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Capacity Building for a Better Future

A Report on

Causes and Consequences of Out-Migration from Middle Ganga Plain

By

Archana K. Roy
R.B. Bhagat
K.C. Das
Sunil Sarode
Reshmi R.S.

(Department of Migration and Urban Studies)

INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES
(Deemed to be University)

Mumbai-400088, Maharashtra, INDIA

<https://www.iipsindia.ac.in>

2021

highwages
landlessness
hunger
flood
indebteness
poverty



Chapter 3 Profile: Study Area and Sample Household

Introduction

Although the MGP region covers Eastern Uttar Pradesh and Bihar, the shared cultural and socio-economic patterns across the two states, provide unity and coherence along with a unique geographic personality emerging from similar physiographic conditions (Singh, 1971) which gives credence to its being treated as a single unit. This chapter presents the profile of the study area i.e., Middle Ganga Plain followed by sample households and household amenities.

3.1 Physical Settings

Location

The Middle Ganga Plain is a meso-level region of the Northern Indo-Gangetic Plains of India. It is differentiated from Upper Ganga Plain on the basis of isohyets of 100 cm (Stamp 1928), rice dominant cropping pattern (Spate 1954), a contour of 300 feet, population growth, and historical patterns (c.f. Singh, 1971). Its eastern boundary follows the state boundary of Bihar and West Bengal. Situated between the foothills of Himalaya in the north and the edge of the Peninsula in the south, the Middle Ganga Plain (24° 30' and 81° 47' E 87° 50' E) encompasses an area of approx. 144,409 sq. km. Extending 600 km from east to west and 330 km from north to south, the region has immense human, cultural and economic significance for the country. The north-western part of MGP is Terai, the central part is the Gangetic Plain, and the southern part is the Plateau region.

Rivers

The River Ganga flows from west to east through the middle of the Plain dividing the region into North and South parts. The tributaries of the Ganges which flow across the region include Ghaghra, Gandak, Budhi Gandak, Kamla, Bagmati, Kosi, Kali, Sone, and Punpun. The Rivers originating from the Himalayas are perennial (all season) rivers. These rivers deposit alluvial soil over the vast flood plain. The region also has few large ox-bow lakes named Anupam Lake, Kharagpur Lake, and Kanwar Lake.

Physiographic divisions

The vast flat alluvial plain is interrupted by several tributaries of river Ganga which form physiographic divisions. The major units of this plain are Ganga-Ghaghara doab, Ghaghara-Gandak doab, and Gandak-Kosi doab (Mithila Plain). Some rivers join the Ganga from the south also, the Son being the most important. The Magadh Plain lies to the east of the river Sone (Singh 1971). This region has been divided into two first-order, and six second-order groups as given below:

1. Middle Ganga Plain North
 - a. Ganga-Ghaghara Doab
 - b. Saryupar Plain
 - c. Mithila Plain
 - d. Kosi Plain

2. Middle Ganga Plain South
 - a. Ganga Son Divide
 - b. Magadh–Anga Plain

Forest and mineral resources

The Middle Ganga Plain is a belt of moist deciduous forests in the sub-Himalayan foothill of Someshwar and Dun ranges in the Champaran district, which also has grass, reeds, and shrubs. The region receives an annual rainfall of above 1600 mm. Moist deciduous forests are found in Gaya, Kishanganj, and Kaimur, while dry deciduous forests are found in Kaimur, Purnia, and Raxaul. The Middle Ganga Plain also produces minerals like Quartzite, Limestone, Crude Mica, Steatite, and Pyrites, Bauxite Cement Mortar, Glass sand, and Dolomite in small quantities.

Natural Calamities

Almost all the rivers keep shifting their courses making this area prone to frequent floods. The Kosi River which is notorious in this respect has long been called the ‘Sorrow of Bihar’. In addition, the region also faces natural calamities in terms of drought and cyclonic rains

3.2 Socio-economic settings

Population

As per Census 2011, the population of the Middle Ganga Plain is 1,822 lakhs (988 lakhs in Eastern UP and 1,033 lakhs in Bihar) with a rural population of 1617 lakhs (701 lakhs in Eastern UP and 916 lakhs in Bihar) and an urban one of (287 lakhs in Eastern UP and 117 lakhs in Bihar). Thus, 89 percent of the population in Bihar and 71 percent in Eastern UP were living in rural areas. The purely agrarian and under-developed regional economy faces a severe strain due to the high population density.

Socio-economic and demographic characteristics

Table 3.1 shows the socio-economic and demographic characteristics of the study area. As per the Census of India 2011, while the sex ratio in Eastern UP at 951 is higher than that of the country (940), Bihar’s sex ratio is much lower at 918. Both Bihar (62%) and Eastern UP (66%) have a literacy rate lower than the national one (74%). Similarly, male and female literacy levels are also lower across Eastern UP (77% males and 55% female) and Bihar (71% male and 51% female) when compared to the national average (82.14% male and 65.46% female).

The work participation rate in both Bihar (11.4% females, 41.0% males) and Eastern UP (12.4 % female and 39% male) remains poor in comparison to the country (25% female and 53% male nationally). Nearly two-fifths of the population are marginal workers with more women (60% in Eastern UP and 58% in Bihar) being involved in marginal work than men (35% in Eastern UP and 32% in Bihar). The percentage of female agricultural labour in both Eastern UP and Bihar is higher than their male counterparts although when it comes to agricultural cultivation which involves farming in own farms, the percentage of men is higher than the

women across both states. The unemployment rate is also relatively higher in this region due to chronic economic under-development and lack of basic infrastructure.

The root of the poor economic performance of this region lies in British colonial policy that not only created a vulnerable class through permanent settlement but also destroyed local knowledge-based industries providing livelihoods to urban and rural artisans. Post-independence, the zamindars who became the landowners continued the exploitative processes initiated by the British; their antipathy towards the use of technology and agricultural reforms further decreased land productivity (Banerjee & Iyer 2005).

Table 3.1: Socio-economic and demographic characteristics of the study area, Census 2011

	Est. UP	Bihar
Demographic Characteristics		
Total Population (in lakh)	798	1033
Male Population (in lakh)	409	539
Female Population (in lakh)	389	494
Sex Ratio (F/1000 M)	950	918
Social Characteristics		
Social profile (%)		
%SC	24.2	19.6
%ST	1.7	1.6
Total literacy rate	66.2	61.5
Male literacy rate	77.0	71.0
Female literacy rate	54.9	51.3
Economic Characteristic		
Work participation (%)		
Working Population (Total)	39.0	41.1
Working population (Male)	27.6	29.7
Working population (Female)	12.4	11.4
Marginal workers (Total)	42.5	38.9
Marginal workers (Male)	34.9	31.9
Marginal workers (Female)	60.2	57.8
Agriculture labourers (Total)	25.7	44.1
Agriculture labourers (Male)	23.6	42.3
Agriculture labourers (Female)	33.5	51.2
Cultivators (Total)	35.1	26.3
Cultivators (Male)	36.9	28.1
Cultivators (Female)	28.2	18.0
% wasteland to total land	20.5	23.6
Unemployment rate (2017-18) (rural)*	5.4	6.8

Source: *Economic Survey 2018

3.3 Migration History

Another common characteristic of this region is a long history of mass migration in form of indentured labour during 1824-1924 to British colonies followed by port cities and agriculturally developed regions in post-independent India. Historically, migration from this region dates back to the second quarter of the nineteenth century with the end of the slave trade from Africa and the introduction of the Indian Emigration Act (*Girmitya Act*) in 1824. During 1834-1916, more than four lakh people from India migrated as indentured labourers to different

European colonies like Caribbean islands, Mauritius, Fiji, Jamaica, etc. ((Tinker 1974) to work in rubber, sugarcane, and coffees plantation. A majority of them were recruited—from the Indo-Gangetic Plain, mainly from the western part of Bihar, the eastern part of the United Province (now UP), and the Chotanagpur. It is justifiably presumed by linguists that most of these emigrants must have been native speakers of the various dialects of Bhojpuri, being spoken in some part of MGP (Cohen 1991).

Due to persistent widespread poverty and underdevelopment, migration from this region continued even after independence although it was mainly confined within the national boundary. Many moved to Kolkata to work in jute mills and ports, and to tea gardens of Assam. However, in the 1970s, there was a shift from east to west from Kolkata to the developed western states of India.

After 1990, the new economic policy of India (adopted in 1991) accelerated the rate of male out-migration from 4.2 percent in 1991 to 5.9 percent in 2001 in UP and 3.7 percent in 1991 to 7.4 percent in 2001 in Bihar. At the same time, this region also showed a significant rise in international migration towards the Gulf destinations in response to global economic changes. Although migration to the Gulf countries began in 1974 due to the oil boom, this trend took off in UP only from 2001 making it a comparatively newer phenomenon that has not been studied extensively as yet.

Livelihood migration from this region whether international or internal is dominated by males leaving their families behind in the villages. Evidence shows that migration without family is mainly confined to the northern and eastern states of India. Bihar (1338) has the highest sex ratio of the inter-state migrant i.e., the number of males who migrate per 1000 females as per Census 2001 followed by UP (1153) demonstrating that migration in these states is dominated by single males and females who are left behind in villages. Moreover, (Desai and Banerji (2008) indicate the phenomenon of women whose husbands lived elsewhere is highly geographically clustered; with nearly nine percent of the ever-married women from the mountainous state of Uttarakhand reporting husbands living elsewhere, as do eight percent of the rural women in the central plains of UP and 11 percent in Bihar. In contrast, in the more prosperous southern states of Karnataka and Tamil Nadu, few women reside away from their husbands. Thus, the separation of husband and wives due to migration appears to be an accepted behavioural and social norm in UP and Bihar.

Section B

Profile of Sample Household

A total of 4056 households were surveyed across the MGP region. Based on the migration status, households were classified into three groups, viz; non-migrant households (no one has migrated for employment or education), migrant households (any short/long term migrants), and return migrant households (at least one migrant who has returned and does not plan to migrate again). More than half of the households that were surveyed are migrant households

while nearly two-fifths were non-migrant households and the remaining eight percent are return-migrant households. Similar trends have been noted in Bihar and Eastern UP.

This section presents the comparison of the characteristics of the migrant households with non-migrant and return-migrant households. It also sheds light on the characteristics of the households across the different forms of migration in Bihar and Eastern UP. A comparison of the socio-economic conditions of non-migrants is vital to comprehend the relative impact of migration on ‘left behind’ members of the families and to enhance our understanding of the root causes of migration.

3.4 Socio-economic Characteristics of Households

It is widely found that migrant households have some distinct features when compared to non-migrant households. Table 3.2 presents the distribution of respondent migrant, non-migrant and return-migrant households by religion, caste categories, landholding, and family type. In the MGP, more than 80 percent of the sample household are Hindus, and the remaining are Muslims. More than half of the households in the sample belong to OBC, followed by SC, and other castes; and the migration status of the households does not appear to have any bearing on this. However, no significant difference has been observed in caste composition in migrant and non-migrant households.

Although a majority of the households across the MGP are either landless or possess less than one acre of land, a comparison with migration status shows that a relatively higher proportion of migrant households are landless (58%) than non-migrant (54%) and return migrant households (45%). Bihar has a higher proportion of landless households than Eastern UP. One striking feature is that in Eastern UP, a higher proportion of non-migrant households (44%) are landless when compared to migrants (38%) and return migrant households (39 %).

Nuclear families are the norm rather than the exception in the 21st century as is confirmed by the data in this study. Nearly three-fourths of the non-migrant households (76%) and return migrant households (77%) have nuclear families. However, a higher share of the migrant households belong to joint families than non-migrant and return migrant households. Nuclear families are more common in Bihar than in Eastern UP.

A majority of migrant households are headed by females in comparison with non-migrant and return migrant households (Table 3.2). Nearly two-thirds of the migrant households across the region have left-behind women; where the male migrates and his spouse stays back in the village.

Age and sex-selective migration is distinctly reflected in the age-sex pyramid for the migrant and non-migrant households (Figure 3.1). In reference to non-migrant households, the proportion of men in the 20-49 years age group is lesser than that of women of the corresponding age group.

Table 3.2: Socio-economic characteristics of the migrant, non-migrant, and return migrant households in Bihar, Eastern UP, and MGP (%)

BC	Bihar			Est UP			MGP		
	HH by Migration status			HH by Migration status			HH by Migration status		
	NM HH	M HH	RM HH	NM HH	M HH	RM HH	NM HH	M HH	RM HH
Religion									
Hindu	86.1	79.1	87.1	91.6	87.5	93.5	87.6	81.3	88.5
Muslim	13.9	20.9	12.9	8.4	12.5	6.5	12.4	18.7	11.5
Caste Category									
ST	2.2	2.1	1.9	4.3	2.3	1.8	2.7	2.1	1.9
SC	23.9	21.4	17.9	35.6	33.0	35.3	26.5	23.9	22.1
OBC	55.3	56.0	61.1	45.0	46.9	44.9	53.0	54.1	57.3
Others	18.6	20.5	19.1	15.1	17.7	18.0	17.8	19.9	18.7
Landholding Size									
Landless	56.6	63.6	46.3	44.2	37.5	38.7	53.8	57.7	44.7
< 1 Acre	26.8	26.9	37.8	27.8	34.5	35.7	27.1	28.7	37.0
≥ 1 acre	16.6	9.5	15.9	28.0	28.0	25.6	19.1	13.7	18.3
Family Type									
Nuclear	77.7	65.9	81.0	68.8	46.3	64.3	75.6	61.8	77.0
Joint	22.3	34.1	19.0	31.2	53.7	35.7	24.4	38.2	23.0
Headship									
Male	87.7	46.6	98.8	85.3	51.9	95.8	87.4	47.4	97.8
Female	12.3	53.4	1.2	14.7	48.1	4.2	12.6	52.6	2.2
HH with LBW	NA	60.9	NA	NA	67.4	NA	0	61.7	0
Total (%)	100	100	100	100	100	100	100	100	100
Total	806	1143	149	773	1021	164	1579	2164	313

Note: NM: Non-migrant household MHH- Migrant household RM- Return migrant household

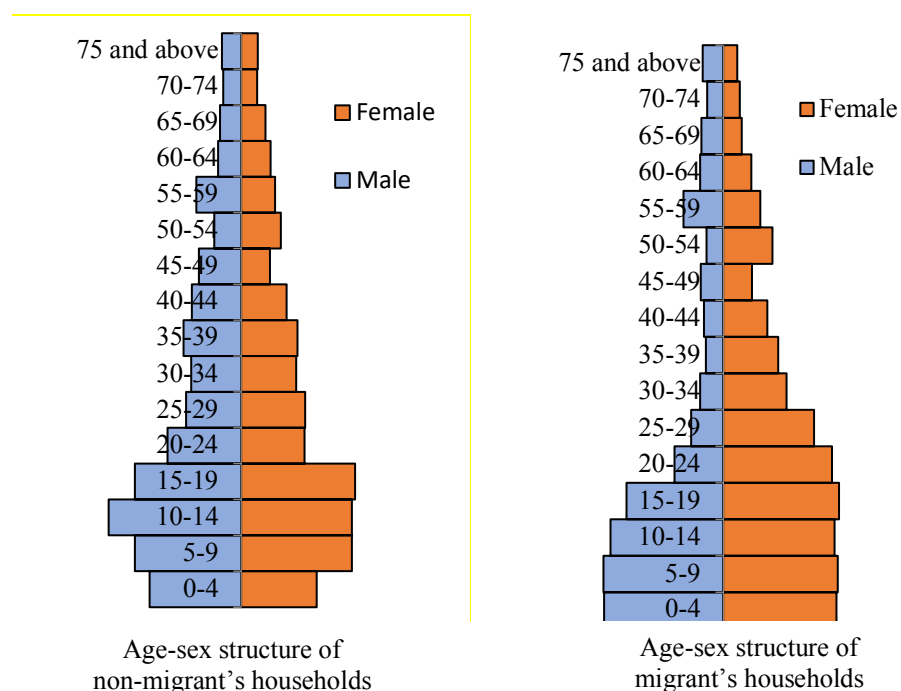


Figure 3.1: Age sex structure of non-migrant and migrant households

3.5 Characteristics of Internal, International and Seasonal Migrant Households

Based on the different types of migrants in the region, three types of classification were made; international migrant household, internal/out-migrant household, and seasonal migrant household. More than 40 percent of the total households in the MGP region are out-migrant households (OM HH) followed by seasonal migrant households (exclusively SM HH, 11%) and international migrant households (IM HH, 3%). Compared to ten percent of the seasonal migrant households in Bihar, only four percent of the households in Eastern UP had seasonal migrants. Three percent of households across the MGP mentioned having at least one international migrant.

The socio-economic characteristics show that in MGP, a majority of international, internal, and seasonal migrant households are Hindus, OBCs, and landless. There is no difference in distribution across the two regions. The OBCs are the dominant caste group across all categories of migration. However, there is a significantly higher representation of seasonal migration from SCs (34%) and landless classes (69%). Another striking feature is that the share of ‘others’ caste group household (45%) is higher in international migration than the internal migration (20%). Data concerning family type indicates that long-term and long-distance migrants mostly belong to joint families whereas most seasonal and internal migrant households have nuclear families. In Est. UP, the share of international migrant households is higher from OBCs (53%) whereas, in Bihar, it is from the ‘others’ caste group.

Table 3.3: Socio-economic characteristics of the international, internal and seasonal migrant households in Bihar, Eastern UP and MGP (%)

Background characteristics	HH by type of migration								
	Bihar			Est UP			MGP		
	IM HH	OM HH	SM HH	IM HH	OM HH	SM HH	IM HH	OM HH	SM HH
Religion									
Hindu	61.5	80.0	84.9	74.4	89.6	93.8	56.0	82.3	85.8
Muslim	38.5	20.0	15.1	25.6	10.4	6.2	44.0	17.7	14.2
Caste Category									
ST	9.0	1.6	2.3	2.8	2.1	3.8	6.7	1.7	2.5
SC	3.0	19.9	32.6	18.1	33.1	46.3	7.5	23.1	33.9
OBC	37.3	58.3	53.2	52.8	47.3	38.8	41.0	55.7	51.6
Others	50.7	20.3	11.9	26.4	17.6	11.3	44.8	19.6	12.0
Landholding Size									
Landless	64.8	61.1	72.5	34.4	37.8	40.7	54.5	55.4	69.3
< 1 Acre	25.9	28.6	21.6	33.9	33.6	45.7	27.6	29.8	23.8
≥ 1 acre	9.3	10.3	6.0	31.7	28.5	13.6	17.9	14.8	6.8
Family Type									
Nuclear	56.0	65.5	72.0	35.4	47.2	61.3	45.5	61.0	71.2
Joint	44.0	34.5	28.0	64.6	52.8	38.8	54.5	39.0	28.8
Headship									
Male	42.6	37.5	83.5	57.5	49.1	69.1	41.8	40.3	82.0
Female	57.4	62.5	16.5	42.5	50.9	30.9	58.2	59.7	18.0
HH with LBW	84.4	73.8	NA	78.3	71.4	NA	88.1	73.2	0.0
Total (%)	100	100	100	100	100	100	100	100	100
Total	62	846	235	63	882	76	125	1728	311

Note: IM-International migrant household SM- Seasonal migrant household OM-Internal migrant household

Source of Income

Figure 3.2 shows the different sources of household income in migrant, non-migrant, and return migrant households. Most households rely on agriculture which is seasonal in nature. The reliance on agriculture is highest among return migrant households (46%) followed by the non-migrant household (38%) and lowest for migrant household (32%). The second source of income for a non-migrant household is from labour, both agricultural and non-agriculture (16% each) which was slightly higher in return migrant households (17% agricultural and 23% non-agriculture) and lower in a migrant household (11% and 13% respectively). Income from the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and artisan and household industry are extremely low across all three household types. Almost one-tenth of return migrant households generate income from business and trade which is higher than migrant (3%) and non-migrant households (6%). Less than 15 percent of households across all three categories generate income from livestock. In migrant households, remittances add to the household income with nearly three-fourth of the migrant households indicating that they receive income from the remittance.

The household income was estimated at the household level. As far as the share of income from different sources to the total income of households is concerned, Figure 3.3 depicts that remittances are the largest source of income in migrant households while agriculture is the main source of income across other households. In migrant households, 63 percent of the total income comes from remittances followed by agriculture (13 percent) and non-agriculture labour (9 percent). This signifies that migrant households are dependent upon the remittances sent by the migrant labours. However, in non-migrant and return migrant households, where no remittances are received, the pattern of share of income from different sources to total income remains similar. Almost 40 percent of the income comes from agriculture, followed by non-agricultural labour work (20% in non-migrant and 25% in return migrant household).

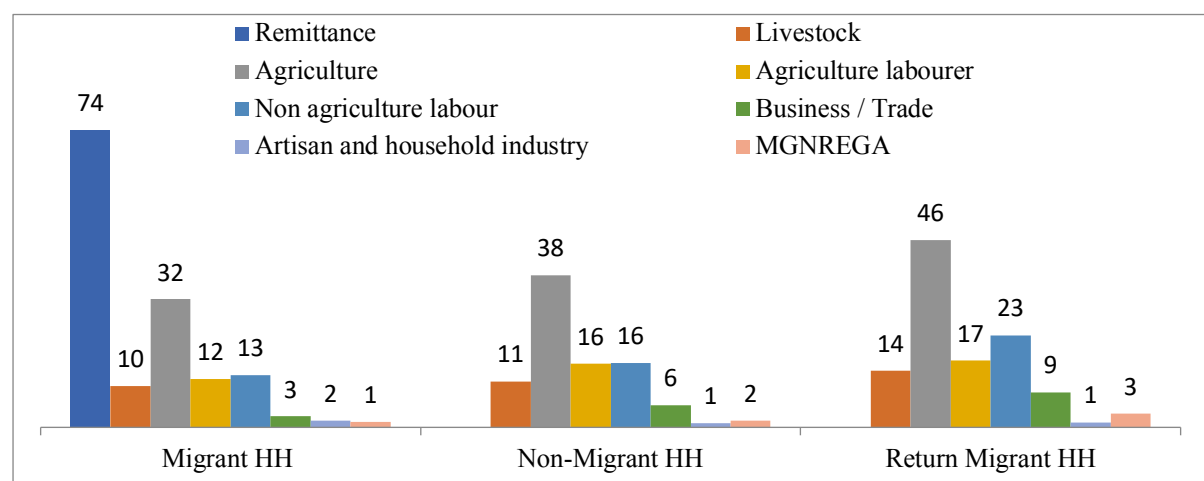


Figure 3.2: Percent households by sources of income and status of migration

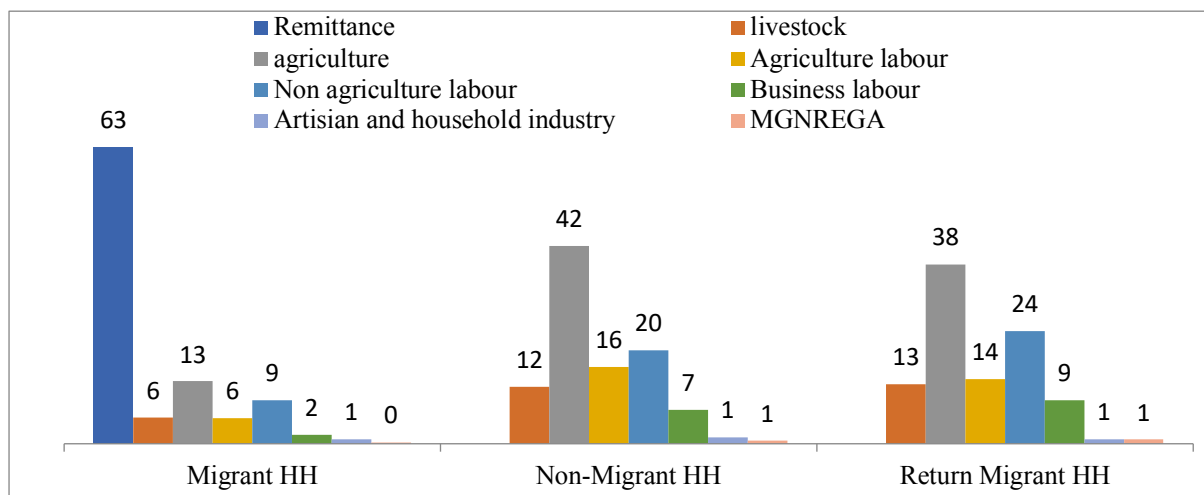


Figure 3.3: Percentage share of income from different sources to the total income of the household

MGNREGA appears to have an almost negligible share in the total household income across all three categories of households. The share of business income is also low among non-migrant (7%) and return migrant (9%) households and it almost negligible (2%) in migrant households.

Access to Mobile Phone

The mobile phone has become an essential item not only for communication but also as an interface between beneficiaries from the government schemes and programmes. Nearly 90 percent of households are having ordinary mobile phones, which is slightly more in migrant and return migrant households. Two-fifths of the households have either a smartphone or a feature phone. In Eastern Uttar Pradesh higher percentage of migrant households (41%) have a smartphone than non-migrant (29%) and return migrant households (32 %). In Bihar, the situation was quite different, a higher percentage of non-migrant households are having smartphones than migrant (14 %) and return migrant households (12%).

Table 3.4: Percentage of households having phone facility and by types of phone

	NM HH	M HH	RM HH	Total
Household having phone	87.5	95.7	94.3	92.4
Landline facilities	0.9	1.3	0.7	1.1
Ordinary mobile facilities	87	86.3	86.0	86.5
Smartphone with internet facilities	19.8	20.1	18.1	19.8
Feature phone facilities	19	22.6	19.4	21
Total	1368	2033	295	3696

Section C

Housing and household amenities

This section provides the housing and household amenities in migrant, non-migrant, and return-migrant households. The household amenities include the type of house, number of rooms, kitchen, bathroom and toilet facilities.

3.6 Housing

More than 99 percent of the houses are owned by the people living in them across the MGP. Bihar and Eastern UP show similar trends irrespective of the migration status of the households. However, a larger number of households (HH) in Bihar live in kuccha houses (43%) as opposed to Eastern UP who live in pucca (39%) and semi-pucca (38%) houses.

In Bihar, the percent of households living in kuccha houses are nearly the same across migrants (44%) and non-migrants (41%), followed by both groups living in semi-pucca houses. In Eastern UP, more than a third of both groups of households (37% migrant and 39% non-migrant) live in pucca houses. The data thus shows that the structure of the residence remains common in each state, irrespective of their migration status.

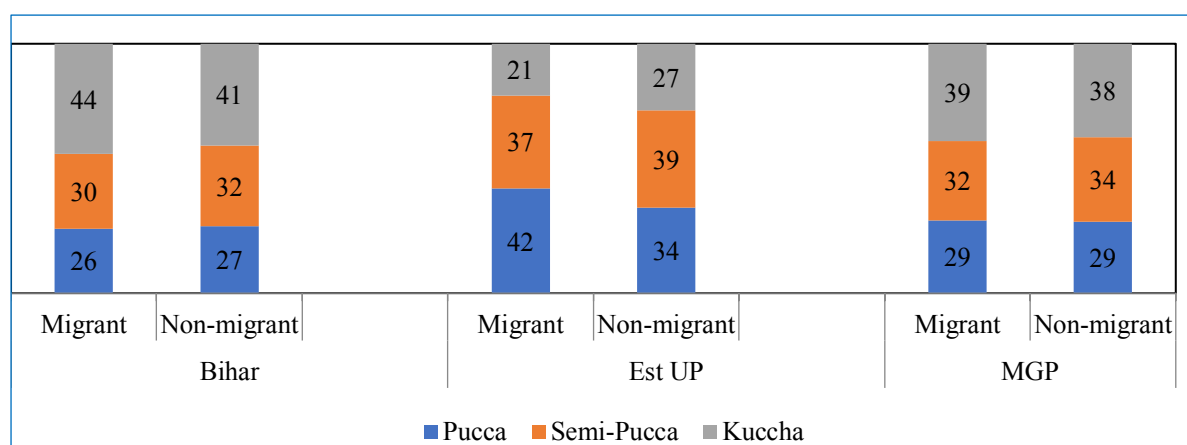


Figure 3.4: Percent distribution of migrant and non-migrant households by type of house

Household Amenities

No of rooms

Figure 3.3 shows that the majority of houses in MGP have two rooms or less (65%); the pattern remains the same in eastern UP (61%) and Bihar (66%). However, Eastern UP has the highest number of houses with five or more rooms. The difference is distinct across the migrant and non-migrant households in both the regions, migrant households have more rooms than non-migrant households. The difference is higher in Eastern UP. This could also be due to the fact that migrant households tend to live as joint families and so require more rooms.

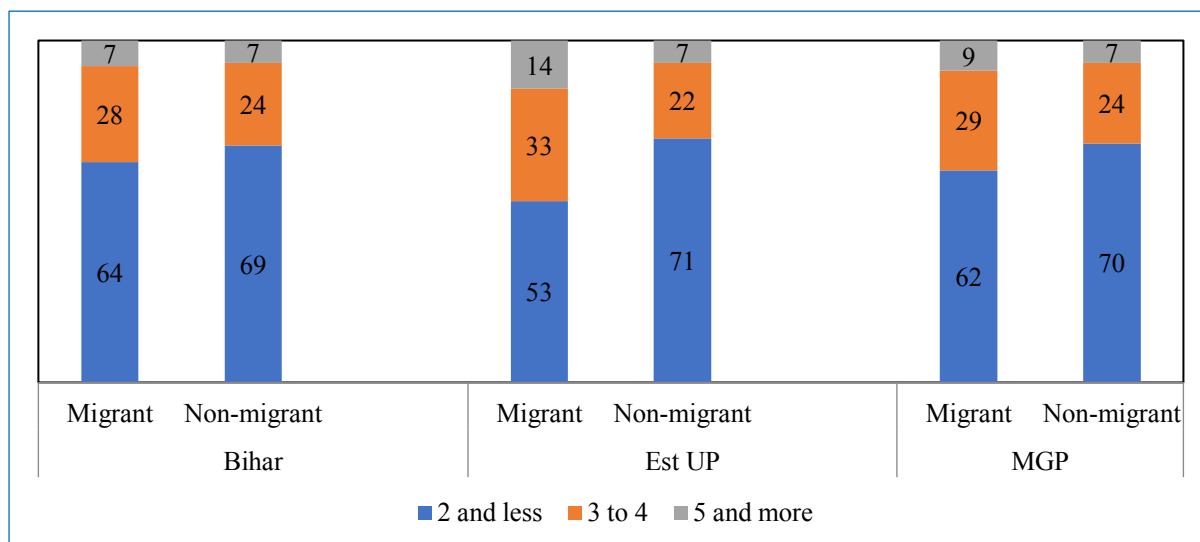


Figure 3.5 Percent distribution of migrant and non-migrant households by Number of rooms

Separate Kitchen

Eastern UP (41%) has almost double the number of households with a separate kitchen for cooking as compared to Bihar (22%). When the migration status of the households is considered, a slightly higher percentage of migrant households has a separate room for cooking as compared to non-migrant households. Non-migrant households in Eastern UP have the least tendency to have a separate space for cooking. In general, the return migrant households have a higher tendency to have a separate place for cooking followed by migrant and non-migrant households having the least tendency for the same.

Cooking Fuel

The fuels that are used for cooking included LPG, Kerosene, and solid waste. Households in both Bihar (80%) and Eastern UP (66%) lean towards the use of solid waste as the preferred fuel for cooking. However, households in Eastern UP show a higher proportion of households use LPG (34%) than those in Bihar. In both regions, the use of agricultural/animal waste as fuel for cooking is more common in the non-migrant household than migrant households.

Drinking water

Groundwater extracted through hand pumps is the major source of drinking water in both regions (Figure 3.4). However, a relatively larger share of the migrant households has their own hand pump while 20 to 35 percent of non-migrant households depend on public hand pump for drinking water.

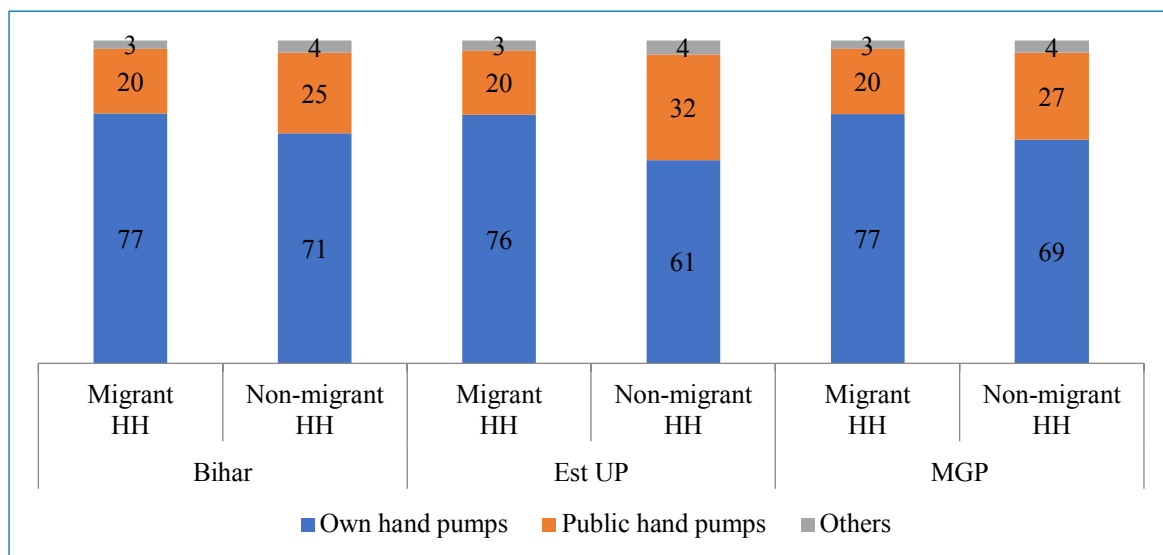


Figure 3.6: Source of drinking water by migration status of households

Bathroom and toilet facilities

A majority of the households in Bihar, Eastern UP, and MGP use open bathrooms with walls (temporary) but no roofs followed by bathrooms within premises. The percent of households with bathrooms within the premises as well as enclosed spaces without roofs that served a bathroom is slightly higher in Eastern UP than in Bihar.

Figure 3.5 depicts toilet facilities available to respondent households in the MGP. A majority of the households across the MGP (53%) and in Bihar (56%) opt for open defecation (partially and mainly) due to the unavailability of toilets. The migration status of the household has no bearing on the use of open spaces for defecation in Bihar. However, more than half of the households in Eastern UP (57%) prefer to use toilets within their residences. Moreover, the availability of toilet facilities within the residences is slightly higher amongst migrant and return migrant households (60%) when compared to non-migrant households (53%).

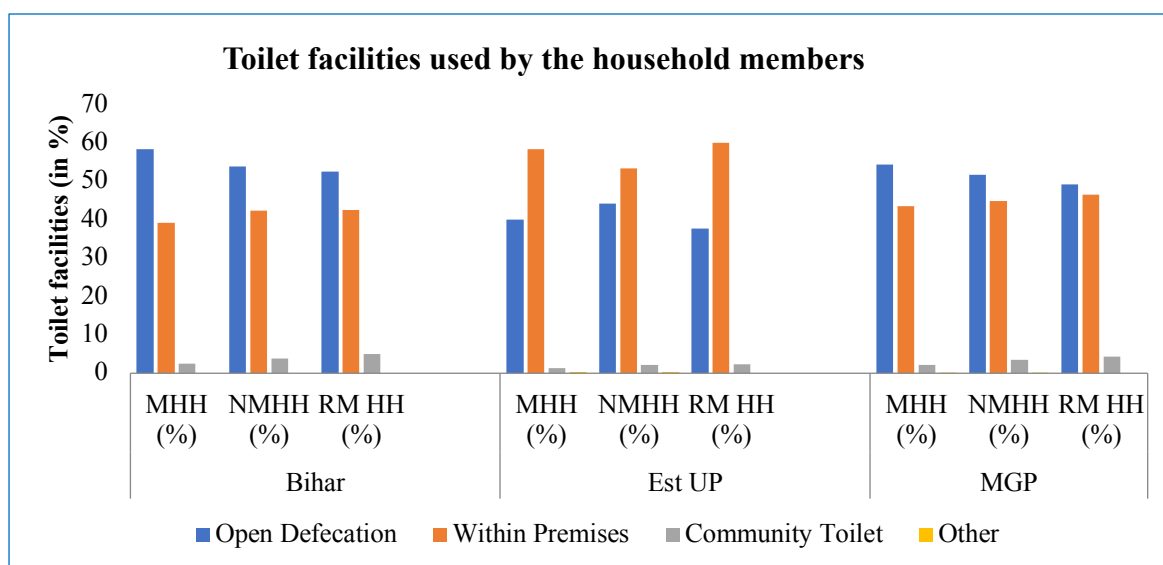


Figure 3.7: Distribution of toilet facilities across migration status of households

3.7 Conclusion

The economic and demographic homogeneity of the region arises mainly from the primary livelihood mode which is agriculture. Despite having dense river networks, fertile land, the region is known for poverty, migration, casteism and feudalism. The rivers are not utilized effectively causing havoc rather than contributing to prosperity. The large population tends to be poor, landless, illiterate, malnourished, unemployed implying that their potential for economic growth is underutilized. Social issues such as caste conflict, gender disparity further aggravate the problems which are not improved by poor governance and the absence of political will to bring about change.

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**INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES, MUMBAI
(Deemed to be University)**

(An Autonomous Organisation of Ministry of Health and Family Welfare, GoI)

B.S. Devshi Marg (Govandi Station Road), Deonar

Mumbai-400088, Maharashtra, INDIA

<https://www.iipsindia.ac.in>

