



NON-FARM EMPLOYMENT IN ASSAM: AN ANALYSIS BASED ON SECONDARY DATA

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ABSTRACT

The Rural Non-farm sector has achieved considerable importance now-a-days as an alternative strategy for generating employment, reducing poverty and for development of rural areas. Majority of rural population in developing countries are engaged in a variety of non-farm activities besides involving in farming which is their major activity. Some of the non-farm activities flow directly from agriculture or are closely related to it, others are distinct, ranging from full-time but temporary wage employment in industry or construction to regular but part-time self employment in home-based handicrafts and trading or other services (ILO, 1983). In India too, economic opportunities in the non-farm sector have increased. The proportion of rural workers engaged in agriculture in relation to the total workforce remained stagnant at around 78 percent until 1993-94 and then declined to 68 per-cent in 2009-10 (Goswami and Bhattacharya, 2014). This breakaway from agriculture in favour of non-farm (non-agricultural sector) reflects the importance of the Rural Non-farm sector. In this backdrop, the study focus on various issues relating to the growth and composition of rural non-farm employment especially in the post liberalization period from the macro prospective.

KEYWORDS: Non-farm, Employment, Work Participation Rate, NSSO, Census

I. INTRODUCTION

The Rural Non-farm sector has achieved considerable importance now-a-days as an alternative strategy for generating employment, reducing poverty and for development of rural areas. Majority of rural population in developing countries are engaged in a variety of non-farm activities besides involving in farming which is their major activity. Some of the non-farm activities flow directly from agriculture or are closely related to it. Others are distinct, ranging from full-time but temporary wage employment in industry or construction to regular but part-time self employment in home-based handicrafts and trading or other services (ILO, 1983). In India too, economic opportunities in the non-farm sector have increased. The proportion of rural workers engaged in

agriculture in relation to the total workforce remained stagnant at around 78 percent until 1993-94 and then declined to 68 per-cent in 2009-10 (Goswami and Bhattacharya, 2014). This breakaway from agriculture in favour of non-farm (non-agricultural sector) reflects the importance of the Rural Non-farm sector.

One of the important features of rural areas of Assam is a relatively large workforce engaged in agricultural sector. The agricultural sector is traditional in nature with low level of technical progress and low productivity. Mono cropping is generally practiced which is characterized by huge underemployment in terms of unutilized labour time and low productivity. Agriculture has not been able to generate surpluses for investment

and augment purchasing power and has failed to generate new employment avenues in order to absorb the increasing labourforce. Moreover, factors like frequent occurrence of flood destroying crops, large number of small landholdings and fragmented landholdings, unequal land-distribution structure, low use of modern agricultural inputs and negligible seed/variety replacement are threatening the livelihood-sustainability of the rural people. In this context, the non-farm sector has emerged as an important segment of the rural economy in Assam in terms of employment to the growing labourforce (Mech, 2015). A combination of farm and non-farm income at the household level provides resilience against adverse situations in either of the sectors, though agriculture is known for more frequent adversity (More, 2014). The productivity and profitability in the non-farm sector is generally higher than in the farm sector and so people in rural areas now-a-days are accepting it as substitutes of farm activities. This indirectly helps in accelerating the growth of rural areas by increasing the income of the rural people as non-farm wage is usually higher than agricultural wage, provides security and reduces risk and uncertainty associated with farm income. So, in the context of Assam, the rural non-farm sector can act as a potent source of employment. The role of rural non-farm sector is important here because it is generally organised on a small scale and it provides employment opportunities, mostly using local labour and local resources as well as labour-intensive techniques. Therefore, as concern about employment expansion and poverty-alleviation in rural areas has grown, and since urban-based industrialisation cannot provide a solution, attention has therefore shifted towards the rural non-farm sector, which, as an intermediate sector, straddles the urban economy, on the one hand, and the rural agriculture economy on the other (Islam, 1997). In this backdrop, the study shall focus on various issues relating to the growth and composition of rural non-farm employment especially in the post liberalization period from the macro prospective. Further for capturing various micro issues related to the concept of rural non-farm sector we have been resorted to data collected by the author through primary survey during 2014-15.

II. METHODOLOGY

1. The Rural Non-farm Sector:-

There is no commonly accepted definition of the rural farm sector. According to Davis (2003), the rural non-farm economy (RNFE) may be defined as comprising of all those non-agricultural activities which generate income to rural households (including income in kind and

remittances), either through waged work or in self-employment. However, There is considerable disagreement on what, constitute “non-agricultural” activities and whether allied agricultural activities should be included within the purview of the rural non farm sector. However, we adopt the definition given by The Study Group on rural non farm sector in Assam (Bhimjiani, 1994) with slight modification as follows:

“The rural non farm sector comprises all non-agricultural activities: mining and quarrying household and non-household manufacturing, processing, repairs, construction, trade, transport and other services in villages and rural towns of up to 50,000 population undertaken by enterprises varying in size from household ‘own-account enterprises.’ all the way to factories”.

For the purpose of the present study the above definition is accepted with minor adaptation pertaining to population size. Thus, all villages and rural towns with population up to 5000 are categorized as rural areas in order to ensure conformity with the definition of rural areas and classification of the rural workforce as given in India’s Population Census.

We now present below the conceptual framework in defining non-farm sector with the help of pie diagram in Diagram-1.

2. THE STUDY AREA

The study Area is the state of Assam. It is located in the heart of the northeastern zone of India. The state has 27 districts, and its capital is Guwahati. It covers an area of 78,434 square kilometer approximately which account for about 2.39 percent of the total land area of the country giving shelter to 2.58 percent of the total population of the country. This state is predominantly rural with approximately 86 percent of the total population of 4,388,756 living in rural areas (Population census, 2011).

3. DATA COLLECTION

The present study is based on both primary and secondary data. Secondary data is used to understand some of the basic socio-economic characteristics of the study area.

i. Secondary Data Collection: For collecting the secondary data, different publications of Directorate of Economics and Statistics, Government of Assam; District Rural Development Agency, Government of Assam; National sample survey Organization, Ministry of Statistics and Programme implementation, Government of India; Central Statistical Organization, Ministry of Statistics and

Programme implementation, Government of India; and various volumes of population census is utilised. These secondary data is used to ascertain the structure of non-farm employment opportunities available in Assam.

III. NON FARM SECTOR IN ASSAM

In the context of Assam, the rural non-farm sector is perceived to be a potent source of employment to the growing labour force in the face of heavy demographic pressure on land, small and fragmented land-holdings and iniquitous land-distribution structure. Before going to the analysis of non-farm sector, we first enquire about the work participation rate in rural Assam.

1. Work Participation Rates (WPRs): Work Participation Rates shows the proportion of population that actively contributes to the production of goods and services of a country. This ratio is useful in analysing the employment situation of a country (Kumar, 2010). The data pertaining to WPR in India and Assam are shown in Table 1.

As can be seen from the Table 1, the WPR is comparatively low in Assam with significant gap between the WPR of males and females. The lower participation of female workers reflects the social status of females, wherein the work done by female workers is generally not recognized as an economic activity (Reddy, 2009). The fluctuation in WPR of females across the time period may be because of income effect, which states that females participate in the labour force if there is a fall in the reservation income of the households (Unni, 1989; Srivastava & Srivastava, 2010). A sudden increase in the WPR of females in Assam in 2004-05 is because of the negative growth rate of agriculture in the preceding year, and the decline in WPR in 2009-10 can be explained by the recovery of agriculture in the subsequent years.

Having explored the overview of the employment situation in Assam using WPR our center of attention now shifts to analyzing various dimensions non-farm sector. The non-farm sector on the hand is taken to comprise of all those economic activities which generate wage and self employment outside the agricultural sector for the rural population.

2. Pattern of Non-farm Employment: Data from various secondary sources reveal that the non-farm sector constitutes an important segment of the rural economy in terms of providing employment to the rural workforce in Assam. The percentage share of rural non-farm employment in Assam accounted for about 30 percent during 2009-2010, about 40 percent during 2011-2012, showing an almost increasing trend apart from a slowdown in 2004-05 when it was about 25 percent (Table 2).

3. Non-farm Workers: As the share of Nonfarm employment is increasing over the years so an analysis of the sectoral growth pattern of Non-farm Workers becomes necessary. This would show the declining or expanding avenues of employment for the rural labour force. Table 3 presents data on the percentage distribution of workers in two broad categories—farm and non-farm, along with a further break-up of non-farm activities into a number of sub-sectors. It shows a structural transformation in the rural sector of Assam with an accelerated but fluctuating decline in the proportion of male workforce engaged in the farm sector in favour of the non-farm sector from 78.2 per cent in 1993-94 to 66.6 per cent in 2009-10 and finally 61.3 per cent in 2011-12. However, in case of females, the proportion of workers engaged in the farm sector has remained high, with a fluctuating trend in the range of 80 to 88 per cent. There has been a gradual increase in the proportion of male workers in the non-farm sector from 21.8 per cent in 1993-94 to 35.2 per cent in 2011-12, whereas for females, the same has fluctuated at around 12 to 20 per cent. Thus, employment of females is heavily tilted in favour of agriculture. The excessive dependence of females on agriculture can be explained by two factors. First, a weak human capital base of rural females renders them unfit to switch over to the non-farm sector (Chadha, 2003). Secondly, as more than 83 per cent of farmers fall in the category of marginalised farmers, there is little scope for mechanisation of agricultural operations. Income generated by these uneconomic holdings is insufficient for survival. Thus, male members migrate to non-farm activities, and agricultural activities are carried out by family labour, thereby increasing the number of females in the farm sector.

Within the non-farm sector, it is the tertiary sector that provides more employment opportunities. The secondary sector provided employment only to 9.5 per cent of rural males and 3.2 per cent of females in 2011-12, as against the corresponding figures of employment of 32.4 per cent and 6.9 per cent respectively for males and females in the tertiary sector. In the secondary sector, manufacturing is the major contributor of rural non-farm employment. However, during the period from 1999-2000 to 2009-10, there has been an increase in the share of employment in the construction sector, absorbing a large number of rural casual and seasonal labours. Within the tertiary sector, trade, hotels and restaurants, transport and communication, community and other services absorb a higher percentage of the labour force.

Until now we have been analyzing the data based on NSSO surveys but another potential source is population

census. An intense analysis of rural non-farm sector based on population censuses is thus made. Focusing on the trends of expansion of rural non-farm workers, the percentage of rural main workers engaged in the non-farm sector had increased from less than 16 percent in 1971 to over 32 percent in 2001. Concurrently, the proportion of workers dependent on agriculture has declined from 84 percent to 67.5 percent during the same periods which is indicative of the structural changes taking place in the rural economy of Assam. Here it is pertinent to point out that the share of rural non-farm employment in the state is higher than all-India share more specifically; the share of the non-farm sector in rural employment was only 25.5 percent (Dey and Bezbaruah, 2012). As the percentage of rural main workers engaged in the non-farm sector had increased over time so an analysis of the comparative growth rates of employment in different sectors of the rural non-farm economy in the pre and post reform periods in the state will be a worthy exercise for understanding the nature of rural non-farm sector. The expansion of rural non-farm workers in the state has been comparatively higher in the post reform period. The annual rate of growth of rural non-farm workers was around 6.9 percent during 1991-11 as compared to 4.5 percent observed during 1971-91 (Table 4)

Further, with the exception of mining and quarrying, employment in all other subsectors has been higher in the post 1991 period. The higher rate of growth in employment in mining and quarrying observed during 1971-91. Even, in 2001, this sector accounted for less than 1 percent of the rural workers. The construction sector in particular has been at the forefront of employment generation in the rural non farm sector with employment growth of over 15 percent per annum during the post reform period. Further, the employment expansion in manufacturing was also found to be robust at over 13 percent while that of transport, storage and communication expanded over 9 percent (Population Census: 1971, 1991, 2001). The growth of any sector always depends on certain pillars, which is also the case with the rural non-farm sector in Assam (Table 4).

4. Rural Non-agricultural Enterprises:

The growing importance of rural non-farm sector in the rural economy can be understood from the expansion of rural non-agricultural/non-farm enterprise in Assam. The growth of rural non-farm employment also leads to the expansion of rural non-agricultural/non-farm enterprises.

The number of rural non-agricultural enterprises in Assam increased from 310804 in 1990 to 641873 in 2005 reflecting a growth rate of more than 7

percent per annum during this period. Further, almost 69 percent of all non-agricultural enterprises in the state were located in rural areas. Thus for assessing the significance of rural non-farm sector in the economy of Assam an analysis of the composition of rural enterprises in Assam is needed. Analysis reveals that 94 percent of all rural enterprises were non-agricultural enterprises and less than 6 percent were agricultural enterprises (Table 5).

IV. CONCLUSION

The non-farm sector is taken to comprise of all those economic activities which generate wage and self employment outside the agricultural sector for the rural population. Data from various secondary sources reveal that the non-farm sector constitutes an important segment of the rural economy in terms of providing employment to the rural workforce in Assam. The important findings regarding the WPR and pattern of non-farm employment includes:

1. WPR is comparatively low in Assam with significant gap between the WPR of males and females.
2. The incidence of rural non-farm employment in the state is higher than all India average.
3. The percentage share of rural non-farm employment in Assam is showing increasing trend overtime apart from a slowdown in 2004-05.

As the share of Nonfarm employment is increasing over the years so an analysis of the sectoral distribution of the workforce is made. The relative employment-absorbing capacity of different sectors and the changes within them during the post-reforms period in the rural labour market of Assam can be better understood by analysing the employment growth rates in different sectors. There has been structural transformation in the rural sector of Assam with an accelerated but fluctuating decline in the proportion of male workforce engaged in the farm sector in favour of the non-farm sector during 1993-94 to 2011-12. Major highlights are:

1. There has been a gradual increase in the proportion of male and female workers in the non-farm sector during 1993-94 to 2011-12.
2. In case of females, the proportion of workers engaged in the farm sector has remained high with a fluctuating trend.

An intense analysis of rural non-farm sector based on population censuses is made. Focusing on the trends of expansion of rural non-farm workers, the percentage of rural main workers engaged in the non-farm sector

had increased from less than 16 percent in 1971 to over 32 percent in 2011. As the percentage of rural main workers engaged in the non-farm sector had increased overtime so an analysis of the comparative growth rates of employment in different sectors of the rural non-farm economy in the pre and post reform periods in the state will be a worthy exercise for understanding the nature of rural non-farm sector. The findings highlighted that

1. The expansion of rural non-farm workers in the state has been comparatively higher in the post reform period.
2. With the exception of mining and quarrying, employment in all other subsectors has been higher in the post 1991 period.
3. The construction sector in particular has been at the forefront of employment generation in the rural non farm sector with employment growth of over 15 percent per annum during the post reform period.

This growing importance of rural non-farm sector in the rural economy can be understood from the expansion

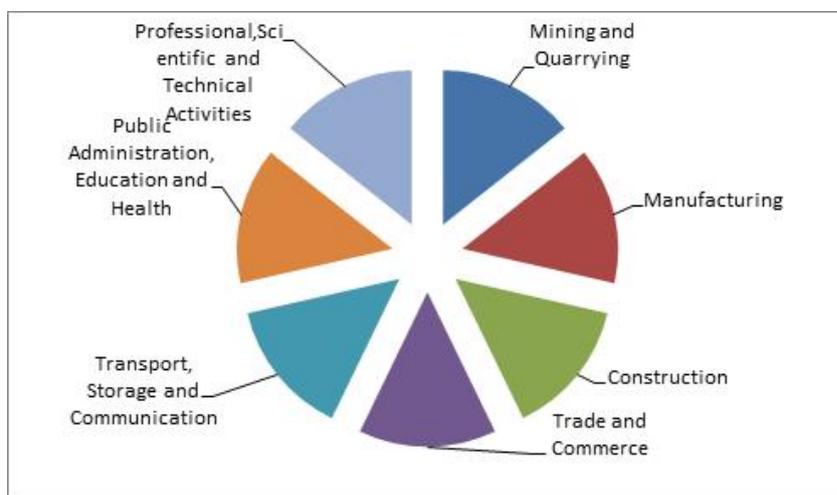
of rural non-agricultural/non-farm enterprise in Assam. The number of rural non-agricultural enterprises in Assam has shown an increasing trend reflecting a growth rate of more than 7 percent per annum during this period. Further, a major share of all non-agricultural enterprises in the state are located in rural areas. For assessing the significance of rural non-farm sector in the economy of Assam an analysis of the composition of rural enterprises in Assam is made. Analysis reveals that

1. The rural non-agricultural enterprises in Assam have shown an increasing trend.
2. Major share of all non-agricultural enterprises in the state are located in rural areas.
3. 94 percent of all rural enterprises were non-agricultural enterprises in 2005.
4. More than half of these enterprises were involved in retail trade while 13 percent were manufacturing units. With a little over 4 percent of the rural non-farm enterprises in the state comprised of hotels and restaurants in 2005.

V. DIAGRAMS, TABLES

Diagram-1

Composition of Rural Non-farm Sector



Source: Developed by Authors

Table 1 WPR in Assam vis-à-vis India: 1993-94 to 2009-10

| Years | Assam | | India | |
|---------|-------|--------|-------|--------|
| | Male | Female | Male | Female |
| 1993-94 | 51.6 | 15.9 | 55.3 | 32.8 |
| 1999-00 | 52.9 | 15.1 | 53.1 | 29.9 |
| 2004-05 | 55.1 | 20.9 | 54.6 | 32.7 |
| 2009-10 | 55.3 | 15.8 | 54.7 | 26.1 |

Source: NSSO, Various Rounds, Government of India.

Note: The figures are based on Usual Status (in percentages) concentrated only on rural areas

Table 2 Percentage Share of Rural Non-farm Employment in Assam: 1993-2012

| Year | Annual Growth Rate |
|----------------------------------|--------------------|
| 1993-94 (50 th Round) | 20.8 |
| 1999-00 (55 th Round) | 32.3 |
| 2004-05 (61 th Round) | 25.7 |
| 2009-10 (66 th Round) | 29.5 |
| 2011-12 (68 th Round) | 37.9 |

Source: NSSO (Various Rounds)

Table 3 Distribution of Rural Workers in Farm and Non-Farm Sectors (Assam): 1993-94 to 2009-10

| NSS Rounds Sectors | Male | | | | | Female | | | | |
|-----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | 50 th Round | 55 th Round | 61 st Round | 66 st Round | 68 th Round | 50 th Round | 55 th Round | 61 st Round | 66 st Round | 68 th Round |
| | 1993-94 | 1999-00 | 2004-05 | 2009-10 | 2011-12 | 1993-94 | 1999-00 | 2004-05 | 2009-10 | 2011-12 |
| Farm Sector | 78.2 | 64.7 | 69.6 | 66.6 | 61.3 | 83.2 | 79.4 | 88.3 | 86.2 | 87.2 |
| Non-Farm Sector | 21.8 | 35.3 | 30.4 | 33.4 | 35.2 | 16.8 | 20.6 | 11.7 | 13.8 | 11.1 |
| i. Mining & Quarrying | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ii. Manufacturing | 2.2 | 2.9 | 2.9 | 3.7 | 3.9 | 8.7 | 8.3 | 3.7 | 2.8 | 2.5 |
| iii. Electricity, water, etc | 0.3 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| iv. Construction | 0.8 | 2.2 | 3.0 | 4.1 | 5.2 | 0.1 | 0.2 | 0.8 | 0.9 | 0.7 |
| v. Trade, hotels, restaurants | 8.2 | 9.9 | 11.6 | 11.2 | 12.8 | 1.9 | 1.5 | 1.1 | 2.8 | 1.9 |
| vi. Transport, storage, community | 1.6 | 3.3 | 3.2 | 3.3 | 3.7 | 0.1 | 0.3 | 0.2 | 0.0 | 0.1 |
| vii. Financial, insurance, etc | 0.3 | 0.3 | 0.2 | 0.5 | 0.6 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 |
| viii. Community & other services | 8.2 | 16.3 | 8.8 | 10.1 | 15.3 | 5.8 | 10.2 | 5.7 | 7.2 | 4.8 |

Source: NSSO, Various Rounds, Government of India.

Table 4 The annual rate of growth of Rural Non-farm workers in Assam: 1971-2011

| Serial number | Sectors | 1971-91 | 1991-2011 |
|---------------|--------------------------------------|---------|-----------|
| 1 | Mining and Quarrying | 8.94 | 0.63 |
| 2 | Manufacturing | 3.37 | 13.43 |
| 3 | Construction | 8.06 | 15.22 |
| 4 | Trade and Commerce | 5.48 | 5.81 |
| 5 | Transport, Storage and Communication | 5.37 | 9.47 |
| 6 | Rural Non-farm Sector | 3.98 | 4.12 |
| 7 | Others | 4.53 | 6.87 |

Source: Adapted from Dey and Bezbaruah (2012)

Table 5 Composition of Rural Enterprises in Assam: 2005

| Type of Enterprise | Number of Enterprises | Percentage of Total Enterprises |
|--------------------|-----------------------|---------------------------------|
| Agricultural | 39810 | 5.84 |
| Non-agricultural | 641873 | 94.16 |
| Total | 681683 | 100 |

Source: Economic Census, 2005

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