

**RURAL NON-FARM EMPLOYMENT: A CASE STUDY OF
WEST BENGAL**

*Dissertation submitted to the Jawaharlal Nehru University in partial
fulfillment of the requirements for the award of the degree of*

MASTER OF PHILOSOPHY

PRIYANKA CHATTERJEE



Centre for the Study of Regional Development

School of Social Sciences

Jawaharlal Nehru University

New Delhi -110067

2012

Acknowledgement

As I am on the verge of finishing my research, I realize there is a galaxy of persons, without whom this work could not see the light of day. First and foremost among them is my supervisor Professor Ravi S. Srivastava, who guided me throughout and introduced me to world of research. My heartiest thanks and respect are always there for him and I will also look forward to learn and do better research work with him. Apart from my supervisor, I would like to mention the name of Vergesse sir of my who has never refused to help me out of the problems that I have faced in tackling the NSS dataset. Besides, I am thankful to the all other professors of my centre, who not only gave me valuable suggestions, but also helped me with their constructive criticism. I would also like to thank my centre officials who have always helped me to do any kind of official work throughout these two years of my MPhil.

I would like to thank some of my seniors who have helped me to complete my M Phil. Among them worth mentioning are JD da and Sharmistha di who taught me how to work with NSS data. In this respect I would like to mention the name of Soham Sahoo, who without knowing me personally, had given me ample time to guide me to work with my dataset. Apart from them I would like to thank Gautam da, Zico da, Ajit Jha, Arijit da among my seniors and some of my lovely juniors- Diya, Chaiti, Indrani, Paramita, Shantanu, Pintu, Rajib who made my stressful time happier.

Coming to my classmates and friends there are numerous names that comes to my mind. Within my class I would like to mention the name of two persons Sajida and Manoj for their constant support to me. Now among the friends in campus I would like to thank Saranika, Arpita, Priyanta, Arka, Amartya, Ishan, Antara, Amit, Ruchira, Kingshuk. Among them special thanks to Saranika again to boost me up and help me out with any kind of problem I faced with my MPhil work specifically data work. I should also mention the names of three very close friends of mine who helped me in several ways throughout my MPhil period- Debolina, Oindrila and Deepta. In this respect I should not forget to mention the name of one of my very favourite teacher/guide/elder brother – Sukanta Dutta whose suggestions and teaching has helped me to achieve this goal.

After taking the names of all of my teachers, friends and classmates, now I would like to mention the names of some very important persons in my life. It is my pleasure to thank my parents and my elder brother who is always there for me in any hurdles of my life.

DEDICATED TO BABA AND MA

Contents

1	Introduction	7
1.1	Background of the Study	7
1.2	Review of Literature	9
1.2.1	Rural Non-Farm Sector in the countries other than India	9
1.2.2	Linkages between Farm and Non-farm sector	10
1.2.3	Determinants of Rural Non-Farm Employment	11
1.2.4	Case Studies of West Bengal	12
1.3	Objectives	13
1.4	Research Questions	14
1.5	Data and Methodology	14
1.5.1	Data Source	14
1.5.2	Methodology	15
2	Position and Pattern of Rural Non-Farm Employment in West Bengal	18
2.1	Incidence of Non-Farm Employment in West Bengal	19
2.2	Ranking of the 15 Major States on the Basis of Non-Farm Employment	20

2.3	Diversification within the Rural Non-Farm Sector	27
2.4	Types of Employment	37
2.4.1	Types of Employment in West Bengal and its Different Re- gions	37
2.4.2	Types of employment in Different sub-Sectors of the Non- Farm Sector	46
2.5	Conclusion	47
3	Diversification of Employment among Social Groups in West Ben- gal	49
3.1	History of Caste Discrimination in India	49
3.2	Employment Scenario of Different Social Groups in Rural Non-Farm sector	53
3.2.1	Employment Scenario of Different Social Groups in Rural Non-Farm sector in Overall West Bengal	54
3.3	Employment of Total Rural Persons of Different Social Groups in Different Subsectors of the Rural Non-Farm Sector of West Bengal (Usual Status)	59
3.4	Conclusion	61
4	Determinants of Non-Farm Employment in West Bengal	63
4.1	Introduction	63
4.2	Factors Affecting the Shift to the Rural Non-farm Sector	65
4.3	Factors Determining the Diversification of Employment in the Rural Areas of West Bengal	67
4.3.1	Description of the Variables used in the Model	67

4.3.2	Models and Interpretations	71
4.4	Conclusion	75
5	Conclusion	77
	Appendix	82
	Bibliography	84

List of Tables

2.1	Ranking of the States on the basis of the Total Rural Persons (Male + Female) Employed in the Rural Non-Farm Sector	22
2.2	Ranking of the states on the basis of the Total Rural Male Employed in the Rural Non-Farm Sector	24
2.3	Ranking of the States on the basis of the Total Rural Females Employed in the Rural Non-Farm Sector	26
2.4	Percentage Distribution of Rural Non-Farm Employment in Different Sectors – Total Rural Persons (Usual Status)	30
2.5	Percentage Distribution of Rural Non-Farm Employment in Different Sectors – Total Male Workers (Usual Status)	31
2.6	Percentage Distribution of Rural Non-Farm Employment in Different Sectors – Total Female Workers (Usual Status)	32
2.7	Percentage of Total workers among the total workers in the rural non-farm sector in different Modes of Employment by Usual Status	38
2.8	Percentage of Rural Male workers among the total rural male workers in the rural non-farm sector in different Modes of Employment by Usual Status	39
2.9	Percentage of Rural Female workers out of the total rural female workers in the rural non-farm region in different Modes of Employment by Usual Status	40

2.10	Percentage of Total Rural Persons out of the total rural employed in Different Modes of Employment by Current Weekly Status	41
2.11	Percentage of Rural Male workers out of the total rural male working in the rural non-farm sector in Different Modes of Employment by Current Weekly Status	42
2.12	Percentage of Rural Male workers out of the total rural male working in the rural non-farm sector in Different Modes of Employment by Current Weekly Status	43
2.13	: Percentage of Total Rural Persons out of the total employment in the rural non-farm sector in Different Modes of Employment by Current Daily Status	44
2.14	Percentage of Total Rural Male out of the total male employment in the rural non-farm sector in Different Modes of Employment by Current Daily Status	45
2.15	Percentage of Total Rural Female out of the total female employment in the rural non-farm sector in Different Modes of Employment by Current Daily Status	46
2.16	Percentage distribution of workers in Different sub-sectors of Non-farm Sector in West Bengal (Usual Status)	47
3.1	Region-wise proportion of different Social Groups in total population	55
3.2	Percentage Distribution of Social Groups (Total Workers) in Different Modes of Employment by Usual Status	58
4.1	Result of Probit Model for the year 2004-05 (61st Round)	73
4.2	Result of Probit Model for the year 2009-10 (66th Round)	75

List of Figures

2.1	Percentage of Total Rural Persons (Male + Female) working in the Rural Non-Farm Sector of Different States	23
2.2	Percentage of Total Rural Male engaged in the Rural Non-Farm Sector of Different States	25
2.3	Percentage of Total Rural Female working in the Rural Non-Farm Sector of Different States	27
2.4	Percentage of Total Rural Persons (Male + Female) working in Different Sub Sectors of Rural Non-Farm Sector of West Bengal . . .	33
2.5	Percentage of Total Rural Male Engaged in Different Sub Sectors of Rural Non-Farm Sector of West Bengal	34
2.6	Percentage of Total Rural Female Engaged in Different Sub Sectors of Rural Non-Farm Sector of West Bengal	36

Chapter 1

Introduction

1.1 Background of the Study

Indian agriculture was earlier considered as the most important employment generating sector and contributed around 59% of GDP at factor cost in 1951-52. Green Revolution in mid 1960's led to the substantial increase in the agricultural output in India and the agricultural sector showed a growth a growth of above 4% during the time period from 1980-81 to 1993-94. But during 1993-94 to 1999-00, this growth rate gradually decreases to around 3%. Again a Planning Commission report (2007) claims that the agricultural growth rate declined to around 2% in 1997-98 to 2001-02 and further to 1.8% during the years 2002-03 to 2006-07 (Kashyap, Mehta; 2007). This fall in the growth rate is supported by the decline in the share of agricultural income in the national income which was around 46% in 1971 and decreased to 20% by 2004-05. Again this decline is accompanied by the fall in the labour force in agriculture. There was a decrease in the labour force in agriculture from 86% in 1972-73 to 76% in 1999-00 (Kashyap, Mehta; 2007). Moreover, the increasing population and sizeable increase in labour force on one hand and increasing fragmentation of land holdings on the other resulted in the decrease in the availability of per household cultivable landholdings. During the time period from 1960-61 to 2002-03 the share of marginal holding increased to 70% which was only 39% earlier implying that there had been a 22% rise in its

share. (Kashyap. Mehta; 2007). In such a situation agricultural sector fails to create sufficient employment opportunities to the increasing rural labour force. The period from 1993-94 to 1999-00 experience a decline in the employment growth of agriculture from 2.2% to 0.2%. After that, there was an employment growth to 1.8% during the period 1999-00 to 2004-05 (Sharad, 2006). This resulted in huge disguised unemployment in the agricultural sector and the level of poverty substantially increased leading to rural-urban migration. But the urban sector fails to create adequate amount of formal jobs for the huge amount of migrants. Hence the migrated labours from the rural sector end up getting informal, semiskilled and poorly paid jobs. This acts as an added factor to the formation of urban slums, poverty and crime (Sharad, 2006). In this scenario the Rural Non Farm Sector developed to save the rural economy from this vicious trap of unemployment and underemployment and reduce the migration.

The rural non-farm sector is said to consist of all sectors in the rural areas other than agriculture which includes mining and quarrying, household and non-household manufacturing, processing, repair, construction, trade and commerce, transport and other services in villages and rural towns. Non-farm income in rural India contributed, approximately, about 34 per cent of the total household income in 1993-94. Non-farm income shares are highest in the states of Himachal Pradesh, the Northeast, West Bengal and Tamil Nadu, where about 45 per cent of the total income come from this sector. On the other hand, the non farm sector of the states like Gujarat, Madhya Pradesh, Andhra Pradesh, Maharashtra and Karnataka accounts only 25 per cent of the total income (Gopinath, 2009). Some have also included the income earned by the rural members from the nearby cities within the country and abroad (Islam, 1997). The sector is hoped to increase rural employment, improve income distribution, alleviate poverty and contribute to the economic growth of the country. But again it was argued that non farm sector will generate employment only if it is labour intensive. But again in some studies it has been argued that though public investment in 1980's fostered the growth of non farm sector, the cut in the same due to the New Economic Policy hampered its growth. Further argument has been given in various studies that equitable distribution of land, education and access to cheaper credit ensures both

the growth of agricultural and the non farm sector (Gopinath, 2009).

1.2 Review of Literature

Numerous studies both worldwide and corresponding to India have been done in the area of rural non-farm sector. Several issues relating to the rural non-farm sector have been addressed in various literatures by various economists. In the next section I have put forward some of these literature addressing the issues.

1.2.1 Rural Non-Farm Sector in the countries other than India

Dennis Anderson and Mark W. Leiserson (1980) characterised the nations depending on the non-farm activities for employment generation and income as the poorest groups of rural population. Nonfarm activities are considered as the source of a range of goods and services to the rural population and the agricultural sector and thus are expected to improve the standard of living of the rural areas. The paper reveals that the percentage of the rural labour force engaged in the non-farm activities varies between 20% and 30% for most of the 15 developing countries. Rural non farm sector in Latin America contributes around 40% of the rural incomes as per the study by *Thomas Reardon, Julio Berdegue and German Escobar (2001)*. The study revealed that in Latin America the non-farm wage incomes exceed that of self employment, local non farm income is also more than the migration incomes and the service sector yields more non farm income than the manufacturing incomes. *Anit Mukherjee and Xiaobo Zhang (2005)* in his paper made a review of the strengths and weaknesses of the rural nonfarm economy in China and India and highlighted the potentials and challenges of growth in the sector. *Atiur Rahman, Taiabur Rahman, and Taifur Rahman (2007)* studied the patterns of rural employment in Bangladesh and had mentioned that a substantial shift in the employment structure had occurred from the agricultural sector to the rural non farm sector since 1980's. Various statistical evidences are used to prove

that this diversification in the rural employment have reshaped the rural labour force. Another paper by *Mahabub Hossain (2004)* using the data available from the national level surveys analysed the change in the structure of the non farm economy and its contribution to the growth and distribution of rural incomes in Bangladesh during 1990s.

1.2.2 Linkages between Farm and Non-farm sector

The strong linkages between the rural non farm sector and the agricultural sector in India, the demand side features of the structure of the rural non-farm industry and the requirements of the government intervention are addressed in a paper by *Vibhooti Shukla (1992)*. It also suggested some policy implications to strengthen the impact of the non agricultural sector on rural development. In another paper *Brajesh Jha (2006)* with the help of CDS (current daily status) claimed that towards the end of the 1990s, the incidence of unemployment has exceeded 7%. A combination of farm and non-farm income at the household level in rural areas provides resilience against adverse situations in either of the sector. From the average wages and the working conditions obtain in the non-farm sector it is evident that the productivity and profitability in the non-farm sector is generally higher than in the farm sector. *Anit Nath Mukherjee (2002)* considering 14 states of India for the period 1973 to 1993 has analysed the role of inter-linkages between Total Factor Productivity in agriculture and nonfarm employment for rural development in India and has shown that these states have successfully exploited the inter-linkages attaining higher levels of rural development. Some authors have studied the consequences of the presence of non farm sector in different states of India separately apart from the studies of the overall India. Few of these are given below in this paper. This farm- nonfarm linkage has also been addressed by *Sharad Ranjan (2006)* where he has mentioned that industrialization leads to the modernization of agriculture and hence help in the increase in the productivity of agriculture.

1.2.3 Determinants of Rural Non-Farm Employment

The rural non-farm sector has been primarily developed with a view to solve the unemployment problem and alleviate poverty. But there are various other factors that influence rural people to move towards the rural non-farm sector. Several studies have been done in this field to study the factors that affect the shift to the rural non-farm sector. *Ann Gordon and Catherine Craig (2001)* examined the determinants and importance of the access to the non farm sector in Sub Saharan Africa. There are certain hindrances to the poor people to enter the non agricultural sector. The paper discusses the role of these barriers which includes education, social capital, infrastructure, natural resources etc. in relation to the non farm sector of the region. The author concluded that it is the interaction among the above factors that facilitate the participation of the rural labour force in the non farm sector. *Sharad Ranjan (2008)* has surveyed the two villages of Uttar Pradesh in order to investigate the factors that back the shift of the rural persons to the non-farm sector. The same author's paper in the year 2006 gives a detailed analysis of the determinants of the rural non-farm employment and the main causes of diversification from the agricultural sector to the rural non-farm sector. A paper by *Anjani Kumar (2009)* deals with the contributions of several socio-economic factors affecting rural employment diversification towards non-farm sector within agriculture in the eastern states of India. *Prasada Rao Mecharla (2002)* considered two villages of Andhra Pradesh in order to identify the factors that influence the shift of the rural workers towards the rural non-farm sector. He also tried to find out whether there is any difference in the factors in the two villages that drive the rural people to the rural non-farm sector in the state. The reasons for the diversification of the economic activity and participation in the non agricultural sector by each member of the households in rural Gujarat was studied by *Jeemol Unni (1996)* in her paper with the help of the multinomial logit model. *Vibhooti Shukla (1991)* formulated a multiple regression model to show the functional linkages between the agriculture and the urban activities in different districts of Maharashtra. It takes into account the determinants of the levels and changes in the overall rural non farm sector in the state.

1.2.4 Case Studies of West Bengal

The reviews of various studies help us to conclude that the emergence of the non farm sector has impact in various parts of the world as well as in India. This paper is concerned about the effect of the rural non farm sector in the state of West Bengal since it is mainly an agro-based state and faced huge unemployment and underemployment problems. *S.K.Bhaumik* concentrated on the unemployment situation in West Bengal during the 10th plan and advised some policy implications to solve the unemployment puzzle. In the year 2007, after collecting data from twelve villages of West Bengal wanted to study the determinants of the occupational diversification by the rural workers. His study also included the survey of the annual earnings per worker in the farm and non-farm sectors.

Census of 2001 estimated the population of West Bengal as 802.21 lakhs out of which around 72% lives in rural areas whereas the rest 28% stays in urban areas. About 19% of total workforce is engaged in the agricultural sector as cultivators whereas agricultural labourers constituted 25%. West Bengal though mainly based on agriculture, not much cultivable land is left for further agricultural purpose. It was hoped that with the development of the infrastructure the agricultural growth will be promoted which in turn will lead to the growth of the rural non farm sector since there is a strong linkage between the two sectors. The state experienced a shift in the growth from the primary sector to the tertiary sector. But though this structural change was sharp in terms of the state domestic product, the shift of workforce away from agriculture to the non agriculture sector was slow. The number of unemployed increased sharply from 1993-94 to 1999-00 which was mainly due to the increase in the rural unemployment. (Bhaumik, 2002). The worker population ratio (WPR) in rural West Bengal has been almost stagnant during 1971 and 2001. The WPR for rural males declined from 48.48% to 46% over the given years though there was a slight increase in 1991 to 51%. On the other hand, from 1971 to 2001 the WPR for rural females in West Bengal witnessed a steady increase from 4.58% to 8.87%. But the share of workforce participating in agriculture decreased over the years from 61.37% to 43.94% and that of the non agricultural sector increased from 36.63% to 56.06% over the span of 30 years.

Gradually with the stagnation of the agricultural sector the workforce engaged in the rural non agricultural services increased. Again among the rural non agricultural sector, the major one is the tertiary sector where the increase in workforce for the years 1971-91 was around 4.19 percentage points followed by the secondary sector with an increase in the same by 4.07 percentage points. The employment in the rural non agricultural sector, for both male and female increased with more distinct and sharp increase in case of females. Now, the shift of the labour force from the agricultural sector to the rural non agricultural sector depends broadly on two factors: push and pull factor. The developmental factors like agricultural modernization and commercialization, urbanization, literacy have tried to pull the labour force out of the agricultural sector whereas the distress factors like poverty, unemployment-underemployment have pushed the rural labour force to move to the rural non farm sector and the urban sector. This diversification due to the distress factors is also mentioned as the residual sector hypothesis. (Vaidyanathan,1986; Bhalla 1989;). It is coined as the residual sector hypothesis because of the fact that the non agricultural sector acts as a sponge for the excess labour of the agricultural sector. Studying the characteristics of the rural non farm sector of West Bengal it has been found that the consumption linkages is stronger than the production linkages since the development of the agricultural sector led to the demand induced growth in the rural non agricultural sector. But studies also revealed that this growth is to be accompanied by factors like infrastructural facilities, urbanization and educational facilities. It has been found that apart from the distress factors that push the workers out of the agricultural sector the factors like high education, availability of higher wage compared to the agricultural sector pull the rural workers to the rural non farm sector in West Bengal. Given this scenario of rural employment of West Bengal we tend to set the following objectives of this paper.

1.3 Objectives

- To study the pattern of occupational diversification in the rural sector of West Bengal at the region level.

- To analyze the influence of the per capita land availability, agricultural development, literacy, etc on the rural non-farm sector employment.
- To analyze the individual, household and the structural determinants of the development of the non-farm sector.

1.4 Research Questions

- How is the rural non-farm diversification in West Bengal different from other states in India?
- Is the diversification in West Bengal a result of push or the pull factor?
- What are the characteristics of the workers employed in the rural non-farm sector in West Bengal?

1.5 Data and Methodology

1.5.1 Data Source

One of the major and reliable sources of the employment/unemployment data available for the study is the National Sample Survey (NSS) Data. The paper aims to address the above objectives using two rounds of NSS data – 61st round conducted in the year 2004 -05 and 66th round conducted in 2009-10. Initially NSS used to conduct annual employment surveys which had certain drawbacks depicting the actual picture of employment/unemployment of a particular region. To overcome these drawbacks, Expert Committee on Unemployment Estimates, headed by Prof. M.L Dantwala and set up by the planning commission in 1968, recommended the National Sample Survey Organization (NSSO) to conduct a five yearly employment surveys i.e quinquennial surveys at both state and central level. The first quinquennial survey was conducted during the period September 1972 – October 1973 which corresponds to the 27th round of NSS. After that

eight such surveys have been done by NSS. This paper is based on the information provided by the 61st and 66th rounds of NSS data which are the two very recent quinquennial data available. Here, in order to answer the above questions, both the data provided in the NSS reports and the unit level data are used.

1.5.2 Methodology

In NSS report the data is provided in proportion format, hence absolute figures are not available. Chapter 2 focuses on West Bengal's position among the 15 major states in terms of rural non-farm employment as well as on the different modes of employment in the rural non-farm sector of the state. In order to judge the position of non-farm sector employment of West Bengal in comparison to the major 15 states of India I have used NSS report data for both the years. The employment generating sector in the rural areas that are mentioned by the NSS are agriculture; mining and quarrying; manufacturing; electricity, gas and water supply; construction; trade and hostel; transport; finance and intermediation business; public administration, education and communication. The rural non-farm sector constitutes of any sector in the rural areas other than agriculture. Hence mining and quarrying; manufacturing; electricity, gas and water supply; construction; trade and hostel; transport; finance and intermediation business; public administration, education and communication form the rural non-farm sector. The proportions of people employed in each of these sectors are provided by the NSS reports for different states which have been used in this paper in order to understand where exactly West Bengal stands in terms of rural non-farm employment. In the same chapter I have look into the different modes of employment within the rural non-farm sector of West Bengal. For this unit level data has been used as the reports information does not suffice the purpose.

Chapter 3 is based on the employment diversification among the different social groups in West Bengal. The chapter aims to see the opportunity of the different social groups in the field of job in the rural non-farm sector of West Bengal. Sectoral distribution of the workforce within the rural non-farm sector of West Bengal has also been focused in this paper. The caste based analysis includes

which caste have better access and opportunity in the rural non-farm sector of the state; whether caste discrimination prevails in the state or not etc. To understand whether a particular rural person is engaged in the farm or non-farm sector, National Industrial Classification (NIC) codes are used. In NSS 61st round data NIC code 1998 has been used whereas in the 66th round NSS data NIC code 2004 is used. In general to compare both the years NIC codes concordance is to be done. But in this paper I have restricted my work upto 2 digit code of NIC. The two digit NIC codes of 1998 and 2004 are same and hence we do not need to perform the concordance method. Since the two digit NIC codes for both the years are same these two are easily comparable. The two digit NIC codes from 10 to 99 represent the rural non-farm sector. This has been used in order to find out the employment scenario in the rural West Bengal.

In this paper, apart from concentrating on West Bengal as a whole, I have done a region-wise analysis within west Bengal. 61st round NSS data has divided West Bengal into four NSS regions and that of 66th round has divided into five regions. The four regions in 61st round includes following districts:

HimalayanRegion - Darjeeling, Jalpaiguri, Koch Bihar

EasternRegion - Uttar Dinajpur, Dakshin Dinajpur, Maldah, Murshidabad, Birbhum, Nadia

CentralRegion - Bardhaman, North 24 Parganas, Hugli, Howrah, Kolkata, South 24 Parganas

WesternRegion - Bankura, Puruliya, Medinipur

The five regions in 66th round NSS data includes following districts:

HimalayanRegion - Darjeeling, Jalpaiguri, Koch Bihar

EasternRegion - Uttar Dinajpur, Dakshin Dinajpur, Maldah, Murshidabad, Birbhum, Nadia

SouthernPlains - North 24 Parganas, Kolkata, South 24 Parganas

CentralPlains - Bardhaman, Hugli, Howrah

WesternPlains - Bankura, Puruliya, Purba Medinipur, Paschim Medinipur.

For comparability of the two rounds we need to have same number of NSS regions in both the data set. It is always better to convert five regions to four than to perform the exercise other way round. So here we have basically consolidated the Southern and Central Regions as mentioned in the 66th round into the same way as given in 61st round.

Chapter 2

Position and Pattern of Rural Non-Farm Employment in West Bengal

The stagnation of the agricultural sector all over India leads to the creation of a substantial amount of unemployment and underemployment in the rural areas. The expansion of the rural non-farm sector opened up employment opportunities for the rural people in the rural areas of the country. The increased proportion of employment in the rural non-farm sector reveals the growing importance of the sector in Indian economy. From 1972-73 onwards the incidence of rural non-farm employment increased from 14.3% to 21.7% in 1987-88 and remained at the same level till 1993-94. Further increase to 23.8% in 1999 -2000 and to around 27.4% in 2004-05 was witnessed in the sector (Bhaumik, 2007). Moreover, the study of the same author has disclosed that the rural males are much more benefitted as compared to the rural females in case of the employment in the rural non-farm sector of India.

This paper mainly concentrated on the rural non-farm sector and its employment prospect in West Bengal. There are various literature that have dealt with the detailed discussion of the employment in this sector. One paper by the S.K. Bhaumik

(2007)¹ has detailed analysis of the incidence of the rural non-farm employment in 15 major states of India.

2.1 Incidence of Non-Farm Employment in West Bengal

Many economists have concentrated on the employment pattern and the position of different states of India in respect of rural non-farm employment. The paper by Bhaumik (2007), mentioned above, have studied the incidence of rural non-farm sector employment in² 15 major states of India for the 1993-94 and 2004-05. According to Bhaumik the incidence of rural non-farm employment has been divided into three categories: Firstly, states with high incidence of rural non-farm employment – incidence of non-farm employment exceeding 30%; Secondly states with medium incidence of rural non-farm employment – incidence of non-farm employment ranging between 20.1% and 30%; Thirdly, states with low incidence of rural non-farm employment – incidence of non-farm employment less than or equal to 20%.

Based on this categorization, Bhaumik in his paper (2007) has ranked 15 states according to their proportion of employment in the rural non-farm sector. The author, in his paper has calculated the percentage of rural non-farm employment on the basis of $(US - PS + SS)$ ³ where US, PS and SS are Usual Status, Principal Status and Subsidiary Status respectively. Following this concept, it is found that for the total rural workers (male and female), in the year 2004-05 the states like Kerala, West Bengal, Haryana, Tamil Nadu, Punjab, Orissa belong to the category high incidence of rural non-farm employment. Under the category of medium incidence of rural non-farm employment comes the states like Uttar Pradesh, Andhra Pradesh, Rajasthan, Assam, Bihar, Gujarat, and Maharashtra whereas Karnataka

¹S. K. Bhaumik. "Growth and Composition of the Rural Non-Farm Employment in India in the Era of Economic Reforms", *Indian Economic Journal*, Vol. 55(3) Oct-Dec 2007

²Incidence of rural non-farm employment - percentage of rural non-farm workers to total rural workers (Bhaumik, S.K., 2007)

³According to the NSSO definition, $US - PS + SS$ workers includes those persons who worked during the year either on enduring or in a subsidiary basis.

and Madhya Pradesh belong to the class of low incidence. In case of rural males, 11 out of 15 states belong to the class of high incidence of rural non-farm employment for the year 2004-05 which are Kerala, Haryana, Punjab, Tamil Nadu, Rajasthan, West Bengal, Orissa, Uttar Pradesh, Andhra Pradesh, Gujarat and Assam. The remaining four states fall under category of medium incidence and no state has an employment incidence less than 20%. On the other hand, in 1999-00, West Bengal occupied the first position in respect of rural female employment in the rural non-farm sector. But in the year 2004-05, the incidence of female non-farm employment is highest in Kerala (48.3%). In this year only two states, Kerala and West Bengal had high incidence of the female employment in the sector whereas the three other states Tamil Nadu, Orissa and Andhra Pradesh have medium incidence of rural female employment and lowest was found in Maharashtra (9.4%).

Apart from concentrating on the incidence, Bhaumik (2007) had also studied the annual growth rate of the rural non-farm employment. For the period 1993-94 to 2004-05 the annual growth rate of the total rural persons working in rural non-farm employment has been 3.81% in comparison of 3.05% in the period 1983-84 to 1993-94. The annual growth rate at the all-India level for the male employed in the rural non-farm sector during the period from 1993-94 to 2004-05 has been around 3.91% highest being in Orissa with 6.11% whereas for the rural female workers at all-India level the annual growth rate was 3.45%. (Bhaumik, 2007)⁴ .

2.2 Ranking of the 15 Major States on the Basis of Non-Farm Employment

This section of the paper concentrates on the rank of West Bengal among other 15 states of India in respect of the rural non-farm employment. The ranking is done by considering employment of the total rural persons (male + female), rural male as well as female. Here I have considered the NSS data for the year 2004-05

⁴S. K. Bhaumik. "Growth and Composition of the Rural Non-Farm Employment in India in the Era of Economic Reforms", *Indian Economic Journal*, Vol. 55(3) Oct-Dec 2007

(61st round) and 2009-10 (66th round). NSS estimates employment on the basis of three different approaches:

Usual Status Approach – It has a reference period of 365 days. This approach again has two sub-groups: usual principal status considers those persons who spends a relatively longer period of the reference period of 365 days prior to the date of survey as worker and usual subsidiary status considers the persons who are actually ‘non-worker’ according to the principal status but performs some gainful activity in the subsidiary activity.

Current Weekly Status – Here the reference period is of 7 days preceding the date of survey.

Current Daily Status – The reference period here is each of the 7 days preceding the date of survey. It is expressed in terms of number of person-days whereas the usual status is expressed in terms of number of persons.

Here I have considered the usual status approach in order to find out the position of West Bengal in respect of the rural non-farm employment.

Let us first consider the total rural persons (male + female) working in the rural non-farm employment in 15 states considered. In both the years it is found that Kerala occupied the first position and West Bengal is in the second position. For the year 2004-05 i.e. in the 61st round West Bengal is followed by Haryana, Tamil Nadu, Punjab, Orissa, Andhra Pradesh, Uttar Pradesh, Rajasthan, Assam, Gujarat, Bihar, Maharashtra, Karnataka and Madhya Pradesh. The trend becomes different in the year 2009-10 though Kerala, West Bengal and Haryana maintained their ranks. The fourth position was occupied by Punjab followed by Rajasthan, Tamil Nadu, Uttar Pradesh, Bihar, Orissa, Andhra Pradesh, Assam, Karnataka, Gujarat, Maharashtra and Madhya Pradesh. Not only in both the years Kerala and West Bengal occupied the same positions, their percentage of total rural persons employed in the non-farm sector increased by a substantial amount. For Kerala, the percentage of total rural persons employed in the rural non-farm sector increased from 58% to 64.3% and that for West Bengal the increase is from 37.2%

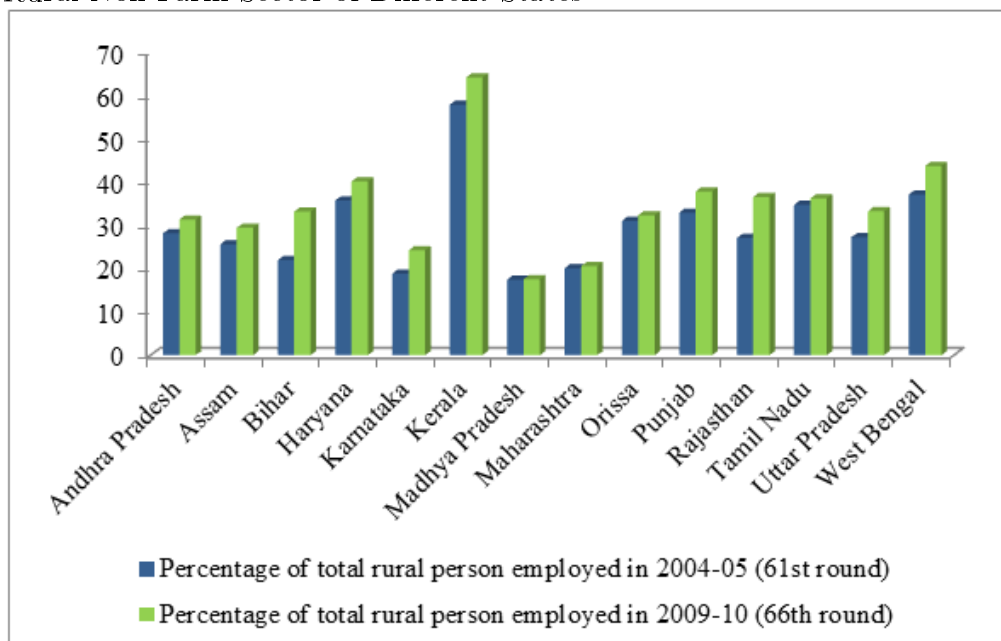
to 43.8%. Again Madhya Pradesh remained in the last position in both the years with almost no change in the percentage of rural persons employed in the sector.

Table 2.1: Ranking of the States on the basis of the Total Rural Persons (Male + Female) Employed in the Rural Non-Farm Sector

States	Percentage of total rural person employed in 2004-05 (61st round)	States	Percentage of total rural person employed in 2009-10 (66th round)
Kerala	58	Kerala	64.3
West Bengal	37.2	West Bengal	43.8
Haryana	35.8	Haryana	40.2
Tamil Nadu	34.8	Punjab	37.9
Punjab	33	Rajasthan	36.6
Orissa	31.1	Tamil Nadu	36.3
Andhra Pradesh	28.2	Uttar Pradesh	33.3
Uttar Pradesh	27.3	Bihar	33.2
Rajasthan	27.1	Orissa	32.4
Assam	25.7	Andhra Pradesh	31.4
Gujarat	22.8	Assam	29.5
Bihar	22	Karnataka	24.3
Maharashtra	20.1	Gujarat	21.8
Karnataka	18.9	Maharashtra	20.6
Madhya Pradesh	17.5	Madhya Pradesh	17.6

Data Source: NSS Reports 61st and 66th rounds

Figure 2.1: Percentage of Total Rural Persons (Male + Female) working in the Rural Non-Farm Sector of Different States



Data Source: NSS Reports – 61st and 66th Rounds

The above graph depicts a clear picture of the percentage of the total rural persons (Male + Female) engaged in the rural non-farm employment in different states. It is seen that in almost all the states the percentage of the total rural persons employed in the year 2009-10 is more than that in the year 2004-05. The increase is more prominent in the states like Kerala, West Bengal, Rajasthan, Uttar Pradesh, Bihar, Karnataka. There is very slight change in the percentage of the total rural persons working in the rural non-farm sector of Maharashtra and in Madhya Pradesh. The percentage of the total rural persons employed in the sector almost remains unchanged.

Kerala is in the top position in both the years when rural male employment is concerned in rural non-farm sector with 62.9% of them being employed in 2004-05 which increased to 67.4% in the year 2009-10. But in this case, West Bengal ranks 7th among the 15 states with 36.2% male employment in the year 2004-05, increasing to 40.7% in the year 2009-10. This means that though the position of West Bengal is good in case of total rural persons' employment in the sector, it is not that promising in case of rural male. In 2004-05 i.e. in the 61st round, Haryana lies in the second position followed by Punjab, Tamil Nadu, and Rajasthan. Orissa

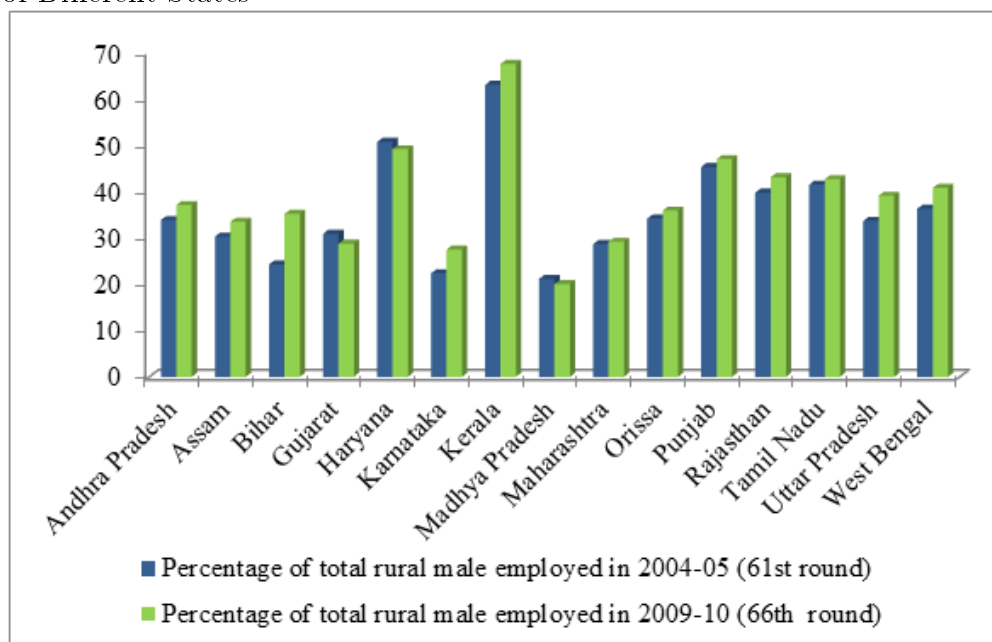
occupies the 8th position after West Bengal followed by Andhra Pradesh, Uttar Pradesh, Gujarat, Assam, Maharashtra, Bihar, Karnataka and Madhya Pradesh. In the year 2009-10, the second position is occupied by Haryana followed by Punjab, Rajasthan and Tamil Nadu. After West Bengal, in the year 2009-10, lies the states like Uttar Pradesh, Andhra Pradesh, Orissa, Bihar, Assam, Maharashtra, Gujarat, Karnataka and Madhya Pradesh. Here also Madhya Pradesh has the lowest percentage of rural male employment whose proportion of employment decreased from 21.1% in 61st round to 20% in 66th round.

Table 2.2: Ranking of the states on the basis of the Total Rural Male Employed in the Rural Non-Farm Sector

States	Percentage of total rural male employed in 2004-05 (61st round)	States	Percentage of total rural male employed in 2009-10 (66th round)
Kerala	62.9	Kerala	67.4
Haryana	50.6	Haryana	49
Punjab	45.2	Punjab	46.9
Tamil Nadu	41.4	Rajasthan	43
Rajasthan	39.7	Tamil Nadu	42.6
West Bengal	36.2	West Bengal	40.7
Orissa	34.1	Uttar Pradesh	39
Andhra Pradesh	33.8	Andhra Pradesh	37
Uttar Pradesh	33.6	Orissa	35.8
Gujarat	30.8	Bihar	35.1
Assam	30.2	Assam	33.4
Maharashtra	28.6	Maharashtra	29.1
Bihar	24.2	Gujarat	28.7
Karnataka	22.3	Karnataka	27.4
Madhya Pradesh	21.1	Madhya Pradesh	20

Data Source: NSS Reports 61st and 66th rounds

Figure 2.2: Percentage of Total Rural Male engaged in the Rural Non-Farm Sector of Different States



Data Source: NSS Reports – 61st and 66th Rounds

The graph shows that the rural male employment in the states like Gujarat, Haryana and Madhya Pradesh has declined in the later year. For all the other states the employment has increased but the increase is prominent in Bihar, Karnataka, Uttar Pradesh and West Bengal. The growth in the rural male employment in Maharashtra and Orissa is not that impressive.

For the rural females the opening in the non-farm sector is not that much easy as that for their counterpart in the rural region and the proportion of rural female employed in the sector is generally less than that of the rural male. Kerala and West Bengal occupied the first and the second position respectively with 48.3 % and 41.3% of the rural female working in the sector. The trend slightly got reverse in the year 2009-10, when the female non-farm sector employment in rural West Bengal increased by a substantial percentage from 41.3% to 57.7% and captures the top position among all the other states. Kerala has 57.4% of the female working in the non-farm sector which is slightly less than that in West Bengal. But all the other states have much lower percentage of female working in the non-farm sector. Only Kerala and West Bengal has above 40% female employment in the rural non-farm sector.

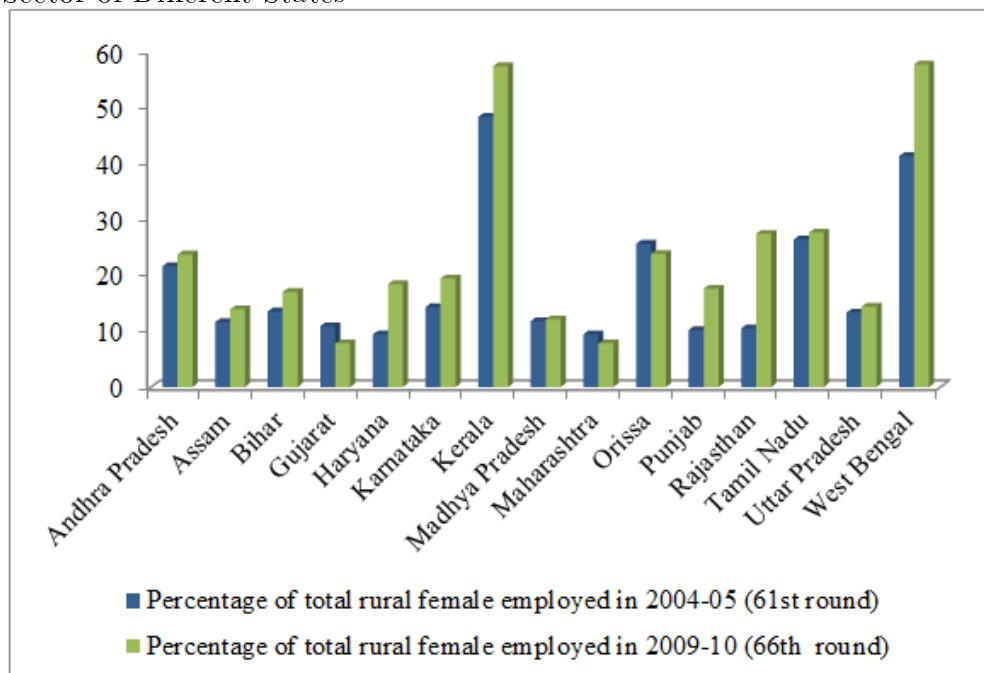
Most of the other states in India have female employment in the rural non-farm sector ranging from 20% to 30%. In the year 2004-05, the third rank has been held by Tamil Nadu with 26.4% of the rural non-farm female employment. This was followed by Orissa, Andhra Pradesh, Karnataka, Uttar Pradesh, Madhya Pradesh, Assam, Gujarat, Rajasthan, Punjab, Haryana, Maharashtra. The trend differs in the year 2009-10. Rajasthan, whose female non-farm employment was only 10% in 2004-05 improved to around 27.4% in the year 2009-10 holding the fourth position. This is followed by the states Orissa, Andhra Pradesh, Karnataka, Haryana, Punjab, Bihar, Uttar Pradesh, Assam, Madhya Pradesh, Gujarat and Maharashtra.

Table 2.3: Ranking of the States on the basis of the Total Rural Females Employed in the Rural Non-Farm Sector

States	Percentage of total rural female employed in 2004-05 (61st round)	States	Percentage of total rural female employed in 2009-10 (66th round)
Kerala	48.3	West Bengal	57.7
West Bengal	41.3	Kerala	57.4
Tamil Nadu	26.4	Tamil Nadu	27.6
Orissa	25.6	Rajasthan	27.4
Andhra Pradesh	21.6	Orissa	23.8
Karnataka	14.3	Andhra Pradesh	23.7
Bihar	13.5	Karnataka	19.4
Uttar Pradesh	13.3	Haryana	18.4
Madhya Pradesh	11.8	Punjab	17.6
Assam	11.6	Bihar	17
Gujarat	10.9	Uttar Pradesh	14.4
Rajasthan	10.5	Assam	13.9
Punjab	10.2	Madhya	12.1
Haryana	9.4	Gujarat	7.8
Maharashtra	9.4	Maharashtra	7.8

Data Source: NSS Reports 61st and 66th rounds

Figure 2.3: Percentage of Total Rural Female working in the Rural Non-Farm Sector of Different States



Data Source: NSS Reports – 61st and 66th Rounds

In majority of the states the proportion of female employment have shown an increase in the year 2009-10 as compared to that in 2004-05. In contrast to this the state like Gujarat, Orissa and Maharashtra have experienced fall in the female employment in rural non-farm sector. The change in the female employment in Madhya Pradesh is almost negligible this case also. But the prominent increase is easily visible in case of West Bengal, Kerala, Rajasthan and as well as to some extent in Andhra Pradesh.

2.3 Diversification within the Rural Non-Farm Sector

The rural non-farm employment as defined in Chapter 1 consists of any occupation that exists in the rural areas other than agriculture. 61st round NSS data has classified rural non-farm sector into subsectors consisting of mining and quarrying; manufacturing; electricity water supply and gas; construction; trade, hotel

and restaurants; transport, storage and communication; financial intermediation and business activity; public administration, education and other community etc. But in NSS 66 round the rural non-farm sector has been more broadly classified into several other sub sectors. According to this round the rural non-farm sector consists of the following sub sectors: mining and quarrying; manufacturing; electricity, gas and water supply; construction; wholesale, retail trade; hotels and restaurants; transport, storage and communication; financial intermediation; real estate, renting and business activity; public administration and defence, compulsory social activity; education; health and social work; other community, social and personal service activities; activities of private households as employers and undifferentiated production activities of private households; extraterritorial organizations and bodies. To make the two rounds information comparable, we have considered the classification of the rural non-farm sector as done in the 61st round. In the 61st round the sector financial intermediation and business activities includes the sectors financial intermediation, real estate, renting and business activity and hence we add the information of these sectors in 66th round to make it compatible with the previous round. Again the public administration education and other community in 61st round is equivalent to the total of the subsectors - public administration and defence, compulsory social activity; education; health and social work; other community, social and personal service activities; activities of private households as employers and undifferentiated production activities of private households; extraterritorial organizations and bodies. Thus the classification we have followed here is the one given in the 61st round NSS data.

This section has a detailed analysis of the employment condition in different subsectors of the rural non-farm sector. It has been found that in case of rural males in the year 2004-05, wholesale retail trade sector is the highest employment generating sector followed by manufacturing, construction, services transport, storage. On the other hand, the rural female has more than 50% of the employment in the manufacturing sector. Other sectors which have a major role in absorbing the rural female are services, trade and construction (Bhaumik, 2007). At the all India level, in 2004-05, manufacturing sector has the highest percentage of rural non-farm employment with an employment percentage of 8.1%. This sector is followed

by wholesale, retail trade, hotels and restaurants sector which employs around 6.1% of the total rural employment. Construction sector hold the third position with an employment of 4.9% of the rural person. Electricity, water supply and gas sector employs the lowest percentage of the rural people (around 0.2%). But this picture of employment of the total rural person in the rural non-farm sector slightly differs in the year 2009-10. During this year construction employing 9.4% of the total rural employment occupies the first position. At the all India level it is found that in the year 2009-10, the manufacturing sector hold the second position in employing the rural person generating employment for 7.2% of the total rural persons. Though the employment percentage in the wholesale, retail trade and hotels sector increased to 6.4%, its position become third in this year. Other sectors together account for the rest of the total rural employment in India. Electricity, gas and water supply sector, in this year also generates the lowest rural employment. The tables below depict the picture of the rural non-farm employment in 15 major states of India. The employment proportion here considered is on the basis of the usual status (usual principal status + usual subsidiary status).

Table 2.4: Percentage Distribution of Rural Non-Farm Employment in Different Sectors – Total Rural Persons (Usual Status)

States	year	Mining & quarrying	Manufacturing	Electricity, Water supply	Cons.	Whole sale, Retail Trade, hotel	Transport, etc	Fin. Inter	Pub. adm
Andhra Pradesh	2004-05	1.5	7.8	0.2	5.1	8	4.6	0.7	5.9
	2009-10	1	7.7	0.3	8.6	8.4	5.3	0.8	4.9
Assam	2004-05	0.3	2.9	0.2	3	11.6	3.2	0.2	8.8
	2009-10	0.4	3.7	0.1	4.1	11.2	3.3	0.5	10.1
Bihar	2004-05	0.1	5	0.1	3.2	8.7	2.8	0.3	4
	2009-10	0	4.8	0.1	11.7	8.7	4	0.7	5.1
Gujarat	2004-05	0.6	10.1	0.2	3.7	6.9	4.5	0.5	4.3
	2009-10	0.4	7.8	0.1	5.4	5.5	5.3	0.4	3.8
Haryana	2004-05	0.2	11.8	0.8	12.6	11.1	6.2	1.2	6.7
	2009-10	0	10.9	0.7	14.4	8.6	5.8	1.6	7
Himachal Pradesh	2004-05	0.2	7.2	2.6	18.3	7.7	5.8	0.8	7.9
	2009-10	0	5.5	3	24.6	8.3	5.6	1.5	9.4
Karnataka	2004-05	0.5	5.3	0.1	3.1	5.9	3.3	0.4	3.7
	2009-10	1.1	5.4	0.1	5.6	7.5	3.3	0.9	3.5
Kerala	2004-05	1.9	10.1	0.3	15.1	15.6	9.9	2.9	7.1
	2009-10	1.4	8.7	0.3	19.2	15.8	10	4	8
Madhya Pradesh	2004-05	0.7	4.5	0.2	4.6	5.3	1.2	0.4	4.2
	2009-10	2	2.7	0	7.4	4	0.9	0.3	2.7
Maharashtra	2004-05	0.4	7.6	0.2	4.2	6.6	4	0.8	4.8
	2009-10	0.5	6.3	0.3	5.6	6.9	3.8	0.9	4.8
Orissa	2004-05	0.8	8.5	0.2	6.7	9.1	3	0.7	5.1
	2009-10	1.1	6.2	0.2	11	8	4	0.4	4.9
Punjab	2004-05	0.1	9.4	1.1	13.5	9.3	5.2	1.1	5.5
	2009-10	0.3	8.9	0.7	18.1	7.6	5.3	0.8	5.2
Rajasthan	2004-05	1.9	7.5	0.3	14.1	6.5	3.6	0.5	5.3
	2009-10	2.3	4.8	0.6	18.8	7.4	4.1	0.5	4.5
Tamil Nadu	2004-05	0.5	13.5	0.2	8.6	8	4.7	1.2	4.7
	2009-10	0.4	10.9	0.2	11.6	8.2	5.9	1.2	4.2
Uttar Pradesh	2004-05	0.2	9.6	0.1	7.4	8.2	3	0.6	4.5
	2009-10	0.4	7.7	0	15.6	8	3.2	0.4	3.7
West Bengal	2004-05	0.3	8.9	0.1	5	11.4	4.6	1.1	4.8
	2009-10	0.5	12	0	7	10.5	5.2	0.9	4.6
all-India	2004-05	0.6	7.9	0.2	6.8	8.3	3.8	0.7	5.2
	2009-10	0.8	7	0.2	11.3	8.2	4.1	0.7	4.8

Data Source: NSS 61st and 66th Rounds Reports

Table 2.5: Percentage Distribution of Rural Non-Farm Employment in Different Sectors – Total Male Workers (Usual Status)

States	year	Mining & quarrying	Manufacturing	Electricity, Water supply	Cons.	Whole sale, Retail Trade, hotel	Transport, etc	Fin. Inter	Pub. adm
Andhra Pradesh	2004-05	1.5	7.8	0.2	5.1	8	4.6	0.7	5.9
	2009-10	1	7.7	0.3	8.6	8.4	5.3	0.8	4.9
Assam	2004-05	0.3	2.9	0.2	3	11.6	3.2	0.2	8.8
	2009-10	0.4	3.7	0.1	4.1	11.2	3.3	0.5	10.1
Bihar	2004-05	0.1	5	0.1	3.2	8.7	2.8	0.3	4
	2009-10	0	4.8	0.1	11.7	8.7	4	0.7	5.1
Gujarat	2004-05	0.6	10.1	0.2	3.7	6.9	4.5	0.5	4.3
	2009-10	0.4	7.8	0.1	5.4	5.5	5.3	0.4	3.8
Haryana	2004-05	0.2	11.8	0.8	12.6	11.1	6.2	1.2	6.7
	2009-10	0	10.9	0.7	14.4	8.6	5.8	1.6	7
Himachal Pradesh	2004-05	0.2	7.2	2.6	18.3	7.7	5.8	0.8	7.9
	2009-10	0	5.5	3	24.6	8.3	5.6	1.5	9.4
Karnataka	2004-05	0.5	5.3	0.1	3.1	5.9	3.3	0.4	3.7
	2009-10	1.1	5.4	0.1	5.6	7.5	3.3	0.9	3.5
Kerala	2004-05	1.9	10.1	0.3	15.1	15.6	9.9	2.9	7.1
	2009-10	1.4	8.7	0.3	19.2	15.8	10	4	8
Madhya Pradesh	2004-05	0.7	4.5	0.2	4.6	5.3	1.2	0.4	4.2
	2009-10	2	2.7	0	7.4	4	0.9	0.3	2.7
Maharashtra	2004-05	0.4	7.6	0.2	4.2	6.6	4	0.8	4.8
	2009-10	0.5	6.3	0.3	5.6	6.9	3.8	0.9	4.8
Orissa	2004-05	0.8	8.5	0.2	6.7	9.1	3	0.7	5.1
	2009-10	1.1	6.2	0.2	11	8	4	0.4	4.9
Punjab	2004-05	0.1	9.4	1.1	13.5	9.3	5.2	1.1	5.5
	2009-10	0.3	8.9	0.7	18.1	7.6	5.3	0.8	5.2
Rajasthan	2004-05	1.9	7.5	0.3	14.1	6.5	3.6	0.5	5.3
	2009-10	2.3	4.8	0.6	18.8	7.4	4.1	0.5	4.5
Tamil Nadu	2004-05	0.5	13.5	0.2	8.6	8	4.7	1.2	4.7
	2009-10	0.4	10.9	0.2	11.6	8.2	5.9	1.2	4.2
Uttar Pradesh	2004-05	0.2	9.6	0.1	7.4	8.2	3	0.6	4.5
	2009-10	0.4	7.7	0	15.6	8	3.2	0.4	3.7
West Bengal	2004-05	0.3	8.9	0.1	5	11.4	4.6	1.1	4.8
	2009-10	0.5	12	0	7	10.5	5.2	0.9	4.6
all-India	2004-05	0.6	7.9	0.2	6.8	8.3	3.8	0.7	5.2
	2009-10	0.8	7	0.2	11.3	8.2	4.1	0.7	4.8

Data Source: NSS 61st and 66th Rounds Reports

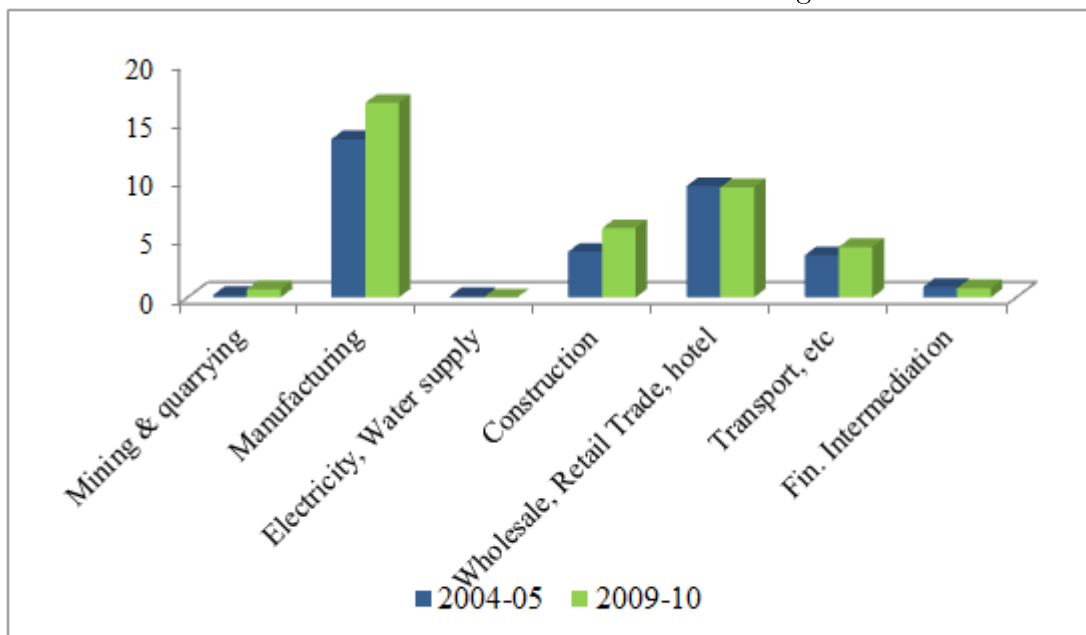
Table 2.6: Percentage Distribution of Rural Non-Farm Employment in Different Sectors – Total Female Workers (Usual Status)

States	year	Mining & quarrying	Manufacturing	Electricity, Water supply	Cons.	Whole sale, Retail Trade, hotel	Transport, etc	Fin. Inter	Pub. adm
Andhra Pradesh	2004-05	0.8	9.7	0	1.1	4.9	0.1	0.1	4.9
	2009-10	0.7	10	0	4	4.4	0.3	0.2	4.1
Assam	2004-05	0	3.7	0	0.8	1.1	0.2	0.1	5.7
	2009-10	0	2.8	0	0.9	2.8	0	0.2	7.2
Bihar	2004-05	0	8.1	0	0	2.6	0	0	2.8
	2009-10	0	8.2	0	0.5	2.1	1	0	5.2
Gujarat	2004-05	0.3	4.4	0	1.9	1.5	0	0	2.8
	2009-10	0	1.7	0	2.4	1	0.5	0	2.2
Haryana	2004-05	0	3.6	0.1	0.5	1.1	0.2	0.1	3.8
	2009-10	0	5.4	0	2.5	2.6	0.1	0	7.8
Himachal Pradesh	2004-05	0	2.4	0.2	0.9	0.7	0.5	0	4.4
	2009-10	0	1.3	0.2	4.3	1	0.1	0.1	6
Karnataka	2004-05	0.3	7.6	0	0.6	2.5	0.2	0	3.1
	2009-10	0.3	6.8	0	2.3	5.3	0.1	0.1	4.5
Kerala	2004-05	0.2	20.9	0.2	1.7	5.2	1.4	1.6	17.1
	2009-10	0.5	18.6	0.5	6.7	6.8	0.7	2.9	20.7
Madhya Pradesh	2004-05	0.7	5.8	0	2	1.8	0	0	1.5
	2009-10	0.3	4.7	0	4.7	0.8	0	0	1.6
Maharashtra	2004-05	0.1	3.1	0	1.3	2.3	0.1	0.1	2.4
	2009-10	0.1	2.1	0	1.2	2.1	0	0	2.3
Orissa	2004-05	0.7	15.7	0	3.4	2.6	0.1	0	3.1
	2009-10	0.2	10.7	0	6.1	2.5	0	0.1	4.2
Punjab	2004-05	0	3.7	0	0.1	1	0.3	0	5.1
	2009-10	0	4	0.1	1	1.4	0	0.2	10.9
Rajasthan	2004-05	0.2	3.6	0	3.8	0.8	0	0	2.1
	2009-10	0.1	1.9	0	22.4	0.9	0.2	0	1.9
Tamil Nadu	2004-05	0	14.6	0	2	4.4	0.4	0.2	4.8
	2009-10	0.1	11.7	0.1	7.7	4	0	0.1	3.9
Uttar Pradesh	2004-05	0.2	7.4	0	0.6	1.8	0.1	0	3.2
	2009-10	0	6.3	0	2	2.6	0.1	0	3.4
West Bengal	2004-05	0.1	28.9	0	0.5	3.4	0.1	0.1	8.2
	2009-10	1.4	37.3	0	1	4.6	0.4	0.5	12.5
all-India	2004-05	0.3	8.4	0	1.5	2.5	0.2	0.1	3.8
	2009-10	0.3	7.5	0	5.2	2.8	0.2	0.2	4.4

Source: NSS 61st and 66th Rounds Reports

Considering the above tables we can get a fair idea about the proportion of employment in different sub-sectors of rural non-farm sector in West Bengal. Since this paper mainly concentrates on the rural non-farm employment in West Bengal, so from the table above we can infer the following information regarding the employment in different sub-sectors of West Bengal.

Figure 2.4: Percentage of Total Rural Persons (Male + Female) working in Different Sub Sectors of Rural Non-Farm Sector of West Bengal



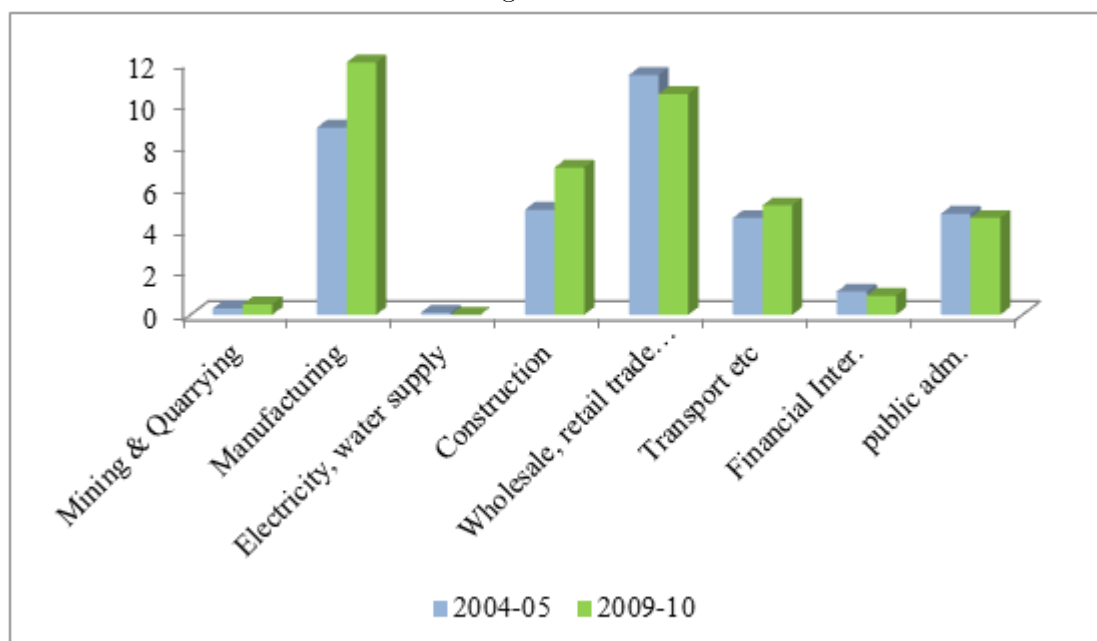
Data Source: NSS Reports 61st and 66th rounds

In rural West Bengal, manufacturing sector is the highest employment generating sector in both years employing 13.5% of the rural person in 2004-05 which increased to 16.6% in 2009-10. Wholesale, retail trade sector occupies the second position in this respect employing almost same percentage of worker in the sector in both the years. The public administration sector absorbs a significant amount of the total rural workers (around 5.5% in the year 2004-05 and 6.1% in 2009-10). The employment in the construction sector increased to 5.9% in 2009-10 from 4.9% in the year 2004-05. The remaining sectors together employ a very small segment of the total rural workers. And it is noteworthy that the employment in the electricity, gas and water supply sector is almost negligible.

The decline in the proportion of the rural male engaged in the agricultural sector at all-India level from 83.2% in 1972-73 to 74.5% in 1987-88 and 71.4% in 1999-00(Chadha, 2001) implies a reason for the distinct diversification in their occupational structure. In case of overall-India, construction is the highest employment generating sector employing around 11% of the rural males in 2009-10, which actually showed a steep increase from 6.8% in the year 2004-05. In 2004-05 the wholesale, retail trade sector has the highest rural male employment which

almost remains same in the later year also. Manufacturing sector remains in the third position in both the years but the proportion of rural male employed in the sector decreased to 7% from 7.9%. Public administration also provides employment to around 5% of the rural male holding the fourth position as the employment generating sector. The remaining sectors together accounts for generating a very low proportion of employment for the rural males. All the other sectors account together to provide employment to a low percentage of the rural males. The lowest employment is in electricity, gas and water supply sector. Coming to the rural non-farm sector of West Bengal and its employment opportunities for the rural males we get somewhat same kind of picture.

Figure 2.5: Percentage of Total Rural Male Engaged in Different Sub Sectors of Rural Non-Farm Sector of West Bengal



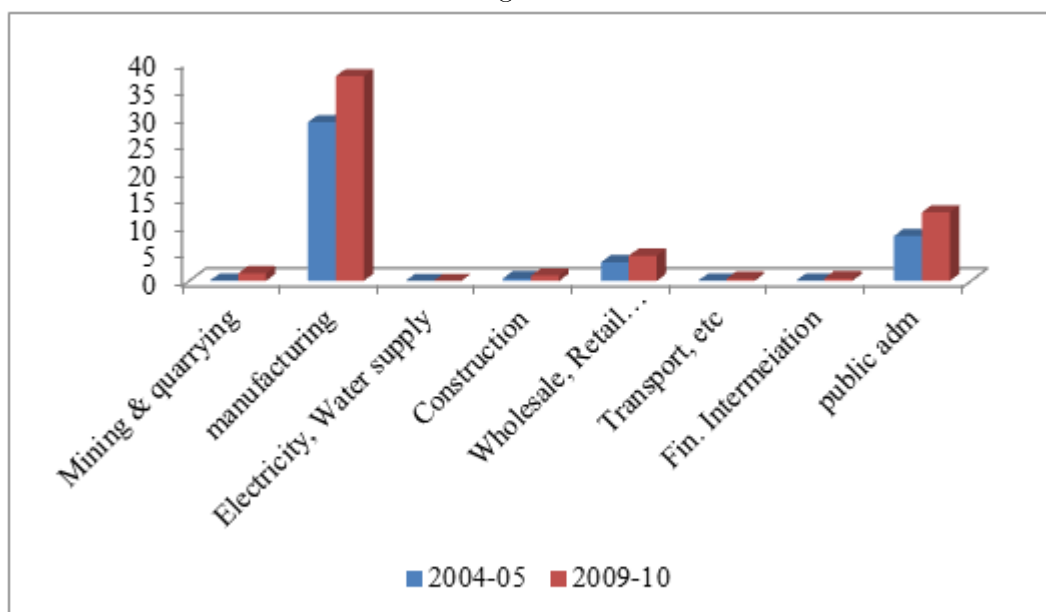
Data Source: NSS Reports 61st and 66th rounds

In rural West Bengal the highest employment of the rural male is found in the manufacturing sector which increased from 8.9% to 12%. Wholesale retail trade and hotel sector provide employment to around 11.4% rural male in 2004 -05 which decreased slightly to 10.5% in 2009-10, still remaining the second highest employment generating sector for rural male in West Bengal. Construction sector ranks third in employing rural male in West Bengal in 2009-10 giving employment opportunities to 7% of the rural male in the state. Transport sector absorbs around

5.2% of the rural male in the year 2009-10 which increased from 4.6% in 2004-05. The rural male employment in the public administration sector remains almost unchanged over the two years concerned. Moreover the rural male employment in the employment mining and quarrying and the electricity sector are almost negligible in both the years but as compared to the electricity sector mining and quarrying absorbs more rural male in the state.

The condition of the rural female in India is not as well as their male counterparts. The opening of the rural female in rural non-farm sector is not that wide as that of the rural male. At the all India level, the employment of the rural female is highest in the manufacturing sector though the proportion decreased from 8.4% in 2004-05 to 7.5% in 2009-10. During 2009-10 construction sector, employing 5.2% of the rural female hold the second position in the rural female employment. There is an increase in the proportion of employment in the sector from 1.5% in 2004-05 to 5.2% in 2009-10. The rural female of India also has a good opening in the public administration part of the rural non-farm sector which employs approximately 4% of them in both the years. Like their male counterparts, the rural female also does not have any employment in the electricity, water supply sector. But, as mentioned earlier, that the employment of the rural female is worth mentioning in West Bengal and hence it has a slightly different picture in case of rural non-farm employment.

Figure 2.6: Percentage of Total Rural Female Engaged in Different Sub Sectors of Rural Non-Farm Sector of West Bengal



Data Source: NSS Reports 61st and 66th rounds

The highest employment generating sector in the rural West Bengal apart from farm sector is manufacturing. This sector absorbs the highest proportion of rural female than any other sub sector of West Bengal. In the year 2009-10, almost 37% of the rural female is engaged in the manufacturing sector which was 28.9% in 2004-05. The next high rural female employment generating sector is the public administration which employs around 12.5% of them in 2009-10 which increased from 8% in 2004-05. Wholesale, retail trade sector also employs around 4.6% of the rural female in 2009-10. The remaining three sectors within the non-farm sector employ a very small percentage of the rural female. Again like the male counterparts, in West Bengal also, the rural female has no employment opportunities in the electricity, water supply and gas sector. Moreover, the financial sector also does not have any significant proportion of rural female working in the sector in West Bengal.

After concentrating on the sectoral diversification of the rural non-farm employment in West Bengal, in the next section of the chapter we will study the types of employment in the rural non-farm sector of the state and in its different regions.

2.4 Types of Employment

2.4.1 Types of Employment in West Bengal and its Different Regions

NSS has provided the classification of the types of employment available in the rural non-farm sector. These are self employment, regular/salaried employment and the casual labour. In case of self employment the “workers operates her own business”; under regular/salaried employment the “worker has a long term contract that does not require any periodic renewal;” and casual wage labour that “entails a daily or periodic renewal of work contract.”⁵

In this section we will have a detailed analysis of the types of employment in the sector. NSS data of 61st round has divided the state into four regions: Himalayan (Darjeeling, Kochbihar, Jalpaiguri), Eastern Plains (Uttar Dinajpur, Dakshin Dinajpur, Maldah, Murshidabad, Birbhum, Nadia), Central Plains (Bardhaman, North 24 Parganas, Hugli, Howrah, Kolkata, South 24 Parganas) Western Plains (Bankura, Purliya, Medinipur). But the recent NSS round i.e. the 66th round has divided the state into five regions: namely Himalayan (Darjeeling, Kochbihar, Jalpaiguri), Eastern Plains (Uttar Dinajpur, Dakshin Dinajpur, Maldah, Murshidabad, Birbhum, Nadia), Southern Plains (North 24 Parganas, South 24 Parganas, Kolkata), Central Plains (Bardhaman, Hugli, Howrah) and Western Plains (Bankura, Purliya, Purba and Paschim Medinipur). This difference in the division of the state in the two rounds leads to the problem of comparability. So to solve the problem, I have considered the division done in the 61st round. Some previous studies help us to get statistics about the proportion of self employed, regular employed and casual labour in West Bengal. It was found that about 49.6% of the total employed in West Bengal is engaged in self employment (by US – PS + SS). The proportion of self employment in West Bengal had increased from 1983 to 1993-94 but there has been a fall in this proportion during the period 1993-94 to 1999-00. The proportion of the regular employed in the state fall from 20.42%

⁵The definition of the three types of employment are available in the NSS reports of both the rounds

in 1983 to 16.25% in 1999-00. In contrast to this, the proportion of casual labour among the total employed increased over the years after 1993-94 and there share among the total employed is much high as compared to the other two category workers⁶ (Bhaumik, 2002). Let us now analyse the modes of employment in the rural non-farm sector of West Bengal and in its different NSS regions.

The data used by this paper i.e. NSS 61st and 66th rounds reveals the following detail picture regarding the modes of employment in West Bengal. For the state as a whole the proportion of self employment among the total employed in the rural non-farm sector decreased from 72.01% in 2004-05 to 47.27% in 2009-10. The share of the regular employed has increased from 3.77% in 2004-05 to 7.56% in 2009-10. The increase in the proportion of the casual labour among the total employed in the sector is worth mentioning as it has an increase from 24.21% in 2004-05 to 45.17% in 2009-10. Going into the detailed analysis of the modes of employment in different regions of the state we can find out that in all the regions the trend that is seen in case of the overall state is being followed. All the regions experience a fall in the share of self employment and a substantial rise in that of casual labour. The regular employed has the lowest share among the total employment in all the regions. In most of the regions, the proportions of the regular employed is less than 4% of the total employed of the respective region in 2004-05 which increased to around 8% in the year 2009-10. Only in the Himalayan region the proportion of the regular employed increased from 5.93% in 2004-05 to 19.97% in the year 2009-10.

Table 2.7: Percentage of Total workers among the total workers in the rural non-farm sector in different Modes of Employment by Usual Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	69.33	42.02	5.93	19.97	24.74	38.01
Eastern Plains	70.61	40.59	3.46	7.04	25.93	52.37
Central Plains	73.28	51.08	3.41	7.75	23.31	41.18
Western Plains	73	52.67	3.88	3.17	23.12	44.16
Total	72.01	47.27	3.77	7.56	24.21	45.17

Data Source: NSS Data 61st and 66th rounds

⁶Bhaumik, S.K. (2002) “Emerging employment and Unemployment Scenarios in West Bengal: Implications for Policy” *Journal of Indian School of Political Economy*, Vol.14, No. 3

Let us now concentrate on the male and female employment in the overall state and in different regions of West Bengal. As far as the male employment is concerned, following the usual status it has been found that the proportion of self employment among the total employment in the state has decreased from 57.07% in 2004-05 to 46.07% in 2009-10 whereas that of the regular and casual employment has increased in the later year. The proportion of the regular employment increased from 5.59% in 2004-05 to 7.39% in 2009-10 but the increase in proportion of casual labour among the total employment from 37.34% in 2004-05 to 46.55% in 2009-10 is worth mentioning. Apart from the Western Plan region, in all the other parts of West Bengal the proportion of self employment fell. In the Western Plain region there is an increase in the proportion of the self employment from 38.5% in 2004-05 to 52.96% in 2009-10. Again the proportion of casual labour also increased in the region from 18.03% in 2004-05 to 43.76% in 2009-10 but that of the regular employment showed a decline from 8.62% in 2004-05 to 3.28% in 2009-10. Among all the regions the highest proportion of male workers engaged as self employment is in the Western plains but the casual labour's share is highest in the Eastern Plains. In both the years the regular employment's proportion is highest in the Himalayan region.

Table 2.8: Percentage of Rural Male workers among the total rural male workers in the rural non-farm sector in different Modes of Employment by Usual Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	53.11	45.14	13.77	20.15	33.11	34.72
Eastern Plains	52.26	37.89	4.07	7.29	43.67	54.82
Central Plains	58.17	49.20	6.34	6.82	35.51	43.98
Western Plains	38.50	52.96	8.62	3.28	18.03	43.76
Total	57.07	46.07	5.59	7.39	37.34	46.55

Source: NSS Data 61st and 66th rounds

The female workers in the rural non-sector of West Bengal are mainly engaged as self employed in the sector as compared to the regular employed worker or the casual labour. Though the proportion of the self employed female worker in the state has decreased in the year 2009-10 as compared to that in the year 2004-05, it is still more than 50% of the total female employment in the rural non-farm

sector. Around 38.22% of the total female employment in the non-farm sector is the casual labours and only 8.43% of them are working as regular employed in the recent year. From the table below it can be said that the proportion of self employment among the rural female in West Bengal is maximum in Eastern Plains in the year 2004-05 which changed to Central Plains in 2009-10. In the Himalayan region, around 18.90% of the total female workers in the rural non-farm sector of the state are working as the regular employed and this mode of employment among the female is highest in Himalayan region only. The proportion of casual labour is highest in the Himalayan region only. A sharp increase in the share of the casual female worker in the total female employment is noticed in the Eastern Plains region. Rather, in the Himalayan region the share of the casual female worker among the total female non-farm employment is more than 50% and the lowest is in the Central Plains which is around 26.205 in the year 2009-10.

Table 2.9: Percentage of Rural Female workers out of the total rural female workers in the rural non-farm region in different Modes of Employment by Usual Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	28.26	23.71	29.30	18.90	42.44	57.38
Eastern Plains	73.16	53.69	4.26	5.79	22.57	40.51
Central Plains	64.76	61.10	7.76	12.70	27.48	26.20
Western Plains	58.12	51.34	4.32	2.66	37.56	46
Total	61.57	53.35	7.72	8.43	30.71	38.22

Data Source: NSS Data 61st and 66th rounds

By current weekly status (CWS) we get somewhat different picture as compared to the usual status. Under this approach the share of the self employment among the total employed in the sector remained almost unchanged between the two years. The proportion of the regular employed, for the state as a whole, has shown a decrease between the two years concerned. In contrast to this, the proportion of the casual labour among the total employed have risen. Considering different regions separately we can get slightly different picture of the proportion of employment under different categories. The share of self employed among the total employed in the respective regions have witnessed an increase in the Eastern and Western Plains Himalayan whereas in the other to regions it has decreased. For the regular

employed it can be concluded that there is a consistent decrease in the proportion in all the regions of the state. Moreover the decrease in the proportion of regular employed in relation to the total employed is much sharp both at the state level and the region level. The highest proportion of regular employment is seen in the Himalayan region and the lowest is in the Eastern plains. The share of the casual labour in all the four regions has shown a sharp and distinct increase from 2004-05 to 2009-10. Only in the Western Plain region the proportion of causal labour almost remain unchanged within the two periods. A very sharp increase in the proportion of casual labour among the total employed is seen in the Central plains from 17.27% in 2004-05 to 37.4% in 2009-10.

Table 2.10: Percentage of Total Rural Persons out of the total rural employed in Different Modes of Employment by Current Weekly Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	48.64	43.24	21	14.71	30.35	42.05
Eastern Plains	48.4	54.93	12.64	3.59	38.97	41.48
Central Plains	67.65	56.46	15.08	6.14	17.27	37.4
Western Plains	57.79	63.84	10.79	4.16	31.43	31.99
Total	56.78	56.68	13.12	5.56	30.1	37.76

Data Source: NSS Data 61st and 66th rounds

Among the modes of non-farm employment of the rural male in West Bengal it is seen that the self employment's proportion has decreased from 59.07% in 2004-05 to 54.44 % on 2009-10 whereas that of the regular wage employed and casual labour have increased to 14.39% and 31.17% respectively in 2009-10. Going into the region-wise analysis it is observed that in all the regions, under CWS, the proportion of the self employed rural male in the sector has decreased in the later year and a large amount of fall in this respect is seen in the Himalayan region where in the year 2009-10, 54.74% of the total rural non-farm employed are engaged as self employed which was 66.44% in 2004-05. The proportion of the casual labour has also fallen but by a small amount. In contrast to this the percentage of the regular wage employed in the rural non-farm sector of the region has increased from 7.84% in 2004-05 to 21.77% in 2009-10. The highest proportion of self employment among the rural male in the non-farm sector is

seen in the Western Plain region whereas the regular employment is highest in the Himalayan region. The maximum proportion of the male casual labour is found in the Eastern Plains region (around 39.13%).

Table 2.11: Percentage of Rural Male workers out of the total rural male working in the rural non-farm sector in Different Modes of Employment by Current Weekly Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	66.44	54.74	7.84	21.77	25.72	23.49
Eastern Plains	59.57	44.44	11.11	16.43	29.32	39.13
Central Plains	56.27	58.69	13.63	13.26	30.10	28.05
Western Plains	61.89	60.57	11.65	9.10	26.46	30.33
Total	59.07	54.44	12.14	14.39	28.79	31.17

Data Source: NSS Data 61st and 66th rounds

Under CWS approach the proportion of self employed female worker among the total worker in the rural non-farm sector of West Bengal fall to 62.86% in 2009-10 from 75.50% in 2004-05. The proportion of the female casual labour under this approach in the state as a whole has increased from 15.61% in 2004-05 to 27.33% in 2009-10. But there is not much increase in the percentage of the regular wage employed among the females of West Bengal. It is also observed from the table given below that the proportion of self employment in different regions of the state like Himalayan, Eastern and Western Plains has fallen drastically. Exceptional to this trend, the self employment of the rural females in the sector concerned has increased from 66.38% in 2004-05 to 76.06% in 2009-10. There has not been much change in different regions of the state in regards of the regular wage employment among the female workers. But the proportion of the female casual labour has shown a massive increase in the Eastern plain region and except in the Central Plains, in all the other regions the female casual labour has increased.

Table 2.12: Percentage of Rural Male workers out of the total rural male working in the rural non-farm sector in Different Modes of Employment by Current Weekly Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	41.24	22.88	9.59	17.77	49.17	59.35
Eastern Plains	86.66	55.77	5.68	5.56	7.67	38.67
Central Plains	66.38	76.06	11.10	12.92	22.52	11.02
Western Plains	73.80	63.93	11.05	9.41	15.16	26.66
Total	75.50	62.86	8.89	9.81	15.61	27.33

Data Source: NSS Data 61st and 66th rounds

Under Current Daily Status (CDS) the share of self employment in the total employment of the state has increased whereas that of the regular employed and casual labour have decreased over the years. The proportion of self employment among the total employment was 56.08% in 2004-05 which increased to 63.92% in 2009-10. On the other hand, the same proportion of the regular employed at the state level decreased from 16.22% in 2004-05 to 14.17% in 2009-10. Though the fall in the proportion of the regular employed is not that prominent (only by nearly 2%), the same for the casual labour is from 27.70% in 2004-05 to 21.91% in 2009-10. The proportion of self employment has shown a consistent rise in all the regions of the state. But regular as well as casual labour's proportions in the total employed of the respective regions have decreased in most of the regions. Only the percentage of casual labour among the total employed in the Central Plains has fallen from 17.04% in 2004-05 to 23.64% in 2009-10. Self employment in the rural non-farm sector is highest in the Eastern Plains and lowest is in the Central Plains. Regular employment's proportion is highest in the Central Plains (16.38%) and lowest in the Himalayan Region (9.19%).

Table 2.13: : Percentage of Total Rural Persons out of the total employment in the rural non-farm sector in Different Modes of Employment by Current Daily Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	48.77	68.23	22.03	9.19	29.20	22.59
Eastern Plains	49.38	67.78	15.66	11.98	34.96	20.24
Central Plains	63.34	59.98	19.63	16.38	17.04	23.64
Western Plains	59.51	65	14.26	14.26	26.23	20.73
Total	56.08	63.92	16.22	14.17	27.70	21.91

Data Source: NSS Data 61st and 66th rounds

In the rural non-farm sector of West Bengal, under CDS 61.6% of total male workers are engaged as self employed in the year 2004-05 which fell to 55.49% in 2009-10. There is a slight increase in the proportion of the male workers engaged as regular employed from 14.44% in 2004-05 to 16.62% in 2009-10 and that of the casual labour increased from 23.96% in 2004-05 to 27.88% in 2009-10. In the Himalayan region the proportion of self employment experienced a sharp fall from 70.53% in 2004-05 to 52.78% in 2009-10 whereas the regular and casual employments' share increased in the later year. Not only the Himalayan region, in all the other regions also the proportion of self employment has decreased. On the other hand, the percentage of people engaged as the regular wage worker and casual labour have increased than that in the year 2004-05. But the proportions of all the modes of employment have remained almost unchanged between the two years in the Central Plains region. Moreover, the proportion of the regular employment in the year 2009-10 is less than that in the year 2004-05.

Table 2.14: Percentage of Total Rural Male out of the total male employment in the rural non-farm sector in Different Modes of Employment by Current Daily Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	70.35	52.78	8.77	21.96	20.88	25.26
Eastern Plains	61.75	48.11	13.31	18.08	24.94	33.81
Central Plains	59.42	59.29	16.32	16.51	24.26	24.19
Western Plains	63.02	61.72	13.84	10.41	23.14	27.87
Total	61.60	55.49	14.44	16.62	23.96	27.88

Data Source: NSS Data 61st and 66th rounds

The rural female self employment in the non-farm sector according to CDS in the year 2004-05 was 72.01% which decreased to 58.08% in the year 2009-10. There is only a marginal increase in the proportion of the regular employment in the state's rural non-farm sector. The share of the casual labour increased from 14.75% in 2004-05 to 27.08% in 2009-10. In the Himalayan, Eastern and Western Plains regions the proportions of the rural female self employment have decreased whereas that in the Central Plains has increased. In all the regions the share of the regular and casual employment has increased in the later year. Only in the Central Plains region the proportion of the casual labour has decreased from 20.91% in the year 2004-05 to 10.31% in 2009-10. A major increase in the proportion of female casual labour is found in the Eastern Plains. Himalayan region has the highest proportion of the regular and casual female labour in the rural non-farm sector whereas the self employment among the rural females working in the rural non-farm sector is highest in the Central Plains.

Table 2.15: Percentage of Total Rural Female out of the total female employment in the rural non-farm sector in Different Modes of Employment by Current Daily Status

State/Regions	Types of Employment					
	Self Employment		Regular employment		Casual Labour	
	2004-05	2009-10	2004-05	2009-10	2004-05	2009-10
Himalayan	51.32	27.53	12.49	22.43	36.19	50.04
Eastern Plains	82.46	52.87	8.73	9.02	8.81	38.11
Central Plains	62.42	69.77	16.67	19.85	20.91	10.31
Western Plains	71.54	56	15.65	12.21	12.80	31.80
Total	72.01	58.08	13.25	14.84	14.75	27.08

Data Source: NSS Data 61st and 66th rounds

2.4.2 Types of employment in Different sub-Sectors of the Non-Farm Sector

In this section we mainly concentrated on the employment pattern calculated by considering only the Usual Status approach. The table below gives a description of the modes of employment in different sub-sectors which constitute the non-farm sector of West Bengal. The table below reveals that trade and hotels sector in the rural west Bengal has the highest amount of self employment in both the years as compared to any other sectors (around 84.8% in 2004-05 and 87.1% in 2009-10). Proportion of regular employment is highest in the financial intermediation and business activity sector in the year 2009-10 which accounts to around 22.7%. On the other hand, the proportion of the casual labour is found to be highest in the construction sector (67% in 2004-05 which increased to 75.2% in 2009-10). Let us now consider each region of the state separately and analyse the modes of employment in the rural non-farm sector of these regions. In the Himalayan region the proportion of self employment in the year 2009-10 is highest in the financial intermediation and business activity sector (around 95%) but in 2004-05, the self employment was highest in the trade and hotels sector. in this region regular employment is found to be highest in the public administration sector but construction sector has employed most of the workers as the casual labour. In the eastern plains the proportion of self employment is highest in the trade and hotel sector again but the regular employment is found most in the public

administration sector. Here again the construction sector has the highest amount of casual labour in both the years concerned. Other two remaining regions of the state also so similar kind of picture as far as the proportion of the self employment, regular employment and casual labour are concerned.

Table 2.16: Percentage distribution of workers in Different sub-sectors of Non-farm Sector in West Bengal (Usual Status)

State/ Region	Modes of Emp	Mining & Quarrying		Manufacturing		Construction		Trade & Hotel		Transport		Fin bus		Pub Adm	
		2004 -05	2009 -10	2004 -05	2009 -10	2004 -05	2009 -10	2004 -05	2009 -10	2004 -05	2009 -10	2004 -05	2009 -10	2004 -05	2009 -10
Himalayan	Self	38.8	34	57.4	49.6	2.49	41.2	88.7	85.2	87.8	55.3	85.2	95.2	35.4	18.5
	Regular	15.8	16.4	0.55	45.4	2.78	6.9		8.35	5.04	15.5	14.7	4.77	57.8	56.7
	Casual	45.3	49.5	42	4.93	94.7	51.8	11.2	6.45	7.15	29.1			6.65	24.7
East. Plains	Self	48.4	33.2	83.6	45.6	24.1	8.25	90.5	91.9	63.9	68.1	57.6	68.1	51	28.6
	Regular	0.29	0.07	2.72	9.54	0.14	19.5	2.62	3.17	16.2	15.9	40.7	31.9	42.2	57.4
	Casual	51.3	66.7	13.5	44.7	75.7	72.1	6.83	4.88	19.7	15.9	1.6		6.68	13.8
Cent. Plains	Self	56.4	41.5	58.1	67.3	14.1	18	83	82.1	81.9	80.6	71.1	63.6	45.8	29.7
	Regular	0.30	0.12	8.61	11.9	0.25	0.05	5.42	7.74	4.88	8.87	14.7	23.7	40.8	56.9
	Casual	43.2	58.3	33.2	20.8	85.6	81.9	11.5	10.1	13.1	10.4	14.1	12.5	13.2	13.3
West. Plains	Self	58.8	49.2	79	66.5	10.1	7.14	88.5	83.5	42.9	68.9	56.6	70.8	52.2	43.2
	Regular	0.29	0.08	4.33	6.65		1.82	2.78	7.19	10.5	5.62	9.8	22.6	35.7	31.1
	Casual	40.8	50.6	16.5	26.8	89.9	91	8.68	9.24	46.5	25.4	33.5	6.53	12	25.5
Total	Self	35.1	40.4	58.4	59	23.1	15.9	84.8	87.1	73.6	62.5	66.7	68.9	25.7	57
	Regular	1.95	1.48	15.4	11.6	9.83	8.84	7.22	2.98	11	15.4	24.3	22.7	58.7	14.8
	Casual	62.8	58	26.1	29.3	67	75.2	7.91	9.92	15.2	21.9	8.91	8.32	15.5	28.1

Data Source: NSS Data 61st and 66th rounds

2.5 Conclusion

It has been found that West Bengal is in a sound position in respect of rural non-farm employment among the 15 major states of India. Only in case of rural male the position is not that good but for the total rural persons and the rural female employment in the sector, the position of West Bengal is worth mentioning. Again the majority of the people in the rural areas are engaged as the self employed and casual labour and the percentage of the regular employed is very low in this case. This is true for both rural male and female working in the rural non-farm sector. Moreover the trend also remains same in all the cases – Usual Status, Current weekly Status and Current Daily Status. The manufacturing and the wholesale, retail trade and hotel sector are the most important sector that employ majority of the rural people in the sector.

The next chapter has dealt with the same issue but specifically for the social groups in West Bengal. In the next chapter we have tried to study the employment pattern of the different social groups in the region.

Chapter 3

Diversification of Employment among Social Groups in West Bengal

Many renowned ethnologists have pictured India's population as a combination of Aryans, Dravidians, Mongolians and Scythians people. From that time onwards these people possessed different cultures and living styles and their gradual interaction with each other lead to the creation of new culture which replaced the old distinctive ones. With the course of time India become a combination of different social groups or castes and religions. But the history of India reveals that there is major discrimination between the upper castes and the lower castes and this story of discrimination is not only restricted among the social groups, it is also true for the people belonging to the religion other than Hindu. In this chapter I have concentrated on the condition of different social groups in the rural non-farm sector specifically in case of employment in West Bengal.

3.1 History of Caste Discrimination in India

Many authors have defined caste in various manners in India. Few definitions are being quoted here in this paper just to make the concept of castes in India a bit

clearer. Mr. Nesfield defines a caste as

a class of the community which disowns any connection with any other class and can neither intermarry nor eat nor drink with any but persons of their own community.

Another author Sir H. Risley

a caste may be defined as a collection of families or groups of families bearing a common name which usually denotes or is associated with specific occupation, claiming common descent from a mythical ancestor, human or divine, professing to follow the same professional callings and are regarded by those who are competent to give an opinion as forming a single homogeneous community.

There is another definition of caste given by Dr Kelkar which defines caste as

a social group having two characteristics: (i) membership is confined to those who are born of members and includes all persons so born; (ii) the members are forbidden by an inexorable social law to marry outside the group¹ .

This caste system in India basically creates hindrances for the people belonging to different castes and classes to mix with one another. This discrimination between the upper and lower castes exists in every aspect in the society. Lower castes have to cross various hurdles to get admission in any activities of the society like educational centres, job sectors. Indian Caste System consists of Schedule Castes (SCs), Schedule Tribes (STs) and Socially and Educationally Backward Classes. The Socially and Educationally Backward Classes are also known as Other Backward Classes (OBC) or Backward Classes (BC). In earlier days, i.e. since 1935, the majority of the lowest classes had been categorised as SCs and these people

¹Definitions are available in “Castes in India – Their Mechanism, Genesis and Development” by B. R. Ambedkar

also belong to the class of “*Untouchability*”². This class of SCs also consists of some of the STs who live outside the tribal areas though their lifestyles are slightly different from the SCs and belong to the lowest layer of the SCs. On the other hand the STs residing in the tribal areas consist of the three-fourth of their total population in India. The ST group though in their own areas do not face any problem off discrimination but they are also deprived from the basic necessities of life like their counterpart SCs in India. Apart from the SCs and STs, there is another oppressed class i.e the Other Backward Class (OBC). It was believed from the initial times that the OBC will confine themselves as the provider of agricultural as well as the non-agricultural products or as artisans, hair dresser etc. The discrimination towards these backward classes hampered their social in the society. Education and job sector are two major areas where these caste based discrimination are very prominent. These, so called backward classes, are denial of the higher education in India and hence do not get easy entrance in the job sector also. Job in the organised sector as well as in the non-farm sector needs some skill as well as technical awareness. But due to the lack of their opportunity in the higher and technical education, these socially backward classes get very less job in these sectors as compared to the socially advanced classes. West Bengal is not an exception in this respect. Caste based discrimination prevails in every part of West Bengal. Rural areas are more prone to this kind of caste discrimination. This kind of discrimination created the need of the caste reservation. The requirement of the proper education facility for all the social groups both backward and advanced has been identified by many social reformers like Mahatma Phule (1827-1890), Narayanaguru (1856-1928), Swami Vivekananda (1863-1902) and Dr. B.R. Ambedkar (1891-1890). Since this paper is based on the employment in the rural non-farm sector, I would like to study the condition of all the backward classes as compared to the socially advanced classes in the rural non-farm sector in terms of employment opportunities. To promote education among the socially backward classes some scholarship programmes are launched in India like Post-Matric Scholarship Scheme (1943), Overseas Scholarship Scheme. The reservation of 12.5% of the SCs in different sectors of the economy were introduced in 1943 by Dr. Ambed-

²As described in by P.S. Krishnan in “Caste Discrimination in Higher Education in India” at Annual EMS Memorial Lecture, 2012

kar and the achievements of reservation for the SCs got automatically transferred to the STs after Independence. The Rajiv Gandhi National Fellowship has been started in the year 2005-06 for promoting M.Phil and Ph.D studies among the SCs and the STs. For technical courses or the full-time professional courses National Schedule Castes Finance and Development Corporation provides loan to the SC students providing them access to higher education which opens their path to job sector.

The SCs are around one fifth of the total population in India of which 70% stay in the rural areas. Though during the late 1990's majority of this SC population stick to the agricultural sector, around one fifth of them joined the rural non-farm sector as self employed or salaried employed. Their participation in the non-farm activities has been better as compared to the other backward social groups in India³ (Thorat and Sabharwal, 2006). The educational background is one of the major factors required for the attainment of the job in rural non-farm sector. From the NSS data analysis it has been found the proportion of illiterates among the SC working in the rural non-farm sector is much more as compared to that of the socially advanced people in the sector (Thorat and Sabharwal, 2006) and it is concluded that the proportion of educated SC\ST working in the non-farm sector is much less as compared to the non SC\ST. Moreover, it is also found that the most of the illiterate SC in the rural non-farm sector in India are engaged as the self employed or casual labour.

Studying the condition of the rural non-farm sector for overall India it has been found that on one hand, for the average household, the ratio of non-farm to agricultural income is 4.5 to 1 and on the other hand, the same ratio for the poor is 0.75 to 1(Lanjouw and Shariff, 2004). There is an increase in the proportion of the non-farm employment to total rural employment from 16.6% in 1977-78 to 27.6% in 2004-05 (Kaur et al.,2010). This shift from the agricultural to the rural non-farm sector has been witnessed in West Bengal also.

Now after a detailed discussion on the condition of the socially backward classes in different sectors of India, we will concentrate on their employment scenario in

³Under UPS in 1999-00, the proportion of rural non-farm SC workers who are illiterate is 41.25% and 21.78% are literate upto primary level.

the rural non-farm sector of West Bengal. The next section of the chapter deals with this caste discrimination in the rural non-farm sector of West Bengal. The data available from the NSS 61st and 66th rounds has revealed that in rural West Bengal also the opening of the socially backward classes is not the same as that for the advanced classes.

3.2 Employment Scenario of Different Social Groups in Rural Non-Farm sector

In the previous section I have discussed the historical discrimination of the socially backward classes in various sectors of the economy. In this section I will concentrate on the detailed analysis of the condition of different social groups in the rural non-farm sector of West Bengal and in its four regions⁴ as divided by NSS. The employment of the individuals is calculated by NSS on the basis of three approaches mentioned in Chapter 2. Whether a particular person is engaged in the farm or non-farm sector is judged by considering the NIC codes given in both the years' data. As mentioned earlier, the 2 digit NIC codes from 10 to 99 represent the non-farm sector and hence we are mainly interested in the proportion of the people engaged in this sector only.

In the last chapter we have already discussed about the proportion of the total rural workers engaged in the rural non-farm sector of West Bengal and also the proportion of the total rural non-farm workers working under different modes of employment. This chapter focuses on the condition of different social castes in the rural non-farm sector of West Bengal. The opening and opportunity of all the social castes are not equivalent because of the existing caste discrimination. Next section of this chapter describes the employment scenario of different castes in the rural non-farm sector of the state and in its different regions. Section 3.3 analyses

⁴NSS has divided the state into 4 regions in the 61st round whereas in the 66th round it has divided the state into 5 regions. For the comparability purpose I have converted 5 regions of the state into the 4 regions given in the 61st round. Further details are given in Chapter 1 of this paper.

the sectoral distribution of the social groups within the rural non-farm sector of the state and in its four states.

3.2.1 Employment Scenario of Different Social Groups in Rural Non-Farm sector in Overall West Bengal

In 2004-05 the proportion of OBC among the total population in rural West Bengal was lowest (6.5%) followed by ST (8.07%). The major proportion of the population is captured by the General Category people (57.89%) and the second highest in the population is the SC (27.53%). In the year 2009-10, though there is not much change in the proportion of the General and OBC people. Only the proportion of the SC has risen in the year 2009-10 as compared to that in the previous year but the proportion of the ST has fallen in the later year. If we consider the regions of West Bengal separately we can get a bit different result in some regions in relation to the state as a whole. In the Himalayan region the proportion of the SC is highest followed by the General Category in the year 2004-05. The lowest in this region is the proportion of the OBCs. In the year 2009-10, only the proportion of the SC people has shown an increase in the population. On the other hand in this region, the proportions of all the other social groups have decreased in the later year. The fall in the proportion of ST and General Category are worth mentioning. In the Eastern region the proportion of the General Category is the highest in both the years but it has decreased in the later year. The second highest proportion among the total population is of the SCs whose proportion has increased in the year 2009-10. On the other hand, in comparison to these two social groups, the proportion of the STs and OBCs are very low in both the years. The Central region shows almost the same kind of picture like that of the Eastern Region. In this region the majority of the population is occupied by the General Category and the SCs. Moreover the proportion of the SC in the year 2009-10 has decreased than that in the year 2004-05 but the proportion of the General Category has increased. The ST and the OBCs are much less in percentage in comparison to the other two social groups. In the Western Plain also the proportion of the General Category is highest followed by the SCs. Though here also the proportions of the ST and

OBC in the population of the region, they are higher than that in any other region of the state and for the overall state also. Table 17 below gives the region-wise proportion of the different social groups in the total population.

Table 3.1: Region-wise proportion of different Social Groups in total population

State/ Region	Social Groups	Percentage of Total Population	
		Year	
		2004-05	2009-10
Himalayan	ST	22.8	11.45
	SC	41.75	60.55
	OBC	7.56	6.54
	General	27.89	21.46
Eastern Plains	ST	6.02	5.02
	SC	21.73	23.81
	OBC	4.34	5.82
	General	67.91	65.35
Central Plains	ST	3.25	5.35
	SC	33.15	26.53
	OBC	5.25	6.09
	General	58.35	62.03
Western Plains	ST	12.09	9.21
	SC	21.68	28.05
	OBC	10.77	10.17
	General	55.45	52.57
Total	ST	8.07	6.75
	SC	27.53	29.71
	OBC	6.5	6.94
	General	57.89	56.6

Data Source: NSS 61st and 66th Rounds unit level data

Given this population composition, I will now like to concentrate on the employment condition of the different social groups in the rural non-farm sector of the state. Here I have considered the employment proportion of different social groups in the rural non-farm sector by considering only the usual status employment.

The total rural population of the state earn their livelihood from both the agriculture and the non-farm sector. In the year 2004-05, the highest proportion of the total rural non-farm employment engaged in the sector belong to the general class (around 55.6%) followed by the SCs (around 28.47%). Around 8.81% of the total

rural non-farm employment is ST and that of the OBC is 7.12% which is lowest among all the social groups. In the year 2009-10, the proportion of the General Category people working in the rural non-farm sector of West Bengal increased by a very small fraction to 56.07% and that of the SC to 30.87%. But the percentage of the ST in the rural non-farm sector declined to 6.82% in the year 2009-10 and in this year, STs employment proportion among all the social groups is lowest. Now, in 2004-05, as well as in 2009-10, the majority of the ST population working in the rural non-farm sector are casual labour. Compared to this, the regular employment among the STs is very low in both the years and most of them are self employed in the sector. The regular employment among the SCs is also low but they almost have same proportion of people working as self employed and casual labour. In case of the General Category people and the OBC it is seen that most of them are mainly engaged as the self employed in the sector. They also take part in the sector as casual labour. Thus overall it is seen that the proportion of regular employment is low in the rural non-farm sector of West Bengal. Let us now see the employment conditions of different castes in the four regions of West Bengal.

In the Himalayan region the maximum proportion of the population is of the SCs and hence in the rural non-farm sector of the region 40.02% of the workers belong to this caste in 2004-05 which significantly increased to 62.49% in 2009-10. Most of the SCs in the rural non-farm sector of the region are engaged as self employed and casual labour. Compared to these two types of employment, the proportion of SCs engaged as regular employed is low (4.46% in 2004-05 and 10.45% in 2009-10). The General Category (26.34%) and the STs (25.04%) almost have same proportion of employment in the rural non-farm sector of the region both of which showed a decrease to 21.63% and 10.19% respectively in the year 2009-10. But in this region as compared to the other castes, high proportion of STs is engaged in the non-farm sector as regular employed. Moreover, the proportion of STs engaged as the regular employed has increased substantially from 2004-05 to 2009-10. The proportion of the General Category people working as self employed in the sector decreased in the year 2009-10 but that of the regular employment and casual labour has risen.

The Eastern Plain region of West Bengal has 63.11% of the total non-farm workers from the General Category in 2004-05 which increased to 65.73% in 2009-10. Here also the majority of them are engaged as self employed and casual labour. But the proportion of self employed among the General Category people decreased and that of the casual labour increased. Though there is also an increase in the proportion of the regular employed among this group yet its percentage remain very low. The proportion of the SC in the total non-farm worker in the year 2004-05 was 24.82 which slightly fell to 23.77% in 2009-10. SC people also have a similar kind of trend here regarding the employment pattern. Self employment and casual labour are two main important occupations of the SCs in the rural non-farm sector of the region. ST and OBC have very low proportion of employment in the rural non-farm sector of the region. For all the social groups in the region it is seen that the majority are engaged as self employed and casual labour.

In the Central Plain region around 56.3% of the total non-farm workers belong to the General Category in the year 2004-05 which almost remain same in the year 2009-10. These people are mainly self-employed in the region and another proportion of them are engaged as casual labour. Compared to this a very low percentage of people are engaged as regular employed in the region. The SC category has the second highest proportion of employment in the rural non-farm sector of the region. Among them again the workforce are divided between the casual labour and self employment. But there has been a decrease in the proportion of the SCs engaged as self employed and the proportion of casual and regular employment increased over the years. The percentage of the STs and OBCs working in the rural non-farm sector are very less as compared to the other two social groups. For them also it is seen that the trend of fall in the proportion of the self employment and rise in that of the casual labour and regular employment holds. For ST and OBC also the regular employment percentage is very low.

In the Western Plain also, the highest proportion of the rural non-farm workers belong to the General Category people followed by the SC people. Though the proportion of employment of the STs and OBCs are still less as compared to the two other castes in the region but their proportions are higher than that in the

other three regions. STs have a proportion of 13.33% worker in the year 2004-05 and OBC has the proportion of 11.32%. Both the proportion decreases in the year 2009-10 but in spite of that, this region has higher proportion of ST and OBC employment in the rural non-farm sector. This region is also not an exception. The trend of the proportion of self employment, casual labour and regular employment is same like all the other regions.

Table 3.2: Percentage Distribution of Social Groups (Total Workers) in Different Modes of Employment by Usual Status

State/Region	Castes	Modes of employment					
		Self employment		Regular employment		Casual labour	
		2004-05	2009-10	2004-10	2009-10	2004-05	2009-10
Himalayan	ST	11.20	17.60	38.38	65.25	50.42	17.15
	SC	55.52	47.94	4.46	10.45	40.02	41.61
	OBC	42.04	37.34	16.55	29.72	41.41	32.94
	General	58.08	37.66	5.36	23.55	36.56	38.78
Eastern Plain	ST	41.72	28.93	1.80	4.71	56.48	66.36
	SC	50.09	40.71	2.48	6.47	47.42	52.82
	OBC	76.19	57.99	4.56	8.03	19.25	33.98
	General	57.60	39.72	2.65	7.30	39.75	52.98
Central Plain	ST	20.32	10.22	3.58	5.60	76.10	84.17
	SC	50.10	44.52	4.83	7.38	45.06	48.10
	OBC	77.83	69.65	5.34	7.86	16.83	22.49
	General	64.76	56.68	4.37	8.14	30.88	35.18
Western Plain	ST	47.60	48.13	1.15	1.13	51.25	50.75
	SC	37.82	37.71	2.28	2.14	59.90	60.15
	OBC	67.11	50.74	1.58	1.10	31.32	48.16
	General	73.13	61.66	3.39	4.41	23.49	33.93
Total	ST	35.52	27.38	8.67	12.51	55.80	60.12
	SC	47.97	42.77	3.60	6.61	48.43	50.62
	OBC	69.94	57.88	4.43	7.39	25.64	34.73
	General	64.14	50.73	3.52	7.54	32.35	41.73

Data Source: Unit Level Data NSS 61st and 66th Rounds

3.3 Employment of Total Rural Persons of Different Social Groups in Different Subsectors of the Rural Non-Farm Sector of West Bengal (Usual Status)

The employment pattern and trend of the social groups in different subsectors of the rural non-farm sector of West Bengal and in its different regions is the main focus of this section of the chapter. Here I have considered the percentage employed from each social group in the subsectors where employment is considered on the Usual Status basis. Here the financial intermediation and the public administration sector are together considered as the service sector. For overall West Bengal it is observed that the proportion of the ST working in the rural non-farm sector is highest in both the years in the mining and quarrying sector. The proportion of the ST working in the sector fell to 8.08% in 2009-10 from 11.3% in 2004-05. The second highest employment percentage of the ST is in the construction sector which increased to 7.89% in 2009-10 from 5.84% in 2004-05. The SCs are employed in high proportion in the construction sector in both the years with around 38.6% of the total employment in 2009-10. In the transport sector also they have a good proportion of employment in both the years holding the second position in terms of SCs employment in the rural non-farm sector. In almost all the other subsectors around 30% of total employed in each of the subsectors are SCs. For the OBCs the highest proportion of employment is found in the service sector in the year 2009-10. It increased from 7.79% in the year 2004-05 to 12.6% in the year 2009-10. Compared to the other sectors, the transport and construction sectors have the lowest proportion of the OBC people working. The General Category people have the highest proportion of employment in the manufacturing sector though it decreased from 68.2% in 2004-05 to 64.2% in 2009-10. Transport sector also has around 61.4% General Category people of the total employed in the region. This analysis implies that taken together, among the four social groups the General Category people are better employed in the sectors. Again among the socially backward classes the SCs proportion of employment is much higher than

the STs and OBCs.

Let us now consider the four regions separately. The first region is the Himalayan region. It is seen that in the Himalayan region the socially backward classes mainly the SCs and the STs have a high proportion of employment as compared to the OBCs. The employment proportion of the General Category people in this region is not that high as it is expected to be given the fact of caste based discrimination. STs have the highest proportion of employment in the mining and quarrying sector. On the other hand the SCs experience a large increase in their proportion working in the mining and quarrying and the construction sectors. STs have the highest percentage of employment in the trade and hotels sector in the year 2009-10, but in 2004-05 the STs were mainly in the mining and quarrying sector with around 29% of them working there. OBCs have very less percentage of people working in the region as compared to the SCs and STs.

In the Eastern Plains the highest proportion of employment is of the General Category people among the four social groups in both the years this is followed by the SCs in the region. In total the lowest is of the OBCs. Here also the STs are mainly working in the mining and quarrying sector. Services sector also had a 7.8% employment of the STs in the region in the year 2004-05 which decreased to 4.41% in the year 2009-10. Transport sector employs a very low (less than 1%) of the STs in the year 2009-10. Among the total employed in the transport sector in the year 2009-10, 80% is of the General Category people followed by SCs though only 18% is captured by them. The employment proportion of the OBCs in the transport sector is negligible.

The Central Plains region also depicts a similar kind of picture regarding the employment proportion of different social groups as in the Eastern Plains. The proportion of employment in overall non-farm sector is more for the General Category people followed by SCs. The proportion of the STs and OBCs are comparatively much lower than these two. In all the subsectors the employment of the General Category people is much higher even if in comparison to the SCs. SCs here has the highest employment in the transport sector in the year 2009-10 whereas the General Category people are mainly employed in the manufacturing sector.

But for this category the proportion of employment in other subsectors are also not that low. In almost all the subsectors the proportion of employment of the General Category people are above 40%. For the STs the highest proportion of employment is found in the construction sector which has 42.8% of the General Category people, 40% SCs, 12.3% STs and only 4.71% OBCs.

Now for the Western region also we do not get any new trend. There also it is the General and the SC people who have much better access in any of the subsectors.

Thus it is always the General i.e. the socially advanced class that is getting the maximum opportunity to join the rural non-farm sector. Among the socially backward classes, as the literature has already suggested, it is the SCs who has the highest opportunity to find a job in the rural non-farm sector. (For table of details see appendix.)

3.4 Conclusion

The above discussion leads us to a situation where we can say that the caste discrimination exists in the rural areas of West Bengal. This chapter has mainly concentrated on the condition of the employment of different social groups in the rural non-farm sector of West Bengal. I have studied the condition of the social groups not only for the overall state of West Bengal but also for the four regions of the state as divided by NSS. The study above reveals that in West Bengal also there is the predominance of the General Category people who are supposedly the socially advanced class of the society. In most of the region and the state as a whole as well, it is the General Category who has the highest proportion of employment in the rural non-farm sector and the employment proportion of these people are much higher relative to the other social groups. Among the socially backward classes it is the SC who has the highest proportion of employment in the state as well as in different regions of the state. The percentage of the STs and OBCs working in the rural non-farm sector of the state are much lower in comparison to the General category as well as SCs. In some places it the STs who

have more employment percentage and some places have OBC more in the rural non-farm sector. Apart from the employment proportion, this chapter has also studied the different modes of employment in which different social groups have been engaged.

There are mainly three modes of employment- self employment regular employment and casual labour. These three types of employment are very found among the different social groups. For all the social groups it has been found that the proportion of people engaged in the rural non-farm sector as regular employed is the lowest. Maximum proportion of the people is engaged as self employed and casual labour in the sector. Irrespective of the social group, it is seen that the majority of the people in the rural non-farm sector are working as self employed and casual labour. But again the majority are found to be working as self employed as compared to the casual labour in the year 2004-05. But the data of the NSS 66th round reveals that there has been a shift in the modes of employment from the self employed to the casual labour. For all the social groups, the percentage of the people engaged in the rural non-farm sector as self employed decreased and that of the casual labour increased. The proportion of the regular employed people in the sector increased in the year 2009-10 but still that is much lower in comparison to the proportion of people engaged as self employed and casual labour. This case is true for all the social groups in the rural non-farm sector.

The next chapter of this paper deals with the factors that are influencing the rural people of the state to move to the rural non-farm sector leaving the traditional agricultural sector.

Chapter 4

Determinants of Non-Farm Employment in West Bengal

4.1 Introduction

The trends of employment/unemployment situation in West Bengal have been studied by many renowned economists. One of the papers by S.K. Bhaumik (2002) focuses mainly on the employment/unemployment condition of the state during the Tenth Five Year Plan. Since NSS data follows three approaches to calculate employment of a particular region, unemployment also can be judged on the basis of those three approaches¹. The number of unemployed in West Bengal was 27.86 lakhs in 1983-84 which declined to 24.56 lakhs in 1993-94. But there was a sharp increase in the number of unemployment from 1993-94 onwards by 1999-00 the figure stood at 39.85 lakhs (Bhaumik, 2002). Moreover it has also been found that around three-fourths of the unemployment that prevailed in the state is among the males. The rural unemployment as a percentage of the total unemployment of the state was around 72.78% in the year 1983 which increased to 78.35% in 1999-00. On the other hand, the urban unemployment as a percentage of total unemployment was 27.22% in 1983 but it fell to 21.65% in 1999-00 (Bhaumik,

¹Usual Status (Usual Principal status + Usual subsidiary status), Current Weekly Status and current Daily Status are the three approaches of calculating employment as considered by NSS.

2002). Hence it can easily be inferred that the rural areas of West Bengal are affected by the chronic problem of unemployment. This chronic unemployment problem in West Bengal calls for the formation and expansion of the rural non-farm sector in the state. It has been started with the view of using it as an instrument for solving the unemployment crisis and alleviating rural poverty. The unemployment problems that existed in the rural areas of the country as a whole, compel the rural people to migrate to the urban areas for better livelihood. But due to the growing problems associated with the urbanization, the rural migrants end up getting semi-skilled and labour intensive jobs or often they remain unemployed which resulted in the formation of the urban slums, poverty, malnutrition and crime (Sharad, 2006). To avoid this urban congestion and the problems of migration, the localization of the rural employment was taken into consideration. Hence the development of the rural non-farm sector gained importance. As the industries in the rural non-farm sector are mainly labour intensive, it is hoped that the expansion of the rural non-farm sector will lead to the creation of new jobs for the rural people. This helped in the reduction of inequality in the rural income distribution and also creates an industry-agricultural linkage by pushing agriculture to the higher growth trajectory by the process of modernization of production (Sharad, 2006). Bhalla and Chadha in 1983 claimed that

rural income distribution is much less unequal in areas where a wide network of non-farm avenues of employment exists; the lower strata of the rural societies participate much more intensely in non-farm activities, though their involvement is much less remunerative as compared with that of the upper strata. ²

The next section of this chapter deals with the various factors that influence rural people to move towards the rural non-farm activities in West Bengal.

In the next section of this chapter we have discussed the various factors that affect the shift of the rural people of West Bengal from the agricultural sector to the rural non-farm sector. Section 4.3 deals with the significance of the factors determining

²Sharad,R (2006) “Occupational Diversification and Access to Rural Employment – Revisiting the Non-Farm Employment Debate” p.2

the shift to the rural non-farm sector with the help of the econometric analysis. The analysis in the section is done by using the Probit model.

4.2 Factors Affecting the Shift to the Rural Non-farm Sector

The growth rate of agriculture in India has shown a continuous decline from 1970 onwards. The agricultural sector had a growth rate of 4% during the period 1980-81 to 1993-94. After that it showed a continuous decline to around 2% during the 9th and the 10th Five year Plan and further to 1.8% during 2002-03 to 2006-07 as per the Planning Commission Report, 2007 (Kashyap, Mehta; 2007). This decline in the agricultural growth rate is accompanied by the shift of the labour force from agricultural sector to the rural non-farm sector. The rural non-farm sector consists of both the secondary and the tertiary sector. The subsectors like mining and quarrying, manufacturing, construction, and electricity, gas water supply constitute the secondary sector whereas the remaining other subsectors form the tertiary sector. Again it has been found that the growth of the tertiary sector is more than that of the secondary sector in India as a whole (Basant and Kumar (1988, 1990)). But the shift of the rural people from their traditional occupation agriculture to the rural non-agricultural sector depends on a number of factors. These factors can be divided into two categories: demand pull factors and the distress push factors. Broadly, the factors like agricultural modernization and commercialization, urbanization, literacy among the rural people, creation of new jobs, higher wage rate, etc have tried to pull the workers out of the agricultural sector. These are categorized as the pull factors. On the other hand, the distress driven factors like agricultural stagnation, unemployment, poverty, low income etc have pushed the workers from the agricultural sector and hence are categorized as the push factors. Reardon et al. (1998) have referred to this issue of diversification of employment in the rural areas from the standpoint of the relative returns in the agricultural and the rural non-farm sector. The relative returns in the rural non-farm sector is higher than that in the farm sector and also the returns to

farming are also relatively risky as compared to the non-farm. These cause the pull factor to work in the rural areas (Sharad, 2006). Distress-push diversification of employment in the rural areas is common among the poorer section which means that this section is mainly shifting to the non-agricultural sector. The demand-pull diversification is commonly found among the richer and affluent households in the rural areas (Sharad, 2006). The main features and reason under the pull and the push factors of diversification have been put forward by Davis and Pearce (2000).

Push Factors	Pull Factors
<ul style="list-style-type: none"> • Population Growth • Increasing scarcity of arable land and decreasing access to fertile land • Declining farm productivity • Declining returns from farming • Lack of access to farm input markets • Decline of the natural resource base • Temporary events and shocks • Absence or lack of access to rural financial markets 	<ul style="list-style-type: none"> • Higher return on labour in the Rural non-farm employment. • Higher return on investments in the RNFE • Lower risk of RNFE compared to on-farm activities • Generation of cash in order to meet household objectives • Economic opportunities, often associated with social advantages, offered in urban centres and outside of the region or country

Source: Sharad, 2006

But it is noteworthy that whether the diversification to the rural non-farm sector is owing to the push or pull factor differs among the households of a particular region. The households having lower income levels or are endowed with less assets will have distress push factor working behind its shift to the rural non-farm sector whereas the demand pull diversification occurs among the richer households. It is also seen that the richer households of the rural region are mainly engaged in the rural non-farm sector as self employed as it requires higher investment which only they can afford. On the other hand the poorer households are engaged

as the wage labour in the rural non-farm sector. It is from this theory that a concept of *Residual Sector Hypothesis* has been defined. This theory states that the rural non-farm sector has developed as the absorber of the surplus labour in the rural areas that cannot be employed in the agricultural sector. Vaidyanathan (1986) has explained that the rural non-farm sector acts as a sponge for the excess labour in the agricultural sector. Samal (1990, 1997) mentioned that the residual sector hypothesis basically indicates the presence of the distress push factor of the diversification in the rural areas of India.

Keeping these above factors in mind, in the next section I will attempt to find out the factors determining the shift of the rural workforce from the agricultural to the rural non-farm sector in West Bengal.

4.3 Factors Determining the Diversification of Employment in the Rural Areas of West Bengal

In the previous section we have discussed broadly the factors that affect the shift of the workforce from agriculture to the rural non-farm sector. This section deals with the econometric analysis of the factors that influence the move of the rural people from the primary sector. The analysis here has been done by using Probit model. Let us have a detailed discussion on the variables used in the model.

4.3.1 Description of the Variables used in the Model

‘Education level of the individual’ is one of the important factor that opens up The Probit model is used when we have a model whose dependent variable is binary in nature. The data used here is the two rounds of NSS – 61st and 66th which corresponds to the years 2004-05 and 2009-10 respectively.

The dependent variable that I have considered in the model is whether a particular individual is employed in the rural non-farm sector or not which entails that the

variable employment takes the value '1' if a particular individual is engaged in the rural non-farm sector and value '0' if the individual is not engaged in the rural non-farm sector. This includes all the other rural working population within the age group 15 – 59 years who resides in the rural regions of West Bengal.

Let us now consider the explanatory variables used in the model for getting an idea about whether the push or pull factors are important in the rural areas of West Bengal that induce people to join the rural non-farm sector. The asset of a particular household is a factor that appears to be responsible for the shift of the rural people to the rural non-farm sector. In the rural areas the amount of land possessed by each household is considered as one of the important and pertinent asset with the help of which we can get a fair idea about the economic condition of the household. Since I have considered individual as the unit in the Probit model, 'land possessed per capita', given by land possessed divided by household size is taken as the explanatory variable here. It is hypothesized that the relation between the land possessed per capita is negatively related to the individual's income from the rural non-farm sector. This is because of the fact that the individual having better access to land has less probability to shift to the rural non-farm sector as compared to the landless or marginal land possessed individuals. The members of the households having greater access to land like to specialize in the agriculture and allied activities rather than getting engaged in the rural non-farm sector. On the other hand, members of the households having less or no access to land are generally employed as agricultural labour. So for better standard of living these people engage themselves in the rural non-farm sector.

'Household Size' is another explanatory variable that has been used in the model. It is believed that if the household size is big, it becomes difficult for a household to sustain life depending only on agriculture. This forces the members of the households to shift to the rural non-farm sector. Thus the relation of employment in the rural non-farm sector with the household size is expected to be positive.

'Age of a particular individual' also has a relation with his participation in the rural non-farm sector. Elder people in the rural areas are expected to have less opening as well as less access to the rural non-farm sector. Moreover, the person

of higher age group who has spent most of his life based on agriculture has no intention to move towards the rural non-farm sector. The working age group in a population as considered by the NSS is from 15-59 years. It is said that people of lower age group will have a higher tendency to shift towards the rural non-farm sector.

opportunity for the people to enter into the rural non-farm sector. People with higher education level are expected to have better skill which is one of the requisite for getting a job in the rural non-farm sector. NSS has classified education into two types: “General Education” and “Technical Education”. An individual, once achieved a level of education do not like to work in the agricultural sector as the rural non-farm sector is expected to provide with higher returns to him. In the model ‘General Education’ is categorized into four parts: No literacy, literate upto primary, middle school, secondary and above. Similarly ‘technical education’ has four categories: no technical education, technical degree in agriculture/engineering/ technology/ medicine etc, technical education below graduate level education above graduate level. Technical education here is considered as a proxy of skill achieved by an individual. It is believed that there will be a positive relation between the literacy rate and the job opportunity in the non-farm sector. But it is also argued that formal schooling is not always required by the individual in order to get job in the rural non-farm sector. Skills can also be achieved from the friends, relatives and job training. So higher educational level does not always entail higher wage in the rural non-farm sector (Sharad, 2006).

‘Sex’ of an individual is another factor that has an effect on getting a job in the rural non-farm sector. In India it has been found that the female participation rate in the rural non-farm sector is less as compared to that of males. Women are culturally and historically less mobile than males and hence they are in a disadvantageous position in terms of the rural non-farm employment but they remain employed in the farm sector as the farm employment is available closer to their dwelling places (Chadha, 1997). They are also not as well trained as male because of their less opportunity in the education field. Moreover females’ mobility to move outside the household to work is constraint by various household

responsibilities. Thus the non-farm sector is much more open for the male in the rural areas. Vyas and Bhargava (1995) found that “social disapproval and family pressures faced by women discourage them from entering into economic activities outside the household”. In the model sex is used as dummy variable which takes the value ‘1’ if the individual is male and ‘0’ if female and it is expected to have a positive relation with the dependent variable used in the model.

Another important factor that influences the participation in the non-farm sector is the ‘Income of the household’. It is a general consensus that the members from high income households engage themselves in the rural non-farm sector as self employed. So if the household can earn higher amount of income from the agricultural sector, it will have a tendency to invest the surplus amount for acquiring assets and equipments which are required to get involved in the rural non-farm sector. But one of the drawbacks of NSS data is that it does not provide us with the income data of the individuals or households. Hence I have used a proxy for income of the household. NSS has the information about the monthly household consumer expenditure (MHCE). We can get the monthly per capita consumer expenditure (MPCE) by dividing the MHCE by household size. This MPCE is then use as the proxy of income of the individual concerned.

In India there is a vast discrimination in the education as well as the job sector on the basis of the caste and religion. Hence two more variables namely social group and religion are also considered in the model. NSS data has considered 8 religions separately. But in the state, major proportion of the population is either Hindu or Muslim. All the other religion together form a small proportion of the population of the state. Hence for this analysis religion variable is recoded here into three categories: Hindu, Muslim and others where ‘other’ category includes all the religions excluding Hindu and the Muslims. It is also expected that in case of the castes, backward classes will have less job opportunity as compared to the General category people (as discussed in the previous chapter) and similarly for the religion Hindus will have more opening in the sector than any other religion in the area.

4.3.2 Models and Interpretations

Two Probit models have been done in this paper to identify the factors that are influencing the employment in the rural non-farm sector of West Bengal. One model is for the year 2004-05 which is based on NSS 61st round data and another is for the year 2009-10 which is on 66th round. In the Probit model the coefficients of the explanatory variables do not directly reflect their effects on the dependent variable directly. In order to obtain the partial effects of the explanatory variables on the dependent variable we have to calculate the marginal effects of the variables. These marginal effects for each variable show the corresponding effects on the dependent variable.

Let us now first consider the Probit model result based on the 61st round NSS data. The result of the model based on the data available from the NSS 61st round (2004-05) shows that general education – primary upto middle class level has come out to be insignificant. But the sign of the co-efficient is positive. In spite of the positive co-efficient here from the Probit model result we cannot conclude that level of ‘General Education’ influence a person’s entry in the rural non-farm sector. Coming to the technical education, we have seen that all the levels of technical education in the model have been insignificant. This result may occur because of the limitation of the data set available. But the higher level of technical education has expected sign telling that increase in the level of technical education in relation to no technical education will help to get job in the rural non-farm sector of West Bengal. Further, it has also been mentioned that it is not always necessary that the skills will be achieved through proper schooling. But from the marginal effect it can be said that if there is one unit increase in the level higher technical education the employment in the rural non-farm sector of West Bengal will go up by 9.2 percentage points. Again, the variable sex has the expected sign indicating that the rural male has better employment opportunity in the rural non-farm sector of the state in comparison to the females but it is statistically insignificant in the model. Coming to the castes, it is seen that all of them except the OBCs have expected sign and they also have significant influence on the employment in the non-farm sector. Since the reference variable is the

general caste (socially advanced class) the negative value of the co-efficients of ST and SC implies that they have less opportunity in the rural non-farm sector of West Bengal as compared to the general category. Similarly the negative sign of the Muslims and Other religion imply that they have less access to the non-farm sector as compared to the Hindus. The co-efficients of per capita MPCE that is considered as the proxy for the income level of the individuals. It is positive which means that the household having high level of income will be able to acquire the skills required for working in the rural non-farm sector and hence have a tendency to move towards the sector from the traditional agriculture one. The variable household size does not come up with an expected result from the available data set though it is statistically significant here. On the other hand the age variable with a negative sign indicated that with the increase in the age of an individual, his ability to grasp the skill required for the availability of job in the rural non-farm sector decreases. Hence with the increase in the age the employment in the rural non-farm sector falls. Moreover, I have already explained that the old age group people do not want to shift from the agricultural sector to the rural non-farm sector. Thus the negative sign of the coefficient here indicates that within the age group 15-59 years, rural non-farm employment is much more open for the young age group worker.

Table 4.1: Result of Probit Model for the year 2004-05 (61st Round)

	Coef.	Std. Err	z	P> z	Marginal Effect	delta std err
Sex= 1, male =0, female	0.015	0.017	0.860	0.392	0.005	0.006
General Education (Reference: No literacy)						
Upto Primary	0.078	0.020	3.910	0.000	0.027	0.007
Middle	0.104	0.030	3.480	0.000	0.037	0.011
Secondary & Above	0.024	0.034	0.710	0.478	0.008	0.012
Technical Education (Reference: No Education)						
has tech education	0.290	0.385	0.760	0.450	0.105	0.141
Below Graduate	-0.020	0.187	-0.110	0.913	-0.007	0.065
Graduate & Above	0.256	0.209	1.230	0.220	0.092	0.076
Caste (Reference: General)						
ST	-0.531	0.043	-12.440	0.000	-0.173	0.012
SC	-0.126	0.023	-5.420	0.000	-0.044	0.008
OBC	0.120	0.035	3.390	0.001	0.043	0.013
Religion (Reference: Hindu)						
Muslim	-0.055	0.022	-2.500	0.012	-0.019	0.008
Others	-0.474	0.091	-5.190	0.000	-0.154	0.026
pc_mpce	0.000	0.000	5.200	0.000		
pc_land Possessed	-3.936	0.103	-38.270	0.000	0.000	0.000
Household size	-0.018	0.003	-6.060	0.000	-1.384	0.034
Age	-0.001	0.000	-2.670	0.008	-0.006	0.001
Constant	0.026	0.036	0.730	0.468	0.000	0.000

Source: Authors' Estimation from NSS 61st round unit level data

The Probit model result obtained from the data set of NSS 66th round gives a somewhat different result from that of the NSS 61st round. The model result in the 66th round is not the same as that of the 61st round. Here it is found that the variable sex is statistically significant which shows with a positive sign of the co-efficients. This implies that the male counterpart in the rural West Bengal has better access to the rural non-farm sector as compared to the female which is supported by the hypothesis we have considered in the previous section. Coming to the general education level, it is seen that the lower education level are statistically insignificant but higher level of general education level, though statistically

significant, has a sign which is not consistent with the hypothesis. Moreover in this year we have got that the level of technical education is insignificant. This may happen because it has already been mentioned that education level is not always necessary to acquire skill for getting a job in the rural non-farm sector. In case of caste it is again seen that the co-efficients of SC and ST are significant with a negative sign which means that the opportunity of these castes to get job in the rural non-farm sector is less as compared to the General caste in the region. The model here reveals that the per capita MPCE has a negative relation with employment in the rural non-farm sector and moreover the variable is insignificant. The sign of the co-efficient is not consistent with the hypothesis, we have considered as the hypothesis says that per capita MPCE should have a positive relation with the employment in the rural non-farm sector as it allows the individuals/ household to invest in the rural non-farm sector and to join the sector as self employed worker. The model above represents that the per capita land possessed by an individual residing in the rural areas of West Bengal has an inverse relation with the employment in the rural non-farm sector. Here also the household size comes out to be insignificant with a negative sign. But the household size should have a positive relation with the employment in the rural non-farm sector. But here the variable is insignificant with a negative sign. Age has a negative impact on the dependent variable here. With the increase in the age the probability of getting a job in the rural non-farm sector decreases. Again the person who has spent most of the life in the field of agriculture may not like to shift to the rural non-farm sector. Hence there exists a negative relation with the age of an individual.

Table 4.2: Result of Probit Model for the year 2009-10 (66th Round)

	Coef.	Std.Err	z	P> z	Marginal Effect	Delta Std Err
Sex= 1, male =0, female	0.046055	0.027504	1.67	0.094	0.017508	0.01045
General Education (Reference: No literacy)						
Upto Primary	0.045423	0.037692	1.21	0.228	0.01735	0.014395
Middle	-0.03391	0.04486	-0.76	0.45	-0.01295	0.01714
Secondary & Above	-0.12958	0.046024	-2.82	0.005	-0.04939	0.017544
Technical Education (Reference: No Education)						
has tech education	0.889926	0.767369	1.16	0.246	0.303727	0.206093
Below Graduate	-0.69684	0.221244	-3.15	0.002	-0.24527	0.066484
Graduate & Above	-0.20618	0.372309	-0.55	0.58	-0.07786	0.138539
Caste (Reference: General)						
ST	-0.29939	0.062507	-4.79	0	-0.11287	0.023084
SC	-0.12204	0.035727	-3.42	0.001	-0.04643	0.013563
OBC	0.06169	0.052815	1.17	0.243	0.02345	0.020041
Religion (Reference: Hindu)						
Muslim	0.058488	0.035023	1.67	0.095	0.022265	0.013343
Others	0.130476	0.127723	1.02	0.307	0.049625	0.048423
pc_mpce	-1.8E-05	3.12E-05	-0.59	0.555	-7.00E-06	1.19E-05
pc_landpossessed	-2.5014	0.129502	-19.32	0	-0.95107	0.046872
householdsize	-0.00465	0.005841	-0.8	0.426	-0.00177	0.00222
Age	-0.00235	0.001212	-1.94	0.052	-0.00089	0.00046
Cons	0.268079	0.072751	3.68	0		

Data Source: NSS 66th round unit level data

4.4 Conclusion

The Probit models based on the NSS data of the two years 2004-05 and 2009-10 provide a bit different results. In spite of that, a fair idea about the push and pull factors that is working behind the shift of the people to the rural non-farm sector. From both the models it is seen that the general education level has significant effect on the employment in the non-farm sector which means that the education level achieved by a person pull him to the rural non-farm sector. Though technical education level in both the models comes out to be insignificant yet the skill can

be achieved without formal training. The person who can achieve the skill do not want to remain in the agricultural sector and tries to swing to the rural non-farm sector with the hope of better returns in comparison to the agricultural sector. Again the per capita MPCE is significant in the 61st round Probit model whereas it is insignificant in the 66th round Probit model. This may occur because of the changes in the data set in the two years. But we can infer that higher income acts as one of the pull factors that cause the shift of the workers from the agricultural sector. On the other hand, the land possession has a significant effect implying that people with small land possession has the tendency to shift towards the rural non-farm sector. This acts as the push factor for the shift to the sector. Though household size as an explanatory variable should have acted as a push factor for the shift from the agricultural sector. But it is insignificant in both the years. Hence I am not considering it as a factor that influences the shift of the workers to the rural non-farm sector.

Hence from the above analysis it can be concluded that in West Bengal the pull factors act more as the reason for the shift of the rural workers from the agricultural sector to the rural non-farm sector. The push factor has less effect in this field as compared to the pull factors working behind this shift. So we can say that in West Bengal rural areas the pull factors are more important as compared to the push factors.

Chapter 5

Conclusion

This whole study gives us a fair detail of the employment pattern in the rural non-farm sector of West Bengal. The study not only concentrated on the state as a whole but also on the NSS regions and has verified separately the employment condition in all the four regions also. The importance of the rural non-farm sector in the state in respect of employment has been studied in comparison with other 15 major states of India. It has been found that as far as the percentage of the total rural workers (male + female) are considered, among all the states West Bengal occupied the second position in both the years concerned i.e. 2004-05 and 2009-10. But when it comes to the separate study of the male and female employment in the sector in these two years, the data available from the NSS reports reveal that the scenario is not the same as that of the employment of the total rural person in the rural non-farm sector. West Bengal does not have a very sound position in case of the rural male employment in the sector. For this case the state ranked seventh in both the years, inspite of its position among the 15 major states in case of the total rural person employment. The position of the state in case of the total rural person employed may have improved because of rural female employment in the rural non-farm sector. Compared to any other states, it is Kerala and West Bengal which have a very high percentage of female employment. West Bengal ranked second in the year 2004-05 which improved so that it can occupy the first position and there is a noteworthy increase in the percentage of the rural females working in the rural non-farm sector. This position of West Bengal regarding the

employment of the rural female in the sector concerned here, keeps the state in the second position among all the 15 states when total rural persons employment is concerned.

Now in the second chapter I have also considered the sub sectors of the rural non-farm sector and their employment pattern in the state and in its different region. It is found that as far as the total rural persons employment is concerned,, manufacturing sector has the highest proportion of employment in both the years followed by wholesale, retail trade and hotel sector. For this, the construction sector does not have significant percentage of employment. The employment of the rural males in different sectors of the rural non-farm sector shows almost a similar picture like that of the total rural persons employment. For them also the manufacturing sector has the highest percentage of employment followed by wholesale, retail trade sector and construction sector. In both the cases the proportion of employment in the electricity, gas and water supply sector is negligible. But in case of rural male, the mining and quarrying sector in West Bengal also does not absorb a good proportion of them in the state. But the employment of the rural female in the different sub sector show a different picture in comparison to the rural male and total rural persons. Rural female has the highest employment in the manufacturing sector. Apart from this sector, the public administration sector absorbs a good proportion of the rural female in the state. But the employment of rural females is not that much prominent in the construction has that in the case of rural males and the total rural persons. But for them also, there is almost no employment in the electricity, gas and water supply sector.

This paper has also considered the modes of employment that are available in the rural non-farm sector. Here the modes of employment have been studied under three definitions of employment. When Usual Status is considered, among the three modes of employment, it is found that when the employment of the total rural person is considered, most of the people are engaged as the self employment in the sector. The major proportion of the remaining rural persons (male and female) are engaged as casual labour and a very small proportion are regular employed in this sector. Though in the later year the proportion of the total

rural persons working in the sector as self employed, it still remain the highest source of employment in the rural non-farm sector. This picture is same for the state as a whole as well as for the different regions of the state. When the rural male is considered, it is found that the proportion of self employment among them has decreased in the later year and that of the regular and the casual labour has increased. Only in the Western Plain regions the proportion of self employment has increased and unlike other regions the proportion of regular employment in the region has decreased. The rural females are mainly engaged as self employed in the sector as compared to the casual labour and regular employed. More than 50% of the total rural female working in the rural non-farm sector are engaged as self employed. Apart from the self employment they are also engaged as casual labour but a very small percentage of the rural female is engaged as the regular employed in the sector. Let us consider the proportion of employment under CWS and CDS. It is found that under CWS the proportion of self employment remain unchanged in the two years and that of the regular employment has fallen. The proportion of the casual labour in the sector has shown an increase in the later year. The rural male employment in the sector under CWS has revealed that the self employment has decreased in the later year but that of the regular and casual labour has increased. On the other hand, the female employment in the rural non-farm sector under this category of employment shows that the proportion of the self employment has decreased and that of the casual labour has increased. But the proportion of the regular employed has almost remain unchanged in both the years. Under CDS the employment in the rural non-farm sector show a completely different picture. Here the self employment of the total rural persons has increased in the later year but that of the regular and casual labour has decreased. For the rural males it is found that the proportion of the self employment has decreased whereas there has been a slight increase in the proportion of the regular employed. The casual labour's proportion also increased in this case. Under CDS also, the major proportion of the rural females are engaged as the self employed and remaining very small proportion are found as casual labour.

This paper not only concentrated on the employment of the total rural employment

in the rural non-farm sector but also studied the employment condition of different social groups in West Bengal. The study above reveals that in West Bengal also there is the predominance of the General Category people who are supposedly the socially advanced class of the society. In most of the region and the state as a whole as well, it is the General Category who has the highest proportion of employment in the rural non-farm sector and the employment proportion of these people are much higher relative to the other social groups. Among the socially backward classes it is the SC who has the highest proportion of employment in the state as well as in different regions of the state. In some places it the STs who have more employment percentage and some places have OBC more in the rural non-farm sector but both are much less than that of the SCs. Again, for all the social groups it has been found that the proportion of people engaged in the rural non-farm sector as regular employed is the lowest. Maximum proportion of the people is engaged as self employed and casual labour in the sector. Irrespective of the social group, it is seen that the majority of the people in the rural non-farm sector are working as self employed and casual labour. But again the majority is found to be working as self employed as compared to the casual labour in the year 2004-05. But the data of the NSS 66th round reveals that there has been a shift in the modes of employment from the self employed to the casual labour. For all the social groups, the percentage of the people engaged in the rural non-farm sector as self employed decreased and that of the casual labour increased. The proportion of the regular employed people in the sector increased in the year 2009-10 but still that is much lower in comparison to the proportion of people engaged as self employed and casual labour which is true for all the social groups.

After studying the employment condition the rural non-farm sector of West Bengal and its different states I have concentrated on the factors that determine the shift of the rural workers from the agricultural sector. It can be concluded from the above study that in West Bengal the pull factors act more as the reason for the shift of the rural workers from the agricultural sector to the rural non-farm sector. The push factor has less effect in this field as compared to the pull factors working behind this shift. So we can say that in West Bengal rural areas the pull factors are more important as compared to the push factors.

Thus in this paper, I have tried to put up the employment picture of the rural non-farm sector in West Bengal and its different regions.

Appendix

Region-wise Percentage distribution of social groups working in the subsectors of the Rural Non-Farm Sector

State/ Region	Social Group	Mining & Quarrying		Manufacturing		Construction		Trade & Hotels		Transport		Services	
		2004- 05	2009- 10	2004- 05	2009- 10	2004- 05	2009- 10	2004- 05	2009- 10	2004- 05	2009- 10	2004- 05	2009- 10
Himalayan	ST	29.8	13	13.7	7.06	8.39	3.33	12.9	11.4	0.6	7.27	10.54	5.41
	SC	39.8	63.9	42.3	44.4	29.4	74.8	39.8	56.2	37.5	67.5	58.5	55.3
	OBC	9.31	4.11	16.7	22.6		6.08	6.25	8.81	4.27	0.89	0.59	3.17
	Gen	21	18.9	27.2	25.8	62.1	15.7	41	23.5	57.5	24.3	30.3	36.1
Eastern Plains	ST	9.02	6.56	2.72	1.68	6.82	1.25	0.52	2.05	4.53	0.99	7.8	4.41
	SC	27	22.7	16.7	28.4	26.5	26.7	20.1	23.7	18.5	18.6	23.8	22.7
	OBC	3.69	5.9	10.1	8.17	1.81	5.85	6.5	4.74	7	0.04	6.44	16.4
	Gen	60.2	64.8	70.4	61.6	64.8	66.1	72.8	69.5	69.9	80.2	61.9	56.4
Central Plains	ST	4.91	6.84	1.26	1.19	1.57	12.3	2.06	5.54	0.55	6.68	1.78	1.81
	SC	34.9	31.8	28.2	21.1	40.1	40	34.9	32.7	37.5	41.9	37	38.9
	OBC	5.91	5.66	4.77	5	0.73	4.71	6.88	6.31	3.35	6.58	6.08	7.24
	Gen	54.1	55.6	65.7	72.6	57.5	42.8	56.1	55.4	56.5	44.8	55	52
Western Plains	ST	15.4	9.68	9.59	8.8	12.9	20.75	3.6	1.82	8.51	1.47	5.38	1.45
	SC	24.8	29.9	9.83	23.7	37.4	32.5	9.67	26.8	36.8	31.8	14.5	26.3
	OBC	11.6	7.97	6.49	14.6	10.6	6.85	15.8	9.2	6.12	4.3	13.3	12.8
	Gen	48	52.4	74	52.7	38.9	39.8	70.8	62.1	48.5	62.3	66.7	59.3
Total	ST	11.3	8.08	4.08	2.68	5.84	7.89	2.55	4.49	2.89	3.32	4.6	3.03
	SC	29.7	31.1	20.1	24.9	33.3	38.6	26.2	31.4	34.6	32.8	29	31.2
	OBC	7.21	6.25	7.42	8.16	2.55	5.62	8.52	6.68	4.7	2.39	7.79	12.6
	Gen	51.7	54.5	68.3	64.2	58.3	47.8	62.7	57.3	57	61.4	58.6	53

Data Source: NSS 61st and 66th round unit level data

Bibliography

- Anderson, D and Leiserson, M.W. (1980), "Rural Nonfarm Employment in Developing Countries" *Economic Development and Cultural Change*, Vol. 28, No. 2, pp. 227-248
- Anríquez, G and Stamoulis, K (2007) "Rural Development and Poverty Reduction: Is Agriculture Still the Key?" *Agricultural Development Economics*, ESA Working Paper No. 07-02
- Basant R. & Kumar B.L. (1989) "Rural Non-Agricultural Activities in India: A Review of Available Evidence" *Social Scientist*, Vol. 17, No. 1/2 (Jan. - Feb., 1989), pp. 13-71
- Basu D N and Kashyal S P (1992) "Rural Non-Agricultural Employment in India: Role of Development Process and Rural-Urban Employment Linkages", *Economic and Political Weekly*, Vol. 27, No. 51/52, pp. A178-A189
- Bhambari, C.P(2005) "Reservations and Casteism", *Economic and Political Weekly*, pp.806-808
- Bhaumik, S.K (2007) "Growth and Composition of Rural Non-farm Employment in India in the Era of Economic Reforms" *Indian Economic Journal* Vol. 55, No. 3 (Oct-Dec, 2007) pp. 40-65
- _____ (2007) "Occupational Diversification among Rural Workers: Results from Field Surveys in West Bengal" *The Indian Journal of Labour Economics*, Vol 50. No.4 pp. 673-688
- _____ (2002) "Emerging Employment and Unemployment Scenarios in West Bengal: Implications for Policy" *Journal of Indian School of Political Economy*, Vol.14, No. 3 (July-Sept) pp.395-430
- Chidambaram, R (2004) "Rural Development and Hypothesis Testing" *Inaugural Address at the 57'h Annual Conference of the Indian Society of Agricultural Statistics held at GB Pant University of Agriculture & Technology*
- Daniel, S (2001) "The Rise and Fall of the Rural Non-farm Economy: Poverty impacts and Policy options" *Development Policy Review*, 19(4):491-505
- Dev, S.N (1990) "Non-Agricultural Employment in Rural India: Evidence at a Disaggregate Level", *Economic and Political Weekly*, Vol. 25, No. 28, pp. 1526-1536
- Eapen, M (1996) "Rural Non-Farm Employment: Some Reflections on Petty Production", *Economic and Political Weekly*, Vol. 31, No. 26, pp. 1673-1675

- Gordon, A. and Catherine C. (2001) "Rural Non-Farm Activities and Poverty Alleviation in Sub-Saharan Africa" Policy Series 14, *Natural Resources Institute, University of Greenwich*.
- Gopinath, P (2009) "The Role of Non-Farm Sector in Indian Economy", *Tata Institute of Social Sciences*, Seminar Paper
- Harriss, B (1987) "Regional Growth Linkages from Agriculture and Resource Flows in Non-Farm Economy", *Economic and Political Weekly*, Vol. 22, No. 1/2, pp. 31-46
- Himanshu, Lanjouw, P, Mukhopadhyay, A and Murgai, R (2011) "Non-Farm Diversification and Rural Poverty Decline: A Perspective from Indian Sample Survey and Village Study Data", *Asia Research Centre*, Working Paper 44
- Hirway, I (2005) "Understanding a Neglected Sector" *Economic and Political Weekly*, Vol. 40, No. 18, pp. 1822-1824
- Hodge, I (1986) "Rural development and the environment: A review" *The Town Planning Review*, Vol. 57, No. 2 (Apr., 1986), pp. 175-186
- Hossain, M (2004) "Rural Non-Farm Economy Evidence from Household Surveys" *Economic and Political Weekly*, Vol. 39, No. 36, pp. 4053-4058
- Islam, N (1997), "The Non-Farm Sector and Rural Development – Review of Issues and Evidence", *International Food Policy Research Institute, Washington DC*, Food, Agriculture and the Environment Discussion Paper 22
- Jha, B (2006) "Rural Non-Farm Employment in India: Macro-Trends, Micro-Evidences and Policy Options" *Institute of Economic Growth*, Working Paper No. E/272/2006
- Kaur, S, Kulkarni, V.S, Gaiha, R and Pandey, M.K (2010) "Prospects of Non-Farm Employment and Welfare in Rural Areas", *Australia South Asia Research Center, Australian National University*, Working Paper No. 2010/05
- Kundu, A; Sarangi, N and Dash, BP (2003), "Rural Non-farm Employment: an Analysis of Rural Urban Interdependencies" *Overseas Development Institute*, Working Paper 196
- Kumar, A. (2008) "Rural Employment Diversification in Eastern India: Trends and Determinants", *National Centre for Agricultural Economics and Policy Research*, Working Paper No. 11
- Krishnan, PS (2012), "Caste Discrimination in Higher Education in India" *Annual EMS Memorial Lecture*
- Lanjouw, P and Murgai, R (2008) "Poverty Decline, Agricultural Wages and Non-Farm Employment in Rural India: 1983-2004", *Stanford Center for*

- Mishra, GP (1978), "Anatomy of Rural Unemployment and Policy Prescriptions" *Indian Journal of Industrial Relations*, Vol. 14, No. 2, pp. 261-281
- Mecharla, PR (2002), "The Determinants of Rural Non-Farm Employment in Two Villages of Andhra Pradesh (India)" *Poverty Research Unit at Sussex*, Working Paper No. 12
- Meijerink, G. & Roza P. (2007) "The role of agriculture in development", *Markets, Chains and Sustainable Development Strategy and Policy Paper*, no. 5. Stichting DLO: Wageningen.
- Mishra K Deepak (2007) "Rural Non-Farm Employment in Arunachal Pradesh- Growth, Composition and Determinants" *V.V. Giri National Labour Institute*, NLI Research Studies Series No.: 075/2007.
- Mody, A (1981) "Resource Flows between Agriculture and Non-Agriculture in India, 1950-1970", *Economic and Political Weekly*, Vol. 16, No. 10/12, Annual Number, pp.425-427+429+431+433-435+437+439-440
- Mukhopadhyay S. (1985) "Rural Non-Farm Sector in Asia- A Characterisation" *Economic and Political Weekly*, Vol. 20, No. 22, pp. 966-968
- Mukherjee, A and Zhang, X (2005) "Rural Non-Farm Development in China and India: The Role of policies and Institutions" DSGD Discussion paper No. 24, *International Food Policy Research Institute*.
- Mukherjee, AN (2002), "Farm Productivity and Nonfarm Employment for Rural Development in India" *Doctoral Program in Policy and Planning Sciences*, *University of Tsukuba*, Ph.D Thesis
- Ramamurti, S and Radhai, R "The Impact of the Non Farming Sources of Income On the Socio economic Conditions of the Village Economy of Tamil Nadu, India" *Center for Asia Studies*, pp. 01-20
- Rahman, A, Rahman, T and Rahman, T. (2007) "The Role of Organizations in the Growth of the Rural Non-Farm Sector in Bangladesh The Case of LGED" *School of Environment & Development, University of Manchester*, Discussion Paper Series No.11
- Ray, S (1994), "Farm - Non-Farm Interaction in a Labour Surplus Economy" *Economic and Political Weekly*, Vol. 29, No. 53, pp. A171-A174
- Reardon, T and Berdegue J, Escobar G (2001) "Rural Non-farm Employment and Incomes in Latin America: Overview and Policy Implications" *world Development*, Vol. 29, No. 3 pp. 395-409
- Sakthivel, S and Joddar P (2006) "Unorganised Sector Workforce in India Trends, Patterns and Social Security Coverage" *Economic and Political Weekly*, Vol.

41, No. 21, pp. 2107-2114

- Sharad, R (2008), "Determinants of Rural Non-Farm Employment: Microlevel Evidence from Uttar Pradesh" *Social Scientist*, Vol. 36, No. 5/6, pp. 22-50
- (2006) "Occupational Diversification and Access to Rural Employment- Revisiting the Non-farm Employment Debate" *Labour and Development*, Vol. 11/12, pp. 102-131
- Shetty, SL (1971) "Inter-Class Incidence of Taxation in Farm and Non-Farm Sectors in India" *Economic and Political Weekly*, Vol. 6, No. 52, pp. A173+A175-A186
- Shukla, V (1991) "Rural Non-Farm Activity: A Regional Model and Its Empirical Application" *Economic and Political Weekly*, Vol. 26, No. 45, pp. 2587-2595
- Shukla, V (1992) "Rural Non-Farm Employment in India Issues and Policy" *Economic and Political Weekly*, Vol. 27, No. 28, pp. 1477-1488
- Som, R, Kleih U, Kumar Y and Jena S (2002) "Rural Non-Farm Employment in Madhya Pradesh: Findings of a Participatory Rural Appraisal in 8 Villages", *Natural Resources Institute*, NRI Report No. 2694
- Thorat, S (2002) "Oppression and Denial: Dalit Discrimination in the 1990s", *Economic and Political Weekly*, Vol. 37, No. 6, pp. 572-578
- Thorat, S and Sabharwal N S (2006) "Rural Non-farm employment of the Scheduled Castes- A Comparative Study", *Indian Institute of Dalit Studies*, Working Paper Series, Volume I, No. 05
- Unni, J (1991), "Regional Variations in Rural Non-Agricultural Employment: An Exploratory Analysis" *Economic and Political Weekly*, Vol. 26, No. 3, pp. 109-111+113-117+119-122
- Unni, J (1996), "Diversification of Economic Activities and Non-Agricultural Employment in Rural Gujarat" *Economic and Political Weekly*, Vol. 31, No. 33, pp. 2243-2245 and 2247-2251
- Uniyal, M and Paudyal, D (2007), "An Assessment of Progress in Promoting Sustainable Rural Development in the Asian and Pacific Region" *United Nations Economic and Social Commission for Asia and the Pacific*
- Vyas, VS and Mathai, G (1978), "Farm and Non-Farm Employment in Rural Areas: A Perspective for Planning" *Economic and Political Weekly*, Vol. 13, No. 6/7, Annual Number, pp.333+335+337+339+341+343+345+347