

Chapter 5

Non Farm Sector in Assam

This chapter presents the analysis of non farm sector in Assam. First section deals with the non farm sector analysis based on secondary data. In this section, the pattern of non-farm employment, Structure of Non farm workers, and nonagricultural enterprises is analyzed based on secondary data. The next section deals with the non farm sector analysis based on primary data. In this section, the pattern of non-farm employment, Structure of Non farm workers, and nonagricultural enterprises is analyzed with a focus on entrepreneurship. The last section deals with some of the dynamisms around the concept of non farm sector.

5.1 Non-farm Sector in Assam: An Exploration of Census and NSSO Surveys

In Assam, the nonfarm employment gained considerable importance as an alternative employment generating strategy. For understanding various dynamics relating to nonfarm employment we have resorted to various volumes of NSSO Surveys, Population Census and Economic Census. In the following section an attempt has been made to highlight some of the issues relating to nonfarm employment in details.

5.1.1 Pattern of Non-farm Employment in Assam

The expansion of non farm sector has generally showed the way for the expansion of nonfarm employment in Assam. Thus, an analysis of the structure of nonfarm employment becomes indispensable. This is done by firstly analyzing the work participation rate. This is followed by the examination of share of Non-farm employment in Assam.

(a) Work Participation Rates (WPRs)

Before going into the analysis of pattern of nonfarm employment we examine the work participation rate. This would give us an idea about the proportion of population actively contributing to the production of goods and services of a country. This ratio is useful in getting an preview of aggregate employment situation of a

country (Kumar, 2010). As such the data pertaining to WPR in India and Assam is evaluated in Table 5.1

Table: 5.1
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

As can be seen from the Table 5.1 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.

(b)Pattern of Non-farm Employment

Having explored the overview WPR in Assam our center of attention now shifts in analyzing various dimensions non-farm sector. The non-farm sector on the other hand 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 percentage share of rural non-farm employment in Assam accounted for about 30 percent during 2009-2010, about 40 percent during

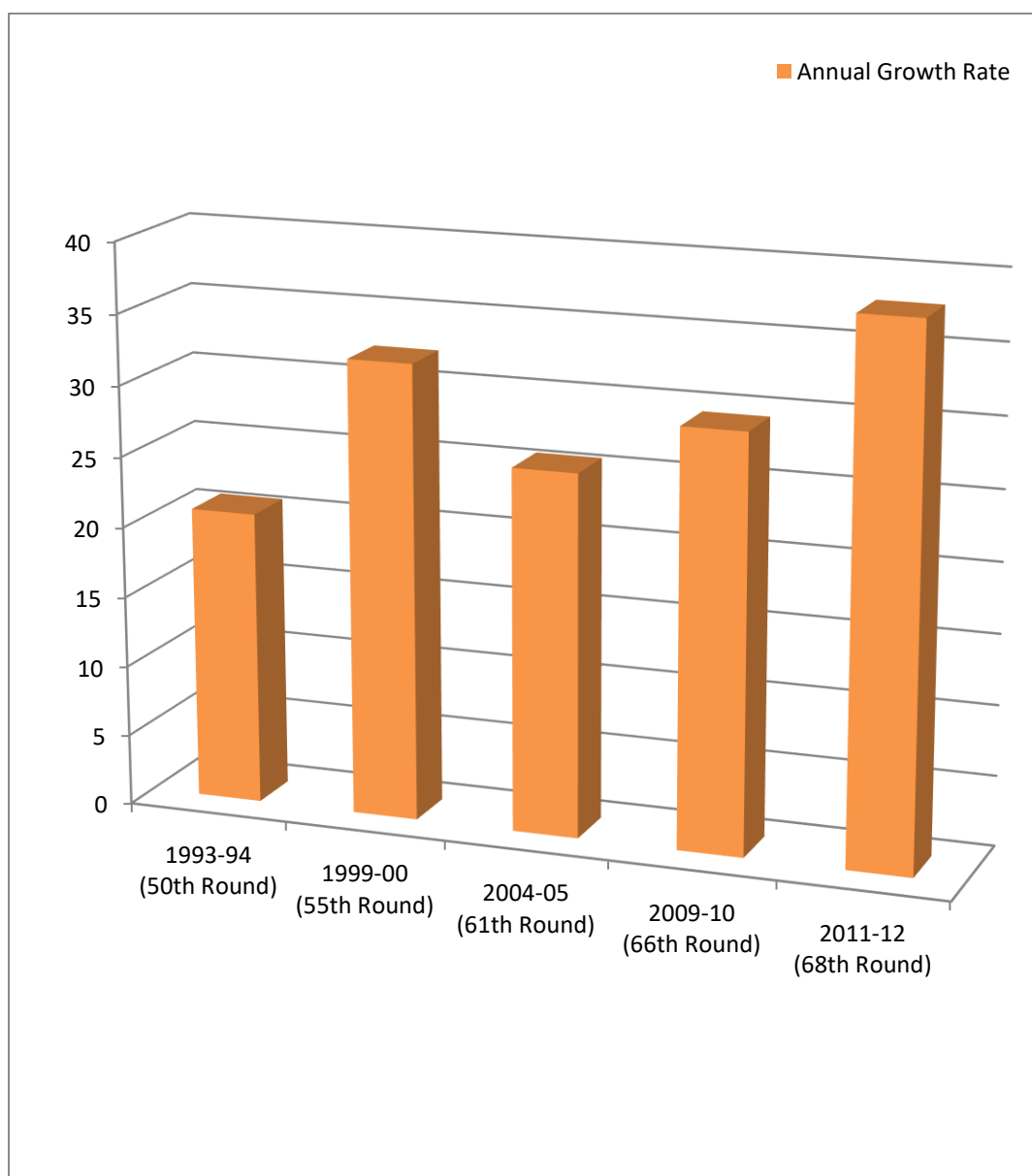
2011-2012, showing an almost increasing trend apart from a slowdown in 2004-05 when it was about 25 percent (NSSO, Various Rounds) (Table 5.2).

Table: 5.2
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)

Diagram: 5.1
Growth Rate of Non-farm Employment



Source: NSSO (Various Rounds)

5.1.2 Structure of Non-farm Workers

The main drivers of nonfarm employment in Assam are the workers who have been engaged in these nonfarm activities. A worker is a person who undertakes a specified type of work. So understanding the pattern of workers engaged in nonfarm activities would enable us in realizing various dimensions of nonfarm employment.

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 34 percent in 2011. Concurrently, the proportion of workers

dependent on agriculture has declined from 84 percent to 66 percent during the same periods which is indicative of the structural changes taking place in the rural economy of Assam (Population Census, 1971; Population Census, 2011).

As the percentage of rural main workers engaged in the non-farm sector had increased overtime, so we undertake an analysis of the comparative growth rates of employment in different sectors of the rural non-farm economy in the pre and post 1991 in the state for understanding the nature of rural non-farm sector. The expansion of rural non-farm workers in the state has been comparatively higher during the post 1991 period. The annual rate of growth of rural non-farm workers was around 4.1 percent during 1991-2011 as compared to 3.9 percent observed during 1971-91 (Population Census: 1971, 1991, 2001, 2011)

Further, with the exception of mining and quarrying, employment in all other subsectors has been higher in the post 1991 period. During the period 1991-2011, 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. 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, trade and commerce a little below 6 percent while other avenues expanded at a rate 6.47 percent respectively (Population Census: 1971, 1991, 2001, 2011) (Table 5.3). As pictorial presentation helps digesting facts in a simpler way, so we present these facts with the help of multiple bar diagram in Diagram 5.2.

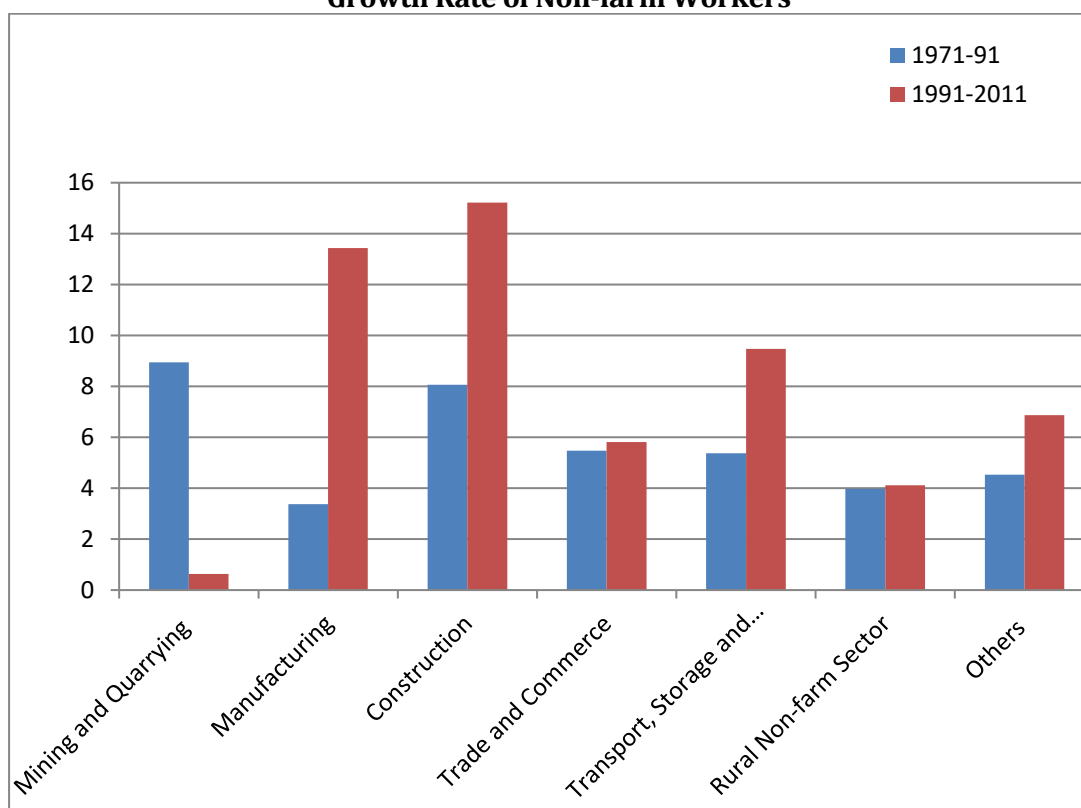
Table: 5.3
The Annual Rate of Growth of Rural Non-farm Workers in Assam: 1971-2011

Serial number	Sectors	1971-1991	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: Population Census: 1971, 1991, 2001 and 2011

Note: Figures for 1981 is an interpolated figure as there is no population census in 1981.

Diagram: 5.2
Growth Rate of Non-farm Workers



Source: Same as Table-5.3

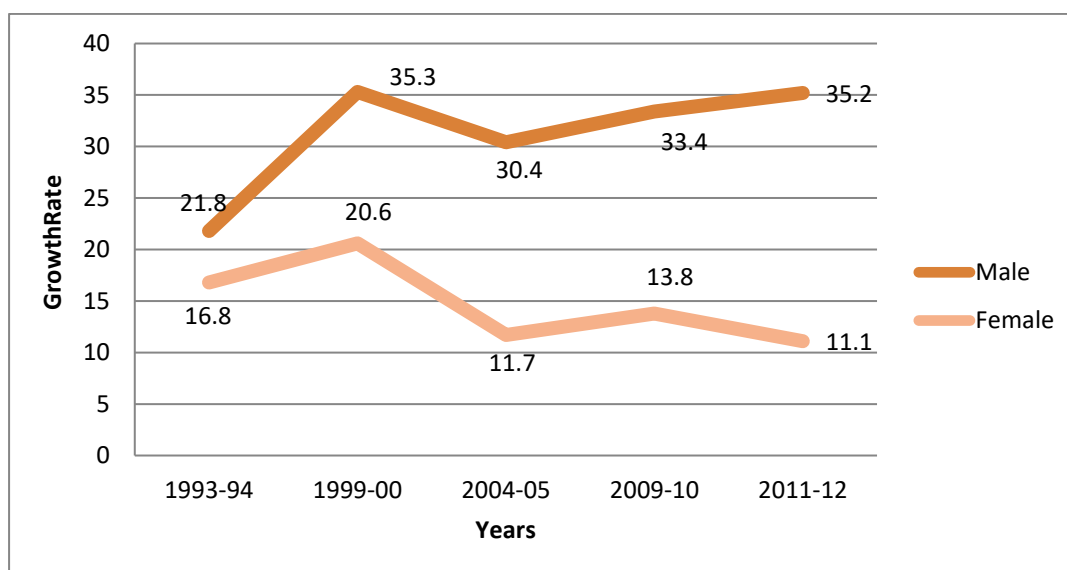
As from the above exercise it is observed that the growth of nonfarm workers is more prominent in the post 1991 period, so we have carried out an analysis of the distribution of rural workers in non-farm sector with a specific look at situations prevailing in various nonfarm subsectors in Assam in Table 5.4.

Table 5.4 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

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.

Chart: 5.3
Growth of Nonfarm Workers by Sex: 1993-94 to 2011-12



Source: NSSO, Various Rounds, Government of India.

5.1.3 Rural Non-agricultural Enterprises:

One of the integral segment of non-farm sector is the non-agricultural enterprises. It has achieved considerable importance now-a-days as an alternative strategy for generating employment, reducing poverty and for development of rural areas. As concern about employment expansion and poverty-alleviation in rural areas has grown, and since urban-based industrialization cannot provide a solution, attention has therefore shifted towards the rural non-farm enterprises, which straddles the urban economy, on the one hand, and the rural economy on the other.

From Table 5.5 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 (Economic Census, 2005).

Table: 5.5

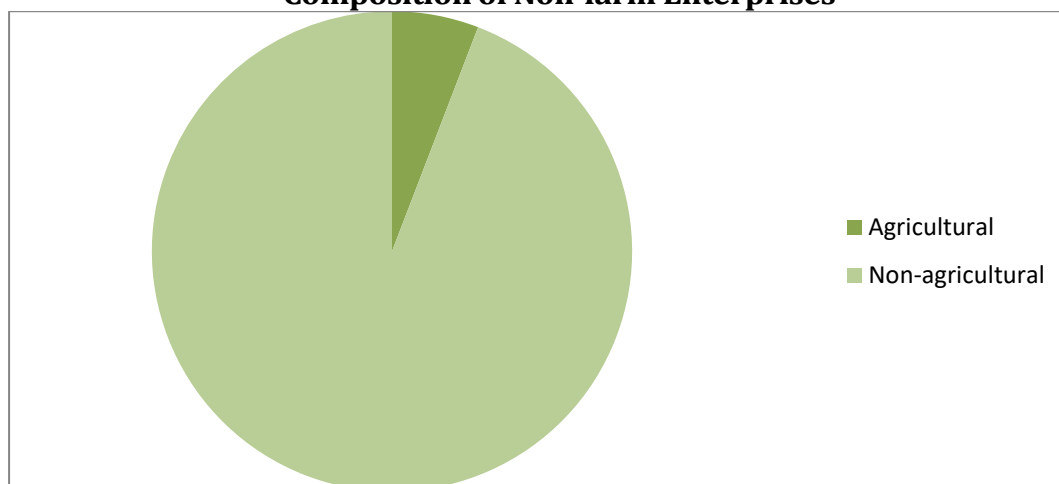
Composition of Rural Enterprises in Assam: 2005

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

The composition of Nonfarm enterprises is presented with the help of a pictorial presentation for easy understanding in Chart 5.4.

Chart: 5.4
Composition of Non-farm Enterprises



Source: Economic Census, 2005

As the non-agricultural enterprises constitute a major portion of total enterprises in the state so a study of the sectoral composition of the rural non-farm enterprises in the state is very essential. This sort of analysis is undertaken in the Table 5.6

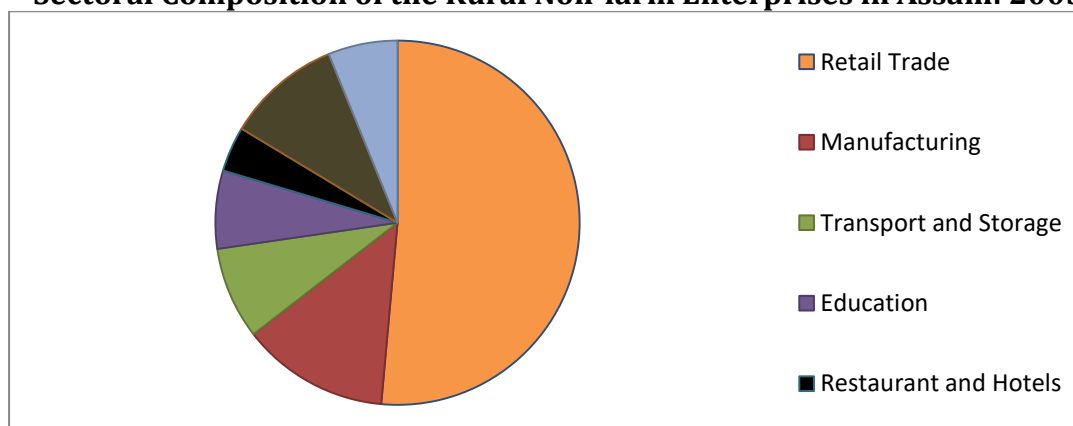
Table: 5.6
Sectoral Composition of the Rural Non-farm Enterprises in Assam: 2005

Serial Number	Sector	Percentage of Total Enterprises
1	Retail Trade	51.41
2	Manufacturing	13.08
3	Transport and Storage	8.18
4	Education	6.93
5	Restaurant and Hotels	4.00
6	Wholesale Trade and Financial Services	10.20
7	Others	6.16

Source: Economic Census, 2005 p.57.

Analysis reveals that more than half of these enterprises were involved in retail trade while 13.1 percent were manufacturing units. About 8.2 percent of the non-agricultural enterprises in rural areas were found to be engaged in transport and storage activities; education and other community, social and personal services had a share of 6.9 percent and 6.1 percent respectively. Over 4 percent of the rural non-farm enterprises in the state comprised of hotels and restaurants in 2005. The combined share of other sub-sectors including construction, wholesale trade and financial services was found to be 10.2 percent (Economic Census, 2005, p.57) (Table 5.6). For easy understanding we present these facts using pie diagram in Chart 5.5.

Chart: 5.5
Sectoral Composition of the Rural Non-farm Enterprises in Assam: 2005



Source: Economic Census, 2005

5.2 Non-farm Sector in Assam: A Cross Sectional Analysis

The economy of Assam has witnessed remarkable changes in recent years as the nonfarm employment gained considerable importance as an alternative employment generating strategy. For understanding various unnoticed issues relating to nonfarm employment which are often neglected by big national level surveys a field survey was undertaken in 2014-15 across regions in Assam. In the following sections an attempt has been made to highlight some of the issues relating to nonfarm employment in details.

5.2.1 Structure of Non-farm Employment in Assam

The expansion of non farm sector has generally showed the way for the expansion of nonfarm employment in Assam. Thus, an analysis of the structure of nonfarm employment becomes indispensable. This is done from three perspectives. Firstly, the structure of non-farm employment is analyzed by industry groups; secondly, the structure of non-farm employment is analyzed across social groups; and thirdly the status on multiplicity of employment is explored.

(a) Structure of Non-farm Employment by industry groups

From the secondary sources it is revealed that non-farm employment is expanding over the years, so an in-depth analysis of structure of employment is made. For this the share of nonfarm employment across industry groups in Assam is undertaken. This would enable us to identify the avenues where employment is prominent.

In Table 5.7 an attempt has been made to identify the share of non-farm employment across agro-climatic zones in Assam. In the Lower Brahmaputra Valley, among male workers 18 percent are in manufacturing, 7 percent in construction 5 percent in wholesale and retail trade and 20 percent in transportation, and 18 percent in public admin etc. Among female workers 11 percent are in manufacturing, 5 percent in construction, 4 percent in wholesale and retail trade and 24 percent in transportation

and 25 percent in public admin etc. Among persons 16 percent in manufacturing, 6 percent in construction 5 percent in wholesale and retail trade and 22 percent in transportation, and 20 percent in public admin,7 percent in financial services and 13 percent in information and communication etc.

Table: 5.7
Share of Non-farm Employment across Agro-climatic Zones in Assam: 2014-15

Agro-Climatic Zones	District		Manufac turing	Electri city, Gas etc.	Costru ction	Wholesal e and Retail Trade	Transportat ion and storage	Financ ial Activit ies
Lower Brahmapu tra Valley	Kamrup Metro politian	Male	18.59	0.58	7.27	4.96	20.74	8.93
		Female	10.79	0.03	4.82	4.06	23.98	9.01
		Person	15.51	0.5	6.31	4.6	22.02	9
North Bank Plain	Lakhimp ur	Male	21.96	38.34	6.73	2.18	1.09	0.95
		Female	17.38	13.31	12.88	0.82	2.45	0.82
		Person	20.82	32.76	8.27	1.84	1.43	0.92
Upper Brahmapu tra Valley	Dibrugar h	Male	5.84	3.67	5.31	5.38	24.33	10.82
		Female	10.12	6.52	3.6	2.06	20.41	22.47
		Person	7.4	4.7	5.1	4.7	19.1	14.8
Central Brahmapu tra Valley	Nagaon	Male	4.56	3.19	5.48	4.41	7.15	23.65
		Female	5.36	1.75	2.63	2.63	5.54	17.37
		Person	4.8	2.7	4.5	3.8	6.6	21.5
Hill Region	Dima Hassao	Male	23.18	7.48	3.38	2.38	0	8.21
		Female	28.16	16.94	6.33	2.45	0	14.69
		Person	24.4	9.8	4.1	2.4	0	9.8
Barak Valley	Cachar	Male	25.98	14.33	4.08	3.56	0.37	10.25
		Female	34.36	11.41	3.89	1.61	0.4	10.25
		Person	25.3	13.9	4.2	3	0.8	8.9
ASSAM		Male	16.67	11.64	5.32	3.77	8.8	10.22
		Female	17.43	7.91	5.29	2.38	9.55	11.69
		Person	16.91	10.48	5.31	3.34	9.03	10.68

Source: Primary Survey, 2014-15

Table: 5.7
Share of Non-farm Employment across Agro-climatic Zones in Assam: 2014-15(Continued)

Agro-Climatic Zones	District		Public administration, Defence, education, etc.	Professional activities	Information and Communication	Others	TOTAL
Lower Brahmaputra Valley	Kamrup Metropolitan	Male	18.42	7.27	12.64	0.6	100
		Female	24.74	6.59	15.1	0.88	100
		Person	20.92	7.01	13.61	0.52	100
North Bank Plain	Lakhimpur	Male	14.34	5.71	8.36	0.34	100
		Female	14.11	15.95	19.43	2.85	100
		Person	14.29	8.27	11.12	0.28	100
Upper Brahmaputra Valley	Dibrugarh	Male	29.98	7.61	6.75	0.31	100
		Female	14.24	17.5	2.57	0.51	100
		Person	27	10.9	5.9	0.4	100
Central Brahmaputra Valley	Nagaon	Male	26.69	6.46	18.02	0.39	100
		Female	42.19	6.57	15.91	0.05	100
		Person	32	6.5	17.3	0.3	100
Hill Region	Dima Hassao	Male	25.23	5.56	9.54	15.04	100
		Female	5.1	6.12	3.67	16.54	100
		Person	20.3	5.7	8.1	15.4	100
Barak Valley	Cachar	Male	21.64	12.18	2.52	5.09	100
		Female	31.54	0.89	4.56	1.09	100
		Person	27	10.1	5.1	1.7	100
ASSAM		Male	23.01	7.42	9.88	3.27	100
		Female	23.7	9.13	10.32	2.6	100
		Person	23.23	7.95	10.02	3.05	100

Source: Primary Survey, 2014-15

In the North Bank Plain, among male workers 22 percent are in manufacturing, 7 percent in construction 2 percent in wholesale and retail trade and 1 percent in transportation, and 14 percent in public admin etc. Among female workers 17 percent are in manufacturing, 13 percent in construction, 1 percent in wholesale and retail trade and 2 percent in transportation and 14 percent in public admin etc. Among persons 21 percent in manufacturing, 8 percent in construction 2 percent in wholesale and retail trade and 2 percent in transportation, and 14 percent in public admin, 1 percent in financial services and 11 percent in information and communication etc.

In the Upper Brahmaputra Valley, among male workers 6 percent are in manufacturing, 5 percent in construction 5 percent in wholesale and retail trade and 24 percent in transportation, and 30 percent in public admin etc. Among female workers 11 percent are in manufacturing, 4 percent in construction, 2 percent in wholesale and retail trade and 20 percent in transportation and 15 percent in public admin etc. Among persons 7 percent in manufacturing, 5 percent in construction 5 percent in wholesale and retail trade and 19 percent in transportation, and 27 percent in public admin, 15 percent in financial services and 6 percent in information and communication etc.

In the Central Brahmaputra Valley, among male workers 5 percent are in manufacturing, 5 percent in construction 4 percent in wholesale and retail trade and 7 percent in transportation, and 27 percent in public admin etc. Among female workers 5 percent are in manufacturing, 3 percent in construction, 3 percent in wholesale and retail trade and 6 percent in transportation and 42 percent in public admin etc. Among persons 4 percent in manufacturing, 5 percent in construction 4 percent in wholesale and retail trade and 7 percent in transportation, and 32 percent in public admin, 22 percent in financial services and 17 percent in information and communication etc.

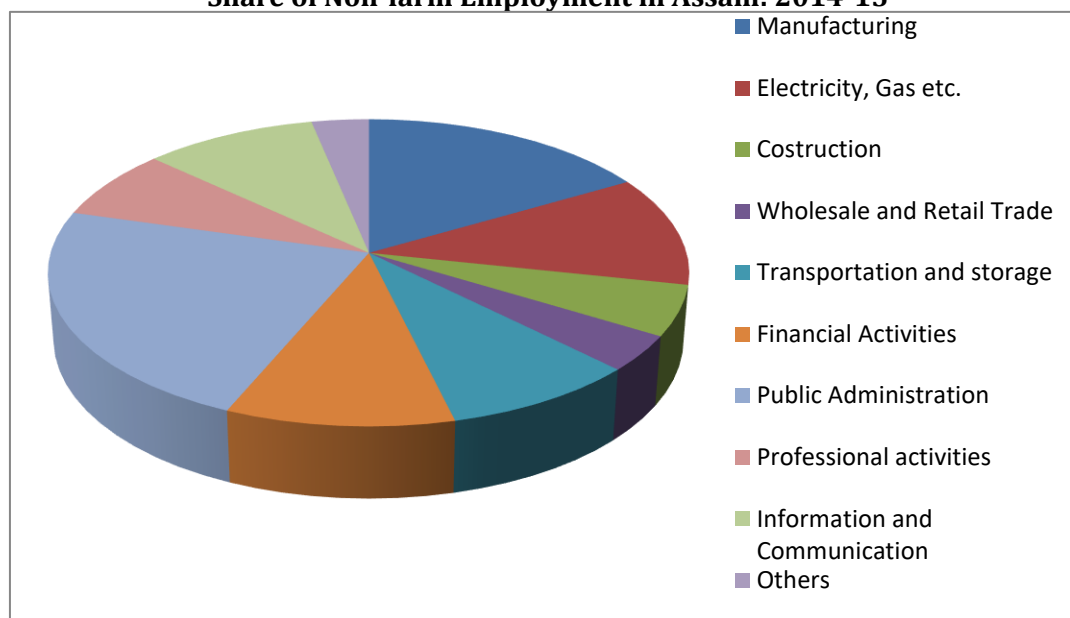
In the Hill Region, among male workers 23 percent are in manufacturing, 3 percent in construction 2 percent in wholesale and retail trade and 25 percent in public admin etc. Among female workers 28 percent are in manufacturing, 6 percent in construction, 2 percent in wholesale and retail trade 5 percent in public admin etc. Among persons 24 percent in manufacturing, 4 percent in construction 2 percent in wholesale and retail trade and 20 percent in public admin, 22 percent in financial services and 8 percent in information and communication etc.

In the Barak Valley, among male workers 26 percent are in manufacturing, 4 percent in construction 4 percent in wholesale and retail trade and 22 percent in public admin etc. Among female workers 35 percent are in manufacturing, 4 percent in construction, 2 percent in wholesale and retail trade 32 percent in public admin etc. Among persons 25 percent in manufacturing, 4 percent in construction 3 percent in

wholesale and retail trade and 27 percent in public admin,9 percent in financial services and 5 percent in information and communication etc.

In Assam, 17 percent are in manufacturing, 10 percent are in Electricity, Gas etc., 5 percent are in construction, 3 percent are in wholesale and retail trade, 9 percent are in transportation, 11 percent in financial; activities,, 23 percent are in public administration, 87 percent in professional activities and 10 percent are in information and communication. The share of non-farm employment in Assam is illustrated in Chart 5.6

Chart: 5.6
Share of Non-farm Employment in Assam: 2014-15



Source: Primary Survey, 2014-15

(b) Structure of Non-farm Employment across Social Groups

For an in depth exploration of the status of non-farm employment, the structure of employment is analyzed across social groups. This sort of examination would help us in identifying a preference lines for various social groups as far as participation in various employment avenues is concerned.

Table: 5.8
Structure of Employment by Industry Groups across Social Groups: 2014-15

Social Groups	Agriculture and allied	Manufacturing	Electricity, Gasetc.	Construction	Wholesale and retail trade	Transportation and storage	Financial and insurance activities	Public adminin, defence, education,	Professional Scientific and technical activities	Information and communication	others	Non-farm Total	Total
GEN	675	123	12	18	0	0	35	59	78	0	0	325	1000
SC	467	164	0	68	72	125	0	34	0	0	0	533	1000
ST	340	153	0	89	105	178	135	0	0	0	0	660	1000
OBC	504	81	0	108	143	74	0	0	0	0	10	416	1000
ALL	497	130	3	71	92	99	43	23	20	18	4	503	1000

Source: Primary Survey, 2014-15

In Table 5.8 an attempt has been made to identify the structure of non-farm employment across social groups in Assam. Employment share across social class shows that Scheduled tribe have relatively low share in agriculture and allied activities while general caste and other caste have high share. Employment in manufacturing is significantly higher among STs and SCs than other social groups. SCs are mostly engaged in repair related works, mainly caste-based occupations like basket weaving, black smithy, copper smith, etc. which are essentially low paying activities while the STs are engaged in weaving and manufacturing woollen garments. STs have distinctly higher share as their presence in household manufacturing is very high. Employment share in construction is highest among OBCs followed by SC.

In trade, hotel & restaurant all the social groups have fairly high share in employment. In transport and storage too all the social groups are represented barring general. In public administration, education etc., GENs have highest share followed by SC. It can be observed that the upper castes and STs have relatively higher share in employment in every branch of activities while the lower social classes have much lower share in employment barring construction. Scheduled tribe have highest share in nonagriculture employment followed by Scheduled castes. The reason for highest share of nonagriculture employment among STs is primarily due to their engagement in traditional occupation like weaving, manufacturing of woollen garments and trading. Low average size of cultivable land among SCs forces some people (mostly

illiterates and unskilled) in to casual type of employment in construction sector on the one hand and reservation in employment also seem to have helped others (better educated lot) to get regular/salaried employment on the other hand. GENs are observed to have highest literacy both among males and females in the present survey and also have traditionally been most forward class both in terms of education and employment in the region. Rightly so, their share in public public administration, education etc and other Professional Scientific and technical activities constitutes the highest share.

(c) Multiplicity of Employment

People deriving income from different sources are the most common features in Assam as single source of income is hardly sufficient to eke out living. Engagement in multiple sources of livelihoods is most common not only among poor but relatively well-off households in order to augment their incomes. So for a productive analysis of the structure nonfarm employment in Assam, we need to consider another aspect of employment i.e. the multiplicity of employment. For this, two different processes seem to work simultaneously; first as a deliberate household strategy to enhance income as an involuntary response to crisis situation (Stark, 1991) and secondly to seize opportunities as a means of accumulation (Davies, 1996). Multiple economic activities are most pervasive and widespread among different groups of population in the survey areas in Assam.

In Table 5.9 an attempt has been made to identify the multiplicity of employment food security status in Assam. When Food Security status is very low 40 percent are engaged in one employment and rest is engaged on two employments. When Food Security status is low, 30 percent are in one employment, 50 percent are engaged on two employments and rests have more than two employments. When Food Security status is medium, 47 percent are in one employment, 50 percent are engaged on two employments and rests have more than two employments. When Food Security status is high, 47 percent are in one employment, 53 percent are engaged on two employments. When Food Security status is very high, 63 percent are in one

employment, 33 percent are engaged on two employments and rests have more than two employments.

Table: 5.9
Multiplicity of Employment in Assam: 2014-15

		Multiplicity of Employment							Total
		One		Two				More than Two	
		Farm	Non-Farm	Farm-Farm	Farm-Nonfarm	Nonfarm-Farm	Nonfarm-Nonfarm		
Food Security status	Very Low	2 (40.0)	-	3 (60.0)	-	-	-	-	5 (100)
	Low	36 (23.38)	10 (6.49)	47 (30.52)	12 (7.79)	19 (12.34)	5 (3.25)	25 (16.23)	154 (100)
	Middle	18 (16.07)	35 (31.25)	4 (3.57)	21 (18.75)	5 (4.46)	27 (24.11)	2 (1.79)	112 (100)
	High	41 (15.07)	89 (32.72)	4 (1.5)	32 (11.76)	12 (4.41)	94 (34.54)	-	272 (100)
	Very High	5 (8.47)	32 (54.24)	-	-	-	22 (37.29)	-	59 (100)
	All	102 (16.94)	166 (27.58)	58 (9.63)	65 (10.80)	36 (5.98)	148 (24.58)	27 (4.49)	602 (100)

Source: Primary Survey, 2014-15

Note: Figures in parenthesis () represent the percentages of row total.

5.2.2 Pattern of Non-farm Workers in Assam

The main drivers of nonfarm employment in Assam are the workers who have been engaged in these nonfarm activities. A worker is a person who undertakes a specified type of work. So understanding the pattern of workers engaged in nonfarm activities would enable us in realizing various dimensions of nonfarm employment.

(a) Pattern of Non-farm Workers by Industry Groups

Pattern of Nonfarm workers can be analyzed using standard industrial and occupational classifications. In this section the pattern is analyzed using industrial classification of workers. In order to maintain simplicity, structure of employment by industrial classification is analyzed according to principal status of workers and as such subsidiary status of workers has not been taken in to account. It has been observed that the analysis based on principal status gives clearer picture of work activity.

In Table 5.10 an attempt has been made to identify the structure of non-farm employment across agro-climatic zones in Assam. In the Lower Brahmaputra Valley, among male workers 245 workers are engaged in agriculture and allied activities, 47 in manufacturing, 120 in construction 380 workers in wholesale and retail trade and 85 in transportation, and 56 in public admin etc. Among female workers 736 workers are engaged in agriculture and allied activities, 180 in construction and 19 in public admin etc. Among persons 491 workers are engaged in agriculture and allied activities, 24 in manufacturing, 150 in construction 190 workers in wholesale and retail trade and 43 in transportation, and 38 in public admin etc.

In the North Bank Plain, among male workers 441 workers are engaged in agriculture and allied activities, 98 in manufacturing, 187 in construction 195 workers in wholesale and retail trade and 83 in transportation, 83 in professional Scientific and technical activities and 44 in public admin etc. Among female workers 775 workers are engaged in agriculture and allied activities, 115 in construction. Among persons 608 workers are engaged in agriculture and allied activities, 49 in manufacturing, 111 in construction 20 workers in wholesale and retail trade and 42 in transportation, 45 in professional Scientific and technical activities and 25 in public admin etc.

In the Upper Brahmaputra Valley, among male workers 328 workers are engaged in agriculture and allied activities, 98 in manufacturing, 76 in construction 263 workers in wholesale and retail trade and 132 in transportation, and 80 in public admin etc. Among female workers, 865 workers are engaged in agriculture and allied activities, 135 in others. Among persons, 597 workers are engaged in agriculture and allied activities, 16 in manufacturing, 38 in construction 132 workers in wholesale and retail trade and 66 in transportation, and 40 in public admin etc.

In the Central Brahmaputra Valley, among male 550 workers are engaged in agriculture and allied activities, 72 in manufacturing, 125 in construction 68 workers in wholesale and retail trade and 87 in professional Scientific and technical activities and 44 in public admin etc. Among females, 890 workers are engaged in agriculture and allied activities, and 80 in others. Among persons, 720 workers are engaged in

agriculture and allied activities, 36 in manufacturing, 63 in construction 34 workers in wholesale and retail trade and 15 in transportation, and 44 in professional activities.

In the Hill Region, among males, 389 workers are engaged in agriculture and allied activities, 98 in manufacturing, 184 in construction 133 workers in wholesale and retail trade and 139 in transportation, and 50 Financial and insurance activities. Among females, 718 workers are engaged in agriculture and allied activities, 18 in manufacturing, 80 in construction 30 workers in wholesale and retail trade, 39 in information and communication, and 90 in others. Among persons, 554 workers are engaged in agriculture and allied activities, 98 in manufacturing, 132 in construction 82 workers in wholesale and retail trade and 70 in transportation, and 18 in public admin etc, 37 in information and communication, and 70 in others.

In Barak Valley, among males 307 workers are engaged in agriculture and allied activities, 221 in construction 158 in transportation, 185 workers in wholesale and retail trade and 33 in professional Scientific and technical activities and 28 in public admin etc. Among females, 845 workers are engaged in agriculture and allied activities, 15 in construction, 33 in professional Scientific and technical activities and 20 in public admin etc, 30 in information and communication, and 75 in others. Among persons, 576 workers are engaged in agriculture and allied activities, 118 in construction, 93 workers in wholesale and retail trade and 79 in transportation, 17 in professional Scientific and technical activities and 24 in public admin etc, 15 in information and communication, and 44 in others. In Assam, 579 workers are engaged in agriculture and allied activities, 120 in construction, 83 workers in wholesale and retail trade and 69 in transportation, 27 in financial activities, 21 in public admin etc, 25 in information and communication, and 44 in others.

(b) Occupational Distribution of Workforce

Another potential way of classifying the workers is based on their occupations. An occupation is a person's usual or principal activity in which he is engaged which acts as a means of earning a living. This sort of exercise would enable us in identifying an occupational preference pattern followed by workers engaged in nonfarm sector in Assam. In Table 5.11 Occupation and Industrial distribution of Workers is

compiled. The occupational distribution of workers by industry shows a very narrow base with little diversification across industry groups. Majority of workers are concentrated in a few industry groups. The Elementary occupation holders (cultivators, animal husbandry workers etc.), skilled agricultural and fishery workers, professionals, Plant, machine operators and assemblers are concentrated in a single industry, the remaining occupational groups such as Legislators, senior officials and managers, Technicians and associate professionals, clerks, Service, shop and market sales workers, Craft and related trades workers are bunched in to a few industry groups. Such a narrow base of occupation across industry groups is an indicative of a less diversified base of the economy.

Until now we have analyzed the occupational distribution neglecting the subsidiary occupations. So an analysis is undertaken about various subsidiary occupations linking with different principal occupations. This sort of exercise would try to highlight a sort of preference lines among workers for various subsidiary occupations i.e about which subsidiary occupations is more favored.

Thus a tabulation exercise is carried out about the principal workers pursuing subsidiary occupations in Table 5.12. Among the elementary occupation holders 10 percent have no secondary occupation, while 67 percent are Service, shop and market sales workers, 23 percent are Craft and related trades workers. When it comes to Skilled agricultural and fishery workers majority are Service, shop and market sales workers. Moreover as expected Legislators, senior officials and managers, Professionals, Technicians and associate professionals have no secondary occupation as the earning levels are high. Among the Service, shop and market sales workers and Craft and related trades workers about 36 percent are engaged in elementary occupations and 20 percent are engaged as skilled agricultural and fishery workers. In the Plant, machine operators and assemblers category 43 percent are engaged as skilled agricultural and fishery workers and 37 percent are Service, shop and market sales workers (Table 5.12).

Table: 5.10
Structure of Employment by Industry Groups in Assam: 2014-15

Agro-Climatic Zones	District		Agriculture and allied	Manufacturing	Electricity, Gas etc.	Construction	Wholesale and Retail Trade	Transportation and storage
Lower Brahmaputra Valley	Kamrup Metropolitan	Male	245	47	0	120	380	85
		Female	736	0	0	180	0	0
		Person	491	24	0	150	190	43
North Bank Plain	Lakhimpur	Male	441	98	15	107	40	83
		Female	775	0	0	115	0	0
		Person	608	49	8	111	20	42
Upper Brahmaputra Valley	Dibrugarh	Male	328	32	0	76	263	132
		Female	865	0	0	0	0	0
		Person	597	16	0	38	132	66
Central Brahmaputra Valley	Nagaon	Male	550	72	0	125	68	29
		Female	890	0	12	0	0	0
		Person	720	36	6	63	34	15
Hill Region	Dima Hassao	Male	389	0	0	184	133	139
		Female	718	18	0	80	30	0
		Person	554	9	0	132	82	70
Barak Valley	Cachar	Male	307	0	0	221	185	158
		Female	845	10	5	15	0	0
		Person	576	5	3	118	93	79
ASSAM		Male	565	7	1	125	87	74
		Female	594	8	1	115	79	63
		Person	579	8	1	120	83	69

Source: Primary Survey, 2014-15

Table: 5.10
Structure of Employment by Industry Groups in Assam: 2014-15(Continued)

Agro-Climatic Zones	District		Financial Activities	Public administration, defence, education, human health etc.	Professional activities	Information and Communication	Others	NON-FARM TOTAL
Lower Brahmaputra Valley	Kamrup Metropolitan	Male	38	56	21	8	0	755
		Female	0	19	8	12	45	264
		Person	19	38	15	10	23	510
North Bank Plain	Lakhimpur	Male	63	44	81	13	15	559
		Female	0	5	8	15	82	225
		Person	32	25	45	14	49	392
Upper Brahmaputra Valley	Dibrugarh	Male	15	80	45	0	29	672
		Female	0	0	0	0	135	135
		Person	8	40	23	0	82	403
Central Brahmaputra Valley	Nagaon	Male	20	0	87	49	0	450
		Female	0	0	0	18	80	110
		Person	10	0	44	34	40	280
Hill Region	Dima Hassao	Male	50	20	0	35	50	611
		Female	10	15	0	39	90	282
		Person	30	18	0	37	70	446
Barak Valley	Cachar	Male	56	28	33	0	12	693
		Female	0	20	0	30	75	155
		Person	28	24	17	15	44	424
ASSAM		Male	29	21	8	26	57	535
		Female	26	21	10	25	58	406
		Person	27	21	9	25	57	521

Source: Primary Survey, 2014-15

**Table: 5.11
Occupation and Industrial Distribution of Workers: 2014-15**

	Agriculture and allied	Manufacturing	Electricity, Gas etc.	Construction	Wholesale and retail trade	Transportation and storage	Financial and insurance activities	Public adminin, defence, etc.	Professinal Scientific and technical activities	Information and communication	others	Total
Elementary Occupation	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00 (232)
Skilled agricultural and fishery workers	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00 (138)
Legislators, senior officials and managers	0.00	0.00	0.00	0.00	0.00	0.00	33.33	66.67	0.00	0.00	0.00	100.00 (85)
Professionals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00 (56)
Technicians and associate professionals	0.00	0.00	0.00	0.00	0.00	0.00	15.38	11.54	53.85	19.23	0.00	100.00 (164)
Clerks	0.00	0.00	0.00	0.00	0.00	0.00	33.33	33.33	0.00	0.00	33.33	100.00 (172)
Service, shop and market sales workers	0.00	22.08	6.67	30.11	40.89	0.00	0.00	0.00	0.00	0.00	0.00	100.00 (367)
Craft and related trades workers	0.00	66.67	0.00	0.00	33.33	0.00	0.00	0.00	0.00	0.00	0.00	100.00 (125)
Plant, machine operators and assemblers	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00 (167)
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00 (32)

Source: Primary Survey, 2014-15

(c)Employment Status of Workers

A number of different working arrangements have been developed over the years allowing more flexibility at work. Mainly employment status of workers has been ascertained based on the principal and subsidiary status occupation and accordingly workers have been categorised in to self-employed, regular and casual statuses. An individual's employment rights responsibilities that he confronts at his workplace crucially depend upon this status of employment.

In Table 5.13 an attempt has been made to identify the status of employment across agro-climatic zones in Assam. In the Lower Brahmaputra Valley, among male workers 585 are self employed, 228 are casual and 187 are regularly employed. Among female workers, 169 are self employed, 781 are casual and 50 are regularly employed. Among persons, 377 are self employed, 505 are casual and 119 are regularly employed.

In the North Bank Plain, among male workers 479 are self employed, 412 are casual and 109 are regularly employed. Among female workers, 138 are self employed, 847 are casual and 15 are regularly employed. Among persons, 309 are self employed, 630 are casual and 62 are regularly employed. In the Upper Brahmaputra Valley, among male workers 612 are self employed, 317 are casual 71 are regularly employed. Among female workers, 272 are self employed, 718 are casual and 10 are regularly employed. Among persons, 442 are self employed, 518 are casual and 41 are regularly employed. In the Central Brahmaputra Valley, among male workers 524 are self employed, 342 are casual and 134 are regularly employed. Among female workers, 220 are self employed, 745 are casual and 35 are regularly employed. Among persons, 372 are self employed, 544 are casual and 85 are regularly employed. In the Hill Region, among male workers 678 are self employed, 118 are casual and 204 are regularly employed. Among female workers, 96 are self employed, 837 are casual and 67 are regularly employed. Among persons, 387 are self employed, 478 are casual and 136 are regularly employed. In the Barak Valley, among male workers 406 are self employed, 438 are casual and 156 are regularly employed. Among female workers, 300 are self employed, 672 are casual and 28 are regularly employed. Among

persons, 353 are self employed, 555 are casual and 92 are regularly employed. In Assam, 419 are self employed, 546 are casual and 35 are regularly employed. Thus, it can be observed that the self employment is the principal mode of livelihood of the workforce although the employment status of the workers is distinctly different for different agro climatic zones (Table 5.13). The status of employment in Assam is illustrated in Chart 5.7.

Table: 5.12
Principal Workers Pursuing Subsidiary Occupation: 2014-15

Principal Occupations	Subsidiary Occupations											
	None	Elementary Occupation	Skilled agricultural and fishery workers	Legislators, senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service, shop and market sales workers	Craft and related trades workers	Plant, machine operators and assemblers	Others	Total
Elementary Occupation	10.35	0	0	0	0	0	0	66.81	22.84	0	0	100
Skilled agricultural and fishery workers	13.04	0	0	0	0	0	0	54.35	32.61	0	0	100
Legislators, senior officials and managers	100	0	0	0	0	0	0	0	0	0	0	100
Professionals	100	0	0	0	0	0	0	0	0	0	0	100
Technicians and associate professionals	100	0	0	0	0	0	0	0.00	0	0	0	100

Source: Primary Survey, 2014-15

**Table: 5.12
Principal Workers Pursuing Subsidiary Occupation: 2014-15(Continued)**

Principal Occupations	Subsidiary Occupations											
	None	Elementary Occupation	Skilled agricultural and fishery workers	Legislators, senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service, shop and market sales workers	Craft and related trades workers	Plant, machine operators and assembles	Others	Total
Clerks	62.21	0	0	0	0	0	0	15.7	0	22.09	0	100
Service, shop and market sales workers	10.9	35.97	21.25	0	0	0	0	0	31.88	0	0	100
Craft and related trades workers	0	36	20	0	0	0	0	30.4	0	13.6	0	100
Plant, machine operators and assembles	6.59	13.77	42.51	0	0	0	0	37.13	0	0	0	100
Others	100	0	0	0	0	0	0	0	0	0	0	100

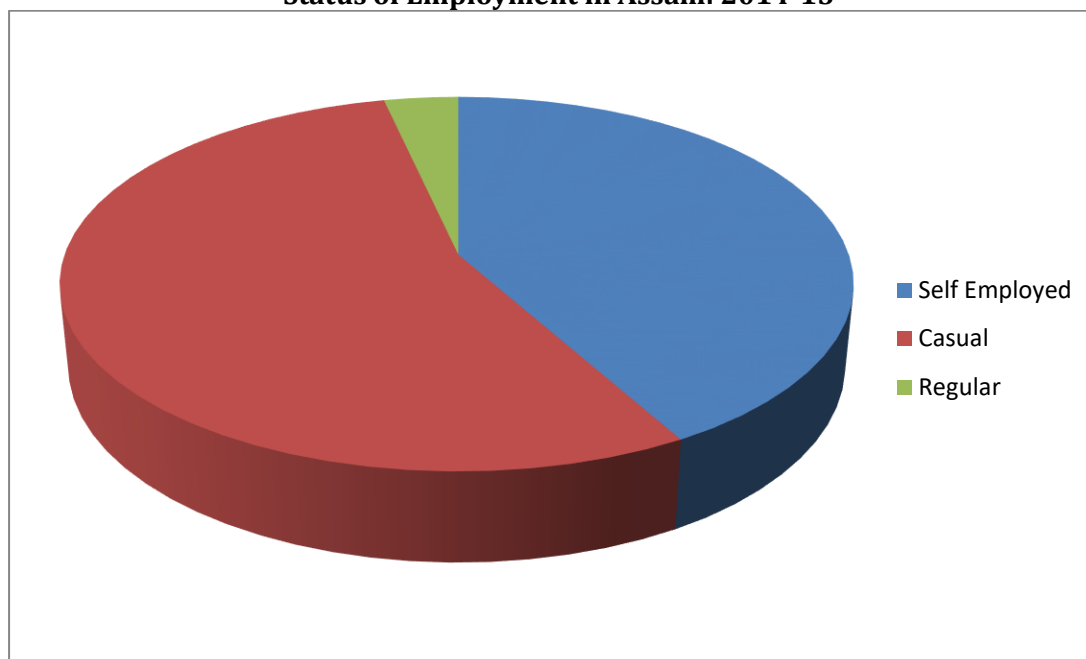
Source: Primary Survey, 2014-15

Table: 5.13
Status of Employment in Assam: 2014-15

AGRO-CLIMATIC ZONES	DISTRICT		Status of Employment			Total
			Self Employed	Casual	Regular	
Lower Brahmaputra Valley	Kamrup Metropolitan	Male	585	228	187	1000
		Female	169	781	50	1000
		Person	377	505	119	1000
North Bank Plain	Lakhimpur	Male	479	412	109	1000
		Female	138	847	15	1000
		Person	309	630	62	1000
Upper Brahmaputra Valley	Dibrugarh	Male	612	317	71	1000
		Female	272	718	10	1000
		Person	442	518	41	1000
Central Brahmaputra Valley	Nagaon	Male	524	342	134	1000
		Female	220	745	35	1000
		Person	372	544	85	1000
Hill Region	Dima Hassao	Male	678	118	204	1000
		Female	96	837	67	1000
		Person	387	478	136	1000
Barak Valley	Cachar	Male	406	438	156	1000
		Female	300	672	28	1000
		Person	353	555	92	1000
ASSAM		Male	645	311	44	1000
		Female	193	781	26	1000
		Person	419	546	35	1000

Source: Primary Survey, 2014-15

Diagram: 5.7
Status of Employment in Assam: 2014-15



Source: Primary Survey, 2014-15

5.3 Non- farm Enterprise in Assam: 2014-15

One of the integral segment of non-farm sector is the non-agricultural enterprises. It has achieved considerable importance now-a-days as an alternative strategy for generating employment, reducing poverty and for development of rural areas. As concern about employment expansion and poverty-alleviation in rural areas has grown, and since urban-based industrialization cannot provide a solution, attention has therefore shifted towards the rural non-farm enterprises, which straddles the urban economy, on the one hand, and the rural economy on the other.

(a)Composition of Non-farm Enterprises

From the analysis of secondary data, it got reflected that the non agricultural enterprises constitute a major portion of enterprises in the state. So, an analysis of the sectoral composition of enterprises across various non-farm sub-sector would be an valuable exercise.

From Table 5.14, in Lower Brahmaputra valley, among 1000 enterprises, 319 are engaged in Trade and Commerce, 234 are manufacturing enterprises, 137 are transportation related enterprises, 42 are construction enterprises and 125,15 and 10

Table: 5.14
Distribution of Non-farm Enterprises in Assam: 2014-15

Agro-Climatic Zones	District	Non-farm Activities								TOTAL
		Trade and Commerce	Manufacturing	Transportation	Construction	Financial Activities	Health related Activities	Food Service Activities	Others	
Lower Brahmaputra Valley	Kamrup Metropolitan	319	234	137	42	125	15	10	118	1000 (89)
North Bank Plain	Lakhimpur	259	536	-	84	121	-	-	-	1000 (35)
Upper Brahmaputra Valley	Dibrugarh	438	377	11	71	43	11	38	33	1000 (58)
Central Brahmaputra Valley	Nagaon	523	218	93	-	173	-	-	07	1000 (32)
Hill Region	Dima Hassao	497	312	-	-	135	10	46	-	1000 (48)
Barak Valley	Cachar	284	-	139	30	73	27	54	393	1000 (75)
TOTAL		368	254	61	37	156	9	20	95	337

Source: Primary Survey, 2014-15

are financial, health and food service activities while 118 are other types of enterprises. In North Bank Plain, among 1000 enterprises, 259 are engaged in Trade and Commerce, 536 are manufacturing enterprises, 84 are construction enterprises and 121 in financial activities. food service activities. In Barak valley, among 1000 enterprises,

In Upper Brahmaputra valley, among 1000 enterprises, 438 are engaged in Trade and Commerce, 377 are manufacturing enterprises, 11 are transportation related enterprises, 71 are construction enterprises and 43,11 and 38 are financial, health and food service activities while 33 are other types of enterprises. In Central Brahmaputra

valley, among 1000 enterprises, 523 are engaged in Trade and Commerce, 218 are manufacturing enterprises, 93 are transportation related enterprises, and 173 are financial service activities while 7 are other types of enterprises. In Hill Region, among 1000 enterprises, 497 are engaged in Trade and Commerce, 312 are manufacturing enterprises, 135,10 and 46 are financial, health and In Assam as a whole, among 1000 enterprises, 368 are engaged in Trade and Commerce, 254 are manufacturing enterprises, 61 are transportation related enterprises, 37 are construction enterprises and 156, 9 and 20 are financial, health and food service activities while 95 are other types of enterprises (Table 5.14).

Table: 5.15
Workers in Non-farm Enterprises in Assam: 2014-15

Non-farm Activities	Type of Workers								
	Family Worker			Hired Worker			Total Worker		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Trade and Commerce	76.09	5.43	81.52	18.48	0.00	18.48	94.57	5.43	100.00 (92)
Manufacturing	33.93	1.79	35.71	53.57	10.71	64.29	87.50	12.50	100.00 (56)
Transportation	8.33	25.00	33.33	50.00	16.67	66.67	58.33	41.70	100.00 (12)
Construction	37.50	0.00	37.50	62.50	0.00	62.50	100.00	0.00	100.00 (16)
Financial Activities	24.53	7.55	32.08	54.72	13.21	67.92	79.25	20.80	100.00 (53)
Health related Activities	0.00	0.00	0.00	100	0.00	100	100	0.00	100.00 (12)
Food Service Activities	0.00	0.00	0.00	100	0.00	100	100	0.00	100.00 (15)
Others	20.99	11.10	32.10	43.21	24.69	67.90	64.20	35.80	100.00 (81)
TOTAL	37.39	6.53	43.92	45.70	10.39	56.08	83.09	16.90	100.00 (337)

Source: Primary Survey, 2014-15

(b) Workers in Non-farm Enterprises

As nonfarm enterprises in Assam is showing an increasing trend over the years on the one hand and these enterprises are distributed among various sub-sectors on the other so an analysis of the type of workers engaged in these enterprises would be meaningful exercise. From table 5.15 in trade and commerce, 81 percent are family

workers and 19 percent are hired workers. In manufacturing, 36 percent are family workers and 64 percent are hired workers. In transportation, 33 percent are family workers and 67 percent are hired workers. In Construction, 38 percent are family workers and 62 percent are hired workers. In financial activities, 32 percent are family workers and 68 percent are hired workers. In health and food service related enterprises, all are hired workers.

(c) Different Dimensions of Non-farm Enterprises

(i) Non-farm Enterprises by Year of Establishment

Since, a quite large numbers of the non-farm activities in sample rural areas, either forming the traditional household activities or the non-traditional activities were reported to be quite old. It is therefore, we further find that fairly a very high proportions of little over than 47 per cent of the present entrepreneurs are engaged in different non-farm activities for employment for last nearly two decades ago. In fact, the proportions of entrepreneurs who have been engaged in trade are 31 per cent and 15 percent each in manufacturing, transport and construction respectively before 1990. The proportions of entrepreneurs who have been engaged in trade are 66 per cent, 16 percent in manufacturing, 8 percent in transport and 8 percent in others respectively before 2000. The proportions of entrepreneurs who have been engaged in trade are 32 per cent, 22 percent in manufacturing, and 4 percent in transport, 11percent in construction, 5 percent in financial activities and health activities, 3 percent in food service activities and 8 percent in others respectively after 2000. The proportions of entrepreneurs who have been engaged in trade are 23 per cent, 5 percent in manufacturing, and 2.5 percent in transport, 37.5 percent in financial activities, 5 percent in food service activities and 28 percent in others respectively after 2010 (Table 5.16).

(ii) Origin of the Enterprises

Since, we have found earlier that a sizeable proportion of the non-farm activities were quite old, and established before 1990 so an analysis of the origin of enterprises would be fruitful. The analysis revealed that around 45 per cent of them

were established during last two generations ago of the present owners of these activities and almost 37 percent of units are originated by the father's of the present entrepreneurs.

Table: 5.16
Year of Establishment of the Non-Farm Activities

Year	Activities								
	Trade and Commerce	Manufacturing	Transport	Construction	Financial Activities	Health related Activities	Food Service Activities	Others	TOTAL
Post 1980	30.76	15.38	15.38	15.38	0	0	0	23.10	100.00 (26)
Post 1990	66.18	16.18	8.82	0	0	0	0	8.82	100.00 (135)
Post 2000	31.58	22.81	3.74	1053	5.26	5.26	3.51	17.31	100.00 (107)
Post 2010	22.50	5.0	2.5	0	37.5	0	5.0	27.50	100.00 (69)
TOTAL	36.79 (124)	25.52 (86)	6.23 (21)	3.56 (12)	15.73 (53)	1.19 (4)	2.08 (7)	8.9 (30)	100.00 (337)

Source: Primary Survey, 2014-15

However, a majority of around 52 per cent non-farm activities are the origin of the first and present generation. Among the trade and commerce, 46 percent are first and present generation enterprises while 45 percent are the traditional non-farm activities. Among the Manufacturing, 64 percent are first and present generation enterprises, 29 percent are the traditional non-farm enterprises. Among the Transport, 75 percent are first and present generation enterprises, 8 percent are the traditional non-farm enterprises. Among the Construction, 17 percent are first and present generation enterprises, 67 percent are the traditional non-farm enterprises. Among the Financial Activities, 44 percent are first and present generation enterprises, 44 percent are the traditional non-farm enterprises (Table 5.17).

Table: 5.17
Origin of the Non-Farm Activities

		Origin				
		Self	Family Tradition	Friend/ Relatives	Others	TOTAL
Activities	Trade and Commerce	46.05	44.74	9.21	0.00	100.00 (124)
	Manufacturing	64.29	28.57	7.14	0.00	100.00 (86)
	Transport	75.00	8.33	16.67	0.00	100.00 (21)
	Construction	16.67	66.67	16.67	16.67	100.00 (12)
	Financial Activities	44.44	44.44	0.00	11.11	100.00 (53)
	Others	55.17	27.59	13.79	3.45	100.00 (41)
	TOTAL	51.48	37.28	9.47	1.78	100.00 (337)

Source: Primary Survey, 2014-15

(iii) Reasons for Establishment of Non-farm Enterprises

The decision of the entrepreneurs of opting the preferential non-farm activity for establishment is governed by several factors like the availability pattern of required raw material, man power with required skill for performing concerned activity, the available marketing facilities for selling the products, finance, linkages of location with basic communication and information sources, and urban areas and the availability of required infrastructural facilities for properly functioning of the respective venture. However, in regard to the various rural non-farm activities covered for the purpose of the present study we found that the present location was the home place of each of the entrepreneurs of different non-farm activities. Lacking employment opportunities in local areas is seen forcing 39 percent rural workforce to establish non-farm activities, the availability of local raw material is seen forcing 19 percent rural workforce to establish non-farm activities and the skills among the family members for performing various work related to concern activity are noted to be forcing 17 percent rural workforce to establish non-farm activities. The contribution of Government in promoting non-farm activities is seen in terms of

providing financial and technical assistance to 4.73 per cent households for favour of the establishment of non-farm activities. The proportions of entrepreneur who opted for starting the non-farm activities due to the availability of lower level of earnings in locally available wage-paid employment were noted to be 12.43 per cent (Table 5.18).

Table: 5.18
Reason for Establishment of Non Farm Activities

Reasons	Activities								
	Trade and Commerce	Manufacturing	Transport	Construction	Financial Activities	Health related Activities	Food Service Activities	Others	TOTAL
None	21.43	7.14	7.14	28.58	7.14	0	7.14	21.43	100.00 (28)
Family skill	13.79	6.90	31.03	3.45	17.24	0	0	27.59	100.00 (58)
Raw materials	53.13	37.5	0	0	6.25	0	0	3.12	100.00 (64)
Unemployment	76.92	13.85	0	0	7.69	0	0	1.54	100.00 (130)
Govt. Policy	0	0	0	0	50.00	37.50	12.50	0	100.00 (16)
Low wages in other activities	9.52	19.05	9.52	4.76	4.76	0	9.52	42.87	100.00 (41)
TOTAL	36.79 (124)	25.52 (86)	6.23 (21)	3.56 (12)	15.73 (53)	1.19 (4)	2.08 (7)	8.9 (30)	100.00 (337)

Source: Primary Survey, 2014-15

(iv) Constraints in the Expansion of Non-farm Enterprises

The respondents also shared about various constraints facing their nonfarm enterprises to expand. It thus becomes imperative to tabulate some of the constraints faced by different non-farm enterprises. The enterprises engaged in trade and commerce related activities reported that 67 percent have limited market, 20 percent have inadequacy of raw material and 10 percent are suffering from poor marketing channel. The enterprises engaged in manufacturing related activities reported that 25 percent are suffering from poor marketing channel, 21 percent have technological bottlenecks and 20 percent have financial constraints. The enterprises engaged in transportation related activities reported that 33 percent have financial constraints. 50

percent of the enterprises engaged manufacturing faced with stiff competition, while 33 percent suffered from financial constraints. Among health related activities 33 percent suffered from financial constraints, and among food service activities 50 percent suffered from financial constraints (Table 5.19).

Table: 5.19
Constraints in the Expansion of Non-farm Enterprises in Assam: 2014-15

Non-farm Activities	Constraints in the expansion of Non-farm Enterprises								Total
	None	Limited Market	Inadequacy of raw material	Stiff Competition	Technological bottlenecks	Poor marketing Channel	Financial Constraints	Lack of govt. support	
Trade and Commerce	17.10	36.84	19.74	6.58	0.00	10.53	9.21	0.00	100.00 (124)
Manufacturing	25.00	0.00	0.00	0.00	21.43	25.00	17.86	10.71	100.00 (86)
Transportation	58.34	0.00	0.00	0.00	0.00	0.00	33.33	8.33	100.00 (21)
Construction	16.67	0.00	0.00	50.00	0.00	0.00	33.33	0.00	100.00 (12)
Financial Activities	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00 (53)
Health related Activities	66.67	0.00	0.00	0.00	0.00	0.00	33.33	0.00	100.00 (4)
Food Service Activities	50.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	100.00 (7)
Others	40.91	18.18	9.09	13.64	9.09	9.09	0.00	0.00	100.00 (30)

Source: Primary Survey, 2014-15

Table: 5.20
Alternative Options for Developing Non-farm Enterprises in Assam: 2014-15

Non-farm Activities	Alternative options for developing Non-farm Enterprises						
	Development of Product Design	Additional investment on working Capital	Technological improvements	Access to financial resources	Improved marketing facility	Adequate govt. support	Total
Trade and Commerce	5.26	10.53	0.00	38.16	42.11	3.95	100.00 (124)
Manufacturing	0.00	35.71	50	10.71	3.57	0.00	100.00 (86)
Transportation	0.00	16.67	0.00	66.67	0.00	16.67	100.00 (21)
Construction	0.00	66.67	33.33	0.00	0.00	0.00	100.00 (12)
Financial Activities	27.78	0.00	0.00	72.22	0.00	0.00	100.00 (53)
Health related Activities	0.00	33.33	33.33	0.00	0.00	33.33	100.00 (4)
Food Service Activities	0.00	0.00	0.00	100.00	0.00	0.00	100.00 (7)
Others	36.36	13.64	0.00	36.36	13.64	0.00	100.00 (30)

Source: Primary Survey, 2014-15

5.4 Entrepreneurship in Non-farm Sector: 2014-15

Entrepreneurship plays a significant role in the growth of non-farm sector in Assam. Entrepreneurship is defined as the enthusiastic willingness of a person to organize his or her economic activity with the help of appropriate technology and practices conceived for a sustainable living.

5.4 .1 Entrepreneurship across Non-farm Activities

The non-farm activities in rural areas function at household level through engaging its family members in running of the concerned activities. In general sense, all the members of non-farm households which are attached with their family enterprises in any form, may be regarded as the entrepreneurs of the concerned

activity. However, the head of household holds a key position that handles controls and manage all kinds of work involved in the operation of concerned household based non-farm activities. Therefore, in this study the head of non- farm household has been regarded as an entrepreneur of the concerned non-farm activity. At this juncture, understanding the pattern of entrepreneurship across non-farm enterprises would be an worthy exercise and hence an attempt has been made in Table 5.21.

From Table 5.21, in Kamrup Metropolitan district among every thousand entrepreneurs 305 are engaged in trade and commerce, 251 are in manufacturing, 119 are in transportation, 87 in construction, 130 in financial activities, 10 in health related activities, 8 in food service activities and 90 in others. In Lakhimpur district among every thousand entrepreneurs 237 are engaged in trade and commerce, 551 are in manufacturing, 90 in construction and 122 in financial activities. In Dibrugarh district among every thousand entrepreneurs 412 are engaged in trade and commerce, 359 are in manufacturing, 8 are in transportation, 83 in construction, 40 in financial activities, 15 in health related activities, 44 in food service activities and 39 in others. In Nagaon district among every thousand entrepreneurs 525 are engaged in trade and commerce, 210 are in manufacturing, 87 are in transportation, 170 in financial activities, and 7 in others.

In Dima Hassao district among every thousand entrepreneurs 490 are engaged in trade and commerce, 319 are in manufacturing, 119 are in transportation, 87 in construction, 130 in financial activities, 15 in health related activities and 46 in food service activities. In Cachar district among every thousand entrepreneurs 280 are engaged in trade and commerce, 251 are in manufacturing, 140 are in transportation, 25 in construction, 70 in financial activities, 27 in health related activities, 50 in food service activities and 408 in others. In Assam on an aggregate among every thousand entrepreneurs 375 are engaged in trade and commerce, 282 are in manufacturing, 59 are in transportation, 48 in construction, 110 in financial activities, 11 in health related activities, 25 in food service activities and 90 in others (Table 5.21).

Table: 5.21
Entrepreneurship across Non-farm Sector in Assam: 2014-15

AGRO-CLIMATIC ZONES	DISTRICT	Non-farm Activities								TOTAL
		Trade and Commerce	Manufacturing	Transportation	Construction	Financial Activities	Health related Activities	Food Service Activities	Others	
Lower Brahmaputra Valley	Kamrup Metropolitan	305	251	119	87	130	10	8	90	1000
North Bank Plain	Lakhimpur	237	551	-	90	122	-	-	-	1000
Upper Brahmaputra Valley	Dibrugarh	412	359	8	83	40	15	44	39	1000
Central Brahmaputra Valley	Nagaon	525	210	87	-	170	-	-	8	1000
Hill Region	Dima Hassao	490	319	-	-	130	15	46	-	1000
Barak Valley	Cachar	280	-	140	25	70	27	50	408	1000
ASSAM		375	282	59	48	110	11	25	90	1000

Source: Primary Survey, 2014-15

5.4.2 Different Dimensions of Entrepreneurship

It has generally been believed that beside various fundamental factors and locational aspects, the basic socio-economic and personnel characteristics of entrepreneurs of different enterprises are equally important determining factors to the growth pattern and expansion of non-farm enterprises. In this background the age and educational characteristics and the sex composition of the entrepreneurs are focused among the various other most crucial personnel characteristics which directly influence the functioning and operational aspects of any enterprise.

(i) Sex of the Entrepreneurs

The rural non-farm activities involve every categories of male and female skilled, un-skilled, literate and illiterate workforce in its different stages of operations. So, firstly we look into the sex composition of the entrepreneurs in the Table 5.22.

Table: 5.22
Entrepreneurs in Non-farm Enterprises by Sex in Assam: 2014-15

Non-farm Activities	Percentage of Entrepreneurs		
	Male	Female	Total
Trade and Commerce	95.09	4.91	100.00
Manufacturing	100.00	0.00	100.00
Transportation	99.05	0.95	100.00
Construction	100.00	0.00	100.00
Financial Activities	93.85	6.15	100.00
Health related Activities	100.00	0.00	100.00
Food Service Activities	96.00	4.00	100.00
Others	92.36	7.64	100.00

Source: Primary Survey, 2014-15

From Table 5.22, among the entrepreneurs engaged in trade and commerce 95 percent are male and just less than 5 percent are female entrepreneurs. Among the entrepreneurs engaged in manufacturing related activities 100 percent are male entrepreneurs. Among the entrepreneurs engaged in transportation 99 percent are male and just less than 1 percent are female entrepreneurs. Among the entrepreneurs engaged in construction, health related activities 100 percent are male entrepreneurs. Among the entrepreneurs engaged in financial activities 94 percent are male and just little over 6 percent are female entrepreneurs. Among the entrepreneurs engaged in food service activities 96 percent are male and 4 percent are female entrepreneurs. Among others 92 percent are male and just little over 7 percent are female entrepreneurs.

(ii) Age of the Entrepreneurs

Since we found earlier that the households established a substantial number of non-farm activities during the past several generations ago, so in agreement to this findings the analysis to the age composition of the entrepreneurs revealed that a large majority of around 30 per cent of them constituted quite old of above 45 years, in fact

8 per cent entrepreneurs accounted for over 60 years of age and only 21 per cent entrepreneurs followed to young age groups of between 35 and 45 years. The young generation entering into the expansion of non-farm activities is noted by the fact that the proportion of present entrepreneurs with young age group of below 35 years constituted 17 per cent. The young age groups of entrepreneurs are notably engaged in activities confined to both traditional and non-traditional trading and commercial activities and relatively higher rewarding activities such as transportation construction, financial activities and trade. Entrepreneurs having age more than 65 years are seems to be engaged in financial activities. Entrepreneurs in the age group 45-65 are seems to be engaged more on manufacturing, transport and construction (Table 5.23).

(iii) Educational Level of the Entrepreneurs

The rural non-farm activities involve every categories of skilled, un-skilled, literate and illiterate workforce in its different stages of operations. Like-wise, these activities can be headed equally by different age groups of individuals with differential level of educational standards and even by illiterates and highly educated personnel of the rural households.

Our analysis in Table 5.24 depicted that around 8 per cent of the entrepreneurs of sample non-farm enterprises, are illiterate and another 17 per cent are possessing only functional literacy while around 12 per cent entrepreneurs have attended graduation level of education and a major chunk of 39 per cent of them have the secondary level of educational attainment. In trade and commerce 11 percent have education upto middle level, 13 percent have education upto high level, 70 percent have education upto higher secondary level and 5 percent have graduation and higher levels of education. In manufacturing, 2 percent are illiterate, 12 percent have upto primary level, 21 percent have education upto middle level, 46 percent have education upto high level, 14 percent have education upto higher secondary level and 4 percent have graduation and higher levels of education. In transport related activities, 33 percent are illiterate, 42 percent have upto primary level, 8 percent have education upto middle level, and 17 percent have graduation and higher levels of education. In

construction, 33 percent are illiterate and 67 percent have upto primary levels of education. In financial activities, 22 percent have education upto middle level, 11 percent have education upto high level, 33 percent have education upto higher secondary level and 33 percent have graduation and higher levels of education.

Table: 5.23
Age Characteristics of the Entrepreneurs

		Age Group						Total
		15-25	25-35	35-45	45-55	55-65	65 and above	
Activities	Trade and Commerce	3.95	7.89	19.74	22.37	43.42	1.32	100.00 (92)
	Manufacturing	3.57	0.00	25.00	42.86	28.57	0.00	100.00 (56)
	Transport	16.67	25.00	0.00	50.00	8.33	0.00	100.00 (12)
	Construction	16.67	0.00	33.33	50.00	0.00	0.00	100.00 (16)
	Financial Activities	0.00	22.22	11.11	44.44	11.11	11.11	100.00 (53)
	Others	3.45	27.59	20.69	34.48	10.34	3.45	100.00 (108)
	TOTAL	4.73	12.43	18.93	33.14	27.81	2.96	100.00 (337)

Source: Primary Survey, 2014-15

It further revealed that the entrepreneurs heading transportation, trading and commercial and service related activities are relatively better educated than those are heading manufacturing activities. Thus, from the above discussion it indicates that the individuals with their young working age groups and possessing relatively better level of educational attainments are mainly initiating towards the establishment of such non-farm activities only, which provide higher incomes while the illiterates and individuals with functional literacy are noted mainly dominating in the expansion of low paid manufacturing activities (Table 5.24).

Table: 5.24
Educational Level of the Entrepreneurs

Educational Level	Illiterate	Primary	Middle	High	H.S	Graduate and Higher	TOTAL
Trade and Commerce	0.00	0.00	11.84	13.16	69.74	5.26	100.00 (92)
Manufacturing	2.71	11.57	21.43	46.43	14.29	3.57	100.00 (56)
Transport	33.33	41.67	8.33	0.00	0.00	16.67	100.00 (12)
Construction	33.33	66.67	0.00	0.00	0.00	0.00	100.00 (16)
Financial Activities	0.00	0.00	22.22	11.11	33.33	33.33	100.00 (53)
Others	0.00	6.90	17.24	41.38	13.79	20.69	100.00 (108)
TOTAL	8.28	17.16	18.93	38.46	4.73	12.43	100.00 (337)

Source: Primary Survey, 2014-15

5.5 Dynamisms around the Concept of Nonfarm Sector

There are several inherent dynamisms that determine and promote the growth of nonfarm sector. To understand various dynamics of nonfarm sector we have analyzed the relationship between non-farm Sector and various economic and non economic variables.

5.5.1 Non Farm Sector and Non-Economic Variables

To capture various aspects of nonfarm sector we have analyzed the relationship between non farm sector and various non-economic variables such as religion, household size, type of houses, educational level, social group and gender.

(a) Non Farm Sector and Religion

The relationship between the Dependence on non farm sector for livelihood and Religion of the household is analyzed in Table 5.25.

In Table 5.25, among the Hindu households 66 percent enjoyed very high levels of dependence on non-farm sector, while approximately 23 percent have very low level of dependence on non-farm sector. Among the Muslim households all have very high levels dependence on non-farm sector. Among the Christian households 73 percent have very high level of dependence on non-farm sector, while approximately 26 percent have very low level of dependence on non-farm sector.

Table: 5.25
Dependence on Non farm Sector for Livelihood and Religion of the Household

		Religion of the household			Total
		Hindu	Muslim	Christian	
Level of Dependence on non farm sector	Very Low	128 (97.0) [23.3]	0 (0.0) [0.0]	4 (3.0) [26.7]	132 (100.0) [21.9]
	Low	7 (100.0) [1.3]	0 (0.0) [0.0]	0 (0.0) [0.0]	7 (100.0) [1.2]
	Medium	22 (100.0) [4.0]	0 (0.0) [0.0]	0 (0.0) [0.0]	22 (100.0) [3.7]
	High	27 (100.0) [4.9]	0 (0.0) [0.0]	0 (0.0) [0.0]	27 (100.0) [4.5]
	Very High	366 (88.4) [66.5]	37 (8.9) [100.0]	11 (2.7) [73.3]	414 (100.0) [68.8]
Total		550 (91.4) [100.0]	37 (6.1) [100.0]	15 (2.5) [100.0]	602 (100.0) [100.0]

Source: Primary Survey, 2014-15

Note: Figures in parenthesis () and [] represent the percentages of row and column total respectively.

Moreover, among the households falling under the category of very low levels of dependence on non-farm sector 97 percent are Hindus. Also, the households falling under the category of low dependence on non-farm sector all are Hindus. Households

enjoying Medium levels of dependence on non-farm sector can be seen more among Hindus. Generally majority of households enjoying high to very high levels of dependence on non-farm sector are Hindus.

(b) Non Farm Sector and Household Size

The relationship between the Dependence on non farm sector for livelihood of the household and Household Size is analyzed in Table 5.26.

In Table 5.26, households having very low dependence on non-farm sector generally have small families (51 percent) and rest are medium families (44 percent). Among household having low levels of dependence on non-farm sector, 43 percent have small family size and 57 percent have medium size families. Among household having medium levels of dependence on non-farm sector, 22 percent have small family size and 64 percent have medium size families. In the high dependence on non-farm sector category, 14 percent have small family size and 67 percent have medium size families and 19 percent have large family size.

Table: 5.26
Dependence on Non farm Sector for Livelihood and Household Size

		Household Size			Total
		Small(1-3)	Medium(4-6)	Large(7&above)	
Level of Dependence on non farm sector	Very Low	67 (50.8)	58 (43.9)	7 (5.3)	132 (100.0)
	Low	3 (42.9)	4 (57.1)	0 (0.0)	7 (100.0)
	Medium	5 (22.7)	14 (63.6)	3 (13.6)	22 (100.0)
	High	4 (14.8)	18 (66.7)	5 (18.5)	27 (100.0)
	Very High	122 (29.5)	249 (60.1)	43 (10.4)	414 (100.0)
Total		201 (33.4)	343 (57.0)	58 (9.6)	602 (100.0)

Source: Primary Survey, 2014-15

Note: Figures in the parenthesis represent the percentages of row total respectively.

While in the very high dependence on non-farm sector category, 30 percent have small family size and 60 percent have medium size families and 10 percent have large family size.

(b) Non Farm Sector and Type of Houses

The relationship between the Dependence on non farm sector for livelihood of the household and type of houses of the household is analyzed in Table 5.27.

In Table 5.27, it is seen from the table that households having very low dependence on non-farm sector generally reside in katcha houses (49 percent) and rest in semi pucca houses (51 percent). Among household having low levels of dependence on non-farm sector, 43 percent have katcha houses and 29 percent have semi pucca houses. Among household having medium levels of dependence on non-farm sector, 18 percent have katcha houses and 46 percent have semi pucca houses. In the high dependence on non-farm sector category, 30 percent have semi pucca houses and 70 percent have pucca houses. While in the very high dependence on non-farm sector category, 30 percent have semi pucca houses and 59 percent have pucca houses.

Table: 5.27
Type of Houses and Dependence on Non-Farm Sector of the Household

		Type of Houses			
		Katcha House	Semi Pucca houses	Pucca Houses	Total
Level of Dependence on non farm sector	Very Low	64 (48.49)	67 (50.76)	1 (0.75)	132 (100.00)
	Low	3 (42.86)	2 (28.57)	2 (28.57)	7 (100.00)
	Medium	4 (18.18)	10 (45.46)	8 (36.36)	22 (100.00)
	High	0 (0.00)	8 (29.63)	19 (70.37)	27 (100.00)
	Very High	46 (11.11)	123 (29.71)	245 (59.18)	414 (100.00)
Total		117 (19.44)	210 (34.88)	275 (45.68)	602 (100.00)

Source: Primary Survey, 2014-15

Note: Figures in the parenthesis represent the percentage of row total respectively

(d) Non Farm Sector and Education

The relationship between the Dependence on non farm sector for livelihood of the household and educational level of the head of the household is analyzed in Table 5.28.

Table: 5.28
Dependence on Non farm Sector and the Educational level of the Head of the Household

		Educational levels					Total
		Illiterate	Secondary	Higher Secondary	Graduate and above	Others	
Level of Dependence on non farm sector	Very Low	6 (4.5) [42.9]	25 (18.9) [30.1]	87 (65.9) [30.1]	14 (10.6) [6.6]	0 (0.0) [0.0]	132 (100.0) [21.9]
	Low	1 (14.3) [7.1]	2 (28.6) [2.4]	3 (42.9) [1.0]	1 (14.3) [0.5]	0 (0.0) [0.0]	7 (100.0) [1.2]
	Medium	0 (0.0) [0.0]	3 (13.6) [3.6]	15 (68.2) [5.2]	4 (18.2) [1.9]	0 (0.0) [0.0]	22 (100.0) [3.7]
	High	0 (0.0) 0.0]	7 (25.9) 8.4]	14 (51.9) 4.8]	6 (22.2) 2.8]	0 (0.0) 0.0]	27 (100.0) 4.5]
	Very High	7 (1.7) [50.0]	46 (11.1) [55.4]	170 (41.1) [58.8]	188 (45.4) [88.3]	3 (0.7) [100.0]	414 (100.0) [68.8]
Total		14 (2.3) [100.0]	83 (13.8) [100.0]	289 (48.0) [100.0]	213 (35.4) [100.0]	3 (0.5) [100.0]	602 (100.0) [100.0]

Source: Primary Survey, 2014-15

Note: Figures in parenthesis () and [] represent the percentages of row and column total respectively.

It is seen from the table that the households where head of the household is illiterate, Majority (43 percent) have very low dependence on non farm sector for livelihood. Also among the households where head of the household is having education up to secondary level, 55 percent have very high dependence on non farm sector for livelihood, 8 percent have high levels of dependence on non farm sector for livelihood and 4 percent have medium levels of dependence on non farm sector for livelihood. Among the households where head of the household is having education up to higher secondary level, 64 percent have high to very high levels of dependence on non farm

sector for livelihood. Among the households where head of the household is having education up to graduate and above level, 88 percent have very high levels of dependence on non farm sector for livelihood, 3 percent have high levels of dependence on non farm sector for livelihood and 2 percent have medium levels of dependence on non farm sector for livelihood

Table: 5.29
Dependence on Non Farm Sector by Social group

		Social group				Total
		General	Scheduled Caste	Scheduled Tribe	Other Backward Class	
Level of Dependence on non farm sector	Very Low	7 (5.3) [7.0]	7 (5.3) [18.4]	6 (4.5) [7.6]	112 (84.8) [29.1]	132 (100.0) [21.9]
	Low	1 (14.3) [1.0]	2 (28.6) [5.3]	1 (14.3) [1.3]	3 (42.9) [0.8]	7 (100.0) [1.2]
	Medium	2 (9.1) [2.0]	0 (0.0) [0.0]	1 (4.5) [1.3]	19 (86.4) [4.9]	22 (100.0) [3.7]
	High	3 (11.1) [3.0]	2 (7.4) [5.3]	5 (18.5) [6.3]	17 (63.0) [4.4]	27 (100.0) [4.5]
	Very High	87 (21.0) [87.0]	27 (6.5) [71.1]	66 (15.9) [83.5]	234 (56.5) [60.8]	414 (100.0) [68.8]
Total		100 (16.6) [100.0]	38 (6.3) [100.0]	79 (13.1) [100.0]	385 (64.0) [100.0]	602 (100.0) [100.0]

Source: Primary Survey, 2014-15

Note: Figures in parenthesis () and [] represent the percentages of row and column total respectively.

Moreover, among the households falling under the category of very low levels of dependence on non farm sector for livelihood 89 percent household head have education below higher secondary level, 5 percent are illiterate. Also, the households falling under the category of low levels of dependence on non farm sector for livelihood 14 percent household head are illiterate, 29 percent have education below secondary level, 43 percent have education below higher secondary level, and 14 percent have education up to graduate and higher levels. The households falling under the category of medium levels of dependence on non farm sector for livelihood 14

percent have education below secondary level, 68 percent have education below higher secondary level, and 18 percent have education up to graduate and higher levels.

(d) Non Farm Sector and Social Group

The relationship between the Dependence on non farm sector for livelihood of the household and social group of the household is analyzed in Table 5.29.

It is seen that among the General category people 3 percent enjoyed high levels of dependence on non farm sector for livelihood, while approximately 87 percent enjoyed very high levels of dependence on non farm sector for livelihood. Also among scheduled caste people 5 percent have high levels of dependence on non farm sector for livelihood and 71 percent have very high levels of dependence on non farm sector for livelihood. Among scheduled tribe people 10 percent have very low to low levels of dependence on non farm sector for livelihood, 1.3 percent have medium levels of dependence on non farm sector for livelihood, 6.3 percent have high levels of dependence on non farm sector for livelihood and 84 percent have very high levels of dependence on non farm sector for livelihood. Among other backward class people 30 percent have very low to low levels of dependence on non farm sector for livelihood, 5 percent have medium levels of dependence on non farm sector for livelihood, 4 percent have high levels of dependence on non farm sector for livelihood and 61 percent have very high levels of dependence on non farm sector for livelihood.

Moreover, among the households falling under the category of very low levels of dependence on non farm sector for livelihood 85 percent belong to the other backward class, 5 percent belong to scheduled caste, scheduled tribe and general category people. Also, the households falling under the category of low levels of dependence on non farm sector for livelihood 43 percent belong to the other backward class. Households enjoying Medium levels of dependence on non farm sector for livelihood can be seen mainly among other backward class people (86 percent). Generally majority of households enjoying high to very high levels of dependence on non farm sector for livelihood belong to the other backward class people (63 percent and 57 percent respectively).

(e) Non Farm Sector and Gender

The relationship between the Dependence on non farm sector for livelihood of the household and gender of the head of the household is analyzed in Table 5.30.

In Table 5.30 we have made an attempt to cross tabulate the dependence on non farm sector for livelihood status of the households with the sex of the head of the households. It is seen from the table that majority of households having very low dependence on non farm sector generally are male headed households (79 percent) and rest is female headed. Among household having low dependence on non farm sector, 83 percent are male headed households where 17 percent households are female headed households. Among household having medium levels dependence on non farm sector, 81 percent are male headed households where 18 percent households are female headed households. In the high dependence on non farm sector category, 85 percent are male headed households whereas 15 percent households are female headed households. While in the very high dependence on non farm sector for livelihood category, 79 percent are male headed households with rest being the female headed households.

Table:5.30
Dependence on Non farm Sector for Livelihood of the Household and Sex of the Head of the Household

		Sex of the head of the household		Total
		Female	Male	
Level of Dependence on non farm sector	Very Low	28 (21.21)	104 (78.79)	132 (100.00)
	Low	1 (16.67)	6 (83.33)	7 (100.00)
	Medium	4 (18.18)	18 (81.82)	22 (100.00)
	High	4 (14.81)	23 (85.19)	27 (100.00)
	Very High	85 (20.53)	329 (79.47)	414 (100.00)
Total		122 (20.27)	480 (79.73)	602 (100.00)

Source: Primary Survey, 2014-15

Note: Figures in the parenthesis represent the percentages of row total respectively.

5.5.2 Non Farm Sector and Economic Variables

To capture various aspects of nonfarm sector we have analyzed the relationship between non farm sector and various economic variables such as income, asset and land using the data collected through field survey.

(a) Non Farm Sector and Income

The relationship between the Dependence on non farm sector for livelihood of the household and per capita monthly income of the household is analyzed in Table 5.31.

In Table 5.31, it is seen that in case of household having very low per capita monthly income 53 percent have very low levels of dependence on non farm sector for livelihood, 3 percent have low levels of dependence on non farm sector for livelihood, and 41 percent have very high levels of dependence on non farm sector for livelihood. In case of household having low per capita monthly income 32 percent have very low levels of dependence on non farm sector for livelihood, 1 percent have low levels of dependence on non farm sector for livelihood, and 59 percent have medium levels of dependence on non farm sector for livelihood.

In case of household having medium levels of per capita monthly income 7 percent enjoyed high levels of dependence on non farm sector for livelihood and 88 percent enjoyed very high levels of dependence on non farm sector for livelihood. In case of household having high per capita monthly income 92 percent enjoyed very high levels of dependence on non farm sector for livelihood. In case of household having very high per capita monthly income, 50 percent enjoyed low levels of dependence on non farm sector for livelihood and rest 50 percent enjoyed very high levels of dependence on non farm sector for livelihood (Table 5.31).

Moreover, among the households falling under the category of very low levels of dependence on non farm sector for livelihood majority have very low to low levels of per capita monthly income. Also, the households falling under the category of low levels of dependence on non farm sector for livelihood 43 percent have very low

levels of per capita monthly income, and 29 percent have low levels of per capita monthly income. The households falling under the category of medium levels of dependence on non farm sector for livelihood 18 percent have very low levels of per capita monthly income, and 46 percent have low levels of per capita monthly income, and 36 percent have medium levels of per capita monthly income.

Table: 5.31
Dependence on Non farm Sector for Livelihood and Per capita Monthly Income of the Household:2014-15

		Classwise distribution of total monthly income of the household (in rupees)					Total
		Very Low	Low	Medium	High	Very High	
Level of Dependence on non farm sector	Very Low	60 (45.5) [53.1]	67 (50.8) [31.9]	5 (3.8) [1.9]	0 (0.0) [0.0]	0 (0.0) [0.0]	132 (100.0) [21.9]
	Low	3 (42.9) [2.7]	2 (28.6) [1.0]	1 (14.3) [0.4]	0 (0.0) [0.0]	1 (14.3) [50.0]	7 (100.0) [1.2]
	Medium	4 (18.2) [3.5]	10 (45.5) [4.8]	8 (36.4) [3.0]	0 (0.0) [0.0]	0 (0.0) [0.0]	22 (100.0) [3.7]
	High	0 (0.0) [0.0]	8 (29.6) [3.8]	18 (66.7) [6.8]	1 (3.7) [7.7]	0 (0.0) [0.0]	27 (100.0) [4.5]
	Very High	46 (11.1) [40.7]	123 (29.7) [58.6]	232 (56.0) [87.9]	12 (2.9) [92.3]	1 (0.2) [50.0]	414 (100.0) [68.8]
Total		113 (18.8) [100.0]	210 (34.9) [100.0]	264 (43.9) [100.0]	13 (2.2) [100.0]	2 (0.3) [100.0]	602 (100.0) [100.0]
Contingency Coefficient		0.497					

Source: Primary Survey:2014-15

Note: Figures in parenthesis () and [] represent the percentages of row and column total respectively.

The households falling under the category of high levels of dependence on non farm sector for livelihood 30 percent have low levels of per capita monthly income, and 67 percent have medium levels of per capita monthly income. The households falling under the category of very high levels of dependence on non farm sector for livelihood 11 percent have very low levels of per capita monthly income, 30 percent have low levels of per capita monthly income. 56 percent have medium levels of per

capita monthly income, and 3 percent have high levels of per capita monthly income (Table 5.31).

Also the Pearson Chi square test between the grouping of rural households in Assam according to the dependence status on non-farm sector and per capita monthly income (PCMI) of the households suggest that there is association between the two types of grouping. However, to measure the strength of association contingency coefficient is calculated. It reveals that association is moderately strong. So it can be inferred that with the increase in the dependence on non-farm sector the household the monthly income of the households also gets increased

(b) Non Farm Sector and Asset

The relationship between the Dependence on non farm sector for livelihood of the household and asset ownership pattern of the household is analyzed in Table 5.32. In Table 5.32, it is seen that in case of household having very low asset ownership pattern 52 percent have very low levels of dependence on non farm sector for livelihood, 3 percent have the low levels of dependence on non farm sector for livelihood, 4 percent enjoyed medium levels of dependence on non farm sector for livelihood, and 27 percent enjoyed very high levels of dependence on non farm sector for livelihood. In case of household having low asset ownership pattern 32 percent have the very low levels of dependence on non farm sector for livelihood, 4 percent enjoyed medium levels of dependence on non farm sector for livelihood, and 85 percent enjoyed very high levels of dependence on non farm sector for livelihood.

In case of household having medium asset ownership pattern 8 percent enjoyed high levels of dependence on non farm sector for livelihood and 86 percent enjoyed very high levels of dependence on non farm sector for livelihood. In case of household having high per capita monthly income 4 percent enjoyed high levels of dependence on non farm sector for livelihood, and 96 percent enjoyed very high levels of dependence on non farm sector for livelihood. In case of household having very high asset ownership pattern, 88 percent enjoyed very high levels of dependence on non farm sector for livelihood.

Moreover, among the households falling under the category of very low levels of dependence on non farm sector for livelihood 46 percent have very low asset ownership pattern, and rest 51 percent have low asset ownership pattern. Also, the households falling under the category of low levels of dependence on non farm sector for livelihood 43 percent have very low asset ownership pattern, and 29 percent have low asset ownership pattern. The households falling under the category of medium levels of dependence on non farm sector for livelihood 3 percent have very low to low asset ownership pattern, and 4 percent have medium asset ownership pattern. The households falling under the category of high levels of dependence on non farm sector for livelihood 4 percent have high asset ownership pattern, and 96 percent have very high asset ownership pattern.

Table: 5.32
Dependence on Non farm Sector for Livelihood and Asset Ownership Pattern of the Household:2014-15

		Asset Ownership Pattern of the household					Total
		Very Low (0.0-0.20)	Low (0.20-0.40)	Medium (0.40-0.60)	High (0.60-0.80)	Very High (0.80-1.00)	
Level of Dependence on non farm sector	Very Low	60 (45.5) [52.2]	67 (50.8) [32.4]	5 (3.8) [2.4]	0 (0.0) [0.0]	0 (0.0) [0.0]	132 (100.0) [21.9]
	Low	3 (42.9) [2.6]	2 (28.6) [1.0]	1 (14.3) [0.5]	0 (0.0) [0.0]	1 (14.3) [6.2]	7 (100.0) [1.2]
	Medium	4 (18.2) [3.5]	10 (45.5) [4.8]	8 (36.4) [3.8]	0 (0.0) [0.0]	0 (0.0) [0.0]	22 (100.0) [3.7]
	High	0 (0.0) [0.0]	8 (29.6) [3.9]	16 (59.3) [7.6]	2 (7.4) [3.7]	1 (3.7) [6.2]	27 (100.0) [4.5]
	Very High	48 (11.6) [41.7]	120 (29.0) [58.0]	180 (43.5) [85.7]	52 (12.6) [96.3]	14 (3.4) [87.5]	414 (100.0) [68.8]
Total		115 (19.1) [100.0]	207 (34.4) [100.0]	210 (34.9) [100.0]	54 (9.0) [100.0]	16 (2.7) [100.0]	602 (100.0) [100.0]
Contingency Coefficient		0.461					

Source: Primary Survey: 2014-15

Note: Figures in parenthesis () and [] represent the percentages of row and column total respectively.

The households falling under the category of very high levels of dependence on non farm sector for livelihood 6 percent have low asset ownership pattern, 6 percent have high asset ownership pattern, and 88 percent have high asset ownership pattern. Also the Pearson Chi square test between the grouping of rural households in Assam according to the dependence status on non farm sector for livelihood status and asset ownership pattern of the households suggest that there is association between the two types of grouping. However, to measure the strength of association contingency coefficient is calculated. It reveals that association is moderately strong. So it can be inferred that with the increase in the asset ownership pattern of the family the household's dependence on non farm sector for livelihood status also gets accelerated.

(b) Non Farm Sector and Land

The relationship between the Dependence on non farm sector for livelihood of the household and landholding possession of the household is analyzed in Table 5.33.

In Table 5.33 we have made an attempt to cross tabulate the dependence on non farm sector for livelihood status of the households with the landholding possessed by the households. It is seen that in case of landless households 2 percent have the low levels of dependence on non farm sector for livelihood, 2 percent enjoyed high levels of dependence on non farm sector for livelihood, and 95 percent enjoyed very high levels of dependence on non farm sector for livelihood.

In case of Marginal landowning households 25 percent have the very low levels of dependence on non farm sector for livelihood, 25 percent have the low levels of dependence on non farm sector for livelihood 50 percent enjoyed high to very high levels of dependence on non farm sector for livelihood.

In case of Small landowning households 56 percent have very low levels of dependence on non farm sector for livelihood, 8 percent enjoyed the medium levels of dependence on non farm sector for livelihood, and 14 percent enjoyed high levels of dependence on non farm sector for livelihood. In case of medium landowning households 78 percent have very low levels of dependence on non farm sector for

livelihood, 8 percent enjoyed the medium levels of dependence on non farm sector for livelihood, and 10 percent enjoyed high levels of dependence on non farm sector for livelihood. In case of large landowning households 86 percent have low levels of dependence on non farm sector for livelihood, and rest 15 percent enjoyed medium levels of dependence on non farm sector for livelihood.

Table: 5.33
Dependence on Non farm Sector for Livelihood and Landholding Possessed by the Household :2014-15

		Size class wise distribution of landholding possessed by the household					Total
		Landless	Marginal (1.25-2.5 acre)	Small (2.5-5 acre)	Medium (5-10 acre)	Large (10 acre &above)	
Level of Dependence on non farm sector	Very Low	6 (4.5) [1.4]	1 (0.8) [25.0]	45 (34.1) [56.2]	68 (51.5) [78.2]	12 (9.1) [85.7]	132 (100.0) [21.9]
	Low	3 (42.9) [0.7]	1 (14.3) [25.0]	3 (42.9) [3.8]	0 (0.0) [0.0]	0 (0.0) [0.0]	7 (100.0) [1.2]
	Medium	7 (31.8) [1.7]	0 (0.0) [0.0]	6 (27.3) [7.5]	7 (31.8) [8.0]	2 (9.1) [14.3]	22 (100.0) [3.7]
	High	6 (22.2) [1.4]	1 (3.7) [25.0]	11 (40.7) [13.8]	9 (33.3) [10.3]	0 (0.0) [0.0]	27 (100.0) [4.5]
	Very High	395 (95.4) [94.7]	1 (0.2) [25.0]	15 (3.6) [18.8]	3 (0.7) [3.4]	0 (0.0) [0.0]	414 (100.0) [68.8]
Total		417 (69.3) [100.0]	4 (0.7) [100.0]	80 (13.3) [100.0]	87 (14.5) [100.0]	14 (2.3) [100.0]	602 (100.0) [100.0]
Contingency Coefficient		0.669					

Source: Primary Survey:2014-15

Note: Figures in parenthesis () and [] represent the percentages of row and column total respectively.

Moreover, among the households falling under the category of very low levels of dependence on non farm sector for livelihood 4.5 percent are landless households, 34 percent are small landholding households and 52 percent are medium landholding households. Also, the households falling under the category of low levels of

dependence on non farm sector for livelihood 43 percent are landless households, 43 percent are small landholding households, and 14 percent are marginal landholding households. The households falling under the category of medium levels of dependence on non farm sector for livelihood 32 percent are landless households, 27 percent are small landholding households, 32 percent are medium landholding households, and 9 percent are large landowning households. The households falling under the category of high levels of dependence on non farm sector for livelihood 22 percent are landless households, 4 percent are small landholding households, 41 percent are medium landholding households and 33 percent are medium landholding households. The households falling under the category of very high levels of dependence on non farm sector for livelihood 95 percent are landless households and 4 percent are small landholding households.

Also the Pearson Chi square test between the grouping of rural households in Assam according to the dependence status on non farm sector for livelihood and land holding pattern suggest that there is association between the two types of grouping. However, to measure the strength of association contingency coefficient is calculated. It reveals that association is strong. So it can be inferred that with the increase in landholding size possessed by the household the dependence on non farm sector for livelihood status of the household also gets enhanced.

Remarks

In this chapter, an attempt has also been made to ascertain the structure of nonfarm employment opportunities in Assam to address the *Objective Number 2*. 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.

Such an analysis also bears special importance from the perspective of policy formulation as it helps in identifying sectors, which require special attention to improve employment growth. The overall rate of growth of employment for rural males and females has shown a fluctuating trend during 1993-94 to 2009-10. This sudden increase or decrease in the growth rate for females is mainly due to their large involvement in the farm sector, which witnessed a similar type of abrupt increase and decrease of employment growth rate. The employment situation of females worsened due to their social exclusion and exploitation on account of their lack of access to education, information and mobility (Unni, 1989).

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 retain 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.

While examining the reasons behind establishment of non-farm enterprises: the lacking opportunities of employment in rural areas, the availability of local raw material and the skills among the family members for performing various work

related to concern activity are noted to be the major factors, which initiated the households to opt for establishing non-farm activities at the present location. Moreover, the intent on the part of Government in promoting non-farm activities can be seen in terms of providing financial and technical assistance to households for the establishment of non-farm activities.

The traditional households based low paid non-farm activities such as manufacturing and professional services are the origin of past several generations while the most modern form of relatively better earning non-farm activities such as trading and commercial and transportation are of the recent origin.

Also based on primary survey the Structure of employment of the workforce is analysed using standard occupational and industrial classifications. Results show that non farm sector is increasing in employment across all agro-climatic zones. The major findings in this regard are elaborated below:

Firstly, the employment share across social class shows that Scheduled tribe have relatively low share in agriculture and allied activities while OBC have high share. Scheduled tribe have highest share in non-agriculture employment followed by Scheduled castes. The reason for highest share of non-agriculture employment among STs is primarily due to their engagement in traditional occupation like weaving, manufacturing of woolen garments and trading. Employment in manufacturing is significantly higher among STs and SCs while employment share in construction is highest among OBCs followed by SCs. GENs are observed to have highest literacy both among males and females in the present survey and also have traditionally been most forward class both in terms of education and employment in the region which induces them to attain highest share in public public administration, education etc and other professional scientific and technical activities. Next we analyse the Occupation and industrial distribution of workforce.

Secondly, the occupational distribution of workers by industry shows a very narrow base with little diversification across industry groups. Majority of workers such as the elementary occupation holders (cultivators, animal husbandry workers etc.), skilled agricultural and fishery workers, professionals, Plant, machine operators and

assemblers are concentrated in a single industry, the remaining occupational groups such as Legislators, senior officials and managers, Technicians and associate professionals, clerks, Service, shop and market sales workers, Craft and related trades workers are bunched in to a few industry groups.

Thirdly, the categorization of workers by employment status show that the self employment is the principal mode of livelihood of the workforce because of lack of regular employment opportunities, followed by casual workers. The share of regular employed is too small.

Fourthly, the scrutinization of the information on principal workers pursuing subsidiary occupation yields that landless workers seem to be depending primarily on the single activity (62 per cent), while in the case of marginal and small landholding classes, dependence on multiple activities increases in order to augment their household income. However, in case of medium and large landholding class such dependence on multiple activities declines, probably because household have relatively higher incomes from agriculture and animal husbandry and other assured sources of incomes such as from pension and other incomes. The information on Principal workers pursuing subsidiary occupation highlight that among the elementary occupation holders majority are service, shop and market sales workers, and also craft and related trades workers. When it comes to skilled agricultural and fishery workers majority are service, shop and market sales workers. Moreover as expected legislators, senior officials and managers, professionals, technicians and associate professionals have no secondary occupation as the earning levels are high. Among the Service, shop and market sales workers and Craft and related trades workers and plant, machine operators and assemblers majority are engaged in elementary occupations and also as skilled agricultural and fishery workers.