Rural Non-Farm Employment: A Study in Tamil Nadu



Institute of Applied Manpower Research Planning Commission, Government of India

Rural Non-Farm Employment: A Study in Tamil Nadu

Institute of Applied Manpower Research Planning Commission, Government of India

Acknowledgements

The Institute of Applied Manpower Research (IAMR) is thankful to the members of the Standing Committee on Research Programme (SCRP) of IAMR for approving the study on Rural Nonfarm Employment (RNFE) and giving its valuable guidance to conduct the study. The study was organised in four states Uttar Pradesh, Gujarat, Tamil Nadu and Punjab in close collaboration with Giri Institute of Development Studies, Lucknow; Centre for Research in Rural and Industrial Development (CRRID), Chandigarh; Institute of Development Alternatives, Chennai, and Gujarat Institute of Development Research, Ahmedabad. IAMR is grateful to all of them for making valuable contributions.

Institute's faculty Dr. Rashmi Agrawal, Director (overall in-charge), Dr. Shachi Joshi, Dy. Director, Dr. G. P. Joshi, Dy. Director and Dr. Partha Saha, Dy. Director, were involved in coordinating with the state teams in finalization of survey methods, development of tools, sampling and organising fieldwork and focus group discussions at various places across the states. They were also involved in preparing a framework for report writing. The institute put on records sincere gratitude to all of them.

Besides the above faculty, Dr P. K. Saxena, Joint Director, Shri D. Indrakumar, Asst. Director, Shri Radhey Shyam, Asstt. Director and Shri Sanjay Kumar, Young Professional were also involved in supervising the data collection at field level. Special thanks to all the staff of IAMR who played important roles in completing the primary survey.

Thanks are also due to Sh. Sudershan Kumar for providing the secretarial assistance and Mrs. Dipika Sen for editing the reports. Shri Dipayan Nandi, Mrs. Shagum Barwal and Mrs. Vaishali Rana, Asstt. Systems Analysts helped in developing software, guiding state teams and in the analysis of data. We are thankful to all of them for their efforts.

Contents

		Page No.
Executive Sur	nmary	xi
Chapter I	Introduction	
1.1	Background	1
1.2	Objective	4
1.3	Outline of the Report	5
Chapter II	The Overall Context of Rural Non-Farm Employment in Tamil Nadu and its Emergence over time	
2.1	The Context	6
2.2	Size and Growth of Population	6
2.3	Vital Rates in Tamil Nadu	7
2.4	Components of Fertility Decline	8
2.5	Infant Mortality Rate in Tamil Nadu	8
2.6	Urbanisation in Tamil Nadu	9
2.7	Migration	9
2.8	Non-Farm Employment over time in Tamil Nadu	10
2.9	Employment and Gender in Tamil Nadu	20
2.10	Sectoral Diversification in Tamil Nadu	21
2.11	Recent Trends in Employment	22
2.12	Concluding Observations	25
Chapter III	Rural Non-Farm Employment in Tamil Nadu	
3.1	Survey	26
3.2	Survey Instrument and Sampling	27
3.3	Data Sources	28
3.4	Agriculture or Non-Agriculture?	29
3.5	Occupation of the Population	30
3.6	Distribution of Main Workers across Broad Industry Groups	32

3.7	Distribution of Main Workers across Broad Industry groups at the District level	33
3.8	RNFE over time in the Sample Villages	35
3.9	Gender Selectivity in RNFE?	36
3.10	Gender and RNFE at the District Level	38
3.11	RNFE and Age Selectivity	40
3.12	Caste and RNFE	44
3.13	Education and RNFE	47
3.14	Profile of Non-Agricultural Workers	49
3.14.1	Size of Non-Agricultural Labour population	49
3.14.2	Distribution of Non-Agricultural Labour across Sectors	50
3.14.3	Non-farm Employment and Place of Work	51
3.14.4	Distribution of Non-Agricultural Labour by Distance of Work	52
3.14.5	Days of Employment for Non-Agricultural Labour	54
3.14.6	Working Houses of Non-Agricultural Workers	54
3.14.7	Type of Contract and Mode of Payment of Non-Agricultural Labourers	55
3.14.8	Annual Wage Income of Non-Agricultural Labourers	56
3.15	Characteristics of Self-Employed in the Sample Villages in Tamil Nadu	58
3.16	Annual Earnings of the Self-Employed	60
3.17	Conclusion	61
Biblio	graphy	63
	List of Tables	
2.1	Total Workers and their Categories: India and Tamil Nadu	
∠. 1	by Residence and Sex - 2001	11
2.2	Distribution of Population across Workers and Non-workers in India and Tamil Nadu: 2001	13
2.3	Sectoral Distribution of Workers in India and Tamil Nadu in 1971-1991	15-16

2.4	Sectoral Distribution of Workers in Rural Tamil Nadu in 1971-1991	17
2.5	Non-agricultural Employment in Rural Tamil Nadu, 1977- 2010	18
3.1	Distribution of Districts by their Level of RNFE, 2001	26-27
3.2	Sample Villages Surveyed, 2012	28
3.3	Distribution of Households by their Occupation in Tamil Nadu, 2012	29
3.4	Distribution of Surveyed Population in Sample Villages in Tamil Nadu, 2012	31
3.5	Distribution of Working Population across Occupation in Tamil Nadu, 2012	31
3.6	Distribution of Main Workers (15.59) across Broad Industry Groups, Sample Villages in Tamil Nadu, 2012	32
3.7	Distribution of Persons across Broad Industry Groups in Sample Villages in Tamil Nadu, 2012 (%)	34
3.8	Distribution of Main Workers across Broad Industry Groups in Sample Villages in Tamil Nadu, 2012 (%)	34-35
3.9	Change in the Share of RNFE, Sample Villages in Tamil Nadu, 2012	36
3.10	Distribution of Main Workers across Gender and Industry Groups in Sample Village, Tamil Nadu, 2012	38
3.11	Distribution of Main Workers by Gender and Industry Groups across Districts in Tamil Nadu, 2012(%)	39
3.12	Gender Composition of the Sample Population by their Activity in Tamil Nadu 2012	39
3.13	Distribution of Population by Age Groups and Industry Groups in Tamil Nadu, 2012 (%)	40
3.14	Distribution of Main Workers across Age groups by Each Industry Group in Tamil Nadu, 2012	41
3.15	Distribution of Main Workers across Gender, Age and Industry Groups in Tamil Nadu, 2012	42
3.16	Distribution of Workers in Agriculture by Age Group in Tamil Nadu, 2012	43
3.17	Distribution of Main Workers across Age Groups and Industry Groups in High and Low RNFE Districts in Tamil Nadu, 2012	43
3.18	Gender and Caste Composition of Main Workers in Tamil Nadu, 2012 (%)	44

3.19	Distribution of Main Workers across Caste and Industry Groups in Tamil Nadu, 2012	45
3.20	Caste Composition of the Labour Force in Each Industry in Tamil Nadu, 2012	46
3.21	Distribution of Population by Age Groups and Industry Groups in Tamil Nadu, 2012	46
3.22	Distribution of the Surveyed Population by the Educational Level in Tamil Nadu, 2012	47
3.23	RNFE Workers across their Educational Level in Tamil Nadu, 2012 (%)	47
3.24	Percentage Distribution of Surveyed Population across Occupation and Education in Tamil Nadu, 2012	48
3.25	Distribution of Population across Technical Education and Occupation in Tamil Nadu, 2012	49
3.26	Distribution of Non-Agricultural Labour by Sector and District	50
3.27	Distribution of Non- Agricultural Labour by Sector and Place of Work (State as a whole)	51
3.28	Distribution of Non- Agricultural Labour by Place of Work	52
3.29	Distribution of Non- Agricultural Labour by Distance of Work	53
3.30	Percentage of Distribution of Non- Agricultural Labour by District and Distance of Work	53
3.31	Distribution of Non- Agricultural Labour by District and Days of Employment	54
3.32	Percentage Distribution of Non- Agricultural Labour by District and Work Hours	55
3.33	Percentage Distribution of Non- Agricultural Labour by District and Type of Contract	56
3.34	Percentage Distribution of Non- Agricultural Labour by District and Mode of Payment	56
3.35	Average Annual Earnings (Rs.) of Non- Agricultural Labour by District and Social Group	57
3.36	Average Annual Earnings (Rs.) of Non- Agricultural Labour by District and Social Group	58
3.37	Distribution of Self-Employed in Non-Agriculture by District	58
3.38	Distribution of Self-Employed in Non- Agriculture by District and Activity	59

3.39	Distribution of Self-Employed in Non- Agriculture by Activity and Work Place (State as a whole)	59
3.40	Distribution of Self-Employed in Non- Agriculture by District and Workplace	60
3.41	Average Annual Net Earnings (Rs.) per Household Self-Employed in Non- Agriculture by District and Activity	60
3.42	Average Annual Net Earnings (Rs.) per Household Self-Employed in Non- Agriculture by District and Social Group	61

Executive Summary

A need was felt for organizing micro level research studies that would explain the complex interconnections in the emergence, growth and functioning of RNFE in the state of Tamil Nadu. Lack of such micro studies have left the RNFE studies bereft of any link with the agricultural sector. It was not possible to relate the RNFE sector with the agrarian systems from where it had emerged. If agrarian surplus had led to the emergence of RNFE, then RNFE should have grown in leaps and bounds in the erstwhile green revolution areas. Similarly, how does one explain nearly half of the rural main workers in RNFE as a residual phenomenon? Very soon 'residual' will be the dominant phenomenon in a state like Tamil Nadu. To find answers to such and many more questions a micro level study has been conducted.

Objectives of the Study

- 1. To map the RNFE activities in sample rural areas.
- 2. To analyse the extent of RNFE compared to that of the agricultural employment.
- 3. To examine the differences across caste and gender in the RNFE.
- 4. To assess the number of days of employment in RNFE.
- 5. To determine the wage income levels of various RNFE activities in the select villages.
- 6. To study the resource endowment of the households and the nature of RNFE.
- 7. To evaluate the activity status of all the women in each of the households.
- 8. To determine the source of demand for rural non-farm activities and their linkages in the rural economy.
- 9. To determine the factors which encourage employment in rural non-farm sector.
- 10. To analyse the constraints that inhibit the growth of rural non-farm sector.

Methodology and Sampling Technique

The project envisaged a sample survey of 12 villages in the study area of Tamil Nadu. Villages were classified into High RNFE and Low RNFE districts following certain criteria. Out of the 12 villages a random selection was made from both the groups. Survey instruments were developed by the Institute of Applied Manpower Research (IAMR). IAMR also developed data entry formats and the table formats for the report.

Major Findings of the Study

Findings of the study show that RNFE is emerging as a very important activity and draws more and more people into its fold. Households prefer RNFE to agriculture. The younger population overwhelmingly goes for RNFE. It provides a steadier employment and probably better wages.

Villages are fast becoming the habitation for non farm workers. When so many households prefer non- farm employment to agriculture, the traditional categories are becoming insufficient. Rural need not mean agrarian anymore in the case of these villages. Also that RNFE is not a subsidiary occupation.

Policy Suggestions

When RNFE becomes a full time occupation for these workers, what kind of policies should we have in place is a crucial question. Rural development policies need to take this aspect into account and has to evolve specific policies accordingly. Similarly, our education and skill development policies have to take into account the nature of activity and skill acquisition of the surveyed population in reorienting their policies. Employment policy for RNFE is the most important initiative that cries for policy makers attention.

.

CHAPTER I

Introduction

1.1 Background

A vast majority of the Indian population lives in rural area and depends on agriculture for their livelihood. However, the capacity of Indian agriculture to absorb the ever growing labour force was limited. Simultaneously, the secondary and tertiary sectors of the economy, which were supposed to absorb the surplus labour in agriculture failed miserably. With widespread unemployment and underemployment, poverty in rural areas was intensifying. The state realized the gravity of the problem of poverty and came up with many direct interventionist policies. Neither the community development model nor the trickle model had delivered. The new individual oriented anti-poverty measures had very little impact in lifting the majority of the masses out of the poverty trap. One option that was open to the rural poor was migration to the urban centres in search of livelihoods. This, in turn, accentuated the urban problems. Policy makers, planners and he state were hoping and groping for a solution. The wanted the surplus labour in agriculture to be absorbed in some productive activity in the rural area itself. The state took several initiatives in terms of industrial policies, credit policy, vocational training and skill formation to encourage industrial activity in the rural areas. This was essentially aimed at absorbing the rural surplus labour into non-agricultural sector. However, these efforts did not result in the desired outcome.

Scholars who were documenting the impact of green revolution in agriculture came across new economic activities related to agriculture in the green revolution villages (Mellor, 1976; Hazell and Haggblade, 1990). This finding was similar in line with what Kuznets (1966) had predicted. The forward and backward linkages of the new agricultural production techniques had spawned a series of new related economic activities in the villages. This in turn was recasting the income basket of the households with more and more income from non agricultural sources. Subsequently, many studies found such an income pattern though they did not argue that 'prosperity' in agriculture led this diversification in income sources. Interestingly, some also argued that diversification is not only an option for the poor but also for the rich and infact the benefits for the richer households were found larger as compared to the benefits accrues to the poor due to diversification (Hazell and Ramasamy, 1991; Linjow et al., 2004).

Rural nonfarm employment was identified as a vehicle out of crushing poverty by many scholars at this time. Kanis and Stewart (1993) argued that RNFE can be encouraged to tackle the twin problems of rural unemployment and poverty. Rural unemployment and poverty was not the only problems in India but also in several countries in Asia, Africa and South America. Several studies published in

journals like World Development (2001) and Food Policy (2001) identified RNFE as the vehicle of poverty reduction.

While the prosperity led, the diversification of the rural economy was advanced as an explanation for the new found growing non-farm employment in rural areas. Another interpretation, in fact, exactly the opposite one, was put forth sometimes later. This explanation was in line with McGee (1971). Very broadly, this argument can be stated as 'distress induced' rural employment diversification.

The 'distress induced' line of argument began with an important paper by Vaidyanathan (1986). While analysing the labour use pattern across time and space in India, he found 'non agricultural activities are by no means inconsequential' when about one-fifth of the male workers were in the non agricultural occupation as estimated by National Sample Survey Organization in, 1977-78. He explored several possibilities as an explanation for this phenomenon before advancing the 'residual sector' hypothesis. According to him, 'rural workers who cannot get adequate work in agriculture spill over into the rural non-agricultural activities so that the later actas a sponge for the excess labour'. He deduced that the level of RNFE is an indicator of the imbalance between demand and supply of the labour. He also surmised that the rate of rural unemployment could be a measure of it. Based on these deductions, he advanced the hypothesis that 'the higher the rate of unemployment, the higher is likely to be the share of non agricultural sector in total rural employment and the lower the non-agricultural wage relative to that in agriculture'. After analyzing the then available data, he concluded that:

- 1. States with relatively prosperous agricultural population tend to have a high proportion of rural workers in non-agricultural activity.
- 2. High inequality of operational holdings goes with lower incidence of non-agricultural employment.
- 3. Rural unemployment rate and the incidence of non-agricultural employment are positively related.

However, he found non-agricultural wage rates to be higher than the agricultural wages. This finding goes completely against the 'residual sector' hypothesis. He attributed this result to the quality and the nature of data available with National Sample Survey. Therefore, he advocated a more disaggregated analysis 'supplemented by detailed micro studies of the pattern of employment, structure of the labour market and the way they change in different types of situations'.

Unfortunately, that was not to be. Vaidyanathan's paper opened the floodgates and scores of papers on this theme were published subsequently. Most of these papers depended solely on the available secondary data sources to explore and validate the set of hypothesis floated by Vaidyanathan and advanced several new ones. Studies also explored new factors that would have led to the growth of RNFE. Magnitude of RNFE, variations across time and space in RNFE; age, caste, gender and sectoral

differences in RNFE; income and employment due to RNFE; fluctuations and trends in RNFE; potential of RNFE to reduce poverty and diversify income sources are some of the themes around which this literature grew.

One common thread for most of the studies in RNFE is the data source. With each new round of NSSO survey on employment and unemployment and the Census, new studies emerged using the fresh data. NSSO and Census data follow a rigorous definition that had been refined over time and with lot of deliberations. Their methodology is meticulous. The sample designs of NSS have stood the test of scrutiny and the results were corroborated by micro level studies. Using such a rich source of data is sensible when one initiates a research question. It is of immense help in understanding the patterns, the variations and the trends. One can also use the existing variable as a proxy in exploring interconnections and tentatively arrive at certain explanations. This would, in turn, help in setting an important hypothesis to understand an unfolding phenomenon.

However, there remain two other tasks before the research question is fully explored. The hypothetical connections worked out based on *a priori* knowledge and proxy variables are to be tested in the concrete. More importantly, the deductions that lead us to relate variables towards an explanation are to be validated in the concrete. Otherwise, they remain a very knowledgeable speculation. This exercise is possible only by adopting micro studies where the interrelationships can be mapped out in the concrete. The next and an equally important task is to validate the deductions in the context and within a process of change. Once the variables, their connections and the hypothesis are validated, it can be used repeatedly unless the concrete condition varies to indicate a different relationship among the variables.

Unfortunately, the RNFE debate in India has not travelled this ideal path. The deductions by Vaidyanathan were taken as validated findings and tested again and again. Similarly, the prosperity hypothesis rode a similar wave. More damaging, in our view, is the floating of a set of new hypothesis without any logical deductions. While Vaidyanathan dwells in detail as to why he hazards to use the unemployment rate as a proxy, subsequent papers went ahead without much deliberation in choosing a variable or a proxy in their specific contexts. Similarly, what *a priori* knowledge informs them is barely spelt out. In the process, statistical techniques seem to have substituted for the knowledge about the processes.

Essentially, all the possible variables that are available in NSS and Census have been used to find explanations. Consequently, we find that we have little explanation as to why and how RNFE has emerged and grew over time. But we have plenty of speculations. The major problem with most of the studies seems to be that they are data driven rather than issue driven.

Very few studies relied on primary data. Unfortunately, they also seem to suffer from the same problems discussed above. They collect and process the data like NSSO. At the end of it, such studies end up with the same set of questions and answers. Interconnections and processes that go to explain the change remains elusive for these studies as well. What we require at the moment is more of micro studies that would explain the complex interconnections in the emergence, growth and functioning of RNFE.

Lack of such micro studies have left the RNFE studies bereft of any link with the agricultural sector. We are unable to relate the RNFE sector with the agrarian systems from it had emerged. If agrarian surplus had led to the emergence of RNFE, then RNFE should have grown in leaps and bounds in the erstwhile green revolution areas. Similarly, how does one explain nearly half of the rural main workers in RNFE as a residual phenomenon? Very soon 'residual' will be the dominant phenomenon in a state like Tamil Nadu (Kerala had experienced it long ago). Can such a large labour force switch between agriculture and non-agricultural sectors so frequently and so easily? If such shifts, if at all they take place, how a sector like manufacturing will survive? Why labour should consider agriculture as the premium choice for her to come back as and when there is employment when the ruling wage rate in the non-farm sector is higher? Why should a lower castes worker come back to agriculture where he is interiorized on the basis of his caste identity? These are some of the complex questions that remain answered due to the way in which our efforts have travelled all along.

1.2 Objectives of the Study

Our study is not definitely an attempt to address the methodological lacunae that we have indicated so far. Our study is also designed as a micro study but the data collection, processing and analysis closely follows the NSSO methodology. Our finding, therefore, is conditioned by the boundaries set by such a methodology. At best, we may explicate the latest RNFE situation in the sample villages of Tamil Nadu. With this disclaimer, we present the objectives of the study. They are as follows:

- 1. To map the RNFE activities in sample rural areas
- 2. To assess the extent of RNFE as compared to the agricultural employment
- 3. To assess the differences across caste and gender in the RNFE
- 4. To assess the number of days of employment in RNFE
- 5. To assess the wage income levels of various RNFE activities in the select villages
- 6. To assess the resource endowment of the households and the nature of RNFE
- 7. To assess the activity status of all the women in each of the households
- 8. Analyse the source of demand for rural non-farm activities and their forward and backward linkages in the rural economy
- 9. Analyse the factors which encourage employment in rural non-farm sector
- 10. Analyse the constraints that inhibit the growth of rural non-farm sector

1.3 Outline of the Report

The following is the outline of this report. The report comprises of four chapters. The first chapter introduces the research theme. The second chapter provides the background for the study by depicting some salient aspects of the Tamil Nadu economy. The survey data are used to discuss various aspects of RNFE in the state. The last chapter concludes with a set of recommendations.

CHAPTER II

The Overall Context of Rural Non-farm Employment in Tamil Nadu and its Emergence over time

2.1 The Context

Tamil Nadu, the southernmost state in the Indian subcontinent covers a little over 130,000 sq. km – about 4 percent of India's geographical area – and had a population, according to the 2011 Census, of 72.14 million. The economy of the state is relatively more modernized – in comparison with most of the other states in the country – in terms of industrialization, urbanization, educational attainment and literacy, access to health care etc. But the most striking characteristic of the economy – and the process of economic change in the last few decades – appears to be a certain dichotomy or disjunction in it, which can be stated as follows: While in overall gross terms the performance of the economy – in terms say, level and increase in per capita income, or the level and decrease in poverty – is only moderate and modest, more often than not below par as compared to the performance at the all-India level, the economy over the year has witnessed a relatively high level of diversification and broad-basing. This process of socio-economic diversification and broad-basing in the state has a number of dimensions: (a) The process of sectoral diversification, viz., a relatively rapid move away from the primary sector; (b) diversification within different sectors, like say, the process of commercialization and marketisation within the agrarian sector; and (c) Spatial aspects of diversification and broad-basing: viz., the relatively higher spatial spread and reach of agricultural and industrial growth, as also relatively strong rural-urban linkages, which have got strengthened in the last three decades.

The socio-political dimension is one among the several aspects responsible for the broad-basing of the socio-economic process in Tamil Nadu. One among these other dimensions is the strong rural-urban linkages in the state, which is an aspect of population distribution and movement. Now let us turn to some of these issues related to the demographic regime in the state,

2.2 Size and Growth of Population

At the time of 2011 census, Tamil Nadu had a population close to 72.14 million. It is not only among the more populous states but also among the most densely populated. The population density in Tamil Nadu (at 555 persons per sq. km. in 2011) was nearly two-thirds higher than the national average and fifth highest among the major states.

The decadal [2001-2011] growth rate of population in Tamil Nadu (henceforth TN) is 15.6 percent. The sex ratio [number of females per '000 males] in TN works out to 995 in 2011 against 986 in 2001. While the percentage of population in urban areas in 2011 for TN works out to 51.55 percent and the literacy rate for TN in 2011 is 80.3 and it has improved from 73.45 in 2001.

At the turn of the century, the areas which constitute the present State of TN had barely 19 million people. There has been a more than threefold increase in the population during the last 100 years, close to the three-fourths of this increase occurring since Independence. But a comparison with the all-India picture clearly shows that the growth rate of population in the state is of a lower order as compared to the rest of the country, and this is particularly so in the post-Independence period.

It is also noteworthy that there is a distinct downward trend in the growth rate of population from 1971 onwards in TN. In fact, the net additions to the population in the state in the seventies through nineties have remained at the same level as in the sixties. And the contrast in this regard with the country as a whole is very striking: the growth rate of population has declined only marginally in the country since 1971, and the decadal additions to the population have witnessed a steady increase over this period.

With net migration from the state accounting for only a small proportion of the total population, this decline in the rate of growth of population in the state in the seventies and the eighties should be very largely related to the behaviour of the vital rates – the birth rate and the death rate – over this period.

2.3 Vital Rates in Tamil Nadu

While both birth and death rates have registered a decline from around early seventies in TN – in the rural as well as urban areas – the order of decline is significantly higher in the case of birth rates, and hence the natural rate of growth of population has witnessed a decline over this period. But a closer look at the data reveals that rapid declines in the birth rates in the state is a recent phenomenon, discernible from around the mid-eighties onwards. While the decline in the birth rate had set in from around early seventies – if not earlier – the magnitude of decline was only modest till about the early or mid-eighties, a rapid decline setting in only thereafter. Thus, taking the state as a whole, from the triennium 1971-73 to 1982-84, the birth rate declined by only 3.5 points; the decline in the next decade was of the order of 7.6 points, i.e., more than double the decline in the earlier decade. The death rate as noted earlier, also registered a steady decline from the early seventies in the state, but did not witness any perceptible increase in the magnitude of decline in the eighties as compared to the seventies. Thus, the decline in the death rate from 1971-73 to 1982-84 was 3.3 points, and from 1982-84 to 1991-93 was just 2.8 points. Given this, the natural rate has witnessed a sharper fall in the eighties as compared to the seventies in TN.

The moderate decline in the overall birth rate in TN in the seventies was solely due to the decline in the rural rate, the rapid decline in the eighties was the resultant of the rapid decline in both the rural and the urban rates. It is also noteworthy that the pattern of decline in the death rate, either in rural or urban TN, follows more or less the pattern in the birth rate, pointing to the possibility that the decline in death rate –

which is also associated with a decline in the infant mortality rates in both rural and urban TN over this period – was a factor underlying the decline in birth rates.

The amazing spread of the small family norm across space and social groups – with very little variation across them in terms of the desired family size, with almost all desiring just about 2 children – is a striking feature of TN economy in the recent times.

2.4 Components of Fertility Decline

The decline in birth rate – and the associated decline in fertility levels – in TN in the seventies and eighties are largely due to a decline in marital fertility rates, with nuptiality playing only a secondary role in this. In the seventies, when fertility declined by a moderate level in rural TN, it was due to a decline in both marital fertility and nuptiality rates; when the fertility declined rapidly from around the early or mid-eighties here it was almost solely due to a decline in the marital fertility rate. The decline in fertility in urban TN, which had set in only in the eighties, was almost solely due to a decline in the marital fertility rate. Given the universality of marriage in India – TN being no exception to this – this would imply that age at marriage (for the female) has not played any major role in the fertility decline in TN. The singulate mean age at marriage for females registered a modest increase from 19.6 years in 1971 to 20.3 years in 1981 in TN, and remained virtually stagnant thereafter. In Kerala, an increase in female age at marriage played a significant role in the initial phase of its fertility decline, and it was attributed to high female literacy. The fact that TN presents a different scenario in this regard would imply that female literacy – or social sector advances in general – did not play the same central role in its fertility decline.

Now, there is considerable evidence to the effect that the decline in marital fertility in the state has come about essentially through family limitation by recourse to terminal methods of contraception – overwhelmingly to female sterilisation – with spacing of births playing very little role in it. If anything it appears that there is a tendency for births to be "bunched" around lower birth intervals. The norm, which appears to be getting increasingly generalised, is a relatively early marriage (as compared to Kerala, say); two or at most three children in quick succession after that; and go in for female sterilisation after that.

2.5 Infant Mortality Rate in TN

The infant mortality rate in TN has witnessed a steady decline in the seventies through 1990s, and this decline has occurred both in the rural and urban areas. While there is a link between decline in infant mortality and decline in birth rate in TN, we may just emphasise that the decline in infant mortality – or advances in social sectors in general – cannot be seen as the major factor underlying fertility decline in TN as the infant mortality rate got stuck at a high level for a long time during the 1990s but has started declining in the 2000s. It reached 31 in 2008, whereas it was 53 for the country

as a whole during that time. Further, substantial declines in IMR from the relatively high levels prevalent in the state today would require a reorientation of state policies towards better social sector development, as also towards later marriages and higher birth spacing as means for fertility decline, rather than an almost total reliance on female sterilization as in the case of the official family planning programme in the state today.

2.6 Urbanisation in TN

TN happens to be one of the relatively more urbanised states in the country. According to the 2011 census, slightly more than a half (51.5 percent) of its population lived in urban areas. TN has a better spread of urbanisation. It has a larger number of towns per unit area and a better mix of small, medium and large towns, as also a better spatial spread of these towns, compared to other states in the country. In fact if a composite index of urbanisation taking into account (a) the degree of urbanisation, (b) rural population served by a town and (c) the average distance to a town from the village, is used for comparison across the states, TN ranked first among the major states in the country both in 1981 and 1991 (Rukmani, 1994). An important consequence of this good spread of towns in TN is that the rural-urban linkages in the state are quite strong as compared to the other states in the country (with the possible exception of Kerala). And there is reason to believe that the rural-urban linkages in the state have got strengthened in the recent past with a very significant increase in the spread and development of the road network – of the 'minor' roads, viz., roads other than the highways and major district roads, in particular – and of transportation facilities - of public transportation in particular - in the state. According to the census, in 1971 nearly a third (32.4%) of the villages in TN had a town less than 10 km away (Rukmani, 1996). This proportion had increased to nearly half (49.0%) by 1992-93 according to the National Family Health Survey.

2.7 Migration

The strong – and strengthening – rural-urban linkages and the decelerating urban growth in the seventies and the eighties in the state were associated with significant changes in the patterns of migration or mobility in the state. The sharp decline in the rate of urban growth in the seventies and the eighties – after a decade of rapid urban growth in the sixties – was accompanied by a significant decline in the net urban-ward migration in the state. A simple component analysis of the urban growth in the state shows that decadal net rural-urban migration rate was of the order or 8.6 percent in the sixties, and had declined marginally to 7.9 percent in the seventies, but the eighties witnessed a very sharp decline in this rate to – 0.2 percent. But a sharp decline of this order in the net rural-urban migrant stream is consistent with a situation where the relative importance of different mobility streams would have undergone drastic changes, but the overall volume of migration – a summation of all the mobility streams – would not have declined to any significant extent. With its strong and improving spatial connectivity, the overall volume of migration would not have

witnessed any drastic decline, but better rural-urban linkages – among other things – would have induced significant changes in the relative importance of different migrant streams. More to our point, a sharp decline in net rural-urban migration in the state is consistent with –

- a) An increase in both the rural-urban and urban-rural migration streams, with the increase in the latter being larger than the former. An analysis of the census migration data for 1971 and 1981 lend support to such a surmise for the sixties and the seventies (Rukmani, 1993). Unfortunately, we have not been able to obtain migration data from the 1991 census to test whether a scenario would hold for the eighties.
- b) A change in the nature of rural-urban migration i.e., short-terms circulatory movements like daily commutation to work in a nearby urban area, or seasonal migration to an urban area which would be largely left out in a census, would become relatively more and more important over time within the rural-urban mobility streams. While we do not have any data on this for the state as a whole, many village resurveys done recently do lend some support to this hypothesis. Now, a context like this where circulatory movements between rural and urban areas as also urban-rural migrant streams become increasingly important would facilitate better rural-urban linkages. But apart from that, it can also have important implications for sectoral distribution of workers, particularly in the rural areas, an issue we turn to now.

2.8 Non-Farm Employment over time in Tamil Nadu

As per the 2001 Census, TN recoded for the first time, a lower proportion of workers in agriculture as compared to the workers in other sectors. Workers in agriculture accounted for 49.55 per cent of the total workers in 2001. In rural areas, nearly 70 per cent of the total workers were in agriculture. Among males, it was around 65 percent, whereas it was around 78percent among females. We are in the position to compare this pattern with the earlier patterns in the state as the data is amenable for comparison (Table 2.1).

Table 2.1: Total Workers and their Categories: India and Tamil Nadu by Residence and Sex, 2001

Sl.	India/				Persons/ Males/	Total workers (Main+		Cate	egories of W	orkers	<u> </u>		Other Wo	rkers
No.	State	Urban	Females	Marginal)	Cultivators		Agricultural Labourers		Household Industry					
			-		No.	%	No.	%	No.	%	No.	%		
1	India	India Total	Persons	402512190	127628287	31.71	107447725	26.69	16395870	4.07	151040308	37.52		
			Males	275463736	86328447	31.34	57354281	20.82	8312191	3.02	123468817	44.82		
			Females	127048454	41299840	32.51	50093444	39.43	8083679	6.36	27571491	21.70		
		Rural	Persons	310655339	124682055	40.14	103122189	33.20	11709533	3.77	71141562	22.90		
			Males	199199602	84046644	42.19	54749291	27.48	5642112	2.83	54761555	27.49		
			Females	111455737	40635411	36.46	48372898	43.40	6067421	5.44	16380007	14.70		
		Urban	Persons	91856851	2946232	3.21	4325536	4.71	4686337	5.10	79898746	86.98		
			Males	76264134	2281803	2.99	2604990	3.42	2670079	3.50	68707262	90.09		
			Females	15592717	664429	4.26	1720546	11.03	2016258	12.9 3	11191484	71.77		
	Tamil Nadu	Tamil Nadu Total	Persons	27811647	5114384	18.39	8665020	31.16	1458546	5.24	12573697	45.21		
			Males	18153275	3305413	18.21	4277140	23.56	619096	3.41	9951626	54.82		
			Females	9658372	1808971	18.73	4387880	45.43	839450	8.69	2622071	27.15		
		Rural	Persons	17572083	4725890	26.89	7565439	43.05	815009	4.64	4465745	25.41		
			Males	10396912	3028113	29.13	3667853	35.28	324381	3.12	3376565	32.48		
			Females	7175171	1697777	23.66	3897586	54.32	490628	6.84	1089180	15.18		
		Urban	Persons	10239564	388494	3.79	1099581	10.74	643537	6.28	8107952	79.18		
			Males	7756363	277300	3.58	609287	7.86	294715	3.80	6575061	84.77		
			Females	2483201	111194	4.48	490294	19.74	348822	14.0 5	1532891	61.73		

Source: Tamil Nadu Govt. of - Provisional Population Totals, Paper 3 of 2001, Distribution of workers, and Non-workers, Census of India, 2001, Series 34, Tamil Nadu, pp. 110-118

When we look into the distribution of the population in TN by Workers and Non-workers by 2001 Census, it is clear that the work participation rates in TN for both the men and women are *above* those for the country as a whole. An interesting aspect discernible is that while the percentage of marginal workers in TN are lower than the average for the country, the percentage of *marginal* workers in *urban* TN, however, is higher than that for the country, for both the men and women. The issue of marginal workers is extremely important for TN as will be clear from the discussion below (Table 2.2).

By the TN government's own admission in its Human Development Report, 2003, "what is worrisome about the 2001 Census results is that the number of marginal workers has gone up from 1.4 million in 1991 to 4.1 million in 2001. This suggests that the increase in work participation rate during this time period is largely accounted for by an increase in marginal workers as opposed to the main workers. The number of main workers has only risen from 22.8 million to 23.7 million, by less than a million" (ibid: 20).

Table 2.2: Distribution of Population across Workers and Non-workers – India and Tamil Nadu, 2001

Sl. India		Total/	Total/	Persons/ Males/				Workers					
No.	State	Rural/ Urban	Females	Total Population	Total workers	%	Main workers	V/0	Marginal Workers	%	Non- workers	%	
1	2	3	4	5	6		7		8		9		
1	India	Total	Persons	1025251059	402512190	39.26	313173394	30.55	89338796	8.71	622738869	60.74	
			Males	530422415	275463736	51.93	240520672	45.35	34943064	6.59	254958679	48.07	
			Females	494828644	127048454	25.68	72652722	14.68	54395732	10.99	367780190	74.32	
		Rural	Persons	740255371	310655339	41.97	229672348	31.03	80982991	10.94	429600032	58.03	
			Males	380438194	199199602	52.36	169333233	44.51	29866369	7.85	181238592	47.64	
			Females	359817177	111455737	30.98	60339115	16.77	51116622	14.21	248361440	69.02	
		Urban	Persons	284995688	91856851	32.23	83501046	29.30	8355805	2.93	193138837	67.77	
			Males	149984221	76264134	50.85	71187439	47.46	5076695	3.38	73720087	49.15	
			Females	135011467	15592717	11.55	12313607	9.12	3279110	2.43	119418750	88.45	
2	Tamil Nadu	Total	Persons	62110839	27811647	44.78	23684611	38.13	4127036	6.64	34299192	55.22	
			Males	31268654	18153275	58.06	16346879	52.28	1806396	5.78	13115379	41.94	
			Females	30842185	9658372	31.32	7337732	23.79	2320640	7.52	21183813	68.68	
		Rural	Persons	34869286	17572083	50.39	14290211	40.98	3281872	9.41	17297203	49.61	
			Males	17508985	10396912	59.38	9067457	51.79	1329455	7.59	7112073	40.62	
			Females	17360301	7175171	41.33	5222754	30.08	1952417	11.25	10185130	58.67	
		Urban	Persons	27241553	10239564	37.59	9394400	34.49	845164	3.10	17001989	62.41	
			Males	13759669	7756363	56.37	7279422	52.90	476941	3.47	6003306	43.63	
			Females	13481884	2483201	18.42	2114978	15.69	368223	2.73	10998683	81.58	
	•		•	•	•	•	•	•	•		•	•	

Source: Tamil Nadu Govt. of - Provisional Population Totals, Paper 3 of 2001, Distribution of Workers and Non workers, Census of India, 2001, Series 34, Tamil Nadu pp. 101/109

The Census 2001 has provided only a four-fold classification of workers (in place of the usual nine-fold classification). These categories are: Cultivators, Agricultural Workers, Household Industry and Other Workers. A comparison of worker classification between TN and India into these categories reveals that a larger proportion of workers in TN (both the males and females) belongs to the 'Agricultural Labour' and 'Household Industry' category. In the absence of any further information on the nature of employment in these two categories, and given our existing knowledge of the 'poor quality' of employment characterizing these categories, it is not far from the truth to state, that, the higher WPRs in TN do not necessarily signify higher/better quality of employment for TN workforce. Further, another worrisome point noted in the government's Human Development Report and worth quoting at some length is the following: "Even though agriculture continues to account for the bulk of employment, this is not reflected in the income originating from the sector. Agriculture income declined from 24.82 percent in 1993-94 to 18.16 percent in 1999-2000, whereas the share of income from secondary and tertiary sectors improved from 33.72 percent to 34.12 percent and from 41.46 percent to 47.72 percent respectively. In per capita terms, this means that the average output per worker in the primary sector increased only marginally as compared to the other sectors where significant increases were noticed"(ibid: 26).

Even though TN was more industrialized and modernized as compared to most of the other states in India, in terms of distribution of workers it was still largely agricultural: slightly more than 60 percent of its workers were in the primary sector, and within this the agricultural sector proper accounted for the lion's share. But a comparison with the all-India picture shows that the workforce was more diversified in TN. It had a lower percentage of workers in the primary sector, and higher percentage in both the secondary and the tertiary sectors, in comparison with the country as a whole. As for the changes in the composition of workforce over time, TN shared some similarities, and provided some contrasts, when compared to the all-India situation. The proportion of workers in the primary sector had declined – and the proportions in the secondary and tertiary sectors have increased – in both. Within the secondary sector, the proportion of workers in household industry had declined, and the proportion in 'manufacturing other than household industry' had increased. But a striking difference between the two was observed in terms of the intra-sectoral distribution of the workforce within the primary sector itself. While there was a decline in the proportion of cultivators in both the TN and the country – the magnitude of decline though being of a higher order in the former – the proportion of agricultural labourers, the other major component of the agricultural workforce, has registered a substantial increase in TN, while in the country as a whole this proportion was more or less constant between 1971 and 1991, and had registered only a modest increase in 1991 as compared to 1981. The net upshot of all this was that while in 1971 in TN, cultivators and the agricultural labourers constituted the two largest, the land roughly equal, occupational groups, the picture had changed by 1991: agricultural labourers, accounting for roughly a third of the workforce, constituted the largest occupational group; cultivators, accounting for a fourth came second; and workers in 'manufacturing other than household industry' and 'other services' – accounting for a tenth each, came next. And in sharp contrast, the cultivators – accounting for more than a third of the workforce – still constitute the largest occupational group in the country as a whole in 1991. Agricultural labourers, accounting for a fourth, come second; 'other services; the third; 'manufacturing other than household industry' and 'trade and commerce' accounting for roughly 8 percent of the workforce each, come next. Thus, a higher level of diversification away from the primary sector, and a higher level of proletarianisation within the primary sector seem to be the two important distinguishing characteristics with regard to the transformation of the workforce in TN (Table 2.3).

Table 2.3: Sectoral Distribution of Workers in India and Tamil Nadu, 1971-1991

		Percentage d	listribu	tion of	f Workers by	Sectors	
			Prir	nary S	Sector		
State/country	Year	Cultivators	ators Agrl.lab.		Livestock forestry etc	Mining and quarrying	Total primary
	1971	31.3	30	0.5	2.7	0.3	64.8
Tamil Nadu	1981	29.2	31	.7	2.6	0.2	63.7
	1991	24.8	34	.6	2.0	0.3	61.7
	1971	43.3	26	5.3	2.4	0.5	72.5
India	1981	41.6	24.9		2.2	0.6	69.3
	1991	38.7	26	5.1	2.1	0.6	67.5
		Percentage D	Distribu	ition o	f Workers by	Sectors	
			Seco	ndary	sector		
State/country	Year	Househ industry		Manufacturing other than HHI		Construction	Total secondary
	1971	4.5			8.8	1.6	14.9
Tamil Nadu	1981	4.7		10.5		1.6	16.8
	1991	3.5			10.5	2.2	16.2
	1971	3.5			5.9	1.2	10.6
India	1981	3.5			7.8	1.6	12.9
	1991	2.4			7.7	1.9	12.0

	Percentage Distribution of Workers by Sectors										
	Tertiary Sector										
State/country	Year	Trade and commerce	Transport storage and communication	Other services	Total tertiary						
	1971	7.8	3.2	9.3	20.3						
Tamil Nadu	1981	8.5	3.2	7.7	19.4						
	1991	8.7	3.1	10.2	22.0						
	1971	5.6	2.4	8.7	16.7						
India	1981	6.3	2.7	8.8	17.8						
	1991	7.5	2.8	10.3	20.6						

Source: Census of India, 1971-1991

It appears that the extent of diversification of the workforce away from the primary sector is of a higher order for the male workers as compared to the female workers in rural TN. Not only is the proportion in primary sector significantly lower for the male workers, but also the decline in this proportion over time is of a higher order as compared to the female workers. As for the process of proletarianisation within the primary sector, while the proportion of agricultural labourers is significantly lower – and the proportion of cultivators significantly higher – in the case of male workers, the transformation of the agricultural workforce – away from cultivators and towards agricultural labourers – appears to be at work only in their case, and not among the female workers. Thus, the sectoral composition of the workforce and the changes in it vary between the male and the female workers (Table 2.4).

Table 2.4: Sectoral Distribution of Workers in Rural Tamil Nadu, 1971-1991

	Percentage Distribution of Workers by Sectors					
Primary Sector						
Sex	Year	Cultivators	Agrl.lab.	Livestock forestry etc	Mining and quarrying	Total primary
Persons	1971	40.3	38.1	2.6	0.4	81.4
	1981	38.3	40.3	2.3	0.2	81.1
	1991	32.8	44.7	1.9	0.3	79.7
Male	1971	45.6	30.9	2.5	0.4	79.4
	1981	43.8	30.9	2.6	0.2	77.5
	1991	37.4	36.0	2.1	0.3	75.8
Female	1971	22.3	62.2	2.6	0.3	87.4
	1981	26.5	60.1	1.7	0.1	88.4
	1991	24.3	60.9	1.4	0.2	86.8

	Percentage Distribution of Workers by Sectors						
	Secondary Sector						
Sex	Year	Household	Manufacturing	Construction	Total		
		industry (HHI)	other than HHI		secondary		
	1971	3.7	4.1	1.0	8.8		
Persons	1981	3.8	5.0	0.8	9.6		
	1991	3.1	5.3	1.1	9.5		
	1971	3.5	4.6	1.1	9.2		
Male	1981	3.5	6.0	1.1	10.6		
	1991	2.5	6.4	1.6	10.5		
	1971	4.1	2.3	0.5	6.9		
Female	1981	4.4	2.8	0.3	7.5		
	1991	4.0	3.2	0.3	7.5		

	Percentage Distribution of Workers by Sectors							
			Te	rtiary sector	r			
Sex	Year	Trade	and	Transport	storage	and	Other services	Total
		commerce		communica	itions			tertiary
	1971	3.4		0.8			5.8	10.0
Persons	1981	3.8		1.1			4.4	9.3
	1991	3.6		1.3			5.9	10.8
	1971	3.9		1.0			6.3	11.2
Male	1981	4.9		1.6			5.3	11.8
	1991	5.0		2.0			6.7	13.7
	1971	1.5		0.1			4.0	5.6
Female	1981	1.4		0.1			2.6	4.1
	1991	1.2		0.1			4.5	5.8

Source: Registrar General, Census of India, 1971 to 1991.

Considering rural TN as a whole, while both the processes – of diversification away from the primary sector, and the process of proletarianisation within the primary sector – seem to be at work here, the extent to which the process of diversification has occurred between 1971 and 1991 seems to be limited the percentage of workers in the primary sector, has declined, between 1971 and 1991, by just 1.7 percent points from 81.4 percent to 79.7 percent.

There is reason to believe that the census data understate the process of diversification of the workforce in rural TN. The NSS data – which, we believe, is more reliable than the census data with respect to the employment-unemployment characteristics – summarised in Table 5 below, appear to support such a contention. Not only is the proportion of non-agricultural employment in rural TN as given by the NSS, significantly higher than the figure given by the census, the increase in the proportion is also of a higher order. Thus, it appears that there is a clear trend towards diversification – away from agricultural employment – of the workforce in rural TN in the last four decades. We may also note here that the NSS data support our earlier contention, based on census data, that this process of diversification is significantly stronger for the male workforce compared to female workers.

Table 2.5: Non-agricultural Employment in Rural Tamil Nadu, 1977-2010

Year	Percent of Workers in Non-Agricultural Employment			
	Male	Female		
1977-78	26.1	16.4		
1983	31.1	18.2		
1987-88	34.8	22.9		
1993-94	36.0	21.5		
1999-00	37.9	24.8		
2004-05	41.3	26.2		
2009-10	42.5	27.6		

Source: Various issues of Sarvekshana

Now, what could be the factors underlying this phenomenon of diversification of the workforce in rural TN? In order to understand this, it is useful to get into the issue of the nature or the quality of this transformation of the workforce. Is the quantitative shift towards non-agricultural employment in rural TN in the last couple of decades accompanied by a shift to a more skilled, regular workforce? Or is it accompanied by a shift to a more casualised workforce? The answer, it appears, is both. A striking tendency that is discernible within the non-agricultural labourforce – both in rural and urban TN – from around the late seventies onwards (if not earlier) is a tendency towards differentiation. On the one hand, there is a distinct tendency towards a decline in the relative importance of 'workers in the household enterprises', which may be interpreted as a move away from the traditional non-agricultural occupations and as also a move towards proletarianisation within the non-agricultural workforce. On the other hand, there are two distinct

strands which have got strengthened within the wage worker category: a strand which has got increasingly 'formalised' and 'regularised', and a strand which has got increasingly casualised. Two more important points to note here are: first, the change in the composition of the non-agricultural workforce outlined above is more visible in the rural areas as compared to the urban. Secondly, the process of regularisation or formalisation of the workforce is particularly striking for the female non-agricultural labour force, and that too in the rural areas in particular. This may be due to the employment generation in the government sector - as, for example, in the Noon Meal Scheme. It may also be related to the point we had made earlier regarding the strengthening rural-urban linkages in the last two decades or so. We had noted that the strengthening rural-urban linkages were accompanied by a change in the character of migration, with circulatory migration – commutation to work in urban areas in particular – becoming increasingly important over time. And it appears that this phenomenon – of living in a village and commuting to work, often of a regular nature, in the nearby town – is particularly strong among the female workers. The third important point that comes out from the table is the sharp increase in the proportion of casual workers -both in rural and urban areas - in 1983. This, we believe, is largely due to the fact that the monsoons had failed in 1983, and this phenomenon, hence, would point to the role that agrarian distress would play in the process of casualisation of the non-agricultural workforce.

The points made above, perhaps, may be generalised. The increasing incidence of non-agricultural employment in rural TN is accompanied by (a) process of proletarianisation, which is largely a reflection of the decline in the traditional household industries, and (b) a process of differentiation within the wage worker stream. Factors like agrarian modernisation, strong rural-urban linkages, expansion of the state sector etc. seem to underlie the tendency towards formalisation or 'regularisation' of this wage-worker stream, and agrarian distress – due to failure of monsoon, or through process of agrarian differentiation itself – appears to be an important factor underlying the tendency towards casualisation within this stream.

In urban TN, the extent of proletarianisation – move away from the employment within the household enterprises – is, as one would expect, significantly higher than in rural areas, and so is the extent of 'formalisation' or 'regularisation' of the workforce. All the same, the tendency towards casualisation is also discernible within the urban workforce. This is, basically, a reflection of the informal-formal dichotomy within the urban economy, which, it appears, is getting strengthened over time.

So far we have discussed the sectoral composition of the workers in TN and it has changed over time. Let us now have a brief look into the WPR (work participation rates) for women in the state and the trends in it.

2.9. Employment and Gender in Tamil Nadu

Between 1981 and 1991 the WPR increased for women in TN, both in the rural and the urban areas. For men, on the other hand, the WPR showed a marginal increase in urban areas but a marginal decrease in rural areas. However, a district-wise classification of WPR data for 1991 revealed the following disquieting feature: those districts that showed a distinct increase in female WPR were also the districts where female child and adolescent work participation rates had increased. In TN, during 1991, 13 out of 21 districts recorded female WPRs higher than the state average. These districts also experienced a higher than the average increases in female child and adolescent WPRs. For males, 7 districts that had recorded WPRs higher than state average, showed higher than average male child and male adolescent WPRs in these districts (Swaminathan, 2002).

Disaggregation of the WPR data for 1991 by SC and non-SC categories, introduces another significant dimension to the analysis of the magnitude and pattern of the female employment in TN. As far as WPRs for all the ages is concerned, the SCs and non-SCs show different patterns for male and female workers. While the SC male WPR is marginally lower than the non-SC male WPR, the SC female WPR is significantly higher than the non-SC female WPR for rural as well as the urban areas. In other words, a larger proportion of SC women 'work' (relative to their population) when compared to the non-SC women.

More gender related points that emerged from the analysis of 1991 Census in comparison with 1981 included the following: (i) for TN as a whole and for almost every district across the state, rural child female WPR in the age-group 5-14 is higher than the rural child male WPR in the same age-group. In other words, the proportion of *female* child workers is *greater* than the male child workers; (ii) disaggregating this data by caste, we find that, the proportion of female child and adolescent workers among SCs is greater than the proportion of female child and adolescent among the non-SCs; (iii) the proportion of SC female workers in the farm sector is greater than among the non-SC female workers irrespective of age group, signifying less occupational diversification among SC workers; (iv) A glance at the age-wise and industrial category-wise distribution of female WPR (SC and non-SC) for the state as a whole revealed that, in the case of female participation in non-farm employment (that is, Census categories 'Household and Otherthan Household categories), the bulk of those employed are in the age group 5-14, followed by those in the age group 15-19; thereafter, there is a distinct fall in the percentages employed in these industrial categories from the age group 20-24 onwards. On the other hand, female employment in farm employment shows no such distinct decline as we go from child to adolescents to adult workers. To put it differently, if we equate non-farm employment with shift into more 'modern' employment, then we need to take cognizance of the fact that such employment is concentrated among the younger age groups, namely, child and adolescent workers. As we go into the higher age groups, namely, 20-24 years onwards, the percentage of females employed in non-farm sectors progressively declines. For SCs and rural SC female

workers in particular, the 'Agricultural Labour' category still forms the dominant employment category, whatever the age group (Swaminathan, 2002).

2.10. Sectoral Diversification in Tamil Nadu

With the secondary and tertiary sectors growing at much higher rates as compared to the primary sector, it is but natural that the diversification of the economy away from the primary sector takes place over time. While such a process of diversification is not confined to just TN – every other state in the country has witnessed a similar process of diversification – the extent and pace of such a process of diversification seem to be of higher order in the state when compared with the picture for the country as a whole.

The process of diversification of the economy, away from the primary sector, had set in much earlier in TN as compared to the country as a whole. Even by 1960-61, the TN economy was more diversified. And even by the mid-sixties, the primary sector had ceased to be the most important sector in its economy – the tertiary sector by then had taken that place; the country as a whole had to wait for nearly two decades, till the mid-eighties, for this to happen.

It is also noteworthy that, even though the level of diversification of TN economy was of a higher order as compared to the country as a whole even in the early sixties, the process of further diversification – or the decline in the importance of the primary sector – over the next three decades was as sharp and strong in the state as in the country. In fact, till about the early eighties, this process of diversification appears to be stronger in TN as compared to the all-India. The net result of this is that today TN's economy is one of the most diversified – if not the most diversified – economies in the country.

Having said this, we would like to emphasise that this process of diversification, at least in a part, is a reflection of a sluggish primary sector. This is clear from the fact that till about the early eighties – the period during which the primary sector hardly witnessed any growth – the process of diversification was sharp and strong; and with the recovery of the primary sector from around the mid-eighties the decline in the percentage contribution of this sector to NSDP is in fact quite slow. But it should also be clear that the rapid growth of the secondary and tertiary sectors has also contributed to this process of diversification. Till about the early eighties – the period during which the secondary sector grew at a rapid rate – the importance of the secondary sector increased quite sharply; the eighties, when there was a decline in the growth rate of this sector, in fact witnessed a decline in the relative importance of this sector. The relative importance of the tertiary sector on the other hand has seen a steady increase all through this period of these three decades; and this increase was particularly sharp in the eighties when this sector grew at s very high rates. The point we would like to emphasise is simply that, the process of diversification of the Tamil Nadu economy is not a reflection of a dynamic economy where all the sectors within it grow at high – but differential – rates; on the other hand it is a reflection of an economy where

the primary sector is sluggish, and the secondary and the tertiary sectors grow at reasonably high or very high rates.

Thus, it appears that underlying this process of diversification is the phenomenon of strengthening duality or differentiation between the primary sector on the one hand, and the secondary and tertiary sectors on the other. This differentiation also gets reflected in a widening 'technological differentiation' between the primary sector, on the one hand, and the secondary and tertiary sectors on the other. We had noted earlier that the process of diversification, away from the primary sector, had also occurred in the case of the workforce in TN. But this process – in the case of the workforce – was significantly weaker as compared to the process of diversification in the case of income. This would imply that the differentials in productivity – income originating in a sector per worker employed in the sector – would have widened considerably, between the primary and the non-primary sectors, over the period under consideration in the state. While this process of 'technological differentiation' would have taken place in the country as a whole also, it is stronger in TN. Thus, in 1971, the ratio of per-worker productivity in the non-primary (i.e., secondary plus tertiary) sectors to primary sector in the state was 3.1 and by 1991, this ratio had increased to 5.1; the corresponding ratios for the country as a whole are 3.2 (in 1971) and 4.3 (in 1991).

2.11 Recent Trends in Employment

National Scenario

Productive employment generation along with ensuring decent work conditions were the two most important objectives to be achieved during the 11th Five Year Plan period. Also, this was the period which experienced one of the fastest economic growths. A reflection on this period clearly reveals that despite unprecedented economic growth, employment growth has been rather sluggish, and in many sectors there has been an absolute decline in employment during the period 2004-05 to 2009-10 (based on NSS employment and unemployment surveys).

During the process of development, with agricultural innovation and technological upgradation, dependence on agriculture for employment declines, and the secondary and tertiary sectors attract more employment opportunities (both in traditional non-farm activities as well as new avenues of employment, particularly in the domain of service sector). In India, even though the importance of agriculture as a contributor to GDP has been declining (15% in 2009-10, while it was around 20% five years ago), it still continues to employ half of the working

¹ These ratios have been obtained by using the census data on workforce, which perhaps underestimate the extent of diversification in the workforce – And hence it is likely that the, above ratios over state the increase in 'technological dualism' between sectors. In fact the per worker productivities calculated using census workforce data and the sectoral incomes (in constant 1980-81 prices) – which we had calculated on the basis of data given in the Economic Appraisals – show that the per worker productivity had declined in absolute terms in the primary sector between 1971 and 1991 in Tamil Nadu. This we find hand to believe. So the ratios given above should not be taken literally. The general idea they convey – of widening technological dualism or differentiation between sectors – we believe, holds.

population (53%). In India, therefore, the movement of workers out of agriculture into industry and services has been relatively slow. In other words, what we find in India is a significant mismatch between agriculture's share in GDP and dependence of workers on agriculture for their livelihood.

In agriculture, employment increased by 21 million (by Usual Principal Subsidiary Status (UPSS) during the first half of the decade. In the latter half of the decade there was a decline in the absolute numbers employed in agriculture by 15 million. However, total agricultural employment at the end of the decade was still higher than at the beginning of the decade. That means that the process of structural change in employment that one would expect with a period of very rapid, in fact, unprecedented growth in the output in the economy outside of agriculture, is not occurring.

In manufacturing, there was an absolute increase in employment by nearly 12 million in the first half of the decade which was off-set by a decline by 5 million in the second half of the decade.

The only sector which has experienced continuous increase in employment during the decade was the non-manufacturing sector. During the entire decade there was an increase in non-manufacturing employment by 27.5 million. In non-manufacturing sector, the consistent increase in employment throughout the decade was almost entirely guided by the construction.

Service sector, which accounted for more than half of the GDP, experienced only marginal employment growth of 4 million during the second half of the decade.

Therefore, for the country as a whole, except for the construction sector, there has hardly been any increase in employment during the second half of the decade despite witnessing phenomenal economic growth.

With a few rare exceptions, almost all the major states experienced a decline in agricultural employment during 2004-05 and 2009-10. The decline has been quite significant in *rural* Uttar Pradesh where the number of working age population (15-59 years) as per *principal activity* status declined from 23 million to 16 million.² TN also experienced a decline of 0.5 million in agricultural employment during the same period. The distribution of this decline among the states did not lead to a significant shift of the workers out of agriculture to industry or services. The only non-agricultural sectors in rural Uttar Pradesh which experienced rise in employment were construction sector and hotels and restaurants. In rural TN, the sectors which experienced increase in employment were construction, and transport and communication.

It is interesting to note that despite being one of the most industrialized states in the country, employment in manufacturing in rural TN declined during this period. A part of the decline in employment in manufacturing can be attributed to the global financial crisis and the following

23

² Unless and other wise mentioned, the employment numbers discussed in this write-up are for the population in the age group of 15-59 years, as per usual principal activity status (UPA) for rural areas only.

slump in export. However, there are more important domestic issues which need to be looked into as to why manufacturing employment is declining despite no decline in gross value added (GVA) (which was 20% of State GDP in TN). This might be due to assured minimum wages (MGNREGA) for which the rural workers are unwilling to take up employment in manufacturing sector, or due to the pull factor emanating from the construction sector where wages are much higher than the manufacturing sector. If wage is the principal reason for decline in employment, is it the case that entrepreneurs are replacing labour with capital? Or are there any political economy factors (in addition to or instead of wage differential) that contributed towards the declining employment in manufacturing sector? Are there any structural changes taking place in the manufacturing process which is displacing workers from the factories? It is difficult to get answers to these questions through the large scale employment and unemployment surveys as conducted by NSSO.

We may briefly summarise our discussions so far on the characteristics of the workforce in TN. The important characteristics associated with the workforce in TN are: (a) diversification of the workforce away from the primary sector; (b) proletarianisation - which is observed in both the rural and urban areas, and in agricultural as well as non-agricultural workforce; (c) differentiation - or an emergence of duality - where both 'formalisation' as well as 'casualisation' occur within the non-agricultural workforce, both in the rural and urban areas; and (d) increasing incidence of 'casualisation' accompanying the process of proletarianisation in the case of the agricultural workforce in the rural areas. These processes within the workforce, we believe, reflect a number of basic socio-economic processes agrarian differentiation; sub-division of landholdings because of demographic pressure; agrarian distress spatial diversification of the economy (strengthening rural-urban linkages being one aspect of it); formal-informal duality within the urban sector; diversification of the economy away from the primary sector etc. have all played a role in these processes.

As the foregoing discussion points out, strong rural-urban linkages appear to have an important role to play in the composition and transformation of the rural workforce. Apart from this, these linkages have been a factor underlying other demographic changes also.

These strong rural-urban linkages in TN can act as an effective mechanism for the transmission of urban values – in terms of say, the small family norm, but perhaps more importantly in terms of norms and aspirations regarding lifestyles – to rural areas. They, thus aid the process of 'Sankritisation', and hence provide the basis for increasing aspirations of the people, which, as we shall see later is perhaps the most important factor underlying the fertility decline in TN. These increasing aspirations - and the process of Sankritisation in general – have also led to wide ranging socio-economic changes in TN. They have been a factor underlying the change observed in the marriage system like the emergence of dowry or a decline in the incidence of consanguineous marriages etc. And these changes have got reflected in the status of women in TN, an index of which is the sex-ratio of the population.

2.12 Concluding Observations

Our discussions so far on the demographic aspects in TN have served to highlight some dimensions of the process of diversification and broad-basing of the economy. At one level it is seen in terms of the spread of urbanisation and the strong – and strengthening – rural – urban linkages. At another level, the process of diversification was observed in the structure of workforce in terms of its movement away from the primary sector, and from traditional household based production; and these processes were particularly discernible in rural TN.

The processes of demographic and occupational diversification have aided transference of urban values and life-styles to rural areas, provided a basis for increasing aspirations among the people and for the spread of 'elite-emulation' or 'Sanskritisation'. And these phenomena, in turn, provided a basis for some striking changes in the demographic regime itself in the state – like the rapid fertility decline from the early eighties; and most distressingly, to phenomena like female infanticide and feticide.

It is also clear that these processes of diversification were accompanied by a processes of differentiation, or emergence of dualities: growth of a regular, formal workforce on the one hand, and a casual workforce on the other, is one such instance of differentiation. In the case of urbanisation the growing urban spread was also accompanied by a process of differentiation: while the larger urban agglomerations whose linkages more often than not went beyond the local economy to national – or international – linkages, grow at rapid rates, the small, isolated towns linked to local economy experienced considerable fluctuations in their growth rates, and often stagnated.

These processes of diversification and differentiation at the demographic level are essentially reflections of similar tendencies – of growth or stagnation, differentiation and diversification – operating in the productive sectors of the economy, like agriculture and industry. Let us move on to discuss one such process of diversification in rural employment in the state using the survey data and its results.

CHAPTER III

Rural Non-Farm Employment in Tamil Nadu

3.1. Survey

The project envisaged a sample survey of 12 villages in the study area of TN. Survey instruments were developed by the Institute of Applied Manpower Research (IAMR). IAMR also developed data entry formats and the table formats for the report.

Selection of Survey Villages

While the project envisaged a sample survey of 12 villages in the state, the specific districts and villages were decided based on the data for the villages from the 2001 census. As per the 2001 census, TN had 31.1 per cent of its rural population in non-farm employment. Taking this proportion as the bench mark, all the districts were identified either as high or low rural non-farm employment (hereafter RNFE) district. Twelve out of 28 districts in the state could be classified as high RNFE districts while sixteen districts showed a lower level of RNFE (Table 3.1).

Table 3.1: Distribution of Districts by their Level of RNFE, 2001

SI.No	District	% of RNFE Population
1.	Kanyakumari	64.5
2.	Virudhunagar	56.7
3.	Tirunelveli	50.5
4.	Thoothukudi	47.5
5.	Coimbatore	43.9
6.	Vellore	43.3
7.	Thiruvallore	42.1
8.	Kancheepuram	39.3
9.	Salem	35.6
10	Namakkal	34.2
11.	Erode	32
12.	Madurai	31.1
13.	Karur	30.2
14.	Trichy	27.4
15.	Dindigul	24.6
16.	Nagapattinam	24.5
17.	Ramanathapuram	24.3
18.	Thanjavur	23.5
19.	Pudukottai	23.5
20.	Sivagangai	23.1
21.	Dharmapuri	22.1
22.	Cuddalore	21.9

23.	Thiruvannamalai	21.5
24.	Theni	21.0
25.	Ariyalur	19.0
26.	Villupuram	18.0
27.	Niligiri's	17.0
28.	Perambalur	14.0
Tamil N	Vadu	31.1

Source: Census, 2001

3.2 Survey Instruments and Sampling

We have used four survey instruments in all to undertake the survey. House listing schedule gathered information about the members of a household, their age, gender, occupation, caste and land ownership data. Based on this information, each household was identified as one of the following types:

- 1. Agricultural Household
- 2. Rural Labour Household
- 3. Self-Employed but without hired labour household
- 4. Self-Employed with hired labour household
- 5. Service Household

Separate lists were prepared of each type of these households. We adopted a stratified random sampling method. Our sample of 100 households was distributed across these five stratums. While half of the sample (50 households) was selected from agricultural households, one-fifth of the sample (20 households) was drawn from the rural labour households. All the remaining types had a sample of 10 households each.

We administered a structured questionnaire among the selected sample households. This questionnaire explored the nature of work, conditions of work, place of work, nature of contract, wages and benefits etc., in some detail.

The third survey instrument was used to collect required information from the enterprises which were operating in the sample village. The fourth instrument was administered at the village level to collect information about population, land use, infrastructure, amenities etc.

All together, we have surveyed 1,252 sample households from these 12 villages.

From among these districts, two districts that had experienced higher level of RNFE and two low RNFE districts were selected. Virudhunagar and Thirunelveli are the high RNFE districts, while Thanjavur and Pudukottai are the low RNFE districts. While Kanyakumari district topped the list with the highest level of RNFE in the state, we have excluded it since its agricultural and settlement patterns were more similar to Kerala than to Tamil Nadu. From the lower RNFE districts, we chose Pudhukottai for its dry agro-climatic condition (that characterizes most of the

low RNFE districts) and Thanjavur for its puzzle with its low RNFE status and the most fertile irrigated regime over several centuries.

At the next level, we computed the proportion of RNFE workers at the village level for the selected districts. Using the proportion of rural workers in RNFE for that district, we identified three villages in each district that had more or less the same level of workers in RNFE. Each chosen villages had about 500 households. Altogether, we selected 12 villages from four districts and surveyed them during March-April 2012 for our study (Table 3.2).

Table 3.2: Sample Villages surveyed, 2012

SI.No	Village	District	High/Low	No. of Households in 2001
1.	Perumanadu	Pudhukottai	L	469
2.	Rethnakottai	Pudhukottai	L	533
3.	Pudhunilavayal	Pudhukottai	L	466
4.	Serumakkenathau	Thanjavur	L	469
5.	Thiruppalanam	Thanjavur	L	548
6.	Manaiyeripatti	Thanjavur	L	460
7.	Mullaiseval	Virudhunagar	Н	386
8.	Subbramaniyapuram	Virudhunagar	Н	520
9.	Pattampudur	Virudhunagar	Н	441
10.	Appaneri	Tirunelveli	Н	490
11.	Palamadai	Tirunelveli	Н	370
12.	Mathalamparai	Tirunelveli	Н	483

Source: Census of 2001

3.3 Data Sources

As we have discussed in the earlier section, we have collected informations about the households at two levels. The house listing information is available for all the households enumerated in the sample. We use that information to assess the extent and nature of non-farm employment in each village. We also try to assess the differences in the level of diversification into non-farm activities across the sample village. Distribution of the sample village's population across various occupations is mapped out with the help of this data.

Data from 100 sample households in each village is used to explore in detail about the work conditions, nature of the contract, duration of work, wages, benefits and location of non-agricultural work.

These two sources together help us to profile the villages as well as the sample households in their new economic activity of non-farm employment.

Let us begin with the exploration of non-farm activities in the sample villages.

3.4. Agriculture or Non-Agriculture?

We have noted in an earlier section where we have explored the available secondary data that non-agricultural employment in rural TN is continuously on the rise. We found that during 1976-77, it was estimated that 26 per cent of the male workers and 16.4 per cent of the female workers were in non-agricultural employment in the state. As per the latest 66th round of the NSSO (for the year 2009-10), 42.5 per cent of the male workers and 27.6 per cent of the female workers, were estimated to be in non-agricultural employment in rural TN.

Given this state-wide trend, let us explore the pattern in the sample villages. We use the house listing data for this analysis. We classify the enumerated households into two groups. A household is identified as an agricultural household if all the members of that household are involved in agriculture. Households that have at least one member in the non-agricultural occupation are classified as a non-agricultural household. When we look into the distribution pattern across these two categories, we find that only about 28 per cent of the total households surveyed remain pure agricultural households in 2012. On the other hand, 72 per cent of the households surveyed have at least one member in the non-agricultural occupation (Table 3.3).

Table 3.3: Distribution of Households by their Occupation in Tamil Nadu, 2012

Sl.No	Name of the	No. of	%	No. of	%	Total	%
	Village	Agr. HH		Non-		НН	
				Agri. HH			
	High RNFE	542	20	2173	80	2715	100
	Districts						
	Virudhunagar	167	14	1029	86	1196	100
	District						
1.	Subbramaniapuram	70	16	360	84	430	100
2.	Mulliseval	42	11	343	80	385	100
3.	Pattampudur	55	10	493	90	548	100
	Thirunelveli	375	25	1144	75	1519	100
	District						
4.	Appaneri	104	19	431	81	535	100
5.	Palamadai	200	41	286	59	486	100
6.	Mathalamparai	71	14	427	86	498	100
	Low RNFE	1032	37.2	1745	62.8	2777	100
	Districts						
	Pudukottai District	355	26.25	997	73.7	1352	100
7.	Permanadu	145	32	308	68	453	100
8.	Rethinakottai	132	29	325	71	457	100
9.	Pudunilaivayal	78	18	364	82	442	100
	Thanjavur District	677	47.5	748	52.5	1425	100
10.	Serumakkanallur	164	36	284	64	448	100
11.	Thirupalanam	270	48	298	52	568	100
12.	Malaiyeripatti	243	59	166	41	409	100
	Total	1574	27.8	4085	72.2	5659	100

Source: Survey data

We find that for all the villages together, only 28 per cent of the households have agriculture alone as their occupation. The rest of the households, nearly three-fourths of the total, have at least one member of the household in non-agricultural occupation. Obviously, the level of non-agricultural households is higher at 80 per cent in the high RNFE districts. The low RNFE districts have experienced a lower level of diversification with about 63 per cent of the households involved in non-agricultural activities.

At the district level, Virudunagar, Thirunelveli and Pudukottai (a low RNFE district in 2001) districts have just about one-fourth or one-fifth of the total households engaged solely in agriculture. Thanjavur district, a district with a delta irrigated by Cauvery River, still has about 48 per cent of its households in agriculture. Even in such an agricultural district, a little more than half of the households are into non-agricultural activities.

One can clearly discern the decline in agriculture as indicated by the fewer households engaged in agriculture in all the sample villages. Only in one village, we find agriculture to be the occupation of more than half of the households. This pattern indicated that agriculture is no more the sole occupation of the households in rural TN. Non-agriculture is not a peripheral activity as it was imagined to be a couple of decades ago. It is no more a 'residual' activity as it was argued by many scholars.

Another important aspect evident from the above data is the lack of or rather a low level of the emergence of non-farm activity in the fertile delta region. The hypothesis that the agrarian surplus would spawn a whole set of activities due to the linkage effects, did not happen. Thanjavur, the rice bowl of the state, and a vanguard green revolution area has, in fact, experienced the lowest level of diversification. On the other hand, one of the driest districts in the state, Virudunagar, has experienced a very high level of diversification.

Using the data on households and classifying them as agricultural and non-agricultural is a gross measure to understand the actual conditions in the sample villages. Diversification, though is a household decision, happens only through individuals. Given this, let us now move on to discuss the occupational profile of the individuals.

3.5. Occupation of the Population

We found that a vast majority of the households in the sample villages have at least one member in the non-agricultural occupation. What are these occupations of the individuals? This information would help us to understand the relative importance of the agricultural and non-agricultural sectors in the lives of the surveyed population in the sample villages. Though we have information for all the individuals of all the households in the surveyed villages (Table 3.4), we will exclude the categories of children, students, old aged people (as claimed by the respondents) and others (who are not working due to ill health, physical impairment etc). When we look into the distribution pattern of individuals across occupation, we find that while 42 per cent of the population is in agricultural and allied activities, 58 per cent are engaged in

non-agricultural activity (Table 3.5). Agriculture is no more a dominant occupation in the surveyed villages. Non-agricultural labour has emerged as the single largest occupation with nearly half of the population engaged in that activity. Other kinds of non-agricultural occupations account for about 8 per cent.

Table 3.4: Distribution of Surveyed Population in Sample Villages in Tamil Nadu, 2012

SI.No	Activity	Number of Persons	%		
1.	Self-Cultivation	1211	5.28		
2.	Animal Husbandry	87	0.38		
3.	Agri. Labour	3553	15.49		
4.	Non-Agri. Labour	5652	24.63		
5.	Household work	3266	14.23		
6.	Self-employed in Non-Agri.	320	1.39		
7.	Service (Govt.)	355	1.5		
8.	Service (Pvt.)	134	0.58		
9.	Others	113	0.49		
10.	Student	5930	25.6		
11.	Unemployed	738	3.2		
12.	Child	1457	6.4		
13.	Old Age	127	0.6		
	Total	22944	100		

Source: House Listing Survey Data, 2012

Table 3.5: Distribution of Working Population across Occupation, TN, 2012

SI.No	Occupation	No. of Persons	0/0
1.	Self-Cultivation	1211	7.8
2.	Animal Husbandry	87	0.6
3.	Agri. Labour	3553	23.2
4.	Non-Agri. Labour	5652	36.6
5.	Household Work	3266	4.0
6.	Self Employed in Non-Agri.	320	2.1
7.	Service (Govt.)	355	23
8.	Service (Pvt.)	134	0.9
9.	Others	133	0.9
10.	Unemployed	738	4.7
	Total	15430	100

Source: House Listing Survey data, 2012

We find that it is not only that a majority of households in the sample villages have at least one member in the non-agricultural activity; it is also evident that more than half of the working persons in the surveyed villages are into non-agricultural activity.

Which are the economic activities that have absorbed people who reside in the sample villages? We have used the Nation Industrial Classification codes to identify each individual's activity and then grouped them into broad sections. We have considered only the persons in the working age group of 15-59 and had to exclude housewives from the classification. Therefore, the total number of persons considered is slightly lower than the number of persons we considered for the earlier two tables. We take the main workers in the sample villages and look into their distribution pattern across the broad industry groups.

3.6. Distribution of Main Workers across Broad Industry Groups

We find that 45 per cent of the main workers are employed in the agricultural sector. Among the non-agricultural sector, manufacturing is the largest employer among the population of the sample villages. About one-fifth of the working population in the sample villages are engaged by the manufacturing sector. Construction is the second most important activity that engages the non-agricultural workers. Another one-tenth of the workers are engaged in trade while transport absorbs about 6.7 per cent of the main workers. These four activities together, account for nearly half the workers in the sample villages (Table 3.6).

With manufacturing as the dominant employer in the non-farm sector, the potential for further growth in the non-farm employment is very bright in the state. The burgeoning middle class with significant surpluses is fuelling the construction sector. With widespread urban pattern in TN, the sector is likely to absorb more and more labour. It is already experiencing a crunch for labour and with rising wages it is likely to attract labour not only from agriculture but from the other sectors as well.

Table 3.6: Distribution of Main Workers (15.59) across Broad Industry Groups at Sample Villages in Tamil Nadu, 2012

SI. No	Broad Industry Group	No. of Persons	%	Per 1000 Distribution of persons, 2009-10
1.	Agriculture, Forestry, Fishing	4195	45	559
2.	Mining and Quarrying	35	0.4	7
3.	Manufacturing	1814	19.5	104
4.	Electricity, Gas and Water supply	15	0.2	16
5.	Construction	1250	13.4	69
6.	Wholesale & Retail trade and Restaurants & Hotels	877	9.4	72
7.	Transport, Storage and Communications	624	6.7	37
8.	Financing, Insurance etc	90	1.0	15
9.	Community Services	420	4.5	66
10.	Others	-	-	55
	Total	9320	100	1000

Sources: House Listing Survey data; Report on Employment and Unemployment Survey 2009-10

When we compare this distribution pattern with the state pattern provided in the Report on Employment and Unemployment Survey (2009-10), we find that agriculture accounts for more than half of the sample population in the state. All the non-farm sectors account for less than what we have found in our survey villages. But the dominant sectors which employ the non-agriculture labour are the same as we found in our survey. The sample design of our survey may have a bias in capturing more of non-agricultural labor as we have half of the villages located in high RNFE areas whereas a majority of the districts fall below the state level as per the 2001 census.

Therefore, the proportion of non-agricultural sector could be lower in the Employment survey and could be higher in our survey. Despite these differences, the overall pattern of employment and sectors of employment are the same.

3.7. Distribution of Main Workers across Broad Industry Groups at the District Level

We have noted in the previous sub-section that the rural non-farm employment in TN is led by the manufacturing sector and construction activity as the second most important engine of this diversification. The other important sectors that absorb rural labour are the trade and transport. As is well known in development literature, manufacturing is not evenly spread across the space. It is concentrated in the pockets of growth. Though people migrate to these centers of growth, employment in manufacturing will not be available in many habitations where manufacturing activity is at a low level. Similarly, the other important non-farm sectors could be concentrated in certain areas. Essentially, various sectors could be the important engines of diversification in different areas. We explore this possibility by looking into the employment pattern across the various industry groups in the sample districts.

We find that the manufacturing led the diversification in high RNFE districts of Virudunagar and Thirunelveli accounting for 44 per cent and 22 per cent of the main workers of the respective districts. Similarly, construction is also a strong sector in these two districts. Trading and transport sectors are more or less uniform among all the sample districts.

In contrast, the low RNFE districts have a feeble manufacturing sector. Just around 5 per cent of the workers in these districts are absorbed by manufacturing as compared to 44 and 25 per cent in Virudunagar and Thirunelveli districts. Construction sector also absorbs less labour in the low RNFE districts. Construction is the lead employer in Thanjavur district, whereas manufacturing employs the least number among the major sectors of non-farm employment. Trading and hotels is the major employer in Pudukottai district absorbing about 14 per cent of the workers. Interestingly, transport and trade absorbs more or less the same level of workers in all the sample districts.

Thus, one finds that high levels of diversification away from agriculture are possible with the expansion in manufacturing as had happened in Virudunagar and Thirunelveli. The capacity of construction seems to vary vastly across the districts. Trade and transport seem to have a limited

potential irrespective of other activities in the districts. To conclude, one may say that, if there is a strong manufacturing base, the level of diversification could be higher. The weaker the manufacturing sector, the lower is the level of diversification as evident from our sample data. We find more or less a similar pattern when we look into the village level data as well (Tables 3.7 and 3.8).

Table 3.7: Distribution of Persons across Broad Industry groups, Sample Villages in Tamil Nadu, 2012 (%)

SI.	Broad Industry Group	High I	RNFE	Low F	RNFE
No.		Virudunagar	Thirunelveli	Pudukottai	Thanjavur
1.	Agriculture, Forestry, Fishing	20.9	36.3	56.45	66.7
2.	Mining and Quarrying	-	-	1.45	0.04
3.	Manufacturing	43.9	24.1	4.8	5.2
4.	Electricity, Gas and Water supply	0.18	0.2	0.6	0.04
5.	Construction	17.4	15.5	11.7	8.84
6.	Wholesale & Retail trade and	6.3	9.4	14.4	7.14
	Restaurants & Hotels				
7.	Transport, Storage and	6.3	6.8	6.8	6.78
	Communications				
8.	Financing, Insurance etc	0.98	0.8	0.8	1.29
9.	Community Services	3.9	6.8	3.16	3.84
10.	Others	-	-	-	-
	Total	100	100	100	100

Source: House Listing Survey data

Table 3.8: Distribution of Main Workers across broad Industry groups in Sample Villages in Tamil Nadu, 2012 (%)

SI.	Broad		Hig	h RNF	E Villa	ages			Low	RNFE	Villag	ges	
No	Industry	1	2	3	4	5	6	1	2	3	4	5	6
	Group												
1.	Agriculture,	21.3	16.4	26.1	30.4	29.2	51.8	54	64	51.9	79	68	67
	Forestry,												
	Fishing												
2.	Mining and	-	-	-	-	-	-	4	-	-	-	-	-
	Quarrying												
3.	Manufacturing	41.3	44	46	23.7	40.7	5.9	5.6	2.8	5.9	6.2	6.5	4.
													3
4.	Electricity, Gas	-	0.3	-	-	-	0.5	-	-	0.5	-	-	-
	and Water												
	supply												
5.	Construction	20.2	21.3	10.2	21.3	12.8	11.6	17.4	5.3	11.6	6	16	7.
													7
6.	Wholesale &	8.0	5.0	6.5	7.5	6.3	15.6	9.2	19.2	15.6	2	14	7.
	Retail trade and												7
	Restaurants &												

	Hotels												
7.	Transport, Storage and Communication s	2.8	9.3	5.5	7.1	4.3	9.3	7	4.7	9.3	2.3	13	7. 5
8.	Financing, Insurance etc	0.6	1.0	1.2	1.5	0.3	0.5	0.4	16	0.5	1.2	1.4	1. 5
9.	Community Services	5.5	2.6	44	9.4	6.1	4.5	2.8	2.2	4.5	4.1	3.8	4. 2
10.	Others	-	-	-	-	-	-	-	-	-	-	-	-
	Total	100	100	100	100	100	100	100	100	100	100	100	10 0

Source: Survey data

High RNFE Villages

- 1. Mulliseval
- 2. Subbramaniapuram
- 3. Pattampudur
- 4. Appaneri
- 5. Mathalamparai
- 6. Palamadai

Low RNFE Villages

- 1. Perumanadu
- 2. Rethinakottai
- 3. Pudunilavayal
- 4. Serumakkanallur
- 5. Thirupalanam
- 6. Malaiyeripatti

3.8. RNFE Over Time in the Sample Villages

Economists and policy makers are expressing concern about the trends in employment during the recent past. The growth experienced by the economy (GDP growth) does not seem to have any impact on the employment. Between 2004-05 and 2009-10, the state of TN had experienced a loss of employment to the tune of 0.35 million jobs. Reduction in employment is estimated in agriculture, manufacturing, mining, trade, hotels, financial intermediaries, education and other services. There is a marginal increase in construction, electricity, transportation, real estate, public administration and health. Acharya and Mitra (2000) were unable to clearly establish a growth in non-farm employment rates during the 1990's in any state other than Karnataka. Many scholars were also skeptical about the potential of RNFE (Murthy, Jayaraj, 1994). What we find from our survey is that RNFE has gained enormously during the last decade i.e., between 2001 and 2012. Ten out of 12 sample villages have made impressive gains in RNFE employment ranging from 10 per cent to 30 per cent. While the increase in the proportion of main workers in RNFE is quite high in the high RNFE districts, it is somewhat moderate in low RNFE villages

(Table 3.9). Only two of our sample villages have registered a decline in the level of RNFE over this period. Even a low RNFE district like Pudukottai has made impressive gains. It is true that we are in no position to clearly whether these gains are the results of the diversification that had happened prior to 2004-05 and since then whether it had stagnated as witnessed from the secondary data. The trend in these villages seems to defy the overall trend of loss in employment except in two villages. Importantly, these two villages are irrigated villages with a steady agriculture. We are in no position to reason out why there is a decline in the level of RNFE in these villages during the last decade.

To sum up, the process of diversification into non-agricultural employment is continuing in most of the villages drawing more and more workers from agriculture into non-agricultural employment (Table 3.9).

Table 3.9: Change in the Share of RNFE in Sample Villages in Tamil Nadu, 2012

Sl. No	Name of the Village	% Share of RNFE in 2001 Census	% Share of RNFE in 2012 Survey	Gain or loss in % share of Population in RNFE
	High RNFE Districts			III KINFE
	Virudunagar District			
1.	Subbramaniapuram	56	79	+22
2.	Mulliseval	53	83	+30
3.	Pattampudur	56	74	+18
	Thirunelveli District			
4.	Appaneri	49	70	+21
5.	Palamadai	50	48	-2
6.	Mathalamparai	52	71	+19
	Low RNFE Districts			
	Puddukottai District			
7.	Permanadu	26	46	+20
8.	Rethinakottai	22	36	+14
9.	Pudunilavayal	23	48	+25
	Thanjavur District			
10.	Serumakkanallur	31	21	-10
11.	Thirupalanam	22	32	+10
12.	Malaiyeripatti	22	33	+11
	Total	-	-	

Source: Census 2001; House Listing Survey

3.9 Gender Selectivity in RNFE

Emergence of rural non-farm employment as a supplementary livelihood had a clear gender bias favoring men as compared to women as was evident from the analysis of the secondary data. Many studies have tested this hypothesis and confirmed a positive association (Visaria and

Basant, 1993; Lajour, 2004; Islam, 1987; Reardon, 2001; Unni and Rani, 2005). When women had access to non-farm employment, it had reduced the differentials in wage income among male and female (Unni and Rani, 2005). With men moving out of agriculture towards non-farm employment, women take up agricultural work and this gave rise to a hypothesis that agriculture is getting more and more feminized. Given these broad contours, let us analyze the data from our survey to understand the recent pattern in our sample villages.

We find that men are more into non-farm employment as compared to women (Table 3.10). Nearly 57 per cent of women are engaged in agriculture, whereas only 38 per cent of men are in agriculture. Thus, the hypothesis that men are more favoured than women in RNFE proves to be right.

Secondly, the occupational profiles of men are more diverse as compared to women. Construction is the major non-farm activity for men (20 per cent), followed by manufacturing (12%), trade (13%) and transport (11%). In contrast, women are concentrated in manufacturing (33%). Apart from agriculture (57%), they have a feeble level of participation in all other sectors. More importantly, number of women in manufacturing (1,114) far outnumbers men (700).

Gender bias in RNFE do not seem to work when it comes to manufacturing activity as it had engaged more number of women in the state as compared to the men. Thus, manufacturing led diversification of employment in the state which is led mainly by women, whereas men are spread out in other major non-farm occupation but in quite large numbers. Though the proportion of women involved in agriculture is the highest, within agriculture, it is still men who outnumber women. We are in no position to comment on the feminization of agriculture as we do not have a time series data.

Thus, we find important differences in the employment pattern among men and women. While women are employed in large number in manufacturing, men are more spread out. Is the pattern same for the high and low RNFE districts? Let us explore the pattern across districts in the following section.

Table 3.10: Distribution of Main Workers across Gender and Industry groups in Sample Villages in Tamil Nadu, 2012

SI.	Broad Industry Group	Ma	Male		nale	To	otal
No		Nos.	%	Nos.	%	Nos.	%
1.	Agriculture, Forestry, Fishing	2259	38	1936	56.6	4195	45
2.	Mining and Quarrying	31	0.5	4	0.1	35	0.4
3.	Manufacturing	700	12	1114	32.5	1814	19.5
4.	Electricity, Gas and Water supply	15	0.3	0	0	15	0.2
5.	Construction	1164	19.7	86	2.5	1250	13.4
6.	Wholesale & Retail trade and Restaurants & Hotels	764	13	113	3.3	877	9.4
7.	Transport, Storage and Communications	618	10.5	6	0.2	624	6.7
8.	Financing, Insurance etc	73	1.2	17	0.5	90	10
9.	Community Services	273	4.6	147	4.3	420	4.5
10.	Others	-	-	1	-	-	-
	Total	5897	100	3423	100	9320	100

Source: Survey data

3.10. Gender and RNFE at the District Level

Manufacturing sector is the high RNFE districts have drawn a large number of women, even much more than their traditional occupation of agriculture. Nearly 66 per cent of women workers in Virudunagar and 47 per cent of women workers in Thirunelveli are employed in manufacturing to a large extent and most of the remaining women are in agriculture. Their presence in other sectors is negligible. Men, on the other hand are drawn into manufacturing and construction in equal numbers (28%) as well as into trade and transport (9-10%) in Virudunagar district. Thirunelveli men are more into construction, trade and transport.

Women in the low RNFE districts are predominantly into agriculture and a very few of them are employed in trade and construction. Despite this, Pudukottai has diversified enormously between 2001 and 2012. This diversification is led by men in trade (essentially hotels) (18%), construction (16%) and transport (10%). The other low RNFE district, Thanjavur, has construction as the major RNFE activity that employs men (13%). Trade and transport sectors absorb comparable levels of men like in the high RNFE districts (Table 3.11).

Thus, each district has a distinct pattern of employment for men and women. High RNFE districts have not only drawn men but women in larger number, and possibly, that is why the rapid pace of diversification is maintained. A similar process in the low RNFE districts can happen only if some sector draws women away from agriculture. Virudhunagar district could draw such a large number of women due to the match and fireworks industry. Thirunelveli has beedi rolling occupation that has attracted a large number of women. Pudukottai and Thanjavur districts do not have any such non-agricultural activity to employ women. Men will continue to be the drivers of diversification in these two districts.

Table 3.11: Distribution of Main Workers by Gender and Industry Groups across Districts in Tamil Nadu, 2012(%)

SI.	Broad Industry Group]	High RNF	E	L	ow RNI	E
No		Male	Female	Male	Female	Male	Female
1.	Agriculture, Forestry, Fishing	17.2	26.2	34	39.6	55.7	88.7
2.	Mining and Quarrying	-	-	-	-	-	-
3.	Manufacturing	28.7	65.6	8.8	47.3	6.2	3.3
4.	Electricity, Gas and Water supply	0.3	0	0.3	0	-	-
5.	Construction	282	1.85	23.4	3.4	12.8	0.9
6.	Wholesale & Retail trade and	9.2	2.1	13.8	2.7	9.2	3.2
	Restaurants & Hotels						
7.	Transport, Storage and	10.6	0	11	0.2	10	0.4
	Communications						
8.	Financing, Insurance etc	1.6	0	0.9	0.5	1.7	0.4
9.	Community Services	3.8	4.1	7.2	6.1	4.2	3.0
10.	Others	-	-	-	-	-	-
	Total	100	100	100	100	100	100

Source: Survey Data

When we look into the gender composition of each activity of our sample population, we find that men are consistently over represented in all the activities than women. We find that agriculture labour is one activity where the difference is very narrow. The widest difference is noted among the non-agricultural self-employment. Nearly 84 per cent of those who are engaged in that activity are men. Non-agricultural employment is a new opportunity that has emerged as an important source of employment in rural areas of Tamil Nadu. Nearly 72 percent of the non-agricultural labourers are men. Services in the private sector have absorbed relatively more women as compared to other activities (Table 3.12).

Table 3.12: Gender Composition of the sample population by their activity, Tamil Nadu 2012

Sl.	Activity	Male %	Female %	Total %
No				
1	Self Cultivation	67.8	32.2	100
2	Agricultural Labour	51.2	48.8	100
3	Non agricultural labour	71.6	28.4	100
4	Self Employed in Non Agri	83.7	16.3	100
5	Services (Govt)	72.7	27.3	100
6	Services (Private)	60.4	39.5	100
7	Others	40.7	59.3	100
	Total	51.3	48.7	100

Source: Survey data

This is the overall pattern for all the districts and this clearly validates findings elsewhere that RNFE is more beneficial to men than the women.

So far we have discussed the gender composition of the sample RNFE workers in TN. Age of the workers is another important factor that may decide a person's entry into the non-agricultural labour force.

3.11 RNFE and Age Selectivity

We have noted earlier that RNFE is emerging as an important employer in many areas of TN. In some districts, it has drawn more women and in some other districts it has drawn only men. Does the process of non-farmisation of the labour in the villages in the state has any age selectivity? Does it vary across high and low and high RNFE districts?

We find that the younger workers are proportionately more in the RNFE activities than in agriculture. While 45 per cent of all the workers are engaged in agriculture, only 26 percent of workers from the youngest age group of 15-24 and 36 per cent from the age group of 25-34 are found in agricultural employment. On the other hand, 59 per cent of workers in the age group of 45-59 are engaged in agriculture.

The pattern is exactly the opposite in the leading non-farm sectors like construction and manufacturing. Trading is the only activity that does not show much of a preference for age (Table 3.13).

Table 3.13: Distribution of Population by Age Groups and Industry Groups in Tamil Nadu, 2012 (%)

SI.	Broad Industry Group		Age Group					
No.			T	T	T			
		15-24	25-34	35-44	45-59			
1.	Agriculture, Forestry, Fishing	26	36	49	59	45		
2.	Mining and Quarrying	0.4	0.2	0.7	0.2	0.4		
3.	Manufacturing	28.3	22.5	18.9	12.8	19.5		
4.	Electricity, Gas and Water supply	0	0.1	0	0.5	0.2		
5.	Construction	19.4	16.7	11.7	9	13.4		
6.	Wholesale & Retail trade and	12.2	10	8.1	8.8	9.4		
	Restaurants & Hotels							
7.	Transport, Storage and	8.1	9.2	6.6	3.6	6.7		
	Communications							
8.	Financing, Insurance etc	1.2	0.8	0.7	1.3	1		
9.	Community services	4.6	4.3	4.1	5.1	4.5		
10	Others	0	0	0	0	0		
	Total	100	100	100	100	100		

Source: Survey data

We also find that only 8 per cent of the workers in the age group of 15-24 are engaged in agriculture. This age group is over represented in all the sectors of non-farm employment as

compared to their overall share in the population. Similarly, the next age group of 25-34 years account for 29 per cent of the main workers. But their share in agriculture is only 23 per cent, whereas in all other important non-farm sectors, their share is higher. Beyond this age group, the share in agriculture is larger than their respective shares in the total main workers (Table 3.14).

Table 3.14: Distribution of Main Workers across Age Groups by Each Industry Group in Tamil Nadu, 2012

SI.	Broad Industry Group	Age Group				Total
No.		15-24	25-34	35-44	45-59	
1.	Agriculture, Forestry, Fishing	7.9	23.1	31.9	37.1	100
2.	Mining and Quarrying	14.3	17.1	54.3	14.3	100
3.	Manufacturing	20	33	28	19	100
4.	Electricity, Gas and Water supply	0	13	7	80	100
5.	Construction	19.9	35.7	25.4	19	100
6.	Wholesale & Retail trade and Restaurants & Hotels	18	30	25	27	100
7.	Transport, Storage and Communications	17	40	29	15	100
8.	Financing, Insurance etc	17	23	22	38	100
9.	Community services	14	27	26	32	100
10	Others					100
	Total	14	29	29	28	100

Source: Survey data

Thus, we could clearly discern that the agricultural sector is losing younger labour force to non-agricultural sector. The problem is acute among the youngest age group. The widespread concern that agriculture gets only the aged workers is found valid from the above analysis. In fact, we find that the largest segment that is engaged in agriculture is from the age group of 45-59.

Is there any age selectivity across the gender in the pattern that we have observed?

Since men are more into non-agriculture, their share in agriculture is lower as compared to women irrespective of the age group. Construction and manufacturing, the major sectors that absorb rural male labourers, attract the younger ones more than the aged. Only trade is immune to this trend.

As we have noted earlier, employment pattern among women in sample rural areas are extremely polarized. Nearly half of the youngest age group (15-25) is engaged in manufacturing. Their share declines with the higher groups. The widespread belief that trading attracts many young women is not found to be substantially true with 5 per cent of the women into that occupation. Construction has hardly attracted any age group of women (Table 3.15).

Table 3.15: Distribution of Main Workers across Gender, Age and Industry groups in Tamil Nadu, 2012

SI.	Broad Industry group		I	Male			Female		
No.					Age G	roup			
		15-24	25-34	35-44	45-59	15-24	25-34	35-44	45-59
1.	Agriculture, Forestry, Fishing	22.5	28	43	52	33	51	52	70
2.	Mining and Quarrying	-	-	-	-	-	-	-	-
3.	Manufacturing	18	13	11	8	50	39	30	21
4.	Electricity, Gas and Water supply	-	-	-	-	-	-	-	-
5.	Construction	27	25	18	13	3	2	3	2
6.	Wholesale & Retail trade and Restaurants & Hotels	16	14	12	12	5	3	3	3
7.	Transport, Storage and Communications	12	12	14	11	6	-	-	-
8.	Financing, Insurance etc	1	1	1	2	1	-	-	-
9.	Community services	4	4	4	6	7	4	4	3
10.	Others	-	-	-	-	-	-	-	-
	Total	100	100	100	100	100	100	100	100

Source: Survey data

We found that younger workers are drawn more into RNFE and the older ones are found more in numbers in the traditional occupation of agriculture. Such a trend could be more acute in high RNFE districts than the low RNFE districts.

When we look into the age-wise distribution of the main workers across the industrial groups, we find that in the high RNFE districts, proportion of workers in agriculture is lower among all the age groups as compared to the low RNFE districts. Younger workers are proportionately more into non-agricultural employment as compared to the older workers. Even then only 42 per cent of the highest age group of 45-59 is found in agriculture in higher RNFE districts whereas more than half of the workers in 25-34year age group are into agriculture. Only the youngest ones are drawn more into non-agricultural employment in low RNFE districts. Youngest workers in the low RNFE districts are found more in construction, trade and transport indicating that the scope for employment in manufacturing is minimal as compared to the high RNFE districts (Table 3.16).

Since, not much of labour is absorbed in non-agricultural employment in low RNFE districts; does it mean that the workers in agriculture are younger?

Young workers, wherever they are, do not want to be a part of the agricultural work. When we look into the age composition of the agricultural sector, we find that the differences are not very wide across the low and the high RNFE districts (Table 3.17).

Table 3.16: Distribution of Workers in Agriculture by Age Group in Tamil Nadu, 2012

SI. No.	Age Group	% of worke	% of workers in Agriculture		
		High RNFE districts	Low RNFE districts		
1.	15-24	6	8		
2.	25-34	21	24		
3.	35-44	32	32		
4.	45-59	40	36		
	Total	100	100		

Source: Survey data

Thus, young workers prefer non-agricultural employment than agricultural employment in TN.

Table 3.17: Distribution of Main Workers across Age Groups and Industry Groups in High and Low RNFE Districts in Tamil Nadu, 2012

SI.	Broad Industry		Н	igh RNFI	E		I	Low RNF	E
No.	Group				Age G	roup			
		15-24	25-34	35-44	45-59	15-	25-34	35-44	45-59
						24			
1.	Agriculture,	14	21	32	42	30	53	67	75
	Forestry, Fishing								
2.	Mining and	-	-	-	-	0.8	0.4	1.4	0.3
	Quarrying								
3.	Manufacturing	45	37	34	23	10	7	3.3	2.3
4.	Electricity, Gas and	0	0	0	0.5	0	0	0	0.4
	Water supply								
5.	Construction	19	20	15	12	19	13	8	5.6
6.	Wholesale & Retail	8	8	7	9	16	12	10	9
	trade and								
	Restaurants &								
	Hotels								
7.	Transport, Storage	6	8	7	5	10	10	6	1.7
	and								
	Communications								
8.	Financing,	1	1	0.4	1	1	0.8	1	1.3
	Insurance etc								
9.	Community services	5	5	5	7	4	4	3	3
10.	Others	-		-	1	-	-	-	-
	Total	100	100	100	100	100	100	100	100

Source: Survey data

We found that even in low RNFE areas, the proportion of workers from the youngest age group is very low in agriculture as compared to non-agriculture. This affirms the apprehension of many farmer leaders about the future of agriculture. Agriculture will decline further with the lack of

young workers as well as due to the reduced availability of labour. The problem at hand for the planners and policy makers is exactly the opposite of what they had in their hands a decade ago. Earlier, the problem was how to productively deploy the surplus labour from agriculture. Now the problem is how to get enough labour to carry on the agricultural production. The problem is not only just a demand and supply problem but it is a social problem which had been set in motion by a combination of variables, at least in TN. Untill and unless this issue is addressed seriously by the state and the policy makers, the sustainability and the future of agriculture is under grave threat.

3.12 Caste and RNFE

Caste is a social hierarchical system that had deprived sections of the society for a very long time in our country. Its manifestation is clearly discernible in terms of the differences in social and economic gains experienced by different social groups. The scheduled caste and backward caste generally lag behind as compared to the socially advanced in terms of land holding, education, health, housing, sanitation and social mobility. Agriculture, the traditional occupation of our rural people was very much conditioned by the social hierarchy. The scheduled castes who are at the bottom of the hierarchy, were land-poor and earned the livelihood by their labour. On the other hand, those who are at the top of the hierarchy owned lands and therefore could afford not to work in the farms. Such a system provided certain advantages to the upper caste people, whereas the lower caste ones were trapped in their traditional occupation for a long time. RNFE is a new opportunity and it is very important to understand the social composition of the labour market. It is pertinent to recollect that the agrarian relations of production were mediated by the caste relations.

We find that nearly 30 per cent of the surveyed main workers are from scheduled castes and 63 per cent are from Backward Castes (BCs). Only 7 per cent are from Other Castes (OCs). The proportion of men to women is high among all caste groups (Table 3.18).

Table 3.18: Gender and Caste Composition of Main Workers in Tamil Nadu, 2012 (%)

SI. No.	Gender	Caste			SC	BC	OC	Total	
		SC	BC	OC	Total				
1.	Male	59.2	65.7	58.8	63.3	27	65	7	100
2.	Female	40.8	34.3	41.2	36.7	32	59	9	100
3.	Total	100	100	100	100	30	63	7	100

Source: Survey data

When we look into the distribution pattern of main workers by their caste and the industry, we find that the proportion of SC workers in agriculture is at 55 per cent of their main workers whereas it is lower at 42 percent for BCs and 29 percent for OCs. Thus, the movement away from agriculture into non-agricultural employment is found to be slower among SCs. On the other hand, the OCs have branched out much more than any other social group. This goes to

indicate that the earlier social markers do play a role in conditioning the access to new opportunities as well. It is not that he lower caste workers are not allowed to participate but the entry for upper caste is evidently easier. In manufacturing, the OCs are proportionately more represented than the other social groups. While all the three groups are represented more or less at the same level in construction, trade seem to clearly discourage SCs as only 4 per cent of their main workers are absorbed in that industry whereas, it is three times more among BC and twice more for OC's. Transportation is again another industry where caste does not seem to play any role (Table 3.19).

Table 3.19: Distribution of Main Workers across Caste and Industry Groups, Tamil Nadu, 2012

SI.	Broad Industry Group	SC	BC	OC	Total
No					
1.	Agriculture, Forestry, Fishing	1522 (55)	2467 (42)	202 (29)	4195 (45)
2.	Mining and Quarrying	2 (0.1)	33 (6)	0 (0)	35 -
3.	Manufacturing	492 (18)	1111 (19)	210 (30)	1814(20)
4.	Electricity, Gas and Water supply	4 (0.1)	11 (0.2)	-(0)	15 (0.2)
5.	Construction	321 (12)	835 (14)	94 (13)	1250 (13)
6.	Wholesale & Retail trade and	112 (4)	704 (12)	61 (9)	877 (9)
	Restaurants & Hotels				
7.	Transport, Storage and	181 (7)	380 (7)	63 (9)	624(7)
	Communications				
8.	Financing, Insurance etc	19 (0.7)	60 (1)	11 (2)	90 (1)
9.	Community services	95 (3.5)	258 (4)	65 (9)	420 (5)
10.	Others	-	- (0)	-(0)	0 (-)
	Total	2748 (100)	5859 (100)	706 (100)	9320
					(100)

Note: Figures in parenthesis are column percentages.

Source: Survey data

The caste composition of the workforce in each industry indicate that except in agriculture, the SCs are having a less than proportionate share of workers as compared to their overall share in the total main workers. The obverse is found for BC's and much more acutely among the OCs (Table 3.20).

Table 3.20: Caste Composition of the Labour Force in Each Industry in Tamil Nadu, 2012

SI.No	Broad Industry Group	SC	BC	OC	Total
1.	Agriculture, Forestry, Fishing	36	59	5	100
2.	Mining and Quarrying	6	94	0	100
3.	Manufacturing	27	61	11	100
4.	Electricity, Gas and Water supply	27	73	-	100
5.	Construction	26	67	-	100
6.	Wholesale & Retail trade and Restaurants & Hotels	13	80	7	100
7.	Transport, Storage and Communications	29	61	12	100
8.	Financing, Insurance etc	21	66	12	100
9.	Community services	23	61	16	100
10.	Others	-	-	ı	-
	Total	30	63	8	100

Source: Survey data

Table 3.21: Distribution of Population by Age groups and Industry Groups, Tamil Nadu, 2012

SI.No.	Broad Industry Group			Age Group)	
		15-24	25-34	35-44	45-59	Total
1.	Agriculture, Forestry, Fishing	331 (26)	967 (36)	1339	1558	4195
				(49)	(59)	(45)
2.	Mining and Quarrying	5 (0.4)	6 (0.2)	19 (0.7)	5 (0.2)	35 (0.4)
3.	Manufacturing	363	601	512	338	184
		(28.3)	(22.5)	(18.9)	(12.8)	(19.5)
4.	Electricity, Gas and Water supply	0 (0)	2 (0.1)	1 (0)	1 (0.5)	15 (0.2)
5.	Construction	249	446	317	238 (9.0)	1250
		(19.4)	(16.7)	(11.7)		(13.4)
6.	Wholesale & Retail trade and	157	267 (10)	219 (8.1)	234 (8.8)	877 (9.4)
	Restaurants & Hotels	(12.2)				
7.	Transport, Storage and	104 (8.1)	247 (9.2)	178 (6.6)	95 (3.6)	624 (6.7)
	Communications					
8.	Financing, Insurance etc.	15 (1.2)	21 (0.8)	20 (0.7)	34 (1.3)	90 (?)
9.	Community Services	59 (4.6)	114 (4.3)	111 (4.1)	136 (5.1)	420 (4.5)
10.	Others	-	-	-	-	-
	Total	1283	2671	2716	2650	9320
		(100)	(100)	(100)	(100)	(100)

Note: Figures in parenthesis are column percentages.

Source: Survey data

So far we have used the data from house listing survey for an analysis of various characteristics of RNFE in the state. As mentioned in the first chapter of this report, we undertook a sample survey of households for a somewhat detailed probe. About 100 households from each sample village were selected on a stratified random basis. We have to use the data from that survey for all our further discussions. Since the data is from another base, they are not comparable with the earlier data.

3.13 Education and RNFE

Let us now turn our attention to another important attribute that may impact the employment profile of an individual viz., education. Better educated or higher a person is educated, the chances of him or her to get into non-farm employment could be better.

When we look into the educational profile of the surveyed population, we find that a vast majority is educated below the secondary level (71%). Another 17 per cent have completed secondary level. Together, they account for 88 per cent of the sample population surveyed (Table 3.22).

Table 3.22: Distribution of the Surveyed Population by the Educational Level in Tamil Nadu, 2012

SI. No	Level of education	No. of Persons	%
1.	Below Secondary	3459	70.5
2.	Secondary	827	17
3.	Higher Secondary	349	7.1
4.	Graduate	212	4.3
5.	Post Graduate	55	1.12
6.	Total	4902	100

Source: Survey data

Only 17 per cent have completed secondary education and 7 per cent have completed higher secondary education. Graduates and post graduates constitute just 5 per cent of the population. When we compare the proportion of persons in RNFE and their level of education, we find that the proportion of persons in RNFE is higher among those who have completed secondary education as compared to those who are educated below secondary level. Beyond that, the pattern does not hold any good except in the case of postgraduates. However they are too few in the number to draw any pattern out of it (Table 3.23).

Table 3.23: RNFE Workers across their Educational Level in Tamil Nadu, 2012 (%)

SI. No.	Level of Education	No. of Persons	No. of Persons in RNFE	% of RNFE persons to the total
1.	Below Secondary	3459	762	22
2.	Secondary	827	280	33
3.	Higher Secondary	349	75	21
4.	Graduate	212	50	24
5.	Post Graduate	55	21	38

Source: Survey data

When we look into the distribution pattern of the educational level of the surveyed population across occupations, we find that the largest number of uneducated are employed as agricultural

labourer and just about one-fifth of them are in the non-agricultural labour. Even with a little education, larger proportion of them moves into the non-agricultural employment.

When we look into the educational composition of agricultural labourers, non-agricultural labourers and the self-employed, we find that nearly 39 per cent of agricultural labourers are illiterates and another one-fifth are educated up to primary level. About one-fifth of the non-agricultural labourers are illiterates. However, the proportions of those who are educated up to secondary level are higher among the non-agricultural labourers (Table 3.24).

Table 3.24: Percentage Distribution of Surveyed Population across Occupation and Education in Tamil Nadu, 2012

SI. No.	Occupation			E	ducational L	evel		
		Illiterate	Primary	Upper primary	secondary	Higher secondary	Gradu- ate	Post Graduate
1.	Self- cultivation	11	7	8	6	6	9	9
2.	Animal Husbandry	2	0	2	2	0	0	0
3.	Agri.Labo ur	36	28	25	19	14	8	4
4.	Non-Agri. Labour	21	35	25	31	17	11	13
5.	Household Work	22	16	25	21	34	23	24
6.	Self Employed	4	6	7	6	6	7	2
7.	Service (Govt.)	05	1	1	7	6	15	16
8.	Service (Pvt.)	2	1	2	4	6	15	16
9.	Others	0.7	0.2	0.6	11	4	6	9
	Total	100	100	100	100	100	100	100

Source: Survey data

Thus, the proportion of better educated persons is more among those who are employed in non-agriculture. On the other hand, agriculture has a larger proportion of less educated and uneducated persons.

Does technical education have any relationship with the occupation? Obviously, it has an influence. The B.E., B.Tech and Medicinal graduates as well as those who have studied in polytechnics are better employed in government sector or in private sector. However, a large number of persons who have studied in ITI are working as non- agricultural labourers. Interestingly, most of the self-employed are not technically educated. Not even 5 per cent of them are technically educated. Technical education does not seem to result in self-employment in Tamil Nadu. They would rather seek the stability of salaried employment rather than risk playing

in an uncertain market. Only those who are not educated much are into self-employment (Table 3.25).

Table 3.25: Distribution of Population across Technical Education and Occupation in Tamil Nadu, 2012

SI. No.	Occupation						
		BE	Polytechniques	ITI	Med	Other	Total
1.	Studying	17	18	4	0	0	39
2.	Self-employed	-	-	1	0	4	5
3.	Animal Husbandry	-	-	-	-	-	-
4.	Agri. Labour	-	3	1	0	0	4
5.	Non-Agri. Labour	-	6	13	0	7	29
6.	Household Work	2	-	1	0	9	12
7.	Self Employed	-	1	2	0	1	4
8.	Service (Govt.)	1	2	2	2	2	9
9.	Service (Pvt.)	16	13	6	2	5	42
10.	Others	0	0	0	0	0	0
Total		36	43	30	4	28	144

Source: Survey data

To summarize, the overall educational level of the population is substantially up to secondary level. Agricultural labour is the most important occupation for those who are educated up to secondary level. Technically qualified persons are either employed in government or private employment, whereas the ITI educated ones are substantially employed as non agricultural labour. Most of the self-employed are not educated much.

So far we have explored the salient characteristics of the working population in relation to various economic and social attributes. Let us now turn our attention to the specific characteristics of the non-farm workers.

3.14 Profile of Non-Agricultural Workers

We found earlier in our discussion that non-agricultural employment is emerging as the most important occupation in the erstwhile low RNFE districts of Pudukottai and Thanjavur districts and has already emerged as the dominant employer in the high RNFE districts of Virudhunagar and Tirunelveli. We have used the house listing data as well as the detailed sample survey data to assess the magnitude of RNFE in the sample villages. However, we have not looked into the profile of non-agricultural workers. In this section, our focus will be exclusively on that, and let us start with the size of non-agricultural labour in the total population of the surveyed population.

3.14.1 Size of Non-Agricultural Labour Population

All together, we have netted 850 non-agricultural labourers in the sample households of 12 villages. They accounted for nearly about 27 per cent of the population that we have surveyed in our sample households. The proportion of non-agricultural labour to the total surveyed

population is quite high in RNFE districts (at 41% in Virudhunagar and 36% in Tirunelveli district), whereas it is low in low RNFE districts (at 13% in Thanjavur and 18% in Pudukottai districts).

3.14.2 Distribution of Non-Agricultural Labour across Sectors

Which are the sectors that had drawn the labour from these surveyed villages is an important question that we try to answerer from the data that we have collected. For all the districts together, we find that 'others' account for nearly 37 per cent of the total non-agricultural workers. It is the largest sector in terms of employment in non-agriculture. This sector is amorphous at a very broad level and contains several odd jobs. We are in no position to come to any definite conclusion as to what accounts for the bulk of 'others'.

Another important reason for the large of 'other' workers is a confusing coding structure that was used at the time of the survey. Our suspicion is that most of those who are to be classified as belonging to the non-agricultural labour are grouped under 'others'. Therefore, we need to factor in this flaw while interpreting the results for 'others'.

Construction is the second largest sector that has absorbed 28 per cent of the non-agricultural labour and manufacturing about 21 per cent. These two sectors together, account for nearly 50 per cent of the non-agricultural labourers in the surveyed villages. About 7 per cent of the workers are in the trade and about 5 per cent in the hotels and restaurants. Mining and Quarrying account for just about 2 per cent of the non-agricultural workers (Table 3.26).

Table 3.26: Distribution of Non-Agri Lab by Sector and District

							All Districts
Sector	High RNFE Di	ists.	Low RNFE	Dists.		Combined	
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur		
					Ü	Total	
Mining &	5	3		4	9		
Quarrying			8			13	21
Manufacturing	76	84	160	9	4	13	173
Construction	61	83	144	38	58	96	240
Wholesale &	21	10		11	6		
Retail Trade			31			17	48
Hotel &	8	9		19	2		
Restaurant			17			21	38
Others	140	68	208	63	60	123	331
Total	311	257	568	144	139	283	851

Source: Primary Survey, 2012

However, the pattern of sectoral distribution of workers is not uniform across the sample districts. In the low RNFE districts of Pudhukottai and Thanjavur, more than 43 per cent of the non-agricultural labourers are absorbed by the 'other' sector. The proportion of non-agricultural

workers in hotels and restaurants is quite significant in Pudhukottai at about 13 per cent. On the other hand, the proportion of non-agricultural workers in the construction sector is quite high in Thanjavur district at 42 per cent as compared to 26 per cent in Pudhukottai district.

In the high RNFE district, Virudhunagar is dominated by employment in the 'other' sectors, followed by manufacturing and construction. However, in Tirunelveli 'manufacturing' is the largest sector followed by construction sector.

3.14.3 Non-farm Employment and Place of Work

Let us now explore the sectoral distribution of workers and the place of work. We find that 37 per cent of the non-agricultural workers who work within the village are in 'other' sector and importantly 31 per cent of the work within the village is in manufacturing. Nearly one-fifth of the work within the village is in construction. Work outside the village is provided by construction (39%) and 'others' (38%). Those who are outside are substantially in 'others' and about one-tenth of such employment is provided by hotels and restaurants (Table 32).

Table 3.27: Distribution of Non-Agricultural Labour by Sector and Place of Work (State as a whole)

Sector	Within Village	Outside Village	Outside District	Within Village	Outside Village	Outside District
Mining & Quarrying	16	5	0	4.43	1.15	0.00
Manufacturing	112	52	9	31.02	12.01	16.07
Construction	68	165	7	18.84	38.11	12.50
Wholesale & Retail	18	28				
Trade			2	4.99	6.47	3.57
Hotel & Restaurant	12	20	6	3.32	4.62	10.71
Others	135	163	32	37.40	37.64	57.14
Total	361	433	56	100.00	100.00	100.00

Source: Primary Survey, 2012.

As far as the manufacturing sector is concerned, 67 per cent of the workers find their job within the village, whereas the proportion of workers in construction sector who find their work outside is high at 70 per cent. In the case of 'other' sector, more than 50 per cent find their job outside the village and importantly about 37 per cent from the 'other' sector find employment within the village.

When we look for variations across high and low RNFE districts, we do not find any distinct pattern. Virudhunagar has a pattern of high local employment with 50 per cent of non-agricultural work is available within the villages. However, in all other districts, majority of the workers have to go outside the village for non-agricultural work indicating that commuting to work is quite significant in the state (Table 3.28).

Table 3.28: Distribution of Non-Agri Labourers by Place of Work

Place of Work	High RNFE Districts			Low RNFE Districts			All Districts Combined
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur		
						Total	
Within Village	158	100	258	46	57	103	361
Outside Village	139	142	281	84	68	152	433
Outside District	14	15	29	13	14	27	56
All categories	311	257	568	143	139	282	850

Source: Primary Survey, 2012

For the state as a whole, we find employment outside the village at 51 per cent, whereas employment in non-agricultural sector within village is about 42 per cent.

Thus, the overall pattern clearly indicates that both the processes are at work in the sense that while non-farm activities in the villages itself are absorbing about 40 per cent of the non-agricultural workers and simultaneously workers are in demand in other locations as well accounting for nearly 50 per cent of the non-agricultural labourers in the surveyed villages.

The above discussion seem to indicate that the place of work do not have much importance given the high levels of connectivity both by transportation and communication. This variable could have been an important variable three decades ago when the debate started.

3.14.4 Distribution of Non-Agricultural Labour by Distance of Work

A better nuanced way of capturing and analyzing the place of work is the distance that workers travel for their work. When we analyze the distance travelled, we find 52 per cent of the workers reporting that they are working within the village. However, 34 per cent of the workers have reported that they travel up to 5 km for their work. Another 10 per cent had reported that they travel between 5-10 km for their work. We can safely interpret from this data that nearly 45 per cent of the workers commute to work every day. We come to the conclusion based on three facts (Tables 3.29 and 3.30).

We found the manufacturing units in Virdunagar district were transporting their workers, particularly the women workers, in their buses every day. Secondly, the public transport was available from all the surveyed villages to the nearby towns with very good road network. Finally, the widespread availability of cellular phones and the two wheelers combine to collapse the spatial restriction. Information and mobility is greatly enabled by these two technologies. Labour market is therefore much wider, much more intense and well informed. Given all these

factors, one is inclined to interpret that commuting to work enabled by cell phones, private and public transport is gaining importance in the surveyed villages. However work within the village still account for 55 per cent.

From the above analysis, it is clear that most of the non-agricultural workers work either in their own village or commute up to 5 km. Just about 5 per cent of them commute beyond that. Economic activities that can absorb this much labour had come in and around these villages and hence these labourers stay in their villages but had taken up non-agricultural work. Non-agricultural workers commute longer distance in high RNFE districts as compared to the workers in low RNFE districts. This could be because while manufacturing could be shifted to home based work (in certain operation if not the entire operation), employment in constriction and 'other' sector employment like driving cannot be shifted to home.

Table 3.29: Distribution of Non-Agriculture Labour by Distance of Work

Distance of Work	High	RNFE Distts.		Low RNFE		All Districts Combined	
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur	Total	
Within	158						
Village		100	258	46	57	103	361
Up to 5 km	125	57	182	23	44	67	249
5 - 10 km	9	2	11	13	8	21	32
10 - 20 km	4	0	4	2	0	2	6
20 km. and	1	1		1	2		
above			2			3	5
Total	297	160	457	85	111	196	653

Source: Primary Survey, 2012

Table 3.30: Percentage of Distribution of Non- Agriculture Labour by District and Distance of Work

Distance of Work	High RNFE Distts.			Low RNFE Distts.			All Districts Combined
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur	Total	
Within	53.20						
Village		62.50	56.46	54.12	51.35	52.55	55.28
Up to 5	42.09						
km.		35.63	39.82	27.06	39.64	34.18	38.13
5 - 10 km.	3.03	1.25	2.41	15.29	7.21	10.71	4.90
10 - 20	1.35						
km.		0.00	0.88	2.35	0.00	1.02	0.92
20 km.	0.34						
and above		0.63	0.44	1.18	1.80	1.53	0.77
	100.00					100.0	
Total		100.00	100.00	100.00	100.00	0	100.00

Source: Primary Survey, 2012

3.14.5 Days of Employment for Non-Agricultural Labour

One 'important' reason for the labour to shift away from agriculture and seek employment in the non-agricultural sector is to get more regular employment opportunities. While agricultural employment is plagued by seasonality with peaks during seasons and prolonged troughs during the off season, non-agricultural employment is relatively more stable with the intensity of peaks and troughs not so acute. Moreover, since the demand is steadier, the number of days of employment could also be more in non-agricultural employment. The survey data indicates such a pattern. Nearly 86 per cent of the surveyed non-agricultural labourers have indicated that they get employment between 6 and 12 months. Just about 11 per cent of them have reported that they got employed between 3 and 6 months. Non-farm workers get more number of days of employment in high RNFE districts as compared to low RNFE districts. But it is only slightly lower (Table 3.31).

Table 3.31: Distribution of Non- Agriculture Labour by District and Days of Employment

Days of Employment	High R	NFE Distts.		Low		All Districts Combined	
	Virudhunagar	Thirunelveli	Total	Pudukottai	Pudukottai Thanjavur		
						Total	
Less than 3	7	3		3	7		
months			10			10	20
	33	28		12	18		
3 - 6 months			61			30	91
6 - 12	269	226		122	112		
months			495			234	729
12 months	1	0		7	1		
and above			1			8	9
Total	310	257	567	144	138	282	849

Primary Survey, 2012

Thus, those labourers who have shifted away from agriculture have managed to get a steadier employment as compared to the agricultural employment. In this sense, there is no incentive for the workers to get back to agriculture if they want to maximize their income earning potential.

3.14.6 Working Hours of Non-Agricultural Workers

Non-agricultural work involves longer hours of labour though it is more regular and fetches higher wages than agriculture. Though we do not have comparable data from agricultural employment, one can safely conclude that the hours of work per day is more in non-agriculture than in agriculture. Nearly 85 per cent of the non-agricultural labourers have reported that they work for 8 hours and more, whereas only 15 per cent have reported that they work for lower number of hours per day (Table 3.32). More labourers in high RNFE district have reported higher hours of work as compared to low RNFE district. The labour market could be more

intensely organized in high RNFE districts to make the labour work for more time as compared to the low RNFE districts. With the spread of RNFE in other areas as well, the number of workers who have to put in longer hours may increase further in the future.

Table 3.32: Percentage Distribution of Non-Agricultural Labour by District and Work Hours

Hours of Work	High	RNFE Distts.		Low 1	RNFE Distts.		All Districts Combined
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur	Total	
Less	0.00	0.39		0.00	0.72		
than 4							
hrs			0.18			0.35	0.24
4 - 8	6.77	10.89		16.67	11.51	14.1	
hrs			8.64			3	10.50
8 hrs	93.23	88.72		83.33	87.77		
and						85.5	
above			91.18			1	89.50
	100.00	100.00		100.00	100.00	100.	
Total			100.00			00	100.24

Source: Primary Survey

3.14.7 Type of Contract and Mode of Payment of Non-Agricultural Labourers

Most of the non-agricultural labourers are casual labourers as they are paid on a daily basis, though many of them presume that they are regular workers (Table 3.33). While 78 per cent of them are paid on a daily basis, 57 per cent think that they are regular workers. It could mean the regularity of work rather than their legal status. Only about 13 per cent are paid monthly. Even here, one has to be cautious as their monthly wages will be worked out based on the number of days that a worker had worked. They may not be eligible for any leave. While this type of arrangement may ensure regular employment, it will not entitle the worker any benefit. About 10 per cent of the workers have reported piece rate wages (Table 34). Piece rate wages are very common in match industry and beedi rolling which are taken up by women workers in large number in Virudhunagar and Tirunelveli districts. That is why it is relatively high in those districts, whereas it is insignificant in low RNFE districts. Similarly, monthly wages is more prevalent in low RNFE districts as compared to the high RNFE districts. It could be that with more RNFE activity, casualisatin will be more intense. It could also be that the type of employment may dictate the payment pattern.

With more number of workers in hotels in Pudhukottai or drivers in Thanjavur, number of workers getting a monthly salary will be higher, whereas employment in manufacturing and construction will be on a daily wage basis in high RNFE districts.

Table 3.33: Percentage Distribution of Non-Agricultural Labourers by District and Type of Contract

Type of Contract	High RNFE Dists.			Low RNFE Dists.			All Districts Combined
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur		
						Total	
Regular	51.94	50.97	51.50	58.74	78.00	57.45	53.47
Casual	48.06	49.03	48.50	41.26	78.00	42.55	46.53
Total	100.00	100.00	100.00	100.00	78.00	100.00	100.00

Source: PrimarySurvey

Table 3.34: Percentage Distribution of Non-Agricultural Labour by District and Mode of Payment

High RNFE Dists.			Low RNFE Distts.			All Districts Combined
Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur		
					Total	
77.49	80.86	79.01	69.23	79.86	74.47	77.50
11.90	12.11	11.99	5.59	1.44	3.55	9.19
10.61	7.03	8.99	25.17	18.71	21.99	13.31
100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Primary Survey

3.14.8 Annual Wage Income of Non-Agricultural Labourers

Apart from regularity of work and thereby a regular wage income, the drive to diversity into nonagricultural employment is to benefit out of a higher income. Here again, we do not have comparable data for agricultural income that prevail in the surveyed villages. However, from the interviews that we had conducted with the villagers, we can deduce that the non-agricultural income is much higher as compared to the agricultural income. The difference is much sharper in the case of men as compared to women. There are specific variations in the wages for nonagricultural workers across sectors and districts. Construction, for instance, fetches more than a double as that of working in textile mills. Many of those who are in textile mills feel that their wages are stagnating, whereas their counterparts in construction are experiencing a continuous rise in their wages. However, it is harder to work in construction as compared to the mill work. Payment in hotels and restaurants also fetch more than other sectors. Sectors which looked promising earlier are paling in comparison to the emerging important sectors. Fetching a job in the mill sector was considered as a break through till a decade ago. Now, it is a burden as those who have gone into construction are earning much more. Also, they have a greater potential of climbing up the hierarchy as a small time organizers to a big time organizer, sub-contractor and eventually into a full-fledged contractor, whereas the more secure mill job offers nothing in comparison. Wages are not rising. No permanency is in sight which may fetch some benefit and social security.

Let us now discuss the annual earning of non-agricultural workers in various sectors in the surveyed villages. Income data has always proved very problematic, elusive and grossly understated. Let us not take their absolute values on their face value. If the problems of income data are true for all the sectors, then we may presume that the data is similarly biased across the board. We will just have an idea about their relative positions.

Lowest annual earning happened among the worker in the manufacturing. Those who are in the trade earn a wage income that is better than manufacturing. In a ten point scale, manufacturing has a score of 5.4, trade is at 6.7, mining is at 8.6, construction is at 9.7 and hotel and restaurants is at 10. Employment in other sector fetches an annual wages which is equivalent to 8.4 in the ten point scale (Table 3.35).

Table 3.35: Average Annual Earnings (Rs.) of Non-Agricultural Labourers by District and Social Group

Average Annual Earning										
Sector							All Districts Combined			
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur					
						Total				
Mining & Quarrying	50160.00	78000.00	60600.00	57000.00	59333.33	58615.38	59371.43			
Manufactur- ing	38256.00	34471.43	36256.60	30533.33	60000.00	46800.00	36938.82			
Construct-ion	61800.00	74078.05	68840.56	58657.89	67965.52	64281.25	67009.21			
Wholesale & Retail Trade	38114.29	50160.00	42000.00	54872.73	55000.00	54917.65	46575.00			
Hotel & Restaurant	57000.00	54666.67	55764.71	81473.68	57000.00	79142.86	68684.21			
Others	49971.43	65426.87	54973.91	61770.97	62920.00	62336.07	57703.95			

Source: Primary Survey

Wage levels across sectors are found to be higher in low RNFE districts than the high RNFE districts except in mining and construction. Why the wage levels are higher in the low RNFE districts is another question that needs further research. The demand for non-agricultural labour will be less in low RNFE districts and the supply of labour will be more. The wage level therefore, should be lower. However, the data indicates just the opposite pattern which we are unable to explain at this stage.

The wage income of non-agricultural labour slightly varies in terms of the caste location of the workers. Backward caste workers earn the highest, closely followed by the scheduled castes. Others earn nearly 10 per cent less than the BCs. The explanation for the wage differential can be located in the nature of work. Since 'others' opt for less strenuous work as compared to the BCs and SCs, they may earn slightly less. Most of the work in non-agricultural labour is labour

intensive and generally 'others' were not into such hard labour earlier. It may also be due to the fact that they could combine non-agricultural labour with their agricultural income. We need to probe further to explain the wage differentials across the caste groups (Table 3.36).

Table 3.36: Average Annual Earnings (Rs.) of Non- Agriculture Labour by District and Social Group

Social	W. 1 B. 11				D		All Districts
Group	High RNFE I		Total	Low RNFE Pudukottai		Combined	
	Virudhunagar	Timruneiven	Total	rudukottai	Thanjavur	Total	
BC	58363.64	72190.48	63740.74	69473.68	70087.50	69694.38	65851.79
SC	55500.00	64920.00	60058.06	57818.18	68760.00	65416.67	62026.53
ST	0	0	0	0	0	0	0
Others	0	59466.67	59466.67	0	0	0	59466.67
All							
Social							
Groups	57664.12	68162.16	62479.34	67588.24	69505.26	68462.40	64517.17

Source: Primary Survey

So far we have discussed the non-agricultural labour and its salient characteristics in the sample villages in TN. Let us now explore the situation of the rural self-employed persons.

3.15 Characteristics of Self-Employed in the Sample Villages in Tamil Nadu

We have information about 180 self-employed persons in our sample survey. They account for about 8 per cent of the surveyed population (Tables 42). The number of self employed is more in the low RNFE villages than in the high RNFE villages.

Table 3.37: Distribution of Self-Employed in Non-Agriculture by District

	High RNFE Distts.			Low RNFE			
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur	Total	All Districts Combined
Number	46	35	81	63	36	99	180
Percentage (out of total							
pop)	6.06	4.61	5.33	7.63	4.61	6.16	5.76

Source: Primary Survey

Trading accounts for more than half of the self-employed population in the surveyed villages except in Thirunelveli district. It is higher in low RNFE districts (60%) than in the high RNFE districts (50%). Services account for about one-fourth of the self employed. It is marginally higher in low RNFE villages than the high RNFE villages. Together, they (trading and services) account for about 80 per cent of those who are self-employed. Thus, we do not find much of the

diversity in the activities of those who are self-employed. Thus we find that this activity is not diversified much (Table 3.38).

Table 3.38: Distribution of Self-Employed in Non-Agriculture by District and Activity

	High RNFE Di	Low RNFE					
	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur		All Districts
Activity						Total	Combined
Service	5	14	19	15	11	26	45
	(10.87)	(40.00)	(23.46)	(23.81)	(30.56)	(26.26)	(25.00)
Transport	2	2	4	3	0	3	7
	(4.35)	(5.71)	(4.94)	(4.76)	(0.00)	(3.03)	(3.89)
Trade	27	13	40	37	22	59	99
	(58.70)	(37.14)	(49.38)	(58.73)	(61.11)	(59.60)	(55.00)
Construc	0	0	0	1	3	4	4
tion	(0.00)	(0.00)	(0.00)	(1.59)	(8.33)	(4.04)	(2.22)
Hotel	4	3	7	5	0	5	12
	(8.70)	(8.57)	(8.64)	(7.94)	(0.00)	(5.05)	(6.67)
Manufac	8	3	11	2	0	2	13
turing	(17.39)	(8.57)	(13.58)	(3.17)	(0.00)	(2.02)	(7.22)
Total	46	35	81	63	36	99	180
	100	100	100	100	100	100	100

Source: Primary Survey

In terms of their area of operation, we find that much of trading (about 70%) takes place within the village. But the services are offered outside the village as well, and it accounts for 42 per cent of their activity. If we take all the activities together, nearly 63 per cent of the persons who are self-employed operate within the village. About 30 per cent operate outside their villages and the rest operate outside the district. Thus, self-employment is localized to a very large extent and it is very rare for them to offer their services even outside their district (Table 3.39).

Table 3.39: Distribution of Self-Employed in Non-Agriculture by Activity and Workplace (State as a whole)

(State as a whole)									
Activity	Within Village	Outside Village	Outside District	% within village	% outside village	% outside district			
Service	26	19	0	22.61	34.55	0.00			
Transport	1	4	2	0.87	7.27	20.00			
Trade	69	23	7	60.00	41.82	70.00			
Construction	2	1	1	1.74	1.82	10.00			
Hotel	8	4	0	6.96	7.27	0.00			
Manufacturing	9	4	0						
				7.83	7.27	0.00			
Total	115	55	10	100.00	100.00	100.00			

Source: Primary Survey

However, the pattern is not uniform across space. The self-employed in the low RNFE districts are not very mobile as they operate within the village (75%), whereas only half of the self employed in the high RNFE villages operate within their villages (Table 3.40).

Table 3.40: Distribution of Self-Employed in Non-Agriculture by District and Workplace

	High RNFE Distts.			Low RNFF	All		
Place of	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur		Districts
Work						Total	Combined
Within	27	14	41	49	25	74	115
Village	(58.70)	(40.00)	(50.62)	(77.78)	(69.44)	(74.75)	(63.89)
Outside	16	19	35	12	8	20	55
Village	(34.78)	(54.29)	(43.21)	(19.05)	(22.22)	(20.20)	(30.56)
Outside	3	2	5	2	3	5	10
District	(6.52)	(5.71)	(6.17)	(3.17)	(8.33)	(5.05)	(5.56)
	(46.00)	(35.00)	(81.00)	(63.00)	(36.00)	(99.00)	(180.00)
Total	100	100	100	100	100	100	100

Source: Primary Survey

3.16 Annual Earnings of the Self-Employed

The highest earning is reported by those who are self-employed in manufacturing followed by those who operate eateries. The lowest earnings are reported among those who provide services. We have noted in the earlier section that a vast majority of the self employed are in trading activity. They are all seemed to be small time traders and have reported an income of around Rs.91, 000 per annum. However, traders in high RNFE districts have reported slightly higher earnings. The net earnings of those who are in services in high RNFE districts earn more than their counterparts in low RNFE districts. Net earnings of the self-employed in high RNFE is also higher than those in the low RNFE districts (Table 46).

Table 3.41: Average Annual Net Earnings (Rs.) per Household Self-Employed in Non-Agriculture by District and Activity

	High RNFE D	istts.		Low RNFI	All		
Activity	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavui	Total	Districts Combined
Service	49200	93857	82105	76000	54545	66923	73333
Transport	126000	60000	93000	80000	0	80000	87429
Trade	100000	74769	91800	105568	64364	90203	90848
Construction	0	0	0	120000	92000	99000	99000
Hotel	123000	52000	92571	110400	0	110400	100000
Manufacturing	142500	160000	147273	180000	0	180000	152308
Total	105000	86914	97185	100286	63667	86970	91567

Source: Primary Survey

The caste location of the self-employed has some relationship to the average annual earnings of the people. Self- employed from backward castes earn more than the other caste groups. The self-employed who are from SC earn the lowest. The difference is not much in the low RNFE districts (Table 3.42). However, it is very stark in high RNFE districts. This difference in the net earnings may indirectly indicate the type of activity of the self employed as well as the market for them and the role of caste in conditioning the market. SC members may find it difficult to operate in a larger market in certain sectors like a hotel. A hotel run by a scheduled caste member in a village may not be patronized by the other castes members and thereby his clientele will be much smaller and thus their income earning potential could also be smaller to that extent.

Table 3.42: Average Annual Net Earnings (Rs.) per Household Self-Employed in Non-Agriculture by District and Social Group

	High RNFE D	ists.		Low RNFE	4.17		
Social Group	Virudhunagar	Thirunelveli	Total	Pudukottai	Thanjavur	Total	All Districts Combined
Backward Classes	114188	92000	105396	106759	66960	88333	96785
Scheduled Caste	43500	72000	60600	117000	60000	88500	73000
Others	100200	84750	93333	91800	54000	84649	87491
All Social Groups	105000	86914	97185	100286	63667	86970	91567

Source: PrimarySurvey

3.17. Conclusion

Our survey has clearly indicated that RNFE is emerging as a very important activity and draws more and more people into its fold. Households prefer RNFE to agriculture and the younger population overwhelmingly goes for it. It provides a steadier employment and probably better wages. Villages are fast becoming the habitation for non farm workers. When so many households prefer non- farm employment to agriculture, the traditional categories are becoming insufficient. Rural need not mean agrarian anymore in the case of these villages. Also that RNFE is not a subsidiary occupation. When it becomes the full time occupation for these workers, what kind of policies should we have in place is a crucial question. Rural development policies need to take this aspect into account and has to evolve specific policies accordingly. Similarly, our education and skill development policies have to take into account the nature of activity and skill acquisition of the surveyed population in reorienting their policies. Employment policy for RNFE is the most important initiative that cries for our attention.

Policy Recommendations

- The entry barriers for women and SCs are to be tackled.
- Encourage manufacturing in low RNFE districts which employs more and more women as well.
- Encourage school completion by the people of rural areas which seem to lead them to better RNFE jobs.
- Agriculture is losing young workers and it deserves urgent attention.
- The skilled among the rural labour are few and therefore there is an urgent need for simple and quick skill formation among them.
- Greater safety norms are to be set and implemented in many new RNFE activities and as of now nothing is in place posing great danger to the lives of the people as we find repeatedly in the fire accidents in Virudunagar district which kills scores of people every year.
- No social safety net is in place for the casual informal workers and they are left to fend for themselves. A health care system and old age caring are very much required as the RNFE workers neither have the traditional social protection nor the state protection.
- RNFE is no more a residual activity of the rural population in the state and therefore
 specific housing, healthcare and transportation and social security policies are urgently
 required. While the rural get some priority the new sector of RNFE hardly had attracted
 any kind of policy intervention.

Bibliography

Hazell, P. and S. Haggblade (1990), 'Rural-Urban Growth Linkages in India', PRE Working Paper Series No.430, Agriculture and Rural Development, World Bank.

Hazel, P. and C. Ramasamy (1991), *The Green Revolution Reconsidered: The Impact of High-Yielding Rice Varieties in South India*, John Hopkins, Baltimore.

Harris, B. and S. Janakarajan (2004) Rural India Facing the 21st Century, Anthem Press, London.

Jayaraman, R. and P. Lanjouw (1999), 'The Evolution of Poverty and Inequality in Indian Villages', *World Bank Research Observer*, Vol. 14 No.1, February, pp. 1-30.

Jayaraj, D. (1992), 'Determinants of Rural Non-agricultural Employment: A Village Level Analysis of the Data for Tamil Nadu', in Subramaniam, S. (ed.), *Themes in Development Economics: Essays in Honour of Adisheshiah*, Oxford University Press, New Delhi.

Kanis, Gustav and Frances Stewart (1993), 'Rural Non-agricultural Activities in Development: Theory and Application', *Journal of Development Economics*, Vol. 40, No.1, February.

Lanjouw, P. and A. Shariff (2004), 'Rural Non-Farm Employment in India: Access, Incomes and Poverty Impact' *Economic and Political Weekly (EPW)*, Vol.39, No.40.

Mellor, J. (1976) (ed.), Agricultulre on the Road to Industrialization, Johns Hopkins University ress, Baltimore.

Rukmani, R. (1993), The Process of Urbanization and Socio-economic Change in Tamil Nadu, 1901-81, Unpublished Ph.D Thisis submitted to the University of Madras.

Rukmani, R. (1994), 'Urbanization and Socio-Economic Change in Tamil Nadu, 1901-1991' *EPW*, December 17-24, 1994, pp. 3263-327.

Rukmani, R. (1996), 'Factors underlying High Dispersal of Towns in Tamil Nadu', *Review of Development and Change*, Vol.1. January-June, pp. 113-125.

Swaminathan, P. (1994), 'Where Are the Entrepreneurs? What the Data Reveal for Tamil Nadu', *EPW*, Vol. XXX, No.2, May 28, pp. M-64 to M-74.

Sujitkumar, P.S. (2007), 'Livelihood Diversification: A Case Study in Rural Tamil Nadu', *Indian Journal of Labour Economics*, Vol. 50, No.4.

Unni, J. (1998), Non-Agricultural Employment and Poverty in Rural India – A Review of Evidence, *EPW*, Vol.33, No.13.

Unni, J. (1998), 'Non-agricultural Employment and Poverty in Rural India: A Review of Evidence', *EPW*, Vol.33, No.13, March 28.

Vaidyanathan, A. (1986), 'Labour Use in Rural India: A Study of Spatial and Temporal Variations', *EPW*, Vol.21, No.52.

Visaria, P. and R. Basant (1993), Agricultural Employment in India: Trends and Prospects, Sage.

Viswanath, T., P.F. Lanjouw, R. Jayaraman (2004), 'Tamil Nadu Poverty Profile', *The World*.

INSTITUTE OF APPLIED MANPOWER RESEARCH

City Office: 53, Lodhi Estate, New Delhi-110 003 Phone: +91 (0) 11 24697081; 24697082 Fax: +91 (0) 11 2778 3467 Web: http://iamrindia.gov.in E-mail: DG.IAMR@nic.in

Campus: Sector A-7, Narela Institutional Area, Delhi-110 040 Phone: + 91 (0) 11 27787215/6/7
Fax: +91(0) 11 27783467
Web: http://iamrindia.gov.in E-mail: DG.IAMR@nic.in