS employment. The push factors basically relate to lower productivity and wages, risks in farming, incomplete/missing input and insurance markets etc. In the situation of adverse conditions, the households are pushed to diversify into RNFS activities. Therefore, agricultural / infrastructural development, urbanisation, commercialisation - phenomena that represent development on one hand and unemployment, poverty - phenomena representing distress on the other can be treated as correlates of RNFS activities. The literature shows that there is a close link between the level of agricultural development and the level of RNFS employment. However, there is also evidences of the households participating in the non farm sector due to distress or push factors. The differences in these correlates across various regions give rise to variations in RNFS employment in these regions. Moreover, within the RNFS, there is a wide variety among the sub sectors as far as employment and its rate of growth, productivity and wages, working conditions are concerned. Whereas some sectors like services and manufacturing are fast growing and engage a major chunk of RNFS workers, others like construction, transport and communication generally engage relatively less number of workers in rural areas.

RNFS employment in India for male as well as female workers is rising gradually over time in absolute terms and as proportion of total rural employment as well though the rates of growth over different time periods have been changing. At all India level, in 2001, around 27 percent of main workers were engaged in RNFS (www.censusindia.net). A welcome feature is the increase in the share of RNFS workers during the period of 1993-94 to 1990 - 00.

The all India level picture conceals a lot of heterogeneity present at the regional level. Within the country, the share of RNFS workers varies between 71.43 percent (Kerala) to 14.5 percent (MP). For states like Bihar, Rajasthan, Chattisgarh, these shares

are 18 percent, 23 percent and 13.19 percent respectively. It can be seen that the share of RNFS workers in Maharashtra is only around 20 percent, though Maharashtra is considered to be one of the industrially well-developed states. Various indicators of economic performance such as per capita income, per capita value added in industries, per capita gross value of output in industries etc show that Maharashtra is one of the top states as far as these are concerned as per the Economic Survey of Maharashtra (2001-02). Therefore it is expected that the non-farm sector in Maharashtra would show better performance as far as the employment aspect is concerned. On the contrary, the share of RNFS is seen to be quite low i.e.-20 percent and is comparable with some of the backward states in India

2. Need for the Study

In case of Maharashtra, the need to study the RNFS employment arises from the fact that agriculture in Maharashtra is nature constrained. Only 15 percent of the GCA is irrigated as against the national average of around 38 percent. The yields of the food and non food grain crops are very low as compared to the all India level figures. The absorption capacity of the agricultural sector is thus limited. Obviously, one of the options is increasing employment in the rural non-farm sector. It is necessary therefore to look into the current pattern of RNFS employment at the state as well as at the district level and various correlates of RNFS. This will give us an idea about the leading and lagging regions with respect to RNFS within the state as well as leading and lagging sub sectors within the RNFS and also about the policies that can be formulated. The data on employment profile of the state shows that non farm employment is basically an urban phenomenon in Maharashtra, with the share of RNFS employment in TMW being just around 12 percent. This share is increasing very slowly. Thus, the Maharashtra economy in terms of employment is basically agrarian in nature, with more than half the population still engaged in it. However, the productivity levels in agriculture are very low. It has been noted that among all the sectors (agriculture and non-agriculture), the labour productivity (GSDP per UPS as well as UPSS worker) was very low in Maharashtra. The same study also shows that the head count among rural households in 1993-94 was very high in agriculture as compared to the other rural sectors. These figures of head count in agriculture are very high as compared to many other states. Thus, low productivity of

agricultural employment is one of the main features of Maharashtra economy. Promotion of better paying RNFS employment thus assumes great significance for productive employment and reducing poverty among rural classes.

3. Objectives of the Study

Objectives of the study are:

- I. To study the pattern of rural non-farm employment at the state and region level as well as at household level.
- II. To locate correlates of rural non-farm employment in various regions.
- III. To assess region specific constraints in the growth of livestock based agro-processing units, and draw policy implications.

4. Methodology of the Study

The study utilises secondary as well as primary data for the analysis. Secondary data has been used for analysing pattern of employment at the state level as well as at the district level. The major data source utilised is the Census of India. The other major data sources used for understanding the determinants/correlates of non farm employment are the Season and Crop Report (GOM), Statistical Information relating to Agriculture (GOM), District Socio-Economic Abstracts (GOM), Economic Census (GOM), CMIE etc. With the help of these data sources, the study tries to look into firstly, the employment pattern of RNFS at the state and the district level and secondly, various correlates of the RNFS employment.

Sampling design

For understanding the employment pattern at the micro level, data was collected through field survey. The selection of the state i.e. Maharashtra was purposive. Two districts-one with higher and the other with lower concentration ratio (CR) of the RNFS workers were chosen. Accordingly, district Satara and district Washim with the CR of 12.5 and 4.62 respectively were selected. It has to be noted here that Washim is the district created in the year 1998 from district Akola. Hence wherever the data for this district is not available, that of the parent district Akola has been utilised. Within each district, a class II town was selected and two village clusters (comprising of three villages each)-one near the town (within 3 kms from the town) and the other little away (more than 10 kms away) were chosen. The last stage of sampling was the household selection.

In each village cluster, thirty households were to be selected in each of the seven stipulated categories of employment. This was done on the basis of the distribution of households in the village population as well as the given criterion of selecting minimum 3 households in each category. The information at the village level was collected with the help of village information schedule and household schedules.

With increasing incomes and changing consumption basket of people, the demand for livestock is increasing and therefore, this can become a potential thrust area for income and employment generation in the rural areas. For understanding the scale of operation, extent and nature of the livestock activities at the micro level, data was also collected from livestock processing units in the two sample districts. The livestock activity assigned to Maharashtra was meat. Hence only meat processing units were considered for field survey. The types of these units were 1. Own Account Manufacturing Enterprises (OAMEs), 2. Non Directory Manufacturing Establishments (NDMEs), 3. Directory Manufacturing Enterprises (DMEs) and 4. Factories. These were to be selected in the proportion of 6:4:3:2. Thus, seven to eight units in each district and a total of eight districts were to be selected.

It has to be noted that in both the districts, there were problems in collection of data due to absence of some types of enterprises in the place of survey. E.g. in both the districts, no factory could be located in the place of household survey or its vicinity. Hence, data could not be collected. Absence of such enterprises in the village or in its vicinity speaks of characteristics of that particular rural area and also of the market for the concerned produce. Hence data was not collected from similar units in urban areas/other districts. A total of twelve units were selected. Out of these, six were in Satara and these were- three OAEs, one NDME and one DME In Washim, all the units were OAEs.

5. Major Findings of the Study

5.1 Regional Disparities in Maharashtra

It has been noted that Maharashtra falls in the lowest category as far as the level of RNFS employment is concerned. Development of this state conceals lot of heterogeneity across various regions of the state. The three main region regions of the state are western Maharashtra (WM), Marathwada and Vidarbha. Districts in WM are the

most developed districts on the whole. On the other hand, those in the other two regions are comparatively lagging districts. A major reason for the disparities in various aspects is the urban centric growth which has taken place around the districts Thane, Mumbai and Pune which fall in WM.

Though for the state as a whole, the share of RNFS workers is around 20 percent, there are wide disparities across regions. The share ranges between 34 percent (Konkan) to around 11 percent (Amravati). The data on other major indicators also presents a similar picture. The data presented in this chapter presents a few important things.

- Districts or regions of Maharashtra can be classified into two groups based on their level of agricultural development and the extent of RNFS activity and probable reasons for the existing status of the same.
- There are districts of WM, which exhibit better development of agricultural sector, infrastructure and other indicators of development. The extent of RNFS activity (in absolute terms and as proportion) is also high in this region. Thus, there is a clear nexus between development agricultural sector and that of RNFS.
- On the other hand, in the agriculturally lagging districts of Marathwada and Vidarbha, the extent of RNFS activity is on the lower side (in absolute terms and as proportion) in terms of number of people employed. These are underdeveloped in terms of indicators such as availability of infrastructural facilities, extent of urbanisation etc and are characterised by higher poverty levels, lower per capita incomes, proportionately lower share of primary sector in total district income than the share of workforce engaged etc.
- Within the RNFS, in the underdeveloped regions, the share of manufacturing is lower than that in WM. Similarly, shares of construction, trade and commerce and other services are higher than those in WM. Thus, agriculture and the manufacturing sectors are both comparatively lagging. There is a possibility that due to the lack of any strong stimulus from these two important sectors, the distress of the rural households has led to the expansion of informal service sector.
- Finally, as far as male –female composition of the RNFS is concerned, in absolute terms, the share of the female workers is lower. However, an increasing trend in female participation in the RNFS is observed.

- As far as the Economic Census data is concerned, the major point that point that emerges is that there is a distinct increase in the agricultural ENTP as well as employment therein, at the state level as well as in all the major regions of the state. The rate of change is higher for WM. The increasing importance of allied activities is very clear.
- The factory sector also reveals regional disparities in number as well as employment is concerned. Western Maharashtra emerges as the most developed region -agriculturally as well as non-agriculturally.

The Sample Districts

The districts chosen here are Satara and Washim - the districts with higher and lower concentration ratios respectively. -These districts are at different stages of development. The major points emerging from secondary data relating are as follows-

- Satara in WM region is a better district as far as its agricultural and infrastructural development, and economic status is concerned. Similarly, it is larger as well as a growing district. Nearly one fourth of the rural main workers are working in the RNFS.
- Washim on the other hand is a smaller, agriculturally as well as industrially less developed district in Vidarbha. Merely nine percent of the rural workforce is engaged in RNFS.
- The data on various indicators for these districts exhibits firstly, a strong nexus between agricultural, infrastructural development and level of RNFS activity. Secondly, it also shows differences in the pattern of RNFS employment in the better and less developed districts and different causes of expansion of RNFS in both types of districts. Better performance of agricultural and manufacturing sector seems to have stimulated growth of RNFS sector in Satara as against in Washim, where the performance of both these sectors is weak. The growth of RNFS appears to be due to the push factors in presence of stagnant agricultural sector. Thus, it is the operation of pull factors and push factors in the better and less developed regions respectively that explains the expansion of RNFS.

The Sample Villages

The micro level data in the villages is analysed with an objective of finding the comparative picture of pattern of RNFS employment and their correlates. First, for understanding the level of economic development of the villages, first, we have looked into the available village information. Next, the pattern of RNFS in each of the two village sets across the village sets as well as within the households and present a comparative picture for village sets in the same district and for village sets in two sample districts is analysed. The important points that emerge from the analysis of data relate to the pattern of employment, its diversification, and the economic status/ well being of various category households. These give us an idea about comparatively better off and relatively deprived categories at the micro level.

- As far as the economic status of the households is concerned, it is clearly noted that the landed and the trading categories are relatively the better categories. This can be observed from the data relating to their asset position, type of house they own, technology of cooking they use, percentage of households in the category having bank account etc.
- The number of days of employment are seen to be higher for landed and wholesale trading households. The data relating to diversification of employment activities of the households reveals a similar picture. It is observed that the households in better off category, specifically in the wholesale trading category, show lesser extent of employment diversification. This mainly because it is the traditional business and can support a large number of family members. Thus, comparatively, there is no/ less need for diversification. However, the households in the other better off category- the landed one are seen to be having more number of supplementary income sources as they are able to expand into other activities such as livestock. For other categories, it is possibly the need for diversification, subsistence that leads to diversification. Thus, push and pull factors both seem to working within a village.
- A comparison of districts in this regard shows that Satara is a better off district than Washim as far as the household data concerned. For Washim, the

household data also does not show diversification of activities of the household members in to non-farm employment on a large scale. It is felt from the data collected that the economy of the Washim villages is stagnant and the strength of both types of stimulus - push or pull factors seems to be rather weak.

- Within districts, the village clusters near to the town are better clusters than the distant ones. This shows that non-farm activity is basically urban in nature. Similarly, it is the agriculturally better off district-Satara, which shows more number/ proportion of households in the livestock activity. Thus, it can be said that agricultural development gives boost to allied activities. This is clear from the secondary data also.

5.2 Meat Processing Units in Maharashtra

The secondary data relating to the livestock units and the primary data relating to the meat processing units point out the following issues-

- Given the increasing demand for and supply of livestock animals for meat purpose, livestock processing can become a growth sector in the sample regions especially in the lagging region of Washim. Comparison of sample units in both the districts shows that those in Satara were better off in terms of signs of prosperity such a size of the units and market, availability of infrastructure, cleanliness. The average unit size and market was smaller in Washim.
- However, some common problems were noted as far as these units in both the districts are concerned. Basically these operate on a small scale and are unorganised. This makes it difficult for them to bargain for better facilities. There are no government schemes or other promotional agencies, which would give them incentives / platform to voice their demands so as to improve their economic status. Taking advantage of increasing demand for meat as well as linked up activities like leather industry assumes utmost importance.
- special attention needs to be given to provision of proper infrastructure. Similarly, it is necessary that these units get organised with the help of some or the other promotional agency.

4. Policy Implications

The major issue emerging out of the discussion is the regional disparities in overall development as well as in rural areas of the state. Therefore, attention needs to be focussed on the lagging regions. Though expansion of RNFS activities is important, certain conditions need to be fulfilled. With nearly 70 to 80 percent of the population depending on agriculture, lower literacy rates and lower productivity levels, it becomes important to create suitable conditions for expansion of RNFS and to tap all possibilities within agriculture for expanding the employment base.

Specifically, attention has to be focussed on the following issues-

- In case of agricultural sector, completion of incomplete irrigation projects is one of the important policy implication as water is necessary for farm as well as non farm activities (**Attention to: Commissionerate of Agriculture, Government of Maharashtra, Pune**).
- Investment in agro-processing and livestock processing need to be the thrust area. For this, micro-level understanding of the cropping pattern, consumption basket of the locals, market potentials need to be studied for the lagging regions. One major advantage for Maharashtra is that the climatic conditions are suitable for growing various fruits, oilseeds. The scope for expansion of horticultural activities and of processing units (for fruits and oilseeds) needs to be studied. One of the important areas can also be provision of agricultural services to the farmers (**Attention to: Commissionerate of Agriculture, Government of Maharashtra, Pune**).
- RNFS activities include diverse set of activities of different types and hence it difficult to prescribe any blanket policy for the entire sub sectors in it. As has been said before, location specific approach becomes important in this case. A few important areas, which can be thought of, are the production and marketing of handicrafts, tourism, provision of services in the areas of new upcoming areas of health and environment (**Attention to: Ministry of Industry, Ministry of Rural Development, Government of Maharashtra, Mumbai**).
- Taking a holistic approach, it can be said that policies, which create suitable environment for expansion of non-farm activities, are of utmost importance. One of the important policy prescriptions is therefore monitoring not only the extent but also

the quality and type of education/ skills imparted in the concerned region. This in a nutshell indicates investment in human capital formation in rural areas (**Attention to: Ministry of Education, Ministry of Rural Development, Government of Maharashtra, Mumbai**). .

- Finally, it can be said that the factor conditions, demand conditions, related / supporting industries and finally the firm structures are some major determinants, which shape the macro environment in which local ENTP operate (Porter (1990)). Similarly, the points mentioned above indirectly indicate the importance of infrastructural facilities including credit, strong local institutions such as panchayati raj institutions, self-help groups etc. wherein decisions decentralised.

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Foreword

It has been noted that during the 1990s, employment growth was concentrated in the urban areas. Similarly, the largest employment providing sector-the rural agricultural sector exhibited a declining capacity of employment generation. Against this background, the importance of rural non-farm sector is well recognised by researchers and the policy makers.

It was, therefore, thought essential by the Ministry of Agriculture, Government of India to study the pattern of rural non -farm employment in Maharashtra. Accordingly, the study was conducted by the Agro Economic Research Centre of Gokhale Institute of Politics and Economics, Pune.

The study shows that Maharashtra is one of the states with lower level of rural non-farm employment and is also characterised by regional disparities as far as the spread of rural non-farm employment is concerned. An analysis of the secondary data shows a comparatively better position of Western Maharashtra in terms of development of agricultural and manufacturing sectors and of the infrastructural facilities as against that of Vidarbha and Marathwada regions. There has been comparatively larger expansion of informal sector services in the latter regions due to the lack of any strong stimulus from the two important sectors i.e the agricultural and manufacturing sectors. These are also the regions with higher incidence of poverty.

The present scenario therefore definitely calls for a strong initiative for creating an environment conducive for generation of rural non-farm employment in the lagging regions of the state. Investment in livestock and agro-processing activities, focus on watershed development and completion of incomplete irrigation projects, investment in upcoming areas of health and environment, handicrafts, tourism and, finally, investment in human capital formation to suit the needs of rural population are some of the important policy implications emerging from the present study.

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Chapter I

Rural Non Farm Employment in India: An Overview

1.1 Introduction

Generation of employment for the fast growing population with the ultimate objective of poverty alleviation has always remained a major challenge before the policy makers. The discussion relating to this issue has gained new dimension with the onset of the process of liberalisation. With a move towards a more free and competitive environment, however, the discussion has centred on mainly the trends in employment in the pre and post reform period, the stagnant agricultural employment and need to find new areas of employment. In this connection, the importance of the non-farm sector is being increasingly recognised. The recognition of the growing importance of rural non farm sector (RNFS) employment by the researchers and policy makers stems firstly from the growing share of non-farm income and employment in the total income and employment of the rural households in the developing countries. It has been found that the income from non-farm activities contributes between 25 and 35 percent of the total income of rural households as far as India is concerned. As far as the employment part is concerned, at all India level, RNFS employment has been growing at more than two percent per annum, which is higher than that of the agricultural sector (Fisher et al (1997)). Secondly, apart from the increasing share of RNFS employment, the other important point to be noted is that the productivity and profitability is generally higher in the non-farm sector and therefore, it is considered to be important for maintaining / increasing purchasing power and food security of the rural households. The working conditions and wages in RNFS enterprises are found to be on an average better than in the agricultural sector (Fisher et al (1997)). Therefore, this sector assumes significance with regard to poverty alleviation as well as prevention of excess urbanisation.

The approach for studying RNFS with an objective to look for proper policies rests on a few things. Firstly, it has to be noted that it is difficult to exactly define the scope of RNFS activities as it includes several heterogeneous non-farm activities or enterprises of different sizes and from different industry groups in rural areas. The sector is usually mentioned in a negative sense (Fisher et al (1997)). Various activities in this

sector might be having different demand and supply conditions in their input and output markets, different levels of profitability, working conditions of labourers etc. Secondly, for understanding the participation of rural households in a particular non-farm activity, the motivation behind the decision as well as the ability of the households to participate therein has to be studied. Thus, the factors determining relative risk or profitability of a particular non farm activity and those determining ability of households to participate in it have to be studied. The approach and the policies therefore, have to be sector (i.e. within the broad RNFS) and region specific.

1.2 The Review of Literature

The major issues dealt with in the literature relating to RNFS are - the patterns of rural non-farm income and employment in various regions, their determinants and correlates, relationship between RNFS employment and poverty. The studies dealing with these issues try to analyse the hypotheses governing emergence of RNFS activities in particular regions, the growing and lagging sectors within RNFS, composition of workers etc. In majority of the studies, the focus is on finding the determinants / correlates of RNFS employment, farm - non farm linkages and whether and in what way agricultural sector affects the RNFS activity. Lanjow and Shaiff (2002) in their review of literature shed light on the recent studies based on primary and secondary data, dealing with various such issues - linkages (through wage rates, consumption, expenditure, income from agriculture etc.) between farm and non farm sector, changing nature of these linkages as development proceeds and their impact on employment, its pattern and on poverty (Vaidyanathan (1983), Hazell and Haggbadde (1990), Banerjee and Munshi (2000), Walker and Ryan (1990) etc). These studies bring out the importance of RNFS employment in promoting incomes and reducing variability in the incomes of the rural population. However, a few disturbing trends are also noted. Expansion of RNFS employment is seen to be accompanied by a contraction in the traditional labour services, fall in the share of disadvantaged groups in the non-farm employment due to inability to participate in the RNFS, falling male - female workers ratio etc. (Wadley and Derr (1990), Dreze et al (1998)).

One of the important issues pertaining to the RNFS employment is whether this sector expands due to the distress diversification of the rural households or due to some

positive stimulus provided to the rural economy. For understanding the participation of households in the RNFS activities, therefore, one has to look into the factors that motivate the rural households to participate in these activities. These can be classified as pull or push factors. The pull factors emanate from some stimulus such as agricultural development, which through various types of linkages through production, investment and consumption / expenditure with the other sectors, leads to the expansion of RNFS. Here again, the nature of this stimulus and the capacity of the households to participate in these activities will determine the nature and composition of RNFS employment. As against this, the push factors basically relate to lower productivity and wages, risks in farming, incomplete/ missing input and insurance markets. In the situation of adverse conditions, the households are pushed to diversify into RNFS activities. Therefore, agricultural / infrastructural development, spread of education, urbanisation, commercialisation - phenomena that represent development on one hand and unemployment, poverty - phenomena representing distress on the other can be treated as correlates of RNFS activities. The literature shows that there is a close link between the level of agricultural development and the level of RNFS employment (Visaria and Basant, (1994), Mahendra Dev (1994), Fisher et al (1997)). Similarly, it has been found that the supply of basic physical infrastructure such as roads, electricity, water and of social infrastructure such as education are preconditions for rural workers to enter into the RNFS (Fisher et al (1997)). This study shows that the states with higher literacy rates are also the states with higher percentage of RNFS employment. However, there are also evidences of the households participating in the non farm sector due to distress or push factors (Mahendra dev (2001)).The differences in these correlates across various regions give rise to variations in RNFS employment in these regions. Moreover, within the RNFS, there is a wide variety among the sub sectors as far as employment and its rate of growth, productivity and wages, working conditions are concerned. Whereas some sectors like services and manufacturing are fast growing and engage a major chunk of RNFS workers, others like construction, transport and communication generally engage relatively less number of workers in rural areas.

1.3 Profile of Employment at All India Level.

1.3.1 Employment and Unemployment at All India Level.

The latest data on employment (NSS) shows a declining trend in the rate of growth of employment (current daily status) from 2.7 percent in 1983-84 to 1.07 percent 1999-2000. This was in spite of comparatively higher growth in GDP in that period. The rate growth of number of unemployed people increased from -0.08 percent during 1983 to 1993-94 to 4.74 percent during 1993-94 to 1999-2000 at all India level. The figures were even higher for the rural areas (GOI (2002-03)). The post reform period exhibited growth in employment for some sectors of the economy but these improved growth rates do not compensate for declining rates of growth in many other sectors. This was because the number of such sectors was small and these were not the major absorbers of workers (Chadha (2002)). One of the major characteristics of the employment is that it is basically rural in nature. At all India level, 73.34 percent of the total main workers (TMW) were in rural areas (Census 2001). Thus, it is clear that in the 1990s, the largest employment providing sector—the rural sector exhibited a declining capacity of employment generation. It was found that the employment elasticity of agriculture, which was 0.70 during 1983 to 1993-94, declined to 0.01 during 1993-94 to 1999-00 (GOI (2002-03)). The deteriorating capacity of the sector also points towards rural-urban divide in this regard. It has been noted that during the 1990s, the employment growth was concentrated in the urban areas (Bhalla (2000)). The present scenario therefore definitely calls for a strong initiative for creating conducive environment for generation of rural non-farm employment.

1.3.2 Rural Non Farm Employment in India.

RNFS employment in India for male as well as female workers is rising gradually over time in absolute terms and as proportion of total rural employment as well though the rates of growth over different time periods have been changing. This can be seen from the NSS as well as Census data, though their estimates are different. Depending upon the source, currently about 40 to 50 million workers are primarily employed in RNFS in India (Fisher et al (1997)). These constitute about one fourth of the total workforce in the country. A welcome feature is the increase in the share of RNFS workers during the period of 1993-1994 to 1990 - 2000. However, a few disquieting

trends in case of female RNFS workers can be noted. Firstly, the share of female workers in total RNFS workers has fallen (as against the male workers) during the same time period. Secondly, the share of female RNFS workers in total female rural workforce has also fallen during this period. Thirdly, the extent of marginalisation is seen to be very high for female workers (16.48 percent in 1999-00) as compared to their male counterparts (1.69 in 1999-00)(Bhaumik (2002)). Male workers thus dominate RNFS employment.

The all India level picture conceals a lot of heterogeneity present at the regional level. At the disaggregate level, the differences in the RNFS employment across various regions can be observed by looking at the Census data. At all India level, in 2001¹, around 27 percent of main workers were engaged in RNFS (www.censusindia.net). Within the country, the share of RNFS workers varies between 71.43 percent (Kerala) to 14.5 percent (MP). In some of the other major states like Punjab, Haryana, Gujarat, Tamil Nadu, Andhra Pradesh share of RNFS workers is 46 percent, 34 percent, 28 percent and 24 percent respectively. For others like Bihar, Rajasthan, Chattisgarh, these shares are 18 percent, 23 percent and 13.19 percent respectively. It can be seen that the share of RNFS workers in Maharashtra is only around 20 percent, though Maharashtra is considered to be one of the industrially well developed states. As per the Economic Survey of Maharashtra (2001-02), Maharashtra occupies top position in terms of various indicators of economic performance such as per capita income, per capita value added in industries, per capita gross value of output in industries etc. Therefore it is expected that the non farm sector in Maharashtra would show better performance as far as the employment aspect is concerned. On the contrary, the share of RNFS is seen to be quite low, i.e. 20 percent which is comparable with some of the backward states in India.

1.4 Employment Profile in Maharashtra

In this section, we look at the pattern of RNFS employment at the state level. This would provide us an idea about the main features of RNFS employment in the state. It can be seen from table 1.1 that the share of workers in the primary sector in total main workers of the state is falling. The sector's contribution to the state income is also falling. On the other hand, the shares of secondary and tertiary sectors in both are increasing thus indicating the increasing importance of the non-farm sector in the state economy.

Table 1. 1: Sectorwise Structure of Labourforce and Sectoral Contribution to District Income in Maharashtra (In percentage)

Sector	1981		1991		2001	
	TMW	NSDP	TMW	NSDP	TMW	NSDP
Primary	63.76	28	61.23	21.4	55.41	15
Secondary and Tertiary	36.24	72	38.77	78.6	44.59	85

Note: TMW = total main workers, NSDP= net state domestic product.

Sources: GOM (2002b), www.censusindia.net.in

Table 1.2 provides information relating to the classification of TMW in the state. It can be seen from table 1.2 that there is a continuous decline in the share of rural population of the state over the census years. Another important feature of the population is that the share of cultivators is continuously declining whereas that of agricultural labourers is increasing though marginally. Though the composition of the workforce is changing gradually, it is still basically agrarian in nature with almost 80 percent of the workforce engaged in it. Share of RNFS workers is thus only around 20 percent.

Table 1.2: Employment Profile in Maharashtra

Rural population		1961	1971	1981	1991	2001
1	Tot. rural population as % of tot. population	71.78	68.92 (-3.98)	64.97 (-5.73)	61.30 (-5.65)	57.6 (6.04)
2	Share of TMW in total population (rural) (%)	52.42	38.6 (26.36)	42.70 (10.62)	44.19 (3.49)	50.43 (14.12)
3	Share of Cultivators in TMW(rural) (%)	57.26	47.51 (-17.03)	47.87 (0.76)	46.26 (-3.36)	41.69 (-9.88)
4	Share of Agricultural labourers in TMW (rural) (%)	28.95	38.15 (31.77)	35.14 (-7.89)	36.61 (4.18)	38.39 (4.86)
Rural Non Farm Employment						
5	Share of RMW in TMW	75.62	72.83	71.67	68.96	66.84
6	Share of Tot. RNF workers in TMW	10.55	10.44	12.18	11.81	12.48
7	Share of RNF male workers in Rural male TMW	19.80	18.18	22.92	24.46	27.18
8	Share of RNF female workers in Rural female TMW	6.29	6.08	6.70	6.02	4.78
9	Share of total RNF workers in Rural TMW	13.79	14.45	14.34	17.13	19.92

Note: Figures in the bracket show % change over the decade.

Source: General Economic Tables, Maharashtra, Census of India, (various years), www.censusindia.net.in

As far as specifically the rural employment is concerned, a few important points can be noted from the table. Firstly, the share of rural main workers (RMW) is seen to be gradually declining. Thus, though it dominates that of the urban main workers, the latter is

seen to be gradually increasing. Secondly, with the share of RMW falling, the share of RNFS workers in TMW is seen to be very low-12.48 percent in 2001. Thus non farm activity is basically urban in nature. Next, the share of RNFS male workers in rural male TMW is continuously increasing while that of females is fluctuating. The RNFS activity is seen to be basically dominated by male workers. The NSS data also shows similar trends. According to this data set (i.e.NSS), the RNFS employment has grown from 19.8 percent in 1972-73 to 26.2 percent in 1999-00. Similarly, the share of male RNFS workers in rural workers has been increasing while that of female is falling (Bhaumik (2002)).

As has been mentioned earlier, the RNFS includes all types of non-agricultural activities that come under 'secondary' as well as 'tertiary' sector.

Table 1.3: Categories of the Rural Non Farm Employment in Maharashtra (In percent).

Year	Tot/ M/ F	Categories of RNFS					
		Mining, Quarrying	MPSR	Construction	Trade and Commerce	Transport, Storage, Communication	Other Services
1961	Tot	0.73	37.37	6.06	10.47	3.37	26.71
	M	0.65	34.94	6.13	11.08	4.11	26.67
	F	1.45	46.90	5.82	8.11	0.48	26.84
1971	Tot	0.73	38.88	4.49	19.99	9.10	26.81
	M	0.65	38.81	4.34	21.09	9.78	25.33
	F	1.45	39.57	4.95	11.06	3.53	39.45
1981	Tot	1.03	37.11	6.90	18.70	8.58	27.67
	M	1.03	36.41	6.33	19.86	9.57	26.79
	F	1.05	41.62	10.64	11.11	2.10	33.47
1991	Tot	1.92	34.62	7.05	17.31	7.69	31.41
	M	1.80	32.88	7.66	18.47	8.56	30.63
	F	1.82	43.64	5.45	12.73	0.00	36.36

Notes: 1. M=male, F=female 2. =The share of mining and quarrying could not be made available separately from the allied activities for the year 1961. Therefore, its share for the year 1971 is written. 2. MPSR = manufacturing, processing, servicing, repairs. 3. This classification of RNFS employment not available for 2001 as yet.

Source: General Economic Tables, Maharashtra, Census of India (various years).

It can be seen from table 1.3 that over the period, the most important category in terms of share has been 'manufacturing' (share of which is seen to be falling), followed by 'other services' and 'trade and commerce'. However, the percentage change overtime is higher for, 'transport, storage, communication' and 'trade and commerce'. Thus, tertiary sector is growing at a faster pace.

It is very clear from the above discussion that non farm employment is basically an urban phenomenon in Maharashtra, with the share of RNFS employment in TMW

being just around 12 percent. This share is increasing very slowly. The share of RNFS workers in RMW is also not very high - it is just around 20 - 25 percent by the recent census (2001) and NSS round (2000) respectively. Again the rate of change is not very high in this case too. Thus, the Maharashtra economy in terms of employment is basically agrarian in nature, with more than half the population still engaged in it. The NSS data shows that in rural areas, employment in agriculture (usual principal + subsidiary status (UPSS)) increased by 0.41 percent while that of total rural non-agricultural sector increased by 0.2 percent during 1993-94 and 1999-00(Chadha (2002)). Thus, though the share of agriculture is falling, in absolute terms the employment in it is still growing. However, the productivity levels in agriculture are very low. It has been noted that among all the sectors (agriculture and non-agriculture), the labour productivity (GSDP per UPS as well as UPSS worker) was very low in agriculture (Bhalla (2000)). The same study also shows that the head count among rural households in 1993-94 was very high in agriculture as compared to the other rural sectors. These figures of head count in agriculture are very high as compared to many other states. Thus, low productivity of agricultural employment is one of the main features of Maharashtra economy. Promotion of better paying RNFS employment thus assumes great significance for productive employment and reducing poverty among rural classes.

1.5 Need for the Study

In case of Maharashtra, the need to study the RNFS employment arises firstly from the fact that agriculture in Maharashtra is nature constrained. In 2000-01, only 16 percent of the GCA was irrigated as against the national average of around 38 percent. The yields of the food and non-food grain crops are also very low as compared to the all India level figures. Secondly, as has been noted above, the productivity levels of the workers in agriculture are very low. Thirdly, the other important point to be noted is the wide differences in RNFS employment across various regions of the state. This ranges from around 34 percent in Konkan region to around 12 percent in the Amaravarti region of the state.

There are thus limits to labour absorption in the nature constrained agricultural sector. Obviously, the option is increasing employment in the rural non farm sector in comparatively underdeveloped regions of the state. Currently, the share of RNFS workers

in the total main workers is only around 20 percent which is very low as compared to some other states. The employment in RNFS thus has to increase. It is necessary therefore to look into the current pattern of RNFS employment at the state as well as at the district level and various correlates of RNFS employment. This will give us an idea about the leading and lagging regions with respect to RNFS within the state as well as leading and lagging sub sectors within the RNFS and also about the policies that can be formulated.

1.6 Objectives of the study

Objectives of the study² are:

- I. To study the pattern of rural non-farm employment at the state and region level and to locate correlates of rural non-farm employment in various regions.
- II. To assess the economic status of various category households and to study the pattern of rural non-farm employment at household level.
- III. To assess region specific constraints in the growth of livestock based agro-processing units, and draw policy implications.

1.7 Methodology and the Sampling Design of the Study

Methodology:

The study utilises secondary as well as primary data for the analysis. Secondary data has been used for analysing pattern of employment at the state level as well as at the district level. The major data source utilised is the Census of India. Whereas the Census data is published and available till the taluka level, the NSS data is available only at the state level. Hence, the major data source used is the Census. The other major data sources used for understanding the determinants/correlates of non farm employment are the Season and Crop Report (GOM), Statistical Information relating to Agriculture (GOM), District Socio-Economic Abstracts (GOM), Economic Census (GOI), Centre for Monitoring Indian Economy (CMIE) etc. With the help of these data sources, the study tries to look into firstly, the employment pattern of RNFS at the state and the district level and secondly, various correlates of the RNFS employment.

Sampling design

For understanding the employment pattern at the micro level, data was collected through field survey. The selection of the state i.e. Maharashtra was purposive. Two

districts—one with higher and the other with lower concentration ratio (CR)³ of the RNFS workers in 2001 were chosen. Accordingly, district Satara and district Washim with the CR of 12.5 and 4.62 respectively were selected. It has to be noted here that Washim is the district created in the year 1998 from district Akola. Hence wherever the data for this district is not available, that of the parent district Akola has been utilised. Within each district, a class II town⁴ was selected and two village clusters (comprising of three villages each)—one near the town (within 3 kms from the town) and the other little away (more than 10 kms away) were chosen. This is shown in Table 1.4. The last stage of sampling was the household selection. In each village cluster, thirty households were to be selected in each of the seven stipulated categories of employment. This was done on the basis of the distribution of households in the village population as well as the given criterion of selecting minimum 3 households in each category. The information at the village level was collected with the help of village information schedule and household schedules.

Table 1.4: Selection of Sample Districts and Villages in Maharashtra

Selection of Districts and Villages.				
Districts/ Town Villages	Criteria			
Selection of Districts (2001)	Concentration ratio			
	High Satara - 12.15		Low Washim - 4.62	
Selection of Class II towns (2001)	Phaltan		Washim	
	< 3km from Phaltan	> 10 km from Phaltan	< 3km from Washim	> 10 km from Washim
Selection of Village cluster	Kolki	Kambleshwar	Dodaki	Hiwara Rohila
	Jadhavwadi	Somanthali	Jambharun Navji	Shrigiri
	Thakurki	Sangavi	Wangi	Tandali Budruk
	30	30	30	30
Selection of households	30	30	30	30
Categories of households to be selected	1.Small and marginal farm households 2. Household manufacturing, processing, servicing and repairs 3. Private Construction 4.Govt.aided construction/agricultural labourers 5.Retail Trading 6.Wholesale Trading 7.Transport,storage and communication			

Sources: GOM (1991) and (2001) www.censusindia.net.in

The survey was conducted during December 2002 and January 2003 and the data was collected for the year July 2002 to June 2002.

Livestock Processing Units

With increasing incomes and changing consumption basket of people, the demand for livestock is increasing and therefore, this can become a potential thrust area for income and employment generation in the rural areas. For understanding the scale of operation, extent and nature of the livestock activities at the micro level, data was also collected from livestock processing units in the two sample districts. The livestock activity assigned to Maharashtra was meat. Hence only meat processing units were considered for field survey. In all, fifteen units were to be selected. The types of these units were 1. Own Account Manufacturing Enterprises (OAMEs), 2. Non Directory Manufacturing Establishments (NDMEs), 3. Directory Manufacturing Enterprises (DMEs) and 4. Factories⁵. These were to be selected in the proportion of 6:4:3:2 as per the guidelines provided. Thus, seven to eight units in each district and a total of eight districts were to be selected.

It has to be noted that in both the districts, there were problems in collection of data due to absence of some types of enterprises in the place of survey. E.g. In both the districts, no factory could be located in the place of household survey or its vicinity. Hence, data could not be collected. Absence of such enterprises in the village or in its vicinity speaks of characteristics of that particular rural area and also of the market for the concerned produce. Hence data was not collected from similar units in urban areas/other districts.

A total of twelve units were selected. Out of these, six were in Satara and these were- three OAEs, one NDME and one DME. In Washim, all the units were OAEs.

1.8 Study Design

The study consists of six chapters. The introductory chapter presents background of the problem, objectives and methodology of the study followed for the study. The second chapter, deals with the regional disparities in RNFS in Maharashtra. The third chapter looks into the characteristics of the sample districts in detail and provides a background to the fourth chapter, which deals with the primary data. This chapter studies the pattern of RNFS employment in the selected villages and presents a comparative picture of RNFS employment in these villages. This chapter is followed by the fifth chapter, which deals with the status of livestock enterprises in Maharashtra. The data

collected from the livestock based processing units is also analysed here. The sixth chapter is the concluding chapter containing summary and conclusion of the earlier chapters and also the policy implications.

Notes:

1. In the data relating to Census 2001, classification of workers into main and marginal is not provided as yet. Therefore, the clubbed data (main + marginal) is considered throughout in place of rural main workers.
2. The second objective as per the guidelines was as follows: 'To estimate the determinants of employment in the selected non farm rural activities'. But since it was noted in the letter (dtd. June 14, 2002) from the co-ordinator that determinants of RNFS employment would be estimated by the coordinating centre with the help of primary data supplied by all the AERCs, we have not estimated the determinants. Instead, try to locate the correlates of RNFS with the help of the secondary data. Similarly, in addition to the stated objective, to also attempt to study the economic status of various category households with the help of the data collected.
3. Concentration Ratio = Number of rural non-farm workers (those other than cultivators and agricultural labourers) in the district/ the total rural population of the district.
4. A class II town is the town with population between 50,000 to 1,00,000.
5. OAEs - ENTP employing only the owner- worker or his or her family workers.
NDMEs - ENTP with at least one and utmost five workers of whom one is a hired worker. DEs -ENTP with at least six workers including at least one who is hired. Factories-ENTP employing at least ten workers if they use power or at least 20, if no power is used.

Chapter II

Regional Disparities in the Rural Non Farm Sector in Maharashtra

2.1 Introduction

Maharashtra consists of 35 districts and they constitute three main regions, which can be distinguished from each other due to differences in levels of socio-economic development, historical background, demographic characteristics, agro-climatic conditions etc. These are - western Maharashtra (WM), Marathwada or central Maharashtra and Vidarbha or eastern Maharashtra. Out of the eight main divisions (i.e. district conglomerates) of the state, the divisions in WM such as Konkan, Pune and Kolhapur, are the most developed divisions of the state. On the other hand, the divisions in Marathwada and Vidarbha are comparatively lagging regions of the state. It has been noted that Maharashtra falls in the lowest category as far as the level of RNFS employment is concerned. Development of this state conceals lot of heterogeneity across various regions of the state. A major reason for the disparities in various aspects is the urban centric growth which has taken place around the districts Thane, Mumbai and Pune which fall in WM. Districts like Mumbai and Thane (Konkan region) together account for 20 percent of the total population of the state and around 25 percent of the total income of the state income in 2000-01 (at 1993-94 prices). These divisions as well as agriculturally developed divisions such as Kolhapur support a large proportion of the migrant population. The development experience of Maharashtra shows that high unemployment rates in rural and urban Maharashtra, dependence of two thirds of the workforce on agriculture which is dependent on scanty rainfall has driven the state towards a growth path leading to concentration of non farm activities in few regions (GOM (2002b)). An attempt here is made to focus on the RNFS employment with a view to study the spatial disparities in the pattern of employment of RNFS in the state of Maharashtra. We look into firstly, the pattern of RNFS employment in the state and the changes that have been taking place across various regions of state. The regions can then be classified as those with higher and those with lower concentration of RNFS workers. Secondly, we look into the economic profile as well as other correlates of RNFS employment in Maharashtra. Finally, the composition of RNFS employment across

various regions is studied, so as to understand the lagging and growing sub sectors of RNFS as a whole in each region of the state. The major data source used here is the Census of India. For analysing the inter regional disparities, district averages are calculated to represent a division. The district average will give us a measure of central tendency of the concerned variables. For the three main regions - Western Maharashtra, Marathwada and Vidarbha, and for Maharashtra, region and state totals of the indicators are presented respectively.

2.2 Regional Pattern of Rural Non Farm Employment in Maharashtra

Table 2.1 presents regionwise share of rural non-farm workers in total rural main workers (RMW).

Table 2.1: Share of Rural Non Farm Workers in Total Rural Main Workers in Maharashtra (In percent)

Division	District Average				
	1961	1971	1981	1991	2001
Western Maharashtra	10.31	12.97	12.94	16.10	23.58
Konkan	17.05	18.65	27.82	25.97	34.52
Nasik	11.13	11.63	13.42	13.45	14.33
Pune	15.02	16.40	19.28	20.11	22.09
Kolhapur	13.87	17.11	19.97	22.89	24.61
Marathwada	11.79	9.95	11.61	10.19	14.21
Aurangabad	12.19	11.13	12.76	11.65	14.62
Latur	13.85	11.23	13.79	12.09	13.15
Vidarbha	11.34	10.98	12.24	11.70	16.69
Amravati	9.25	9.09	10.49	11.40	11.94
Nagpur	16.83	17.53	19.39	17.89	21.17
Maharashtra	13.65	14.10	17.12	16.93	19.92

Source: General Economic Tables, Maharashtra, Census of India (various years)

It can be seen firstly, that the share of RNFS workers is continuously increasing for all the regions except for Latur. This is a positive feature in the context of developing economies. Secondly, the overall share as well as the rate of change overtime is seen to be greater for the three regions of western Maharashtra (Konkan, Pune and Kolhapur) which are well developed regions of the state as far as the industrial and agricultural performance is concerned. The share of Konkan region is seen to be very high as compared to other regions of the state. This is because of the concentration of industrial activity in and around Mumbai and Thane districts. The share of district Thane that falls

in this region is 39 percent of the total rural main workers. As far as Nagpur is concerned, the overall share is on the higher side though the pace of change is very slow. Regions like Nasik, Aurangabad, Latur and Amaravati are clearly the regions with low share RNFS employment. An encouraging feature of the RNFS employment is its changing composition in terms of male and female workers. Table 2.2 shows an increasing trend in the female participation in the RNFS.

Table 2.2: Share of Female Workers in Total Rural Non Farm Sector Workers in Maharashtra (In percent)

Division	District Average				
	1961	1971	1981	1991	2001
Western Maharashtra	20.44	10.64	13.45	14.48	24.27
Konkan	24.53	12.82	15.55	16.95	25.99
Nasik	19.71	10.91	12.77	13.38	21.87
Pune	18.91	10.39	14.43	14.35	25.75
Kolhapur	18.97	8.45	11.25	12.45	28.62
Marathwada	16.37	9.18	11.62	11.87	22.43
Aurangabad	16.30	10.22	10.95	11.88	22.60
Latur	16.41	8.96	10.27	11.87	22.33
Vidarbha	18.17	13.88	15.53	15.70	23.17
Amravati	12.33	9.09	10.27	11.79	18.48
Nagpur	24.00	18.69	18.72	18.83	27.08
Maharashtra	18.89	11.19	13.32	14.73	25.10

Source: General Economic Tables, Maharashtra, Census of India (various years).

- Though the overall share of females in RNFS employment is only around one-fourth according to the 2001 Census, it is seen to have increased over the years. However, disparity across the regions is observed for all the years. The lagging regions of the state clearly have been engaging less female workers in the RNFS. In these regions, thus the share of female workers dependent on agriculture- cultivators and agricultural labourers is very high. Non farm activity is thus basically male dominated activity in all regions, but more so in the lagging regions.

2.3 Correlates of Rural Non Farm Sector Employment in Various Regions of Maharashtra.

In this section, we look into various correlates of RNFS employment in terms of indicators of the economic profile, agricultural and infrastructural development of different regions of the state and try to correlate these with the share of RNFS workers in the respective regions. For understanding various correlates of RNFS, we firstly look into the economic profile of various regions and various correlates relating to agricultural

and infrastructural development in these regions. Table 2.3 shows the economic status of the various regions in the state in terms of income and poverty.

It can be seen firstly that the average Net District Domestic Product as well as average per capita income of the region is positively correlated with the share of RNFS workers in the regions. Thus, higher share of RNFS is generally associated with higher income. Similarly, if the share of income of these regions (i.e. high-income regions) in total Maharashtra income (NSDP in 1998-99) is calculated, it is found to be comparatively higher. Secondly, the figures for percentage share of poor families within the regions is observed to be less for the districts in the WM region (Pune region is also seen to be having comparatively higher share of 'below poverty line families'. This might be because of inclusion of drought – prone districts in the division wherein the incidence of poverty is comparatively higher). For Vidarbha and Marathwada regions, the percentage of poor families is seen to be comparatively very high. These are the regions wherein RNFS employment is very low, ranging between 11 percent to 15 percent The share of cultivators and agricultural labourers in these regions is very high i.e. more than 80 percent.

Table 2.3: Economic Profile of Various Regions of Maharashtra

Division	District Average		
	Income-1998-99 (at 1993-94 prices)		
	NDDP (Rs.in lakh)	Per capita income (Rs)	Incidence of poverty (%)
Western Maharashtra	10322416	12386	23.86
Konkan	1162089	11488	14.62
Nasik	424255	11271	39.59
Pune	687756	13900	27.47
Kolhapur	391980	13486	14.68
Marathwada	1417518	9565	29.20
Aurangabad	219204	10267	33.46
Latur	189993	9038	26.01
Vidarbha	2432392	11755	28.93
Amravati	236586	9912	29.62
Nagpur	297209	13229	27.11
Maharashtra	14172393	15804	26.6

Note: NDDP is net district domestic product

Source: GOM (2001-02)

We look into various indicators of agricultural performance of various regions of the state. This can be observed from table 2.4.

Figures for percentage of irrigated area show lopsided development across regions in the state. It is seen to be very high for Pune and Kolhapur regions and very low for the divisions in Marathwada and Vidarbha. The rest fall in between. A similar picture is noted for the value of agricultural produce per hectare and the number of tractors in each region. A look at the figures for share of agricultural labourers reveals generally higher share for regions in Marathwada and Vidarbha along with Nasik and lower for the regions of WM. The table also reveals the disparity across regions in terms of average yield of the major crops. The yields for all crops except oilseeds are generally lower in case of Marathwada and Vidarbha. Again, the regions of WM come out as agriculturally developed and other as agriculturally lagging regions.

Table 2.4: Agricultural Development of Various Regions in Maharashtra

Division	District Average								
	% area under irrigation (GIA/GCA) (1994-95)	Value of prod. (Rs./ ha) 1995)	No. of tractors (1997)	% of Agri lab to main workers (2001)	Share of primary sector in total Income (1998-99)	Average yield(kg/ha)(1998-99)			
						Tot FG	Sugar Cane	Cotton	Tot. Oil-seeds
WM	20.07	9402	56683	31.20	26.16	1384	89812	245	957
Konkan	6.14	10526	65	22.97	21.39	2031	-	-	710
Nasik	17.94	8917	4371	46.07	29.32	1097	87189	216	799
Pune	24.31	4942	3581	29.18	22.65	688	87927	267	922
Kolhapur	22.59	12473	3243	23.79	34.44	1267	97465	291	1629
Marathwada	15.01	6145	11206	40.57	34.69	843	78577	148	486
Aurangabad	18.41	5984	1186	34.63	31.87	803	83407	165	489
Latur	10.29	6266	631	44.91	36.8	848	74155	137	472
Vidarbha	11.34	5916	13464	52.03	35.30	992	84698	128	1065
Amravati	5.03	7453	991	57.35	32.47	1077	83139	102	1232
Nagpur	21.34	4686	634	46.48	37.56	924	84268	151	1069
Maharashtra	15.81	6693	1138	38.39	18	974	88998	139	966

Note: GIA= gross area irrigated, GCA= gross cropped area.

Sources: CMIE (2000), www.censusindia.net, GOM (1995-96), GOM (1998-99), GOM (2002b).

Secondly, it can also be seen that the contribution of primary sector to the district income is very low for regions in western Maharashtra. For these regions, the corresponding share for secondary/ tertiary sector in district income is found to be comparatively higher. An interesting

point that was observed from the data was the higher share of tertiary sector in the regions other than those in western Maharashtra.

We also look into various indicators of availability of infrastructural facilities and information relating to the factory sector (table 2.5). The table clearly shows the disparity among regions in terms of number of factories as well as of employed people therein, and other indicators. Again, the correlation can be found between the RNFS employment and these variables.

Table 2.5: Availability of Infrastructural Facilities in Various Regions of Maharashtra

Division	District Average					
	Road length (/100sqm)	Factories		Bank branches (/lakh pop)	Bank Deposit (/lakh capital)	Infrastructure Development Index ²
		Number	Employment (no)			
WM	69.44	1677	1061474	6.92	6512	112.37
Konkan	54.50	1753	121985	8.272	14144	105.77
Nasik	73.47	817	38157	5.12	1465	98.00
Pune	75.66	2033	81047	6.75	3375	140.09
Kolhapur	96.06	791.33	31312	6.62	1957	110.01
Marathwada	47.86	228	88757	5.04	1056	84.90
Aurangabad	42.61	308	6072	5.18	1256	87.91
Latur	51.36	203	6755	4.93	906	82.65
Vidarbha	50.77	433	127591	6.21	1724	93.73
Amravati	53.90	374	8893	5.82	1224	81.18
Nagpur	48.28	520	18404	6.52	2124	103.78
Maharashtra	73.11	28404	1278832	6.88	9229	106.77

Source: CMIE (2000)

2.4 Sub Sectors of the Rural Non Farm Sector

For understanding the composition of the RNFS as a whole, the shares of its sub sectors need to be observed. A regionwise break up of RNFS into various categories is provided in table 2.6. The data here relates to the year 1981 and 1991. Such a break up of RNFS data is not available as yet for the year 2001. It can be noted that for all the regions in 1981, the share of 'manufacturing, processing, services and repairs' and of 'other service' is comparatively higher than that of other categories. Thus, these are the two categories which together account for little less than 70 percent of the total RNFS employment. 'Construction' and 'transport, storage and communication' seem to be relatively less important areas of labour absorption in rural areas.

Table 2.6: Percentage Share of Various Categories of RNFS workers in Various Regions of Maharashtra-1981,1991 (In percentage)

Division	Census Categories of RNFS											
	I		II		III		IV		V		VI	
	1981	1991	1981	1991	1981	1991	1981	1991	1981	1991	1981	1991
WM	1.79	1.30	40.06	36.26	9.96	6.90	14.56	16.89	5.79	8.37	27.83	30.21
Kokan	3.10	2.48	46.47	36.02	10.23	8.24	10.21	17.43	7.68	8.72	22.32	27.10
Nashik	0.17	0.62	35.73	30.88	8.23	5.80	18.13	20.65	6.86	8.32	30.89	33.74
Pune	0.41	0.96	40.91	39.30	9.97	7.23	14.64	13.85	7.18	8.92	26.89	29.74
Kolhapur	0.97	0.95	39.38	36.81	9.47	5.89	14.23	17.21	6.25	7.39	29.71	31.70
Marathwada	0.46	1.06	36.17	30.76	11.24	7.55	18.98	19.24	3.62	5.41	29.53	35.91
Aurangabad	0.21	0.85	38.79	32.45	11.14	6.50	17.37	18.91	3.36	5.47	29.12	35.82
Latur	0.62	1.20	34.43	29.59	11.30	8.29	20.05	19.47	3.79	5.37	29.81	36.09
Vidharbha	3.86	4.90	40.12	40.96	10.10	8.09	13.20	12.31	4.24	4.46	28.47	29.21
Amravati	1.17	1.29	32.05	24.51	8.69	7.69	18.73	20.22	4.86	5.07	34.51	41.21
Nagpur	5.46	4.90	44.91	40.96	10.94	8.09	9.93	12.31	3.87	4.46	24.89	29.21
Maharashtra	3.86	1.81	40.12	35.02	10.10	7.22	13.20	17.33	4.24	6.86	28.47	31.74

Note: I-Mining and Quarrying, II- Manufacturing, Processing, Services and Repairs, III-Construction, IV-Trade and Commerce, V-Transport, Storage and Communication, VI-Other Services

Source: General Economic Tables, Maharashtra, Census of India, (various years).

As for the 1991 data, a similar picture across regions is noted. The major change over the decade is that the share of 'manufacturing' has further fallen or has remained constant and that of 'other services' has increased. The share of sectors IV and V have generally increased for all. The percentage change is lower for Marathwada.

One interesting point that can be noted from the table is that the share of manufacturing category is seen to be higher than that of the service category for the well developed regions of the state for both the years. For the rest, the reverse is true. Thus, in the regions which are agriculturally well developed, and have better economic profile and infrastructural facilities, the RNFS is seen to have expanded. In these regions, the agricultural development seems to have supported and stimulated the development of manufacturing sector rather than the service sector. In other regions, which are agriculturally lagging and have high share of agricultural worker category, the 'other service' category seems to be the dominant RNF sub sector. It is quite possible that the lower development of agricultural sector and infrastructural facilities prohibits the expansion of manufacturing sector and fuels the informal 'other services' sector. This informal sector is found to be a unique characteristic of developing countries wherein people unable to enter into other sectors crowd into this particular sector. In these

regions, the share of 'construction' is also seen to be comparatively (though marginally) higher than the regions such as Thane, Pune, Kolhapur and Nagpur. One reason for this may be higher level of government sponsored construction activities under various schemes.

2.5 Enterprises in Maharashtra

Data on enterprises (ENTP) as published in the Economic Census can be utilised here to supplement some of the observations emerging from the above data. This data relates to a large number of large units operating in the unorganised sector of the economy. We first look into the state level data in this section and then go to the regionwise analysis.

Table 2.7 gives an account of details of the ENTP in Maharashtra². It can be seen clearly that agricultural ENTP are a rural phenomenon whereas non-agricultural ENTP are by and large an urban phenomenon. Numberwise and employment wise agricultural ENTP contribute around 16 percent and 10 percent to the total respectively. The average size of employment per agricultural ENTP and the share of hired employment is also less than the non-agricultural one. However, it can be noted that their number and employment are increasing at a faster rate than the non agricultural ENTP. Another important thing to be noted is that districts Kolhapur and Brihanmumbai, which have highest number of ENTP and employment are both in western Maharashtra. This again brings out the regional disparities in the economic development in the state. Retail trade is seen to be the most important industry group- numberwise. Share of this group in the total ENTP increased from 36 percent in 1990 to 40 percent in 1998. The category 'community, social and personal services' is also an important category. Together, these major categories contribute around 70 to 80 percent to the total number of and employment in the ENTP.

Table 2.7: Enterprises in Maharashtra- 1998

	Total	Agricultural	Non Agriculture
1.No. (Lakhs)	32.34	5.17 (16% of tot)	27.16 (84% of tot)
Increase over 1990 (%)	23.2	67.8	17.3
Rural (%)	49.9	94.4	41
OAEs (%)	70	95	65.2
2.Employment (Lakhs)	104.45	9.68(9.3% tot)	94.68(90.7% of tot)
Increase over 1990 (%)	16.6	81.5	12.5
Female empt. (% to tot agl empt)	15.3	30.6	13.7
Avg. size of empt. per ENTP	3.2	1.87	3.49
Empt. Per 1000 population	114	-	-
Hired Empt (% of tot)	60	7.5	65.5
3.District with highest number of enterprises and employment	Brihanmumbai	Kolhapur	Brihanmumbai
4.Major activity groups by no. of ENTP (%)	1.Retail Trade (34) 2.Com,Soc, Per. Services (20) 3.Raising Livestock (15)	*	1.Retail Trade (40) 2.Com,Soc, Per Services(24) 3.Manufacturing (16)
5.Major activity groups by employment	1.Com, Soc, Per Services (28) 2.Manufacturing (23) 3.Reail Trade (19)	*	1.Com,Soc, Per Services (31) 2.Manufacturing (25) 3.Retail Trade (21)

Notes: 1. OAEs = own account ENTP 2. * = Within agricultural, rearing livestock and agricultural services, hunting etc. are only the two categories.

Source: GOM (2000).

Table 2.8 presents a comparison between the years 1990 and 1998 as regards activitywise share of ENTP and employment therein. This data also shows increasing share of agricultural ENTP and the employment. Among the non farm activities, sharewise major activities are manufacturing, restaurants, and community/social/personal services in both the years. However, there are differences in the direction and rate of change in their share. Shares of categories- construction, wholesale trade, financial/business services has increased in terms of their number as well as employment. On the other hand, shares of major categories- construction and community/social/personal services has fallen.

Table 2.8: Share of Rural Enterprises and Employment in Total, according to Major Industry Groups. (In percentage)

Major Activity	Economic Census-1990			Economic Census-1998		
	ENTP	Persons Usually Working	Hired Persons Usually Working	ENTP	Persons Usually Working	Hired Persons Usually Working
Agriculture	21.92	16.86	4.35	30.29	24.48	3.61
Mining -Quarrying	0.25	0.77	1.35	0.15	0.60	1.27
Manufacturing	18.06	27.47	32.88	13.38	23.34	35.65
Electricity, Gas, Water	0.19	0.53	1.13	0.04	0.24	0.60
Construction	1.75	1.48	1.05	2.36	1.90	1.20
Wholesale Trade	0.79	1.02	1.50	1.36	1.46	1.61
Restaurant, Hotels	23.78	15.28	4.88	24.75	17.19	6.22
Retail Trade	3.18	3.23	2.63	2.85	3.04	2.88
Transport	1.22	1.44	1.58	2.14	1.73	1.54
Storage and Warehousing	0.41	0.56	0.98	0.10	0.14	0.27
Communication	0.57	0.60	1.28	0.36	0.38	0.80
Fin., Insurance, Real Estate, Business Services	1.51	1.97	3.15	2.05	2.41	3.88
Comm, Soc, Per. Services	26.36	28.66	42.94	20.17	23.10	40.47
Others (unspecified activities)	0.02	0.14	0.30	0.00	0.00	0.00

Sources: GOM (1993-94 and 2000-01b).

We now look into the regionwise spread of the ENTP in the state. This is presented in table 2.9. Though the data pertains to the year 1990 - the third Economic Census, it presents a comparative picture as far as the regions are concerned. The regionwise data on ENTP shows that in absolute terms, the number of non-agricultural ENTP is very high for districts of WM as compared to other regions. Similarly, for these agriculturally well developed districts, the share of agricultural ENTP is higher than that for the agriculturally lagging regions. These are the districts wherein the proportion of workers engaged in the RNFS is high. This possibly indicates that agricultural development has given boost to the non-farm employment and has acted as pull factor for the development of the non-farm sector. However, the share of non-agricultural establishments is higher for regions of Marathwada and Vidarbha. Thus, for agriculturally lagging regions, it is not the agricultural sector but some other factors that have led to the development of whatever little RNFS exists. It can be said that it is the need for diversification that has acted as the push factor for the expansion of the RNFS.

Table 2.9: Share of Rural Agricultural and Non Agricultural Enterprises-1990

Division	District Average			
	Share Enterprises (%)		Share of People employed (%)	
	Agricultural	Non agricultural	Male	Female
WM	29.24	70.76	81.48	18.52
Konkan	10.59	89.41	82.34	17.85
Nasik	19.87	80.13	83.15	16.30
Pune	24.97	75.03	79.88	20.12
Kolhapur	40.49	59.51	82.15	17.85
Marathwada	9.31	90.69	86.44	13.56
Aurangabad	8.91	91.09	86.75	13.25
Latur	9.10	90.90	8.17	13.83
Vidarbha	11.82	88.18	82.91	17.09
Amravati	8.31	91.69	87.13	12.87
Nagpur	14.98	85.02	80.97	19.03
Maharashtra	21.92	78.08	82.47	17.53

Source: GOM (1993-94)

The data also shows for all the regions, disparity in the employment of female workers as against the male workers. The share of female workers is seen to be very low as compared to their male counterpart. The disparity is more for the lagging regions.

Tables 2.10 and 2.11 present the data relating to the third (1990) as well as fourth Economic Census (1998). Since the fourth report has not presented data for rural and urban classification of agricultural ENTP, a table similar to table 2.10 can not be prepared for 1998. However, to get an idea of the direction of changes in ENTP, shares of combined (rural and urban) agricultural and non-agricultural ENTP for the whole region as such are calculated for years 1990 and 1998.

Table 2.10: Regionwise Share of Total (Rural+Urban) Agricultural and Non agricultural Enterprises, 1998 (In percentage)

	Agricultural		Non Agricultural	
	1990	1998	1990	1998
Western Maharashtra	13.78	18.70	86	81.30
Marathwada	6.83	8.42	93	91.58
Vidarbha	7.91	12.14	92	87.86
Maharashtra	11.76	16.00	88	84.00

Source: GOM (2000).

Table 2.11: Regionwise Share of Total Persons (Rural+Urban) Employed in Agricultural and Non-Agricultural Enterprises in 1990 and 1998. (In percentage)

Region	Agricultural		Non - Agricultural	
	1990	1998	1990	1998
Western Maharashtra	6.37	10.10	93.63	89.90
Marathwada	4.61	5.84	95.39	94.16
Vidharbha	4.77	7.63	95.23	92.37
Maharashtra	5.96	9.27	94.04	90.73

Source: GOM (2000).

A comparison between broad regions for these years brings out a very important point that the share of agricultural ENTP as well as employment therein has increased in all the regions, though the rates of change vary across regions. The hierarchy amongst various regions is seen to be similar for number and employed persons and is maintained in 1998.

To get an idea of the regional disparities in the organised manufacturing sector, we also look into regionwise data relating to the manufacturing sector- number of factories and employment in them. However, this data relates to the total region and not to the rural parts of the regions. Here, to arrive at the regionwise figure for employment, average of the district average number of workers employed in factories was calculated. Table 2.12 shows that majority of the factories as well as employment generated in factories is highest in western Maharashtra. Marathwada is occupying the lowest position.

Table 2.12: Distribution of Registered Factories and Average Number of Workers Employed in Maharashtra.

Region	Registered Factories (%)	Average Number of Workers Employed
Western Maharashtra	80	73266.21
Marathwada	6	10018.13
Vidharbha	14	14892.13
Maharashtra (Total)	100	1225009

Source: GOM (1993-94).

It is quite clear that the agriculturally better developed regions of the state are also those regions which have larger extent of non agricultural activity in the organised as well as unorganised sectors of the state.

2.6 Concluding Observations

The present chapter attempts to look into the pattern of rural non farm employment in the state of Maharashtra. Though for the state as a whole, the share of RNFS workers is around 20 percent, there are wide disparities across regions. The share ranges between 34 percent (Konkan) to around 11percent (Amravati). A few important findings that emerge from this chapter are presented below. Firstly, there seems to be clearly a link between the level of agricultural development of the region and its RNFS employment. Agriculturally well developed regions are characterised by higher productivity of the crops and lesser contribution of the primary sector to the total income- which is supposed to a feature of the fast developing region. These are the regions with high share of RNFS workers. In the agriculturally lagging regions, the share of RNFS workers is found to be comparatively lower as compared to the other regions as well as amongst total main workers of the respective regions. Secondly, among the sub sectors of RNFS, in the well developed regions, manufacturing sector seems to be a strong sector. The agricultural development and better infrastructural facilities thus seem to have supported the development of RNFS. On the other hand, the share of the service sector is observed to be generally higher comparatively for the lagging regions. There is a possibility that due to the lack of any stimulus, the distress of the rural households has led to the expansion of informal service sector. Finally, as far as male – female composition of the RNFS is concerned, in absolute terms, the share of the female workers is lower. However, an increasing trend in female participation in the RNFS is observed.

As far as the Economic Census data is concerned, the major point that emerges is that there is a distinct increase in the agricultural ENTP as well as employment therein, at the state level as well as in all the major regions of the state. The increasing importance of allied activities is very clear. Thus, after reaching situation of plateau, agricultural growth has been stimulating growth in / is spilling over into the allied activity sector.

The factory sector also reveals regional disparities in number as well as employment is concerned. Western Maharashtra emerges as the most developed region - agriculturally as well as non-agriculturally.

The overall development in Maharashtra thus seems to be characterised by disparities. This clearly indicates a need for a strong stimulus for creation of better paying RNFS activities in the rural areas of the lagging regions of the state.

Notes :

1. Here, the term 'Rural Main Workers' includes main as well as marginal workers as the Census data (2001) on main and marginal workers has not been published separately for various categories .

2. Infrastructure Development Index is calculated as-

$$I_j = \sum_{i=1}^n w_i y_{ij}$$

Where- $y_{ij} = 100 * x_{ij} / x_{iA}$

where- x_{ij} = value of the i th indicator of the j th state/ district and
 x_{iA} = value of the i th indicator for all India

and

w_i is the weight of i th indicator such that $\sum_{i=1}^n w_i = 1$

The list of the indicators used here is given in (CMIE 2002), p.no. 2.

3. The Economic Census published by the Central Statistical Organisation defines an 'Establishment' as 'an enterprise run by employing at least one hired worker on a fairly regular basis'. 'Agricultural Establishments' are 'all Enterprises which are in agricultural sector viz. livestock production, agricultural services, hunting, trapping, forestry and logging, fishing. Enterprises engaged in activities pertaining to agricultural production and plantation are not considered as 'Agricultural Establishments'. 'Non-Agricultural Establishments' are the 'Enterprises engaged in economic activities other than agricultural activities'. These are Mining, Manufacturing, Gas-Electricity, Construction, Trade, Services etc. An 'Enterprise' here is 'an undertaking engaged in production of goods and/or services not for the sole purpose of own consumption'.

Chapter III

Socio-Economic Profile of the Sample Districts

3.1 Introduction

It was noted in the earlier chapter that the districts with better agricultural performance and better overall development also are the districts with higher proportion of RNFS employment. With this background, we look into various socio-economic, demographic characteristics of the sample districts and try to relate them to the pattern of RNFS employment of the concerned districts. This will provide us an idea about the correlates and the major factors determining the RNFS employment in the two districts.

Satara is a district in western Maharashtra, the most developed region of Maharashtra. On the other hand, Washim is a newly created district in the year 1998 by taking out some talukas from district Akola which falls in the Vidarbha region of the state. Therefore, wherever data for Washim is not available, data for the parent district Akola has been utilised for the purpose of the analysis.

3.2 Demographic Characteristics of the Sample Districts

Table 3.1 shows that the percentage shares of RNFS workers for Satara and Washim are 24.2 percent and 9.39 percent respectively. The concentration ratios for these districts are 12.15 and 4.62 respectively.

Table 3.1: Population in the Sample Districts - 2001.

	Satara	Washim
Total population	2796906	1019725
% of Rural population to total population	85.76	82.53
Density of population (per sq Km)	267	196
% change in rural population during 1961 and 2001	88.63	17.47
Rural main workers as % of rural population	36.92	39.77
% of cultivators and agricultural labourers in RMW	75.80	90.62
% of RNFS workers in RMW	24.20	9.38
Concentration ratio of RNFS workers	12.15	4.62
Literacy Rate-Rural	77.16	72.16
Total number of villages	1739	789
Total number of cities	15	4

Sources: GOM (2000-01a), CMIE (2000), GOM (2002b)

It can be seen that populationwise, Satara is a bigger district. The total population, density of population, number of villages and towns are higher for this district as

compared to that of Washim. Next, the rural population of Satara is growing at a faster rate than Washim. For both the districts, more than 80 percent of the population is in rural areas but the composition of rural workers is different in the districts. Nearly 90 percent of the workers in Washim are dependent on agriculture and barely 10 percent are engaged in RNFS. The percentages for Satara are 75 percent and 24 percent respectively. Finally, the literacy rate for Satara is higher than Washim, but the disparity is not very high.

It is also important to know the composition of RNFS employment and the dominant and lagging sectors within RNFS. We look into the distribution of RNFS workers into various sub-sectors in the years 1981 and 1991 to understand the change taking place over the years (table 3.2).

Table 3.2: Distribution of RNFS Workers in the Sample Districts.

Category	Satara		Washim	
	1981	1991	1981	1991
I	8.84	8.93	8.23	7.07
II	29.32	32.26	28.10	23.74
III	12.75	5.71	6.48	6.06
IV	13.88	14.89	17.41	18.69
V	7.01	8.68	7.17	5.56
VI	28.20	29.53	32.61	38.89
Total	100	100	100	100

Notes: 1. I-Mining and Quarrying, II- Manufacturing, Processing, Services and Repairs, III-Construction, IV-Trade and Commerce, V-Transport, Storage and Communication, VI-Other Services.2.Data for the category I also includes that on Allied activities, as separate data could not be obtained.

Source: General Economic Tables, Maharashtra, Census of India, (various years).

A few important trends are observed from the table. 'Manufacturing' is an important activity in both the districts for 1981 as well as 1991. However, its share is increasing in Satara and falling in Washim. Secondly, shares of 'construction' 'trade and commerce' and 'other services' are higher in Washim, the less developed region as compared to Satara in 1991. These observations are similar to those in chapter II. Thus in absence of a strong stimulus from the agricultural sector, the major activities are concentrated in the areas of 'services', 'trade' and 'construction' besides the 'manufacturing' sector.

3.3 Income of the Sample Districts

Figures in table 3.3 show that income wise Satara is a better-developed district. The district income of Satara is more than three times that of Washim. Similarly, per capita

income and the share of district income in the state income are also higher for Satara. An interesting point that can be noted is regarding the distribution of district income as well as TMW within sectors. For both the districts, the share of workers in the primary sector is proportionately very high than that of income generated in that sector. This reflects lower labour productivity in this sector. For the other two sectors, reverse picture is noted for both the districts. Particularly, it can be noted that the share of income in tertiary sector is very high for Washim- in absolute terms and in comparison with Satara too, though the share of TMW is as low as 9.5percent in this sector¹. The poverty ratio is seen to be higher for Washim (Akola) than for Satara.

Table 3.3: Income of the Sample Districts.

Income	Satara		Washim	
1.Total district income at 1993-94 prices (Rs in lakh)	340825		93111	
2.District per capita income at 1993-94 prices (Rs)	12236		9187	
3.Share of Sectors in DI and TMW(%) (2000-01)	DI	TMW	DI	TMW
Primary Sector	27.69	72.87	22.55	86.7
Secondary Sector	24.40	10.18	15.79	3.79
Tertiary Sector	47.91	16.94	61.65	9.51
4. % of district income to state income	2.34		0.64	
5.Poverty Ratio	24.64		30.78A*	
6.Lorenz Ratio	24.92		23.03A*	

Notes: 1.A* indicates data for Akola 2. DI= district income.

Sources: GOM (2001-01a), GOM (2002b).

3.4 Agricultural Development in the Sample Districts.

The figures in table 3.4 show that agriculture in Washim is mainly rain fed, the cropping pattern is less diversified and the yields of almost all the crops are lower than those for Satara. Not only the share of agricultural labourers in RMW is higher, the density of these labourers is also seen to be higher than that for Satara indicating agrarian structure dominated by the labourers and their pressure on the agricultural land. Number of tractors per unit of NSA indicates the extent of mechanisation. It can be seen that the value is quite small for Washim. Higher share as well as density of agricultural labourers and lower agricultural yields can be related to the higher poverty ratio (table 3.3).

Table 3.4: Agricultural Development in the Sample Districts

Agricultural Development	Satara	Washim
1.Net Sown Area (in 000ha) (1996-97)	570	387
2.Gross cropped area (in 000ha) (1996-97)	706	389
2.GIA/GCA (%) (1996-97)	31.44	3.86
4.Value of agricultural production(Rs./capita)(1995)	2234	2856A*
5.Number of tractors/NSA (1997)	1.66	0.21
6.% of agricultural labourers to RMW(2001)	23.91	56.59
7.% of agricultural labourers to NSA (2001)	50.47	60.51
8.Major crops	Jowar, Bajra, G.nut Sugarcane, Wheat, Gram	Jowar, Cotton Wheat, Gram
7.Average yield.(kg./ha)	Total foodgrains	996
(200-01)	Total pulses	446
	Sugarcane	91
	Groundnut	1285
	Cotton	322
8.% area under non foodgrain crops	19.75	38.93

Note: 1.RMW= rural main workers 2. A* indicates data for Akola

Source: GOM (2000-01a).

3.5 Availability of Infrastructural Facilities in the Sample Districts

For preparing table 3.5, data mainly relating to Akola, the parent district has been used. The data shows better position of Akola for some indicators but two important indices- infrastructure development index and the extent of urbanisation are seen to higher for Satara.

Table 3.5: Infrastructural facilities in the Sample Districts.

Infrastructural Facilities	Satara	Washim
Road length (per100sqm) (2001)	98.72	82.86A
% Length of rural roads (km.)(2001)	44.78	27.29
% of villages connected with roads (2001)	76.25	-
Factories (2000)	Number	318
	Employment	492 A
		23052
		11288 A
Bank branches (per lakh pop) (1995)	5.72	6.57 A
Bank Deposit (per lakh capital, Rs.) (1995)	1851	1089 A
Infrastructure Development Index (1995)	110.02	86.54 A
Urbanisation (percentile) rank (1995)	64	19 A
Villages electrified (% villages) (2001)	91.27	99.11

Note: A = Akola.

Sources: GOM (2000-01a), CMIE (2000)

3.6 Agricultural and Non Agricultural Activity by Enterprises in the Sample Districts

Economic census gives data on agricultural and non-agricultural enterprises in rural and urban areas. Table 3.6 presents the same for the two districts.

Table 3.6: Enterprises in Rural Areas of the Sample Districts-1998 (in percent)

Composition of Enterprises : Share of Agricultural and Non Agricultural OAEs and Establishments						
Category	Satara			Washim		
	Agl	Non agl		Agl	Non agl	
OAEs	95.33	71.08		83.10	74.93	
Establishments	4.67	28.92		16.90	25.07	
Total Enterprises	100	100		100	100	
Distribution of Agricultural and Non Agricultural OAEs and Establishments						
	Satara			Washim		
	Agl	Non agl	Total	Agl	Non agl	Total
OAEs	53.99	46.01	100	7.00	93.00	100
Establishments	12.38	87.62	100	4.38	95.62	100
Total	46.00	53.00	100	6.00	94.00	100

Note: OAEs = own account ENTP.

Source: GOM (2000).

It can be seen from the table that as far as the composition of enterprises is concerned, in both the districts, OAEs are dominating in their share in agriculture as well as non-agriculture. The disparity can be noted in the second part. Whereas in Satara, the share of agricultural ENTP to total is little less than 50 percent, it is just 6 percent in Washim. A similar picture is noted for employment as well. Thus, the important point emerging is that as has been mentioned in the earlier chapter, agricultural and infrastructural development in district Satara has given stimulus for development of agricultural ENTP. In Washim, weak agricultural development seems to have led to distress related expansion of non-agricultural activities.

Table 3.7: Share of Workers Employed in Enterprises in Rural Areas of Sample Districts. (In percent)

Category	Satara		Wahim	
	Agriculture	Non Agriculture	Agriculture	Non Agriculture
1.Total Workers	40	60	5	95
2.Hired Workers	7	93	2	98
3. 2 as % of 1	5.20	48.43	17.07	48.76

Source: GOM (2000)

It is also observed from the data presented in the fourth economic census, 1998 (GOM, 2000) that out of the total (rural+urban) agricultural enterprises in the state,

Satara and Washim have 7.45 percent and 1.94 percent enterprises respectively. As against this, the shares of non agricultural rural enterprises in Satara and Washim in the state as a whole are comparable i.e. 3.83 percent and 3.29 percent respectively. This probably indicates diversification of non-farm activity in Washim due to absence of strong stimulus from agricultural sector and therefore need to get pushed into non-farm activities in rural areas. A similar pattern is observed for employment in the ENTP. The share of persons employed in the agricultural ENTP is 7.68 percent in Satara and 1.69 percent (in total Maharashtra) in Washim respectively. As for the non-agricultural ENTP, the share was 1.98 percent for Satara and 1.71 percent for Washim.

Table 3.8 presents data relating to industry group wise share of ENTP in Satara and Washim. Here again, the share of agricultural ENTP and employment is seen to be the highest followed by 'retail trade' and 'community, social, personal services' in Satara.

Table 3.8: Share of Enterprises and Workers Employed in Enterprises according to Major Industry Groups in Rural Areas of Sample Districts. (In percent)

Industry Group	Satara		Washim	
	Enterprises	Workers	Enterprises	Workers
Agriculture	46.66	40.50	6.36	5.23
Mining and Quarrying	0.04	0.06	0.28	0.33
Manufacturing	9.42	14.66	20.32	25.23
Electricity, Gas and water	0.01	0.03	0.10	1.47
Construction	1.95	1.84	0.83	0.70
Wholesale Trade	1.55	2.33	0.44	0.36
Retail Trade	18.91	15.26	30.31	19.71
Restaurant and hotels	1.93	2.41	3.08	2.97
Transport	2.67	2.38	0.56	0.73
Storage and Warehousing	0.03	0.04	0.26	0.25
Communication	0.16	0.17	0.74	0.83
Financial Insurance, Real Estate and Business Services	3.66	3.31	1.37	1.72
Community, Social, Personal Services	13.01	17.01	35.35	40.49
Others (Unspecified Activities)	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00

Source: GOM (2000).

In Washim, on the other hand, share of agriculture is around 6 percent. It is the service activity (community, social, personal) and trade that occupies the highest position. The former includes workers providing various types of services which are mostly informal in nature and the market for these is characterised by ease of entry, small scale of operation etc. Therefore this category comprises a large number of workers.

Thus, comparatively higher share of this category depicts the underdeveloped nature of the rural economy of the district.

Therefore, it can be said that a better performance of the agricultural sector has stimulated growth of agricultural enterprises in Satara. These enterprises are mainly those engaged in livestock, forestry, fishery, logging. This also includes seed growing farms / nurseries. Thus, the expansion is towards allied activities carried out for commercial purposes. Also, in absolute terms, the number of agricultural as well as non agricultural ENTP is very large in Satara than in Washim. But the share of agricultural ENTP is very high in this district. The reverse is true for Washim where only 5-6 percent ENTP are in agriculture.

3.7 Concluding Observations

It is observed that the developed district Satara exhibits higher CR as well as larger number of workers (in absolute terms and as proportion) in the RNFS as compared to Washim- the comparatively less developed district. The data corroborates the picture emerging from the earlier chapter. Firstly, it exhibits a strong nexus between agricultural, infrastructural development and level of RNFS activity. Secondly, it also shows differences in the pattern of RNFS employment in the better and less developed districts and different causes of expansion of RNFS in both types of districts. Better performance of agricultural and manufacturing sector seems to have stimulated growth of RNFS sector in Satara as against in Washim, where the performance of both these sectors is weak. The growth of RNFS appears to be due to the push factors in presence of stagnant agricultural sector. Thus, it is the operation of pull factors and push factors in the better and less developed regions respectively that explains the expansion of RNFS.

Notes:

1. The figures of tertiary sector for Washim (DI=61.65 % and TMW =9.51%) seem to be very high/ unacceptable in comparison to other sectors of Washim and also of Satara. However, these have to be accepted as these were confirmed after the discussion with the officials of Directorate of Economics and Statistics, Mumbai.

Chapter IV

Rural Non -Farm Employment in the Villages: An Analysis of the Survey Results

4.1 Introduction

Rural non-farm sector includes diverse set of non-agricultural activities carried out at different scales of operation, having different working condition and productivity levels and therefore as has been said before, the approach has to be location specific. Thus, for better understanding of the RNFS, one has to look into micro-level data in a specific context. We look into the pattern of employment in the villages of sample districts selected on the basis of CR with respect to RNFS employment. The districts chosen here viz. Satara and Washim exhibit two different situations. As has been noted in the earlier chapter, the district with high CR of RNFS workers tends to be a better developed district in comparison with the district with lower CR. Similarly, the village clusters selected get classified as the ones near the class II town and the others - away from a class II town in the respective districts. Thus here, the initial level of development and distance criteria are considered to be major factors determining level of the RNFS employment. The micro level data in two districts is analysed in this section with an objective of finding the comparative pattern of RNFS employment and their correlates. First, for understanding the level of economic development of the villages, we look into the available village information. Next, we look into the pattern of RNFS employment in each of the two village sets as well as within the households and present a comparative picture for village sets in the same district and for village sets in two sample districts.

4.2 The Villages

We look into various aspects of the development of villages-the demographic aspects, occupational structure, agriculture and the infrastructure. Here, in the tables below, V1, V2, V3 and V4 stand for the four village clusters in the two districts. Thus, V1 and V3 are near (to the class II town) village clusters whereas V2 and V4 are the distant(from the class II town) village clusters in Satara and Washim respectively. A few major points can be noted from the table 4.1. Firstly, the total population and the number of households are less for Washim than for Satara. Secondly, the figures on literacy rate present some interesting points. It is expected that the literacy rates would be higher for

V1 and V3. However, this is not noted from the figures in the table. It possibly can be explained in terms of some location specific socio-cultural factors. This also means that level of agricultural/ infrastructural development may not be necessarily correlated with social indicators such as literacy. Thirdly, the extent of migrant population is seen to be comparatively higher for the nearer villages for Satara as well as Washim possibly indicating more number of employment opportunities in those villages, which are near urban areas.

Table 4.1: Demographic Details of the Sample Villages (2001)

Demographic Details	Satara		Washim	
	V1	V2	V3	V4
Tot population	9482	10979	2310	3339
% of female population	47.05	44.99	48.7	47.29
Tot. households	1934	2146	409	596
SC households	215 (11.12)	307 (14.31)	84 (20.54)	165(27.68)
ST households	-	4 (0.19)	10 (2.44)	-
% of total literate*	54.32	47.86	37.63	51.37
Literate males *	1780 (58.09)	2802 (59.38)	451 (53.06)	850 (61.42)
Literate females *	1381 (50.13)	1635 (35.92)	162 (20.8)	538 (40.82)
Migrant population				
1. Seasonal	17	30	26	28
2. Permanent	938	132	2	-

Notes: 1. Figures in the bracket are % in the respective category. 2. * = Figures are for the year 1991(census) as figures could not be obtained for 2001 for all the villages in the two districts.

Source: Records of Talathi / Gramsevak (Grampanchayat)

The occupational structure (table 4.2) shows that the villages in both the districts are basically agrarian with 70-90 percent of the households depending upon agriculture as labourers or as cultivators. The rest are engaged in non farm activities. In the mixed categories, the percentage of cultivators, working also as agricultural labourers or pursuing some allied activity is quite high in all villages. Similarly, such shares are higher for distant villages V2 and V4 than for V1 and V3. The percentage of agricultural labourers also pursuing some allied activity is comparatively less. This shows the complementarity between cultivation and livestock activity. As for the percentage of non-farm households, for V1 and V3, this percentage is seen to be comparatively higher- 17 percent and 27 percent respectively indicating higher extent of RNFS employment near urban areas. For V2 and V4, share of cultivator is seen to be very high.

In both the villages, the wage dependent households dominate the non-farm household category. Similarly, in both the villages, the first three categories of RNFS are seen to be the important as far as their shares are concerned.

Among the cultivator households, the pattern of land ownership is similar in the two districts. However, there is absence of large farmers in Washim and therefore, the average size of landholding is also lower for Washim.

Table 4.2: Details of the Occupational Distribution in the Sample Villages -2001

Households	Satara		Washim					
	V1	V2	V3	V4				
Breakup of Total Households								
Tot. Cultivators	1272 (65.8 %)	1867(86.99 %)	262(64.06 %)	492 (82.55 %)				
Tot. Agl. Labourers	319 (16.49 %)	120 (5.59 %)	33(8.07 %)	70(11.74 %)				
Tot. NFHH (landless HH)	343 (17.74 %)	159 (7.42%)	111 (27.14 %)	34(5.7 %)				
Households related to Agriculture								
1. Cultivators- size of landholding:								
a. Marginal (< 2 ha)	846 (66.51%)	1342 (71.88%)	174 (66.41%)	367 (74.59%)				
b. Small (2 -5 ha)	381 (29.95%)	486 (26.03%)	72 (27.48%)	95 (10.57%)				
c. Medium (5 -10 h)	38 (2.99%)	38 (2.04%)	16 (6.11%)	30 (6.09%)				
d. Large (10 -20 ha)	7 (0.55%)	10 (0.05%)	-	-				
2. HH with allied activities as the major occupation	65(3.36%)	554(25.82%)	33(8.07%)	42(7.05%)				
3. Agricultural labourers	319 (16.49%)	120 (5.59%)	33 (8.07%)	70 (11.74%)				
4. Mixture of 1 and 2	701(36.25%)	1996 (93.01%)	295 (72.13%)	544 (91.28%)				
5. Mixture of 2 and 3	354 (18.30%)	674 (31.41%)	90 (22.00%)	112 (18.79%)				
6. Mixture of 1 and 3	1115 (57.65%)	1987 (92.59%)	271(66.26%)	518 (86.91%)				
Categories of NFHH								
A. % of Self employed (SE) and wage dependent (WD) households in total households								
	SE	W	SE	W	SE	W	SE	W
a. Manufacturing, processing	1.65	1.9	0.05	3.31	1.22	2.93	-	-
b. Construction	0.05	9.15	0.14	1.35	2.69	7.34	-	2.69
c. Traders and Shopkeepers:	2.07	0.1	0.70	0.56	1.71	4.40	0.34	0.67
d. Transport	1.14	0.57	-	1.03	1.22	3.42	0.17	1.85
e. Service	0.72	0.36	0.23	0.05	0.49	1.71	-	-
f. Total	109	230	30	135	3	81		31

Notes: 1. NFHH= Non farm households 2. Figures in the bracket are the percentages to the total in the respective category, 2. For categories 2 to 6 under 'households related to agl.', figures in the bracket are % to the total households.

Sources: Records of Talathi / Gramsevak (Grampanchayat)

Table 4.3 shows that district Satara is far better than Washim regarding the availability of irrigation facilities. The cropping pattern is more diversified in Satara with sugarcane as the main commercial crop. Agriculture in Washim is thus mainly rain fed. Not only is the area under irrigation less, the major sources of irrigation like canals are completely

absent. This probably reflects on the less public investment in irrigation in this area for various reasons.

Table 4.3: Agriculture in the Sample Villages - 2003

	Satara		Washim	
	V1	V2	V3	V4
NSA	1236	2583	695	1446.7
Avg size of landholding	1.03	0.72	0.38	0.34
Average land irrigated	1.67	1.17	0.8	1.07
GIA/GCA (%)	59.06	97.36	7.93	8.24
% Area (net) under various sources of irrigation				
Tubewell / wells	71.92	44.41	87.69	100
Canal	28.08	36.22	-	-
Tanks	-	2.39	12.31	-
Others	-	18.91	-	-
Major crops grown	Sugarcane, Jowar, Tur, Bajara, Fodder, Wheat, Gram, Vegetables, Ponogranate,	Sugarcane, Jowar, Bajara, Wheat, Gram	Soybean, Tur Udid, Moong Hy. Jowar Wheat, Gram	Soybean, Tur Udid, Moong Hy. Jowar Cotton Wheat, Gram

Source: Records of Talathi / Gramsevak (Grampanchayat)

Table 4.4 shows that per household livestock, especially poultry, are higher for Satara. Within districts, it is higher for the distant village sets V2 and V4.. This corresponds to higher percentage of households engaged in allied activities. Better agricultural performance/ extent of agricultural activities and the extent of allied activities thus seem to be related.

Table 4.4: Total and Per Hundred Household Livestock Animals in Sample Villages

Type of livestock	Satara		Washim	
	V1	V2	V3	V4
Indigenous Cows	237 (12)	145 (53)	135 (33)	238 (40)
Crossbred Cows	432 (22)	2363 (110)	4 (0.9)	7 (1.1)
Male Buffaloes	5 (0.26)	77 (4)	4 (0.9)	2 (0.3)
Buffaloes (female)	220 (11)	481 (22)	146 (36)	215 (36)
Bullock	392 (20)	534 (25)	360 (88)	380 (64)
Goats	597 (30)	2748 (128)	310 (75)	425 (71)
Sheep	400 (21)	1188 (55)	-	-
Poultry	746 (39)	11687 (545)	55 (0.13)	645 (108)
Fisheries (units)	-	4	-	-
Bee Keeping units)	-	-	-	-
Others – if any	-	7	-	-

Note: The figures in the bracket are number of livestock animals per hundred households

Source: Records of Talathi / Gramsevak (Grampanchayat)

Table 4.5 indicates the availability of infrastructural facilities in the villages. It can be seen that the clusters in Satara are better off as far as the availability of some

infrastructural facilities is concerned. Within the districts, some of the facilities such as financial institutions are non-existent in the nearer clusters. This is because of availability of these facilities in the nearest town.

Table 4.5: A Comparative Account of Available Infrastructure within the Village Groups.

Items	Satara		Washim	
	V 1	V2	V3	V 4
A. Primary school	3	2	2	2
B. Health center	2	2	0	2
C. Veterinary dispensary	0	1	0	1
D. Motorable road	2	2	1	2
E. Financial institutions	0	3	0	1
F. Non-financial institutions	1	2	5	5
G. Non-Government institutions	2	5	0	4
H. Post harvest facilities	3	1	3	0

Notes: A. Primary school: 0:no, 1:public, 2:private, 3:both. B. Health Center 0:no, 1:public, 2:private, 3:both. C. Veterinary dispensary: 0:no, 1:public, 2:private, 3:both. D. Motorable road: 0: not available in any of the village, 1:available in few villages but not in all the villages of the cluster, 2: available in all the villages. E. Financial institutions: 1:post office, 2:commercial bank, 3:both, 0:none of them .F. Non-financial institutions: 1:Private training center, 2:Government training center, 3:both type of training centers, 4:KVIC office. 5:none of these G. Non-Government institutions: 1:cooperative, 2:SHGs, 3:active NGOs for rural development, 4:two out of the three institutions, 5: all the three institutions, 0:None.H. Post harvest facilities: 1:existence of storage facility, 2: existence of regulated Market, 3:existence of processing units, 4: existence of two out of the three indicator, 5: existence of all the three facilities, 0: absence of all.

Source: Discussions with the village officials.

4.3 The Sample Households

The lowest unit of analysis is the household, therefore we look into various demographic and economic characteristics of the sample households. This would give us an undersatnding of socio-economic status, standard of living etc. of the sample households. Since our objective here is to look into the pattern of employment in case of households of the village, based on industry categories, we analyse the data by major industry / household category. These categories are already mentioned in the section on methodology in chapter one. However, we use here the shortforms for saving space¹.

4.3.1 Demographic Characteristics of the Sample Households

The major point emerging out of table 4.6 is higher average family size for the landholding category as well as for the wholesale trading households for both village sets.

These - farming and trading are perhaps the activities where the business is traditional and which can support bigger families.

Table.4.6: Categorywise Average Size of Family in Sample Households

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. farm HH	5.75	5	6.25	4.5
Manf. Proc. Ser. Rep.	4.25	4.75	5.33	4.33
Pvt Con.	4.75	5.5	4.8	4.5
Govt aided Con /AL	4.2	4.83	5	3.88
Wholesale trading	5	8	7	5
Retail trading	4.25	5.4	5.33	6
Trans. Strg. Com	3.67	3.67	4.5	3.33

Education is an important indicator of socio-economic standing of the family. Particularly for understanding the participation of the household in a non farm activity, it is important to know the educational background of the family as better education increases the chances that a household participates in better paying non farm activity.

Table 4.7: Categorywise Average Percentage of Non-literate in the Sample Households

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. farm HH	20	66.67	36.81	40
Manf. Proc. Ser. Rep.	25	53.97	53.33	25
Pvt Con.	32.5	16.67	58.33	50
Govt aided Con /AL	35	46.67	27.78	51.67
Wholesale trading	-	16.67	-	-
Retail trading	16.67	50	26.88	20
Trans. Strg. Com	35	43.33	40	35

The percentage of non-literates is very less for V1 in Satara than V2 as well as V3 and V4 indicating awareness regarding education and availability of educational services in the nearer villages. Within the categories, the percentage is nil / low for the wholesale trading categories in all villages indicating their better economic and social status.

The figures showing educational attainment are presented in table 4.8. These are concentrated in the middle category of educational attainment for all the villages. Similarly, the extent of members taking senior secondary education and above is more in V1. Categorywise, it can be said that the ability / motivation to go for secondary education and above is seen to be higher in case of landed and trading household. However, for the construction categories, this is found to be comparatively low.

Table 4.8: Categorywise Average Number of Family Members indicating Educational Attainment

Category	Formal schooling till class 3 or less				Class 4/5 +Secondary + Class 6-9+Class XI				Senior Secondary and above			
	Satara		Washim		Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	1.5	1	1.5	1.67	2.75	3	2.88	3	2.67	1.67	1	1
Manf. Proc. Ser. Rep.	-	-	2	1	2.75	3	2	2.67	2	3	-	1
Pvt Con.	1.5	-	1.33	1.5	2	4	2.25	2.25	1	-	1	-
Govt aided Con /AL	1	1.5	1	1	2	1	2.33	2.43	1.5	-	-	1
Wholesale trading	-	-	1	-	3	4.5	2	4	3.5	1	3	1
Retail trading	-	1.67	1	1.67	2.25	3	3.17	3.75	1.25	-	1.5	1
Trans. Strg. Com	-	-	1	1	1.67	1.67	2.75	1.33	1	1	1	1

4.3.2 Economic Characteristics of the Sample Households

We look into various indicators for understanding the employment and income pattern as well as asset position of the sample households in this section. Table 4.9 presents categorywise average number of days of employment per household.

Table 4.9: Categorywise Average Days of Employment Per Household

Category	Satara		Washim	
	V1	V2	V3	V4
Sm- Marg- farm HH	278.81	212.34	211.45	160.81
Manf. Proc..Ser.Rep.	184.8	172.95	136.89	213.94
Pvt.con.	177.42	138	180.26	112.67
Govt. aided con./AL	192.33	152.08	121	169.31
Wholesale trading	320	267	336	336
Retail trading	276.3	232	219.83	198
Trans. Strg.Com.	190.67	142.53	235.75	164.78

It can be seen that the average days of employment are generally higher for Satara- V1 and V2 than for Washim -V3 and V4. Within the districts, figures for the nearer villages-V1 and V3 are higher than the distant one- V2 and V4 respectively. As for the categories, the wholesale trading category households and the landed households have very high average employment days. As expected, the construction workers are seen to be having lowest days of employment. A few points clearly emerge from data. Firstly, agriculture based households are able to engage themselves in comparatively more number of days of employment. Secondly, within the RNFS, a similar picture is noted for the wholesale trading category. Thirdly, proximity to the urban area positively affects the number of days of

employment. This might be because of integration of markets of the concerned town and the village. Availability of better infrastructure- physical and social supplements this.

We also look into the sources of income of the households. This gives an idea about the extent of diversification of the household in various activities. This diversification may be more because of the ability to diversify or more because of need for it. Firstly, it can be clearly noted from table 4.10 that the average number of sources of income per household is higher for Satara than for Washim, generally for all categories. Secondly, the number of sources are generally more for the nearer villages in both districts and thirdly, the landed households are seen to be having more number of sources in all villages. This probably indicates better access to various employment opportunities, willingness, ability or need of this category households to participate in the RNFS activities. The category of AL occupies the lowest position in this regard generally in all villages. Thus, on the whole, a positive relation between average number of employment days and average number of sources of income is found except for the trading category. Thus, for this category, it seems that there is no pressing need for diversification into various economic activities.

Table 4.10: Categorywise Average Number of Sources of Income

Category	Satara		Washim	
	V1	V 2	V 3	V4
Sm-Marg. Farm HH	2.63	2.38	2.5	2.25
Manf. Proc. Ser. Rep.	2.25	2.5	2	1.67
Pvt Con	2	2.5	2.2	2
Govt aided Con /AL	2.2	2.17	1.67	1.38
Wholesale trading	3	1.5	2	1
Retail trading	2.4	2	2.33	1.75
Trans. Strg. Com	2	2.33	2	2

It is also important to know whether there is any relationship between number of days of employment, sources of income and the economic status of the households. Several indicators, based on the data collected, are used here for the analysis. An important indicator of well being of the household is whether it holds an account in the bank, as this would indicate awareness of the household and the need to have a bank account due increasing income. Table 4.11 shows that for Satara, households in all categories have bank account as against Washim. The percentage is less for the category of agricultural labourers. For Satara and Washim all the households in wholesale trading category have bank account.

Table.4.11: Categorywise Percentage of Households with a Bank Account

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. farm HH	100	87.5	100	87.5
Manf. Proc. Ser. Rep.	100	75	-	66.67
Pvt Con.	25	100	-	25
Govt aided Con /AL	80	50	-	25
Wholesale trading	100	100	100	100
Retail trading	100	100	66.67	50
Trans. Strg. Com	100	66.67	-	66.67

The figures indicate availability of financial services, awareness regarding the same and the need felt by the households to open an account for the safety/ growth of higher / surplus incomes in developed region of Satara.

We also look into the ownership of livestock animals with the households. Table 4.12 shows higher frequency of animals per household in the distant towns and for the landed households. A similar picture was also observed for the entire village as such as far as the village level information is concerned (see table 4.4).

Table 4.12: Categorywise Average Frequency² of Animals with the Households

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. Farm HH	7.29	15.57	5.5	6
Manf. Proc. Ser. Rep.	280*	3.33	-	1.5
Pvt Con.	9.5	-	-	2
Govt aided Con /AL	4.33	7.67	-	1.75
Wholesale trading	-	-	7	4
Retail trading	-	7.5	1.5	4
Trans. Strg. Com	12	-	1	2

Note: * the figure is very high as only one household has 550 hens.

The economic condition of the households can also be judged from the type of the household they live in and the amenities available to them. It can be seen from table 4.13 that almost all households have their own dwelling.

It is noted from table 4.14 that a few households in Satara have concrete roof for their house. Majority of the households are seen to be having tiled roof. But for Washim, only one household is reported to be having concrete roof. Majority of households in Washim are found to be having low quality roofs, i.e. under category 'other' (e.g. tin roofs). Similarly, among the various categories, larger proportion of construction households, specifically AL, have roof of the category 'other'.

Table 4.13: Categorywise Total Frequency and Percentage of Dwelling House Ownership

Category	Satara				Washim			
	V1		V2		V3		V4	
	H	SO	H	SO	H	SO	H	SO
Sm-Marg. Farm HH	-	8(100)	-	8(100)	-	8 (100)	1 (12.5)	7 (87.5)
Manf. Proc. Ser. Rep.	-	4(100)	-	4(100)	-	3 (100)	-	3 (100)
Pvt Con	2 (50)	2(50)	-	2 (100)	-	5 (100)	-	4 (100)
Govt aided Con /AL	-	5(100)	-	6 (100)	-	3 (100)	-	7 (100)
Wholesale trading	-	2 (100)	-	2 (100)	-	1 (100)	-	1 (100)
Retail trading	-	4 (100)	-	5 (100)	-	6 (100)	-	4 (100)
Trans. Strg. Com	1(33.33)	2(66.67)	-	3 (100)	-	4 (100)	1 (33.33)	2 (66.67)

Note: H= hired, SO = self-owned.

Table 4.14: Categorywise Total Frequency and Percentage of Self-owned Houses Based on Roof.

Category	Satara							
	V1				V2			
	Tcr.	Tr.	Cr.	Oth.	Tcr.	Tr.	Cr.	Oth.
Sm-Marg. Farm HH	1(12.5)	6 (75)	1(12.5)	-	1(12.5)	5 (62.5)	1 (12.5)	3(37.5)
Manf. Proc.Ser. Rep.	-	3 (75)	1(25)	-	2 (50)	1 (25)	-	1 (25)
Pvt Con	3 (75)	-	-	1 (25)	1 (50)	-	-	1 (50)
Govt aided Con /AL	1 (20)	1 (20)	-	3 (60)	1(16.67)	1(16.67)	1(16.67)	3 (50)
Wholesale trading	-	1 (50)	1(50)	-	-	-	2 (100)	-
Retail trading	-	2 (50)	-	2 (50)	-	4 (80)	1 (20)	-
Trans. Strg. Com	1(33.33)	-	1(33.33)	1(33.33)	1 (33.33)	2 (66.67)	-	-
Category	Washim							
	V3				V4			
	Tcr.	Tr.	Cr.	Oth.	Tcr.	Tr.	Cr.	Oth.
Sm-Marg. Farm HH	-	4 (50)	1(12.5)	4 (50)	-	2(25)	-	6(75)
Manf. Proc. Ser. Rep.	1(33.33)	-	-	2(66.67)	1(33.33)	-	-	2(66.67)
Pvt Con.	3 (60)	-	-	2 (40)	1(25)	-	-	3(75)
Govt aided Con /AL	-	-	-	3(100)	2(25)	-	-	6(75)
Wholesale trading	-	1(100)	-	-	-	1(100)	-	-
Retail trading	-	3(50)	-	3(50)	-	1(25)	-	3(75)
Trans. Strg. Com	-	2(50)	-	2(50)	1(33.33)	-	-	2(66.67)

Note: Tcr - Thatched roof, Tr- Tiled roof, Cr - Concrete roof , Oth: Any other.

Table 4.15 shows that 1/3 to 2/3 of all the households in both the village sets have reported presence of latrine in Satara. As against this, in Washim, this number is very small. Within the districts, the distant villages -V2 and V4 have more number of households without this facility.

Table 4.15: Categorywise Total Frequency and Percentage of Households having Latrine

Category	Satara				Washim			
	V1		V2		V3		V4	
	Yes	No	Yes	No	Yes	No	Yes	No
Sm-Marg. Farm HH	6(75)	2 (25)	2(25)	5(62.5)	1(12.5)	7(87.5)	1(12.5)	7(87.5)
Manf. Proc. Ser. Rep.	2 (50)	2 (50)	-	4 (100)	-	3(100)	1(33.33)	2(66.67)
Pvt Con	3(75)	1 (25)	2(100)	-	1(20)	4(80)	-	4(100)
Govt aided Con /AL	1(20)	4 (80)	2(33.33)	4(66.67)	-	3(100)	-	7 (100)
Wholesale trading	1 (50)	1 (50)	2(100)	-	1(100)	-	-	1 (100)
Retail trading	1 (25)	3 (75)	2(40)	3(60)	3(50)	3(50)	-	4(100)
Trans. Strg. Com	1(33.33)	2(66.67)	1(33.33)	2(66.67)	-	4(100)	-	3(100)

Note: Figures in the bracket indicate % of households in that category.

Table 4.16: Categorywise Total Frequency and Percentage of Households having Furniture.

Category	Satara							
	V1				V2			
	B	C	T	Oth.	B	C	T	Oth.
Sm-Marg. Farm HH	6(75)	7(87.5)	7(87.5)	1(12.5)	8(100)	6(75)	4(50)	1(12.5)
Manf. Proc. Ser. Rep.	4 (100)	4 (100)	3(75)	1(25)	1(25)	1(25)	-	-
Pvt Con.	3(75)	2(50)	-	-	2(100)	1(50)	-	-
Govt aided Con /AL	5(100)	3(60)	1(20)	1(20)	4(66.67)	3(50)	2(33.33)	-
Wholesale trading	2(100)	2(100)	2(100)	1(50)	2(100)	2(100)	1(50)	-
Retail trading	4(100)	3(75)	3(75)	1(25)	5(100)	2(40)	1(20)	-
Trans. Strg. Com	3(100)	3(100)	1(33.33)	-	2(66.67)	2(66.67)	1(33.33)	-
	Washim							
	V3				V4			
	B	C	T	Oth.	B	C	T	Oth.
Sm-Marg. Farm HH	8(100)	6(75)	5(62.5)	-	8(100)	8(100)	6(75)	1(12.5)
Manf. Proc..Ser. Rep.	2(66.67)	-	-	-	1(33.33)	2(66.67)	2(66.67)	1(33.33)
Pvt Con.	5(100)	1(20)	1(20)	-	1(25)	1(25)	-	-
Govt aided Con /AL	1(33.33)	-	-	-	5(62.5)	2(25)	-	-
Wholesale trading	1(100)	1(100)	1(100)	-	1(100)	1(100)	1(100)	-
Retail trading	5(83.33)	4(66.67)	3(50)	-	3(75)	3(75)	-	-
Trans. Strg. Com	4(100)	3(75)	3(75)	-	2(66.67)	1(33.33)	1(33.33)	-

Note: B - Beds, C - Chairs, T -Tables, Oth - Any other.

From table 4.16, it can be seen that majority of the households have minimum furniture i.e. bed and also chair and table to some extent in both the districts. The households in the category of private construction and agricultural labourers in both districts are seen to be the worst category as far as availability of furniture is concerned. Only a few households in Satara are seen to be having additional furniture under the heading 'other'. Similarly, the better off position of landholding class and trading classes in both the districts and village sets is clearly noted.

A similar picture is noted in case of consumer durables also (table 4.17). Among all the village sets, V4 in Washim occupies the lowest position whereas V1- Satara is the first in the hierarchy. Similarly, among various household groups, private construction households and the agricultural labour households are lowest in the hierarchy as far as the ownership of consumer durables is concerned. This points towards better economic status of households in the nearer village in the developed district.

Table 4.17: Categorywise Total Frequency and Percentage of Households having Consumer Durables

Category	Satara									
	V1					V2				
	R	B	T	M	Oth	R	B	T	M	Oth
Sm-Marg. Farm HH	8(100)	8(100)	8(100)	2(25)	5(62.5)	6(75)	8(100)	5(62.5)	1(12.5)	-
Manf..Proc Ser. Rep.	3(75)	4(100)	4(100)	2(50)	1(25)	1(25)	3(75)	1(25)	-	-
Pvt Con.	2(50)	4(100)	3(75)	1(25)	1(25)	1(50)	1(50)	-	-	1(50)
Govt aided Con /AL	3(60)	5(100)	4(80)	-	1(20)	2(33.33)	5(83.33)	1(16.67)	-	-
Whosale Trading	2(100)	2(100)	2(100)	2(100)	1(50)	2(100)	2(100)	2(100)	1(50)	2(100)
Retail Trading	4(100)	4(100)	4(100)	2(50)	-	5(100)	4(80)	3(60)	-	1(20)
Trans. Strg. Com	2(66.67)	2(66.67)	1(33.33)	1(33.33)	1(33.33)	2(66.67)	2(66.67)	1(33.33)	-	1(33.33)
Category	Washim									
	V3					V4				
	R	B	T	M	Oth	R	B	T	M	Oth
Sm- Marg-farm HH	6(75)	6(75)	7(87.5)	2(25)	-	3(37.5)	5(62.5)	4(50)	-	-
Manf. Proc.Ser.Rep	1(33.33)	1(33.33)	-	-	-	1(33.33)	2(66.67)	1(33.33)	-	-
Pvt.Con.	2(40)	2(40)	1(20)	-	-	1(25)	1(25)	-	-	-
Govt. aided con/AL	-	-	-	-	-	2(25)	4(50)	-	-	-
Whosale trading	1(100)	1(100)	1(100)	-	-	1(100)	1(100)	1(100)	-	-
Retail trading	4(66.67)	5(83.33)	4(66.67)	1(16.67)	-	1(25)	3(75)	2(50)	-	-
Trans. Strg.Com.	2(50)	4(100)	3(75)	1(25)	-	1(33.33)	1(33.33)	-	-	-

Note: R= radio, B= bicycle, T =television, M= motor driven, oth= others.

An important indicator of standard of living of the households is the technology used for cooking purposes. It is seen from table 4.18 that the number and percentage of households in V1 in Satara having atleast two sources of fuel is comparatively higher than in Washim. In this

district, unlike Satara, very few households are seen to own gas. Similarly, no household in has three sources of fuel as against Satara. The major sources in V3 and V4 are thus, wood and Kerosene. It can also be noted that a similar hierarchy of the households in various categories as in the earlier tables is noted.

Table 4.18: Categorywise Total Frequency and Percentage of Households with Availability of Technology for Cooking Purpose

Category	Satara											
	V1						V2					
	W	k	w+k	w+g	k+g	w+k+g	W	K	w+k	w+g	K+g	W+k+g
Sm- Marg-farm HH	-	-	-	-	7(87.50)	1(12.5)	5(62.5)	-	1(12.5)	-	-	2(25)
Manf. Proc Ser.Rep.	1(25)	-	-	-	2(50)	1(25)	3(75)	1(25)	-	-	-	-
Pvt.Con.	1(25)	-	1(25)	-	-	1(25)	1(50)	-	1(50)	-	-	-
Govt. aided con./AL	1(20)	-	1(20)	2(40)	-	1(20)	4(66.67)	-	1(16.67)	-	-	1(16.67)
Wholesale trading	-	-	-	-	2(100)	-	-	-	-	-	1(50)	1(50)
Retail Trading	-	-	1(25)	-	1(25)	2(50)	2(40)	-	-	-	2(40)	1(20)
Trans. Strg.Com.	-	-	1(33.33)	-	1(33.33)	1(33.33)	1(33.33)	-	1(33.33)	-	1(33.33)	-
Category	Washim											
	V3						V4					
	W	k	w+k	w+g	K+g	w+k+g	W	K	w+k	w+g	k+g	w+k+g
Sm- Marg-farm HH	2(25)	-	3(37.5)	-	3(37.5)	-	4(50)	-	3(37.5)	-	-	-
Manf. Proc.Ser.R ep.	2(66.67)	-	1(33.33)	-	-	-	1(33.33)	-	2(66.67)	-	-	-
Pvt.Con.	2(40)	-	3(60)	-	-	-	3(75)	-	1(25)	-	-	-
Govt. aided con.	3(100)	-	-	-	-	-	6(75)	-	2(25)	-	-	-
Wholesale trading	-	-	-	-	1(100)	-	-	-	-	-	1(100)	-
Retail trading	2(33.33)	-	2(33.33)	-	2(33.33)	-	3(75)	-	-	-	1(25)	-
Trans. Strg.Com.	1(25)	-	1(25)	-	2(50)	-	2(66.67)	-	1(33.33)	-	-	-

Note: - W =wood, K =kerosene, G = gas

It is clearly noted from the above data that the landed category and the wholesale trading category households are better off as far as their economic status is concerned in comparison with the other category households. For these other households, number of days of employment, diversification into various activities and the overall economic status are all at a lower level. This indicates that these households are not able to participate in the better paying nonfarm activities.

4.4 Subsidiary Sources of Income of the Sample Households

We have looked into the average number of sources of income of the categories in table 4.10. We again look into the same issue in detail. It can be seen from table 4.19 that most of the categories have households having subsidiary sources of income in both the districts. Very few households in the category of agricultural labourers have subsidiary sources of income probably indicating their inability to participate in various labour markets.

Table 4.19: Categorywise Percentage of Households Reporting Various Subsidiary Sources of Income

Categories	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. farm HH	100	100	100	100
Manf. Proc. Ser. Rep.	100	100	100	66.67
Pvt Con.	100	100	100	25
Govt aided Con /AL	60	16.67	-	12.5
Wholesale trading	-	100	100	-
Retail trading	100	60	100	50
Trans. Strg. Com	100	100	75	100

A similar picture arises from the data on average number of subsidiary sources of income (table 4.20). For landed categories, this figure is higher than for other categories in both the districts. For trading categories, the value is small as the traditional family business perhaps provides sufficient income for each family member. This thus corresponds to data in table 4.18.

Table 4.20: Categorywise Average Number of Subsidiary Sources Per Household

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. farm HH	1.63	1.25	1.25	1.13
Manf. Proc..Ser. Rep.	1.5	1.25	1	0.67
Pvt Con.	1	1.5	1	1
Govt aided Con /AL	0.6	0.4	-	0.13
Wholesale trading	-	1	1	-
Retail trading	1	1	1	0.75
Trans. Strg. Com	1	1.33	1.33	1

Table 4.21 presents the figures for the most important subsidiary activities the households are engaged in. It can be seen that the concentration is in the service category for both the districts. Within districts, it was already noted that the average number of subsidiary sources of income (table 4.20) is lesser for households in Washim.

Within the available sources of income, the trading and landed categories have entries under 'service' and 'allied activities'.

Table 4.21: Categorywise Percentage of Households Engaged in Transport, Service, and Allied Activities as Subsidiary Sources of Employment/ Income

Category	Transport				Service				Allied activity			
	Satara		Washim		Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	12.5	-	-	-	50	12.5	-	-	62.5	87.5	25	25
Manf. Proc. Ser. Rep.	-	-	-	-	50	50	-	-	25	-	-	-
Pvt Con.	-	-	-	-	50	50	-	-	-	-	-	-
Govt aided Con /AL	-	-	-	-	-	20	-	12.5	-	-	-	-
Wholesale trading	-	50	-	-	-	-	100	-	-	50	-	-
Retail trading	-	-	-	-	40	20	33.33	-	-	20	-	-
Trans. Strg. Com	-	-	-	-	-	-	25	-	-	-	-	-

4.5 Allied Activities of the Sample Households

It has already been noted that allied activity is an important source of income for many households, especially the cultivating ones. In this section, we look into the importance of allied activity for the sample households in terms of employment and income and get a comparative picture across the villages.

As is observed in the earlier tables, here also in table 4.22, it can be seen that allied activity is mainly an activity pursued by landholding classes. In Satara, trading category also is engaged in this activity. It is indicated that this activity is mainly carried on by better off / landed classes which can maintain the livestock animals.

Table 4.22: Categorywise Average Percentage of Households with Allied Activity.

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. Farm HH	62.5	87.5	25	25
Manf. Proc..Ser. Rep.	25	-	-	-
Wholesale trading	-	50	-	-
Retail trading	-	20	-	-

Note: Categories with nil entry in the cell have been excluded.

Within the households also, the percentage of family members engaged in the allied activity is seen to be quite high especially for Satara (table 4.23) Thus, livestock activity seems to be very important for the whole household as such.

Table 4.23: Categorywise Average Percentage of People in the Households Engaged in Allied Activity (In percentage)

Category	Satara		Washim	
	V1	V2	V3	V4
Sm-Marg. Farm HH	88	92.85	75	75
Manf. Proc..Ser. Rep.	66.67	-	-	-
Wholesale trading	-	100	-	-
Retail trading	-	100	-	-

Note: Same as in table 4.21

As for the composition of household members engaged in allied activity of the household, the percentage of males in the households is seen to be greater than that of the females. This difference is greater for Washim (table 4.24).

Table 4.24: Categorywise Percentage of Males and Females in engaged in Allied Activity.

Category	Males				Females			
	Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	50	54.44	66.67	66.67	50	45.56	33.33	33.33
Manf. Proc.Ser. Rep.	50	-	-	-	50	-	-	-
Wholesale trading	-	100	-	-	-	-	-	-
Retail trading	-	75	-	-	-	25	-	-

Note: Same as in table 4.21

Table 4.25 presents household income in a good month as well as a bad month from allied activity. A similar picture as in the case of earlier tables emerges from this table. Firstly, the absolute figures are greater for Satara than for Washim. Secondly, total as well as per capita income is seen to be higher for the distant villages in both the districts. Among the categories, the landed category is seen to be generating highest income from allied activities.

Table 4.25: Categorywise Average Monthly and Per Capita Income for Workers in Sample Households Engaged in Allied Activity

Category	Good month				Bad month			
	Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	19,850 (7528.57)	16571.4 (16571.4)	3333.33 (1175)	14400 (5400)	8,560 (3252.57)	10619.76 (6227.05)	1733.33 (595)	12200 (4575)
Manf. Proc. Ser. Rep.	1500 (750)	-	-	-	1000 (500)	-	-	-
Wholesale trading	-	6250 (3125)	-	-	-	3125 (1562.5)	-	-
Retail Trading	-	3750 (2142.86)	-	-	-	2375 (1357.14)	-	-

Note: 1. Note: Same as in table 4.21 2. Figures in the bracket indicate per capita income from allied activity

4.6 Activity Status of Workers in the Sample Households

Working members of the households can be classified as self employed, salaried or casual workers. In this section we look into the pattern of employment as revealed from data relating to the activity status of the workers. It can be seen from table 4.26 that self-employed workers are mainly concentrated in the landed and the trading households. Thus, these activities are seen to be supporting majority of the household members. Comparatively, the extent of salaried people is less specifically in Washim, indicating lesser extent of organised activity in this region. The proportion of casual workers in each household is seen to be highest.

Table 4.26: Categorywise Activity Status of workers (In percentage)

Category	Self employed				Salary employed				Casual labour			
	Satara		Washim		Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	68	88	93	100	51	25	-	-	100	75	73	75
Manf. Proc..Ser. Rep.	71	61	-	89	42	42	-	-	67	61	75	100
Pvt Con.	42	100	-	-	50	25	50	-	92	63	90	100
Govt aided Con /AL	33	67	-	-	50	-	-	50	83	73	100	88
Wholesale trading	100	100	100	100	-	-	-	-	-	-	-	-
Retail trading	95	100	73	100	20	50	100	-	-	75	60	75
Trans. Strg. Com	50	-	58	-	50	33	42	44	75	89	50	72

Note: The percentage of the three categories for a village does not add up to hundred as these are average figures and secondly, these are not exclusive categories as there are cases of individuals having more than one occupation with different activity status.

A look at table 4.27 shows that the employment pattern of the male workers is more diversified in terms of activity status than the female workers. Female workers are mainly self employed thus, participating in the household business activity along with the domestic chores. They are also working as casual labourers, particularly as agricultural labourers. Comparatively few females are observed as salaried workers. This might be because of difficulty to get salaried jobs and marginal status of female workers who join and withdraw from the workforce as and when required. This flexibility perhaps does not exist for salaried jobs.

Table 4.27: Categorywise Activity Status of Male and Female Workers (In Percentage)

Males	Self employed				Salaried				Casual labour			
	Satara		Washim		Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	63	83	100	100	63	50	-	-	100	100	83	100
Manf.Proc.Ser. Rep.	75	83	-	100	75	50	-	-	100	50	100	100
Pvt Con.	33	100	-	-	100	50	100	-	92	75	100	100
Govt aided Con /AL	33	100	-	-	50	-	-	100	80	100	100	100
Wholesale trading	100	100	100	100	-	-	-	-	-	-	-	-
Retail trading	100	100	79	100	50	100	100	-	-	50	75	100
Trans. Strg. Com	100	-	67	-	100	50	67	83	100	83	100	75
Females	Self employed				Salary employed				Casual labour			
	Satara		Washim		Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
Sm-Marg. Farm HH	100	83	93	100	-	50	-	-	-	100	73	100
Manf. Proc..Ser. Rep.	100	83	-	100	-	50	-	-	100	50	75	100
Pvt Con.	-	100	-	-	-	50	50	-	100	75	90	100
Govt aided Con /AL	-	100	-	-	-	-	-	100	100	100	100	100
Wholesale trading	100	100	-	100	-	-	-	-	-	-	-	-
Retail trading	100	100	73	100	-	100	100	-	-	50	60	100
Trans. Strg. Com	-	-	58	-	100	50	42	83	100	83	50	75

Note: Same as in case of table 4.25

4.7 Activity Status of Workers and the Characteristics of the Households

In this section we look at some of the characteristics of the households by the activity status of their members.

4.7.1 Self Employed Workers in the Sample Households

In case of self-employed workers, we look into their monthly income (total as well as per capita) and also the location of the activity the members are engaged in.

It can be seen from table 4.28 that the absolute values of total income are greater in Satara than the corresponding ones in Washim. Except for the trading category, values for V1 are generally higher. For trading, this might be because of larger extent of business/activity due to being distant from the town. Thus, there is greater need for becoming self-sufficient than the near villages wherein the size of market for various commodities can be smaller due to the nearness to the class II town. A similar pattern is noted for the per capita figures.

Table 4.28: Average Monthly Income for Self Employed Class Workers in Different Industrial Categories in the Sample Villages.

	Good month				Bad month			
	V1	V2	V3	V4	V1	V2	V3	V4
Sm- Marg-farm HH	25100	6718.02	2951.39	3009.52	13914.81	19666.25	1636.81	2175.4
Manf. Proc .Ser.Rep.	1936.36	1635.71	-	1450	772.73	1150	-	883.33
Pvt.Con.	1200	750	-	-	600	400	-	-
Govt. aided con./AL	5000*	1900	-	-	2000	700	-	-
Wholesale trading	2250	5285.71	10500	120000	1037.5	2500	2750	75000
Retail Trading	2788.89	4440	3190	9236.36	1070.56	2101	1500	6036.36
Trans. Strg.Com.	3000	-	5500	-	1000	-	2166.67	-

Note: * = This is very high as the (only) worker in that category is a construction contractor

Table 4.29 shows the type of location of the activity. Among the districts, the frequency values are higher for Satara than for Washim for all the three types of location indicating greater activity in case of households in Satara. For the category of the landed households, there are members who carry out their activity in all the three types of premises. This means that that these members besides farming are engaged in other activities also which can be carried out along with farming. It can also be noted that for the construction categories, the values are very less for Satara. This indicates lesser participation of this class in the economic activities.

Table 4.29: Categorywise Average Frequency of Self Employed Workers Operating the Enterprise by Type of Location of the Enterprise.

Category	Inside Home				Outside home but closed premises				Outside and open air			
	Satara		Washim		Satara		Washim		Satara		Washim	
	V1	V2	V3	V4	V1	V2	V3	V4	V1	V2	V3	V4
Sm- Marg farm HH	2	2.25	1.5	-	2.29	2.67	1.75	1.75	2	1.67	2	2
Manf. Proc. Ser.Rep.	4	1	-	1	1.5	1	-	1.67	-	3	-	-
Pvt.Con.	-	-	-	-	-	-	-	-	1	2	-	-
Govt. aided con./AL	-	-	-	-	-	1	-	-	1	1.5	-	-
Wholesale trading	2	2	-	2	4	2	2	-	2	1	-	-
Retail trading	3.5	1.5	1.67	2.5	-	4	1.67	2.5	2	4	1	1
Trans. Strg. Com.	-	-	-	-	-	-	-	-	1	-	1	-

4.7.2 Casual Workers

For casual labourers, we look into their major activities and the modes of payment. It can be seen from table 4.30 that the major occupation of the casual labourers is as agricultural labourers (AL) followed by construction labourers in both the districts. Among the districts, the total frequency of AL for all categories of Washim is seen to be highest thus indicating lesser extent of diversification in this region than Satara. This is also clear from the fact that there are no entries of casual labourers for categories 'transport' and 'miscellaneous'.

Table 4.30: Categorywise Total and Average Frequency of Casual Workers Engaged in Various Types of Occupations

Category	Satara							
	V1				V2			
	AL	Con.	Trans	Misc	AL	Con.	Trans	Misc
Sm- Marg- farm HH	-	1(1)	1(1)	-	3(1.5)	-	-	-
Manf. Proc.Ser.Rep.	3(1.5)	-	-	-	4(1.33)	1(1)	-	-
Pvt.Con.	5(1.67)	3(1.5)	-	-	2(2)	2(1)	-	-
Govt. aided con.	1(1)	7(1.4)	-	2(1)	7(1.4)	5(1.25)	-	1(1)
Wholesale trading	-	-	-	-	-	-	-	-
Retail trading	-	-	-	-	3(1.5)	-	-	-
Trans. Strg.Com.	3(1.5)	-	1(1)	-	5(1.67)	-	3(1.5)	1(1)
Category	Washim							
	V3				V4			
	AL	Con.	Trans	Misc	AL	Con.	Trans	Misc
Sm- Marg- farm HH	6(3)	-	-	-	6(1.5)	-	-	-
Manf. Proc.Ser.Rep.	4(2)	-	-	-	2(1)	-	-	-
Pvt.Con.	7(1.4)	4(1)	-	-	8(2)	4(1)	-	-
Govt. aided con.	7(2.33)	3(1.5)	-	-	16(2)	2(1)	-	-
Wholesale trading	-	-	-	-	-	-	-	-
Retail trading	6(1.5)	3(1.5)	-	-	3(1.5)	-	-	-
Trans. Strg.Com.	3(1.5)	-	-	-	5(1.67)	-	-	-

Note: figures in the bracket are average frequencies.

Two major systems of payment are - payment by time wage (daily) and payment by piece rate. Table 4.31 shows that the labourers are mainly seen to be receiving remuneration in terms of daily wage. These systems have different economic implications. Whereas daily wage relates to payment of time wage irrespective of the efficiency of the worker, piece rate relates to payment based on the efficiency of the worker / that based on work done by the worker. Payment of piece rate is found in areas with commercial crops and where timely harvesting operations assume utmost significance. However, this system of payment is not widespread in both the districts and no particular pattern in this regard is

observed as far as various categories of households are concerned. The household members who are getting piece rates are mostly agricultural labourers or construction workers.

Table 4.31: Categorywise Frequency of Casual Labourers by Type of Payment

Category	Satara				Washim			
	V1		V2		V3		V4	
	P	D	P	D	P	D	P	D
Sm- Marg- farm HH	-	2	2	3	-	6	-	6
Manf. Proc.Ser.Rep.	-	3	-	5	-	4	-	2
Pvt.Con.	-	8	-	4	-	11	3	9
Govt. aided con./AL	-	11	2	12	-	9	3	15
Wholesale trading	-	-	-	-	-	-	-	-
Retail trading	-	-	-	3	-	9	-	3
Trans. Strg.Com.	-	4	-	9	-	2	-	5

Note: P = Piece rate, D = Daily wage rate (time wage).

4.7.3 Salaried workers

Firstly, we look into categorywise average number of salaried people in the sample villages. This is seen to be one except for the category of landed households of Satara-V1 (table 4.32). For wholesale trading, there are no members as was observed earlier, because the members are mostly self employed in their own family business. Total as well as average frequency for landed households in Satara V1 is seen to be very high. This thus indicates the ability of these households to participate in better paying salaried jobs. For Washim, the extent of salaried activity is seen to be less than that of Satara thus again indicating larger extent of regular activities in the nearer villages.

Table 4.32: Categorywise Average Number of Salaried Workers

Category	Satara		Washim	
	V1	V2	V3	V4
Sm- Marg- farm HH	9(2.25)	1(1)	-	-
Manf. proc.Ser.Rep.	2(1)	2(1)	-	-
Pvt.Con.	1(1)	1(1)	1(1)	-
Govt. aided con.	1(1)	-	-	2(1)
Wholesale trading	-	-	-	-
Retail trading	1(1)	1(1)	1(1)	-
Trans. Strg.Com.	2(1)	1(1)	3(1)	3(1)

Secondly, we look into various types of salaried jobs taken up by the salaried workers (table 4.33).

Table 4.33: Categorywise Total and Average Frequency of Salaried workers by Types of Occupations

Category	Satara								Washim							
	V1				V2				V3				V4			
	S	T	C	M	S	T	C	M	S	T	C	M	S	T	C	M
Sm- Marg-farm HH	8(2)	1(1)	-	-	1(1)	-	-	-	-	-	-	-	-	-	-	-
Manf. Proc.Ser.Rep.	2(1)	-	-	-	2(1)	-	-	-	-	-	-	-	-	-	-	-
Pvt. Con.	1(1)	-	-	-	1(1)	-	-	-	-	-	1(1)	-	-	-	-	-
Govt. aided con./AL	-	1(1)	-	-	-	-	-	-	-	-	-	-	1(1)	-	1(1)	-
Wholesale trading	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail trading	1(1)	-	-	-	1(1)	-	-	-	1(1)	-	-	-	-	-	-	-
Trans. Strg.Com.	1(1)	1(1)	-	-	-	1(1)	-	-	1(1)	1(1)	-	1(1)	-	3(1)	-	-

Note : S = Service, T = Transport, C = Construction, M = Manufacturing

It can be seen that out of the four major areas of salaried jobs, there is concentration for the service sector jobs. In the landed category, some of the salaried workers are found to be working as a teacher / workers in the grampanchayat (in Satara-V1) which can be called as comparatively better paying jobs.

As far as the wage payments are concerned, in absolute terms, generally, the figures for all category are higher for Satara than for the corresponding one from Washim (table 4.34). Within the districts, salaried workers from the landed category are seen to be getting relatively higher salaries. This again possibly indicates better economic status of these households and ability to participate in better paying job opportunities.

Table 4.34: Categorywise Average Wage Payment of Salaried Workers (In Rs.)

Category	Satara		Washim	
	V1	V2	V3	V4
Sm- Marg- farm HH	8208.33	5000	-	-
Manf. Proc.Ser.Rep.	3250	1950	-	-
Pvt.Con.	1200	3000	1800	-
Govt. aided con.	1500	-	-	900
Wholesale trading	-	-	-	-
Retail trading	3000	3000	2000	-
Trans. Strg.Com.	3250	3000	2833.33	2166.67

4.7.4 Previous Occupation and Reasons for Shifting into the Present Occupation

We also look into the reasons given by household members for shifting into the present area of occupation classified by activity status. This is expected to provide reasons for comparative profitability of the current occupation of the workers. However, many of the workers have been engaged in the current occupation since long/ since the beginning. Hence, there is no question of shifting in such cases. Similarly, some have not answered at all. Therefore, the number of households who have reported is very less. This can be seen from the following information-

% of workers (to all workers in all categories) who have -	Satara		Washim	
	V1	V2	V3	V4
Not Shifted	77.08	90.91	85.37	81.40
Not given any answer	16.67	52.27	31.71	53.49

Self employed workers: It can be seen from table 4.35 that very few household members in Washim have replied in comparison with Satara. In all the clusters, the major reasons given for shifting into the current occupation are expectation of improvement in income and secondly, unemployment before shifting. Some workers have replied in terms of seasonality of the earlier work. This is especially true for villages V2 and V4. It is possible that in the nearer clusters in both the districts, proximity to the town may be providing some or the other work to the workers.

Table 4.35: Categorywise Total Frequency of Workers according to Reason for Shifting into Self Employment

Category	Satara								Washim							
	V1				V2				V1				V2			
	I	U	M	S	I	U	M	S	I	U	M	S	I	U	M	S
Sm-Marg. farm HH	1	-	1	-	-	-	-	-	1	-	-	-	1	-	-	-
Manf. Proc..Ser. Rep.	2	1	-	-	1	-	-	2	-	-	-	-	1	-	-	-
Pvt Con.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Govt aided Con /AL	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Wholesale trading	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Retail trading	1	3	-	-	1	-	-	-	1	-	-	-	-	-	1	1
Trans. Strg. Com	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-

Note: 1= Improvement, 2= Unemployment, 3= Miscellaneous, 4= Seasonality of work / Uncertainty

Casual Workers: Here also, the major reason given for shifting is improvement in income or seasonality of the previous work (table 4.36).

Table 4.36: Categorywise Frequency of Workers according to Reason for Shifting to Working as a Casual Labourer.

Category	Satara								Washim							
	V1				V2				V1				V2			
	I	U	M	S	I	U	M	S	I	U	M	S	I	U	M	S
Sm-Marg. farm HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Manf. Proc..Ser. Rep.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pvt Con.	3	-	-	-	1	-	-	-	2	-	-	-	-	-	-	2
Govt aided Con /AL	-	-	1	3	2	-	-	-	1	-	-	-	-	1	-	-
Wholesale trading	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail trading	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trans. Strg. Com	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-

Note: 1= Improvement, 2= Unemployment, 3= Miscellaneous, 4= Seasonality of work / Uncertainty

Salaried Workers: For the salaried workers, very few workers have replied in both the districts (table 4.37). This is partly because the number of salaried people itself is very less there may not have been any shifting in such cases. Also, it might be the case that it is comparatively difficult to shift to a salaried job, as it requires specific skills/ abilities. For those who have replied, improvement in income is seen to be the major reason for shifting.

With the available data in this regard it is clearly seen that there are more people shifting towards self-employment. It must be difficult to shift towards salaried employment (as noted above) and casual labour seems to be a less favoured option.

Table 4.37: Categorywise Categorywise Frequency of Workers according to Reason for Shifting into Salaried Employment

Category	Satara								Washim							
	V1				V2				V1				V2			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Sm-Marg. farm HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manf. Proc..Ser. Rep.	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Pvt Con.	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Govt aided Con /AL	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Wholesale trading	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail trading	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trans. Strg. Com	-	-	-	-	-	-	-	1	1	-	-	-	2	-	-	1

Note: 1= Improvement, 2= Unemployment, 3= Miscellaneous, 4= Seasonality of work / Uncertainty

In table 4.38, we note major types of previous activities of the workers.

Table 4.38: Number and Percentage of Workers Who have shifted to New Activity and Have Provided Reason for the Same by the Type of Activity.

Category	Satara						Washim					
	V1			V2			V3			V4		
	T	AL	Con	T	AL	Con	T	AL	Con	T	AL	Con
Sm-Marg. Farm HH	2	1(50)	-	2	2(100)	-	2	1(50)		3	2(66.7)	-
Manf. Proc. Ser. Rep.	5	2(40)	-	3	1(33.3)	-	-	-		1	1(100)	-
Pvt Con.	4	2(50)	2(50)	2	1(50)	1(50)	2	1(50)	1(50)	3	2(66.7)	1(33.3)
Govt aided Con /AL	5	2(40)	2(40)	4	1(25)	2(50)	1	1(100)		2	1(50)	-
Wholesale Trading	2	-	-	-			1	1(100)		-		-
Retail Trading	4	-	-	1	-		2	1(50)		2	1(50)	1(50)
Trans. Strg. Com	1	-	-	2	2(100)		2	2(100)		3	3(100)	
Total	23	7	4	14	7	3	10	7	1	14	10	2
% to Total	23	47.83		14	71.43		10	80		14	85.71	

Notes: 1.T= Total no. of workers who have shifted and have provided reason for shifting, AL= Agricultural labourers. Con= Construction workers. 2. Figures in the bracket are percentages to the total workers shifted.

It is clearly noted that mostly, the previous activity of the current workers was as agricultural labourer or as construction workers. This percentage is very high for Washim as compared to V1- Satara. Thus, these emerge as the categories at the lowest level of economic well being, which compels them to look for some other activity. Among the categories, there is concentration in the construction categories. The entries under these cells show that workers who were previously working as agricultural / construction labourers have now become contractors in the same field. For other categories also, a comparison of previous and current activity shows a definite move towards better paying activity. As mentioned above, the movement is generally towards starting ones own business. The wholesale trading category as expected, does not show any previous activity except in Washim-V3.

4.8 Concluding Remarks

In this chapter, we have looked into some of the major aspects of employment pattern at the village level and within the households. The important points that emerge from the analysis of data relate to the number of days of employment, pattern of employment, its diversification, and the economic status/ well being of various category

households. These give us an idea about comparatively better off and relatively deprived categories at the micro level.

As far as the economic status of the households is concerned, it is clearly noted that the landed and the trading categories are relatively the better categories. This can be observed from the data relating to indicators such as their asset position, type of house they own, the technology of cooking they use, percentage of households in the category having bank account etc.

The economic status also gets reflected in the number of days of employment and employment pattern of the households. The number of days of employment are seen to be higher for landed and wholesale trading households. As far as diversification of employment activities is concerned, it is quite clear that the households in better off category, specifically in the wholesale trading category, show lesser extent of employment diversification. This is mainly because it is the traditional business and can support a large number of family members. Thus, comparatively, there is no/ less need for diversification. However, the households in the other better off category- the landed ones are seen to be having more number of supplementary income sources as they are able to expand into other activities such as livestock. For other categories, the number of days of employment and extent of diversification are all at a lower level. This indicates inability of these RNFS households to participate in better paying activities. Thus, push and pull factors both seem to working within a village.

A comparison of districts as a whole (each comprising of the two village sets) in this regard shows that Satara is a better off district than Washim in various aspects. The extent of diversification within the RNFS, as observed from the village in formation schedule is greater for villages of Satara. As far as the household information is concerned, the number of days of employment and the extent of diversification on the whole are higher as well for Satara. Within districts, the near village clusters-V1 and V3 are better clusters than the distant ones. This shows that non-farm activity is basically influenced by proximity to urban area. Similarly, it is the agriculturally better off district- Satara, which shows more number/ proportion of households in the livestock activity. Thus, it can be said that agricultural development gives boost to allied activities. This is clear from the secondary data as well.

It can be said that there is a nexus between agricultural development and expansion of the RNFS. Secondary data shows that Satara is comparatively better district than Washim to begin with, as far as agricultural and infrastructural development and the manufacturing sector is concerned. The absolute level as well as share of non-farm activity is higher in Satara than in Washim. Agriculture is still the main activity in both village sets. In Satara, there seems to be a linkage between agricultural performance and development of RNFS. But it seems that Washim villages, do not present a case of expansion of non-farm activities to a larger extent as a result of underdeveloped agriculture and due to the push factors. The household data does not show diversification of activities of the household members in to non-farm employment on a large scale in Washim. It is felt from the data collected that the economy of the villages is stagnant and the strength of both types of stimulus - push or pull factors seems to be rather weak in this district.

Notes:

1. The short forms refer to the categories of households in -
Sm-Marg. farm HH= Small and marginal farming
Manf. Proc. Ser. Rep. = Manufacturing, processing, servicing and repairs
Pvt Con. = in Private Construction
Govt aided Con /AL = Govt. aided construction/agricultural labourers
Wholesale trading = Retail Trading
Retail trading = Wholesale Trading
Trans. Strg. Com = Transport, storage and communication
2. Average Frequency is calculated by taking household frequencies in a category to arrive at the average frequency for the category as a whole.

Chapter V

Livestock Processing Units in Maharashtra

5.1 Introduction

Livestock sector is the important component of allied activities of the state. The livestock population in the state has been growing. According to the Livestock Census 1997, the total livestock population in Maharashtra was 3.98 crores. The approximate gross value of livestock products at current prices in 2000-01 was 41.6 percent of the total gross value from the agricultural sector (GOM (20001-02b)). It has also been noted that the concentration of the livestock population in rural areas is mainly due to the availability of fodder, manpower, their use as draught power and manure in agriculture etc. Like supply, demand for livestock products is also increasing in rural areas due to increasing population and changing consumption pattern of the population. Given the increasing demand for and supply of livestock population of the state, it can be said that livestock based processing sector can become a major thrust area in terms of income and employment in the rural areas.

The need for expansion of RNFS activities on the background of stagnant agricultural employment is quite obvious. According to the National Industrial Classification, the population working in the livestock sector is covered under allied activities/ primary sector / farm related activities. However, it has been found that these activities are being increasingly pursued for commercial rather than subsistence purposes (Fisher et al (1997)). Therefore, we look into the related secondary data as well as the data collected from livestock processing units. The activity chosen for analysis from Maharashtra is meat. These units are basically the units wherein animals - goat or bullocks are bought, flayed, cleaned and sold to the customers. This food industry is also linked up with leather industry as after cutting / cleaning, the skin is sold to the leather industry. The demand for leather products is also increasing domestically as well as at international level. Therefore, considering its significance for the rural sector, we cover this area in this chapter. After a brief introduction to the livestock units in Maharashtra, we look into the data collected from livestock processing units in the sample districts.

5.2 Livestock Units in Maharashtra

The Economic Census data on number of agricultural enterprises is shown in the following table. The agricultural ENTP get classified into units engaged in rearing of livestock and those engaged in agricultural services, hunting etc. The importance of livestock enterprises in the total can be clearly seen.

Table 5.1: Rural Agricultural Enterprises in Maharashtra.

Rural Agl. Enterprise	Rearing of livestock	Agl. Services, hunting etc	Total
Number	447025	41667	488692
Share (%)	91.47	8.53	100

Source: GOM (2000)

It was noted in chapter 2 (table 2.8) that according to the Economic Census 1998, the percentage of agricultural ENTP and employment in total rural ENTP was 30 percent and 24 percent respectively. Similarly, they have registered an impressive growth during 1990 and 1998. Thus, contribution of livestock activities (combining table 2.9 and 5.1) to rural ENTP and employment is quite considerable.

The livestock ENTP are classified by the source of borrowing. Table 5.2 presents the same. Two major points which can be noted from the table are that majority of the enterprises self finance the livestock activity and secondly, the finance under government schemes (i.e. IRDP and Poverty alleviation schemes) is quite meager.

Table 5.2: Number of Livestock Enterprises by Source of Finance.

Activity	Number and Share of Enterprises Financed by						
	IRDP	Poverty Alleviation Schemes	Borrowing from		Self Financing	Other	Total
			Institutions	Non Institutions			
Rearing Livestock	18072	4112	37662	12103	338360	36716	447025
Share	4.04	0.92	8.43	2.71	75.69	8.21	100.00

Source: GOM (2000).

The dominance of self financed enterprises coupled with their number in terms of unregistered enterprises (Table 5.3) places this activity in the informal sector. Thus, 99 percent of the units do not get covered by any law.

Thus, though livestock activity is an important and growing activity, supporting the agricultural activity in rural areas of the state, it largely remains out of the purview of major government schemes / laws and thus are unprotected.

Table 5.3: Number of Livestock Enterprises by Activity and Type of Registration

ENTP	Number of Enterprises Registered with									No. of ENTP Not registered with any agency.
	Factory Act	SDI	KVIC	Power / hand-loom	Handi-Craft	Textile Commissioner	Jute Commissioner	Coir Board	Silk Board	
Number	400	415	109	82	358	131	36	36	202	445262
Share(%)	0.09	0.09	0.02	0.02	0.08	0.03	0.01	0.01	0.05	99.60

Note: SDI = Small Industries Development Commissioner, KVIC =Khadi and Village Industries Commissioner.

Source: GOM (2000).

5.3 Livestock in the Sample Districts

The secondary data relating to the livestock population for the two sample districts shows that livestock population in terms of density, average livestock per village, number of livestock per 1000 human population is high for Satara than for Washim (i.e. Akola).The household level data for these districts (chapter four) also showed a greater extent of allied activities in Satara as compared to Washim. Since primary data was collected from the goat meat processing units, table 5.4 also presents data on the goat population. It is seen that for Satara, the district as well as town figures are higher than for Washim. However, the disparity is more for the town.

Table 5.4: Livestock Population in the Sample Districts

	Satara	Washim (A*)
Density of livestock population (per sq.km)	157	116
Avg. livestock per village	1061	778
No. of livestock per 1000 human population	670	553
No. of goat population for the district(rural)	414405	328921
No. of goat population for the sample class II town (rural)	81620	28931

Note: A* = data for Akola has been used

Source: GOM(1997)

5.4 Livestock Processing Units in the Sample Districts

For understanding the nature of livestock processing activity in rural areas of the sample districts, a survey was conducted to collect data from a total of twelve livestock processing units. The selection of these units has already been discussed in chapter 1 in the section on methodology. The data collected relates to the scale of operation of the units, their income and expenditure market conditions, constraints and problems etc. The data relating to these units is presented in tables 5.4a, 5.4b, 5.5a, 5.5b and 5.6. Tables 5.4a and 5.4b relate to the income and expenditure of the units and the scale of operation. In

tables 5.5a and 5.5b, information relating to market channels for buying raw materials and selling the produce and availability infrastructural facilities is presented.

On the basis of the data collected, following characteristics of the concerned markets and units in both the districts have been noted.

Characteristics of the meat market in Satara and Washim: It was revealed from the fieldwork that the demand for meat was rising day by day. In both the districts, hotels and restaurants were among the main buyers of the produce. However, signs of prosperity in terms of indicators such as availability of infrastructure, cleanliness, as observed in Satara were absent in Washim market. The market was smaller in size in Washim as compared to Satara.

The units in Washim were mainly own account ENTP. Thus, size of the units and the number of people working in it is also less in Washim. Mainly, the families involved in this business belonged to the Muslim community. The activity was mainly the traditional business of the families engaged in it. The business did not seem to be very profitable; it could just maintain the family involved. In Satara, besides Muslims, other community households were also involved. Similarly, apart from own account ENTP, in Satara, one NDME and one DME was also selected. The presence and selection of these units can be used as a proxy indicator to infer about the size of the market, composition of sellers, scale of operation in the market in Satara as compared to Washim.

It can be seen from table 5. 5a and 5.5b that per goat net income for Washim units is higher than that for Satara though the price of the produce is same for both the districts. The difference is mainly because of the monthly rent paid to government. However, the scale of operation in terms of produce sold is greater for Satara than for Washim where normally only one goat is sold per day. Therefore, total income is higher for the Satara units than for Washim ones.

A few important points are observed from the data presented in tables 5.5a, 5.5b and 5.6. Firstly, as far as the marketing channels for buying raw materials and selling of by products are concerned, it was observed that in both the districts, mostly, the units were direct buyers/ sellers in the market. There was absence of any long chain of intermediaries. Secondly, mostly, the units are smaller in size in both the districts. It can be inferred that in smaller areas, due to demand constraints or other things, the units would

be smaller in size and would mainly be unorganised. Without any organisation, it would be difficult for them to reap scale economies or bargain for better facilities. As the business is limited to certain communities and as the units are mostly owner operated/ small in size, we find homogeneity as in these units as far as various characteristics are concerned. Thus, we hardly find any variation in scale of operation, level of integration. As far as the integration is concerned, being smaller in size, vertical integration (with other activities) seems to be difficult given the capital and infrastructure constraints. Their capacity to expand is thus limited. It is observed that there are no institutions, which support these units. Thus, there are no government schemes/ incentives (price or non-price) which help these units get over their problems in input / output markets. Similarly, many do not have enough capital of their own or suitable collateral for taking bank loan. There is lack of any self-help group or NGO working for them. Thus, they are unprotected.

Given the increasing demand for the livestock products, the potential of livestock processing units in these rural areas can be fully tapped, if certain conditions get satisfied. Firstly, it is essential that they are supported by some or the other institution- government or non-government in terms of price / non-price factors. Secondly, barrier to availability of credit should be removed. The major obstacle is absence of collateral with these households. One important option can be formation of self-help groups through which credit can be obtained.

5.5 Concluding Observations

It is observed from the secondary data that the importance of the livestock sector is growing over the years in terms of expansion of livestock population as well as its contribution to the state income. With growing supply as well as demand for the livestock products, livestock sector can become a thrust area in rural areas of the state. However, the analysis of the data reveals a few important points. For state as a whole, majority of the units in the informal sector are not protected by any law. Secondly, at the district level, Satara is a better off district than Akola as far as the supply of livestock population is concerned. As far as the primary data is concerned, Satara - the better developed district- seems to be a better market than Washim as far as the size of market, size of

units, extent of demand, quality and availability of infrastructural facilities are concerned. However, in Washim too the demand is increasing especially from hotels and restaurants.

Both the markets however, face similar problems. For the livestock units, the capacity to expand is limited. Similarly, they are not organised. This makes it difficult for them to bargain for better facilities. There are no government schemes or other promotional agencies, which would give them incentives / platform to voice their demands so as to improve their economic status. Taking advantage of increasing demand for meat as well as linked up activities like leather industry assumes utmost importance.

Table 5.5a: Livestock Processing Units in Satara-Scale of Operation, Income-Expenditure-Profits.

	1	2	3	4	5	6
1 Type of ENTP	OAME	OAME	OAME	NDME	NDME	DME
2 Location : district	Satara	Satara	Satara	Satara	Satara	Satara
3 Distance from class II town	1 km	1 km	4 km	1 km	3 km	1 km
4 Scale of operation:						
-Product sold	Goat meat	Goat meat	Goat meat	Goat meat	Goat meat	Goat meat
-Amt of items produced / sold p.d.						
-Avg. no. of goats	3	4.5	3	2	2.5	3.5
-Total weight per goat in kg.	38	55	38	28	35	45
-Avg. weight per goat in kg.	13	12	13	14	14	13
-No. of people working	4	4	3	2	2	6
-No. of hired people	0	0	0	1	1	2
5 Income per goat p.d (Rs.)						
-Price of the produce (per kg)	100	100	100	100	105	100
-Total amount sold (kg)	38	55	38	28	35	45
- Avg. price of skin sold	125	125	125	125	125	125
-Total income	3925	5625	3925	2925	3800	4625
-Total income per goat	1308	1250	1308	1463	1520	1321
6 Costs per goat p.d. (Rs.)						
-Avg. purchase price of goat	1000	1000	1000	1000	1000	1000
--Cutting charges	15	15	15	15	15	15
-Checking charges	5	5	5	5	5	5
-Transport	-	-	10	-	10	-
-Annual License fees	250 (Rs 0.7 p.d.)	250 (Rs. 0.7 p.d.)	250 (Rs. 0.7 p.d.)	250 (Rs. 0.7 p.d.)	250 (Rs. 0.7 p.d.)	250 (Rs. 0.7p.d.)
-Monthly rent to Corporation	200 (Rs.7 p.d.)	200 (Rs. 7 p.d.)	200 (Rs. 7 p.d.)	200 (Rs. 7 p.d.)	200 (Rs. 7 p.d.)	200 (Rs. 7 p.d.)
Total cost per goat p.d. (Rs.)	1020	1020	1030	1020	1030	1020
7 Income - Cost per goat p.d.	288	230	278	443	490	301

Note: per day per goat license fees and rent to corporation are negligible, they are not included for calculating cost per day

Table 5.5b: Livestock Processing Units in Washim -Scale of Operation, Income-Expenditure-Profits.

		1	2	3	4	5	6
1.	Type of ENTP	OAME	OAME	OAME	OAME	OAME	OAME
2.	Location : district	Washim	Washim	Washim	Washim	Washim	Washim
3.	Distance from class II town	-	-	-	-	-	-
4.	Scale of operation:						
	-Product sold	Goat meat	Goat meat	Goat meat	Goat meat	Goat meat	Bullock meat
	Amount of items produced / sold p.d.						
	Avg. No. of goats/bullocks	1	1	2	2	1	1
	Total weight in kg.	15	15	30	30	15	90
	Avg. weight per goat (kg.)	15	15	15	15	15	90
	No. of people working	4	4	4	4	3	3
	No. of hired people	-	-	-	-	-	
5.	Income (Rs)						
	Price of the produce (per kg.)	110	110	100	100	100	30
	Total amount sold per goat	15	15	15	15	15	90
	Avg. price of skin sold p.d.	125	125	125	125	125	200
	Total income per goat	1775	1775	1625	1625	1775	2900
6.	Costs per goat (Rs)						
	Avg. purchase price of goat	1000	1000	1100	1200	1000	2000
	Cutting charges	15	15	15	15	15	30
	Checking charges	5	5	5	5	5	50
	Transport	10	10	10	10	10	10
	Annual License fees	100 (Rs 0.27 p.d.)	100	100	100	100	100
	Monthly rent to Corporation	100 (Rs 0.27 p.d.)	100	100	100	100	100
	Total cost per goat p.d.	1030	1030	1130	1230	1030	2090
7.	Income - Cost per goat p.d.	745	745	495	395	1675	810

Note: same as in case of table 5.4a.

Table 5.6a: Livestock Processing Units in Satara: Market Channels and Availability of Infrastructure.-Satara

	1	2	3	4	5	6	
1	Market channel for buying raw material						
	- Purchase of raw material -						
	Direct/ through agent	Direct	Direct	Direct	Direct/ agent	Direct	Direct
	Place of purchase	Phaltan,	Phaltan	Nearby villages	Phaltan	Phaltan	Nearby villages
	The seller of raw material	Market - Individual seller	Market - Individual seller	Market - Individual seller	Market - Individual seller	Village households	Dhangar, Dalal
	-Checking of goat by govt.	Yes	Yes	Yes	Yes	Yes	Yes
2	Market channel for selling the product						
	- Sale of the produce						
	Direct/ agent	Direct	Direct	Direct	Direct	Direct	Direct
	Place of sale	Phaltan mutton mkt	Phaltan mutton mkt	Phaltan mutton mkt	Phaltan mutton mkt	Phaltan mutton mkt	Phaltan mutton mkt
3	Availability throughout the year of -						
	Raw material	Yes	Yes	Yes	Yes	Yes	Yes
	Skilled labour	Not required, traditional business	Not required, traditional business	Not required, traditional business	Not required, traditional business	Not required, traditional business	Not required, traditional business
	Capital	Own capital	Own capital and Bank Loan	Own capital but not enough	Loan repaid	Enough	Own capital
	Infrastructure (electricity, roads, water communication)	Yes	Yes	Yes	Yes	Yes	Yes
	Supporting equipment	Yes	Yes	Yes	Yes	Yes	Yes

Table 5.6b: Livestock Processing Units in Washim: Market Channels and Availability of Infrastructure- Washim.

Market Conditions	1	2	3	4	5	6
1. Market channel for buying raw material						
- Purchase of raw material -						
Direct/ through agent	Direct	Direct	Direct	Direct		Direct
Place of purchase	Nearby villages	Nearby villages	Taluka place	Taluka / villages	Nearby villages	Taluka / villages
The seller of raw material	Households	Households	Market	Market	Households	
-Checking of goat	Nagar parishad	Nagar parishad	Nagar parishad	Nagar parishad	Nagar parishad	Nagar parishad
2. Market channel for selling the product						
- Sale of the produce						
Direct/ through agent	Direct	Direct	Direct	Direct	Direct	Direct
Place of sale	Washim market	Washim market	Washim market		Washim market	Washim market
3. Availability throughout the year of of-						
Raw material		No	Yes	No	Yes	Yes
Skilled labour	No	No	Yes	No	No	Yes
Availability of capital	No	No	Yes	No	No	Yes
Infrastructure (electricity, roads, water communication)	Yes	Yes	Yes	No, only road facility available	No, only road facility available	Yes
Supporting equipment	Yes	Yes	Yes	Yes	Yes	Yes

Table 5.7: Number of the Units Responding to Questions Relating to Market Conditions in Meat Market in the Sample Districts.

	Satara		Washim	
	Yes	No	Yes	No
1. Size and pattern of demand	Less in rainy season, high otherwise			
2. Quality consciousness of buyers	All		All	
3. Existence of cooperation	All		All	
4. Existence of rivalry		All		All
5. Government interventions (other than registration, license etc.)		All		All
6. Government support		All		All
7. Existence of promotional agencies		All		All
8. Existence of any non-government-organisation (NGO, SHG)		All		All

Chapter VI

Summary and Conclusions

6.1 Introduction

The latest data on employment (NSS) at All India level shows a declining trend in the rate of growth of current daily status employment from 2.7 percent in 1983-84 to 1.07 percent 1999-2000. This is in spite of the comparatively higher growth in GDP in this period. The growth rate at which the number of unemployed people was growing also increased drastically during 1993-94 to 1999-2000 at all India level. The figures were even higher for the rural areas (GOI (2002-03)). It was noted that the post reform period exhibited growth in employment for some sectors of the economy but these improved growth rates do not compensate for declining rates of growth in many other sectors. This was because the number of such sectors was small and these were not the major absorbers of workers (Chadha (2002)). One of the major characteristics of the employment is that it is basically rural in nature. At all India level, 73.34 percent of the total main workers (TMW) were in rural areas (Census 2001). It was found that the employment elasticity of agriculture which was 0.70 during 1983-1993-94, declined to 0.01 during 1993-94 and 1999-00 (GOI(2002-03)). The deteriorating capacity of the sector also points towards rural -urban divide in this regard. It has been noted that during the 1990s, the employment growth was concentrated in the urban areas (Bhalla(2000)). Thus, it is clear that in the 1990s, the largest employment providing sector-the rural sector exhibited a declining capacity of employment generation. The present scenario therefore definitely calls for a strong initiative for creating conducive environment for generation of rural non-farm employment.

The recognition of the growing importance of Rural Non Farm Sector (RNFS) employment by the researchers and policy makers stems firstly from the growing share of non-farm income and employment in the total income and employment of the rural households in the developing countries. Secondly, it has been noted is that the productivity and profitability is generally higher in the non-farm sector and therefore, it is considered to be important for maintaining / increasing purchasing power and food security of the rural households. The working conditions and wages in RNFS enterprises

are found to be on an average better than in the agricultural sector (Fisher et al (1997)). Therefore, this sector assumes significance with regard to poverty alleviation as well as prevention of excess urbanisation.

The approach for studying RNFS with an objective to look for proper policies rests on a few things. Firstly, it has to be noted that it is difficult to exactly define the RNFS activities as it includes several heterogeneous non-farm activities or enterprises of different sizes and from different industry groups in rural areas. These various activities might be having different demand and supply conditions in their input and output markets, different levels of profitability, working conditions of labourers etc. Secondly, for understanding the participation of rural households in a particular non-farm activity, the motivation behind the decision as well as the ability of the households to participate therein has to be studied. Thus, the factors determining relative risk or profitability of a particular non farm activity and those determining ability of households have to be studied. Thus, the approach and the policies have to be sector (i.e. within the broad RNFS) and region specific.

The studies dealing with these issues try to analyse the hypotheses governing emergence of RNFS activities in particular regions, the growing and lagging sectors within RNFS, composition of workers etc. The focus in majority of the studies is on finding the determinants / correlates of RNFS employment, farm - non-farm linkages and whether and in what way agricultural sector affects the RNFS activity. These studies bring out the importance of RNFS employment in promoting incomes and reducing variability in the incomes of the rural population. However, a few disturbing trends such as expansion of RNFS employment accompanied by a contraction in the traditional labour services, fall in the share of disadvantaged groups in the non-farm employment due to inability to participate in the RNFS, falling male- female workers ratio etc. (Wadley and Derr (1990), Dreze et al (1998)) are also noted.

One of the important issues pertaining to the RNFS employment is whether this sector expands due to the distress diversification of the rural households or due to some positive stimulus provided to the economy. For understanding the participation of households in the RNFS activities, therefore, one has to look into the factors that motivate the rural households to participate in these activities. These can be classified as

pull or push factors. The pull factors emanate from some stimulus such as agricultural development which through various types of linkages through production, capital and consumption / expenditure with the other sectors, leads to the expansion of RNFS. Here again, the nature of this stimulus and the capacity of the households to participate in these activities will determine the nature and composition of RNFS employment. The push factors basically relate to lower productivity and wages, risks in farming, incomplete/missing input and insurance markets etc. In the situation of adverse conditions, the households are pushed to diversify into RNFS activities. Therefore, agricultural / infrastructural development, urbanisation, commercialisation - phenomena that represent development on one hand and unemployment, poverty - phenomena representing distress on the other can be treated as correlates of RNFS activities. The literature shows that there is a close link between the level of agricultural development and the level of RNFS employment (Visaria and Basant (1994), Mahendra Dev (1994) Fisher et al (1997)). However, there also evidences of the households participating in the non farm sector due to distress or push factors (Mahendra dev (2001)).The differences in these correlates across various regions give rise to variations in RNFS employment in these regions. Moreover, within the RNFS, there is a wide variety among the sub sectors as far as employment and its rate of growth, productivity and wages, working conditions are concerned. Whereas some sectors like services and manufacturing are fast growing and engage a major chunk of RNFS workers, others like construction, transport and communication generally engage relatively less number of workers in rural areas.

RNFS employment in India for male as well as female workers is rising gradually over time in absolute terms and as proportion of total rural employment as well though the rates of growth over different time periods have been changing. At all India level, in 2001, around 27 percent of main workers were engaged in RNFS (www.censusindia.net). A welcome feature is the increase in the share of RNFS workers during the period of 1993-94 to 1990 - 00.

The all India level picture conceals a lot of heterogeneity present at the regional level. Within the country, the share of RNFS workers varies between 71.43 percent (Kerala) to 14.5 percent (MP). For states like Bihar, Rajasthan, Chattisgarh, these shares are 18 percent, 23 percent and 13.19 percent respectively. It can be seen that the share of

RNFS workers in Maharashtra is only around 20 percent, though Maharashtra is considered to be one of the industrially well developed states. Various indicators of economic performance such as per capita income, per capita value added in industries, per capita gross value of output in industries etc show that Maharashtra is one of the top states as far as these are concerned as per the Economic Survey of Maharashtra (2001-02). Therefore it is expected that the non-farm sector in Maharashtra would show better performance as far as the employment aspect is concerned. On the contrary, the share of RNFS is seen to be quite low i.e.-20 percent and is comparable with some of the backward states in India

6.2 Need for the Study

In case of Maharashtra, the need to study the RNFS employment arises from the fact that agriculture in Maharashtra is nature constrained. Only 15 percent of the GCA is irrigated as against the national average of around 38 percent. The yields of the food and non food grain crops are very low as compared to the all India level figures. The absorption capacity of the agricultural sector is thus limited. Obviously, one of the options is increasing employment in the rural non-farm sector. It is necessary therefore to look into the current pattern of RNFS employment at the state as well as at the district level and various correlates of RNFS. This will give us an idea about the leading and lagging regions with respect to RNFS within the state as well as leading and lagging sub sectors within the RNFS and also about the policies that can be formulated. The data on employment profile of the state shows that non farm employment is basically an urban phenomenon in Maharashtra, with the share of RNFS employment in TMW being just around 12 percent. This share is increasing very slowly. Thus, the Maharashtra economy in terms of employment is basically agrarian in nature, with more than half the population still engaged in it. However, the productivity levels in agriculture are very low. It has been noted that among all the sectors (agriculture and non-agriculture), the labour productivity (GSDP per UPS as well as UPSS worker) was very low in Maharashtra agriculture (Bhalla (2000)). The same study also shows that the head count among rural households in 1993-94 was very high in agriculture as compared to the other rural sectors. These figures of head count in agriculture are very high as compared to many other states. Thus, low productivity of agricultural employment is one of the main

features of Maharashtra economy. Promotion of better paying RNFS employment thus assumes great significance for productive employment and reducing poverty among rural classes.

6.3 Objectives of the Study

Objectives of the study are:

- I. To study the pattern of rural non-farm employment at the state and region level as well as at household level.
- II. To locate correlates of rural non-farm employment in various regions.
- III. To assess region specific constraints in the growth of livestock based agro-processing units, and draw policy implications.

6.4 Methodology of the Study

The study utilises secondary as well as primary data for the analysis. Secondary data has been used for analysing pattern of employment at the state level as well as at the district level. The major data source utilised is the Census of India. The other major data sources used for understanding the determinants/correlates of non farm employment are the Season and Crop Report (GOM), Statistical Information relating to Agriculture (GOM), District Socio-Economic Abstracts (GOM), Economic Census (GOM), CMIE etc. With the help of these data sources, the study tries to look into firstly, the employment pattern of RNFS at the state and the district level and secondly, various correlates of the RNFS employment.

Sampling design

For understanding the employment pattern at the micro level, data was collected through field survey. The selection of the state i.e. Maharashtra was purposive. Two districts-one with higher and the other with lower concentration ratio (CR) of the RNFS workers were chosen. Accordingly, district Satara and district Washim with the CR of 12.5 and 4.62 respectively were selected. It has to be noted here that Washim is the district created in the year 1998 from district Akola. Hence wherever the data for this district is not available, that of the parent district Akola has been utilised. Within each district, a class II town was selected and two village clusters (comprising of three villages each)-one near the town (within 3 kms from the town) and the other little away (more than 10 kms away) were chosen. The last stage of sampling was the household selection.

In each village cluster, thirty households were to be selected in each of the seven stipulated categories of employment. This was done on the basis of the distribution of households in the village population as well as the given criterion of selecting minimum 3 households in each category. The information at the village level was collected with the help of village information schedule and household schedules.

With increasing incomes and changing consumption basket of people, the demand for livestock is increasing and therefore, this can become a potential thrust area for income and employment generation in the rural areas. For understanding the scale of operation, extent and nature of the livestock activities at the micro level, data was also collected from livestock processing units in the two sample districts. The livestock activity assigned to Maharashtra was meat. Hence only meat processing units were considered for field survey. The types of these units were 1. Own Account Manufacturing Enterprises (OAMEs), 2. Non Directory Manufacturing Establishments (NDMEs), 3. Directory Manufacturing Enterprises (DMEs) and 4. Factories. These were to be selected in the proportion of 6:4:3:2. Thus, seven to eight units in each district and a total of eight districts were to be selected.

It has to be noted that in both the districts, there were problems in collection of data due to absence of some types of enterprises in the place of survey. E.g. in both the districts, no factory could be located in the place of household survey or its vicinity. Hence, data could not be collected. Absence of such enterprises in the village or in its vicinity speaks of characteristics of that particular rural area and also of the market for the concerned produce. Hence data was not collected from similar units in urban areas/other districts. A total of twelve units were selected. Out of these, six were in Satara and these were- three OAEs, one NDME and one DME In Washim, all the units were OAEs.

6.5 Major Findings of the Study

Regional Disparities in Maharashtra

It has been noted that Maharashtra falls in the lowest category as far as the level of RNFS employment is concerned. Development of this state conceals lot of heterogeneity across various regions of the state. The three main region regions of the state are western Maharashtra (WM), Marathwada and Vidarbha. Districts in WM are the

most developed districts on the whole. On the other hand, those in the other two regions are comparatively lagging districts. A major reason for the disparities in various aspects is the urban centric growth which has taken place around the districts Thane, Mumbai and Pune which fall in WM.

Though for the state as a whole, the share of RNFS workers is around 20 percent, there are wide disparities across regions. The share ranges between 34 percent (Konkan) to around 11 percent (Amravati). The data on other major indicators also presents a similar picture. The data presented in this chapter presents a few important things.

- Districts or regions of Maharashtra can be classified into two groups based on their level of agricultural development and the extent of RNFS activity and probable reasons for the existing status of the same.
- There are districts of WM, which exhibit better development of agricultural sector, infrastructure and other indicators of development. The extent of RNFS activity (in absolute terms and as proportion) is also high in this region. Thus, there is a clear nexus between development agricultural sector and that of RNFS.
- On the other hand, in the agriculturally lagging districts of Marathwada and Vidarbha, the extent of RNFS activity is on the lower side (in absolute terms and as proportion) in terms of number of people employed. These are underdeveloped in terms of and other indicators such as availability of infrastructural facilities, extent of urbanisation etc as well and are characterised by higher poverty levels, lower per capita incomes, proportionately lower share of primary sector in total district income than the share of workforce engaged etc.
- Within the RNFS, in the underdeveloped regions, the share of manufacturing is lower than that in WM. Similarly, shares of construction, trade and commerce and other services are higher than those in WM. Thus, agriculture and the manufacturing sectors are both comparatively lagging. There is a possibility that due to the lack of any strong stimulus, the distress of the rural households has led to the expansion of informal service sector.

- Finally, as far as male –female composition of the RNFS is concerned, in absolute terms, the share of the female workers is lower. However, an increasing trend in female participation in the RNFS is observed.
- As far as the Economic Census data is concerned, the major point that point that emerges is that there is a distinct increase in the agricultural ENTP as well as employment therein, at the state level as well as in all the major regions of the state. The rate of change is higher for WM. The increasing importance of allied activities is very clear.
- The factory sector also reveals regional disparities in number as well as employment is concerned. Western Maharashtra emerges as the most developed region -agriculturally as well as non-agriculturally.

The Sample Districts

The districts chosen here are Satara and Washim - the districts with higher and lower CR respectively. These are at different stages of development. The major points emerging from secondary data relating are as follows-

- Satara in WM region is a better district as far as its agricultural and infrastructural development, and economic status is concerned. Similarly, it is larger as well as a growing district. Nearly one fourth of the RMW are working in the RNFS.
- Washim on the other hand is a smaller, agriculturally as well as industrially less developed district in Vidarbha. Merely 9 percent of the rural workforce is engaged in RNFS.
- Firstly, it exhibits a strong nexus between agricultural, infrastructural development and level of RNFS activity. Secondly, it also shows differences in the pattern of RNFS employment in the better and less developed districts and different causes of expansion of RNFS in both types of districts. Better performance of agricultural and manufacturing sector seems to have stimulated growth of RNFS sector in Satara as against in Washim, where the performance of both these sectors is weak. The growth of RNFS appears to be due to the push factors in presence of stagnant agricultural sector. Thus, it is

the operation of pull factors and push factors in the better and less developed regions respectively that explains the expansion of RNFS.

The Sample Villages

For better understanding of the RNFS, one has to look into micro-level data to RNFS employment. The village clusters selected here get classified as the ones near the class II town and the others - away from a class II town in the respective districts. Thus here, the initial level of development and distance criteria are considered to be major factors determining level of the RNFS employment. The micro level data in the villages is analysed with an objective of finding the comparative picture of pattern of RNFS employment and their correlates. First, for understanding the level of economic development of the villages, first, we have looked into the available village information. Next, the pattern of RNFS in each of the two village sets across the village sets as well as within the households and present a comparative picture for village sets in the same district and for village sets in two sample districts is analysed. The important points that emerge from the analysis of data relate to the pattern of employment, its diversification, and the economic status/ well being of various category households. These give us an idea about comparatively better off and relatively deprived categories at the micro level.

- As far as the economic status of the households is concerned, it is clearly noted that the landed and the trading categories are relatively the better categories. This can be observed from the data relating to their asset position, type of house, technology of cooking they use, percentage of households in the category having bank account etc.
- The number of days of employment are seen to be higher for landed and wholesale trading households. The data relating to diversification of employment activities of the households reveals a similar picture. It is observed that the households in better off category, specifically in the wholesale trading category, show lesser extent of employment diversification. This mainly because it is the traditional business and can support a large number of family members. Thus, comparatively, there is no/ less need for diversification. However, the households in the other better off category- the landed one are seen to be having more number of supplementary income

sources as they are able to expand into other activities such as livestock. For other categories, it is possibly the need for diversification, subsistence that leads to diversification. Thus, push and pull factors both seem to working within a village.

- A comparison of districts in this regard shows that Satara is a better off district than Washim as far as the household data concerned. For Washim, the household data also does not show diversification of activities of the household members in to non-farm employment on a large scale. It is felt from the data collected that the economy of the Washim villages is stagnant and the strength of both types of stimulus - push or pull factors seems to be rather weak.
- Within districts, the near village clusters-V1 and V3 are better clusters than the distant ones. This shows that non-farm activity is basically urban in nature. Similarly, it is the agriculturally better off district-Satara, which shows more number/ proportion of households in the livestock activity. Thus, it can be said that agricultural development gives boost to allied activities. This is clear from the secondary data also.

Meat Processing Units in Maharashtra

The secondary data relating to the livestock units and the primary data relating to the meat processing units point out the following issues-

- Given the increasing demand for and supply of livestock animals for meat purpose, livestock processing can become a growth sector in the rural areas in the lagging regions.
- However, special attention needs to be given to provision of proper infrastructure. Similarly, it is necessary that these units get organised with the help of some or the other promotional agency.

6.6 Policy Implications

The major issue emerging out of the discussion is the regional disparities in overall development as well as in rural areas of the state. Therefore, attention needs to be focussed on the lagging regions. Though expansion of RNFS activities is important, certain conditions need to be fulfilled. With nearly 70 to 80 percent of the population

depending on agriculture, lower literacy rates and lower productivity levels, it becomes important to create suitable conditions for expansion of RNFS and to tap all possibilities within agriculture for expanding the employment base.

Specifically, attention has to be focussed on the following issues-

- In case of agricultural sector, completion of incomplete irrigation projects is one of the important policy implication as water is necessary for farm as well as non farm activities.
- Investment in agro-processing and livestock processing need to be the thrust area. For this, micro-level understanding of the cropping pattern, consumption basket of the locals, market potentials need to be studied for the lagging regions. One major advantage for Maharashtra is that the climatic conditions are suitable for growing various fruits, oilseeds. The scope for expansion of horticultural activities and of processing units (for fruits and oilseeds) needs to be studied. One of the important areas can also be provision of agricultural services to the farmers.
- RNFS activities include diverse set of activities of different types and hence it difficult to prescribe any blanket policy for the entire sub sectors in it. As has been said before, location specific approach becomes important in this case. A few important areas, which can be thought of, are the production and marketing of handicrafts, tourism, provision of services in the areas of new upcoming areas of health and environment.
- Taking a holistic approach, it can be said that policies, which create suitable environment for expansion of non-farm activities, are of utmost importance. One of the important policy prescriptions is therefore monitoring not only the extent but also the quality and type of education/ skills imparted in the concerned region. This in a nutshell indicates investment in human capital formation in rural areas.
- Finally, it can be said that the factor conditions, demand conditions, related / supporting industries and finally the firm structures are some major determinants, which shape the macro environment in which local ENTP operate (Porter (1990)). Similarly, the points mentioned above indirectly indicate the importance of infrastructural facilities including credit, strong local institutions such as panchayati raj institutions, self-help groups etc. wherein decisions decentralised.

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ANNEXTURE I

Review Report of the Study on Rural Non-Farm Employment in Maharashtra by Jayanti Kajale

The report under review presents the pattern of rural non-farm employment in Maharashtra; successively a case study of the meat processing industry in the state has been carried away. This is a well-structured report carrying lot of information on the pattern of Non-Agriculture Employment in the two extreme districts of Maharashtra. The study especially the first part of it has only minor problems; some of these problems specifically related to the tables have been presented below.

A few of the table titles are not correct (table 1.1); some of the table titles are not reflecting the content of the tables.

In order to improve comparison, many similar tables can be merged; for instances, Table 1.2 and 1.3, Table 2.3 and 2.4, Tables 2.6 and 2.7

Table 2.5 appears to have been borrowed from the CMIE, how they define Infrastructure Development Index that is relative weights of different infrastructures needs to be explained either in the text or note of the table.

In Table 3.1, the 4th row that is percent change in rural popln. till 2001 since 1961 is not understandable.

In Table 4.28 please check figures for V2 in sm-marg-farm HH. From table titles it appears that income is average for individual worker. The figure for small- farmers in that context is very high; considering the seasonality of the crops, good and bad months for agriculture holders have different connotations unlike other employment categories; therefore please check the figure and remove conceptual flaws if any?

In Table 4.29 and also in successive tables "average frequency" has been used frequently, please explain it somewhere in the text.

These were table specific problems, many tables also suffers from inadequate discussions of the results.

Based on the major objectives of the study, the study as proposed has different sampling procedures for different set of objectives; the sampling plans for the first part of the study about the pattern of rural non-farm employment has no major problems. The second part of the study, which deals with the livestock processing activity, has some problems in relation to the selection of samples for the meat processing units. Author writes that no factory has been selected, as it was not there in the sample districts. The coordinator of the study in the successive course of discussions (in reference to the queries from AERC Santiniketan and others) has suggested that if need arises, processing units from the nearby districts having similar resource endowments may be selected. This suggestion has however been ignored. The so-called DME unit selected in the present study (as it appears from Table 5.5a) also does not fulfill the required criteria of the DME as it employs less than 6 persons. Thus sample consists of only OAMEs and NDMEs, but in these enterprises also there is hardly any variation in scale of operation, level of

integration (one expects more vertically integrated activity apart from selling of raw meat) based on the establishment criteria. Author needs to concentrate on this issue.

In reference to the authors remarks related to the determinants of RNFS, I have rightly opined that the determinants will be estimated by the coordinating center; the idea behind this was that with a sample size of 60 farmers and having so many segregation levels (districts, proximity to town, category of workers) determinants could have been worked out at the aggregate level in a better way. This suggestion however does not constrain the author of the report to work out determinants of RNFS in her own way at the state level. The estimation of determinants at the aggregate level does not appear to be realistic considering the time stipulation of the Ministry and other similar constraints.

In brief, the study under review is good, the findings enrich the existing body of knowledge on the RNFS; a second serious look of the draft report will remove most of the problems highlighted above. The report is acceptable thereafter.

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ANNEXTURE II

Actions Taken

Chapter - I

1. Table 1.1 - Table title is corrected
2. Tables 1.2 and 1.3 - The tables are merged

Chapter - II

1. Tables 2.3 and 2.4 - The tables are not merged due to space and presentation constraint
2. Tables 2.6 and 2.7 - The tables are merged
3. Table 2.5 - clarification relating to infrastructure Development Index included.

Chapter - III

1. Table 3.1- Data description clarified.

Chapter - IV

1. Table 4.28- mistake corrected.
2. Average Frequency- clarification provided

Chapter V

1. Due to the time and resources constraint, a livestock-processing factory could not be contacted and surveyed.
2. The sample in district Satara already contains a DME unit with six people working out of whom two are hired.
3. Discussion relating to heterogeneity among the livestock processing units is included in the chapter.

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