

SELECTIVITY INDEX BASED ANALYSIS OF BLOCK-WISE RURAL OUT MIGRATION: A CASE STUDY OF EAST CHAMPARAN DISTRICT OF BIHAR, INDIA

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Abstract: *Migration is a positive process on one hand and necessary evil on the other. In former case, migrants contribute in the developmental processes of country by working as skilled and non-skilled labourers while in latter case, migration also results in problems like urban sprawl, urban poverty, social conflicts. The present research paper focuses on the rural migrants engaged in workforce of unorganized sector and also answers the question that 'how urban and industrial regions attracting people from rural areas to work and earn more money as compared to their place of origin?' The methodology involves the field survey of two Community Development Blocks namely Motihari and Tetaria in the East Champaran district of Bihar, India. The selectivity index was applied to analyses the religion, caste and education based mobility of rural out-migrants.*

Key words: Rural outmigration, Unorganized sector, Selectivity index, Workforce.

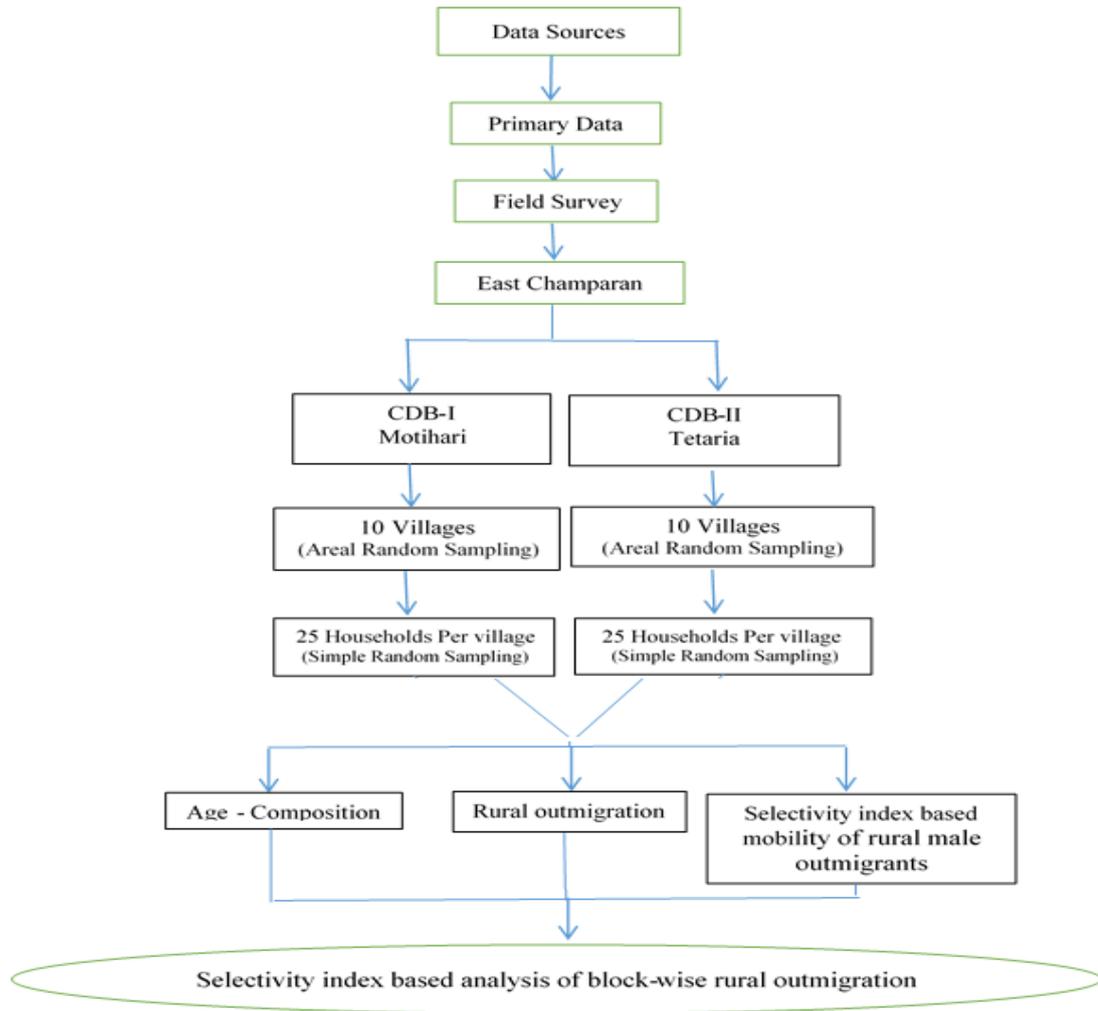
Introduction

In today's era of globalization, urbanization and industrialization, all regions irrespective of rural characteristics and urban characteristics are interlinked and interdependent through improved network of communication and transport, hence have resulted in increased flow of information and rapid mobility of migrants. In current scenario, various push and pull factors at the place of origin and place of destination have played major role in determining the migrating patterns of human being (Joseph, 1988). Economic opportunities serve as the major pull factors in making people to migrate from their places of origin (Ranis and Fei, 1961). Migration on the one hand determines the demographic attributes and flow of workforce on the other. An analysis of trends and patterns of migration gives the percentage increase in the 'add-on' number of people which are responsible for demographic changes in country or any part of the country (Davis, 1963). Consequently, place of origin become depopulated and place of destination become overpopulated and consequently, migration results in demographic change.

Objectives of the Study

- To assess the block-wise rural outmigration in the East Champaran district, Bihar, India
- To analyze the mobility of rural out migrants by applying selectivity index on religion, caste and education in the East Champaran district, Bihar, India.

Figure 01: Structure of the Research Study



Source: Prepared by the author

Methodology

Figure 01 shows the structure of the present research study and the various aspects involved in the study.

Data Sources

The collection of primary data was carried out through comprehensive field survey during the year 2017. The structured questionnaires were used to collect information on demographic and socio-economic attributes of rural out-migrants of two Community Development (CD) blocks namely Motihari (CDB-I) and Tetaria (CDB-II). Figure 01 shows the details of field survey (sampled villages and sampled households) conducted during the year 2017.

Tools of Analysis

The following formula have been used to calculate the 'selectivity index' for various aspects:

$$S.I.= \frac{(\text{percentage of outmigrants with specific characteristics to total outmigrants})}{(\text{percentage of persons with these characteristics in the total population of the community})} \times 100$$

Table 01: Village-wise Population of Out-migrants and Their Composition in CDB-I (Motihari) and CDB-II (Tetaria), East Champaran, Bihar

C.D. Blocks	Villages	Sample Population			Total Out-Migrants		
		Male	Female	Total	Male	Female	Total
CD Block -I (Motihari)	Jhit Kahiya	93	50	143	21	11	32
	Lakhaura	78	44	122	23	13	36
	Barwa	80	54	134	33	17	50
	Haraj Tola Lachhmipur	86	43	129	21	9	30
	Chhatauni Ramsingh	96	49	145	23	10	33
	Ray Singha	87	47	134	29	14	43
	Patparia Moran	99	53	152	19	7	26
	Bariyarpur	73	43	116	17	6	23
	Bankat	67	43	110	11	5	16
	Baswaria	84	47	131	22	11	33
Total CD Block-I		843	473	1316	219	103	322
CD Block -II (Tetaria)	Dhobwaliya	90	43	133	21	10	31
	Fazilpur	71	41	112	23	10	33
	Saraiya	73	49	122	30	14	44
	Sonaul	79	49	128	21	8	29
	Tajpur	91	39	130	23	10	33
	Kadma	81	41	122	22	13	35
	Kothia	93	51	144	15	7	22
	Pipra	71	40	111	17	6	23
	Sobhitapur	67	42	109	11	5	16
	Semraha	84	45	129	19	11	30
Total CD Block-II		800	440	1240	202	94	296

Source: Field survey, 2017

Figure 03: Structure of Discussion On Demographic Attributes

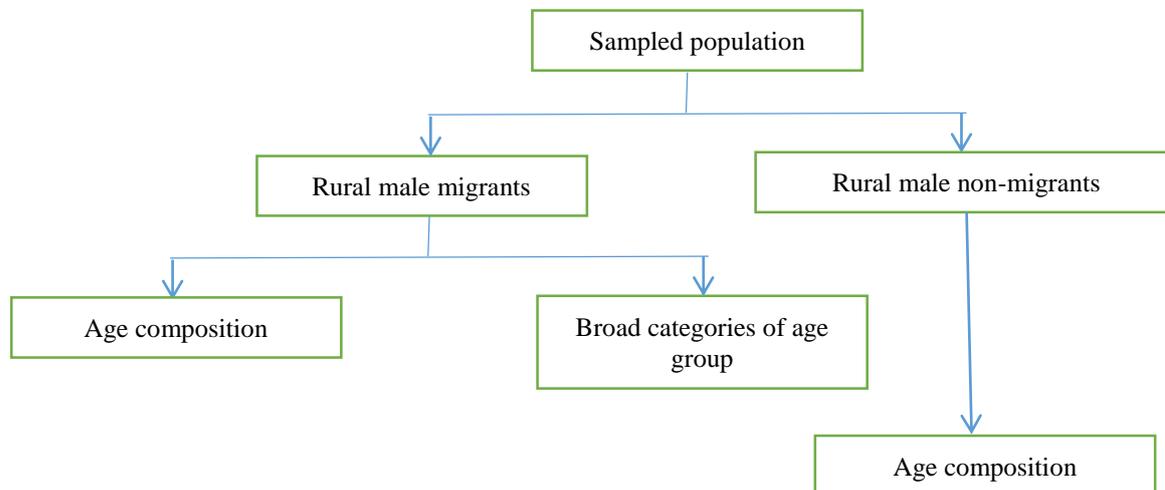


Figure 04 Age-Composition of Male Migrants & Non-Migrants, East Champaran

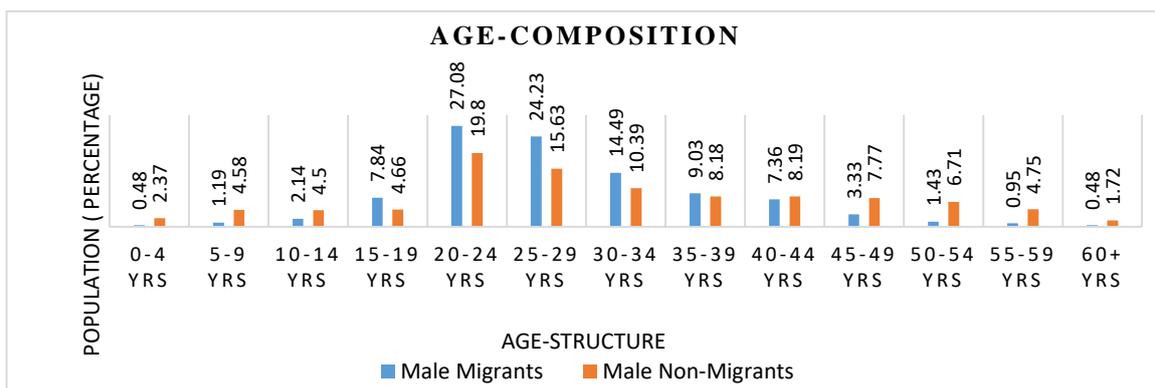


Table 02 shows the data related to broad categories of male out-migrants containing more than one age-groups in the East Champaran. The broad category of children includes age-groups of 0-4 years, 5-9 years and 10-14 years; young migrants are in age-groups of 15-19 years and 20-24 years; middle aged migrants include age-groups of 25-29 years, 30-34 years and 35-39 years; upper middle age groups include 40-44 years, 45-49 years, 50-54 years, 55-59 years; while aged migrants include 60+ years. The highest percentage of male migrants belong to middle age groups (47.74 percent) followed by young migrants (35.92 percent) while the least number of migrants are of children (3.80 percent) and aged migrants (0.48 percent).

Table 02: Broad Age-Group Categories of Rural Male Migrants, East Champaran

Age-Group	Broad Categories of Migrants	Male Migrants	Percentage
0-4	Children	16	3.80
5-9			
10-14			
15-19	Young Migrants	147	35.92
20-24			
25-29	Middle Age Migrants	201	47.74
30-34			
35-39			
40-44	Upper Middle Age Migrants	55	13.06
45-49			
50-54			
55-59			
60+	Aged Migrants	2	0.48
Total		421	100.00

Source: Field survey, 2017

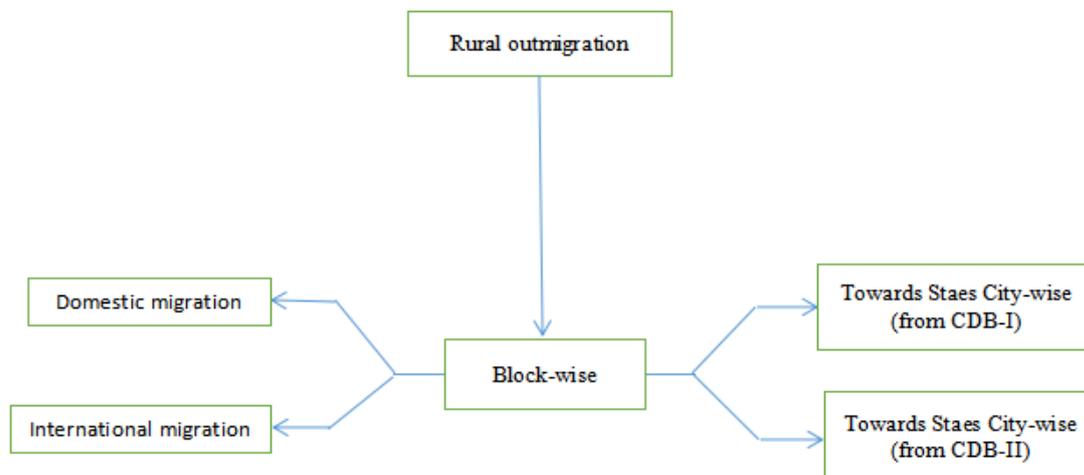
The younger section (15-19 yrs., 20-24 yrs., 25-29 yrs., 30-34 yrs.) of working population shows high migration tendencies to earn more money (Kumar, Sarvottam, 2005). The societal pressure, family responsibilities and increased expenditure of newly married couples collectively acts as push factors (Kothari, D.K., 1980). The tendency of migration declines among the aged people (40-44 yrs., 45-49 yrs., 50-54 yrs., 55-59 yrs.) due to retarded health conditions and decreased energy level as compared to younger people.

Rural Out Migration

Here, rural outmigration has been discussed from community development blocks to different states (domestic migration) and other countries (international migration). Now, domestic migration is also discussed in terms of 'type of cities' (Class-I type, class-II

type etc.) of different States receiving the rural male migrants from CDB-I (Motihari) and CDB-II (Tetaria) of East Champaran district, Bihar (Figure 05).

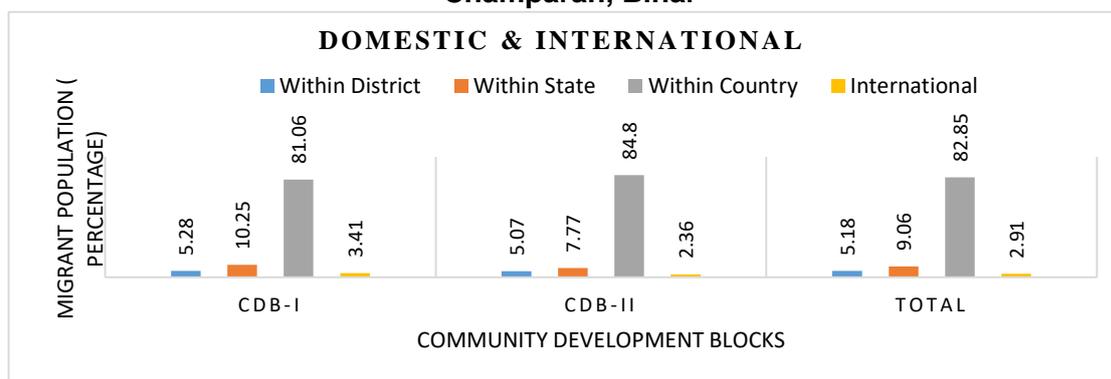
Figure 05: Aspects of Rural Out Migration Covered



Source: Prepared by the author

Figure 06 shows that out of total 618 out-migrants, 5.18 percent moved within district, 9.06 percent moved within State, 82.85 percent moved within country and 2.91 percent moved abroad. To obtain crystal clear picture of out-migrants and their regional patterns of movement we analyzed the movement of out-migrants at the block level. CDB-I (Motihari) had least percentage of out-migrants moving abroad (3.41 percent) while the majority of out-migrants (81.06 percent) have moved to different states. Apart from these two regional patterns of migration, out-migrants moving within district were only 5.28 percent in comparison to out-migrants moving within state that is 10.25 percent. On the other hand, CDB-II (Tetaria) had least percentage of out-migrants moving abroad (2.36 percent) while the majority of out-migrants (84.80 percent) have moved to different states. Apart from these two regional patterns of migration, out-migrants moving within district were only 5.07 percent in comparison to out-migrants moving within state that is 7.77 percent.

Figure 06: Block-Wise Domestic and International Migration from East Champaran, Bihar

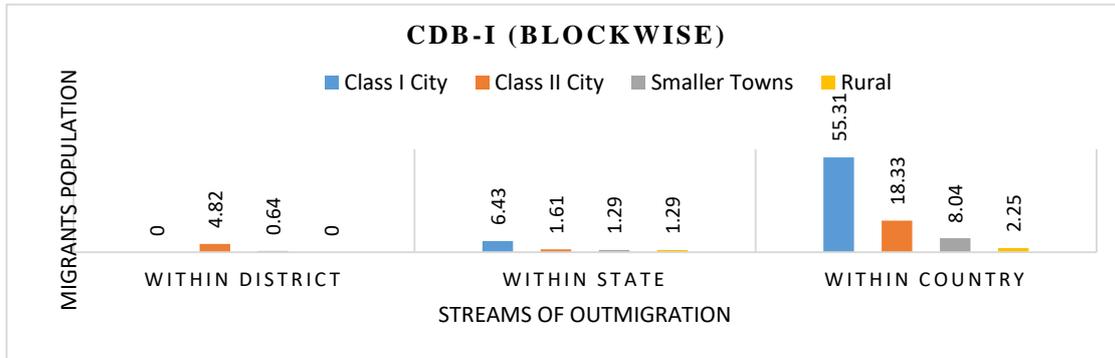


Source: Field survey, 2017

The block-wise analysis of out-migrants to class I cities, class II cities, smaller towns, rural areas show clear picture of out-migrants from CDB I (Motihari) and CDB II (Tetaria). From CDB I (Motihari), (Figure 07) the out-migrants moving 'within district' include nil moved to class I cities, 4.82 percent moved to class II cities, 0.64 percent moved to smaller towns and nil moved to rural areas. Likewise, the out-migrants moving

'within state' include 6.43 percent towards class I cities, 1.61 percent towards class II cities, 1.29 percent towards smaller towns, 1.29 percent towards rural areas. The movement of out-migrants 'within country' shows that 55.31 percent towards class I cities, 18.33 percent towards class II cities, 8.04 percent towards smaller towns and 2.25 percent towards rural areas. Overall scenario shows 5.47 percent moved 'within district', 10.61 percent moved 'within State' and 83.92 percent moved 'within country'.

Figure 07: Block-Wise Regional Pattern of Rural Out Migration from CDB-I (Motihari), East Champaran, Bihar

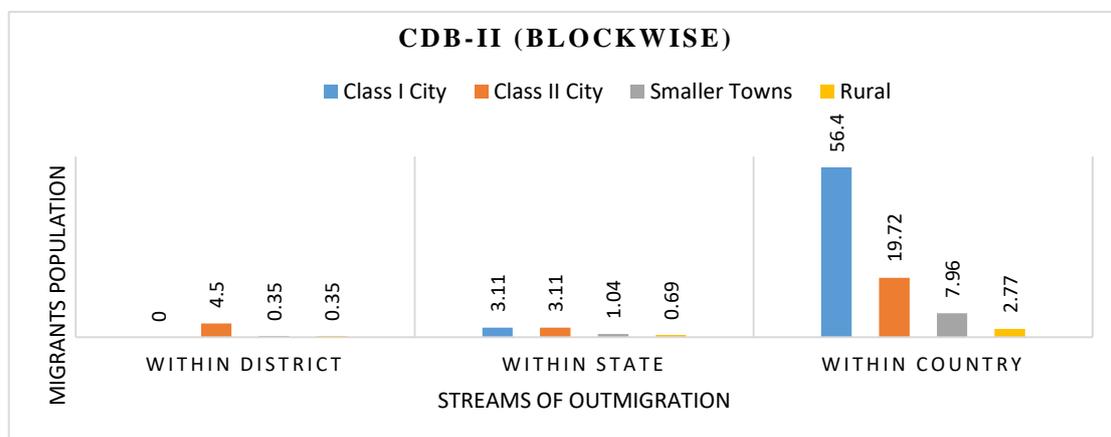


Source: Field survey, 2017

From CDB II (Tetaria), (Figure 08) the out-migrants moving 'within district' include nil moved to class I cities, 4.50 percent moved to class II cities, 0.35 percent moved to smaller towns and 0.35 percent moved to rural areas. Likewise, the out-migrants moving 'within state' include 3.11 percent towards class I cities, 3.11 percent towards class II cities, 1.04 percent towards smaller towns and 0.69 percent towards rural areas. The movement of out-migrants 'within country' shows that 56.40 percent towards class I cities, 19.72 percent towards class II cities, 7.96 percent towards smaller towns and 2.77 percent towards rural areas. Overall scenario shows that 5.19 percent moved 'within district', 7.96 percent moved 'within state' and 86.85 percent moved 'within country'.

Here, it was observed that poor and unskilled rural migrants have tendency to travel short distances in order to find work suitable to them. Consequently, their migration tendency was confined to 'within district' and 'within State' only. Contrary to this, skilled (driver, plumber etc.) and semi-skilled (rickshaw puller, labours, construction worker etc.) rural migrants travel long distances and work throughout the length and breadth of the country.

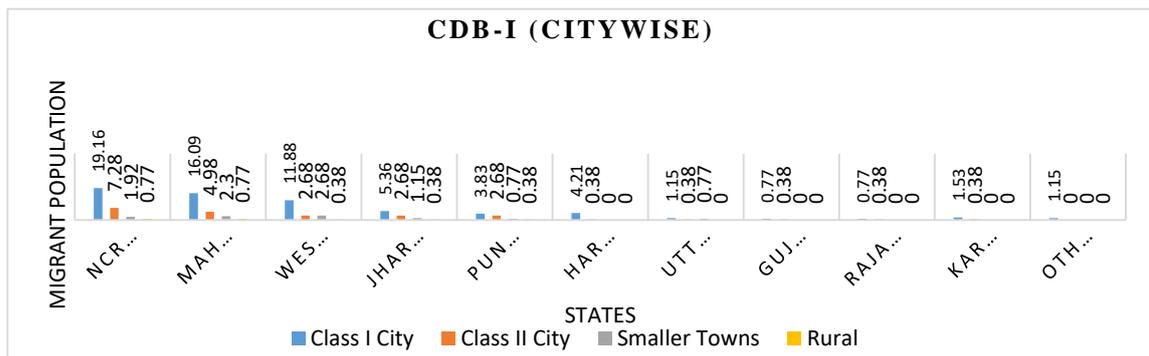
Figure 08: Block-wise Regional Pattern of Rural Out Migration from CDB-II (Tetaria), East Champaran, Bihar



Source: Field survey, 2017

The scenario of CDB-I shows that 29.12 percent moved towards NCR of Delhi, 24.14 percent moved towards Maharashtra, 17.62 percent moved towards West Bengal, 9.58 percent moved towards Jharkhand, 7.66 percent moved towards Punjab, 4.60 percent moved towards Haryana, 2.30 percent moved towards Uttar Pradesh, 1.15 percent moved towards Gujarat, 1.15 percent moved towards Rajasthan, 1.53 percent moved towards Karnataka and 1.15 percent moved towards others State. The total migration from CDB-I towards class - I city accounts the highest percentage (65.90 percent) followed by the class-II (21.83 percent), smaller towns (9.57 percent) and rural areas (2.68 percent).

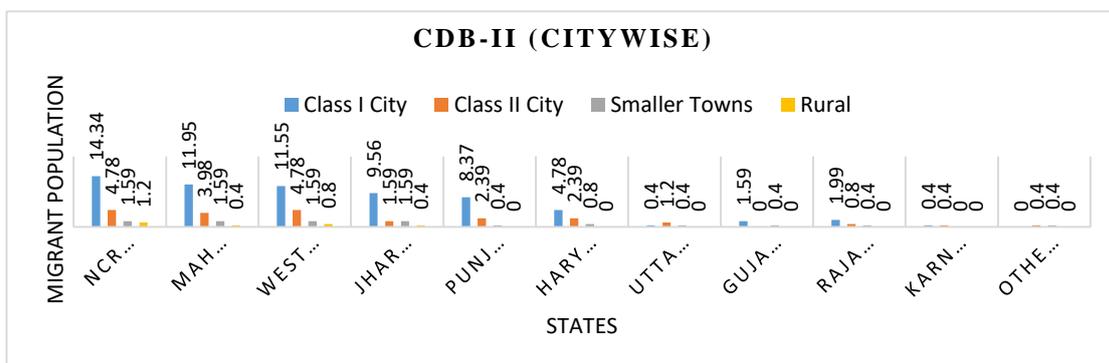
Figure 09: City-wise Rural Out Migration to different States from CDB-I (Motihari), East Champaran, Bihar



Source: Field survey, 2017

The overall scenario of CDB-II shows that 21.91 percent moved towards NCR of Delhi, 17.93 percent moved towards Maharashtra, 19.12 percent moved towards West Bengal, 13.15 percent moved towards Jharkhand, 11.16 percent moved towards Punjab, 7.97 percent moved towards Haryana, 1.59 percent moved towards Uttar Pradesh, 1.99 percent moved towards Gujarat, 3.19 percent moved towards Rajasthan, 0.80 percent moved towards Karnataka and 1.20 percent moved towards others state. The total migration from CDB-II towards class - I city accounts the highest percentage (64.94 percent) followed by the class-II (22.70 percent), smaller towns (9.16 percent) and rural areas (3.18 percent).

Figure 10 City-wise Rural Out Migration to different States from CDB-II (Tetaria), East Champaran, Bihar



Source: Field survey, 2017

The comparative analysis shows that percentage of rural migrants moving towards Class-I city and smaller towns is higher in CDB-I (Motihar) than CDB-II (Tetaria). On the other hand, percentage of migrants moving towards class-II city and rural areas is higher in CDB-II (Tetaria) than CDB-I (Motihari).

Now, the demand for 'specific' type of rural migrants at the 'place of destination' determines the degree of migration towards a specific region. For example, Punjab and Haryana are known as agricultural States and demand for unskilled labour is very high during sowing season and harvesting season of crops and thus, cheap, unskilled labour from Bihar migrates towards these two States. Likewise, Mumbai and Delhi pull rural migrants (unskilled) for constructional activities and other developmental processes. Contrary to this, skilled and semi-skilled have better employment opportunities in metropolitan cities and consequently, skilled rural migrants show high degree of migration towards metropolitan cities.

Religion and Caste Based Analysis of Rural Out-Migrants

The caste-based analysis of out-migrants is based on three broad categories of castes viz. General, Other Backward Classes (OBCs I and OBCs II) and Scheduled Castes (Dalit and Maha Dalit). Further, to give analysis an edge we have also considered Muslim population and their part in outmigration. Table 03 shows the data related to out-migrants based on religion and caste, population of religious community and social category, percentage of out-migrants in their respective religious group and social category and share of religious group and social categories in sample population. Out of 421 male out-migrants, highest percentage of 77.90 percent is shown by Hindu migrants (General class, OBCs, SCs) as compared to 22.09 percent of Muslim migrants.

The scenario of Hindu migrants can be analyzed more specifically in terms of various social categories viz. General class (Brahaman, Bhumihaar, Rajput, Kayasth etc.), Other Backward Classes [OBCs-I (Kanuu, Kewat etc.) and OBCs-II (Yadav, Kurmi, Kushwaha, Chanau etc.), Scheduled Caste [Dalit (Paswan etc.) and Maha Dalit (Musahar, Majhi, Dom etc.)]. Among Hindu migrants, highest percentage of 17.34 percent is shown by OBCs-I migrants followed by General class migrants (17.10 percent), Maha Dalit (15.91 percent) among SCs migrants, OBCs-II migrants (15.68 percent) and Dalit (11.88 percent) among SCs migrants.

Table 03: Share of Rural Migrants Based on Religion and Caste, East Champaran

Social Categories	Out migrants	Out migrants (percent)	Population of social category (Total)	Share in Sample population (percent)
General	72	17.10	220	13.39
OBCs				
OBCs – I	73	17.34	299	18.20
OBCs – II	66	15.68	284	17.29
SCs				
Dalit	50	11.88	231	14.06
Maha Dalit	67	15.91	312	18.99
Muslim	93	22.09	297	18.08
Total	421	100.00	1643	100.00

Source: Field survey, 2017

Table 03, the share of each category of caste/religion in sample population shows that the percentage of 18.08 percent are from Muslim community as compared to Hindu (81.92 percent). The Hindu migrants show varying share in their respective social categories, percentage of 18.99 percent is shown by Maha Dalit in SCs followed by OBCs-I (18.20 percent), OBCs-II (17.29 percent), Dalit (14.06 percent) among SCs and General class (13.39 percent). Table 04 shows that higher selectivity index belongs to General category (127.71), Muslims (122.18), and OBCs I (95.27) showing the higher rate of migration among these two sections of sampled population. Lower selectivity index belongs to OBCs II (90.69), Dalit (84.50) and Maha Dalit (83.78) categories showing the lower rate of migration among these two sections of sampled population. The rural migrants belonging to 'general category' shown high selectivity index (127.71) which justify their high degree of mobility as migrants. First reason

behind this was the better education which make people of general category more aware and eligible for better job opportunities at the place of destination. Secondly, hesitation due to social prestige associated with their caste prohibit the unskilled and semi-skilled rural people to work or get engaged in petty jobs at the place of origin.

The selectivity index of Muslims is also high (122.18) but comparatively low to rural migrants belonging to general category. The migration tendency of Muslims is more or less driven by circumstances. The prevailing poor economic conditions and less job opportunities, poor wages at the place of origin collectively rural Muslim migrants to other places in order to earn more money. If we talk about international migrants, then majority of them belonged to the category of 'rural Muslim migrants' migrating towards the Gulf countries.

The percentage of OBCs rural migrants [OBC-I (18.20), OBC-II (17.29)] is high but selectivity index [OBCs-I (95.27), OBCs -II (90.69)] is low. The higher percentage is due to the large number of migrants in OBCs category while the low selectivity index can be attributed to the fact that proportion of population of OBCs is high. Previously, the migration among the rural migrants belonging to Other backward classes (OBCs) took place due to the advancement in the tools, techniques and technology made the traditional workers (craftsmen, artisans etc.) to starve and migrate to other places in order to find alternate means of livelihood. Currently, the category of OBCs migrants comprises of marginal farmers and laborers which either migrate or get engaged in primary activities (selling of milk, farm labourers, shopkeepers etc.). The migration of scheduled castes (SCs) is characterized by two important factors viz. (i) poverty oriented (ii) feeling of 'social alienation'. Former push rural migrants of this category to survive and latter, push them to migrate in order to live life of dignity and societal acceptance.

Table 04: Selectivity Index (Religion and Caste Based) of The Rural Migrants, East Champaran, Bihar

Social Categories	Out migrants	Percentage among Out migrants	Percentage Share in Sample Population	Selectivity Index
General	72	17.10	13.39	127.71
OBCs				
OBCs – I	73	17.34	18.20	95.27
OBCs – II	66	15.68	17.29	90.69
SCs				
Dalit	50	11.88	14.06	84.50
Maha Dalit	67	15.91	18.99	83.78
Muslims	93	22.09	18.08	122.18
Total	421	100.00	100.00	100.00

Source: Field survey, 2017

Education of Rural Out Migrants

Table 05 shows the educational status in two prominent blocks of East Champaran viz. CDB-I (Motihari) and CDB-II (Tetaria). In CDB-I (Motihari), the highest percentage of 27.85 percent is shown by migrants with 'middle level' educational status followed by migrants with 'primary level' (26.03 percent), migrants with 'secondary level' (14.61 percent), illiterate migrants (10.96 percent), migrants with 'senior secondary level (10.05 percent)', migrants with 'above senior secondary level' (5.48 percent), migrants with 'graduation' (3.65 percent) and migrants with 'post-graduation level' (1.37 percent). On the other hand, In CDB-II (Tetaria), the highest percentage of 31.19 percent is shown by migrants with 'primary level' followed by migrants with 'middle level' (23.76 percent), illiterate migrants (17.82 percent), migrants with 'secondary level' (9.90 percent) migrants with 'senior secondary level (9.90 percent percent)', migrants with

'above senior secondary level' (3.96 percent), migrants with 'graduation' (1.98 percent) and migrants with 'post-graduation level' (1.49 percent).

Table 05: Percentage of Rural Migrants Based on Educational Background, East Champaran, Bihar

Educational Status	Percentage of Out migrants			
	CDB-I (Motihari)		CDB-II (Tetaria)	
	Number	Percent	Number	Percent
Illiterate	24	10.96	36	17.82
Primary	57	26.03	63	31.19
Middle	61	27.85	48	23.76
Secondary	32	14.61	20	9.90
Senior Secondary	22	10.05	20	9.90
Above Senior Secondary	12	5.48	8	3.96
Graduation	8	3.65	4	1.98
Post-Graduation	3	1.37	3	1.49
Total	219	100.00	202	100.00

Source: Field survey, 2017

The selectivity index (Table 06) shows that illiterates (68.48) and educated up to primary level (99.82) are less among migrants. In other words, illiterate and primary level educated migrants are bound by their literacy level to work as labourers. On the other hand, out-migrants attaining education up to secondary level (106.01), senior secondary level (109.07) and above senior secondary level (110.21) showed higher selectivity index which suggests that out-migrants are active in migration. Lastly, the out-migrants with highest selectivity index are graduates (190.00) and post-graduates (198.61) with high degree of migration. This clearly indicates that higher the selectivity index value, higher the rate of mobility.

Table 06: Selectivity Index (Education) of Rural Out Migrants, East Champaran

Educational Status	Out migrants	Percentage among Out migrants	Percentage among total Community Population	Selectivity Index
Illiterate	60	14.25	20.81	68.48
Primary	120	28.50	28.55	99.82
Middle	109	25.89	23.31	111.07
Secondary	52	12.35	11.65	106.01
Senior Secondary	42	9.98	9.15	109.07
Above Senior Secondary	20	4.75	4.31	110.21
Graduation	12	2.85	1.50	190.00
Post-Graduation	6	1.43	0.72	198.61
Total	421	100.00	100.00	100.00

Source: Field survey, 2017

Table 06 shows that selectivity index increases for the migrants belonging to education level of senior secondary (109.07), above senior secondary (110.21), graduation (190.00) and post-graduation (198.61) and this justify the fact that educated migrants have high degree of mobility. Also, educated migrants are more aware about the job opportunities, wages, programs and policies. The educated migrant possesses high level skills which make them eligible for good job opportunities and consequently, their wages/payments (salary) are much higher as compared to unskilled migrants. The higher wages of educated and skilled migrants result in higher remittances which in turn strengthens the local economy. In other words, lack of job opportunities as per the skills pushes the educated migrants towards metropolitan cities. The other aspect is that

migrants after completing school/college education migrate in order to pursue higher education.

Conclusion

Though the improper employment opportunities, poor wages and poverty are push factors for one and all rural migrants irrespective of religion, caste and education. The point of consideration over here is that migration need to be checked at the place of origin by providing considerable assistance (both monetary and non-monetary) to landless villagers so that they begin their 'start-up' or small scale industry. Moreover, government need to give due consideration on developing the 'magnet towns' so that migrants find suitable employment opportunities in their neighboring areas. The idea behind the magnet towns is to prevent the metropolitan cities or large urban centers to go beyond their carrying capacity and result in urban sprawl, urban poverty etc.

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