Nature, Extent, and Pattern of Rural Non-Farm Employment in India

* Neeraj Sharma ** Harinder Mohan

Abstract

The present paper seeks to analyze the nature, extent, and pattern of rural non-farm employment in India by utilizing National Sample Survey Estimates pertaining to various NSS rounds. The results of the study revealed that rural non-farm employment recorded significant increase during various NSS rounds. The gender-wise composition of rural non-farm employment showed that rural non-farm activities have remained male dominated. Within the rural non-farm activities, the increase in the share of the tertiary sector exceeds that of the secondary sector. Moreover, most of the rural non-farm activities were found to be informal in nature. The proportion of self-employed activities followed by casual and regular activities explain the bulk of the increase in the rural non-farm activities.

Keywords: rural non-farm employment, organized and unorganized sector, health and education, employment, tertiary sector

JEL Classification: E2, H51, H52, L6

Sub Topic of the paper: International Economics and Trade

Paper Submission Date: October 13, 2013; Paper sent back for Revision: January 10, 2014; Paper Acceptance Date:

April 16, 2014

he significant role played by the rural non-farm sector (RNFS) in the overall strategic development of rural economies is now universally well recognized. This sector is considered as the backbone of rural economies in numerous parts of the developing world. This sector has also been regarded as the primary source of income and employment for many of the world's poor. Evidence around the world shows that rural non-farm income constitutes roughly 35% of the rural household income in Africa and about 50% in Asia and Latin America respectively. The rural non-farm sector holds the share of 25 - 35% of total income of rural households in contrast with its 20-30% share of employment in developing countries (Hagblade, Hazell, & Reardon, 2010). In the context of the Indian economy too, the percentage share of rural non-farm sector in rural households' income has increased from 31% to around 51% over the period from 1972-73 to 2009-10. Such a significant improvement in the share of rural non-farm income in total rural income over a subsequent period clearly reflects the increasing importance of non-farm activities in the overall rural livelihood in India (Awasthi, 2010).

Besides, the rural non-farm sector holds various production, expenditure, and investment linkages with the other sectors of the economy. These interlinkages can be observed both from the supply as well as the demand side. From the supply side, the non-farm sector provides various kinds of inputs, fertilizers, machinery, and so forth to be utilized in the farm sector and thus facilitates the growth of other sectors of the economy. Whereas, on the demand side, the rural non-farm sector provides the market for the products produced in the farm sector. In addition, the rural non-farm sector can play an active role in reducing widespread rural poverty through income and employment generation, particularly at the times of agricultural distress. The rural non-farm (RNF) sector can interact favourably to alleviate rural poverty with a greater likelihood of the poor households employed in this sector (Lanjouw, 1999; Lanjouw & Shariff, 2004). This very role of the rural non-farm economy becomes

E-mail: neeraj2a@rediffmail.com

E-mail: harinder.mohan@yahoo.com

^{*}Associate Professor, Department of Evening Studies, Panjab University, Chandigarh-160 014.

^{**} Assistant Professor, P.G. Department of Economics, Guru Nanak College, Moga-142 001, Punjab.

immense as it can provide diverse employment opportunities to the rural people and in the process, transforms the rural economy in the desired direction of inclusive growth. There is mounting evidence in village level studies to show that a fairly big proportion of the landless and marginal as well as small farming households, who, amongst themselves constitute a preponderant majority of India's rural poor, do pursue numerous non-farm activities and this helps them to cope with the severity of poverty they would have otherwise faced with earnings from agriculture alone (Chadha, 2008).

The role and significance of rural non-farm activities are also gaining importance for utilizing local talents and local resources, which cannot be easily transferred and utilized in the urban counterparts due to certain economic and non-economic bottlenecks. Moreover, the development of the rural non-farm sector can be an important mechanism for reducing wide spread rural-urban disparities. In order to narrow down rural-urban economic gaps among different strata of rural households, there is an immediate need to look beyond conventional agriculture (Start, 2001). In addition, the development of rural non-farm activities can prevent rural-urban migration (Kar & Ray, 2006) and encourage self-sufficiency among the rural poor. As rural non-farm activities are usually less capital absorbing, the expansion of such activities can lead to deceleration in farm-non-farm income inequalities.

The structural transformation of the Indian economy has not witnessed conventional growth path as suggested by Kuznets in his theory of growth. The rate of growth of GDP in the services sector has outpaced that of the manufacturing sector. India is said to have outpaced a number of countries with its growth in the services sector and this sector has emerged as the key driver of the fast growth of the Indian economy during the past two and half decades (Unni & Naik, 2011). The share of services grew to nearly 60% of the economy's incomes, while the manufacturing sector maintained its position with about a quarter of share of the gross domestic product in 2009-10. Hence, the services sector (which comprises of transport, storage & communication, community & personal social services) has emerged as the most dynamic sector of the Indian economy and is regarded as the engine of our country's economic growth during recent years. However, the major drawback of India's structural transformation has been noticed as slower occupational diversification away from agriculture and towards nonfarm activities. Until recently, nearly three-fourths of the rural workforce largely depended on the agricultural sector as the main source of livelihood, with industry and services constituting 13% each of the shares of employment respectively. Moreover, the declining employment elasticity in the agricultural and manufacturing segments of the rural economy also points towards the distress employment scenario, particularly in the rural parts of the economy. Consequently, the incidence of unemployment has shown increasing trends in recent years and accounted for nearly 8% during 2009-10; this situation is distorting, more specifically in the rural than in the urban areas. Though recently, the estimates of population below the poverty line have declined, the pace of rural poverty reduction was recorded lower during 2009-10 than in the previous two decades. As a result, the absolute number of poor is still large in numbers with most of them being agricultural labour households facing the worst brunt of poverty. Therefore, the rural non-farm sector provides a rational to capture rising economic problems of unemployment and poverty, particularly in the rural parts of our country.

The rural non-farm sector helps facilitating structural transformation in employment and enhances the living standard of rural masses (Sen, 2010). The rural non-farm economy in India is too diverse in activities, unit size, and geographical dispersal. The sector encompasses wide range of heterogeneous activities such as mining and quarrying, household and non-household manufacturing, processing, repair, construction, trade and commerce, transport and other services in villages and rural towns (Bhaumik, 2002). The Economic Census (2005) in India identified 17 non-farm activities, that is, mining and quarrying, manufacturing, electricity, gas, water supply, construction, maintenance and repair, wholesale and retail trade, hotels and restaurants, transport and storage, financial intermediation, and health and social work. One of the significant features of the non-farm sector in India is that the majority of the non-farm activities even outside agriculture are informal in nature. According to the National Commission for the Enterprises in the Unorganized Sector (NCEUS, 2008), in non-farm activities in India, 89% of the enterprises and establishments are unorganized sector enterprises employing less than 10 workers in all. These enterprises account for nearly two thirds of the total employment in this sector and 30% in non-farm output. This points towards the lion's share of the informal non-farm sector in national income and employment generation and more so in rural areas, where agriculture has ceased to generate additional

employment opportunities and has become less remunerative as compared to other occupations. Against the backdrop of the importance and current employment scenario of the non-farm sector in India, the proposed study evaluates the nature, extent, and pattern of the rural non-farm sector in India during the period from 1990-91 to 2010-11. More specifically, the major objectives of the study are:

- (i) To examine the size and pattern of the rural non-farm sector in India;
- (ii) To study the status of rural non-farm employment in India;
- (iii) To bring about policy perceptions in the direction of generating employment opportunities specifically in the rural non-farm sector.

Review of Literature

One of the essential features of the structural transformation is noted as the decline in the proportion of workforce engaged in agriculture in the development of developed economies (Kuznets, 1963). There is a large body of literature on the various issues related with non-farm employment both at the aggregated and disaggregated levels. Most of the studies revealed that the pace of rural diversification in favour of non-farm activities in the rural areas has gained momentum during the past two and half decades. The share of rural non-farm employment in total rural labour force has witnessed substantial growth over the past three decades (Abraham, 2009; Bhaumik, 2002; Ghuman, 2005; Himanshu, 2011; Jha, 2007; Mishra, 2007). However, the studies have also recorded that the pace of rural diversification has not been uniform across different states and regions, nor are the factors associated with this process identical. Within the rural non-farm activities, the increase in the share of the tertiary sector exceeds that of the secondary sector. Moreover, most of the rural non-farm activities are found to be informal in nature. The proportion of self-employed activities followed by casual and regular activities explains the bulk of the increase in the rural non-farm activities.

As far as the determinants of rural non-farm employment are concerned, a number of hypotheses have been put forward and tested in literature on the basis of empirical data. Among these hypotheses, three hypotheses are most popular. These are as follows:

- **⊃** Agricultural Growth Linkages: Mellor put forward the first hypothesis forward 1976, which deals with the interlinkages between demand and supply resulting from a growing agriculture or agricultural led diversification. Mellor emphasized the role of various linkages between farm and the non-farm sector. Production and consumption linkages, both backward and forward, resulted in the demand and supply of each other's products. Increase in the income of farmers would result in an increase in the demand for goods and services of rural non-farm sectors. On the other hand, production linkages would also derive from the agricultural sector. Backward production linkages would result from farmers' increased demands for inputs from the non-agricultural sector, whilst forward linkages would develop through the increased need for agro processing activity. A number of Indian studies have suggested that the growth of agriculture is likely to stimulate growth and development of the RNFE (Hazell & Haggblade, 1991; Papola, 1992; Shukla, 1991, Unni, 1991, 1996). Vaidyanathan (1986) found a significant positive relationship between crop output per head of agricultural population and non-farm employment.
- **⊃ Residual Sector Hypothesis :** The second hypothesis deals with residual sector hypothesis which envisages non-farm activities to absorb surplus labour force (Vaidyanathan, 1986). Vaidyanathan (1986), in his study based on data from 16 states, found a positive correlation between non-farm employment and unemployment rate, and concluded that the rural non-farm sector acts as a sponge in absorbing surplus rural labour force when the potential of agricultural employment was limited. Following Vaidyanathan (1986), various studies examined the growth-distress debate, and the identification of factors explaining regional variation of growth in the RNF sector (Abraham, 2011; Eapen, 1994).

⊃ Inverted U Time Path Hypothesis : The third hypothesis examines the inverted U time path hypothesis according to which the share of non-farm employment in total employment is the net result of the simultaneous operation of both push and pull factors. In addition to validification of the prosperity- and /or distress-induced factors, the role of additional important factors like literacy, urbanization, rural infrastructure, social capital, caste, gender, and government rural development schemes on rural non-farm employment have also been studied empirically. Papola (1992) in his study emphasized the emerging importance of small towns in promoting non-farm employment in rural areas through backward and forward linkages facilitated by these towns.

Database and Materials

The data for the present study were gathered from various secondary sources like governmental and non-governmental reports, journals, articles, books, and so forth. The figures for growth and pattern of rural non-farm employment have been culled from National Sample Survey reports for different years. Data for the incorporated unorganized sector were taken from National Commission for Enterprises in the Unorganised Sector. Simple statistical tools like ratios and percentages have been used to analyze the various aspects of growth of the rural non-farm sector to make inferences about the collected data.

Nature, Extent, and Pattern of Rural Non-Farm Employment in India

The rural non-farm economy in India is too diverse in activities, unit size, and geographical dispersal. The sector encompasses a wide range of heterogeneous activities such as mining and quarrying, household and non-household manufacturing, processing, repair, construction, trade and commerce, transport, and other services in villages and rural towns (Bhaumik, 2007). As per the Economic Census (2005), non-agricultural establishments registered a growth rate of 4.56% during the period from 1998-2005. The role and size of the rural non-farm sector in rural India has witnessed a spectacular growth over the period of the past three and half decades.

The Table 1 depicts the size and growth of the rural non-farm employment in India between the period from 1972-73 to 2011-12. The percentage share of rural non-farm employment in total rural employment (Table 1) increased from 14.4% in 1972-73 (27th NSSO round) to 23.7% in 1999-2000 (55th NSSO round), and further to 33% in 2011-12 (68th NSSO round) from 29% in 2009-10 (66th NSSO round).

The gender-wise composition of rural non-farm employment (Table 2) shows that the percentage share of male non-farm workers rose from 16.7% in 1972-73 to 41% in 2011-12, whereas that of female non-farm workers registered a rise from 10.3% in 1972-73 to no more than 25% in 2009-10. Thus, it can be concluded that rural non-farm activities have remained male dominated over the years.

Table 1. Growth of Rural Non-Farm Employment in India During 1972-73 to 2010-11 (in %)

NSS Rounds	Year	Farm	Non-farm
27th	1972-73	85.6	14.4
32nd	1977-78	84.4	16.6
38th	1983	81.5	18.5
43rd	1987-88	78.3	21.7
50th	1993-94	78.2	21.6
55th	1999-00	76.1	23.7
61st	2004-05	72.7	27.6
66th	2009-10	71	29
68th	2011-12	67	33

Source: Various NSS rounds (27th, 35th, 38th, 43rd, 50th, 55th, 61st, 66th and 68th round)

Table 2: Gender Wise Distribution of the Rural Workforce in Non-Farm Activities During the Period from 1972-73 to 2009-10 (in %)

NSS Rounds	Year	Persons	Male	Female
27th	1972-73	14.4	16.7	10.3
32nd	1977-78	16.6	19.3	11.8
38th	1983	18.5	22.2	12.5
43rd	1987-88	21.7	25.4	15.3
50th	1993-94	21.6	26.0	13.8
55th	1999-00	23.7	28.6	14.6
61st	2004-05	27.6	33.5	16.7
66th	2009-10	32	37	21
68th	2011-12	33	41	25

Source: National Sample Survey Organization (NSSO). (2010). Report on employment and unemployment in India, 2009-10: Key indicators. NSS 66th Round July2009-June 2010, Report, No.NSS KI (66/10). June, National Sample Survey Organization, New Delhi and S. Ranjan (2006). Occupational diversification and access to rural employment: Revising the non-farm employment debate. Munich Personal RePEc Archive, Paper No. 7870. Retrieved from http://mpra.ub.uni-muenchen.de/7870/

The Table 3 gives the sectoral composition of rural non-farms sector in terms of percentage share of majority of the non-farm activities. Such a classification of the workforce would help to explore the sectors having potential to absorb the growing rural labour force. The share of agriculture and allied activities experienced a decline of nearly 14% points during the period from 1993-94 to 2009-10. It was around 75% in 1993-94, which declined to 72.7 % in 2004-05, and further to 68% in 2009-10. Such a decline in the share of primary activities in the rural labour force is more associated with the decline in the share of male work force as compared to the female work force. The respective share of the secondary sector increased from 10.2 % to 17.4% during the same period. Among the major secondary activities, the share of construction activities increased from 2.4 % in 1993-94 to 9.4% in 2009-10. It is important to note that much of the increase in construction activities can be explained in terms of increasing public distribution programme of infrastructure building, including Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), particularly in the rural and urban areas, and due to the real estate development.

The manufacturing sector recorded a share of 8.1% points during the period from 1993-94 to 2009-10. Although recently, its share in terms of employment registered a fall in 2009-10. But it is noteworthy to note that its share in rural net state domestic product has significantly increased since the economic reforms. It is thus reasonable to say that rural manufacturing has been acting as an important source of productive employment, particularly in rural India. The corresponding employment share in mining, quarrying, electricity and gas activities remained static at a low level of employment. The respective share of tertiary sector in rural non-farm employment increased from 11.4% in 1993-94 to 14.7% in 2009-10. Transport, hotels and restaurants have emerged as the major sub-sectors of tertiary activities in rural India. Male-female decomposition of employment revealed that employment in the manufacturing sector is crucially important both for female and male workers. The respective share was recorded more than 7% for both the gender groups. On the other hand, the corresponding share of transport and communication activities was recorded more for male workers as compared to females. Other services activities have been found to be absorbing a significant proportion of both male and female workers. However, the relative position of this sector lessened later for the male workers.

The proportion of male workers in trade, hotels and restaurants consistently rose from 5.5% to 6.4%. Whereas, for females workers, the figure remained almost stagnated at 2% during the same period. Similarly, in the case of construction and transport, and storage and communication sectors, the proportion of male workers rose from 3.2% to 9.4% between the period from 1993-94 to 2009-10; while it remained more or less at low a level till 2004-05, the employment figures rose in 2009-10. Thus, in net terms, it can be concluded from the analysis that the level and buoyancy of women's employment in non-agricultural activities was recorded to be much lower as compared

Table 3. Sectoral Distribution of the Rural Non-Farm Employment in India (1993-94 to 2009-10) (in %)

Sectors		1993-94			1999-2000			2004-05		
	M	F	Р	М	F	Р	М	F	Р	Р
1. Agriculture and allied activities	74.0	86.2	78.4	71.4	85.4	76.3	66.5	83.3	72.7	67.6
ii. Mining and Quarrying	0.7	0.4	0.6	0.6	0.7	0.5	0.6	0.3	0.5	0.6
iii. Manufacturing	7.0	7.1	7.0	7.3	7.6	7.4	7.9	8.4	8.1	7.2
iv. Electricity, Gas and Water Supply	0.3	-	0.2	0.2	-	0.2	0.2	-	0.2	0.2
v. Construction	3.2	0.8	2.4	4.5	1.1	3.3	6.8	1.5	4.9	9.4
2. Secondary Sector (ii+iii+iv+v)	11.2	8.3	10.2	12.6	9.4	11.4	15.4	8.3	13.7	17.4
vi. Trade, Hotels and Restaurants	5.5	2.1	4.3	6.8	2.0	5.1	8.3	2.5	6.1	6.4
vii. Transport and Communication	2.2	0.1	1.4	3.2	0.1	2.1	3.9	2.0	2.5	2.9
viii. Other Services	7.1	3.4	5.7	6.1	3.7	5.2	5.9	3.9	5.0	5.4
3. Tertiary Sector(vi+vii+viii)	14.8	5.06	11.4	16.1	5.8	12.4	18.1	8.4	13.6	14.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: NSSO Reports various rounds and J. Unni & R. Naik (2011). Rural structural transformation: The case of the service sector in India. *Economic and Political Weekly, 46* (26), 196-200.

to employment generated for men. Later, this trend reversed, as the respective share of women workers started experiencing increasing trends since 2004-05.

Status of Employment

Conventionally, change in the employment status of the workforce is studied by disaggregating total employment into self-employment, regular employment, and casual mode of employment. In terms of earnings, the income from regular employment is considered secure. For the casual worker, neither employment nor income is assured. Casual workers undertake all kinds of work with different employers on a short-term basis and ,therefore, are more vulnerable than those in self-employment, which offers scope for numerous activities, and it is difficult to classify it either as secure or as shaky (Ranjan, 2006).

The Table 4 gives the status wise distribution of employment during various NSSO rounds. The results of NSS data on the status of employment reveals that the share of self-employed activities increased up to 2004-05 followed by casual and regular activities. After 2004-05, the casual activities witnessed a significant increase in terms of employment and that of self-employed activities noticed a fall in their respective shares. However, the corresponding share of self-employed activities registered an increase of 1% from 53.5% to 54.5% during the period from 2009-10 to 2011-12, both for males and females. Such a rise in self-employed activities were accompanied by a decline in the casual activities which declined from 34.4% to 29.9% during 2009-10 to 2011-12. As far as the regular activities are concerned, the period between 2009-10 to 2011-12 registered an increase of 4% both for males and females. Regular activities recorded only a marginal increase during the same period. This trend points towards the increasing importance of self-employment activities in the rural areas of India followed by casual activities and regular activities respectively. It is also seen in the Table 4 that the increase in self-employment activities was highest for female workers as compared to male workers. Casual activities, on the other hand, recorded a significant decline both for male and female workers and even in both the rural and urban areas.

○ Organized and Unorganized Non-Farm Employment: A decomposition of rural non-farm employment into the organized and unorganized sector would help us to understand the quality of employment generated in the rural parts of India. It is pertinent to note that NSSO estimates give figures only for organized sector employment. Unorganized sector employment figures can be calculated by subtracting employment figures from the organized

Table 4. Percentage Distribution of Employment by Status of Employment (UPSS) (%)

				Self-Emplo	oyed					
Year		Rural			Urban			Total		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	
1993-94	57.7	58.6	58.15	41.7	44.8	43.25	53.6	56.8	55.2	
1999-2000	55.0	57.3	56.15	41.5	45.3	43.4	51.2	55.5	53.35	
2004-05	58.1	63.7	60.9	44.8	47.7	46.25	54.2	61.0	57.6	
2007-08	55.4	58.3	56.85	42.7	42.3	42.5	51.9	55.9	53.9	
2009-10	53.5	55.7	54.6	41.1	41.1	41.1	50.0	53.3	51.65	
2011-12	54.5	59.3	55.9	41.7	42.8	41.9	50.7	56.1	52.2	
Casual Labour										
Year		Rural			Urban			Total		

Rural				Urban			Total		
Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	
33.8	38.7	36.25	16.3	25.8	21.05	29.3	36.9	33.1	
36.2	39.6	37.9	16.8	21.4	19.1	30.7	36.8	33.75	
32.9	32.6	32.75	14.6	16.7	15.65	27.5	30.0	28.75	
35.5	37.6	36.55	15.4	19.9	17.65	30.1	35.1	32.6	
38.0	39.9	38.95	17.0	19.6	18.3	32.2	36.6	34.4	
35.5	35.1	35.4	14.9	14.3	14.8	29.4	31.2	29.9	
	33.8 36.2 32.9 35.5 38.0	Male Female 33.8 38.7 36.2 39.6 32.9 32.6 35.5 37.6 38.0 39.9	Male Female Persons 33.8 38.7 36.25 36.2 39.6 37.9 32.9 32.6 32.75 35.5 37.6 36.55 38.0 39.9 38.95	Male Female Persons Male 33.8 38.7 36.25 16.3 36.2 39.6 37.9 16.8 32.9 32.6 32.75 14.6 35.5 37.6 36.55 15.4 38.0 39.9 38.95 17.0	Male Female Persons Male Female 33.8 38.7 36.25 16.3 25.8 36.2 39.6 37.9 16.8 21.4 32.9 32.6 32.75 14.6 16.7 35.5 37.6 36.55 15.4 19.9 38.0 39.9 38.95 17.0 19.6	Male Female Persons Male Female Persons 33.8 38.7 36.25 16.3 25.8 21.05 36.2 39.6 37.9 16.8 21.4 19.1 32.9 32.6 32.75 14.6 16.7 15.65 35.5 37.6 36.55 15.4 19.9 17.65 38.0 39.9 38.95 17.0 19.6 18.3	Male Female Persons Male Female Persons Male 33.8 38.7 36.25 16.3 25.8 21.05 29.3 36.2 39.6 37.9 16.8 21.4 19.1 30.7 32.9 32.6 32.75 14.6 16.7 15.65 27.5 35.5 37.6 36.55 15.4 19.9 17.65 30.1 38.0 39.9 38.95 17.0 19.6 18.3 32.2	Male Female Persons Male Female Persons Male Female 33.8 38.7 36.25 16.3 25.8 21.05 29.3 36.9 36.2 39.6 37.9 16.8 21.4 19.1 30.7 36.8 32.9 32.6 32.75 14.6 16.7 15.65 27.5 30.0 35.5 37.6 36.55 15.4 19.9 17.65 30.1 35.1 38.0 39.9 38.95 17.0 19.6 18.3 32.2 36.6	

	Regular Wage/Salaried Employed									
Year		Rural			Urban			Total		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	
1993-94	8.5	2.7	5.6	42.0	28.4	35.2	17.1	6.3	11.7	
1999-2000	8.8	3.1	5.95	41.7	33.3	37.5	18.1	7.8	12.95	
2004-05	9.0	3.7	6.35	40.6	35.6	38.1	18.3	9.0	13.65	
2007-08	9.1	4.1	6.6	41.9	37.9	39.9	17.9	8.9	13.4	
2009-10	8.5	4.4	6.45	41.9	39.3	40.6	17.7	10.1	13.9	
2010-11	10.0	5.6	8.7	43.4	42.8	43.3	19.8	12.7	17.9	

Source: NSSO Reports various rounds

segment. It is pertinent to note that the National Commission for Enterprises in the Unorganized Sector (NCEUS) has extensively referred to the concepts and results of NSS survey on employment and unemployment. While addressing the issues of employment in informal sectors, the NCEUS noted that employment in India can be meaningfully grouped into four categories to reflect quality and its sectoral association. These are (a) formal employment in the formal or organized sector, (b) informal employment in the formal sector, (c) formal employment in the informal sector, and (d) informal employment in the informal sector.

The Commission's recommendation relating to the definition of the informal sector is as follows:

- **⊃ The Informal Sector:** The unorganized sector consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than 10 total workers.
- **⊃** Informal Workers/Employment: Unorganized workers consist of those working in the unorganized sector or households, excluding regular workers with social security benefits provided by the employers and the workers in the formal sector without any employment and social security benefits provided by the employers.

Table 5. Percentage Distribution of Workers in Formal/Informal Employment

Year	Informal Workers			
	Informal Sector	Formal Sector	Total	
1	2	3	4	
1999-00	93.6	6.4	100	(362.75)
2004-05	93.1	6.9	100	(422.61)
2009-10	91.2	8.8	100	(423.17)
Formal Workers				
1999-00	5.3	94.7	100	(33.64)
2004-05	4.1	95.9	100a	(34.85)
2009-10	4.5	95.5	100	(37.25)
Total Workers				
1999-00	86.2	13.8	100	(396.39)
2004-05	86.3	13.7	100	(457.47)
2009-10	84.2	15.8	100	(460.42)

Note: Figures in parentheses are the absolute numbers in millions.

Source: Adapted from T.S. Papola (1992). Rural non-farm employment: An assessment of recent trends. *The Indian Journal of Labour Economics*, *35* (3), 238-45.

⊃ The Informal Economy: The informal sector and its workers plus the informal workers in the formal sector constitute the informal economy. The Commission considered all agricultural activities undertaken on agricultural holdings, either individually or in partnership, as being in the unorganized sector. According to this definition, it excludes only the plantation sector and other types of organized agriculture (e.g. corporate or cooperative farming) and covers a very large part of agriculture. It is ,therefore, to be noted that the Commission has also made an important distinction between organized or formal and unorganized or informal employment as outlined above.

The Table 5 gives the percentage distribution of workers in the formal or organized and informal or unorganized sectors in India during 1999-00 to 2009-10. It is seen from Table 5 that the organized or formal sector accounted for only about 14% of the total employment in 1999-2000, which marginally increased to 15% in 2009-10. Still, nearly 84% of the workers are employed in the informal or unorganized sector, with no job or social security. It is interesting to note from the Table 5 that even in the formal sector, over half of the workers are in 'informal' nature, which provides neither any secured tenure of employment, nor any protection against the contingent risks during or after employment. Thus, of all the workers in the formal and informal sectors together, 92% were in 'informal' employment. Only 8% were in employment with secured job tenures and with social security against contingent risks of work and life.

The Table 6 depicts the employment growth rate and elasticities of the organized and unorganized sectors between the period from 1999-2000 and 2004-05. The overall employment elasticity of the informal sector was recorded as 0.71 as compared to 0.36 in the organized sector and 0.48 for the entire economy. Among different industries, the informal sector agriculture recorded an employment elasticity of 1.50 as against 0.19 in the formal sector. In the case of manufacturing industries, the informal sector elasticity was 1.04 as against 0.58 in the formal sector. Real estate, renting and business services activities in the informal sector had an abnormally high employment elasticity of 3.09. Elasticity was also found to be considerably high in the case of private households with paid employees, which is entirely in the informal sector.

Policy Implications

The role and significance of rural non-farm employment in providing diverse employment opportunities to large

Table 6. Sector Wise Employment Growth Rate and Employment Elasticities of the Organized and Unorganized Sector Between 1999-2000 and 2004-05

Year→	Employment E	lasticity		Economic Activity				
Employment ↓ Growth Rate	Unorganized (1999-2000)	Organized (2004-05)	Total	Unorganized (1999-2000)	Organized (2004-05)	Total		
Agriculture	1.72	2.20	1.73	1.50	0.19	1.09		
Mining	0.22	6.25	3.97	-0.04	0.78	0.85		
Manufacturing	5.13	4.11	4.83	1.04	0.58	0.75		
Electricity,								
Gas & Water	-1.99	3.16	2.77	1.18	0.73	0.67		
construction	8.77	6.58	8.21	0.91	0.81	0.93		
Trade	3.85	-3.68	3.43	0.52	-0.36	0.42		
Hotels &								
Restaurants	5.34	8.44	5.72	0.99	0.84	0.76		
Transport & Storage	6.09	1.26	4.80	0.86	0.07	0.38		
Banking, Finance								
& Insurance	10.00	5.49	6.54	0.94	1.03	1.13		
Real estate, Renting								
& Business Services	10.25	15.94	11.74	3.09	0.88	1.57		
Public Administration								
& Defense	-37.01	-1.97	-3.35	1.11	-0.46	-0.93		
Education	6.04	6.22	6.17	1.81	1.02	1.08		
Health & Social								
Work	6.03	4.89	5.38	0.50	0.48	0.51		
Other Community,								
Social & Personal								
Services	-2.67	-5.10	-2.97	-0.36	13.49	-0.65		
Private Household								
& Extra territorial								
Organisation	25.42	-29.13	20.73	2.31	1.45	2.87		
Total	2.88	2.94	2.89	0.71	0.36	0.48		

Source: National Commission for Enterprises in the Unorganized Sector. (n.d.). Ministry of Small Scale Industries, Government of India. Retrieved from www.nceus.gov.in

amount of rural labour force has increased manifold during the past two and half decades. Hence, efforts are required to promote non-farm activities to absorb large amounts of the rural labour force. This section gives the policy options to promote non-farm activities in the desired direction.

⊃ Industry Specific Policy Framework: The rural non-farm economy in India is too diverse in activities, unit size, and geographical dispersal. The sector encompasses a wide range of heterogeneous activities such as mining and quarrying, household and non-household manufacturing, processing, repair, construction, trade and commerce, transport, and other services in villages and rural towns. These activities have different demand and supply constraints. Only a single policy option cannot be implemented for diverse non-farm activities. Hence, activity-specific policies need to be implemented to enhance specific non-farm activities. Special efforts are required to be taken on many sectoral policy constraints creating hurdles in the way of gainful employment opportunities in rural areas. To this end, factors associated with the particular non-farm activity need to be explored empirically.

- **⊃** Vocational Training Institutions and Skill Development: The role of vocational training institutions is immense in enhancing productivity and efficiency of non-farm activities. The Government of India laid special emphasis to provide transport and skill development of unorganized non-farm sectors in the Eleventh Five Year Plan. However, efforts are required to increase the vocational training institutions and provide skill development for enhancing the skills of the rural labour force employed in various non-farm activities. To this end, skill development and entrepreneurship development should become the integral part of the current educational system.
- **⊃ Health and Education :** Health and education have been recognized as two important pillars of modern economic development. In the era of globalization and liberalization, the government should promote human capital formation in the form of improving skill formation and health measures to improve the efficiency and productivity of rural workers.
- **⊃** Infrastructural and Technological Development: Access to infrastructure and better technology have been identified as the key factors affecting participation in rural non-farm activities. Hence, efforts are required to promote better infrastructural facilities, particularly in the rural areas, to promote those activities associated with the non-farm sectors.
- **⊃** Female Labour Participation: Removal of gender disparity in every aspect of economic development has always remained an integral part of economic planning in India. Gender has been regarded as a significant variable affecting participation in non-farm activities at the disaggregated level. Female labour participation must be encouraged so they can also enjoy the fruits of economic growth. Towards this end, sectors having high employment absorption potential need to be particularly promoted in the rural areas.

Concluding Remarks

It is now becoming evident that in rural economies, with continuing population pressures, an ever declining landman ratio, small and fragmented agricultural holdings, unequal distribution of land and outdated technologies, the agricultural or farm sector alone cannot provide additional employment opportunities to sustain the livelihood of the rural households, even in high growth and the agriculturally potential states in India. A majority of the rural folk (around 60%) still depend on agriculture for their subsistence livelihood. The share of agriculture in terms of GDP and employment generation has been decreasing over a period of time. As a matter of fact, the role of the non-farm sector is increasing to achieve the desired results of inclusive growth as per the policy of the Government of India.

The results of the present study show that the percentage share of rural non-farm employment in total rural employment increased from 14.4% in 1972-73 to 23.7% in 1999-2000, and further to 33% in 2009-10 from 29% in 2009-10. The gender-wise composition of rural non-farm employment showed that rural non-farm activities have remained male dominated. Within the rural non-farm activities, the increase in the share of the tertiary sector exceeds that of the secondary sector. Moreover, most of the rural non-farm activities have been found to be informal in nature. The proportion of self-employed activities followed by casual and regular activities explains the bulk of increase in the rural non-farm activities. Among the major rural non-farm activities, manufacturing (both household and non-household), utilities, construction, trade, restaurants and hotels, transport, storage, communication, community, social and personal services have been found to be the key sub-sectors of the non-farm economy absorbing bulk of the surplus rural labour force. However, the results of the analysis also revealed that India's economy has not witnessed any substantial structural diversification away from agriculture and towards the non-farm sector. Still, nearly thee-fourth of the rural labour force largely depends on agriculture and allied activities for their livelihood. Hence, efforts are required to enhance rural non-farm employment opportunities to tackle the emerging problem of unemployment, particularly in the rural parts of the country.

Limitations of the Study and the Way Forward

The proposed study attempted to examine the nature, extent, and pattern of rural non-farm employment in India by utilizing various secondary data sources. The major limitations of the study are as follows - the present study does not incorporate the extent and pattern of rural non-farm employment at the disaggregated level, which require primary data sources. Rural non-farm employment depends on various socioeconomic factors, which impact various non-farm activities differently. The determination of such factors is beyond the scope of the present study.

Future studies can examine the nature, extent, and pattern of rural non-farm employment at the disaggregated level by utilizing primary data sources. Moreover, as rural non-farm employment depends on various socioeconomic determinants, village level studies are needed to examine the specific impact of these variables on the true nature of rural non-farm employment at the disaggregated level.

References

- Abraham, V. (2009). *Agrarian distress and non-farm employment in India*. Munich Personal RePEc Archive, Paper No. 35275. Retrieved from http://mpra.ub.uni-muenchen.de/35275/
- Abraham, V. (2011). Employment growth in rural India: Distress driven? Economic and Political Weekly, 44(16), 97-104.
- Awasthi, A. (2010). Rural non-farm employment and poverty reduction- An all India and state level analysis. *The Indian Economic Journal (Special Issue, December 2010)*, 113-122.
- Bhaumik, S.K. (2002). Employment diversification in rural India: A state level analysis. *The Indian Journal of Labour Economics*, 45 (4), 719-769.
- Bhaumik, S.K. (2007). Diversification of employment and earnings by rural households in West Bengal. *Indian Journal of Agricultural Economics*, 62 (4), 585-606.
- Chadha, G.K. (2008). Employment and poverty in rural India: Which way to go? ILO Asia-Pacific Working Paper Series.

 Retrieved from http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_123537.pdf
- Eapen, M. (1994). Rural non-agricultural employment in Kerala Some emerging tendencies. *Economic and Political Weekly*, 29 (21), 1285-1296.
- Ghuman, R.S. (2005). Rural non-farm employment scenario: Reflections from recent data in Punjab. *Economic and Political Weekly*, 40 (41), 4473-4480.
- Haggblade, S., Hazell, P.B.R., & Reardon, T. (2010). *Transforming the rural non-farm economy: Opportunities and threats in the developing world.* Baltimore: John Hopkins University Press.
- Hazell, P. B. R., & Haggblade, S. (1991). Rural- urban growth linkages in India. *Indian Journal of Agricultural Economics*, 46 (4), 515-529.
- Himanshu (2011). Employment trends in India: A re-examination. Economic and Political Weekly, 46 (37), 43-59.
- Jha, B. (2007). Is the role of agriculture in rural diversification decreasing? *The Indian Journal of Labour Economics*, 50 (4), 633-642.
- Kar, A., & Ray, A.K. (2006). Rural non-farm sector in India. Its present status and options for improvement: A review. *Agricultural Situation in India*, *52* (5), 13-23.
- Kuznets, S. (1963). Quantitative aspects of the economic growth of nations: VIII. Distribution of income by size. *Economic Development and Cultural Change, 11* (2), 1-80.
- Lanjouw, P. (1999). Rural nonagricultural employment and poverty in Ecuador. *Economic Development and Cultural Change*, 48 (1), 91-122.

- Lanjouw, P., & Shariff, A. (2004). Rural non-farm employment in India: Access, incomes and poverty impact. *Economic and Political Weekly*, *39*(40), 4429-4446.
- Mishra, K. D. (2007). *Rural non-farm employment in Arunchal Pradesh: Growth, composition and determinants.* NLI Research Studies Series, No: 075/2007, V.V. Giri National Labour Institute, Noida, New Delhi.
- National Commission for Enterprises in the Unorganized Sector. (n.d.). Ministry of Small Scale Industries, Government of India. Retrieved from www.nceus.gov.in
- National Commission for Enterprises in the Unorganized Sector (NCEUS). (2008). Contribution of the unorganized sector to GDP report of the sub committee of a NCEUS task force. Working Paper No. 2. National Commission for the Enterprises in the Unorganized Sector (NCEUS). Retrieved from http://nceuis.nic.in/Final Booklet Working Paper 2.pdf
- National Sample Survey Organization (NSSO). (2010). *Report on employment and unemployment in India, 2009-10: Key indicators.* NSS 66th Round July2009-June 2010, Report, No.NSS KI (66/10). June, National Sample Survey Organization, New Delhi.
- Papola, T.S. (1992). Rural non-farm employment: An assessment of recent trends. *The Indian Journal of Labour Economics*, 35 (3), 238-45.
- Ranjan, S. (2006). Occupational diversification and access to rural employment: Revising the non-farm employment debate. Munich Personal RePEc Archive, Paper No. 7870. Retrieved from http://mpra.ub.uni-muenchen.de/7870/
- Sen, J. (2010). Rural non-farm employment and level of living: A state-wise analysis in India in the era of economic reforms. *The Indian Economic Journal, Special Issue, December 2010*, 20-31.
- Shukla, V. (1991). Rural nonfarm employment in India. Issues and policy. *Economic and Political Weekly*, 27(28), 1477-1488.
- Start, D. (2001). The rise and fall of the rural non-farm economy: Poverty impacts and policy options. *Development Policy Review, 19* (4), 491-505. DOI: 10.1111/1467-7679.00147
- Unni, J. (1991). Regional variations in rural non-agricultural employment: An exploratory analysis. *Economic and Political Weekly*, 26(3), 109-122.
- Unni, J. (1996). Diversification of economic activities and non-agricultural employment in rural Gujarat. *Economic and Political Weekly*, *31* (33), 2243-2245+2247-2251.
- Unni, J., & Naik, R. (2011). Rural structural transformation: The case of the service sector in India. *Economic and Political Weekly*, 46 (26), 196-200.
- Vaidyanathan, A. (1986). Labor use in rural India: A study of spatial and temporal variations. *Economic and Political Weekly*, 21 (52), A130-A146.