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## A study of socio demographic condition of North eastern Bihar

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### Abstract

The main objective of this paper is to study the socio-economic and demographic conditions of this flood-prone region of north-eastern Bihar based on the data taken from a primarily conducted sample survey entitled "Migration and Related Characteristics - a Case Study of North-Eastern Bihar" during October 2009 to June 2010. A total of 664 households have been surveyed from the flood affected area of north-eastern Bihar consisting 8 villages of three districts Bhagalpur, Katihar and Purnia. Bivariate analysis and suitable statistical techniques have been applied. Results show that the study area is still backward from the other part of the state as well as the country.

**Keywords:** caste, monthly income, household size, age at marriage, migration.

### INTRODUCTION

Bihar is predominantly a rural state with more than 88 per cent of its population living in villages (Census, 2011). Few decades back it was one of the poorest state of the country and also ranks among the slowest growing region of the country. The slow growth of the state along with the demographic pressure has led to its economic retrogression- the per capita income, not only stagnant during the 1990s but showed a rate of decline. However, in recent years, the growth rate has started accelerating and signs of improvement can be seen on several fronts (Institute for Human Development, 2010).

The key for the overall development of the state economy is agriculture. It is the backbone of Bihar's economy with 81 per cent of workforce and generating nearly 42 per cent of the State Domestic Product. The percentage of population employed in agriculture production system in Bihar is estimated to 81 per cent, which is much higher than the national average (Department of Agriculture, Bihar, 2009). Due to low industrialization, lack of employment and economic backwardness the migration rate particularly out migration is higher in Bihar than other states.

The incidence of out-migration from rural Bihar is probably greater than anywhere else in India (Sharma, 2009). A combination of circumstances, both natural and societal, has created a situation in the state where sending a family member out to earn has been the only way of staying alive. There was a marked increase in migration after 1990 and even more towards the end of the decade as the rural economy grounded to a virtual standstill. It is worthwhile to mention that migration from flood and drought prone areas was not new, the closure of industries as well as law and order problems added to the outflow of people (Deshingkar et.al. 2006).

In India, as well as in Bihar, labour movement has

predominantly been from rural to urban areas. The rural population, mainly small landholders and landless agriculture labour, move towards urban areas in the hope of improving their socio-economic conditions. It has been observed that the migration from the rural areas, whether it is permanent, seasonal or circular has the characteristics that the migrants remain attached to their native places. They continue to maintain link with their families and villages through regular visit as well as sending remittances. A number of studies have been conducted on these types of migration and their impacts on socio-economic development of rural areas have been examined (Shekhar 1993).

In the present paper a brief account of socio-economic and demographic characteristics of northeastern Bihar has been presented. Secondary migration differentials according to some socio-economic characteristics of the study region have also been studied.

### DATA

Bihar is a landlocked state located on the eastern part of India mid-way between West Bengal in the east and Uttar Pradesh in the west. The state is bounded by Nepal in the north and Jharkhand in the south. The name Bihar is derived from the Sanskrit word "Vihar" meaning adobe. The State is linked with ancient culture of the Country. In olden times it was called "Magadh". Modern Bihar comprises four cultural regions- Bhojpur, Mithila, Magadha and Chotanagpur. The Ganga flowing from west to east divides the state into two unequal halves - north and south Bihar plain. The state has fertile farmland, lush orchards, rich civilization, and exquisite scenic beauty. The State covers an area of 94163.00 sq. km and has a population of 10,38,04,637 (census, 2011). There are 38 districts with 101 subdivisions and 45,103 villages in the State. The state decadal growth rate (2001-2011) of the state is 25.07 per cent and density of population is 1,102 per square km. The sex ratio of the state is 916 (Census, 2011).

The district of Katihar is situated in the plains of North Eastern part of Bihar State, surrounded by Purnea district in the North and West Bhagalpur and Sahebganj district in the South and West Bengal in the East. The topography of the Katihar district has been very much affected by floods of river Ganges, Mahananda and Koshi.

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The district has alluvial soil and due to deposit of sand-silt by rivers and soil in southern and the western part has become sandy. Purnea is a level, depressed tract of country, consisting for the most part of a rich, loamy soil of alluvial formation. It is traversed by several rivers flowing from the Himalayas, which afford great advantages of irrigation and water-carriage. Its major rivers are the Koshi, the Mahananda, the Suwara Kali and the Koli. In the west the soil is thickly covered with sand deposited by changes in the course of the Koshi. Among other rivers are the Mahananda and the Panar. Its major agricultural products are jute and banana. The third selected district was Bhagalpur. It is one of the oldest districts of Bihar and is situated in the Ganga basin. The district is surrounded by Munger, Khagaria, Madhepura, Purnea, Katihar and Banka districts of Bihar and Godda and Sahebganj districts of Jharkhand. The idea behind taking this region under study that it is a flood prone area near the sangam of the Ganga and the Koshi river, the sorrow of Bihar. Another fact is that it is a less studied area of Bihar because of economic and educational backwardness.

Most of the studies in the social sciences usually utilize large amount of data in drawing conclusions. The data mainly are either primary or secondary. The present study is essentially based on primary data taken from a survey entitled "Migration and Related Characteristics – a Case Study of North-eastern Bihar" conducted during October 2009 to June 2010. The sampling design used was a multistage sampling procedure. Keeping in view the administrative

convenience as well as the special nature of North-Eastern Bihar, the study confined to the Districts of Purnea, Katihar and Bhagalpur. The ultimate sampling unit for the sample selection was a household. It is known that usually the results based on multistage sampling are less reliable than from SRS or Stratified random sampling of same size, but most of the large sample surveys are conducted under multistage sampling for administrative convenience and significantly reduced cost of transportation and other similar costs. Keeping in view the above fact, the multistage sampling was preferred. Thus for all practical purposes, the sample of selected households may be considered to be a good representative of the households in the population. Using the above methodology, 664 households of the study regions was selected and the head of the household was interviewed. Where head was not present, the most elder person was requested to answer the questionnaire.

## RESULTS AND DISCUSSION

The paper has been arranged in two main sections. In first section a brief account of socio – economic condition of the study region has been given and in the second section some important demographic characteristics have been discussed.

### Section -1: Socio – Economic Condition

Table 1. Percentage Distribution of Households According to Caste and Average Household Size

Caste-Group	No of Houses	Percentage	Average Household Size
SC	156	23.49	5.9
OBC	192	28.92	5.6
Muslim	139	20.93	6.2
Upper	177	26.66	5.2
Total	664	100.00	5.7

Table 1 illustrates the percentage distribution of households according to caste and average household size. Results reveal that about 29 per cent households were from Other Backward Castes and about 23 per cent households were from schedule caste. About 21 per cent households belonging to Muslims while more than 26 per cent households were from upper caste group. Average household size was found 5.7 which was more than the national average of 5.3 average household size (census 2001). Muslims have had the largest family size with 6.2 members per household. Schedule caste

has had the average family size of 5.9 and upper caste group have had the smallest family size of 5.2.

The main occupation of the study region was agriculture. Table 2 shows that occupation of more than 51 per cent household heads was agriculture while about 31 per cent were labourer, among whom most were engaged in agriculture related labour. Only about 6 per cent household heads were in government service and only about 5 per cent were self employed or in private service.

Table 2. Percentage Distribution of Household Heads According to Occupation

Occupation	No of Houses	Percentage
Labour	203	30.6
Agriculture	343	51.7
Self Employed/Private	35	5.3
Govt service	39	5.9
Others	44	6.6
Total	664	100

Table 3 gives the percentage distribution of households according to monthly income. Results reveal that more than 40 per cent households in the study region have had less than 5000 rupees as monthly income. About 80 per cent households were below 10,000 rupees per month income. Only about 6 per cent households

were found with monthly income of more than 15,000. Mainly government servants and migrants households were members of this group. About 14 per cent households belonged to income sample of rupees 10,000 to 15,000. Lower income group households were mainly from labour and small farmers categories.

Table 3. Percentage Distribution of Households According to Monthly Income (in Rs.)

Income (in Rs.)	No of Houses	Percentage
Below 5000	267	40.21
5000-10000	258	38.86
10000-15000	97	14.61
Above 15000	42	6.33
Total	664	100.00

Consumption of electricity is one of the important measures of growth in modern era. Thus a separate question was asked about electrification of houses to the respondents. It was found that more than 52 per cent households were not electrified. Table 4 shows that only about 31 per cent Muslim and about 47 per cent schedule caste

houses were electrified. It was only upper caste group where more than 50 per cent i.e. about 57 per cent houses were electrified. Results show that the study region lacks behind the national average of electrification which was 84 per cent (Planning Commission, 2001.)

Table 4. Percentage Distribution of Households According to Electricity Facility

Caste	Electricity	
	Yes	No
SC	47.4	52.6
OBC	49.5	50.5
Muslim	30.9	69.1
Upper	57.1	42.9
Total	47.1	52.9

Table 5 gives the percentage distribution of households according to type of family. Results reveal that about 69 per cent family were nuclear and it was highest among the schedule castes with more than 78 per cent houses. One of the possible reasons of

dissolution of lower caste family was to receive the benefits of several government plans like Indira Awas Yojna. Fact is that poverty plays an important role in dissolution of a family. Muslims have had the highest percentage of joint family with 38.9 per cent.

Table 5. Percentage Distribution of Households According to Type of Family

Caste	Type of Family	
	Nuclear	Joint
SC	78.8	21.2
OBC	64.6	35.4
Muslim	61.1	38.9
Upper	71.2	28.8
Total	69.0	31.0

Table 6 gives a snap shot of percentage distribution of households according to caste and Standard of Living Index(SLI). Results reveal that while about 21 per cent households belonged to high SLI group whereas Schedule Castes comprise of only 15.4 per cent of this group. Among Schedule Castes about 48 per cent

belonged to low SLI group followed by Muslims, where about 49 per cent belonged to this category. More than 40 per cent households were found among medium SLI group. However the SLI groups vary significantly according to different caste communities ( $p < .005$ )

Table 6. Percentage Distribution of Households According to Caste and SLI

	SC	OBC	Muslim	Upper	Total	$\chi^2$ 18.37*
High SLI	15.4	24.5	16.6	25.4	20.9	
Med SLI	36.5	42.7	36.7	43.5	40.2	
Low SLI	48.1	32.8	46.8	31.1	38.9	
Total	23.5	28.9	20.9	26.7	100	

\*significant at 5 per cent,

Table 7 gives the percentage distribution of households according to landholdings. It was found that about 59 per cent schedule caste households were landless and about 36 per cent households had less than one acre land. Among Schedule Castes only about 5 per cent households had more than one acre land. Among upper caste group only about 17 per cent households were

landless. Among Other Backward Castes about 6 per cent households had more than 10 acre land and among upper caste group about 12 per cent household had more than 10 acre land. About 33 per cent households were landless. Landholdings vary significantly according to castes ( $p < 0.005$ ).

Table 7. Percentage Distribution of Households According to Landholdings

	SC	OBC	Muslim	Upper	Total	$\chi^2$
Landless	59.0	22.4	37.4	17.5	32.8	83.47*
Up to 1 acre	36	29.7	25.9	19.2	27.6	
1-3 acre	3.1	21.9	19.4	19.8	16.4	
3-6 acre	1.3	10.9	10.1	17.5	10.2	
6-10 acre	0	8.8	5.8	14.1	7.5	
More than 10 acre	0.6	6.2	1.4	11.9	5.4	

\*significant at 5 per cent,

In the study region four type of houses were found: Pakka, Kachha (made of mud and other materials), Fush (made of woods and bamboo) and some houses had both type of rooms i.e. pakka as well as fush. Table 8 reveals that schedule castes have had the maximum number of both types of houses. This may be due to the fact that they might be the beneficiaries of Indira Awas Yojna (A

housing plan for poor by the Government of India) and most of them had one room built under the scheme. Muslim households had the maximum percentage of kachha/fush houses with 48.2 per cent followed by OBCs. About 38 per cent upper caste have had pakka houses. Type of houses differs significantly according to different castes.

Table 8. Percentage Distribution of Households According to Type of House

Type of House		SC	OBC	Muslim	Upper	Total	$\chi^2$
Type of House	Kachha/Fush	22.4	34.4	48.2	23.2	31.5	60.99*
	Pakka	16.4	33.9	20.9	37.8	28.2	
	Both	60.9	31.8	30.9	38.9	40.4	

\*significant at 5 per cent

## DEMOGRAPHIC CHARACTERISTICS

It is important to state that only economic and social characteristics are not sufficient to explain actual picture of any region. Although demographic characteristics are affected by socio-economic conditions of any region, its study is important as well. Demographic characteristics are affected by religious belief, occupational trends and many other characteristics of the region.

In this section demographic characteristics are discussed in brief. Since the area is flood prone and economically backward

region, people are more prone to migrate for their livelihood. Although in recent years introduction of several plans by central government as well as state government had put a check on temporary migrants, yet it is still high.

It was found that the sex ratio (931) in study region was more than that of Bihar state(916) but it was found lower than the national average(940) (Census2011). Table 9 shows that the sex ratio among Muslim households was 955, much higher than upper caste households (913).

Table 9. Percentage Distribution of Households According to Sex-ratio

Caste-group	Percentage of males	Percentage of females	Sex Ratio
SC	51.7	48.3	933
OBC	52.0	48.0	923
Muslim	51.1	48.9	957
Upper	52.3	47.7	913
Total	51.8	48.2	931

Table 10 gives the mean number of children ever born and age at marriage of females. Mean children ever born is defined here as the mean number of children born alive to a women in the reproductive age group. It was found that Muslim households had the highest mean children ever born (4.17) followed by Schedule Caste households (3.92). Mean children ever born for the sample population was found 3.81, greater than the mean children ever born found among upper category households (3.52), slightly higher than OBC households it was found 3.72.

Government of India has defined the minimum age of

marriage for men (21 years) and women (18 years). Age at marriage for females was found 16.3 years lower than the prescribed age. It was highest among upper caste group (17.4 years) and the lowest (15.7 years) among schedule caste households. Among Muslims, age at marriage was 15.9 years and among OBC, 16.4 years. The cause of lower age at marriage might be the marriage system and practice of child marriage. Although people are aware about the legal age of marriage but girl child is still a burden for parents and they want to get married their daughters as early as they crossed 15 years.

Table 10. Distribution of Females According to Mean Children Ever Born and Age at Marriage

Caste-group	Mean Children Ever Born	Age at Marriage
SC	3.92	15.7
OBC	3.72	16.4
Muslim	4.17	15.9

Upper	3.52	17.4
Total	3.81	16.3

In rural areas, caste is an important determinant of occupation, education and social status in the community and therefore, it may be one of the important factors responsible for migration differentials. Table 11 presents the percentage distribution of migrants and migration rate. The caste composition of the migrating and non-migrating households shows that upper caste group households were more prone to migrate. About 38 per cent households in upper caste group had at least one migrant and the migration rate was found 20.1 per cent for this category. Percentage of migrating household was found 24.7 per cent in case of OBC category

followed by Muslims but when we see the migration rate Muslims were ahead of OBC. Migration rate for Muslim household was found 13.2 and for OBC household it was 11.2. Schedule Caste households were least prone to migrate because of less education and awareness. Percentage of migration and migration rate is defined as follows:

$$\text{Percentage of migrants} = \frac{\text{Number of migrants in the specified group}}{\text{Total migrants}}$$

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Table 11. Percentage Distribution of Migrants and Migration Rate According to Caste

	Percentage of Migrants	Migration Rate
SC	14.2	7.5(69)
OBC	24.7	11.2(121)
Muslim	23.3	13.2(114)
Upper	37.9	20.1(185)
Total	100.0	12.9(489)

Migration differential by age reveals the impact of migration on socio – economic and demographic structures at both the places of destination and origin. Studies in Eastern Uttar Pradesh found that out migration of young males lead to decline in fertility at the place of origin (Singh et, al. 1981). Migration differential by age has been almost generalized and it is higher for the people aged between 15 and 40 (Yadava, 1988).

migration rate according to age. Migrants as well as migration rate was found highest among the age group (25 -34 years) followed by the age group (35-24 years). The main cause of higher cause of migration in these age groups may be that these are the productive age groups. Persons belonging to (0-14) years and ages more than 60 years are less prone to migrate because of dependency on their families.

Table 12 shows the percentage distribution of migrants and

Table 12. Percentage Distribution of Migrants and Migration Rate According to Age

Age in Years	Percentage of Migrants	Migration Rate
0-14	10.4	6.5(51)
15-24	20.9	14.4(102)
25-34	35.4	24.4(173)
35-45	28.2	16.8(138)
46 and above	5.1	3.3(25)
Total	100.0	12.9

We had taken a sample of 664 households and among them 263 households have at least one migrant. Most of the migration occurs in search of job so after getting a job, migrants usually send

remittances to their family members. Table 13 gives the percentage distribution of households according to remittances they received.

Table 13. Percentage Distribution of Households According to Remittances Received.

Monthly Remittances (in rupees)	No of Households	Percentage
0-1000	37	14.07
1000-2500	118	44.87
2500-4000	77	29.28
more than 4000	31	11.79
Total	263	100.00

The forgoing discussion shows that in the study region agriculture was the main occupation and migration was found to be dominant with more than 15 per cent migration rate. The main cause of migration founded were search of job and better living. Many landless, unskilled and illiterate labourers and farmers migrate from their village for urban areas in search of employment. They feel that urban areas might provide them adequate services and facilities. Some of the people were also found migrant because of study. The

role of caste was found significant deciding the migration place and occupation at destination.

This study may help the planners and social scientists for implementing and extending the rural development programmes, as it gives an overview of the people involved in rural out-migration process and also identify the root causes of migration both at individual and household level. Further proper urban planning can be designed since this study also provides some idea about the

migration intentions and the extent of migration.

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