

# **RURAL NON-FARM EMPLOYMENT IN KARNATAKA**

**D.V. Gopalappa**



**Agricultural Development and Rural Transformation Unit  
Institute for Social and Economic Change  
Nagarabhavi, Bangalore 560-072**

**February 2004**

## CONTENTS

<b>Chapter No.</b>	
	<b>Preface</b>
	<b>Acknowledgements</b>
<b>Chapter – 1</b>	<b>Introduction</b>
<b>Chapter – 2</b>	<b>A Brief Account of the Pattern of Rural Non-Farm Employment in Karnataka State</b>
<b>Chapter – 3</b>	<b>Non-Farm Employment in the Sample Districts – Secondary Data Analysis</b>
<b>Chapter – 4</b>	<b>Village Level Rural Non-Farm Diversification</b>
<b>Chapter – 5</b>	<b>Household Level Rural Non-Farm Diversification</b>
<b>Chapter – 6</b>	<b>Status of Enterprises in the State with Special Reference to the Processing Sector</b>
<b>Chapter – 7</b>	<b>Livestock Based Processing Sector in the State</b>
	<b>References</b>

## PREFACE

The wave of the changing context of markets and gradual withdrawal of the state from its interventionist role will place the agricultural sector at difficult crossroads. Five decades of experience of Indian agriculture has clearly shown that the share of Net National Domestic Product emerging from agricultural sector, has been sliding down at a faster rate, but at the same time the share of workforce dependent on agriculture is not declining with a similar rate. This has caused increase in the carrying capacity of the sector. Overall it indicates the failure of Lewisian framework of transfer of labour from agriculture to non-agricultural sector and an impending reduction in the quality of life in the agricultural sector. In addition to this the growth rates in employment in agriculture as well as non-agricultural sectors are also not quite encouraging. As a result, the pressure on employment in the non-farm sector is increasing significantly. The demand for Non-Farm Employment (NFE) is largely confined to skilled workers and therefore, the growth in employment is moving at snail's pace. Keeping in view the importance of non-farm sector in the calculus of quality of life, it was felt necessary to carry out a holistic and widespread study on NFE. The Ministry of Agriculture GoI initiated a project to analyse the trends and determinants of NFE in various states. This study was focused to analyse the pattern and diversification of the emerging non-farm sectors in various states in the country. The growth and the determinants of the non-farm sector naturally became important components of this study.

Dr. D.V.Gopalappa undertook the study at ADRT unit at a very short notice. But he completed it quite competently. Dr Brajesh Jha, Institute of Economic Growth, New Delhi, provided the study design as well as the methodology and questionnaire. The study was carried out both at secondary as well as primary data level and the results indicate good prospects for non-farm sectors in the districts of Karnataka provided such efforts are supported by the State or the non-state institutions. It is pointed out that increase in the NFE will be influencing the quality of life of the population significantly. I am sure that the results of the study will be of great use to the policy makers and academicians.

**R S Deshpande**  
**Professor and Head**  
**ADRT Unit, ISEC, Bangalore.**

## ACKNOWLEDGEMENTS

This study began at the initiation of the Ministry of Agriculture, coordinated by the Institute of Economic Growth, New Delhi. The study is being conducted in all the Agro-Economic Research Centres of the country. I thank Professor V.M.Rao for his good words and encouragement from time to time to carry out the study. I thank Dr. Brajesh Jha, the coordinator of the project, IEG, who was kind enough to clear doubts about the project.

At the Institute, Prof. Gopal K Kadekodi, Director, Institute for Social and Economic Change, has been helpful and encouraging me to carry out the work. Dr. R.S.Deshpande, Professor and Head ADRT unit, has also given me encouragement to complete the project and also provided me with two excellent investigators to complete the field work. Dr. M.J. Bhende, a senior colleague of mine, has been helpful in advising and clarifying the doubts regarding the project. I thank all of them for their kind help and encouragement.

The respondents of Dakshina Kannada and Raichur districts deserve a special mention for withstanding our long schedule of questions and the strenuous process of enquiry. This study is entirely indebted to their wholehearted support and I would be very happy if the study helps them in terms of policy formulation to augment their welfare. I sincerely thank the officials of the Department of Industry of the respective districts who helped me in so many ways to complete the data collection.

Shri H.S. Gangadhar and Shri Rajendra B Desai were the two research assistants in this project, deserve a special thanks. They were involved in data collection and tabulation. I therefore, acknowledge their effort and thank them. I thank Shri Mohan Kumar for his help in desktop publishing and taking the final print of the report. I thank Shri Devraj for his help in Xeroxing the material required for the project. The errors of interpretation and commission are entirely mine and I shall be responsible for them.

**Dr. D.V.Gopalappa**  
**Asst. Professor**  
**ADRT Unit**  
**Institute for Social and Economic Change**  
**Nagarabhavi**  
**Bangalore 560 072**

# CHAPTER I

## INTRODUCTION

### **Introduction**

Even after 56 years of independence, the majority of the population of our country lives in villages and depend on agriculture for their livelihood. However the share of agriculture in the National income has been declining and is estimated to come down to less than 25 per cent. This has aggravated the unemployment and underemployment situation in rural India. The other major source of employment, industry, had not made any breakthrough in the rural areas. On the other hand, projections based on the growth rate of labour force at 2.5 per cent per annum indicate the necessity of providing additional employment for about 94 million people. The agricultural sector, due to declining size of holding and the organized industry have not been able to generate the needed employment opportunities. This underscores the need for alternative avenues for employment generation in the rural areas. This brings the development of the Non-Farm Sector (NFS) into focus (Rajasekhar 1995).

`Non-Farm' sector means all the non-crop agricultural activities; it includes manufacturing activities, mining and quarrying, transport, trade and services in rural areas. And also the seasonal and contractual jobs unconnected with farming as such, available within the village or a nearby town are considered part of NFE. Rural Non-Farm Activities (RNFAs) play an important role in developing countries such as India. These activities provide supplementary employment to small and marginal farm households especially during the slack season. Consequently, incomes of these households tend to be smooth in a year. RNFAs also have potential to reduce income inequalities and rural-urban migration (Rajasekhar, 1991; 12-15). The non-farm sector is, therefore, seen as a method by which the problems of unemployment, particularly rural unemployment, can be tackled and poverty can be reduced and many efforts are being made in this area of work.

There is abundant literature on the rural non-farm sector. Several studies (Vaidyanathan, 1986; Unni, 1991; Basu and Kashyap 1992; and Dev 1990 and 2003), drawing data from NSS and Census reports, have looked at the growth and structure of NFE

across various regions and factors determining the variations in NFE. There are not many studies which analyse the types, characteristics and factors contributing to the growth of NFAs at the village level. Though the literature is growing, there are gaps. First, the studies on factors contributing to NFE treat the non-farm sector as homogenous. Hence, it is imperative to analyse the factors contributing to the emergence of different activities at the micro level. Second, the studies analysing the factors contributing to NFE are at the macro level. There is a need to analyse the growth, structure and factors contributing to the NFAs at the micro level. Third, it is argued that the new economic policies introduced since 1991 have had an adverse impact on the unorganised non-agricultural sector in rural and urban areas. In this context, it is important to verify these arguments at the micro level.

The changing composition of the rural labour force at the macro level since 1961 has been characterized by three major features. One, the share of non-farm activities in the total labour force has been increasing, albeit slowly; two, this increase has come mainly from the tertiary sector; and three, the bulk of the increase in NFE has been casual in nature (Visaria and Basant, 1994, p.18). The increase in the non-farm component of the rural workforce has been attributed to both developmental and distress factors which sometimes have been operating in a mutually reinforcing way (Vaidyanathan, 1986). The developmental factors like agricultural modernization and commercialization, increased demand for non-crop goods and services, urbanization, growing literacy and even welfare-oriented policy interventions leading to increased job opportunities, etc., have tried to pull the labour force away from agriculture towards more lucrative non-farm activities. At the same time, distress factors like poverty, unemployment/underemployment due to the inability of agriculture to absorb surplus labour, and even frequent natural calamities like drought have tried to push rural households to search for various NFAs activities to supplement their farm income and employment. However, wide regional variations in the nature and composition of this labour force, combined with serious data limitations, have prevented the studies attempting to capture the said process from arriving at any definite conclusion. Hence an increased emphasis has now been laid on the need for conducting more focussed micro/village level studies, which can capture the process, factors and the determinants of the ongoing occupational diversification.

There have been studies to assess the determinants of RNFE (RNFE) (Acharya and Mitra 2000; Basant et.al. 1998); but most researchers have tried to substantiate one of the

above propositions about the process of NFE diversification. Their approaches were different, so were the results. Often aggregation of data has also contributed to this confusion; data on the NFS aggregated even at the micro level may not show clear cut trends; since a wide range of activities are being pooled together. Therefore, a disaggregated analysis of the factors responsible for the diversification of RNFE at the Household (HH) is desirable. The present study will be focussed on the aforementioned.

In order to address some of these concerns the present study focussed on the following objectives;

1. To study the pattern of RNFE diversification, at the HH level.
2. To estimate the determinants of employment in selected non-farm rural activities.
3. To assess region-specific constraints in the growth of livestock-based agro-processing units.

#### **Methodology:**

As part of a study coordinated by the Agro-Economic Research Center, Institute of Economic Growth, New Delhi, ADRT unit has conducted present study in Karnataka State. To fulfill the first and second objectives of the study about employment diversification at the household level and to select the sample households multi-stage stratified random sampling techniques we adopted. Two districts were selected for the study, one district having the highest density of non-farm workers and another district having the lowest density of workers. The available secondary data shows that Kodagu, Dakshina Kannada (DK) and Chickmagalur districts have the highest concentration of non-farm workers and ranks first in all the three years under study (1971, 1981 and 1991). Therefore, we have selected DK by lottery method out of these three districts. Three districts were considered for the lowest concentration viz., Raichur, Mandya and Shimoga districts. The latest figures of 1991 showed Raichur in the 19<sup>th</sup> position compared to Mandya and Shimoga districts, which were in the 16<sup>th</sup> and 18<sup>th</sup> places respectively. We put all the three districts in the selection list and Raichur district was selected based on the same lottery method.

In the second stage of sampling, two village clusters (each consisting of three villages) from each of the selected districts were selected on the basis of level of employment diversification in the villages. Available literature indicates proximity to town as the most important determinant of NFE diversification in a specific region; therefore two village clusters, one cluster situated within 3 kms of a town and another cluster situated more than 10 km away from any town were selected in each district.

A sample of 30 rural households was selected randomly from each of the village clusters. The proportion of these categories of households in the sample was based on their distribution in the village population; however, a minimum of 3 households in each category were selected based on the random sampling method. In brief, 2 districts were selected on the basis of concentration of non-farm rural workers, 2 village clusters from each of the selected districts were chosen on the basis of proximity to a Class II town, and 30 sample HHs were studied from each village cluster - altogether 120 households, 4 village clusters, and 2 districts from each state.

To fulfil the third objective, the coordination centre had suggested four livestock-based activities i.e., milk, wool and meat to find out the prospects of employment generation. Hence we selected fishing activity as it was one of the livestock-based activities in DK district. Two villages (Kotepura and Mukka) in Mangalore taluk where the fish-processing activity is very significant, were selected for this purpose. In Raichur district we found that leatherwork was the major livestock activity. Therefore, two villages (Maski and Gurgunta) in Lingsoor taluk of the same district were taken for the study (selection of the households and manufacturing units were done as per the guidelines given in the proposal).

### **Meaning and Importance of the Non-Farm Sector:**

The term 'non-farm' encompasses all non-crop agricultural activities; it includes manufacturing activities (cottage and small rural industries and other forms of petty production), trades and services in rural areas. And also, the seasonal and contractual jobs, unconnected with farming as such, available within the village or in the nearby town, are a part of NFE (Chadha, 1986; 141; Edgreen and Mugtada, 1989; 38). RNFA's constitute an important category of income for the poor in developing countries which are characterised by problems such as mounting population pressure, diminishing land frontiers, small and fragmented landholdings due to declining land-man ratio and a high incidence of



unemployment. The non-farm activities provide supplementary employment to small and marginal rural households, especially during the slack season. Thus, in determining the total employment and income status of small and marginal households, non-farm activities have a place of great significance in a rural society.

#### **Importance of Non-Farm Sector:**

In recent years, there has been a growing realisation among academics and policy makers in India that the nature of the links between different sectors need to be re-examined. As discussed above, the earlier belief that the secondary sector would productively absorb labour released from the primary sector may not be the only pattern of growth possible – or even desirable. It may be essential to adopt the production methods of the secondary sector such as division of labour, new forms of organisation of the work-processes and so on, in rural areas so that the growth process does not necessarily require an increasing urban industrial sector. The focus shifts from spatial rural/urban dichotomies to the nature of linkages between economic activities and processes. It is the strengthening of such links that is sought to be conveyed in what is now being called the non-farm sector in the literature (Vyasulu, 1990). RNFAs, once developed, would lead to the following beneficial effects on rural communities.

#### **Income from Non-Farm Activities:**

Lack of primary data on wages and income from RNFAs in India makes it difficult to establish the structure and importance of non-farm earnings for rural household incomes. Liedholm and Kilby (1989) found that non-farm activities are second in importance to agriculture in several countries of the world in terms of their contribution to GNP. Evidence from five countries in Asia and Africa suggests an inverse relationship between the size of landholding and the share of non-farm income in the total household income. For the smallest landholding categories in each country, non-farm income sources accounted for more than 50 per cent of household income (Liedholm and Kilby, 1989; 346). Thus, NFAs are important for enhancing the income of small and marginal rural HHs (Samuel 1979).

There is also evidence to show that non-farm activities reduce income inequalities in rural areas (Samuel 1979). Non-farm sources cause the total incomes of the rural households with small landholdings to exceed the incomes of those with large landholding sizes. This vertical relationship between the rural household income and landholding seems to be

holding true only in some parts of the world. One problem with this methodology is that the farm size is taken as a proxy of the total rural household income; but rural household income levels are determined by factors such as farming, non-farm enterprises, off-farm trading and employment opportunities. Hence, it would be better to take the share of non-farm income in total household income. The information on this is scarce. However, such data, wherever available, revealed that 'vertical' shaped relationship holds true. Thus, rural non-farm income is relatively important at both ends of the income distribution.

The RNFA's also reduce rural-urban migration. The decentralised industrialisation in Taiwan, for instance, has created rural employment opportunities and enabled a large number of Taiwan's population to participate in industry without having to leave the countryside. This has not only reduced the total need for urban housing and infrastructure but also made the transition from agricultural to non-agricultural activity less abrupt, with fewer disruptions of family life and the rural social fabric (Samuel 1979). Clearly, there is much to learn from the experience of countries like Taiwan.

#### **Size and Trends in Non-Agricultural Employment:**

The percentage of non-agricultural workers in rural areas seems to be increasing in most of the developing countries. Anderson and Leisonson assessed the extent and importance of non-farm activities in rural areas and towns from the viewpoint of their contribution to the output employment and earnings of the rural workforce. It is rather difficult to arrive at the levels of RNFE because of differences in concepts employed in the National Census and nation wide labour surveys. Anderson and Leisonson, by making adjustments in the National Census data across 15 developing countries, conclude that non-farm activities in rural areas are a primary source of employment and earnings for approximately one quarter of the rural labour force in most of these countries (one-third including the labour force in the rural towns), and a significant source of secondary earnings in the slack seasons for the small and landless farmers. In African countries, rural non-farm activities account for over two-thirds of all NFE (both urban and rural), in Asia for over one-half, and in Latin America for over one-third (including activities in rural towns) (Anderson and Leisonson, 1980; 228-29; Liedholm and Kilby, 1989; 341-345).

For the estimates of the size of rural non-agricultural employment in India, we have two sources, namely population censuses and National Sample Surveys (NSS). From the

population Censuses, one can get some idea of the proportion of the rural population engaged in economic activity and their distribution by sector of employment. However, a detailed sectoral breakup of the working population is available only up to the state level and this limits the usefulness of these data. And also “problems of determining the activity status of a particular individual, the fact that workers often do several types of work covering different ‘sectors’, and the difficulties of capturing the intensity of employment in a short questionnaire administered at a single point of time’ have severely limited the utility of the census data (Vaidyanathan, 1986; A-130).

### **Factors Determining Regional Variations in Non-Agricultural Employment:**

There is a moderate shift of workers from agricultural to non-agricultural activities and such a shift has inter-regional, gender and function-wise variations. What does this shift of workforce from agriculture to non-farm sector imply? This shift can be attributed to a rapid increase in non-agricultural employment opportunities as a consequence of economic development, pulling semi-employed and under-employed workers from agriculture. This can also be attributed to commercialised agriculture which is pushing out semi-employed and under-employed workers, so that non-agricultural sector is now turning into the location for rural surplus labour. While the first proposition implies productive RNFE, the latter points towards ‘distress diversification’. It is in this context that an understanding of factors contributing to RNFE becomes pertinent. The studies by Vaidyanathan, Mahendra Dev and Jeemol Unni, among others, seek to analyse the factors determining RNFE in India. The factors, which were elaborated in these studies, can be summarised below.

### **Linkages Between Agricultural Development and Rural Non-Farm Activities:**

Rural non-agricultural employment naturally depends on agricultural prosperity in a region. Because the incomes of a great majority of people in India depend on the performance of the agricultural sector, the demand for consumer and other types of goods by them depend on agricultural prosperity. The same was noted by Raj (1976), ‘Conditions are favourable for the more extensive and rapid growth of small-scale industries in only some regions in India i.e., those which have recorded moderate to high rates of growth of agricultural output without being subject to serious fluctuations’. This hypothesis is sought to be tested across several countries. For instance, Anderson and Leisonson (1980) found that non-food goods and services occupy a rising share of the rural households’ budget as income rises. In the case of India, Papola (1987) found that the performance of rural

industrial sector in different states broadly corresponded with levels of agricultural productivity and more closely with the growth rate of agricultural output. Rise in income levels, purchasing power and to an extent the investible surplus generated by agricultural growth improved the efficiency of the existing industries and led to the emergence of new and dynamic areas.

Vaidyanathan (1986) considered the level of rural employment in rural non-agricultural activity to be a function of (1) the level of rural demand for non-agricultural goods and services produced locally; (2) the level of extra demand for rural products (services); and (3) the location, scale and technology of activities catering to these demands. He used crop output per head of agriculture population to test the hypothesis of agriculture-led NFE. He found that crop output per head of agricultural population had a significant positive impact on the incidence of non-agricultural activity. Dev's (1990) analysis at the level of NSS regions showed that output per hectare (land productivity) seems to have a positive impact on non-agricultural employment. Unni (1991) found mixed evidence to this hypothesis. She notes; 'the hypothesis of agriculture led growth is partly substantiated by a positive relationship between agricultural productivity in a region and percentage of non-agricultural employment. At the dis-aggregated level, this appears to positively influence non-agricultural employment in all industry groups, except electricity, gas and water and in both developed and less developed regions. Rapid growth of agricultural production in the previous decade, however, appeared to absorb labour better in the agricultural sector.

### **Production Linkages:**

The growth of rural non-agricultural activities also depends on backward and forward linkages that the rural non-agricultural sector has with agriculture. For instance, the manufacture and repair of agricultural implements and transport, act as horizontal linkages from the non-agricultural sector to agriculture. Likewise, processing of products from agriculture (such as cotton, tobacco, groundnuts, sugarcane, etc.,) are forward linkages from to agriculture. Supply of manufactured inputs, characteristic of modern technology, eg., fertiliser, pesticides etc., are a backward linkage. Papola (1987) found that by supplying raw materials (backward linkages) and creating demand for input and allied services (forward linkages) there will be a rapid agricultural growth and this has direct impact on RNFAs. The indirect impact was through raising consumption demand and generating surplus for investment. He found more evidence for an indirect relationship rather than a direct one.

The degree of commercialisation is taken as a proxy for forward and backward production linkages. Vaidyanathan hypothesised that commercialisation of agriculture would lead to higher RNFE. Vaidyanathan used three variables as a proxy of degree of commercialisation. (1) the level of crop output per head of agricultural population (2) the distribution of land ownership and (3) the proportion of area under non-food crops. The percentage area under non-food crops gave mixed results in the regression analysis and Vaidyanathan advocated further refinement in the variable on commercialisation before coming to any conclusion. In Unni's (1991) analysis, the cropping pattern did not indicate any positive impact when analysis was done at all regions. In fact, it was negatively and significantly related to the percentage of female non-agricultural workers. Thus, commercialisation of agriculture in a region appears to inhibit rather than facilitate female participation in rural non-farm activities. However, at a disaggregated level, the dominance of non-food crops had a direct positive impact on male employment in transport, storage and communications.

#### **Level of Urbanisation:**

The proximity to or existence of a large urban population in a region may also facilitate the growth of non-agricultural employment in rural areas in the following ways. The rural areas may cater to the demand for non-agricultural products and services in the nearby urban areas. Secondly, some of the residents from rural areas may engage in non-agricultural occupations in the nearby town and commute to their work place regularly. Jeemol Unni found that, at the aggregate level, the percentage of urban population had a positive impact only on male non-agricultural workers. At a dis-aggregated level, urbanisation had a positive impact in most of the industry groups except in construction and personal services as the demand for these activities is generated in the rural areas itself and they also do not require support from infra-structural facilities available in urban areas (Unni, 1991).

#### **NFE as a Residual Sector:**

The second dimension to the growth of rural non-farm activities can be termed as 'distress diversification' into unproductive or low paid non-agricultural jobs. Such a distress diversification occurs especially when the workers are under-employed in agriculture and the non-agricultural sector acts as a sponge for the excess labour. Such a spill off of excess

labour from agriculture to the rural non-farm sector has been put forward as the residual sector hypothesis by Vaidyanathan (1986). He used NSS person day unemployment rate to capture the excess labour problem in agriculture leading to the growth of residual non-agricultural activities. He found a strong positive relation between the unemployment rate and the percentage of non-agricultural workers. Unni (1991) treated this problem much more elaborately. She questioned the validity of taking NSS person day unemployment rate for the following reasons. First, NSS unemployment rate captures only visible and open unemployment, which would be higher in agriculturally developed regions as the people flock to these areas with expectations of better employment. Added to that, such reported unemployment would be higher in wage dependent households or casual labourers than in self-employed households because it is easier for casual workers to perceive and report their unemployment. The proportion of casual labourers would be high in agriculturally developed regions. If that is the case, the percentage of non-agricultural workers will be higher in these regions. It is not surprising that a positive relationship between these two was observed. In fact, she found a strong positive correlation between the unemployment rate and the index of agricultural development and agricultural productivity per hectare, as well as between the latter two and the percentage of non-farm workers in 56 NSS regions.

Second, the residual sector hypothesis implies that the high unemployment rates should depress the non-agricultural wage relative to the wage in agriculture. An analysis of the correlation between the percentage of non-agricultural workers and the wages in the non-farm sector relative to those in the farm sector in 56 NSS regions showed the association between these two variables. Thus, the hypothesis that surplus labour from agriculture is pushed out to the non-farm sector is not substantiated at the dis-aggregate level.

The weak empirical support to the 'distress diversification hypothesis' at the dis-aggregate level, is thus due to incorrectness of using NSS person days unemployment rate. Hence, Jeemol Unni takes two variables, namely the percentage of landless rural labour households and the percentage of the population below the poverty line. She found mixed evidence when these two variables were incorporated into the regression model. She concludes: "in regions with a higher proportion of poor population, the percentage of male workers in non-agriculture was low. This would imply that distress conditions do not necessarily lead to the growth of non-agricultural activity, perhaps due to lack of demand for non-agricultural goods in such regions. However, it was also observed that above a certain

level regions with a high proportion of landless labour households had a higher percentage of male non-agricultural workers. Here at least exists the possibility of an excess labour supply from these households leading to non-agricultural activity. When the regions were disaggregated by level of development, this relationship was observed in the developed regions but not in the less developed regions” (Unni 1991). Thus, the debate on whether the growth of NFE is ‘distress diversification’ or not remains inconclusive (Unni, 1998). One reason for this is that so far, the studies on this question have concentrated mainly on macro evidence. We need to have primary studies of rural households, where the decision making regarding the allocation of labour is done.

## CHAPTER II

### A BRIEF ACCOUNT OF THE PATTERN OF RURAL NON-FARM EMPLOYMENT IN KARNATAKA STATE

In this chapter an effort is made to understand the percentage share of agriculture and non-agriculture in total workers, the percentage of agricultural workers by industry category and sex in rural Karnataka, and to make a region-wise analysis of RNFE in the state. Towards this the census data of 1961 to 2001 and also the NSSO data of 27<sup>th</sup> to 55<sup>th</sup> rounds have been used. However, wherever data is not available that has been excluded from the analysis.

Table-2.1 presents the percentage of agricultural and non-agricultural workers to total workers in Karnataka state for the five census periods. The proportion of total agricultural workers was about 70.55 per cent in 1961, which has started declining continuously over the decades. By 2001 the percentage was 55.89 per cent. The same trend can be noticed even in the case of male and female agricultural workers. However, the percentage of female agricultural workers has been high when compared to the male agricultural workers though the rate has come down over a period of about 40 years. In case of non-agricultural labour the percentage has been going up over a period of time. As on 2001 the percentage of male agricultural workers is high, 50.86 per cent when compared to the agricultural labourers constituting only 49.14 per cent. The female non-agricultural workers is much low (31.63 per cent) when compared to the agricultural labourers constituting 68.37 per cent. The same results relating to gender are brought out by Chadha (2001) and Dev (1990) at the all-India level. This may be due to the free mobility of male labour from one place to another. Female labourers' mobility is lower because of a few factors. First (as reported by our respondents in the study areas), women have to attend to household work; second, they have to take care of the children; third, they have lower levels of education and finally they have security concern. All these are major factors affecting their lack of mobility (Chadha 2001). Therefore, they try to stick to agriculture operations and agricultural labour.



**Table-2.1: Percentage of Agricultural and Non-Agricultural Workers to Total Workers in Karnataka.**

Year	Agricultural Workers			Non- Agricultural Workers		
	Total	Males	Females	Total	Males	Females
1961	70.553	65.960	79.286	29.447	34.040	20.714
1971	66.696	65.283	72.420	33.304	34.717	27.580
1981	65.023	61.840	74.466	34.977	38.160	25.534
1991	63.117	58.121	75.403	36.883	41.879	24.597
2001	55.886	49.143	68.370	44.114	50.857	31.630

Source: Census Reports: 1961, 1971, 1981, 1991 and 2001.

Percentage of non-agricultural workers across various industry categories has been presented in Table-2.2. The table shows that in 1961 manufacturing, processing, servicing and repairs in the HH industry was much higher when compared to the other industry categories except for non-agricultural employment in other services, in which male labourers are represented at a slightly lower percentage. However, in the subsequent years other services dominate with minor changes. The employment pattern of female workers also shows fluctuation from one census period to another census period, which is difficult to explain easily. However, in 1981 the per cent is very high (32 per cent) and in 1991 it is low compared to other census periods (9.88 per cent). In the case of other industry categories the per cent goes on increasing with minor limitations. This clearly shows that the workers diversify from one activity to another due to lack of stability in their occupations. Table-2.2 clearly brought out the point. However, Bhalla and Peter (2003) have pointed that employment generation (including in the services sector) has been decelerated over a period of time in the post-liberalisation period at the all-India level both in urban and rural India.

**Table-2.2: Percentage of Workers in Various Industry Sectors in Rural Karnataka (Decadal Results)**

Industry Categories	1961			1971			1981			1991			2001		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
III. A.Act.	17.01	17.02	17.00	23.19	22.54	25.76	22.49	22.01	24.05	20.61	20.04	22.47	5.22	3.61	8.48
IV. M & Q.	0.00	0.00	0.00	2.00	1.94	2.25	2.08	1.99	2.38	3.07	3.10	2.97	94.78	96.39	91.52
Va.HHI	30.98	28.72	36.35	18.13	15.92	26.82	17.79	13.46	32.02	7.97	7.37	9.88	0.00	0.00	0.00
Vb.NHHI	6.42	7.27	4.43	10.63	11.21	8.35	16.75	16.70	16.90	19.57	15.07	34.05	0.00	0.00	0.00
VI. Contn.	5.20	5.90	3.53	5.81	6.15	4.47	5.69	6.38	3.41	5.47	6.62	1.78	0.00	0.00	0.00
VII. T&C.	9.21	9.79	7.82	12.46	13.54	8.21	13.79	15.30	8.82	16.57	18.62	9.97	0.00	0.00	0.00
VIII. TS&C.	1.43	2.00	0.07	3.27	3.76	1.34	4.38	5.39	1.07	4.67	5.99	0.42	0.00	0.00	0.00
IX. Otrs.	29.75	29.31	30.80	24.51	24.94	22.81	17.03	18.76	11.36	22.07	23.19	18.45	0.00	0.00	0.00
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Note: 1). In case of 2001, we have just two industry categories i) Household industry category and ii) Other categories.

2). The industry categories can be read as

i). III. Aact = Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities.

ii). IV. M&Q = Mining and Quarrying

iii). Va. HHI = Manufacturing, Processing, Servicing and Repairs in Household Industry.

iv). Vb. NHHI = Manufacturing, Processing, Servicing and Repairs in Non-Household Industry.

v). VI Contn = Constructions

vi). VII T&C = Trade and Commerce

vii). VIII TS&C = Transport, Storage and Communications

viii). IX Otrs = Other Services.

Source: As in table 2.1.

Using NSSO reports, data has been collected for agricultural employment and non-agricultural unemployment for both Karnataka and at the all India level. Table-2.3 presents male employment in both agriculture and non-agriculture employment. As was the case with census data, here also we found that between the various NSSO rounds, agricultural employment for males kept on declining and the non-agricultural employment went on increasing. The per cent of the former was 85.2 per cent in 1972-73, which had declined to 78.5 per cent by 1999-00. The non-agricultural employment was 14.8 per cent in the same year, which increased to 21.5 per cent. Even at the all-India level also we found the same trend.

**Table-2.3: Rural Employment (Main) in Karnataka and India 1972 to 2000 (Male).**

<b>Karnataka</b>	1972-73	1977-78	1983	1987-88	1993-94	1999-00
Agril Emp.	<b>85.2</b>	83.17	82.26	79.3	78.8	78.5
Non-Agril Emp.	<b>14.8</b>	16.83	17.74	20.5	21.2	21.5
Totl. Emp.	<b>100</b>	100	100	100	100	100
<b>All India</b>						
Agril Emp.	<b>83.23</b>	80.5	76.46	73.9	73.7	71.2
Non-Agril Emp.	<b>16.77</b>	19.5	23.54	26	26.3	28.8
Totl. Emp.	<b>100</b>	100	100	100	100	100

Source: NSS 27<sup>th</sup>, 32<sup>nd</sup>, 38<sup>th</sup>, 43<sup>rd</sup>, 50<sup>th</sup> and 55<sup>th</sup> rounds on employment and unemployment.

In case of female labourers, agriculture employment has come down but at a lower rate when compared to that for male (Table 2.4). The decline rate was noticed from 1972-73 to 1993-94, but in the year 1999-00 was high when compared to 1977-78, 1983 and 1993-94, except for the year 1972-73. The non-agricultural employment increased from 11 per cent in 1972-73 to 16.7 per cent in the 1993-94 NSSO 50<sup>th</sup> round. Whereas, in 1999-00 (55<sup>th</sup> round) the non-agricultural employment has went down by 4.3 per cent when compared to 50<sup>th</sup> NSSO survey. It is highly difficult to establish the reasons why the employment situation changes from one period to another period. However, at the all India level, agricultural employment has decreased and non-agricultural employment has increased over the years, except for the year 1987-88. During this period, the decline in agricultural employment was low and the non-agricultural employment high compared to the 50<sup>th</sup> and 55<sup>th</sup> NSSO rounds.

**Table-2.4: Rural Employment (Main) in Karnataka and India 1972 to 2000 (Female).**

<b>Karnataka</b>	1972-73	1977-78	1983	1987-88	1993-94	1999-00
Agril Emp.	89.1	86.84	87.67	83.9	83	87.8
Non-Agril Emp.	10.9	13.12	13.33	15.9	16.7	12.2
Totl. Emp.	100	100	100	100	100	100
<b>All India</b>						
Agril Emp.	89.67	86.78	85.29	82.5	84.7	84.1
Non-Agril Emp.	10.33	13.22	14.71	17.4	15.3	15.9
Totl. Emp.	100	100	100	100	100	100

Source: As in table 2.3.

In the previous paragraphs, we have laid out the increase or decrease in the employment rates between the census periods and the NSSO rounds. Table-2.5 presents the unemployment rates in Karnataka and also at the all-India level in the rural areas for Usual status and the Daily status. The table reveals that in 1972-73 the unemployment per cent was 0.67, which has almost remained the same with minor fluctuations. However, in the latter part of the 1980s it went up to 1.6 per cent in Karnataka and 1.8 per cent at the all India

level. Since then the unemployment rate has come down in Karnataka and also at the all-India level. Bhalla and Hazel (2003) have pointed out that the employment growth in agriculture during the 1990s collapsed due to a sharp deceleration in the growth rate of agriculture in general and crop production in particular. At 1980-81 constant prices, the growth of agricultural GDP decelerated from 3.94 per cent pa to 1.95 per cent pa from 1980-81 to 1990-91. In Karnataka too, the Satishchandran Committee report (1993) showed that in the late 1980s the growth rate of agriculture was low. A similar trend has been noticed in the case of rural female unemployment both at the state and the all-India level. The urban unemployment rate was much higher compared to rural unemployment both in the state and the country.

**Table-2.5: Unemployment Rates in Karnataka and India 1972-73 to 1999-2000.**

Particulars	Usual Status		Daily status	
	Karnataka	All-India	Karnataka	All-India
<b>Rural Male</b>				
1972-73	0.67	0.75	4.65	4.75
1977-78	0.68	0.83	4.48	4.45
1983	0.47	0.97	4.69	4.79
1987-88	1.6	1.8	2.5	4.6
1993-94	0.8	1.1	2.7	1.7
1999-2000	0.6	1.1	2.5	3.7
<b>Rural Female</b>				
1972-73	0.12	0.18	4.64	3.7
1977-78	1.02	0.79	4.07	2.45
1983	0.24	0.32	3.15	2.52
1987-88	1	2.4	5.3	6.7
1993-94	0.2	0.3	1.3	0.8
1999-2000	0.1	0.4	1.2	1.5
<b>Urban Male</b>				
1972-73	3.03	2.87	4.7	4.76
1977-78	3.18	3.28	5.73	5.35
1983	3.13	3.11	6.34	5.45
1987-88	5.7	5.2	9.5	8.8
1993-94	1.9	2.4	3.1	3.6
1999-2000	1.7	2.6	2.9	3.8
<b>Urban Female</b>				
1972-73	1.04	1	1.99	2.04
1977-78	3.32	2.52	2.55	2.11
1983	1.21	1.05	2.41	1.72
1987-88	4.2	6.2	10.9	12
1993-94	1.2	1.1	1.4	1.4
1999-2000	0.8	0.9	1	1.2

Source: As in table 2.3.

As may be expected, even the data from NSSO reports reveal that the male labourers involved in agricultural production has been declining from one NSSO survey to another. In 27<sup>th</sup> (1972-73) survey the level of male agricultural workers was at 85.2 per cent which has come down to 78.5 per cent (Table 2.6). In case of the female agricultural labour, it declined from was 89.1 per cent in 1972-73 to 87.8 per cent in 1999-00. The decline in the case of the males has been higher when compared to female labourers. The reasons have been explained clearly elsewhere in the same report. In the similar way, NFE for males has been going up from one survey to another. In 1972-73 it was just 14.8 per cent, and has gone up to 21.5 per cent in the latest NSSO survey (55<sup>th</sup> round) in 1999-00. The field observations in the two survey districts reveal that the increase in population, decline in the land holdings and uncertain rainfall have been the major reasons for the decline in agricultural employment and increase in non-agricultural employment.

**Table-2.6: Percentage of Workers According to Usual Status by Industry Groups in Rural Areas of Karnataka and India.**

Karnataka	1972-73		1977-78		1983		1987-88		1993-94		1999-00	
	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male
A1. Agricultural production	85.2	89.1	83.2	86.8	82.3	87.7	79.3	83.9	78.8	83.1	78.5	87.8
B. Percentage Distribution of Rural -												
Non-Agricultural Workers	NA	NA										
1. Mining and Quarrying	NA	NA	0.7	0.2	0.7	0.5	1.1	0.5	1.0	0.5	0.9	0.6
2. Manufacturing	NA	NA	6.3	7.9	5.3	6.9	6.3	9.6	5.3	9.9	5.2	5.7
3. Electricity gas and water	NA	NA	0.1	0.0	0.1	0.0	0.2	0.0	0.3	0.0	0.1	0.0
4. Construction	NA	NA	1.7	1.0	3.6	1.8	2.2	1.2	2.0	0.7	2.1	0.6
5. Trade, restaurant and hotels	NA	NA	3.5	2.8	3.3	2.0	4.7	3.0	4.8	2.0	5.7	2.4
6. Transport	NA	NA	0.7	0.1	1.3	0.0	1.5	0.1	1.2	0.0	2.4	0.0
7. Services, etc.	NA	NA	3.8	1.2	3.5	1.2	4.5	1.5	0.3	0.1	0.6	0.0
8. Others	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	6.1	3.7	4.5	2.9
Total non-agricultural workers	14.8	10.9	16.8	13.2	17.8	12.3	20.5	15.9	21.2	16.9	21.5	12.2
<b>All India</b>												
A1. Agricultural production	83.2	89.7	80.5	86.8	76.5	76.8	73.9	82.5	73.7	84.7	71.2	84.1
B. Percentage Distribution of Rural -												
Non-Agricultural Workers	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1. Mining and Quarrying	NA	NA	0.5	0.3	0.7	0.7	0.7	0.5	0.7	0.5	0.6	0.4
2. Manufacturing	NA	NA	6.5	6.1	7.2	7.2	7.6	7.5	7.0	7.5	7.3	7.7
3. Electricity gas and water	NA	NA	0.2	0.0	0.2	0.2	0.3	0.0	0.3	0.0	0.2	0.0
4. Construction	NA	NA	1.7	0.7	2.6	2.6	3.7	3.2	3.3	1.1	4.5	1.2
5. Trade, restaurant and hotels	NA	NA	4.0	2.3	4.5	4.4	5.2	2.4	5.5	2.2	6.8	2.3
6. Transport	NA	NA	1.3	0.1	1.8	1.8	2.1	0.1	2.2	0.1	3.2	0.1
7. Services, etc.	NA	NA	5.4	3.7	6.3	6.2	6.4	3.7	0.4	3.9	0.5	0.1
8. Others	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	6.7	5.9	5.6	4.2
Total non-agricultural workers	16.8	10.3	19.5	13.2	23.3	23.0	26.0	17.4	26.3	21.2	28.8	16.0

Source: As in table 2.3.

### Growth of Workforce in the State and at the All India Level:

Chadha and Sahu (2002) have worked out the growth rates for the workforce by using NSSO survey data for the years 1983 to 1993-94 and 1993-94 to 1999-00. Table-2.7 presents the same for Karnataka and all India. It can be seen from the table that in the first period, 1983 to 1993-94, the growth rate in employment for rural and urban Karnataka was 2.12 and 2.95 per cent respectively. In the subsequent period, it was 0.17 and 2.54 for the respective categories. This reveals the urban bias of policy makers. In real terms, one has to try to increase rural employment, to reduce the regional disparities and urban migration. Even at the all India level, the same trend prevails. Though there is a minor difference between the usual status, weekly status and the daily status the trend has been the same between the rural and the urban areas. Even then, as mentioned elsewhere, the urban unemployment rate is high because of the increase in population due to migration from villages to the urban centres.

**Table-2.7: Growth of Total Workforce by Three Different Measures of Employment – 1983/1999-00.**

Karnataka	Usual status			Weekly status			Daily status		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1983/1993-94	2.12	2.95	2.32	2.66	3.1	2.77	2.65	3.21	2.79
1993-94 to 1999-00	0.17	2.54	0.78	0.71	2.94	1.31	0.8	3.06	1.43
<b>All India</b>									
1983/1993-94	1.75	3.27	2.06	2.53	3.58	2.76	2.38	3.58	2.65
1993-94 to 1999-00	0.66	2.27	1.02	0.9	2.4	1.25	0.67	2.32	1.07

Source: Chadha, G.K. and P.P. Sahu (2002).

Table-2.8 presents the growth of employment for usual status for Karnataka and all India across major industry categories. The table presents that the growth rate in employment for agricultural production was positive from 1983 to 1993-94, whereas in the second period it declined at the rate of 4.39 per cent for urban Karnataka. At the all India level, even for the urban areas, the rate of agricultural employment high when compared to the rural areas. However, in the latest period, the agricultural employment for the urban areas started declining at the rate of 3.4 per cent. However, it is a welcome matter that in Karnataka, the growth rate of agricultural employment is high in rural areas when compared to the urban.

In the first period, i.e., 1983 to 1993-94, the growth rate of NFE in the rural areas was slightly higher when compared to urban NFE. in Karnataka state. In the subsequent study

period, RNFE started declining at the rate of 0.01 per cent, whereas urban NFE has grown at the rate of 3.68 per cent. Even at the all India level, the urban NFE growth rate has been high when compared to the RNFE. As mentioned earlier this is due to the urban bias of the policy makers who do not have much interest in reducing the inequality between the rural and urban areas.

**Table-2.8: Growth of Employment for Usual Status for Karnataka and India Across Major Industry Sectors.**

Industry Categories	Karnataka				All India			
	1983 to 1993-94		1993-94 to 1999-00		1983-1993-94		1993-94 to 1999-00	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
A1. Agricultural production	1.83	1.23	0.21	-4.39	1.38	1.54	0.18	-3.4
B. % Distribn. Of N-A workers								
1. Mining and Quarrying	3.48	17.64	-1.78	-28.4	3.84	4.15	-2.3	-3.71
2. Manufacturing	3.13	2.25	-1.75	2.69	2.14	2.21	1.78	1.83
3. Electricity gas and water	13.29	8.1	-18.9	-14.3	4.7	4.46	-5.7	-4.19
4. Construction	-1.43	2.7	0.51	10.24	5.18	6.2	6.43	6.26
5. Trade, restaurant and hotels	2.97	3.91	1.79	8.45	3.72	3.94	1.18	5.54
6. Transport	3.56	1.19	12.4	5.38	4.58	2.9	7.29	3.91
7. Financing, etc.	0.96	4.09	3.74	6.43	5.99	5.63	2.51	7.05
8. Services	7.65	4.18	-1.71	-1.32	3.13	4.16	0.32	0.13
Total non-agricultural workers	3.54	3.34	-0.01	3.68	3.23	3.54	2.31	2.95
All Sectors	2.12	2.95	0.17	2.54	1.75	3.27	0.66	2.27

Source: Chadha, G.K. and P.P. Sahu (2002).

### Region-wise Analysis of RNE Over the Decades:

As indicated earlier census data has been used to analyse the variations in activity-wise NFE across the districts in Karnataka State. The 1971 census figures reveal that Kodagu district stands first in terms of male NFE followed by DK and Uttara Kannada (UK) districts respectively (Table-2.9). The lowest in terms of male NFE seem to be Mandya, Kolar, and Tumkur districts, who have taken 19<sup>th</sup>, 18<sup>th</sup> and 17<sup>th</sup> ranks respectively. In 1981, the performance of the districts in terms of male NFE changes to some extent. The status of the Kodagu, DK and UK districts remains the same. But Mysore took over the lowest position from Mandya in 1981 and Mandya has taken the 17<sup>th</sup> position from the 19<sup>th</sup> rank. Tumkur district, which had the 17<sup>th</sup> rank rose to the 14<sup>th</sup> rank. In the 1991 Census also, we find little difference in the case of the districts with the lowest NFE. Raichur seems to be in the last position, Mandya is last but one and Shimoga has come down to 17<sup>th</sup> rank. In short Kodagu, DK, UK and Chickmagalur districts have maintained their position during all the

census periods. Raichur district, which had the 11<sup>th</sup> rank came down to 16<sup>th</sup> rank in 1981 and finally 19<sup>th</sup> rank in 1991 census period. Mysore district has shown some progress as it has risen to the 16<sup>th</sup> rank from 19<sup>th</sup> rank in 1981. Kolar has made good progress as its rank improved from 18<sup>th</sup> in 1971 and 1981 to 10<sup>th</sup> rank in 1991.

**Table-2.9: Non-agricultural Male Workers in Total Rural Workforce (in %).**

Districts	1971 %	Rank	1981 %	Rank	1991 %	Rank
1. Bangalore	19.50	7	20.90	8	29.50	5
2. Belgaum	19.30	9	23.40	5	22.90	6
3. Bellary	17.60	12	20.40	9	17.60	14
4. Bidar	23.60	5	16.80	13	22.60	7
5. Bijapur	19.50	8	21.60	7	19.40	11
6. C.Magalur	33.10	4	31.59	4	32.80	4
7. C.Durga	17.10	13	18.11	10	19.20	12
8. D.Kannada	40.90	2	45.33	2	52.90	2
9. Dharwad	18.30	10	17.49	12	19.00	13
10. Gulbarga	20.80	6	17.60	11	19.60	9
11. Hassan	16.50	15	23.20	6	20.00	8
12. Kodagu	48.80	1	55.09	1	60.20	1
13. Kolar	13.60	18	14.95	18	19.60	10
14. Mandya	11.60	19	15.00	17	16.00	18
15. Mysore	15.50	16	12.10	19	17.30	16
16. Raichur	18.30	11	15.40	16	15.20	19
17. Shimoga	16.80	14	15.90	15	16.10	17
18. Tumkur	15.30	17	16.20	14	17.50	15
19. N.Kan.	39.00	3	39.44	3	42.30	3
<b>State</b>	<b>20.60</b>	<b>--</b>	<b>21.06</b>	<b>---</b>	<b>23.00</b>	<b>--</b>

The female employment generation during the three census periods has been presented in table-2.10. In terms of female NFE generation too, Kodagu has the first rank in all the three census periods. Interestingly, the second rank in 1971 was held by the Chickmagalur district, which had the 4<sup>th</sup> rank in terms of male NFE generation. However, in the subsequent periods, Chickmagalore has the 3<sup>rd</sup> rank. UK has the 4<sup>th</sup> rank in all the census periods, and is ranked third for male NFE. DK was in the 3<sup>rd</sup> position in 1971 and rose to 2<sup>nd</sup> rank in the subsequent census periods. Bidar seems to be worst in female NFE as from the 9<sup>th</sup> rank in 1971 and it went down to the 11<sup>th</sup> and 19<sup>th</sup> ranks respectively in the subsequent census periods. Dharwad district, which had the lowest rank improved by moving up to the 17<sup>th</sup> rank in 1991 census period. The situation in Raichur district has declined as it holds the 18<sup>th</sup> rank in 1991 when compared to 12<sup>th</sup> and 7<sup>th</sup> ranks in 1971 and 1981 respectively.



**Table-2.10: Non-Agricultural Female Workers (in %)**

Districts	1971		1981		1991	
	%	Rank	%	Rank	%	Rank
1. Bangalore	17.90	7	16.70	6	18.60	6
2. Belgaum	10.70	17	19.20	5	7.70	12
3. Bellary	12.60	13	10.40	9	7.30	13
4. Bidar	15.50	9	9.50	11	5.10	19
5. Bijapur	12.20	14	6.80	18	6.80	15
6. C.magalur	55.50	2	41.52	3	35.80	3
7. C.Durga	11.80	16	10.13	10	9.60	8
8. D.Kan.	29.90	5	46.52	2	57.10	2
9. Dharwad	9.80	19	6.80	19	6.60	17
10. Gulbarga	17.10	8	6.90	17	6.70	16
11. Hassan	34.40	3	11.60	8	18.70	5
12. Kodagu	57.00	1	59.02	1	62.10	1
13. Kolar	11.90	15	8.17	14	8.70	11
14. Mandya	14.40	11	8.70	13	9.00	10
15. Mysore	26.50	6	9.00	12	13.40	7
16. Raichur	13.20	12	14.50	7	5.40	18
17. Shimoga	10.50	18	7.00	16	7.10	14
18. Tumkur	15.20	10	8.00	15	9.60	9
19. U.Kan.	30.90	4	28.77	4	25.00	4
<b>State</b>	<b>19.20</b>	<b>--</b>	<b>16.61</b>	<b>---</b>	<b>14.80</b>	<b>---</b>

Source: As in table 2.1

The non-agricultural workers in the total rural workforce has been presented in Table-2.11. The table reveals that when both male and female non-agricultural workers are combined we find little variation in terms of the performance of the districts. As usual Kodagu takes first rank in having more non-agricultural workers out of the total rural workforce in all the three census periods. The second place was held DK in 1981 and 1991 census periods and in the 1971 census it had the third place. In the 1971 census period Chickmagalur had the 2<sup>nd</sup> position, which has come down to third position in the subsequent census periods. The UK district has maintained the 4<sup>th</sup> rank in all the census periods. Kolar district was the lowest in terms of NFE in 1971, a position it subsequently improved to the 17<sup>th</sup> and 10<sup>th</sup> ranks. Mandya, which had the 18<sup>th</sup> rank in 1971 improved to 16<sup>th</sup> rank subsequently. Raichur district, which had the 11<sup>th</sup> and 9<sup>th</sup> rank in 1971 and 1981 came down to the 19<sup>th</sup> rank in 1991. The total RNFE in the state accounted for about 19.90, 18.84 and 18.90 per cent in the 1971, 1981 and 1991 census periods respectively. This clearly shows that RNFE has not made any progress over the period under study in the state.

**Table-2.11: Percentage of Non-Agricultural Workers in Total Rural Workforce**

Districts	1971		1981		1991	
	%	Rank	%	Rank	%	Rank
1. Bangalore	18.70	9	18.80	6	24.05	5
2. Belgaum	15.00	14	21.30	5	15.30	8
3. Bellary	15.10	13	15.40	8	12.45	17
4. Bidar	19.55	7	13.15	12	13.85	11
5. Bijapur	15.85	10	14.20	10	13.10	14
6. C.Magalur	44.30	2	36.56	3	34.30	3
7. C.Durga	14.45	15	14.12	11	14.40	9
8. D.Kannada	35.40	3	45.93	2	55.00	2
9. Dharwad	14.05	16	12.15	14	12.80	15
10. Gulbarga	18.95	8	12.25	13	13.15	13
11. Hassan	25.45	5	17.40	7	19.35	6
12. Kodagu	52.90	1	57.06	1	61.15	1
13. Kolar	12.75	19	11.56	17	14.15	10
14. Mandya	13.00	18	11.85	16	12.50	16
15. Mysore	21.00	6	10.55	19	15.35	7
16. Raichur	15.75	11	14.95	9	10.30	19
17. Shimoga	13.65	17	11.45	18	11.60	18
18. Tumkur	15.25	12	12.10	15	13.55	12
19. N.Kan.	34.95	4	34.11	4	33.65	4
State.	19.90	---	18.84	----	18.90	----

**Rural NFE And Industry Categories.**

An effort has been made to study NFE generation across various industry categories to understand exactly which industry category has major scope for NFE. For the analysis we have taken the district-wise data from the three census periods from 1971 to 1991. Table-2.12 presents the activity-wise distribution of male and female workers during the 1971 census. On the whole, RNFE has been high in three sectors viz., allied agricultural activities, other services and manufacturing in household sectors. Chickmagalur, Hassan, Kodagu, UK, Kolar and Tumkur are the districts where we find a lot of RNFE in allied activities. Among these, in the coastal Malnad districts like Chikmagalur, DK, Hassan, Kodagu, Shimoga, and UK the percentages are high. This may be due to the availability of forest resources and sea products in abundance. Female labourers seem to be employed more in allied activities and manufacturing of HH and non-HH industries. The lowest sector for both males and females seems to be mining and quarrying and especially for female, the figures are not encouraging even in construction and transport and commerce. In the case of cultivators and agricultural labourers, generally the employment rate is very high, about 80 per cent for males and 81 per

cent for females at the state level. Among the districts DK, Kodagu and UK are the districts, which with the lowest number of cultivators and agricultural labourers. The sample district, Raichur is much above the state average in terms of cultivators and agricultural labourers and the NFE is low when compared to the state average excepting for trade. Whereas, Kodagu, DK and UK have been better in all respects when compared to the state average.

**Table-2.12: Activity-wise Distribution of Male and Female Workers in 1971 (in %)**

Districts	Cultivators & agri.lab.		Allied Agri. Acti.		Mining & Quarrying		Manufacturing (HH)		Manufacturing (NHH)		Construction		Trade		Transport & Commerce		Other services	
	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM
1. Bangalore	80.70	82.10	2.40	4.00	0.10	0.20	2.10	2.50	5.30	3.10	1.00	1.00	2.20	2.20	1.00	0.50	5.40	4.4
2. Belgaum	80.70	89.40	2.70	1.80	0.10	0.00	4.50	4.10	2.50	0.70	1.50	0.90	2.50	1.20	0.70	0.20	4.80	1.8
3. Bellary	82.30	87.40	1.90	0.70	2.50	2.90	2.50	2.60	1.30	0.60	1.10	0.50	2.30	1.50	1.40	1.00	4.60	2.8
4. Bidar	76.40	84.40	4.70	1.30	0.30	0.10	3.40	3.00	2.10	0.60	1.20	0.10	3.90	0.50	0.50	0.00	7.50	9.9
5. Bijapur	80.30	87.80	4.20	2.20	0.20	0.10	5.20	4.80	1.20	0.40	1.00	0.40	2.50	1.50	0.80	0.70	4.40	2.1
6. C.Magalur	67.00	44.50	16.20	39.30	0.70	0.70	1.60	1.10	2.10	0.80	1.30	0.90	2.80	0.70	0.50	0.00	7.90	12
7. C.Durga	82.90	88.10	4.90	2.10	0.20	0.40	2.80	3.40	1.80	0.80	1.10	0.90	2.00	1.80	0.40	0.00	3.90	2.4
8. D.Kannada	59.20	70.00	6.50	1.90	0.30	0.10	8.00	16.90	6.40	4.90	2.20	0.20	7.30	2.10	2.30	0	7.90	3.8
9. Dharwad	81.60	90.20	2.60	1.00	0.30	0.30	4.20	3.20	1.40	0.70	0.70	0.20	3.80	1.70	0.70	0.30	4.60	2.4
10. Gulbarga	79.00	82.80	3.90	1.00	0.50	0.60	3.30	3.90	2.20	1.30	1.50	1.00	2.90	1.30	0.60	0.00	5.90	8
11. Hassan	83.40	65.60	5.70	20.60	0.20	0.30	1.50	2.70	1.30	1.30	2.10	3.20	1.30	0.90	0.50	0.10	3.90	5.3
12. Kodagu	51.10	42.70	26.00	42.60	0.40	0.30	1.70	1.30	2.50	1.00	2.90	1.80	4.30	0.30	0.80	0.00	10.20	9.7
13. Kolar	86.40	88.20	3.50	5.90	0.30	0.00	1.60	1.20	1.70	0.90	0.60	0.50	2.10	1.40	0.50	0.20	3.30	1.8
14. Mandya	88.40	85.50	1.20	3.10	0.10	0.1	2.00	2.50	1.70	1.00	0.50	0.30	1.60	1.50	0.30	0.00	4.20	5.9
15. Mysore	84.50	73.20	2.40	3.70	0.20	0.30	2.10	4.10	1.90	2.40	1.80	4.30	1.90	1.70	0.30	0.00	4.90	10
16. Raichur	81.60	86.70	3.30	2.20	0.80	0.10	3.20	3.30	1.70	0.80	1.00	0.30	2.70	1.40	0.50	0.30	5.10	4.8
17. Shimoga	83.20	89.30	4.10	3.70	0.10	0.20	2.70	1.70	1.50	1.20	1.30	0.80	2.60	1.40	0.50	0.00	4.00	1.5
18. Tumkur	84.60	84.80	3.90	3.80	0.30	0.20	2.90	4.30	1.20	0.80	0.90	0.90	1.90	1.90	0.40	0.10	3.80	3.2
19. N.Kan.	61.00	69.10	16.80	11.30	1.40	2.80	2.70	1.90	3.00	2.30	1.40	1.30	3.40	2.80	2.60	1.40	7.70	7.1
<b>State</b>	79.50	80.80	4.60	4.90	0.40	0.40	3.30	5.10	2.30	1.60	1.30	0.90	2.80	1.60	0.80	0.30	5.10	4.4

Note: 1) M = Male, FM = Female

2) HH = Household

Source: Census Report 1971

During the 1981 census also a similar trend has been observed. However, there is an improvement in mining and quarrying, commerce, trade and also construction (Table 2.13). The sample district, Raichur, has made significant progress in terms of NFE. For instance, it had more NFE in the case of trade in 1971 when compared to the state average. Whereas by 1981 some progress has been made in the manufacturing of NHH (female NFE), construction, trade, transport (male NFE) and also other services. For all these variables, Raichur district changed positively. DK has also made more progress in terms of generating NFE when compared to the state average. In 1981 census also, DK, UK and Kodagu stood first in terms of NFE generating districts in the state. In general the male cultivators and agricultural labourers have come down whereas the female percentage has gone up when compared to the 1971 census at the state level.

**Table-2.13: Activity-wise Distribution of Male and Female Workers in 1981 (in %)**

Districts	Cultivators & agri.lab.		Allied Agri. Acti.		Mining & Quarrying		Manufacturing (HH)		Manufacturing (NHH)		Construction		Trade		Transport & Commerce		Other services	
	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM
1. Bangalore	78.90	83.40	4.60	4.00	0.40	0.40	2.80	5.30	3.50	2.80	1.30	0.60	3.20	1.50	1.10	0.20	4.00	1.9
2. Belgaum	76.70	80.90	3.00	3.20	0.20	0.30	2.00	2.40	7.40	5.00	1.40	1.70	2.90	2.50	1.50	0.50	5.00	3.6
3. Bellary	79.60	89.60	2.50	1.20	0.10	0.00	3.80	3.80	4.30	1.80	1.70	0.50	3.20	1.50	1.10	0.10	3.70	1.5
4. Bidar	83.10	90.50	1.70	0.40	2.60	2.20	2.40	2.20	2.00	1.10	0.90	0.20	2.80	2.00	0.90	0.10	3.50	1.3
5. Bijapur	78.40	93.30	4.00	0.30	0.10	0.00	2.40	1.80	3.70	1.60	1.30	0.10	4.10	0.60	1.50	0.30	4.50	2.1
6. C.Magalur	68.42	58.48	18.89	35.83	0.13	0.00	1.78	1.30	1.81	0.46	0.98	0.45	3.12	1.13	0.95	0.31	3.93	2.04
7. C.Durga	81.88	89.86	4.32	1.55	0.39	0.26	2.80	3.29	2.64	1.20	0.88	0.23	2.78	1.81	0.67	0.05	3.63	1.74
8. D.Kannada	54.67	53.44	7.92	1.23	0.22	0.07	7.29	29.98	10.19	12.91	1.80	0.07	8.15	0.67	3.77	0.29	5.99	1.3
9. Dharwad	82.50	93.19	2.23	0.36	0.21	0.24	3.78	2.85	2.37	0.88	0.90	0.17	3.36	1.12	0.96	0.02	3.68	1.16
10. Gulbarga	82.50	93.20	2.20	0.40	0.20	0.20	3.80	2.90	2.40	0.90	0.90	0.20	3.40	1.10	1.00	0.00	3.70	1.2
11. Hassan	76.80	88.30	5.70	1.70	1.30	1.40	2.80	2.30	2.90	1.30	2.60	1.40	3.40	1.60	0.80	0.10	3.70	1.8
12. Kodagu	44.91	40.98	35.09	49.64	0.04	0.05	1.06	0.56	3.75	1.18	2.18	1.00	5.00	0.78	1.83	0.40	6.14	5.41
13. Kolar	84.84	91.30	3.21	3.44	0.41	0.05	1.13	0.26	2.49	1.35	0.73	0.12	2.53	1.29	0.83	0.26	3.62	1.4
14. Mandya	84.80	91.30	3.20	3.40	0.40	0.00	1.30	0.80	2.50	1.40	0.70	0.10	2.50	1.30	0.80	0.30	3.60	1.4
15. Mysore	87.90	91.10	1.20	0.90	0.00	0.00	1.60	1.80	2.70	1.60	0.70	0.50	2.10	2.00	0.40	0.00	3.40	2.2
16. Raichur	84.60	85.60	2.70	2.80	0.10	0.10	1.70	2.20	3.30	3.40	1.40	1.50	2.40	1.60	0.60	0.30	3.20	2.6
17. Shimoga	84.10	93.00	2.10	0.70	0.50	0.00	2.60	2.10	2.40	1.20	1.60	0.30	3.00	1.20	0.50	0.10	3.20	1.4
18. Tumkur	83.80	91.90	2.70	1.00	0.40	0.50	2.00	1.50	2.80	1.60	1.00	0.30	3.10	1.10	0.70	0.10	3.50	1.9
19. N.Kan.	60.56	71.23	15.22	7.45	1.79	1.71	2.69	1.72	4.66	4.10	2.08	2.99	4.32	5.21	3.39	0.91	5.29	4.68
<b>State</b>	78.94	83.40	4.64	3.99	0.42	0.39	2.84	5.32	3.52	2.81	1.34	0.57	3.22	1.46	1.13	0.18	3.95	1.89

Source: Census Report 1981.

In the 1991 census period too NFE was high in the case of the allied agricultural activities, manufacturing of non-household industries, trade and other services (table-2.14) . However, in case of all the other sectors also there is an improvement. Interestingly the percentage of male cultivators and agricultural labourers has come down but female involvement in these sectors has gone up from the 1971 to 1991 census. In 1971 the male percentage was 79.50 but it has come down to 77.10 per cent. In case of females the percentage in 1971 was 80.80 but it has increased to 85.20 per cent. The same three districts, DK, UK and Kodagu have fewer cultivators and agricultural labourers and they have more NFE. In Raichur district, the percentage of cultivators and agricultural labourers has gone up over a period of time and the NFE has come down.

**Table-2.14: Activitywise Distribution of Male and Female Workers in 1991 (in %).**

Districts	Cultivators & agri.lab.		Allied Agri. Acti.		Mining & Quarrying		Manufacturing (HH)		Manufacturing (NHH)		Construction		Trade		Transport & Commerce		Other services	
	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM	M	FM
1. Bangalore	70.70	81.40	3.30	2.50	1.60	1.80	1.40	2.00	8.50	5.70	1.90	0.80	4.20	2.20	2.20	0.10	6.40	3.5
2. Belgaum	77.20	92.30	2.00	0.60	0.20	0.10	2.90	2.40	4.20	1.10	2.30	0.20	3.70	1.20	1.40	0.00	6.20	2.1
3. Bellary	82.40	92.80	1.90	0.30	2.00	1.20	1.40	1.00	1.70	0.70	1.10	0.10	3.90	1.80	1.20	0.20	4.40	2
4. Bidar	77.40	95.00	1.70	0.20	0.60	0.20	1.50	0.80	2.70	0.50	1.60	0.20	5.50	0.50	2.30	0.10	6.70	2.6
5. Bijapur	80.80	93.10	2.30	0.60	0.40	0.10	3.10	1.90	2.50	1.00	1.50	0.10	3.40	1.20	1.10	0.00	5.10	1.9
6. C.Magalur	67.30	64.30	16.00	28.00	0.40	0.30	0.90	1.00	2.30	1.10	1.50	0.50	4.50	1.10	1.10	0.10	6.10	3.7
7. C.Durga	80.80	90.30	3.40	1.00	0.50	0.30	1.90	2.20	2.60	1.10	1.20	0.20	3.90	2.00	0.90	0.00	4.80	2.8
8. D.Kannada	47.20	42.90	11.10	3.10	0.70	0.20	1.50	0.90	10.90	46.70	3.50	0.30	11.30	1.60	4.40	0.10	9.50	4.2
9. Dharwad	81.10	93.40	1.90	0.30	0.30	0.10	2.20	1.40	3.10	1.20	1.10	0.10	4.50	1.10	1.30	0.00	4.60	2.4
10. Gulbarga	80.50	93.10	3.10	0.70	1.50	1.00	1.80	1.10	1.70	0.40	1.30	0.20	4.00	1.10	1.10	0.00	5.10	2.2
11. Hassan	80.20	81.40	6.70	12.30	0.60	0.40	0.70	0.80	2.00	1.00	1.20	0.50	3.00	1.00	1.30	0.00	4.50	2.7
12. Kodagu	39.90	37.80	38.00	51.80	0.40	0.50	0.60	0.40	3.10	1.50	2.10	0.50	5.50	1.00	2.00	0.10	8.50	6.3
13. Kolar	80.30	91.30	4.30	2.60	0.90	0.20	0.90	0.80	2.90	1.40	1.20	0.20	3.80	1.30	1.20	0.00	4.40	2.2
14. Mandya	84.10	90.90	2.90	2.00	0.60	0.60	0.80	0.80	2.70	0.80	1.00	0.70	3.10	1.70	0.70	0.00	4.20	2.4
15. Mysore	82.60	86.60	3.50	3.00	0.60	0.50	1.10	2.00	3.00	2.80	1.50	0.50	3.50	1.90	0.70	0.00	3.40	2.7
16. Raichur	84.90	94.60	1.50	0.40	0.50	0.20	1.90	1.30	1.30	0.40	0.60	0.10	3.40	1.10	0.60	0.00	5.40	1.9
17. Shimoga	83.90	92.70	2.50	0.70	0.40	0.40	1.40	1.20	2.20	0.80	0.80	0.10	3.80	1.10	0.90	0.00	4.10	2.8
18. Tumkur	82.50	90.50	2.80	1.10	0.50	0.20	1.90	2.60	2.30	1.60	1.00	0.20	3.30	1.60	0.90	0.00	4.80	2.3
19. N.Kan.	57.70	74.90	17.40	7.60	1.50	1.10	1.80	1.10	3.70	1.40	3.10	0.80	5.90	5.30	2.30	0.50	6.60	7.2
<b>State</b>	77.10	85.20	4.60	3.30	0.70	0.40	1.70	1.50	3.50	5.00	1.50	0.30	4.30	1.50	1.40	0.10	5.30	2.7

Source: Census Report 1991.

### Determinants of Rural Non-Farm Employment:

We have taken few variables relating to agriculture and infrastructure and try to see the impact of these on the rural workforce across various district groups. Towards these we have classified the districts into four groups based on the status of NFE. The respective groups are 1) Very High NFE Districts, 2) High NFE Districts, 3) Medium NFE districts and 4) Low NFE Districts. We have utilised the census data towards the same. In 1971 area under forest, irrigated area and the literacy rate play a major role to determine the NFE. The area under forest has positive impact on the NFE. As the area under forest increases the NFE also increase and vice-versa (Table 2.15). The area under irrigation has the negative relationship with NFE. As the percentage of the irrigated area increases the NFE decreases and vice-versa. And finally the literary rate has the positive impact on the NFE. The table reveals that the districts where the NFE is high the literacy rate is high and the districts where the literary rate is low the NFE is low.

**Table-2.15: Development of Agriculture and Infrastructure Vis-à-vis NFE (1971)**

Degree of Non-Farm Employment	% of Cultivators and agricultural labourers	Work force in non-farm sector	% Of Forest area to total geographical area	% Of net sown area to total geographical area	% Of irrigated area to net sown area	Literacy rate	Road length per thousand population	Railway length per thousand population
RNFE Very High	67.57	27.19	30.03	39.62	14.38	33.36	1.87	0.06
RNFE High	77.18	19.38	17.57	50.37	12.71	32.02	1.46	0.11
RNFE Medium	85.17	16.45	8.75	62.07	16.16	30.96	1.70	0.10
RNFE Low	89.35	10.63	6.22	48.93	21.15	27.97	2.16	0.10

Even in 1981 the variables like the forest area, percentage of irrigated area and the literacy rate have been the determinants of NFE in rural areas. However in case of the second category of the districts where the NFE is high the area under forest is low when compared to the other two categories like medium and low NFE districts. It is highly difficult to reason it out why the results behave like this. However the other two variables are behaving according to the earlier case (Table 2.16).

**Table-2.16:Development of Agriculture and Infrastructure Vis-à-vis NFE (1981).**

Districts	% of Cultivators and agricultural labourers	Work force in non-farm sector	% Of Forest area to total geographical area	% Of net sown area to total geographical area	% Of irrigated area to net sown area	Literacy rate	Road length per thousand population	Railway length per thousand population
RNFE Very High	64.57	29.00	33.13	37.49	7.20	47.99	3.29	0.03
RNFE High	86.59	17.00	6.54	73.50	7.38	31.27	2.39	0.05
RNFE Medium	86.31	14.84	15.58	50.18	9.21	35.25	3.45	0.02
RNFE Low	82.75	10.63	11.68	46.71	10.24	35.93	3.98	0.02

During 1991 census also the variables and the values are behaving according to the 1981 census figures, with minor variation. The forest area, percentage of irrigated area and the literacy rate are the determinants of NFE. This clearly reveals that the distress conditions and the literacy rate are the determinants of NFE. When the irrigation is less the NFE is high and when the literary rate is high the NFE is high. Moreover, wherever the forest area is more the NFE is also high. Therefore, one can conclude that area under forest, percentage of irrigated area and the literacy rate are prominent. Whereas the net sown area and the infrastructure especially the road do not show any impact on the NFE.

**Table-2.17:Development of Agriculture and Infrastructure Vis-à-vis NFE (1991).**

Districts	% of Cultivators and agricultural labourers	Work force in non-farm sector	% Of Forest area to total geographical area	% Of net sown area to total geographical area	% Of irrigated area to net sown area	Literacy rate	Road length per thousand population	Railway length per thousand population
RNFE Very High	62.20	32.01	33.78	38.19	8.45	44.00	7.58	0.10
RNFE High	82.35	17.29	10.92	62.56	10.01	36.20	6.71	0.15
RNFE Medium	86.26	15.67	11.40	55.06	10.26	31.60	5.57	0.17
RNFE Low	86.52	11.12	11.76	50.92	13.41	33.52	7.53	0.15

## **CHAPTER III**

### **NON-FARM EMPLOYMENT IN THE SAMPLE DISTRICTS – SECONDARY DATA ANALYSIS**

This chapter includes three sections. The first section deals with the basic socio-economic indicators of the sample districts and of Karnataka state, the second section deals with category-wise employment generation based on census data and the final section deals with the determinants of RNFE at the district level.

#### **Section-1**

##### **Socio-Economic Details of the Selected Districts**

To understand the nature of the sample districts we have tried to gather a detailed information of the districts (Table 3.1). We start with total geographical area and end with a host of relevant variables so that they indicate the socio-economic position of the sample districts. Out of 25 variables which seem to be the determinants of RNFE, we found that around 72 per cent of the determinants were favourable in DK when compared to Raichur district where only around 28 per cent are favourable for RNFE. Again out of 18 variables which are favourable for RNFE generation, 61.11 per cent have strong features of NFE. These are strong indications to say that DK is in a more advantageous position to generate more NFE when compared to Raichur district. Therefore, NFE is not only due to distress factors and also development of the area in terms of literacy and infrastructure.



**Table-3.1: Socio-Economic Parameters of the Sample Districts**

Particulars	Ref. Year	DK	Raichur	State
Total geographical area (in lakh ha)	1998-99	2.505	4.388	190.50
% of pop.of the distcs to the state (Popn in lakhs)	2001	3.596	3.126	527.34
Annual growth rate of population in %	1991-01	1.40	2.20	1.70
Population density per sq.km	2001	416	241	275
Proportion of rural to total population	2001	61.58	74.57	66.01
Sex ratio(number of females per 1000 males)	2001	1023	980	964
SC/ST population(%) to total population	1991	10	25	20.64
Literacy rate for the entire population (%)	2001	83.47	49.54	67.04
Male literacy rate	2001	89.74	62.02	76.29
Female literacy rate	2001	77.39	36.84	57.45
Rural literacy rate % (Persons)	1991	72	30	48
Rural literacy rate % (Male))	1991	82	44	60
Rural literacy rate % (Female)	1991	64	16	35
Rural literacy rate % (Persons)	2001	79.93	43.15	59.68
Proportion of area under forests	1998-99	26.92	2.17	16.07
Land not available for cultivation (%)	1998-99	24.02	4.86	10.99
Other uncultivated land (%)	1998-99	22.07	29.32	17.86
Average Rainfall(Normal in mms)	1901-70	3975	631	1139
Proportion of Net sown area	1998-99	26.96	63.63	55.06
Average size of land holdings (ha)	1995-96	1.05	2.63	1.94
Proportion of net irrigated area to NSA	1998-99	51.3	23.64	23.75
Cropping intensity	1998-99	124.5	121.12	117.37
Village roads (kms)	1998-99	1269	996	48148
% of HH having electricity	1991	42.4	32.5	52.5
% of rural HH having electricity	1991	31.55	26.46	42.89
No. of cities	1991	1	1	18
Average size of cities	1991	281161	170577	416714
No. of towns	1991	26	12	288
No. of villages	1991	615	1369	27066
Average size of village	1991	3140	1369	1147
Livestock per 1000 human population	1997	348.48	763.99	600.27
Vocational edcnl.institutions per lakh popln.	1993-94	0.72	0.93	1.23
Vocational edcnl.institutions per lakh popln.	2000-01	NA	NA	1.21
% of agricultural labourers in total workforce	2001	4.43	45	26.39
% of cultivators in total workforce	2001	5.23	28.35	29.48
No of Tractors per 1000 ha NSA	1997	1.31	3.19	7.74
No of pumpsets per 1000 ha NSA	1997	109.21	10.38	58.43
Poverty ratio in Karnataka	1999-00	NA	NA	20.04
Poverty ratio (Rural)	1999-00	NA	NA	17.38
Poverty ratio (Urban)	1999-00	NA	NA	25.25

Sources: 1) Karnataka at a Glance – 2001-02.

2) Livestock Census 1997.

3) Censuses 1991 and 2001.

## Section – II

### Status of Non-Farm Employment in the Sample Districts

To find out the status of RNFE in the sample districts we have used census data from 1961 to 1991. We have given the total RNFE, and male and female RNFE separately. Table 3.2, presents the details of NFE in the sample districts. Interestingly, it

is found that altogether, Raichur has more cultivators and agricultural labourers when compared to DK. The number of females engaged in cultivation and labour work has been high compared to males in both the districts, and vice-versa in the case of NFAs. Among the NFAs, other services and manufacturing in household industry seems to rank highest compared to any other activity. DK has more NFE compared to Raichur district.

In the 1971 census it was seen that the percentage of cultivators and agricultural labourers came down for DK when compared to the 1961 census, whereas for the Raichur district it went up. This clearly reveals that the NFE increased in 1971 for DK and declined for Raichur district. In 1971, the allied agricultural activities, manufacturing in HH and non-HH industries, transport and communication and other services are the industry categories where NFE was high. In most of the sectors, the percentage of NFE was high for DK when compared to the Raichur district. In the 1971 census, the percentage of women involved in cultivation and agricultural labour is high when compared to that of males. Female NFE seems to be moderately good in case of allied agricultural activities, manufacturing in HH and non-HH industry and other services. However, they are lower when compared to the males.

By the 1981 census, both for Raichur district and the state, the percentage of cultivators and the agricultural labourers in general, and for females in particular, went up, whereas for the DK district it came down when compared to the 1971 census. The decline in the female percentage in agriculture and its labour was absorbed by the manufacturing in HH and non-HH sector in DK. The percentage of female NFE in the above sectors is 29.98 and 12.91 per cent respectively, which is very high compared to their male counterparts. In all the other activities DK has more NFE compared to the Raichur district.

Coming to the 1991 census we found that the percentage of cultivators and agricultural labourers has gone up further in Raichur district and came down further for DK district. This held good for both males and females in both the districts. Even here female NFE is low when compared to that of males in DK district. Manufacturing in the HH industry has come down markedly for both males and females. In Raichur, the major non-farm activities seem to be other services and trade and commerce for males and for females it is other services and manufacturing in HH industry.

**Table-3.2: Rural Male and Female NFE in the Sample Districts (in %)**

1961	Rural employment			Male R.Emp.			Female R.Emp.			
	Industry categ.	Raichur	DK	State	Raichur	DK	State	Raichur	DK	State
Culti & Agril Lab.	82.61	73.55	81.01	81.21	65.13	78.73	85.10	82.57	84.86	
IV. M & Q.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
In.MQLFF	0.51	3.85	3.23	0.71	5.87	3.62	0.17	1.69	2.57	
Va.HHI	6.45	6.44	5.88	7.08	6.34	6.11	5.33	6.55	5.50	
Vb.NHHI	0.28	4.62	1.22	0.29	6.06	1.55	0.26	3.07	0.67	
VI. Contn.	0.69	0.75	0.99	0.84	1.34	1.26	0.42	0.13	0.54	
VII. T&C.	1.67	3.16	1.75	2.00	4.12	2.08	1.08	2.13	1.18	
VIII. TS&C.	0.21	0.76	0.27	0.32	1.47	0.43	0.01	0.01	0.01	
IX. Otrs.	7.58	6.86	5.65	7.56	9.68	6.23	7.62	3.84	4.66	
Total	100	100	100	100	100	100	100	100	100	
<b>1971</b>										
Culti & Agril Lab.	82.80	63.5	79.80	81.60	59.20	79.50	86.70	70.00	80.80	
Allied Agri.Act.	3.00	4.6	4.70	3.30	6.50	4.60	2.20	1.90	4.90	
IV. M & Q.	0.70	0.20	0.40	0.80	0.30	0.40	0.10	0.10	0.40	
Va.HHI	3.20	11.60	3.70	3.20	8.00	3.30	3.30	16.90	5.10	
Vb.NHHI	1.50	5.80	2.10	1.70	6.40	2.30	0.80	4.90	1.60	
VI. Contn.	0.90	1.40	1.20	1.00	2.20	1.30	0.30	0.20	0.90	
VII. T&C.	2.40	5.20	2.50	2.70	7.30	2.80	1.40	2.10	1.60	
VIII. TS&C.	0.40	1.40	0.70	0.50	2.30	0.80	0.30	0	0.30	
IX. Otrs.	5	6.2	5	5.10	7.90	5.10	4.8	3.8	4.4	
Total	100	100	100	100	100	100	100	100	100	
<b>1981</b>										
Culti & Agril Lab.	84.80	54.15	81.17	84.60	54.67	78.94	85.60	53.44	83.40	
Allied Agri.Act.	2.70	5.08	13.40	2.70	7.92	15.20	2.80	1.23	7.40	
IV. M & Q.	0.10	0.15	1.80	0.10	0.22	1.80	0.10	0.07	1.70	
Va.HHI	1.80	16.92	2.50	1.70	7.29	2.70	2.20	29.98	1.70	
Vb.NHHI	3.30	11.34	4.50	3.30	10.19	4.70	3.40	12.91	4.10	
VI. Contn.	1.40	1.07	2.30	1.40	1.80	2.10	1.50	0.07	3.00	
VII. T&C.	2.30	4.98	4.50	2.40	8.15	4.30	1.60	0.67	5.20	
VIII. TS&C.	0.50	2.30	2.80	0.60	3.77	3.40	0.30	0.29	0.90	
IX. Otrs.	3.1	4.02	5.1	3.20	5.99	5.30	2.6	1.34	4.7	
Total	100	100	100	100	100	100	100	100	100	
<b>1991</b>										
Culti & Agril Lab.	88.70	45.30	79.70	84.90	47.20	77.10	94.60	42.90	85.20	
Allied Agri.Act.	1.10	7.70	4.20	1.50	11.10	4.60	0.40	3.10	3.30	
IV. M & Q.	0.30	0.40	0.60	0.50	0.70	0.70	0.20	0.20	0.40	
Va.HHI	1.70	1.20	1.60	1.90	1.50	1.70	1.30	0.90	1.50	
Vb.NHHI	0.90	26.00	4.00	1.30	10.90	3.50	0.40	46.70	5.00	
VI. Contn.	0.40	2.10	1.10	0.60	3.50	1.50	0.10	0.30	0.30	
VII. T&C.	2.50	7.20	3.40	3.40	11.30	4.30	1.10	1.60	1.50	
VIII. TS&C.	0.40	2.60	0.90	0.60	4.40	1.40	0.00	0.10	0.10	
IX. Otrs.	4	7.3	4.5	5.40	9.50	5.30	1.9	4.2	2.7	
Total	100	100	100	100	100	100	100	100	100	

Source: Census Reports 1961, 1971, 1981 and 1991.

It can be concluded from the above discussion that the percentage of cultivators and agricultural labourers is increasing in Raichur district but NFE has gone down to some extent. In comparison, in DK district, the percentage of cultivators and agricultural labourers has come down and NFE has gone up. In general, women's involvement in cultivation and agricultural labour activities is more and the percentage has been increasing over a period of time in Raichur district.

### **Determinants of Non-Farm Employment in Karnataka:**

In this section, NFE in Karnataka has been analysed for the two census periods, viz., 1981 and 1991. For the earlier census periods, it is highly difficult to get the data for the variables mentioned below. From the 2001 census, detailed data has not yet been published. The task of analysing factors responsible to variations in NFE at district level is, however, not very easy. This is mainly because of data problems. There are data limitations regarding some of the variables used, especially per-capita income at the district level and the proportion of marginal holdings to total holdings. In view of these factors, the analysis may not be very satisfactory; however, given the non-availability of data, we have to use these variables although they are not satisfactory.

As variables indicating growth in a district we use per-capita income and commercialisation of agriculture. The figures on per-capita income are obtained from Estimates of District Income, Karnataka, 1980-81, published by the Directorate of Economics and Statistics, Bangalore. Note, however, that there is a considerable discussion around the reliability of using these estimates. We are using per-capita income at current prices (PCYCR) as well as per-capita income at constant (1980-81) prices (PCYCS). Commercialisation of agriculture (COA) is nothing but the proportion of the area under cash/commercial crops to gross cropped area. Over time paddy has lost its subsistence character and assumed commercial character. Hence, paddy is taken as a cash crop.

These variables, i.e., PCYCR, PCYCS and COA are growth related. We expect a positive relation between these variables and RNFE. In other words, in the districts where there is higher per-capita income and where the proportion of area under cash crops is higher, the proportion of NFE should also be higher. It is often argued that

growing urbanisation positively influences the diversification into non-agricultural activities. To see the impact of urbanisation, we have worked out degree of urbanisation (DUB). The relation that we are expecting between DUB and NFE is again positive. In other words, a higher degree of urbanisation should lead to a higher proportion of NFE.

In order to find empirical support for the 'distress diversification' hypothesis, we have worked out three variables, viz., land-man-ratio (LMR), the proportion of marginal holdings to total holdings (MHTH) and the proportion of agricultural labourers (PAL). The land-man-ratio is worked out by dividing the total crop area in a district by the population dependent on agriculture (cultivators and agricultural labourers) in that district. The variable MHTH is nothing but the proportion of marginal holdings in a district. The variable PAL is the proportion of agricultural labourers to total workers in a district.

For the validation of the distress diversification hypothesis, we expect a positive relationship between MHTH and RNFE and a negative relationship between LMR and PAL and RNFE. This is because the higher the proportion of marginal holdings to total holdings, the greater the compulsion to seek work outside agriculture. On the other hand, the higher the land-man-ratio, the better the employment opportunities in agriculture and hence, people in rural areas are not pushed into non-agricultural activities. Similarly, the higher the proportion of agricultural labourers, the better the employment opportunities in agriculture and consequently, the employment in the non-farm sector.

Finally, Rural Male NFE (RMNF), Rural Female Non-Farm Employment (RFNFE) and RNFE are the proportions of the total NFE to the total male, female and total workers respectively. Table-3.3 presents correlates among all these variables for 1981. As per our expectation, the variables of PCYCS, PCYCR, COA, DUB and MHTH are positively related to RMNF, RFNF and RNF, while LMR and PAL are negatively correlated although none of the coefficients are statistically significant. The correlation coefficient is high in the case of COA and LMR, RMNF, RFNF and RNF. However, the negative correlation between LMR and RMNF is lower compared to that between LMR and RFNF. This suggests that poverty-related factors become significant in the case of female non-agricultural workers.

**Table-3.3: Correlates of Non-Farm Employment: 1981.**

Variables	PCYCS	PCYCR	COA	DUB	LMR	MHTH	PAL	RMNF	RFNF	RNF
PCYCS	1.0000	1.0000**	0.1492	0.1379	-0.3258	0.1133	-0.3914	0.2979	0.1850	-0.2414
PCYCR		1.0000	0.1492	0.1379	-0.3258	0.1133	-0.3914	0.2979	0.1850	0.2414
COA			1.0000	-0.1892	-0.2701	0.3180	-0.0298	0.4063	0.4186	0.4183
DUB				1.0000	-0.0763	0.0307	0.0813	0.2149	0.1890	0.2103
LMR					1.0000	-.8731**	.7887**	-0.3284	-0.4894	-0.4148
MHTH						1.0000	-.8071**	0.1710	0.4268	0.2971
PAL							1.0000	-0.1692	-0.3132	-0.2434
RMNF								1.0000	.9210**	.9841**
RFNF									1.0000	0.9740
RNF										1.0000

Source: Rajasekhar and R.R. Biradar (1998)

By 1991, the overall relationship remained unchanged (Table 3.4). However, the positive correlation between PCYCR and RMNF increase while the negative correlation between LMR and RMNF declined further in the case of males. By 1991, the correlation between LMR, MHTH and PAL and RFNF became more significant. These results suggest that while NFE among males can be explained by growth-related factors, that among females can be better explained by poverty related factors. This is hardly surprising because although work participation rate among women has increased in recent years, the employment among them has gone down. With the shift in NFE from household to non-household manufacturing, female workers will be the first ones to be adversely affected. As is well known, the access of women to all the government-initiated developmental programmes has been constrained by social, economic and cultural factors.

**Table-3.4: Correlates of Non-Farm Employment: 1991.**

	PCYCS	PCYCR	COA	DUB	LMR	MHTH	PAL	RMNF	RFNF	RNF
PCYCS	1.0000	0.9743	-0.2379	0.1476	-0.1913	0.1702	-0.5009	0.3645	0.2222	0.3023
PCYCR		1.0000	0.1874	0.3812	-0.2446	0.2283	-0.4801	0.4675	0.3118	0.4075
COA			1.0000	-0.0753	-0.4392	0.3392	-0.0082	0.2011	0.2756	0.2493
DUB				1.0000	-0.0949	0.0891	0.0094	0.3049	0.2166	0.2841
LMR					1.0000	-0.9295	.7793**	-0.2381	-0.3536	-0.3269
MHTH						1.0000	-0.8297**	0.2800	0.4601	0.4003
PAL							1.0000	-0.3501	-0.4144	-0.4118
RMNF								1.0000	.9029**	.9769**
RFNF									1.0000	.9717**
RNF										1.0000

Source: As in table 3.3.

It needs to be, however, noted that the study based on secondary information is not able to arrive at definite conclusions. This is mainly because of the data limitations at the district level. Secondly, although the relationship between district level variables and NFE is on the expected lines, none of them is statistically significant.

## CHAPTER-IV

### VILLAGE LEVEL RURAL NON-FARM DIVERSIFICATION

Before getting into the detailed HH level data analysis an effort is made to understand the village characteristics of the sample villages. As mentioned earlier, two village clusters in each district were selected and each village cluster consisted of three villages. Village Cluster-1 (VC-1) close to the town (at a distance of about three kms.) and the Village Cluster-2 (VC-2) far away (more than 10 kms. away from the town) were selected in each case. These two categories of clusters were selected basically to understand the various kinds of employment opportunities available to the people and also to understand the wage patterns near towns and far away from town.

The table-4.1, presents the characteristics of the village clusters selected for the study. Raichur district, the lowest in terms of NFE, is comparatively prosperous district agriculturally where the average land holding size and the per-capita land available for cultivation is high when compared to DK district, which stands first in terms of NFE. Even the proportion of irrigated area higher in case of the former when compared to the latter. However, the literacy rate is much higher in DK compared to Raichur. This goes against the findings by Bhalla, Chadha, Rajasekhar and others who suggest agricultural development is one of the major factors which leads to an increase in NFE. Here, the indications are that other than agriculture, non-availability of land, higher literacy rate, infrastructure and awareness of the people have a role in the generation of more NFE. In

**Table-4.1: Characteristics – Across Clusters of Village**

Village Particulars	Raichur		D.Kannada	
	VC-1	VC-2	VC-1	VC-2
Size of the village group	576	1212	2100	1559
Average holding size	3.86	2.12	0.78	0.43
Proportion of irrigated land	78.24	74.59	57.84	42.66
Proportion of landless HHs.	16.15	11.72	10.23	15.07
Per capita land	0.72	0.4	0.12	0.08
Proportion of literate	47.69	49.98	62.26	63.04
Distance from nearby towns	2.75	11.83	2.67	11.00
Size of nearby towns (in '000)	44.38	44.38	34.31	34.31

Note: 1) VC-1, refers to the village cluster-1  
 2) VC-2, refers to the village cluster-2  
 3) Each village cluster consists of three (3) villages.

the absence of land for their livelihood people search for job. The Distress Diversification hypothesis holds good in DK district in addition to the high literacy rate, infrastructure and the awareness of the people. This has been explained in detail in the following sections.

The above argument has been supported by the holding size of the farmers in the sample villages. In the sample villages the number of marginal and small farmers is low in the less developed district, Raichur, when compared to the developed district, DK. Though there is a negative relationship between the land size class and the number of holdings in DK, the decline in the number of holdings as the size class increases has been high when compared to the Raichur district (Table-4.2).

**Table-4.2: No. of HHs Across Size Classes**

Land Size Classes	Raichur		D. Kannada	
	VC-1	VC-2	VC-1	VC-2
Marginal	150	587	1427	1121
Small	170	253	330	126
Semi Medium	153	212	128	66
Medium	10	18	0	7
Large	0	0	0	4
Total	483	1070	1885	1324

Note: Marginal Farmers=0.1 to 1 ha; Small Farmers=1.01 to 2.0 ha; Medium Farmers=2.01 to 5.00 ha; Large Farmers=5.01 ha and above

It is interesting to understand whether the villages, close to towns or the villages, are far away from towns have more non-farm activities. The literature reveals that the villages closer to towns have more NFE opportunities. To test this finding we have data collected for the sample village clusters across various NFE activities. In Raichur district the villages which are close to the town have more activities when compared to the village clusters, far away from the town (Table 4.3). This is true for all the NFAs. Whereas in DK, in the case of the traders and shopkeepers and services, we found that the villages which were far away from the town performed better. Even for the other NFEAs the difference is very narrow. This is mainly because of the awareness and higher literacy levels of the people in these two districts. In DK the awareness and the literacy rate are high and therefore, the people get into one activity or another. Second, the villages in DK are spread across the main roads and the towns and villages are almost clubbed, hence it is difficult to fix the boundaries of the villages. Therefore, one cannot make differentiation between the villages near towns and far away from towns. Whereas in Raichur the HHs are clustered and there is a clear-cut boundary for each village.



**Table-4.3: No. of HHs Across Various Non-Farm Activities**

Particulars	Raichur		D. Kannada	
	VC-1	VC-2	VC-1	VC-2
Manufacturing and Processing	1.74	1.73	2.38	2.25
Construction	3.82	2.31	2.05	1.99
Traders and shop keepers	8.68	5.36	2.76	3.53
Transport	3.13	1.73	1.86	1.86
Services	5.21	4.62	2.00	2.50

The proportion of casual labourers across the industry categories have been presented in Table-4.4. Agricultural labourers without land but engaged in allied activities and agricultural labourers with land constitute the major portion of the casual labourers in the study area. Of the two districts, Raichur seems to be the No. 1 in terms of having more casual labourers. The third and the fifth places are taken by traders and service sectors respectively.

**Table-4.4: Proportion of the Casual Workers Across Industry Categories**

Industrial Categories	Raichur		D. Kannada	
	VC-1	VC-2	VC-1	VC-2
Agricultural labourers	16.15	11.72	10.24	15.07
Agri. Labourers with out land but with allied activity	42.53	29.04	20.24	35.28
Manufacturing, processing etc.	1.74	1.73	2.38	2.25
Construction	3.82	2.31	2.05	1.99
Trade	8.68	5.36	2.76	3.53
Transport	3.13	1.73	1.86	1.86
Services	5.21	4.62	2.00	2.50

An attempt is also made to understand the availability of infrastructure and economic services in the sample villages. This has been presented in Table-4.5. By understanding the characteristics of the districts, without any data one can say that economic services are better in the DK villages when compared to Raichur. The argument does hold good when we study the results which are presented in the table. The table clearly reveals that of the 17 variables, four variables are not at all available in all the villages. Of the 13 remaining variables, six variables are common in both the village clusters. Of the seven variables, six variables seem to be high in DK district when compared to the Raichur district. This shows that the DK villages are fully equipped with infrastructure and economic services. Therefore, it is far ahead in terms of economic development.

**Table-4.5: Availability of Infrastructure and Economic Services in the Sample Villages**

Infrastructure Facilities	Raichur			D.Kannada		
	VC-1	VC-2	Total	VC-1	VC-2	Total
Primary School	3	3	6	3	3	6
Public School	0	2	2	3	1	4
Primary Health Center	0	2	2	1	1	2
Private Medical Practitioner	0	3	3	3	1	4
Veterinary Dispensary	0	1	1	1	2	3
Govt.training center	0	0	0	0	0	0
Private Training center	0	0	0	0	0	0
Khadi Village Industries	0	0	0	0	0	0
Active ANGOs	3	3	6	3	3	6
* Nearest Motorable Road	3	3	6	3	3	6
Post Office	1	1	2	3	3	6
Commercial Bank	0	0	0	2	0	2
Co-operative Societies	1	0	1	2	1	3
Existing Factories	1	0	1	2	0	2
Farm Produce Storage	1	2	3	0	0	0
Fair Price Shop	2	3	5	3	2	5
Ag. Produce Market	0	0	0	0	0	0

Note: Nearest motorable road is available in all the villages.

Table-4.6 presents the livestock per ten households in the sample villages. DK stands first in terms of owning local and crossbreed cows and also male buffaloes. For drought animals like cattle, sheep and she-buffaloes, Raichur district dominates. In DK he-buffaloes are used for cultivation purposes unlike bullocks which are used in Raichur. Cows of various breeds are used for milching and therefore, dairying as NFA is high in DK. Interestingly, the animal population has been higher in villages for away from towns in both the districts.

**Table-4.6: Distribution of Livestock Per Ten Households in the Sample Villages.**

Various Animal Categories	Raichur			D. Kannada		
	VC-1	VC-2	Avg.	VC-1	VC-2	Avg.
Indigenous Cows	2.92	4.33	3.88	5.12	6.90	5.88
Crossbreed Cows	0.07	0.05	0.06	0.20	0.30	0.24
Buffaloes	7.10	17.72	14.30	1.67	0.37	1.12
Draught Animals-Bullocks	1.56	1.96	1.83	0.83	0.64	0.75
Male buffaloes	0.30	0.09	0.16	1.61	1.64	1.63
Goats	5.76	5.82	5.80	0.85	0.46	0.69
Sheep	3.40	3.67	3.59	0.00	0.15	0.06
Others	0.00	0.17	0.11	0.78	0.00	0.45

The village level analysis clearly reveals that the distress diversification in addition to the literacy rate, infrastructure and awareness of the people makes them search for highly paid activity and are very important for NFE generation. These characteristics we found to be higher in DK compared to Raichur district.

## CHAPTER V

### HOUSEHOLD LEVEL RURAL NON-FARM DIVERSIFICATION

As described in the methodology section, 120 sample HHs were selected to study the pattern of employment in the sample districts. Of the sample, 60 each were drawn from Raichur and DK districts. Of these, 30 each came from villages near towns and from villages far away from towns (within three kms and above 10 kms respectively). Before getting into the analysis of the patterns of RNFE, in the first section of the chapter, we have given the socio-economic profile of the selected sample households in the villages under study.

#### Section-I

##### Socio-Economic Profile of the Sample Households

Table 5.1 presents the distribution of sample HHs across various land size classes. Though we have selected the HHs according to the industry categories, they fall into one of these land size classes. The table clearly reveals that the number of landless, marginal and small farmers is high and there are no medium and large farm categories in DK. Even in Raichur district the number of landless, marginal and small farmers is high compared to other categories of farmers. Though the total population of the DK district is high the average family size seems to be low. And moreover, the family size of the villages situated far away from towns is high when compared to those near towns (Table 5.2).

**Table-5.1: Distribution of Sample HHs by Size of Operational Holdings**

Land size classes	Raichur		Dakshina Kannada	
	VC-1	VC-2	VC-1	VC-2
Landless	8	5	19	17
Marginal	11*	13	6	11
Small	6	8	5	2
Semi-Medium	3	4	0	0
Medium	2	0	0	0
Large	0	0	0	0
Total	30	30	30	30

Note: \*One farmer in the marginal farm category has Leased out his land.

**Table - 5.2: Category-wise Average Family Size of The Sample Households**

Industry Categories	Raichur		Dakshina Kannada	
	V1	V2	V1	V2
Small & Marginal	5.17	5.83	6.67	5.17
Manufacturing	6.50	7.57	5.13	4.17
Private Construction	5.67	5.33	3.33	7.00
Govt. aided construction	6.33	8.33	4.33	8.33
Whole sale Trading	7.33	5.00	6.67	5.67
Retail Trading	6.50	5.60	5.00	8.00
Transport	7.67	7.33	4.33	6.67
<b>Total</b>	<b>6.33</b>	<b>6.47</b>	<b>5.23</b>	<b>6.23</b>

The entire sample has houses of one or another. This means that 100 per cent of the sample HHs owned residential houses. Therefore, we tried to see what kind of houses they owned. We classified the houses into three categories based on the roof and the material which used for the construction of the house. *Pucca* houses are made of RCC, *semi-pucca* houses consists tiled roofs, mud walls and cement floors. *Kutchcha* houses see made of thatched roofs, mud walls and cement floors. We found that most of the sample HHs owned *kutchha* houses in Village Cluster-1 and *semi-pucca* houses in Village Cluster-II of the Raichur district. However, in DK district most of the HHs owned *semi-pucca* houses with tiled roofs. This clearly reveals that DK district is better off when compared to Raichur district. Table 5.4 presents the number of animals per family. The table reveals that Raichur is in a better position with respect to owning animals when compared to DK district. The HHs engaged in government aided construction, wholesale trading and retail trading and transport industry categories own more animals per family in Raichur district.

**Table-5.3: Percentage of Self-Owned Houses Based on roof**

Industry Categories	Raichur						D K					
	V 1			V 2			V3			V4		
	Pucca House	Semi-Pucca House	Kutchha House	Pucca House	Semi-Pucca House	Kutchha House	Pucca House	Semi-Pucca House	Kutchha House	Pucca House	Semi-Pucca House	Kutchha House
Small & Marginal	0.00	0.00	100	0.00	83.33	16.67	0.00	100.00	0.00	33.33	66.67	0.00
Manufacturing	0.00	62.50	37.50	14.29	28.57	57.14	37.50	62.50	0.00	16.67	83.33	0.00
Private Construction	0.00	0.00	100.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00	100.00	0.00
Govt. aided construction	33.33	0.00	66.67	33.33	66.67	0.00	66.67	33.33	0.00	33.33	66.67	0.00
Whole sale Trading	66.67	33.33	0.00	0.00	100.00	0.00	0.00	100.00	0.00	66.67	33.33	0.00
Retail Trading	0.00	75.00	25.00	0.00	80.00	20.00	0.00	100.00	0.00	33.33	66.67	0.00
Transport	33.33	0.00	66.67	0.00	66.67	33.33	0.00	100.00	0.00	0.00	100.00	0.00
<b>Total</b>	<b>13.33</b>	<b>30.00</b>	<b>56.67</b>	<b>6.67</b>	<b>60.00</b>	<b>33.33</b>	<b>16.67</b>	<b>83.33</b>	<b>0.00</b>	<b>26.67</b>	<b>73.33</b>	<b>0.00</b>

\*All the HHs have owned the houses.

**Table-5.4: Average Number of Animals per Family**

Name of Categories	Raichur		DK	
	V1	V2	V3	V4
Small & Marginal	2.83	1.50	3.17	0.50
Manufacturing	0.63	0.29	0.50	0.17
Private Construction	1.33	0.33	0.67	1.33
Govt. aided construction	4.67	10.33	0.00	1.33
Whole sale Trading	4.33	1.00	0.00	0.00
Retail Trading	2.00	1.00	0.25	0.00
Transport	3.67	0.33	0.67	0.00
Total	2.40	1.73	0.93	0.40

Almost all the sample HHs owned beds, however, when it came to chairs and tables the percentage came down considerably. The majority of the HHs owning chairs and tables belong to the government-aided construction, whole sale trading and retail trading industry categories in both the village clusters of Raichur district. In contrast, in DK district, the majority of the HHs own all the three kinds of furniture, though the percentage declines from one to another.

**Table-5.5: Percentage of HHS having Various Kinds of Furniture**

Name of Category	Raichur						DK					
	V1			V2			V3			V4		
	Beds	Chairs	Tables	Beds	Chairs	Tables	Beds	Chairs	Tables	Beds	Chairs	Tables
Small & Marginal	100.00	33.33	0.00	100.00	83.33	16.67	100.00	83.33	100.00	100.00	100.00	66.67
Manufacturing	100.00	37.50	12.50	100.00	28.57	14.29	100.00	87.50	87.50	100.00	100.00	66.67
Private Construction	100.00	0.00	0.00	100.00	33.33	0.00	100.00	33.33	33.33	100.00	100.00	33.33
Govt. aided construction	100.00	66.67	66.67	100.00	66.67	33.33	100.00	100.00	100.00	100.00	100.00	33.33
Whole sale Trading	100.00	100.00	66.67	100.00	100.00	33.33	100.00	100.00	100.00	100.00	100.00	33.33
Retail Trading	100.00	75.00	50.00	100.00	60.00	40.00	100.00	100.00	100.00	100.00	100.00	33.33
Transport	100.00	33.33	33.33	100.00	66.67	33.33	100.00	33.33	33.33	100.00	100.00	66.67
Totals	100.00	46.67	26.67	100.00	60.00	23.33	100.00	80.00	83.33	100.00	100.00	50.00

In Raichur district, the percentage of HHs owning durable goods like radio, bicycles, television, motor bikes and other vehicles seems to be low when compared to the DK district (Table 5.6). The HHs owning TV and motor bike belonged to government aided construction and wholesale trading industry categories. In the case of the HHs of the wholesale industry category almost every one owned TV in both the

village clusters. In DK district radios and TVs were owned by about 80 per cent of the HHs in village cluster-1 whereas in village cluster-II the percentage of HHs owning these consumer durables was less. As in Raichur district, we find the same industry categories are better off in owning these consumer durables in DK district.

**Table-5.6:Percentage of HHS having Consumer Durable Goods**

Name of Categories	Raichur									
	V 1					V 2				
	Radio	Bicycles	TV	Motor driven Cycle	Other vehicles	Radio	Bicycles	TV	Motor driven Cycle	Other vehicles
Small & Marginal	33.33	50.00	0.00	0.00	0.00	66.67	33.33	50.00	0.00	0.00
Manufacturing	25.00	62.50	50.00	25.00	0.00	57.14	42.86	28.57	14.29	0.00
Private Construction	33.33	33.33	0.00	0.00	0.00	33.33	66.67	0.00	0.00	0.00
Govt. aided construction	33.33	33.33	66.67	66.67	0.00	100.00	33.33	66.67	66.67	0.00
Whole sale Trading	66.67	66.67	100.00	66.67	66.67	100.00	33.33	100.00	66.67	0.00
Retail Trading	50.00	25.00	25.00	50.00	0.00	80.00	60.00	20.00	20.00	0.00
Transport	33.33	33.33	66.67	33.33	66.67	33.33	66.67	66.67	0.00	0.00
Total	36.67	46.67	40.00	30.00	13.33	66.67	46.67	43.33	20.00	0.00
Name of Categories	Dakshina Kannada									
	V 3					V 4				
	Radio	Bicycles	TV	Motor driven Cycle	Other vehicles	Radio	Bicycles	TV	Motor driven Cycle	Other vehicles
Small & Marginal	100.00	0.00	66.67	33.33	0.00	83.33	50.00	66.67	16.67	0.00
Manufacturing	87.50	12.50	75.00	25.00	0.00	100.00	16.67	50.00	0.00	0.00
Private Construction	100.00	0.00	66.67	0.00	0.00	100.00	0.00	0.00	33.33	0.00
Govt. aided construction	100.00	0.00	100.00	66.67	33.33	66.67	0.00	66.67	33.33	0.00
Whole sale Trading	66.67	33.33	100.00	33.33	0.00	100.00	0.00	66.67	33.33	0.00
Retail Trading	50.00	0.00	100.00	0.00	0.00	100.00	16.67	66.67	0.00	0.00
Transport	66.67	0.00	66.67	0.00	66.67	66.67	0.00	66.67	0.00	33.33
Total	83.33	6.67	80.00	23.33	10.00	90.00	16.67	56.67	13.33	3.33

The higher economic status of the HHs is also reflected in the fuel they use for cooking. Therefore, we have collected data relating to three kinds of fuel and also their combination. It is interesting to observe from Table 5.7 that most of the HHs in both the village clusters in Raichur district depend on wood for fuel. However, only a few HHs belonging to the government aided and wholesale trading industry categories use kerosene and gas as fuel. In DK district the percentage of HHs depending on just wood as fuel is less, constituting around 43 per cent. We find HHs who use both wood+gas and wood+kerosene combinations. This holds good for both the village clusters.

**Table-5.7: Percentage of HHS with Availability of Technology for Cooking Purpose**

Industry Categories	Raichur											
	V 1						V 2					
	Wood	Kerosene	Gas	Wood +Kerosene	Wood +Gas	Kerosene +Gas	Wood	Kerosene	Gas	Wood +Kerosene	Wood +Gas	Kerosene + Gas
Small & Marginal	100.00	0.00	0.00	0.00	0.00	0.00	66.67	0.00	0.00	16.67	16.67	0.00
Manufacturing	100.00	0.00	0.00	0.00	0.00	0.00	85.71	0.00	0.00	0.00	14.29	0.00
Private Construction	100.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Govt. aided construction	33.33	0.00	0.00	33.33	33.33	0.00	66.67	0.00	0.00	0.00	33.33	0.00
Whole sale Trading	0.00	33.33	0.00	33.33	33.33	0.00	33.33	0.00	33.33	0.00	33.33	0.00
Retail Trading	75.00	0.00	0.00	25.00	0.00	0.00	80.00	0.00	0.00	0.00	20.00	0.00
Transport	66.67	0.00	33.33	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
Total	76.67	3.33	3.33	10.00	6.67	0.00	76.67	0.00	3.33	3.33	16.67	0.00

Industry Categories	Dakshina Kannada											
	V 3						V 4					
	Wood	Kerosene	Gas	Wood + Kerosene	Wood +Gas	Kerosene + Gas	Wood	Kerosene	Gas	Wood + Kerosene	Wood + Gas	Kerosene + Gas
Small & Marginal	66.66	0.00	0.00	0.00	33.33	0.00	0.00	0.00	0.00	50.00	50.00	0.00
Manufacturing	37.50	0.00	25.00	0.00	37.50	0.00	16.67	0.00	0.00	33.33	50.00	0.00
Private Construction	33.33	0.00	0.00	66.67	0.00	0.00	66.67	0.00	0.00	33.33	0.00	0.00
Govt. aided construction	33.33	0.00	66.67	0.00	0.00	0.00	33.33	0.00	0.00	0.00	66.67	0.00
Whole sale Trading	33.33	0.00	33.33	0.00	33.33	0.00	0.00	0.00	0.00	33.33	66.67	0.00
Retail Trading	25.00	0.00	50.00	0.00	25.00	0.00	0.00	0.00	16.67	16.67	50.00	16.67
Transport	66.67	0.00	0.00	0.00	33.33	0.00	0.00	0.00	0.00	66.67	33.33	0.00
Total	43.33	0.00	23.33	6.67	26.67	0.00	13.33	0.00	3.33	33.33	46.67	3.33

It is interesting to observe from Table 5.8, that around 50 per cent of the HHs in the sample villages of Raichur district have bank accounts. Households involved in private construction do not have bank accounts. More HHs belonging to the government aided construction and wholesale trading industry categories have bank accounts. In DK in village cluster-I almost all the HHs have bank accounts. Whereas in the village cluster-II the figure is about 87 per cent. Therefore, one can say that in all respects DK's performance seems to be better when compared to Raichur district.

**Table-5.8: Percentage of HHs Having Bank Account**

Industry Categories	Raichur		Dakshina Kannada	
	VC-I	VC-II	VC-I	VC-II
Marginal and Small Farmers	50.00	50.00	100.00	100.00
Manufacturing	50.00	42.86	100.00	100.00
Private Construction	00	0.00	100.00	33.33
Govt. aided construction	66.67	66.67	100.00	66.67
Wholesale trading	66.67	100.00	100.00	66.67
Retail trading	50.00	40.00	100.00	100.00
Transport	66.67	66.67	100.00	100.00
Total	50.00	50.00	100.00	86.67

## Section-II

### Patrons of Rural Non-Farm Employment

In this section we have given the details regarding the patterns of RNFE in the villages under study in both the districts. Table 5.9 presents the percentage distribution of HHs by major sources of employment of the head of the households. We have tried to give equal representation for all the industry categories. However, the representation is little high in case of manufacturing, agriculture and allied activities. Weightage has been given based on the concentration of the activity.

**Table-5.9: Percentage Distribution of Households by Major Sources of Employment (Only Head of the HH).**

Industry Categories	Raichur		Dakshina Kannada	
	VC-1	VC-2	VC-1	VC-2
Agriculture	13.33	20.00	10.00	13.33
Allied Activity	16.67	13.33	10.00	10.00
Manufacturing, processing, services and repairs	20.00	16.67	26.67	20.00
Private construction	10.00	10.00	10.00	10.00
Government aided construction	10.00	10.00	10.00	10.00
Wholesale Traders	10.00	10.00	10.00	10.00
Retail traders	10.00	10.00	13.33	20.00
Services (transport, storage and Communication)	10.00	10.00	10.00	10.00
Total No. HHs	30	30	30	30
Total Per cent	100	100	100	100

It is found that in case of all the sample HHs, there is more than one source of income for the family (Table 5.10). The labourers who are involved in activities like allied activities, regular employment in non-agriculture and the government construction have a higher number of sources of income. Interestingly, villages situated far away from the town have more sources of income when compared to the villages situated near towns. Among the two districts, the number of sources of income are higher in DK compared to Raichur district. This is mainly because of reasons, mentioned elsewhere like education level, infrastructure, awareness and the inclination to do work.



**Table-5.10: Average Number of Sources of Income By Industry Categories**

Industry Categories	Raichur		Dakshina Kannada	
	VC-1	VC-2	VC-1	VC-2
Cultivation	2.25	2.33	2.40	2.66
Agricultural labour	2.28	2.34	2.30	2.25
Allied Activity	2.00	2.25	3.00	3.00
Self employment in manufacturing	2.66	2.50	2.00	2.12
Self employment in private construction	1.66	2.50	2.33	2.34
Self employment in services	2.00	2.00	1.66	1.80
Non agricultural wage labourers	2.10	2.00	2.50	2.72
Regular employment in non-agriculture	2.33	2.75	3.00	3.14
Government construction	2.00	2.33	3.00	3.00

It is interesting to observe from Table 5.11 that the average number of activities per worker has been more than one in both the village clusters and also in the sample districts. As against the HH sources of income the number of economic activities per worker is high in the village clusters near the towns when compared to the village clusters which are far away from the towns. This phenomenon holds good for both the districts. In Raichur district the average number of economic activities is lower when compared to the DK district. However, Raichur district performs better in the case of a few activities.

**Table-5.11: Average Number of Economic Activities Per Worker (Across Various Industry Categories)**

Industry Categories	Raichur		Dakshina Kannada	
	VC-1	VC-2	VC-1	VC-2
Cultivation	1.66	1.38	2.00	1.60
Agricultural labour	1.23	1.28	1.80	1.40
Allied Activity	1.38	1.25	1.50	1.28
Self employment in manufacturing	1.10	1.50	1.40	1.46
Self employment in private construction	1.00	1.16	1.12	1.24
Self employment in services	1.66	1.00	1.00	1.14
Non agricultural wage labourers	1.46	1.40	1.20	1.26
Regular employment in non-agriculture	1.16	1.27	1.16	1.12
Government construction	1.66	1.25	1.00	1.00

An effort has been made to understand the population-worker ratio for both males and females separately. Table 5.12 presents the population-worker ratio for both the

districts. To understand population-worker ratio we have taken total population figure of sample HHs under each industry categories. Secondly, the number of persons employed in sample HHs under each industry category is derived. And in the third stage we have divided total population by the number of persons employed to get population-worker ratio. In Raichur district the male population-worker ratio is 1.87 and the female it is 7.06 for village cluster near towns whereas for village clusters far away from the town it is 2.39 and 5.24 per cent respectively. However, in DK the population-worker ratio is less when compared to the Raichur district. Secondly, the female population-worker ratio is extremely low in DK when compared to the Raichur district. This clearly reveals the impact of education, awareness and the infrastructure availability in DK vis-à-vis Raichur district.

**Table-5.12: Worker Population Ratio (Male & Female – Across Industry Categories)**

Industry Categories	Raichur				Dakshina Kannada			
	VC-1		VC-2		VC-1		VC-2	
	M	F	M	F	M	F	M	F
Cultivation	2.00	9.00	3.00	1.88	2.33	0.00	2.00	5.00
Agricultural labour	2.22	4.50	2.50	2.11	2.00	0.00	2.80	0.00
Allied Activity	2.16	9.00	2.60	9.00	1.50	0.00	1.60	4.00
Self employment in manufacturing	1.33	2.00	1.88	8.00	1.85	2.00	2.50	4.00
Self employment in private construction	2.00	12.00	1.60	4.00	1.66	1.25	1.83	3.00
Self employment in services	1.50	0.00	3.00	3.50	1.50	11.00	2.33	2.00
Non agricultural wage labourers	1.60	19.00	2.00	5.00	1.91	3.77	2.60	1.71
Regular employment in non-agriculture	1.83	8.00	2.75	3.66	1.88	3.00	1.84	4.00
Government construction	2.20	0.00	2.14	10.00	2.00	5.00	1.71	6.50
All Households	1.87	7.06	2.39	5.24	1.85	2.89	2.13	3.36

An attempt is also made to understand the status of workers in the case of self employed, salaried class and casual labour across the industry categories. Table 5.13 presents this data for both the districts. In the case of the self-employed both the districts performed at the same level. However, the cluster near towns seemed poor compared to the cluster located far away from the towns. This seems to be common in both the districts. Manufacturing and trade inclusive of hotels are the major activities where we find more self-employed labourers. In the case of salaried labourers we found the same trend between the clusters. However, the number of salaried labourers seems to be

another when compared to the self-employed category. Between the districts the number of salaried labourers is higher in case of the DK district. Even in case of the casual labourers also the similar trend prevails between the clusters in both the districts. In terms of number the casual labourers in both the clusters of Raichur is lower than the self-employed category and more than the salaried category. In DK the number of casual labourers seems to be high when compared to both self-employed and salaried class. Even when compared to Raichur the casual labourers seems to be high in DK. Mostly, in Raichur the casual labourers belonged to agriculture and private construction industry categories. In DK in addition to these sectors in trade inclusive of hotel and allied activities also casual labourers are concentrated.

**Table-5.13: Activity-wise Status of Workers – Across Various Industry Categories**

Industry Categories	Self Employed				Salaried Labourers				Casual Labour			
	Raichur		D.Kannada		Raichur		D.Kannada		Raichur		D.Kannada	
	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2
Agriculture	0	0	1	0	1	2	0	0	4	11	3	6
Manufacturing servicing & Repairs	9	7	10	6	0	1	1	1	4	1	4	2
Private Construction	0	2	0	1	1	0	0	0	4	5	7	6
Trade inclusive of hotels	8	9	8	11	0	0	1	4	2	1	3	6
Transport, storage & Commn.	2	4	3	3	1	1	1	2	0	1	1	5
Allied activities	3	4	0	2	0	1	0	2	2	0	6	3
Government Construction	1	3	2	3	0	0	2	1	3	1	1	5
All Industries	23	27	24	26	03	05	05	10	19	20	25	33

The status of male and female workers across the industry categories also given separately and they are presented in the Tables 5.14 and 5.15. The tables reveal that the male labourers constitute the maximum in all the categories of employment when compared to the female labourers. However, the female number is high in case of the casual labour category in village cluster II of both the Raichur and DK districts respectively. This is a peculiar trend and it is difficult to explain why it is so. Field observations reveal that, in village cluster far away from town the women get into casual labour in agriculture and they used in the private construction activities as helpers and moreover they find lot of problems to get into the self-employment and also salaried work. Hence, the easy way to earn their livelihood is casual labour work.

**Table-5.14: Activity-wise Status of Male Workers – Across Various Industry Categories**

Industry Categories	Self Employed				Salaried Labourers				Casual Labour			
	Raichur		D.Kannada		Raichur		D.Kannada		Raichur		D.Kannada	
	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2
Agriculture	0	0	1	0	1	2	0	0	3	4	3	4
Manufacturing servicing & Repairs	8	5	9	5	0	1	1	1	4	0	2	0
Private Construction	0	2	0	1	1	0	0	0	3	2	3	3
Trade inclusive of hotels	6	7	7	11	0	0	1	4	1	0	2	2
Transport, storage & Commn.	2	4	3	3	1	1	1	0	0	0	0	1
Allied activities	2	3	0	2	0	1	0	2	2	0	5	2
Government Construction	1	3	2	3	0	0	0	1	2	1	1	3
All Industries	19	24	22	25	03	05	03	08	15	7	16	15

**Table-5.15: Activity-wise Status of Female Workers – Across Various Industry Categories**

Industry Categories	Self Employed				Salaried Labourers				Casual Labour			
	Raichur		D.Kannada		Raichur		D.Kannada		Raichur		D.Kannada	
	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2	VC-1	VC-2
Agriculture	0	0	0	0	0	0	0	0	1	7	0	2
Manufacturing servicing & Repairs	1	2	1	1	0	0	0	0	0	1	2	2
Private Construction	0	0	0	0	0	0	0	0	1	3	4	3
Trade inclusive of hotels	2	2	1	0	0	0	0	0	1	1	1	4
Transport, storage & Commn.	0	0	0	0	0	0	0	2	0	1	1	4
Allied activities	1	1	0	0	0	0	0	0	0	0	1	1
Government Construction	0	0	0	0	0	0	2	0	1	0	0	2
All Industries	04	05	02	01	0	0	02	02	4	13	09	18

The average monthly income of the salaried workers with its range (high or low) has been presented in Table 5.16. The table reveals that in Raichur district Rs. 800 is the least per month and the highest salary seems to be Rs. 2000 in village cluster-I, whereas in cluster-II the range is from Rs. 500 to Rs. 2200. In DK district the salary ranges from Rs. 2500 and Rs. 9000 in the cluster-I and in the cluster-II it ranges from Rs. 800 to Rs. 8,500 per month. This shows that the DK seems to be far better when compared to the Raichur district in terms of average monthly income.

**Table-5.16: Average Monthly Income for Salaried Class Workers with its Range (High or Low) Across Industry Categories**

Industry Categories	Raichur						D.Kannada					
	VC-1			VC-2			VC-1			VC-2		
	High	Low	Avg.	High	Low	Avg.	High	Low	Avg.	High	Low	Avg.
Agriculture	---	----	2000	1200	1100	1150	0	0	0	0	0	0
Allied Activity	0	0	0	----	----	500	0	0	0	3500	2500	3000
Private construction	---	---	800	0	0	0	0	0	0	0	0	0
Manufacturing, servicing & repairs	0	0	0	----	----	1200	----	----	3000	----	----	4000
Government aided construction	0	0	0	0	0	0	9000	4000	6500	----	----	1000
Transport, storage and communication	---	----	1200	----	----	2200	----	----	2500	5800	800	3300
Trade inclusive of hotels	0	0	0	0	0	0	----	----	600	850	150	545
									0	0	0	0

Average wage rate for wage labourers across various industry categories has been presented in Table 5.17. In Raichur district the wage rate per day is very high (in village-I) in case of private construction; manufacturing, servicing and repairs; and government aided construction. The highest wage rate seems to be for the private construction as private people make the labourers to work extra time. The lowest wage rate seems to be in case of trade (inclusive of hotels). The wage rate in this is low because the labourers are given breakfast, lunch and dinner in addition to coffee three times in a day. Though a similar trend is seen in the village cluster-II of the same district the highest wage rate is to be in government aided construction and the lowest is in transport, storage and communication and trade (inclusive of hotels). As there is no competition in the villages far away from the town the wage rate is fixed by the local people. Therefore, the wage rate may be low. In DK district the overall wage rate is high in village cluster-I when compared to Raichur district. However in village cluster-II the wage rate is low ranging from Rs. 25 to Rs. 150 when compared to village cluster-1. In general the wage rate for the labourers involved in private construction is high, Rs. 150 in both the village clusters of DK.

**Table-5.17: Average Wage Rate for Wage Labourers- Across Various Industry Categories**

Industry Categories	Raichur						D.Kannada					
	VC-1			VC-2			VC-1			VC-2		
	High	Low	Avg.	High	Low	Avg.	High	Low	Avg.	High	Low	Avg.
Agriculture	120	25	61	120	30	55	100	75	83	120	20	57
Allied Activity	70	60	65	0	0	0	120	50	84	35	25	30
Private construction	120	40	98	120	25	50	150	50	89	150	20	58
Manufacturing, servicing & repairs	120	40	73	---	---	50	50	50	50	25	25	25
Government aided construction	120	50	97	---	---	120	---	---	120	125	25	64
Transport, storage and communication	0	0	0	---	---	25	---	---	50	120	20	59
Trade inclusive of hotels	50	25	38	---	---	30	80	50	70	40	25	32

Note: Weighted Average value is taken into account to give the overall wage rate.

The next important issue among the patterns of RNFE is the magnitude of employment for casual labourers in a year. The table 5.18 presents the magnitude of employment for the casual labourers in both the districts. In Village Cluster-I of the Raichur district the magnitude of employment is high in the case of the labourers involved in cultivation, private construction and trading inclusive of hotel and the lowest seems to be in case of allied activity. In village cluster-II the magnitude of employment is high only in private construction and cultivation. In DK district the magnitude of employment in village cluster-1 is high in manufacturing, servicing, and government aided construction. In village cluster-II the magnitude of employment is high in government construction and transport, storage and communication. In general, the magnitude of employment is high in DK when compared to Raichur district.

**Table-5.18: Magnitude of Employment Among Casual Labourers – Across Various Industry Categories**

Industry Categories	Raichur		Dakshina Kannada	
	VC-1	VC-2	VC-1	VC-2
Cultivation	0.48	0.43	0.51	0.57
Allied activities	0.39	0.00	0.57	0.48
Private Construction	0.47	0.53	0.55	0.42
Manufacturing, servicing, etc.	0.41	0.31	0.71	0.36
Government aided construction	0.42	0.38	0.69	0.59
Transport storage and communication	0.00	0.27	0.39	0.58
Trading inclusive of hotels	0.47	0.29	0.51	0.55
All Households	0.44	0.43	0.57	0.52

### **Occupation Shifting:**

To answer the question of why people shift from one occupation to the other, we have presented certain details in tables 5.12 to 5.14. The tables reveal that there are quite a number of people who shift from one occupation to another. The major reasons for shifting the occupation is loss in the earlier business, to improve income, lack of regular employment in the earlier occupation and persuasion by others to seek a new job.

Table 5.19 presents the labourers shifting to casual labour from other occupations. The labourers in Village Cluster-I in both the districts have a tendency to shift to casual labour when compared to a Village Cluster-II. The main reason seems to be, to obtain an improvement in income over the previous occupation. Most of these are from

agriculture, allied activities and government construction. Proximity to town where they get more return may be the reason for this.

**Table-5.19: Frequency of Labourers Shifting to Casual Labour – According to Reasons**

Industry Categories	Raichur										Dakshina Kannada District									
	VC-1					VC-2					VC-1					VC-2				
	No	I	II	III	IV	No	I	II	III	IV	No	I	II	III	IV	No	I	II	III	IV
Agriculture	2	2	0	0	0	2	0	1	1	0	3	0	3	0	0	2	1	1	0	0
Allied activity	2	0	1	1	0	0	0	0	0	0	2	0	2	0	0	1	0	1	0	0
Manufacturing servicing & Repairs	1	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Transport, storage & Comcn.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Private Construction	1	1	0	0	0	1	0	1	0	0	2	0	2	0	0	1	0	0	1	0
Government aided construction.	2	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Wholesale trading	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Retail trading	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Industry Categories	8	3	4	1	0	3	0	2	1	0	10		8	2	0	4	1	2	1	0

Note: 1) I= Loss in the earlier business, II = To have improvement over income, III = Lack of regular employment, IV = Motivated by others.

The table 5.20 presents the labourers shifting to salaried employment from various other occupations. The labourers shifting to salaried employment is very minimum as it is not easy to get salaried employment. However, village cluster-II in Raichur district seems to be better in terms of shifting to salaried employment. The reason they have given for the change is the lack of regular employment in the earlier occupations like agriculture, allied activities and manufacturing, servicing and repairs.

**Table-5.20: Frequency of Labourers Shifting to Salaried Employment – According to Reasons**

Industry Categories	Raichur										Dakshina Kannada District									
	VC-1					VC-2					VC-1					VC-2				
	No	I	II	III	IV	No	I	II	III	IV	No	I	II	III	IV	No	I	II	III	IV
Agriculture	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Allied activity	0	0	0	0	0	1	0	0	1	0	1	0	1	0	0	1	0	1	0	0
Manufacturing servicing & Repairs	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Transport, storage & Comcn.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Private Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Government aided construction.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale trading	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail trading	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
All Industry Categories	1	0	0	1	0	4	0	0	4	0	2	0	1	1	0	1	0	1	0	0

Note: 1) I= Loss in the earlier business, II = To have improvement over income, III = Lack of regular employment, IV = Motivated by others.

Table 5.21 presents the labourers shifting from other occupations to self-employment. Here we find positive response from various kinds of labourers. Both the clusters of Raichur district have shown better performance. In both the clusters 16 and 18 labourers respectively had shifted to self-employment. The majority of them belonged to allied activities, Manufacturing servicing and repairs and transport storage and communication. Most of them may have been labourers working in various units, after getting some experience they may have started their own units by taking financial assistance from the government. Most of them opined that they had shifted to self-employment to improve their income. Even in DK district 13 and 12 labourers had shifted to self-employment for the same reason. It may be concluded that the labourers are likely to seek self-employment as compared to any other activity. However, field observations reveal that they are interested in regular jobs, but as the number of regular jobs are limited, they choose self-employment.

**Table-5.21:Frequency of Labourers Shifting to Self Employment – According to Reasons.**

Industry Categories	Raichur										Dakshina Kannada District									
	VC-1					VC-2					VC-1					VC-2				
	No	I	II	III	IV	No	I	II	III	IV	No	I	II	III	IV	No	I	II	III	IV
Agriculture	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Allied activity	4	0	3	0	1	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0
Manufacturing servicing & Repairs	3	0	3	0	0	4		4	0	0	4	0	3	0	1	0	0	0	0	0
Transport, storage & Comcn.	2	0	2	0	0	2	0	2	0	0	3	0	2	1	0	3	0	1	1	1
Private Construction	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
Government aided construction.	1	1	0	0	0	3	0	2	0	1	1	0	1	0	0	3	0	2	0	1
Wholesale trading	3		3	0	0	2	0	2	0	0	2	0	2	0	0	2	0	1	0	1
Retail trading	3	0	0	3	0	2	0	2	0	0	2	0	2	0	0	3	0	3	0	0
All Industry Categories	16	1	11	3	1	18	1	16	0	1	13	1	10	1	1	12	0	8	1	3

Note: 1) I= Loss in the earlier business, II = To have improvement over income,  
III = Lack of regular employment, IV = Motivated by others.



## CHAPTER VI

### **STATUS OF ENTERPRISES IN THE STATE WITH SPECIAL REFERENCE TO THE PROCESSING SECTOR & EMPLOYMENT GENERATION ACROSS THREE INDUSTRIAL CATEGORIES**

As mentioned elsewhere, the data for this particular section is not available at the district level. Therefore, we have concentrated on a state level analysis. In this chapter we have tried to collect data from 1989-90 to 1997-98 from the annual survey of industries. In the first section of the analysis we have tried to see the performance of various Agro-Processing Industry Units (APIUs) within the sector. In the second section we have tried to assess the performance of agro-processing units with reference to the total industry sector in the state. And in the third section we have highlighted employment generation across three industrial categories, viz., OAMEs, NDMEs and DMEs based on the Economic Census and NSSO reports. It is hoped that this will give the performance of the APIUs within the sector, which are most probably concentrated in the rural areas of Karnataka and their share in the total industry sector, and show employment generation across various industry categories.

#### **Section-1**

##### **Performance of APIUs with in the Sector: Growth of the Units**

The APIUs like food products; beverages and tobacco; cotton textiles; wool silk and manmade fiber; jute and vegetable fibre; textile products; wood and its products; paper and leather are most important. The performance of each unit has been presented in Table 6.1. The performance of these has been equated to 100 and studied one by one over a period of nine years. Compound growth rate has been worked out to study accuracy in terms of performance. In Table 6.1 we have shown the growth of the number of units in terms of percentage. Among the units food products play a prominent role. However, from about 40 per cent in 1989-90, it has declined slowly to 36.69 per cent by 1997-98 - decline in the growth rate by 1.23 per cent per annum. The second, third and fourth places, in terms of share, is held by cotton textiles, wood and paper industries, however their growth rate has been negative. Except beverages, which is showing a

growth rate of about 2 per cent per annum and for which the percentage share is also high, all the other units have been showing negative growth. In the case of the leather industry, though the percentage share is low, the growth rate is high. The data reveals that over a period of about nine years, the APIUs have declined in number. Discussions with officials and entrepreneurs revealed three reasons for the poor performance. Firstly, they say that the rainfall is uncertain and that production in general has come down. Second, they say that liberalisation has led to import of food products like oil and other goods, which lead to unit closure, but there is no initiative to start the units though they are providing capital investment subsidy in the range of 15 to 35 per cent. Third, which is most important, is the government is not able to provide required infrastructure specially, market support, electricity and proper road facility.

**Table-6.1: Growth of the Units within the APIUs (Fig in %)**

Year	Food products	Beverages, Tobacco	Cotton textiles	Wool, Silk & Man-made fiber	Jute & Vegetable fiber	Textile products	Wood	Paper	Leather	Total
1989-90	40.04	4.83	18.38	6.53	0.26	6.90	10.96	10.66	1.44	100
1990-91	39.08	6.13	17.43	6.99	0.14	8.71	9.25	10.54	1.72	100
1991-92	39.61	5.81	17.71	6.49	0.18	9.49	8.08	10.61	2.02	100
1992-93	39.61	5.81	17.71	6.49	0.18	9.49	8.08	10.61	2.02	100
1993-94	39.23	6.02	16.22	5.53	0.21	12.63	8.23	9.48	2.46	100
1994-95	35.81	7.02	15.78	5.72	0.21	15.75	6.91	9.82	2.98	100
1995-96	35.58	5.51	14.50	5.71	0.20	17.47	6.65	10.96	3.41	100
1996-97	38.05	6.19	14.79	5.65	0.21	17.28	6.86	7.57	3.38	100
1997-98	36.69	6.33	14.53	5.20	0.16	18.48	5.33	10.98	2.29	100
GR in %	-1.23	2.005	-3.19	-3.17	-0.53	13.74	-6.96	-1.47	9.276	--

Source: Various Issues of Annual Survey of Industries: CSO, GOI.

### **The Status of Employment:**

It is interesting to observe from the table 6.2 that in the APIUs the growth rate is negative in all the Units except textile products. It is highly difficult to correlate the growth of the number of units and the employment generation in beverages and leather industry units. Here, the growth has been positive in terms of number of units but the employment growth rate has been negative. One reason could be that in these units improved technology has been introduced. In contrast in the textile industry units there is a scope for manual labour as it is more labour intensive. Therefore, the employment generation is high in this industry sector. The same holds good in case of the wool, silk and man-made fiber industry units where the growth rate of employment has been

positive. However, the concentration of employment can be seen in case of food products, paper, cotton textile, beverages and wool-silk-man made fiber industry units.

**Table-6.2: Growth of Employment with in APIUs (Fig in %)**

Year	Food products	Beverages, Tobacco	Cotton textiles	Wool, Silk & Man-made fibre	Jute & Vegetable fibre	Textile products	Wood	Paper	Leather	Total
1989-90	34.76	6.95	24.65	3.94	0.21	11.37	4.09	12.19	1.84	100
1990-91	32.00	7.01	21.51	4.74	0.13	15.09	3.39	13.46	2.67	100
1991-92	31.52	6.80	21.02	5.48	0.14	17.70	1.91	12.80	2.63	100
1992-93	31.52	6.80	21.02	5.48	0.14	17.70	1.91	12.80	2.63	100
1993-94	28.23	7.34	19.53	4.84	0.14	25.05	3.20	8.54	3.12	100
1994-95	26.29	7.05	15.23	4.34	0.09	31.69	2.27	9.02	4.01	100
1995-96	25.89	5.49	14.39	5.04	0.11	34.87	1.51	9.00	3.70	100
1996-97	26.84	6.74	12.20	3.81	0.09	36.59	1.36	8.03	4.36	100
1997-98	23.10	6.41	12.54	5.54	0.06	36.95	0.98	9.07	5.35	100
GR in %	-4.46	-1.38	-8.74	0.525	-11.5	16.79	-13.6	-6.12	12.1	--

Source: As in table 6.1.

### Capital Investment in the APIUs:

The growth rate of capital investment gives the explanation for the slow or low or negative employment growth rate in so many sectors with-in the APIUs. The APIUs like wool, silk and man made fibre; jute and vegetable fiber, textile products; paper and wood industries show positive growth rate in capital investment (Table 6.3). This is mainly because, in these units the capital-intensive techniques are being used. Therefore, the employment generation is low though the capital investment is high.

**Table-6.3: Growth of Capital Investment within the APIUs (Fig. In %)**

Year	Food products	Beverages, Tobacco	Cotton textiles	Wool, Silk & Man-made fibre	Jute & Vegetable fibre	Textile products	Wood	Paper	Leather	Total
1989-90	53.18	7.95	11.70	2.45	0.01	4.76	2.63	14.10	3.23	100
1990-91	48.49	9.11	11.85	5.04	0.01	5.88	1.73	13.77	4.11	100
1991-92	48.53	9.25	13.43	4.94	0.01	6.94	0.72	13.44	2.73	100
1992-93	47.43	9.13	12.71	5.27	0.03	8.77	1.73	12.70	2.22	100
1993-94	49.97	9.23	11.43	5.39	0.01	10.78	1.26	8.09	3.85	100
1994-95	39.08	11.50	13.78	4.08	0.03	14.69	1.33	12.02	3.51	100
1995-96	41.27	6.10	12.53	6.64	0.02	13.90	1.27	12.94	5.33	100
1996-97	41.61	8.59	7.16	9.47	0.02	10.47	1.02	16.40	5.26	100
1997-98	32.36	8.56	8.11	12.15	0.00	12.16	0.51	21.99	4.16	100
GR in %	-4.82	-0.8	-4.93	15.48	4.5	13.1	-11.5	3.68	6.095	--

Source: As in table 6.1

### Performance of the Output Value:

In case of the three APIUs like Wool, textiles and leather products the output value has grown positively, whereas all the other APIUs, output value is declining and the growth rate is negative (Table 6.4). This clearly shows that the performance of the APIUs is very dismal in Karnataka state. The tables clearly reveal that there is a close correlation between the number of units, capital investment and the value of output and the employment generation in APIUs like leather, textiles and wool. Therefore, one can encourage the development of the above sectors for more employment generation in the state.

**Table-6.4: Growth of Output Value Within the APIUs (Fig in %)**

Year	Food products	Beve- rages, Tobacco	Cotton textiles	Wool, Silk & Man- made fibre	Jute & Vege- table fibre	Textile products	Wood	Paper	Leather	Total
1989-90	48.99	10.21	12.25	2.76	0.01	4.86	2.39	15.53	3.01	100
1990-91	44.25	10.21	12.78	5.25	0.01	6.17	1.76	15.53	4.05	100
1991-92	44.41	11.06	13.63	5.06	0.01	7.63	0.70	14.73	2.77	100
1992-93	43.06	11.01	12.28	5.86	0.03	9.13	1.59	14.67	2.38	100
1993-94	43.42	10.87	11.20	6.07	0.02	14.72	1.19	8.89	3.63	100
1994-95	57.35	11.05	2.77	6.08	0.02	14.69	1.65	1.78	4.62	100
1995-96	44.90	4.86	12.84	5.10	0.01	13.60	0.87	14.60	3.22	100
1996-97	44.31	11.70	7.51	5.83	0.01	12.71	0.91	11.98	5.03	100
1997-98	37.87	10.24	10.07	9.26	0.01	15.87	0.61	11.34	4.72	100
GR in %	-1.19	-2.01	-6.43	9.079	-4.55	15.29	-10.9	-6.7	5.86	--

Source: As in table 6.1.

The value addition seems to be high in case of the silk and manmade fiber; textiles and paper (Table 6.5). Capital investment matches with the value of output and also the value added in case of wool, silk, and manmade fiber and the textiles but not the paper industry. In the paper industry value addition is more but not the output value. However, value addition matches with the capital investment in the sector. It is very difficult to explain why these variables behave in this manner. In general the output value and the value addition is positive in the cases of two or three sectors and it is negative for all the other sectors. This clearly shows that APIUs are not remunerative and even the employment potential is low if they are run in the existing form.

**Table-6.5: Growth of Value Added Within the APIUs (Fig. In %)**

Year	Food products	Beve- rages, Tobacco	Cotton textiles	Wool, Silk & Manmade fibre	Jute & Vege- able fibre	Textile products	Wood	Paper	Leather	Total
1989-90	35.49	20.66	14.19	3.69	0.02	5.90	1.31	16.30	2.44	100
1990-91	33.61	19.12	20.35	7.87	0.03	9.67	2.31	2.04	5.01	100
1991-92	27.96	20.30	14.58	5.67	0.03	11.43	0.54	16.36	3.13	100
1992-93	22.12	21.05	9.64	9.09	0.06	11.27	0.86	22.59	3.31	100
1993-94	21.43	16.89	9.45	8.57	0.02	28.51	0.85	11.43	2.85	100
1994-95	30.03	5.08	20.16	6.02	0.01	13.50	0.95	21.32	2.93	100
1995-96	29.32	5.89	11.97	8.62	0.02	19.07	0.67	21.63	2.80	100
1996-97	23.14	24.47	6.33	9.61	0.02	17.21	0.68	15.02	3.53	100
1997-98	27.99	15.33	8.67	20.06	0.01	16.00	0.35	8.95	2.63	100
GR in %	-2.74	-6.99	-8.2	13.89	-11.9	12.24	-13.1	7.065	-1.8	--

Source: As in table 6.1.

## Section II

### Proportion of APIUs to the Total Industry Sector

Table 6.6 presents the proportion of the APIUs to the total industrial units in Karnataka State. In the state the APIUs accounted for around 47 per cent from 1989-90 to 1993-94. From 1994-95 onwards we find a fluctuation in terms of their number. They have reached their lowest point i.e., 38.64 per cent in 1996-97 and later started regaining ground. The decline is evident in all the categories of the APIUs with little variation. This shows that during the liberalisation period the performance of the APIUs in terms of number has gone down considerably. A study by Gayathri (2001) reveals that of the total sample of about 1500 units, around 44 per cent of the industrial units were closed down due to various reasons, already explained elsewhere.

**Table-6.6: Percentage of APIUs to the Total Industry Sector (Fig in %)**

Year	Food products	Beve- rages, Tobacco	Cotton textiles	Wool, Silk & Manmade fibre	Jute & Vege- table fibre	Textile products	Wood	Paper	Leather	Total	Total Industry
1989-90	18.96	2.29	8.70	3.09	0.12	3.27	5.19	5.05	0.68	47.34	100
1990-91	18.44	2.89	8.22	3.30	0.07	4.11	4.36	4.97	0.81	47.18	100
1991-92	18.77	2.75	8.39	3.08	0.09	4.50	3.83	5.03	0.96	47.38	100
1992-93	17.84	2.84	7.95	2.71	0.11	4.64	3.70	4.96	0.96	45.71	100
1993-94	18.61	2.86	7.70	2.63	0.10	5.99	3.91	4.50	1.17	47.44	100
1994-95	16.51	3.23	7.28	2.64	0.10	7.26	3.19	4.53	1.37	46.10	100
1995-96	15.89	2.46	6.48	2.55	0.09	7.80	2.97	4.89	1.52	44.66	100
1996-97	14.70	2.39	5.72	2.18	0.08	6.68	2.65	2.93	1.31	38.64	100
1997-98	16.33	2.82	6.47	2.31	0.07	8.22	2.37	4.89	1.02	44.51	100

Source: As in table 6.1.

The status of employment has been presented in Table 6.7. The table reveals that there is lot of fluctuation in terms of proportion of the employment to the total industry sector. In 1989-90 it was about 41 per cent and then declined till 1992-93 when it began rising only to decline again from 1996-97. This shows that there is no steady performance in terms of employment in the APIUs. There has been a steady decline in employment in the food product and paper industries. In all the other APIUs there is a fluctuation in employment from one year to another.

**Table-6.7: Percentage of Employment to the Total Industry Sector (Fig in %)**

Year	Food products	Beve- rages, Tobacco	Cotton textiles	Wool, Silk & Manmade fibre	Jute & Vege- table fibre	Textile products	Wood	Paper	Leather	Total APIUs	Total Industry
1989-90	14.38	2.88	10.20	1.63	0.09	4.70	1.69	5.04	0.76	41.37	100
1990-91	12.86	2.82	8.64	1.90	0.05	6.06	1.36	5.41	1.07	40.18	100
1991-92	12.58	2.72	8.39	2.19	0.06	7.07	0.76	5.11	1.05	39.93	100
1992-93	12.07	2.75	7.69	1.83	0.07	8.21	1.30	4.77	1.05	39.74	100
1993-94	12.13	3.16	8.39	2.08	0.06	10.77	1.37	3.67	1.34	42.98	100
1994-95	11.38	3.05	6.59	1.88	0.04	13.73	0.98	3.91	1.74	43.31	100
1995-96	11.30	2.40	6.28	2.20	0.05	15.22	0.66	3.93	1.61	43.65	100
1996-97	11.02	2.77	5.01	1.56	0.04	15.02	0.56	3.29	1.79	41.06	100
1997-98	9.08	2.52	4.93	2.18	0.02	14.53	0.39	3.57	2.10	39.32	100

Source: As in table 6.1.

Decline in the percentage of the number of units and lower level of employment in the APIUs is mainly because of the low level of capital investment. This is evident in Table-6.8. The table reveals that the percentage of capital investment was 38.34 per cent in 1989-90, which has come down to 21.96 per cent. This has a chain effect on both the establishment of new units and employment generation. More decline in investment can be noticed in case of food products, cotton textiles, jute and wood.

**Table6.8: Percentage of Capital Invested to the Total Industry Sector (Fig in %)**

Year	Food products	Beve- rages, Tobacco	Cotton textiles	Wool, Silk & Manmade fibre	Jute &Vege- table fibre	Textile products	Wood	Paper	Leather	Total APIUs	Total Industry
1989-90	20.39	3.05	4.48	0.94	0.00	1.82	1.01	5.41	1.24	38.34	100
1990-91	16.82	3.16	4.11	1.75	0.00	2.04	0.60	4.78	1.43	34.68	100
1991-92	16.90	3.22	4.68	1.72	0.00	2.42	0.25	4.68	0.95	34.81	100
1992-93	16.89	3.25	4.53	1.88	0.01	3.12	0.62	4.52	0.79	35.61	100
1993-94	18.14	3.35	4.15	1.96	0.00	3.91	0.46	2.94	1.40	36.30	100
1994-95	9.51	2.80	3.35	0.99	0.01	3.58	0.32	2.93	0.85	24.34	100
1995-96	9.29	1.37	2.82	1.49	0.01	3.13	0.29	2.91	1.20	22.51	100
1996-97	9.82	2.03	1.69	2.23	0.00	2.47	0.24	3.87	1.24	23.59	100
1997-98	7.10	1.88	1.78	2.67	0.00	2.67	0.11	4.83	0.91	21.96	100

Source: As in table 6.1.

The output value seems to be showing mixed response. There is a decline in the percentage of APIUs to the total industry sector. The decline rate is more pronounced in the case of food products, cotton textiles, jute, wood and paper. However there is a mixed response in case of all the APIUs (Table 6.9).

**Table-6.9: Output Value of the APIUs to the Total Industry Sector (Fig in %)**

Year	Food products	Beverages, Tobacco	Cotton textiles	Wool, Silk & Manmade fibre	Jute & Vegetable fibre	Textile products	Wood	Paper	Leather	Total APIUs	Total Industry
1989-90	17.66	3.68	4.42	0.99	0.00	1.75	0.86	5.60	1.08	36.05	100
1990-91	14.21	3.28	4.10	1.68	0.00	1.98	0.56	4.99	1.30	32.11	100
1991-92	14.27	3.55	4.38	1.62	0.00	2.45	0.22	4.73	0.89	32.12	100
1992-93	13.70	3.50	3.91	1.86	0.01	2.90	0.50	4.67	0.76	31.81	100
1993-94	15.39	3.85	3.97	2.15	0.01	5.22	0.42	3.15	1.29	35.44	100
1994-95	14.17	2.73	0.68	1.50	0.00	3.63	0.41	0.44	1.14	24.71	100
1995-96	13.77	1.49	3.94	1.57	0.00	4.17	0.27	4.48	0.99	30.67	100
1996-97	13.08	3.45	2.22	1.72	0.00	3.75	0.27	3.54	1.48	29.52	100
1997-98	11.36	3.07	3.02	2.78	0.00	4.76	0.18	3.40	1.42	30.00	100

Source: As in table 6.1.

Table 6.10 presents the value addition of the APIUs to the total industry sector in the state. The value addition has shown the mixed response and there is no consistency either in terms of increase or decrease. The year 1994-95 seems to be the best year in terms of value addition in the APIUs. Otherwise for all the other years from 1989-90 to 1990-91 the performance is not steady.

**Table-6.10: Percentage of Value Added in the APIUs to the Total Industry Sector (Fig in %)**

Year	Food products	Beverages, Tobacco	Cotton textiles	Wool, Silk & Manmade fibre	Jute & Vegetable fibre	Textile products	Wood	Paper	Leather	Total of APIUs	Total Industry
1989-90	10.06	5.85	4.02	1.04	0.01	1.67	0.37	4.62	0.69	28.34	100
1990-91	6.70	3.81	4.06	1.57	0.01	1.93	0.46	0.41	1.00	19.93	100
1991-92	6.67	4.85	3.48	1.35	0.01	2.73	0.13	3.91	0.75	23.87	100
1992-93	4.67	4.44	2.04	1.92	0.01	2.38	0.18	4.77	0.70	21.11	100
1993-94	7.53	5.93	3.32	3.01	0.01	10.02	0.30	4.02	1.00	35.13	100
1994-95	18.00	3.05	12.08	3.61	0.01	8.09	0.57	12.78	1.76	59.93	100
1995-96	7.34	1.48	3.00	2.16	0.00	4.78	0.17	5.42	0.70	25.05	100
1996-97	5.89	6.23	1.61	2.45	0.00	4.38	0.17	3.82	0.90	25.45	100
1997-98	9.40	5.15	2.91	6.73	0.00	5.37	0.12	3.01	0.88	33.57	100

Source: As in table 6.1.

### Section-III

#### Employment Generation in Rural Areas—45<sup>th</sup> and 51<sup>st</sup> NSS Rounds.

Category-wise (OAME, NDME and DME) employment generation has been discussed in this section. Towards this end we have collected data from economic census 1980 and 1990, 45<sup>th</sup> and 51<sup>st</sup> NSSO reports. To start with, we analyse employment across the categories of employment based on the 51<sup>st</sup> NSSO report. Table 6.11 presents the estimated number of enterprises and employment during 1994-95 in rural areas. The table reveals that in Karnataka state OAMEs, NDMEs, and DMEs constitute 5.24, 5.18 and 24 per cent respectively of the total units in the country. In the aggregate the state contributes 5.76 per cent of the total units at the all India level. In the same table employment generation has been compared with the all India level. In the state for all the enterprises the employment is about 5.89 per cent of the total rural employment in the country. However, the rural employment in case of the DME has been very high constituting 16.22 per cent of the rural employment at the all India level.

**Table- 6.11: Estimated No. of Enterprises and Employment During 1994-95 – 51<sup>st</sup> Round (in Rural areas)**

Category of enterprises	No. of enterprises (Fig in '00s)			Employment generation (Fig.in '00s)		
	Karnataka (1)	All India (2)	% of 1 to 2	Karnataka (1)	All India (2)	% of 1 to 2
OAMEs 1	4992	95349	5.24	8153	178447	4.57
NDMEs 2	346	6680	5.18	901	18289	4.93
O+N	5338	102029	5.23	9054	196736	4.60
DME	708	2942	24.07	3977	24524	16.22
All	6046	104971	5.76	13031	221260	5.89

Note: 1) OAME = Own Account Manufacturing Enterprises  
 2) NDME = Non-Directory Manufacturing Establishment  
 3) DME = Directory Manufacturing Establishment  
 4) O+N = (1) + (2)

Source: 51 NSSO round.

A comparative picture of the EC-80, EC-90 and NSS-45 and NSS-51 has been given for the rural enterprises and employment in the state and the country (Table-6.12). The Economic Census 1980 reveals that the rural enterprises accounted for about 7.60 per cent then which has since come down to 5.43 per cent in the economic census 1990. This is because of two factors. One is at the all India level the enterprises might have come



down and second the rural enterprises might have gone up in the state itself. Apparently the table reveals that both in the state and the country the number of rural enterprises has gone down in EC 1990 when compared to EC-1980. A similar trend is noticed in the case of NSS rounds 45 and 51 too. However, there is a considerable increase in case of DME. In the 45<sup>th</sup> round the percentage of DME was just 8.61 per cent which went up to 24.09 per cent by 51<sup>st</sup> round of NSS. A similar trend has been noticed in the case of employment in Karnataka state as the state strictly followed the status of the number of enterprises.

**Table-6.12: Estimated Number of Enterprises and Employment Generation During Economic Census and NSSO Rounds (Rural Areas).**

Census & NSS Rounds	Karnataka No. of units Figures are in '00s	All India No. of Units (Fig. Are in '00s	% of Karnataka to the Country	Karnataka Employment in Nos. Figures are in '00s	All India Employment in Nos. (Fig. Are in '00s	% of Karnataka to the Country
EC-80	2871	37773	7.60	7411	97442	7.606
EC-90	1864	34300	5.43	7155	110088	6.499
NSS-45	6006	118569	5.07	9165	214136	4.28
NSS-51	5338	101688	5.25	9054	196248	4.614
DME-45	190	2207	8.61	2710	27074	10.01
DME-51	708	2939	24.09	3977	24496	16.24
All-45	6196	120776	5.13	11875	241210	4.923
All-51	6046	104627	5.78	13031	220744	5.903

Note: 1) EC80: Economic Census 1980

2) EC90: Economic Census 1990

3) NSS-45: 1989-90

4) NSS-51<sup>st</sup>: 1994-95

Source: 1). NSSO 45<sup>th</sup> ad 51<sup>st</sup> rounds

2). Economic Census 1980 and 1990

## CHAPTER-VII

### LIVESTOCK BASED PROCESSING SECTOR IN THE STATE

This chapter contains two sections. The first section includes the secondary data analysis and the second section covers the primary data.

#### Section-I

To understand the livestock processing sector in the state we have tried to collect secondary data from various sources like livestock census, annual survey of industries and other state published sources. However we did not get much information at the district level. Hence the primary data has been used for detailed analysis. From the livestock census we have collected the number of livestock and worked out the number of various kinds of animals per unit of population. The table 7.1 clearly reveals that the livestock population is coming down over a period of time. Cattle per person show a declining trend for the districts and also the state. The situation is almost same for the livestock population. Total livestock per person also shows a declining trend. The livestock population has been competing with human beings for food, therefore, the human beings have been trying to dispose of the livestock slaughtering houses. Earlier each farm HH used to have at least a pair of bullocks

**Table-7.1: Proportion of Livestock per Unit of Population in the District and the state.**

District/State	Cattle	Buffaloes	Sheep	Goats	Pigs	Other livestock	Total livestock	Poultry
<b>1983</b>								
D.Kannada	0.26	0.08	0.00	0.01	0.01	0.00	0.37	0.55
Raichur	0.34	0.09	0.17	0.17	0.01	0.00	0.79	0.17
Karnataka	0.29	0.09	0.12	0.12	0.01	0.00	0.64	0.31
<b>1990</b>								
D.Kannada	0.23	0.07	0.00	0.01	0.00	0.10	0.41	0.60
Raichur	0.29	0.09	0.17	0.12	0.00	0.04	0.71	0.19
Karnataka	0.23	0.09	0.11	0.09	0.00	0.05	0.56	0.35
<b>1997</b>								
D.Kannada	0.12	0.02	0.00	0.01	0.01	0.00	0.15	0.37
Raichur	0.15	0.06	0.14	0.09	0.01	0.00	0.43	0.10
Karnataka	0.21	0.09	0.16	0.10	0.01	0.00	0.56	0.42

Source: Livestock Censuses 1983, 1990 and 1997.

but now the bullocks are hardly seen in the villages (Rajendran 1994). The table 7.2 presents the production of animal products like milk, meat, pork, etc. As the number of livestock is coming down the production of meat is growing positively. Production of cattle and buffalo has grown at the rate of about 10 and 12 per cent respectively. Though the pig population is less per unit of human population, the pork production is growing at the rate of 18 per cent.

**Table-7.2: Production and its GR of the Livestock in Karnataka**

Year	Milk Production '000 tonnrs		Wool in tonnes	Production of Mutton '00 tonnes		Production of Beef '00 tonnes		Pork '00 tonnrs	Egg in lakhs	Chicken meat '00 tonnes
	Cow	Buffaloes		Sheep	Goat	Cattle	Buffaloes			
989-90	1240	1040	3736	225	175	6949	4397	2154	12780	NA
990-91	1284	1094	3806	233	2040	2337	1242	505	7320	NA
991-92	1322	1142	3892	236	185	7297	4717	2476	13362	NA
992-93	1390	1188	3926	242	189	7679	4828	2536	13490	NA
993-94	1461	1262	3978	249	192	7995	6247	2598	14169	NA
1994-95	1631	1358	4046	253	198	8206	7512	3341	14699	NA
1995-96	1747	1427	4098	267	206	8966	8176	3586	15579	NA
1996-97	1916	1526	4229	272	212	9996	6654	5554	16303	NA
1997-98	2347	1601	4691	285	218	10821	6657	4604	18124	NA
1998-99	2539	1661	5205	306	232	11291	7231	4933	19380	NA
2001-02	2744	1990	5757	331	224	12614	8919	6403	20273	13956
GR in %	8.76	6.14	3.85	3.60	-5.88	10.62	12.06	18.12	7.14	---

Source: Various Issues of Annual Survey of Industries.

The percentage of livestock processing enterprises in the state to the country has been presented in table 7.3. The table reveals that the percentage of slaughtering and the preservation of meat factories was just 0.09 per cent in the state. The net income from this and animal oils and fats is negative. However, the manufacture of dairy products and processing, canning and preservation of fish the net income is positive. This shows that Karnataka state's performance in terms of livestock processing activity is not significant.

**Table-7.3: Percentage of Livestock Processing Enterprises in the State to the Country (1991-92)**

Characteristics	Slaughtering, Preparation, and Preservation of meat	Manufacture of Dairy products	Processing, Canning & preservation of Fish	Manufacture of animal oils & fats, fish oil & food products	Total All India
Number of Factories	0.09	0.63	0.36	1.50	5850
Fixed capital	0.13	0.75	0.08	0.64	47915601
Total persons engaged	0.03	0.70	0.40	0.43	433848
Total inputs	0.09	1.73	0.51	0.61	111961017
Value of output	0.06	1.45	0.43	0.46	151736369
Net income	-0.09	0.75	0.10	-0.13	24930865

Source: As in table 7.2.

### Aquaculture in the State:

Fishing is one of the most important occupations in coastal Karnataka. The major fish producing districts are Udipi, DK and UK. Of these most of the fish is accounted for by DK district. However, the district-wise details are not available and therefore, we have tried to give the aggregate picture of the aquaculture in the state. Fish production is growing at the rate of 0.23 per cent whereas the fish value is growing at the rate of 8.79 per cent (Table 7.4). However the absolute figures reveal that the value of fish has been coming down in the last two years, i.e., from 2001-02 to 2002-03. The proportion of marine fish varied between 41.01 per cent in 2001-02 to 77.44 per cent in the succeeding year. Approximately around 4 per cent of the total fish is being exported to many countries of the world. Growth rate of total fish production and fish value has been presented in table 7.5. It is clear from the table that marine fish production is declining at the rate of 2.3 per cent, whereas inland fish production is growing at the rate of 4.74 per cent. Overall production has stagnated but the value is growing; this may be due to increase in the price of fish products. The export quantity showed increasing trend but not the value earned from the fish exports.

**Table-7.4: Fish Production and its Value in the State**

Year	Quantity in Metric Tonnes	Value Rs. in Lakhs	% of Marine fish	% of Marine fish value	% of Export quantity	% of export quantity value
1993-94	249154	21906	70.046	65.932	3.262	34.698
1994-95	242787	25659	71.050	72.606	3.748	44.089
1995-96	304865	36554	71.347	76.104	2.348	27.013
1996-97	324423	33990	68.669	70.090	3.056	29.204
1997-98	310401	52037	61.166	45.435	3.399	22.545
1998-99	279046	49004	57.563	42.872	4.210	23.254
1999-00	292299	53390	56.672	44.360	4.412	22.922
2000-01	305375	54740	58.259	45.358	3.872	17.256
2001-02	249612	48285	51.446	41.301	3.778	13.126
2002-03	266423	43458	67.622	77.438	3.674	14.428
GR in %	0.234	8.792	--	--	--	--

Source: Statistical Bulletin of Fisheries, DES, Government of Karnataka, Bangalore (2002-03).

**Table-7.5: GR of Fish Production and the Value**

Source of fish	GR in % 1993-94 to 2002-03
Marine Fish	-2.3008
Value	9.0464
Inland Fish	4.7445
Value	13.9686
Total	0.2344
Value	8.7922
Export Qty.	3.2827
Value	-3.2261

Source: As in table 7.4.

Only fish production at the district level is available but not any other details. Table 7.6, presents the fish production across the districts and the state. In Raichur we do not have any marine fish. Even the percentage share of inland fish is not that high. However, the percentage share is increasing every year. In DK district the percentage share of marine fish is very high. It is almost 40 per cent of the state's total production. However, the percentage share of inland fish is very low, around just 1 per cent.

**Table-7.6: Proportion of fish production in the sample districts**

District/State	1999-00	2000-01	2001-02	2002-03
<b>Raichur</b>				
Marine	0	0	0	0
Inland	2.74	2.68	2.83	3.01
Total	1.19	1.12	1.38	0.98
<b>D.Kannada</b>				
Marine	40.53	45.13	37.32	45.56
Inland	0.91	0.87	0.94	1.26
Total	23.36	26.66	19.66	31.21
<b>Karnataka</b>				
Marine*	165653	177907	128416	180161
Inland*	126646	127468	121196	86262
Total*	292299	305375	249612	266423

Note: \* Metric tones

Source: As in table 7.4.

## Section-II

In this section we have given the primary data analysis and the field observations relating to livestock activities like leather products and fishing activities in both the districts being studied.

### **Production and Employment Situation of Livestock Enterprises:**

In Raichur district we have three categories of enterprises: Own Account Manufacturing Enterprises (OAME), Non-Directory Manufacturing Enterprises (NDME) and Directory Manufacturing Enterprises (DME). In DK district the factory sector is also included in addition to these three categories of enterprises. This categorisation has been made based on the size of enterprise in terms of employment. In total we have collected data from 12 and 15 enterprises in both Raichur and DK districts respectively. In Raichur, cow, bullock, buffalo, and other animals' leather-related works are done. In DK

district fish processing activities are carried out. Table 7.7 presents the production and employment situation of the livestock enterprises in both the districts. It can be seen from the table the entire product produced is sold without any problem, which demonstrates that there is no marketing problem. However, the average number of people employed per unit is only 1 in case of OAME and 2 each in case of NDME and DME in Raichur district whereas in DK it is 2,4 and 13 respectively. In factories the employment is as high as 101 per unit. In DK the respective units are larger and in turn the employment generation is high.

**Table-7.7: Production and Employment Situation of Livestock Enterprises in the Sample Districts Across Various Enterprise Categories**

Type of Enterprise	Number of sample units	No. of Items produced per year	Avg. no. of items produced per year**	No. of units sold in market	No. of raw material purchased	Avg. no. of raw material purchased	No of persons involved in the unit	Average no of persons involved in the Units	No of persons hired on Wage	Average no of persons hired on wage
<b>Raichur</b>										
OAME	6	4954	825.67	4954	3167	527.83	31	5	6	1
NDME	4	3768	942.00	3768	2544	636.00	16	4	7	2
DME	2	1680	840.00	1680	1680	840.00	11	6	4	2
<b>Total</b>	<b>12</b>	<b>10402</b>	<b>866.83</b>	<b>10402</b>	<b>7391</b>	<b>615.92</b>	<b>58</b>	<b>5</b>	<b>17</b>	<b>1</b>
<b>DK</b>										
OAME	6	859	143.17	859	1715	285.83	22	4	14	2
NDME	4	1022	255.50	1022	2080	520.00	13	3	15	4
DME	2	1090	545.00	1090	2250	1125.00	8	4	25	13
Factory	3	4133	1377.67	4133	6218	2072.67	11	4	302	101
<b>Total</b>	<b>15</b>	<b>7104</b>	<b>473.60</b>	<b>7104</b>	<b>12263</b>	<b>817.53</b>	<b>54</b>	<b>4</b>	<b>356</b>	<b>24</b>

Note: Number of units referred as number of skins in Raichur and in DK it is in terms of tonnes.

The turnover per year is presented in table 7.8. The turnover per unit in a year ranges from Rs. 2,54,653 to 7,56,000 in Raichur district and it is Rs. 10,06,667 to Rs. 5,53,27,667 in DK. This clearly shows that in DK the turnover rate is high because of the value of the fish and also continuous job availability prevailed in units. Whereas in Raichur the job is not available through out the year. Per unit income realised is also presented in the same table, though the income presented is not net income as only the raw material cost is deducted. The semi net income shows that the income realisation is less in case of OAME and high in DME in both the districts. However DK stands first when compared to Raichur district in terms of returns. The reasons for the better performance is explained in the subsequent sections.

**Table –7.8: Value of the Production of Livestock Activities in the Sample Districts – Across Various Industry Categories**

District and type of enterprises	Avg. Production value per enterprise	Avg. cost of the raw-material per enterprise	Income realised per enterprise excluding wages
<b>Raichur District</b>			
OAME	254653	175892	78761
NDME	345960	164200	181760
DME	756000	196000	560000
<b>Dakshina Kannada District</b>			
OAME	1006667	821500	185167
NDME	1797500	1006000	791500
DME	3870000	1067500	2802500
Factory	55327667	20438667	34889000

Products sold through various marketing sources and their prices have been presented in table 7.9. Across the enterprises we found that the prices commanded by the OAME is less compared to DME in both the districts from all the market sources like retail price, factory price and also the middlemen price. It is clear from the same table that they have also paid more price for the raw material. The entrepreneurs told us that the NDME and DME owners get a higher price because their product is superior. This fact is accepted by all categories of entrepreneurs. Secondly, the middlemen price given to the producers is much lower than the retail price and the factory price. This shows the exploitation of entrepreneurs by middlemen who have given loans to the entrepreneurs to run the units. Third, the middlemen price to buy the raw material is more than the price, which they have to pay when they purchase it from the original source. In this case also the role of middlemen is felt. This is common in both the districts and for all the categories of enterprises. In conclusion it can be said that the middlemen exist while buying the raw material and also while selling the finished products.

**Table-7.9: Variation in the Price of the Product Sold and Raw material Purchased - Across Various Marketing Sources**

Name of Districts	Type of enterprise	Sample size	Product Sold			Raw material Purchased	
			Average retail price	Average factory price	Average Middleman Price	Avg. middlemen price	Avg. price at source
<b>Raichur</b>	OAME	6	380.83	415.00	349.17	267.50	235.83
	NDME	4	541.25	580.00	500.00	350.00	283.75
	DME	2	975.00	1075.00	900.00	700.00	625.00
<b>Dakshina Kannada</b>	OAME	6	6916.67	6508.33	6133.33	2900.00	2583.33
	NDME	4	7025.00	6525.00	6025.00	2925.00	2600.00
	DME	2	7000.00	6500.00	6050.00	3000.00	2650.00
	Factory	3	5316.67	5100.00	5000.00	2550.00	2500.00

To understand the problems of the entrepreneurs we have posed a few qualitative questions and the details are presented in table 7.10. In the leather industry we found that the entrepreneurs did not find any problem in getting raw material and it was available throughout the year, whereas in DK the availability of raw material is based on the season. Respondent found it difficult to get fish in the rainy season and during cyclones. Therefore, they buy the raw material from the people who have stored the fish but the price is higher. In both the districts the entrepreneurs felt that the labour is easily available as the activities do not require much skill specially in the leather industry of the Raichur district. Though the fish processing units require some degree of skills, the labourers are available in DK as the rate of literacy and awareness of the people is high. Regarding financial resources, we found mixed reactions. In Raichur, the entrepreneurs felt that the capital was not easily available but was available if they paid higher rates of interest. In DK about 20 per cent of entrepreneurs have said that the capital was easily available and the remaining felt that it was OK - the capital was available against higher rates of interest. Tables 7.11 and 7.12 support the argument. These tables reveal that the major sources of credit is money lenders and the rates of interest ranged from 21 to 36 per cent per year.

**Table-7.10: Availability of Raw-Material, Capital and Labour**

Type of Enterprises	Availability of raw material				Availability of Skilled labour				Availability of Capital			
	Easily available	It is OK – available	Availability depends on season	Total	Easily available	It is OK – available	Availability depends on season	Total	Easily available	It is OK – available	Availability depends on season	Total
OAME	6	0	0	6	6	0	0	6	0	6	0	6
DME	2	0	0	2	2	0	0	2	0	2	0	2
NDME	4	0	0	4	4	0	0	4	0	4	0	4
Sub Total	12	0	0	12	12	0	0	12	0	12	0	12
OAME	0	0	6	6	6	0	0	6	2	4	0	6
DME	0	0	2	2	2	0	0	2	0	2	0	2
NDME	0	0	4	4	4	0	0	4	1	3	0	4
Factory	0	0	3	3	3	0	0	3	0	3	0	3
Sub Total	0	0	15	15	15	0	0	15	3	12	0	15

**Table 7.11: Sources of Credit**

Source of Credit Availability	Districts		
	Raichur	Dakshina Kannada	Total
Bank	5	8	13
Co-operative Society	1	0	1
Money Launderers	6	7	13
Relatives/Friends	0	0	0
Total	12	15	27



**Table-7.12: Rate of Interest Charged on Loans.**

Rate of Interest on Loan	Districts		Total
	Raichur	Dakshina Kannada	
11-15%	6	8	14
16-20%	0	0	0
21-36%	6	7	13
Above 36%	0	0	0
Total	12	15	27

In the case of availability of infrastructure 50 per cent of the entrepreneurs felt that it was moderate and 25 per cent each said that it was poor and better in Raichur district (Table 7.13). In DK 60 per cent of the entrepreneurs felt that the infrastructure has better and 20 per cent each have felt that it was moderate or best. This clearly shows that the infrastructure availability in Raichur is poor and DK it is better. The same trend is applicable to the availability of supporting equipment. Tables 7.14 and 7.15 present the pattern of demand for the products which they produce and also the quality consciousness of the buyers. Here also we found that the DK's performance is better compared to Raichur district. It is no wonder that Raichur's performance is poor and DK's performance best in terms of turnover, output and the price for the goods which they produce.

**Table – 7.13: Availability of Supporting Infrastructure and Equipment**

Opinion of the respondents	Availability of Supporting Infrastructure			Availability of supporting equipment		
	Raichur	Dakshina Kannada	Total	Raichur	Dakshina Kannada	Total
Poor	3	0	3	0	0	0
OK/ Moderate	6	3	9	12	4	16
Better	3	9	12	0	11	11
Best	0	3	3	0	0	0
Total	12	15	27	12	15	27

**Table-7.14: Size and Pattern of Demand**

Size and Pattern of Demand	Raichur	Dakshina Kannada	Total
Poor	0	0	0
Normal	12	9	21
Better	0	6	6
Best	0	0	0
Total	12	15	27

**Table-7.15: Quality consciousness of buyers**

Opinion of the respondents	Raichur	Dakshina Kannada	Total
Better	12	5	17
Best	0	10	10
Total	12	15	27

**The Status of Promotional Agencies in the Respective Districts:**

The promotional agencies in the respective districts seem to be not that active. However, the position is better in DK district when compared to the Raichur district. To initiate the enterprise almost all the entrepreneurs have received no help from the government in Raichur district but in the of the DK district there was a positive response (Table 7.16). However, officials in Raichur claimed that they had assisted the entrepreneurs by providing subsidised loans to establish the units. Most of these entrepreneurs consisted of Muslims and SC households. However, in terms of support like equipment and training we found that there was a positive response in both the districts.

**Table-7.16: Government interventions in initiating the enterprise and support in terms of Equipment and Training**

Opinion of the respondents	Government intervention to initiate the activity			Government support in equipment and training		
	Raichur	Dakshina Kannada	Total	Raichur	Dakhsina Kannada	Total
YES	0	15	15	7	10	17
No	12	0	12	5	5	10
Total	12	15	27	12	15	27

Most entrepreneurs in Raichur district felt that other promotional agencies also do not exist in the place (Table 7.17). In contrast, in DK about 20 per cent of the entrepreneurs said that there are promotional agencies like cooperative societies, community organisations etc. Interestingly, the existence of other promotional agencies like NGOs or SHGs or Co-operatives are very limited. Only a few entrepreneurs in DK said that the cooperative societies had been helping them to promote their activity by financing working capital (Table 7.18). However, there are producer associations to take care of the interests of the entrepreneurs in DK district, according to 80 per cent of the entrepreneurs. But in Raichur district there are no such organisations of entrepreneurs. These producers organisations help fellow entrepreneurs to sort out raw material

problems, fixation of price for their products, protect entrepreneurs from middlemen by giving raw material and also credit and fixing wages for the labourers (Table 7.19).

**Table-7.17: Existence of Promotional Agencies**

Opinion of the respondents	Raichur	Dakshina Kannada	Total
Yes	0	3	3
No	12	12	24
Total	12	15	27

**Table-7.18: Existence of NGOs or SHGs or Co-operative Societies**

Opinion of the respondents	Raichur	Dakhsina Kannada	Total
Yes	0	4	4
No	12	11	23
Total	12	15	27

**Table-7.19: Existence of Producer Associations**

Opinion of the respondents	Raichur	Dakshina Kannada	Total
Yes	0	12	12
No	12	3	15
Total	12	15	27

### **Conclusions:**

The secondary data analysis reveals that the agricultural employment for males keeps on declining and the NFE goes on increasing. However, in case of the female labourers the agriculture employment has come down but at a lower rate when compared to the male. The NFE in general for the females has shown stagnation with symptoms of declining. Growth rate in the employment of the rural people has come down from 2.12 per cent to 0.17 per cent in Karnataka state and the similar trends are noticed even at the all India level.

The district and the village level analysis reveals that the NFE is not based on the growth related factors like agriculture development. Because though Raichur district has

been one of the agriculturally developed district the NFE has been much low when compared to the other districts. The agriculture development can be explained in terms of the availability of irrigation facilities, land-man ratio, cropped area, etc. The distress diversification hypothesis holds good partially in DK district because in DK, the NFE is very high, this can be explained due to distress factors like land-man ratio and the cropped area, and the non-availability of irrigation facilities. However, the major factors to determine the NFE are the literacy rate, people's awareness, willingness to work and the availability of infrastructure facilities. In DK the literacy rate is high, infrastructure availability is more, the people are well aware of the problems and they have willingness to work and therefore, NFE is high. In addition to these the NFE in DK district is not as a last resort, which is mentioned in the distress diversification hypothesis, because, people have been opting for this occupation as it pays more when compared to other occupations specially agricultural labour in rural areas.

In general, the regular-employment has been more in DK district when compared to Raichur district. In case of self-employment, our observation revealed that DK district has an edge over Raichur district but in terms of data both the districts seem to be the same. The number of casual labourers are more in DK district compared to Raichur district. In fact the casualisation of labour has been increasing compared to regular and self-employment in both the districts.

## REFERENCES

- Acharya, S. and A. Mitra (2000). *The Potential of Rural Industries and Trade to Provide Decent Work Conditions: A Data Reconnaissance in India*. SAAT Working Papers, New Delhi: International Labour Organization.
- Anderson, Dennis and Leisonson, W. Mark (1980). Rural Non-farm Employment in Developing Countries. *Economic and Cultural Change*, 28(2).
- Basant R., B.L. Kumar and R. Parthasarathy (1998). *Non-Agricultural Employment in Rural India: The Case of Gujarat* (ed.,). Jaipur: Rawat Publications.
- Basu and Kashyap (1992). Rural Non-Agricultural Employment in India: Role of Development Process and Rural Urban Employment Linkages. *Economic and Political Weekly*, XXVII(51-52), December 19-26.
- Bhalla, G. and Peter Hazell (2003). Rural Employment and Poverty Strategies to Eliminate Rural Poverty Within a Generation. *Economic and Political Weekly*, XXXVIII(33): 3473-84.
- Chadha, G.K. (1986). Agricultural Growth and Rural Non-Farm Activities: An Analysis of Indian Experience. In Yang-Boo Choe and Fu-chen Lo (Eds.). *Rural Industrialisation and Non-Farm Activities of Asian Farmers*, Korea Rural Economics Institute, Asian and Pacific Development Centre.
- Chadha, G.K. (2001). Impact of Economic Reforms on Rural Employment: No Smooth Sailing Anticipated. *Indian Journal of Agricultural Economics*, 56(3): 491.
- Chadha, G.K. and P.P. Sahu (2002). Post-Reform Setbacks in Rural Employment – Issues that need Further Scrutiny. *Economic and Political Weekly*, XXXVI(21): 1998-2026.
- Dev, Mahendra, S (1990). Non-Agricultural Employment in Rural India: Evidence at a Dis-aggregate Level. *Economic and Political Weekly*, July 14.
- Dev, Mahendra, S. (2003). Agriculture, Employment and Social Sector Neglected. *Economic and Political Weekly*, XXXVIII(14 & 13): 1353-56.
- Edgreen, G. and M. Muqtada (1989). *Strategies for Growth and Employment in Asia: Learning from within*, ARTEP Working Papers.
- Gayathri, K. (2003). Who Benefits from Industrial Incentives – A Study of Capital Investment Subsidy in Karnataka. ISEC Working Paper No. 124, Bangalore.
- Government of Karnataka GOK (1993). *Report of the Expert Committee on Stagnation of Agricultural Productivity in Karnataka During 1980s* (Chairman: T.R. Satish Chandran). Government of Karnataka).

Liedholm, Carl and Peter Kilby (1989). The Role of Non-Farm Activities in the Rural Economy. In Jafferey G. William and V.R. Panchamukhi (Eds.). *The Balance Between the Industry and Agriculture in Economic Development: Sector Proportions*, Vol. 2, ILO/Macmillan Press, London.

Papola, T.S. (1987). Rural Industrialisation and Agricultural Growth: A Case Study on India. In R.Islam (ed). *Rural Industrialisation and Employment in Asia*, ILO/ARTEP, New Delhi.

Raj, K.N. (1976). Growth and Stagnation in Indian Industrial Development. *Economic and Political Weekly*, 11(5,6&7).

Rajasekhar, D., (1991). *Non-Farm Sector in India: Issues and Evidence*. Paper Presented in National Consultation on Identification of Research Priorities in Non-far Sector, Institute for Social and Economic Change, Bangalore.

Rajasekhar, D. (1995). Pattern and Determinants of Rural Non-Farm Employment in Karnataka: A Disaggregated Analysis at District Level. *Agricultural Situation in India*, LII: 279-86.

Rajasekhar, D. and B.R.Biradar (1998). Rural Non-Farm Activities in Karnataka. Unpublished Report, Agriculture Development and Rural Transformation Unit, Institute for Social and Economic Change.

Rajendran, S. (1993). Changing Patterns of Farm Power use in Agriculture – A Study of Tamil Nadu Villages. Ph.D. Thesis, Bangalore: Institute for Social and Economic Change.

Samuel P.S. HO (1979). Decentralised Industrialisation and Rural Development: Evidence From Taiwan. *Economic Development and Cultural Change*, 20(1).

Unni, Jeemol, (1991). Regional Variations in Rural Non-Agricultural Employment: An Exploratory Analysis. *Economic and Political Weekly*, January, 19.

Vaidyanathan A. (1986). Labour Use in Rural India: A Study of Spatial and Temporal Variations." *Economic and Political Weekly*, XXI(52), December 27.

Visaria, P. and R. Basant (1994). Non Agricultural Employment in India: Problems and Perspective. In Visaria, P. and Basant, R. (eds.). *Non Agricultural Employment in India*, New Delhi: Sage Publications.

Vyasulu, Vinod (1990). The Non-Farm Sector in the Indian Economy: A Discussion Note on Research Priorities. *Indian Journal of Social Science*, July-September.