

## Occupational Structure and Livelihood Problems of Farming Communities of Lakhimpur District of Assam, Northeast India

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**Abstract:** Assam is one of the 8<sup>th</sup> states of the north east India with about 86 per cent of rural population. The economy of the rural population of the state is entirely based on the agriculture and allied activities. Although the agriculture is the major occupation and prime livelihood option of the communities, the economic support gained from the agricultural crops is not satisfactory and hence the economic condition of the people is poor. Apart from the cultivation of various crops, the people of the state also practice fishery, animal husbandry, sericulture, pottery etc. as their livelihood options. The district Lakhimpur is situated in the Upper Assam region along the northern bank of Brahmaputra river. Almost 91 per cent population of the district resides in the rural areas with poor socio economic status. To understand the various livelihood options and their prevailing problems, a study has been conducted in the district selecting two Developmental Blocks. For the collection of primary data and information, a total of 160 households are randomly selected from 8 villages considering 4 villages from each Developmental Blocks. The study reveals that although the major occupation of the people is agriculture, the productivity and economic return from agriculture is very poor. Besides the agriculture, the various communities have adopted other occupation like fishery, animal husbandry, handicrafts etc. A number of problems are found prevailing in the region that directly affects the occupation and the livelihood aspects of the rural mass. Occasional flood, lack of modern farming practices and poor infrastructural facilities are identified as major problems of the socio-economic development of the district.

**Keywords:** Assam, North East India, Lakhimpur district, Rural communities, Demography, Occupation, Livelihood, Agriculture, Economic condition.

## INTRODUCTION

Livelihoods indicate the different ways of living of the people. Livelihood can be defined as ‘a combination of the resources used and the activities undertaken in order to live [1]. A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living [2]. Rural people assess livelihood options according to income criteria, whereas the evidence suggests that other criteria are equally meaningful to rural people, in particular the maintenance of cultural and social practices that accompany rural residence [3]. The socio-economic development depends directly on improvement of livelihood. In developing countries, the rural people depend on diversity of livelihood activities where production of crop and livestock features as main economic source [4]. The rural communities of India practice various livelihood options of which the agriculture, livestock and use of natural resources are the prime source of income

Assam is primarily an agricultural state. Agriculture and its allied activities play an important role in the socio-economic development, which influence the livelihood of about four-fifth of the state’s population. More than 70 per cent of the workforces are engaged in agriculture and allied activities. As per the Census 2011, about 98.4 per cent area of total landmass of the state is rural. The net cultivable area of the state 28.11 lakh hectares, which is about 88 per cent of the total land area, is utilized for agriculture purpose. During 2012-13 the contribution of agriculture to the state economy GSDP at current prices was 19.3 per cent.

The Lakhimpur district of Assam is situated on the North East corner of Assam. The district covers an area of 2277 sq. km, out of which 2257 sq. km is rural and 20 sq. km is urban. It has nine developmental blocks under two sub divisions with 1185 inhabited villages and 4 towns. Lakhimpur is one of the backward districts of Assam. The main source of income in the district is agriculture and allied activities.

About 80 per cent of the people of the district depend solely on agriculture for their livelihood. Paddy is the most important crop grown in the district. The principal crops grown in the district are winter rice, summer rice, autumn rice, mustard seed, potato and other pulses. Jute is a major cash crop in the district. Fruits and vegetables also constitute a good part of the agricultural produce. Besides agriculture fishery is very common and popular in Lakhimpur district. Most of the families have taken Pisciculture as the occupation and earning from pisciculture as the supplementary income to support to their family. There are various cottage industries which play vital role in the economy of the Lakhimpur district since long past. These are pottery, blacksmith, bamboo, and cane works carpentry, weaving etc. In addition to this sericulture is one of the traditional cottage industries in the district. Rearing of *eri*, *muga* and *mulberry* silkworms are playing an important role in domestic income of a large number of rural households. Lakhimpur district occupy a unique place in the production of three different kinds of silk items- *pats*, *muga* and *eri*. The sericulture products of the district have a very high demand in the national and international markets.

Even after having fertile land for agriculture, potential in fishery, sericulture, livestock rearing etc., the socio economic condition of the rural mass is not satisfactory. In this context a study has been undertaken for understanding various livelihood aspects and problems of the rural community of the district

#### Objectives of the study

The main objectives of the study are:

- To study the various livelihood aspects of the rural communities of Lakhimpur district of Assam.
- To examine the problems associated with the livelihood of the rural people of the district.

- To suggest the measures for the economic improvement of the rural people.

#### METHODS

The district Lakhimpur from the state Assam is being selected for the present study. Lakhimpur is situated in the northern bank of the river Brahmaputra and foothills of the Himalayas. Two Developmental Blocks namely the Nowboicha and Narayanpur are taken as sample blocks for data collection. Total 8 villages (4 each) from two blocks and overall 160 households are randomly selected (20 households from each village) for survey. The various information about the villages and the communities have been collected from the panchayats and block offices as well as from the people of the villages. The primary data are collected through personal interviews with the family members of each of the household using standard questionnaire. The relevant secondary information is also collected from various sources

#### RESULTS AND DISCUSSION

##### Demographic profile

Lakhimpur District is heterogeneous consisting with several religious communities and Schedule Caste (S.C.) and Schedule Tribe (S.T) communities with its own customs and practices. The majority of them are Assamese along with Nepali, Tea Garden labourers, Bengali, Bihari, Marwari and Sikh. According to Census, 2011, Lakhimpur district has a population of about 10,42,137 with the decadal growth rate of 17.22 per cent. The density of population in the district is 458 per sq. km which is higher than the state (397 sq. km). Lakhimpur has a sex ratio of 968 and literacy rate of 77.2 per cent. Out of the total population, nearly 91 per cent are living in rural areas and 9 per cent are in urban areas. The rural population of the district contributes a good proportion of the marginalized groups like ST, SC, OBC and MOBC.

**Table-1: Demographic profile of Lakhimpur district**

Description	Rural	Urban	District
Total Population	950804	91333	1042137
Population (%)	91.24	8.76	-
Male Population	482582	47092	529674
Female Population	468222	44241	512463
Sex Ratio	970	939	968
Literates	613176	70310	683486
Average Literacy (%)	76.22	86.93	77.2

(Source: Census, 2011) [5]

#### Occupational structure and Livelihood options

The rural people of the district adopt various livelihood options where agriculture is found as major activity that supports the household income. Besides agriculture, livestock, fishery, handicrafts, wages are found other common livelihood activities in the district. The data collected from 160 households from the two

Developmental Blocks indicate that the earning source of majority of the households is agriculture and allied activities. Almost 65 per cent of the surveyed household income is entirely based on agriculture. The major occupational structure of the surveyed families is shown in Table-2.

**Table-2: Distribution of sample households as per their main occupation**

Blocks	Surveyed households	Only Agri	Agri with others	Business	Govt job	Pvt job	Wage earner	Livestock	Fishery	Handicraft	Others
Nowboicha	80	13	36	10	12	6	16	33	14	9	4
Narayanpur	80	9	47	7	9	3	28	41	2	13	1
Total	160	22	83	17	21	9	44	74	16	22	5
%		13.8	51.9	10.6	13.1	5.6	27.5	46.3	10.0	13.8	3.1

The study reveals that only 13.8 per cent of households have earning income from agriculture only. While 51.9 per cent are engaged in other occupation for earning livelihood along with agriculture. Only 10.6 per cent of households have taken business as their occupation. While 13.13 per cent and 5.6 per cent are engaged in Govt. job and private job respectively. Fishery is also recorded as a source of earning for the rural people and 10 per cent of households are engaged in it, and 3.1 per cent of households are engaged in other activities (i.e. Carpentry, Tailoring, ASHA worker, Mechanics etc.)

#### Agriculture

The present survey in the selected district clearly indicates that the agriculture is the prime occupation and source of livelihood of the communities. The data related to the occupational structure of the people in the study area reveals that about 65 per cent of the population are depending on agriculture and allied activities for their livelihood. In view of the importance of agriculture for survival and economic

growth of population in rural area, agricultural development is the prime necessity in the district. Further the study reveals that the people of the district mainly cultivate paddy and other crops like areca nut, bamboo, potato etc. (Table-3).

Although paddy is being cultivated as major agricultural crops, the number of households producing paddy is found only 54 (33.8 per cent). The crop that supports the maximum number of people is areca nut with 37.5 per cent of households. Bamboo is another major plantation which is done by around 25 per cent households and they receive some income from it. Like paddy, crops like maize, vegetable, potato, etc., are commonly cultivated in the district. It is to be noted that the economic support from paddy is limited to only few houses due to lower productivity of the crop caused by various factors. On the other hand, the households earning income from oil seeds are nil while pulses are very low. The households with tea cultivation is found only 5 numbrs (3.1 per cent) in Narayanpur block.

**Table-3: Distribution of households producing various crops**

Blocks	Paddy	Maize	Vegetable crops	Pulses	Areca nut	Bamboo	Potato	Tea	Oilseed	Others
Nowboicha	38	5	12	1	32	13	10	0	0	4
Narayanpur	16	2	18	0	28	27	25	5	0	28
Total	54	7	30	1	60	40	35	5	0	32
% (n=160)	33.8	4.4	18.8	0.7	37.5	25.0	21.9	3.1	0	20.0

Although the different crops contribute in revenue generation, but the income from agricultural crops is not so significant. The details of the earnings of the households in the survey blocks are presented in table 4. The data clearly indicate that the agricultural crops do not provide any income for about 34 per cent of the total surveyed households. It has been found that

62 per cent of the households have less than Rs. 50,000/- income per year from the agriculture. Out of the total 160 households only 1 household is found having the income more than Rs. 2.0 lakh. The data presented in the table clearly reveal that the earnings from agricultural crops is not satisfactory.

**Table-4: Distribution of sample households according to annual agricultural income**

Blocks	Average agricultural income (Rs)	No. of households under (in lakh)							
		No income	< 0.50	0.50 -1.0	1.0 -1.5	1.5 - 2.0	2.0 -2.5	2.5 -3.0	3.0<
Nowboicha	19400	29	44	6	0	0	1	0	0
Narayanpur	9940	25	55	0	0	0	0	0	0
Avg./Total	14670	54	99	6	0	0	1	0	0
% (n=160)		33.8	61.9	3.8	0	0	0.6	0	0

**Livestock**

Livestock plays very crucial role in rural economy. It contributes immensely in raising the domestic income of the farm families and it is considered as an important means for socio economic development. The study reveals that among the various

domestic animals reared by the communities, the cows and oxen, goats, buffaloes, pigs, hens and ducks are common ones and most of the households rear these live stocks. Although livestock rearing is found a common option but only about 47 per cent households get the income from it.

**Table-4: Distribution of households having income and rearing various livestock**

Blocks	Total Income from live stocks	Nos. of household having						
		Income from live stocks	any type of live stocks	Cow	Goat	Hen / duck	Buffalo	Pig
Nowboicha	584000	33	65	58	22	61	2	16
Narayanpur	640000	41	77	72	32	41	4	11
Total		74	142	130	54	102	6	27
%(n=160)		46.3	88.8	81.3	33.8	63.8	3.8	16.9

**Fishery**

Fishing and consumption of fish is a common socio cultural phenomena of the Assamese people. Hence the fishing and fish farming have become important source of livelihood aspect of the people in the area. The study indicates that even though fishery is a potential option for revenue generation, fisheries is found very limited. However, 10 per cent of households (Table 2) who are presently earning income from fishery are dependent mostly on fishing in the available aquatic bodies like beels, ponds, river etc. The higher number of households are found in Nowboicha as the block harbor more water bodies.

agricultural land because of which they work for wages. Due to non-availability of agricultural land and poor economic condition they are incapable to explore other livelihood options. Table 2 shows that 44 households are earning income through wages, out of 160 surveyed families.

**Problems associated with livelihood options**

The status of livelihood and economic condition of the rural communities is found very pitiable. The poor status of the people is due to a number of factors which are associated with their day to day economic activities. Some of the major problems and issues are discussed here as below.

**Handicraft**

Handicrafts include wood carving, cane and bamboo works, weaving clothes etc. A good number of people have taken handicraft as their livelihood option where weaving is found dominant in the villages. The women folk are earning some income for their families by weaving clothes. About 14 per cent households are found earning some income from handicraft. In the surveyed households none of the household has been found engaged in other handicraft works.

**Limited land resource**

Availability of sufficient land is one of the important aspects of better economic condition. The agriculture, other farm activities, cattle farming, fishery etc. directly linked with land available with a farmer. In the surveyed villages it has been found that the majority about 64 per cent of the households are under the marginal and small farmer categories possessing less than 2.5 hectares' land (table 5) which restrict the farmers to undertake excessive farming and allied activities. Though cattle rearing and fishery are found good options for better sources of income, but are restricted only to the big farmers.

**Wage earning**

Wage earners are those who work in others fields or houses to earn income to support their families. Most of the wage earners are having limited land or no

**Table-5: Distribution of farmers according to their land holding (in Acre)**

Blocks	Categories of farmers as per land possession					
	Marginal (<1)	Small (1-2.5)	Medium (2.5-5.0)	Big (5-10)	Very big (10 <)	Landless
Nowboicha	18	23	25	13	0	1
Narayanpur	27	34	18	1	0	0
Total	45	57	43	14	0	1
%	28.13	35.63	26.88	8.75	0	0.63

**Flood and land erosion**

Flood is the most devastating natural calamity that affects every year. Brahmaputra and other small rivers cause the devastating flood year after years in the region which severely affects land, roads and other means of communication, water, forests, wildlife, beels, agriculture, livestock etc. and all these lead to diverse impact on livelihood, biodiversity and environment. Lakhimpur is one of the most flood prone districts of Assam and the population of the district is heavily affected by the floods particularly from the Subansiri Ranganadi and Dikrong rivers.

**Marketing of agricultural and other products**

Marketing of agriculture and other produces is a serious problem for the farming community. Lack of organized marketing facility and lack of storage infrastructure are the main causes of low agricultural income and poverty in the area.

**Inadequate Irrigation facilities**

Lack of irrigation facilities is one of the major reasons for low agricultural productivity in the district. It has been found that none of the surveyed villages has irrigation facility.

**Traditional means of farming**

Another important obstacle in the agriculture development in the state of Assam is traditional method for cultivation. In the district also the agricultural activities are fully performed through traditional means. Use of HYV seed and application of fertilizer, modern machineries is being rarely used by the farmers.

**Farming of local cattle breeds and lack of grazing land**

It is found that the entire surveyed households rear the local breeds of cow which have limited milk productivity. Additionally, these cattle need adequate grazing land. But due to the non-availability of forest land and water logging in the marginal land, the farmers suffer for grazing the cattle which becomes a major problem. Moreover, these cattle create disturbances to the agricultural crops of the surrounding areas.

**Fishery management**

The farmers may undertake fishery to fulfill the huge demand of fish in the local markets including the capital region of Arunachal Pradesh which is adjacent to the district. However, the fishery is suffering

from the regular floods and suitable management practices.

**Lack of awareness and education**

Level of education and training related to agricultural development and other economic activities for farmers is very poor. There are lack of modern farming techniques like selection of suitable crop varieties, accurate methods of sowing, control of pest and pathogen, application of proper amount of fertilizer in the area. These minimizes the production even the best traditional methods of crop selection, sowing and harvesting are followed.

**Manpower**

Shortage of manpower for farm works is also found to be another tending problem in rural areas. Farmers are facing the acute shortage of farm labourers for farming operation in right time. Consequently, land productivity is low and cost of labour (wage) is high resulting non profitable agriculture.

The various case studies conducted from the different parts of state also indicated various existing problems like flood, poor irrigation, traditional means of cultivation, non-availability of markets etc. that hinder the agricultural development which affects the livelihood [6-8].

**CONCLUSION**

The district Lakhimpur of Assam is an economically backward district and the rural population of the district are suffering from various problems which largely hampering their livelihood improvement. The various livelihood options although have good economic potentiality, but due to various problems the people are unable to improve their economic status. Agriculture diversification may help to improve the agricultural status. Development of cottage industry in rural area could be one of the important options with the people using available local resources. The govt. must provide adequate support and facilities through creating and improving different infrastructure like road, health, electricity, irrigation, transportation etc. to ensure the better household income and living standard in specific and achieving economic development in the district and state in general.

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