

AN INQUIRY INTO THE WELL-BEING OF MIGRANTS IN THE SLUMS OF DELHI

Namita Mathur*

This paper explores the condition of migrants in the slums of Delhi. It is based on the findings of 300 migrant households selected from two slum areas of Delhi. It analyses the indicators of migrants' economic well-being and employment in particular. This paper finds that duration of migration and the nature of job at entry level are key factors affecting migrants' occupational mobility; while informal ties have no significant effect on the occupational mobility of migrants. Caste and ownership of agricultural land in the villages significantly influence the family incomes of the migrants.

Keywords: Migration, Social sector policies, Informal networks, Occupational mobility, Family income

INTRODUCTION

A major objective of migration research has been to explain its occurrence. Research on migration, its causes and consequences has been of considerable interest among social scientists for a very long time. There is a large and contentious literature on this subject and this paper is an attempt to examine some of the core issues in the context of India with a focus on some of the factors explaining its occurrence. For India, several studies have placed emphasis on the factors that influence migration and the magnitude of their effect on the labour supply (Banerjee and Kanbur, 1981; Oberoi and Singh, 1983; Oberoi et al, 1989; Chakrapani and Mitra, 1995; Singh and Aggarwal, 1998; Kumar and Aggarwal, 2003; Ghaffari and Singh, 2004; Parida and Madheswaran, 2011; Chakraborty and Kuri, 2013; Patnaik et al, 2015). In the global context, there are a large number of factors that can be classified under different categories such as economic factors like agrarian change, capitalism and migration, economic development, urbanisation, employment and better education/health facilities; social factors like marriage and family migration; and political factors like forced displacement; and natural factors like climate change and natural calamities (Ness, 2013). Factors such as pressure of population resulting in a high land man ratio, low rate of investment in agriculture, unequal distribution of land ownership, capital intensive technologies, and promotion of schools in rural areas are the basic causes of migration (Oberoi and Singh, 1983). Migration from rural areas is not a choice, but is crucial to their existence (Society for Labour and Development, 2017). Though many migrants own land in the rural areas, often they have small landholdings and are dependent on the vagaries of nature.

As already stated, the paper looks at some aspects of migration related to India. In this context, there are two main sources of data on internal migration in India- the Census of India and National Sample Survey (NSS). In the Census, conducted by the Registrar General of India, migration is defined on the basis of 'place of birth' and 'place of last residence'. When a person is enumerated in Census at a place different from his/her place of birth, he/she would be considered a migrant by place of birth. When a person is enumerated at a place different from his/her place of last residence, he/she would be considered a migrant by place of last residence. In the 38th and subsequent rounds of NSS, a migrant was someone whose place of enumeration was different from his last usual place of residence (UPR) where the person had stayed continuously for at least six months. However, these definitions

* Assistant Professor, Indraprastha College for Women, University of Delhi

don't capture all the information related to migration. Of the three types of population mobility—permanent, seasonal/ circular and commuting, these two data sources only capture permanent and semi-permanent migration and underestimate labour mobility (Srivastava, 1998).

Overtime, migration has expanded as more people are migrating now than before. The migrant population as a proportion of the total population increased sharply after 1991. As per the place of last residence criterion, the migrant population in India rose from 27.4 per cent of the total population in 1991 to 30.6 per cent in 2001, and 37.5 per cent in 2011. Better transportation and communication facilities have alleviated the hardships associated with migration. Migrants are now able to easily travel longer distances and also remain connected with their families in the native areas.

Several longitudinal studies have traced the pattern of migration in different rural areas in India. They have all reported a rise in migration in the period 1993 to 2011. Surveys in Palanpur (Himanshu and Lanjouw, 2016) over the last seven decades have shown how agriculture is no longer an important source of employment in India with rural non-farm diversification. The population growth was exerting pressure on the village resources, which was eased off by migration. One could see rising migration from the village with the number of households with migrants doubling from 21 per cent in 1993 to 42 per cent in 2008. Based on Census 2001 and 2011, in the period 1991-2011, nearly 50 per cent of the male migrants from rural areas were in the age group 15 to 39 years. The migration of people in the prime working age implies that they moved out of rural areas as there were no avenues for employment there.

Datta (2016), based on her work in rural Bihar in 1981-2011, elucidated how labour mobility was always important, but became an important aspect of rural life in the past few decades. While 10 per cent of the adult males in rural Bihar had migrated for work in 1981, this proportion increased to 40 per cent in 1998. In 2009, 60 per cent of the households had at least one family member who was away for work as compared to 45 per cent in 1998. Migration of adult males from rural Bihar which was rising during the 1980s, increased in the 1990s and then continued in the 2000s had a profound social and economic impact (Jha and Thakur, 2013). Hence, migration has had a key role to play in affecting employment outcomes, incomes and occupational choices by changing the rural landscape.

Rural areas are also changing with people from different castes migrating in search of better avenues (Datta, 2016 and Tilche, 2016). Datta (2016) notes how there was an aversion among the lower castes to work in the villages. Many people from lower castes improved their social status by migrating to urban areas which provided them with employment opportunities in the informal sector. Large cities improve the wellbeing of people by being more productive and offering economic and non-economic opportunities (Mitra, 2014).

The remittances sent back home have improved the living standard in the states of origin, where many people have built pucca homes and provided for children's education. However, many migrants do not have access to bank accounts or post office accounts to transfer the money. Moreover, the temporary nature of work in the informal sector, where most migrants are employed is a cause of concern for the families. Given the complexity of the nature of migration, there are no simple theories that can adequately explain migration patterns. The Todaro model (1969) had argued that on migration, people first work in the informal sector and then gradually move to the formal sector. Some (Breman 1976; Standing 1977; Mitra 2006) have also argued that in reality, people rarely make this transition and generally remain where they are. A report by the International Labour Organisation (ILO) has revealed that in India, 81 per cent of all the employed people were making a living by being in the informal economy.

In spite of the considerable contribution of the unorganised sector in providing employment opportunities, a vast majority of the migrants employed here face a constant threat of eviction, removal and lack adequate social protection. There is a need to determine how government intervention in the form of labour regulation, social welfare schemes and urban employment programmes can protect the interests of migrants in urban areas. There is a lacuna in the literature on ways of improving labour market outcomes and ensuring basic entitlements to migrant workers. Delhi is one of the cities in India that receives the maximum number of migrants from its neighbouring states like Uttar Pradesh, Bihar, Rajasthan, Haryana and Punjab. Several migrants end up living in the slum areas of Delhi with inadequate access to basic amenities. In this context, field work was carried out in two slums of Delhi, namely Kusumpur Pahari and Trilokpuri. While Kusumpur Pahari is a notified slum located in South-West Delhi and has been inhabited since the 1970s, Trilokpuri is a resettlement colony in East Delhi.

The paper is organised as follows. The next section deals with some of the aspects of the socio-economic conditions of the migrants living in the slum areas of Delhi. Section III attempts to explore the structure and pattern of employment and income of migrants in the survey areas. Econometric results supporting the key findings regarding occupational mobility and income, based on the survey are explained in Section IV, which is followed by the conclusion in Section V.

A PROFILE OF SOCIO-ECONOMIC CONDITIONS

Delhi is one of the fastest growing cities in the country. Like many other large cities in the world, Delhi suffers from urbanisation problems such as congestion and scarcity of resources. Delhi was a Union Territory till 1991 and considered a single district for the Population Census 1991. With the passing of the ‘National Capital Territory of Delhi Act, 1991’, its nomenclature was changed to National Capital Territory (NCT) of Delhi and in 1997, the Government of NCT of Delhi created nine districts and 27 sub-divisions.

Table 1 : Population growth of Delhi and India

Year	Delhi		India	
	Population (in millions)	Decadal growth rate	Population (in millions)	Decadal growth rate
1961	2.7	-	439.2	-
1971	4.1	52.90	548.2	24.80
1981	6.2	53.00	683.3	24.66
1991	9.4	51.45	846.4	23.87
2001	13.9	47.02	1028.6	21.52
2011	16.8	21.21	1210.9	17.72

Source: Census of India, 1961-2011

According to Census 2001, the population of Delhi was 14 million, which increased to 16.8 million in the 2011 Census. While the decennial growth of population of India was 21.52 per cent between 1991 to 2001, and 17.72 per cent in 2001-2011; the corresponding rate for Delhi was 47.02 per cent and 21.21 per cent in 1991-2001 and 2001-2011 respectively. The higher rate of population growth of Delhi can be accounted for by rising migration from other states due to work/employment opportunities in Delhi. A large number of these migrants end up living in the slum areas in Delhi.

According to the NSS, a slum is defined as “A compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions”. The Slum Areas Act (Improvement and Clearance) of the Delhi State follows the same definition with respect to the definition of a slum as the NSS; except that it takes into account settlements with at least 50 households.

In 2012, about 6343 slums were in existence in urban Delhi with approximately 10.2 lakh households (NSS, 2012-13). Approximately 29 per cent of the slums in Delhi had 20-60 households residing in them and 71 per cent slums had more than 60 households. The average households per slum was 161. Nearly 90.25 per cent of the slums were on public land. According to Census 2011, 1.8 million people resided in slums in Delhi which accounted for 10.6 per cent of the population of NCT of Delhi. While 4 per cent of the total slum population of India was in NCT of Delhi in 2001, this figure went down to 2.7 per cent in 2011 (Handbook of Urban Statistics, 2019).

Several studies (Vijay D 2013; Acharya S et al 2017; DRRAA 2017; SLD 2017) have been carried out to study the condition of migrants living in the slum areas in Delhi. All of them reveal the dismal conditions under which the migrant labour households have to eke out a living. A survey of 200 migrant workers conducted in Gurgaon by the Society for Labour and Development (SLD) in 2014 indicated that the low wages of the workers, their inhuman living conditions, social and political exclusion and the unsafe working conditions of migrant women are a cause of concern. Moreover, inter-state migrants face a lot of difficulties in their lives such as lack of identity proof leading to political exclusion, lack of access to subsidised ration, free schooling and lack of access to social sector schemes.

The survey in Kusumpur Pahari and Trilokpuri analysed several aspects of the socio-economic conditions of the migrants in Delhi. Kusumpur Pahari is a recognised slum located in Vasant Vihar. It has 4909 households (Delhi Shelter Board 2017) and spans an area of 173,251 sq metres. It has been classified as a Jhuggi Jhopri Cluster (JJC) and Jan Suvidha Complex (JSC) by the Delhi Urban Shelter Improvement Board. It is located near the posh locality of Vasant Vihar amidst sprawling bungalows and is a clear example of a dual society with underdevelopment and poverty surrounded by prosperity. It houses more than two lakh migrants from Uttar Pradesh, Bihar, Rajasthan, Jharkhand, West Bengal, Andhra Pradesh and Tamil Nadu. Most of the people are employed in the unorganised sector as daily wage labourers, security guards, domestic workers, labourers, drivers, auto drivers, construction workers and petty traders.

Kalyanpuri and Trilokpuri in East Delhi were resettlement colonies created to house the people who had been displaced by the slum clearances in south and central Delhi in the Emergency in 1976. They were not moved into model neighbourhoods with drainage, plots, schools, water supply and electricity as promised, but rather were given plots of 25 square yards to build their houses. The total population is approximately 150,000 living in 36 blocks.

Kusumpur Pahari has a larger number of long-term migrants than Trilokpuri. Nearly 83.3 per cent of the sample of migrants in Kusumpur Pahari had migrated more than 15 years ago, while the corresponding figure for Trilokpuri is 61.3 per cent. Most of the migrants in the former were the ones who came to Delhi in the 1970s from the neighbouring states of Uttar Pradesh, Rajasthan, Bihar, Haryana and the southern states of Andhra Pradesh and Tamil Nadu. Many of these people are original inhabitants of the area who occupied whatever land was available in Kusumpur Pahari, to build their houses. The area of Kusumpur Pahari was a vast piece of public land that was illegally

occupied by the migrants. Gradually, as more and more people came here, they built houses wherever they could get land in the area, leading to a haphazard numbering of the houses. Hence, most of the people are living in their “own” houses now without any title to their property signifying ownership.

In contrast, Trilokpuri is a resettlement colony. Its original inhabitants are those who were already staying here in illegal ‘kuchha’ houses in the 1980s and those who were moved from other slums of Delhi. Several people here were given land by the government to build their ‘pucca’ houses, and their illegal jhuggis were demolished in the 1980s. However, many of the original inhabitants have now moved out of the colony to other middle-income colonies and have given out their houses on rent. Hence, several respondents from Trilokpuri are those who moved to Delhi in the 1990s and are living here in rental accommodations.

A total of 300 migrant households were interviewed with 150 households selected at random from each of the two slums. 56 per cent of the family members surveyed were males and 96 per cent of the heads of the households were in the age group 20-60 years. The average age of the head of the household for 300 households was 41.2 years and the average age at arrival was 21.1 years for both the slums taken together. This corroborates the fact that it is mostly the male members in the prime working age who migrate. The typical migrant on arrival is very young, and in most cases, is forced to migrate for employment due to a dearth of employment options in the native rural areas. Often, the male member is the one to migrate first, and the other family members migrate later; or the other family members continue to reside in rural areas while the male member moves to the city. The field survey revealed that in 61 percent cases, the male head of the household migrated first, with the family following later, and in some cases, the family continued to live in the native place due to the uncertainty of employment in the urban areas. Female migration is generally on account of marriage, joining a family member or moving with the family. In Census 2011 as well, nearly 56 per cent female migrants had migrated due to marriage and 19 per cent had moved with the family, depicting associational mobility.

Income is one of the most important determinants of the socio-economic position of the migrant families. It is affected by several factors such as education levels of family members, nature of employment, years since migrated, gender and age of the head of the household, caste, religion, number of dependent family members and the number of working members.

Table 2 below indicates the difference in average household monthly per capita income in the two slums. The household per capita income has been calculated by adding the monthly income of all the working members of each household and dividing by the total family members.

Table 2: Average Household Monthly Per Capita Income

Name of slum	Mean Household Income (in rupees)	Average Household Size	Mean Household Per Capita Income (in rupees)	Standard Deviation in Mean Per Capita Income	Skewness
Kusumpur Pahari	17828.7	4.82	3774.23	1936.8	1.65
Trilokpuri	16702.7	4.03	3918.01	2378.8	2.37
Total	17266	4.47	3846.12	2130.7	2.13

Source: Field Survey

Though the mean monthly per capita income for Trilokpuri is greater than that for Kusumpur Pahari, there are also greater inequalities in the former.

Another possible factor that can impinge on the wellbeing of migrants is the duration of migration. There is a common notion that as the duration of migration increases, the migrants rise in the socio-economic ladder. However, a study by Mitra (2006) has revealed an absence of a significant relationship between wellbeing and duration of migration. However, Mitra also argues that though there is no evidence of a significant relationship between duration of migration and wellbeing, the fact that migrants don't return to rural areas and continue to live in harsh conditions shows that they have benefitted from migration and expect to improve their position in the future. Moreover, there are also lack of avenues for employment in the rural areas which dissuades them from returning to their native place.

Table 3: Years of Migration and Average Household Per Capita Income

Years of Migration	Number of households	Household PCI
0-1 years	2	1876.19
1-5 years	17	3458.33
5-10 years	30	4153.06
10-15 years	34	3508.33
Above 15 years	217	3905.15

Source: Field Survey

=577.098, Significant, ($p=0.000$), $p<0.05$

=1.387, Significant, ($p=0.000$), $p<0.05$

However, the value of the Chi-square and Phi show the presence of a statistically significant relationship between the duration of migration and the level of per capita household income in the field survey. The lowest per capita income is of those households who migrated less than one year ago or less than five years ago. This can be explained by the fact that these households do not have secure employment, are mostly living in rented accommodations, do not have ration cards and are not able to avail of the government's welfare schemes due to an absence of address proof.

The education of the head of the household is an important determinant of well-being as it can affect the standard of living of the entire family. Several studies have depicted how a higher education level of the head of household improves the employment outcomes, education of the children, health status, their awareness of their rights and various social welfare schemes. The dismal level of education of the heads of households in the slums gives an indication of the level of living of the people. 16 per cent of the heads of the household in the survey were illiterate, and 60 per cent had not passed the secondary level.

Employment is a key measure of the wellbeing of migrants as it is a primary reason for their migration. There was a rise in the proportion of men migrating for employment from 30 per cent in Census 1991 to 37 per cent in Census 2001. However, this figure went down to 27 per cent in Census 2011.

More than 54 per cent of the migrants in the sample worked as farmers on their own land in rural areas. However, 20 per cent were unemployed indicating the lack of avenues for regular employment

in rural areas. This explains why people choose to migrate to urban areas. Rawal and Bansal (2019) have explained using the Periodic Labour Force Survey (PLFS), how there was a fall in the worker population ratio for males in rural areas from 82 per cent to 75.2 per cent from 2011-12 to 2017-18. This implies that 25 per cent of the working age men in rural areas were unemployed. In urban areas also, the worker population ratio fell from 78.4 per cent to 74.2 per cent from 2011-12 to 2017-18. They have also illustrated how there was a fall in the proportion of population employed in agriculture in rural areas (both self-employed and as labour) from 32.3 per cent to 28.4 per cent. There was also a rise in the proportion of population employed in construction in urban areas from 5.8 per cent to 6.2 per cent during the same period. The proportion of population that was unemployed also increased in both rural and urban areas. During the period 2012-16, most of the employment decline was in the unorganised sector, which implied that the most vulnerable section of people were the ones who suffered the most (Abraham, 2017).

The high levels of unemployment and the poor quality of employment in urban areas is a matter of concern as a large proportion of the employment generated require low levels of skill and give low returns. There has been an informalization of formal sector employment as well with several migrants being informally employed in the formal sector. Though there are several Acts¹ such as the 'Inter State Migrant Workers' Act' and the 'Contract Labour Act' to protect the interests of workers, they apply to a small section of the labour force, who are employed in the formal sector. A majority of the labour force is employed in the informal sector or informally employed in the formal sector and are outside the purview of the labour laws. Informal workers do not have secure employment contracts, social security benefits or workers' representation. Often, the employment is contractual. Since 1991, there has been a tendency to employ contract workers instead of regular ones as it makes production more flexible, they can be paid lower wages and they are not entitled to non-wage benefits (Papola and Sharma, 2015). In the field survey, nearly 90 per cent of those who were earning 'regular wages', could be terminated from their jobs without any notice period.

61 per cent of the migrants were not sending any remittances back home. This is partly due to not having any family members back home, the family members in the native areas being self-sufficient or the migrants not earning enough to be able to send any money back home. Only 13 per cent of the migrants received help in the form of cash or kind from their native areas, while 87 per cent did not receive any help. Approximately 9 per cent of the migrants took up supplementary employment in their native areas; an indication of the temporary nature of migration and also the possibility of supplementary income for them.

Informal contacts have an important role to play in providing information to the migrants prior to migration. Informal contacts comprise of caste kinship bonds, co-villagers and relatives who are important information channels for prospective migrants. They not only provide information prior to migration but also assist in job search after migration. Studies have shown that often informal contacts affect the kind of employment that migrants take up when they move to the city. These networks provide people with mutual benefits and often the decisions made by one family member affect the decisions and wellbeing of other family members as well (Stark 1995, Mitra 2004). Mitra (2010) has demonstrated how some of these networks reduce upward mobility as they remain confined to certain occupations and areas due to information asymmetry. 26 per cent of the migrant heads of the households took up jobs as casual labour when they entered the city, 63 per cent as regular wage workers and 11 per cent were self-employed. Table 4 below indicates a significant relationship between the nature of job at entry and the kinship ties.

1 Under the new labour legislation, all the 44 labour laws are being merged into four Codes.

Table 4: Rated Kinship Ties and Nature of Job at Entry

Nature of Job at Entry	Kinship Ties					
		Parents (%)	Brother/ Sister (%)	Relatives (%)	Villagers (%)	On Own (%)
	Casual Labour	21.9	22.8	20.2	29.9	27.5
	Regular Wages	68.8	63.2	73	57.1	61.7
	Self-employed	9.4	14	6.7	13	10.7
	Total	N=32	N=57	N=89	N=77	N=43

Source: Field Survey

=17.967, Significant, ($p=0.021$), $p<0.05$

STRUCTURE AND PATTERNS OF EMPLOYMENT AND INCOME

When one analyses employment, there are two aspects that need to be studied-employment at entry level in the city and current employment status.

Employment at Entry Level

An attempt is made to see the factors which influence the employment at entry level. The factors that possibly influence the employment status at entry level are the presence of contacts and the education of the head of the household. It is evident that education influences the nature of job at entry level in a positive way. On the other hand, one cannot be sure of the impact of the presence of contacts on the nature of employment. The presence of contacts would influence the possibility of getting employment in a positive way, but studies have also shown that in the long run it could be possibly reduce occupational mobility. Migrants tend to remain in areas and occupations where they have kinship ties, thus restricting their upward mobility in some cases. Table 5 shows a significant relationship between the presence of contacts and the nature of job at entry.

Table 5: Employment Status at Entry and Presence of Contacts

Nature of job at entry level		Contacts	On own
	Casual Labour	61	21
	Regular wage	167	17
	Self-employed	27	5
	Total	255	43

Source: Field Survey

=12.353, Significant, ($p=0.002$), $p<0.05$ =0.204, Significant, ($p=0.002$), $p<0.05$

The education level of the head of the household could also influence the nature of job at entry in a positive way. It is likely that the higher the education level of the head of the household, the better would be the nature of the job one gets after migrating to the city. There is a significant relationship between the education level of the head of the household and the nature of job at entry level in the city (Table 6). Hence, we find that the education level does influence the nature of job at entry.

Table 6: Employment Status at Entry and Education

Nature of job at entry level		Illiterate	Primary	Class 6-9	Secondary	Class XI-XII	Bachelor's degree
	Casual Labour	25	21	21	14	1	0
	Regular wage	18	33	39	56	27	11
	Self-employed	5	12	5	3	5	2
	Total	48	66	65	73	33	13

Source: Field Survey

=43.924, Significant, ($p=0.000$), $p<0.05$

=0.384, Significant, ($p=0.000$), $p<0.05$

Often, people change their employment status as they remain in the city for a long period of time. Nearly 66 per cent of the migrant heads of households were currently working as regular wage workers, 19 per cent were self-employed, 12 per cent were working as casual labour, 1.3 per cent were voluntarily unemployed and 0.7 per cent were unemployed. Table 7 depicts a significant relationship between the employment status of the migrant heads of households when they enter the city and their current employment status.

Table 7: Employment Status at Entry and Current Employment Status

Employment Status on Entry						
Current Employment Status		Casual Labour	Regular Wages	Self-Employed	Home Maker	Total
	Casual Labour	35	1	1	0	37
	Regular Wages	24	169	5	0	198
	Self-Employed	17	14	26	0	57
	Unemployed	2	0	0	0	2
	Voluntary unemployed	4	0	0	2	6
	Total	82	184	32	2	300

Source: Field Survey

=224.224, Significant, ($p=0.000$), $p<0.05$

=0.867, Significant, ($p=0.000$), $p<0.05$

Current Employment

In order to analyse the current employment status of the head of the household, we use the current income of the head of the household as a proxy, instead of the employment category only. The employment categories-casual labour, regular wages and self-employed are broadly defined. This makes it difficult to gauge the standard of living of the migrants purely based on the employment status. For example, guards, gardeners, domestic helps, teachers and accountants are all grouped under the category, 'regular wages', though they differ considerably in their skill set and earnings.

Figure 1: Employment Status of the Head of the Household and Education

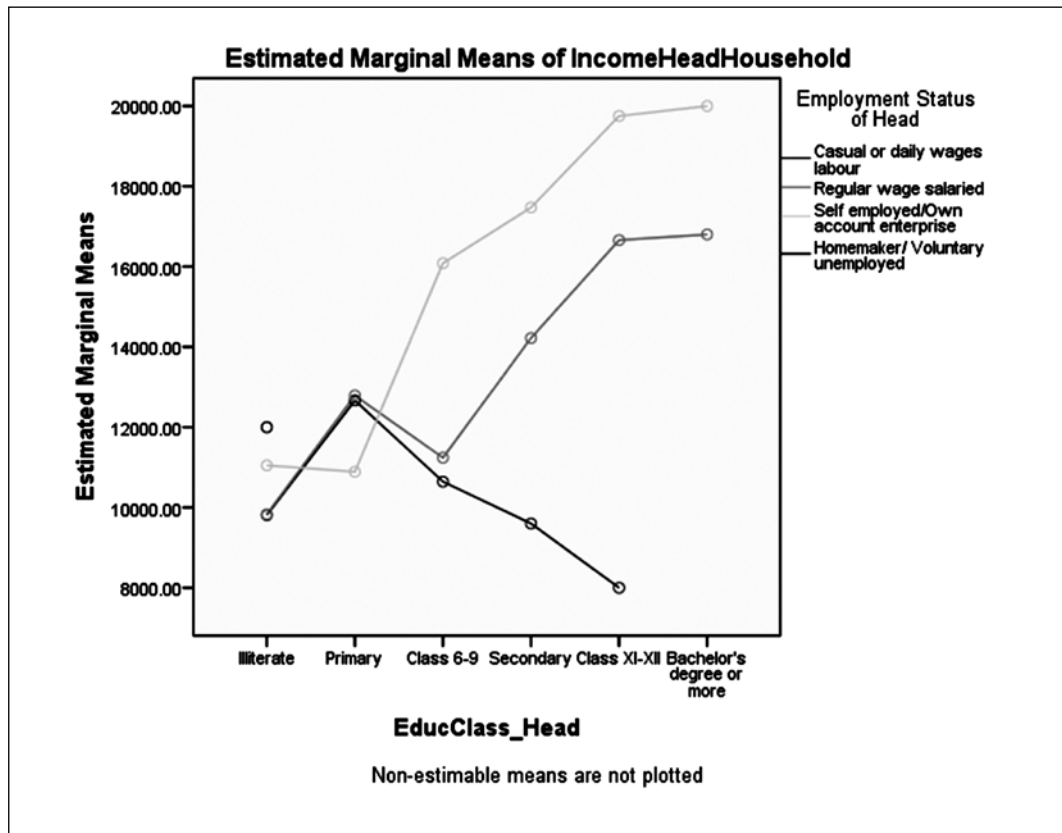


Figure 1 depicts that education does not improve the earnings of someone working as a casual labourer. In fact, the income reduces for casual workers as their education level improves. This implies that education status becomes irrelevant for casual labourers. For those who earn regular wages or are self-employed, education improves the income levels. An interesting finding is that there is no difference in the income level of those who have cleared senior secondary and those who are graduates, when they earn regular wages or are self-employed.

Occupational Mobility

An important concern is to see if migrants are able to improve their economic wellbeing as they continue to remain in the city for a long period of time. Todaro (1969) had envisaged that when people migrate from rural to urban areas, they initially work in the traditional sector. Over a period of time, they make a transition to the formal sector or modern sector. To gauge the economic wellbeing of migrants and see if they have upward mobility as they work in the cities, we use their 'occupational mobility' as a proxy. If migrants are occupationally mobile after migration, it can be conceded that they are better off than what they were when they first moved to the city. A lack of occupational mobility could imply that migrants are not upwardly mobile and remain constrained. To examine the factors affecting occupational mobility, binomial logistic regression analysis has been used with various explanatory or predictor variables.

Some Causal Correlates

Occupational mobility has been taken to be a function of the duration of migration, the presence of informal contacts or kinship ties and the nature of job at entry. Based on the field survey, an attempt has been made to determine the probability of the migrant heads of households being occupationally mobile. In Table 8, those who are occupationally mobile are represented as 1, and those who have not changed their occupation since migration are represented as 0. All the predictor variables are categorical variables.

Occupational Mobility = F (Duration of migration, Nature of job at entry, Contacts)

The time duration dummy, 'duration of migration', has been classified into 0-5 years (Years of migration (1)), 5-15 years (Years of migration (2)) and more than 15 years has been taken as the base (Years of migration). It is likely that as the duration of migration increases, migrants become more occupationally mobile.

The 'nature of job at entry' is the second predictor variable. This has been included as a predictor variable to explore if the employment at entry level has a bearing on the prospects of future employment. There are three categories of employment at entry level-casual labour, regular wages and self-employed. Self-employed has been taken as the reference category.

The effect of 'contacts' on the probability of being occupationally mobile has been explored by classifying all those who had some informal contacts in Delhi prior to their migration, as 1. Those who did not have any informal contacts or kinship ties in the city are taken as the base or comparison category. It is possible that when people have kinship ties in the city, they become constrained by the occupations and localities of their contacts. Hence, in the long run, it is likely that they are not very occupationally mobile.

Table 8: Regression Result of Logit Model for Occupational Mobility (Model 1)

	Coefficient	Wald	p
Constant	-0.736 (.479)	2.060	.151
Years of Migration		8.038	.018
Years of Migration (1)	-1.641 (0.194)**	4.500	.034
Years of Migration (2)	-0.706 (0.494)**	4.230	.040
Self-Employed		12.834	.002
Casual labour	.932 (2.539)**	4.047	.044
Regular Wages	-.097 (.907)	.050	.823
Contacts (1)	.037 (1.038)	.112	.921
Cox & Snell R square	0.082		
Nagelkerke R square	0.114		
Omnibus Tests (Chi-square)	25.126*		.000
Hosmer and Lemeshow test (Chi-square)	2.101		.835
Observations	300		

Note: Values in the parenthesis are odd ratio coefficient;

*1 percent level of significance, **5 percent level of significance, ***10 percent level of significance

The table depicts the relationship between the independent and the dependent variables, where the dependent variable is on the logit scale. The estimates give the amount of increase or decrease in the predicted log odds of changing one's occupation in the city after migration, that would be predicted by a unit change in the explanatory variable, holding other explanatory variables constant. The predicted probability of the event is coded as 1 (having occupational mobility) rather than with 0 (not having occupational mobility), which is the predicted probability of the other event.

The Chi-square value is significant showing that the independent variables taken together, have a significant effect on the dependent variable. A non-significant coefficient on the Hosmer and Lemeshow test shows that the data fit the model well. The Nagelkerke R square, which shows the explained variation by the model is 0.114. The prediction before adding the determining variables was 66.9 per cent, and the classification improved to 70 per cent by adding the predictor variables.

The table shows that the duration of migration or the years of migration is a significant factor affecting the probability of a household having occupational mobility. The default category for the duration of migration is those who have been in the city for more than 15 years. Those who have been in the city for 0-5 years, represented by Years of migration (1), are significantly different from those who have been in the city for more than 15 years and nearly 0.194 times likely to be occupationally mobile than the reference category (15 years and above). Those who have been in the city for 5-15 years are represented by Years of migration (2) and are also significantly different from those who have been in the city for over 15 years and are 0.494 times more likely than the reference category (15 years and above) to be occupationally mobile. Hence, those who have been in the city for 5-15 years are more occupationally mobile than those who have been in the city for 0-5 years, but less occupationally mobile than those who have been in the city for over 15 years. As the duration of migration increases, the probability of migrants being occupationally mobile increases. As migrants remain in the city for longer durations, they understand the labour market better and are more capable of changing their occupation to improve their economic status.

The nature of job at entry is also a significant factor affecting the probability of being occupationally mobile if one worked as a casual labourer or was self-employed at entry. If a migrant head of household was a casual labourer at entry, he was 2.54 times more likely than someone who was self-employed, to change his occupation overtime. However, if a migrant head of household was earning regular wages at entry, he was not significantly different from someone who was self-employed at entry, to change his occupation overtime. Most migrants don't have secure jobs when they enter the city. They end up working as casual labour at construction sites or as daily wage labourers in factories. They often continue their job search and change their occupations once they get a better opportunity. Hence, they end up being more occupationally mobile than those who are self-employed as the latter rarely change their occupations.

The presence of kinship ties is not a significant factor affecting the probability of being occupationally mobile. Having kinship ties does not in any way restrict migrants from being occupationally mobile. The data do not in any way support the hypothesis that kinship ties affect migrants' occupational mobility.

Hence, we find that duration of migration, and working as casual labour or being self-employed at entry level affect occupational mobility. But earning regular wages at entry and having informal contacts in the city do not affect the probability of changing one's occupation later to improve economic well-being.

Income

Family Income is used as a proxy for income. Family income refers to the total income earned by all the family members of a household. The head of the household is usually assisted by the other family members in earning. Thus, this income includes the income earned by the head of the household, his spouse and sometimes, his adult children. The spouses were usually engaged as domestic helps and the children, who were more educated than the head, were employed as regular wage employees in several cases.

Income has always been one of the best indicators of the wellbeing of households. The higher the family income, the better off the household would be. Based on the survey of 300 migrant households, it was revealed that 160 households had monthly family income below 15000 rupees, 126 had monthly family income between 15000 to 35000 rupees and 14 households had monthly family income above 35000 rupees.

Using multinomial regression analysis, an attempt has been made in this section to determine the probability of a household to be in any of the above monthly income categories. There are three categories of households based on their monthly family income - less than 15000 rupees, between 15000 and 35000 rupees and more than 35000 rupees. The probability of being in a particular family income category has been taken as a function of the state category, the education of the head of the household, the years since migration and owning agricultural land in the native area.

These have been explained in the equation given below:

Family Income = F (proportion of working members, state category, education of the head of the household, years since migration, ownership of agricultural land in the native area)

The first predictor variable is the proportion of working members, which is a continuous variable. It is likely to be positively associated with family income.

The second determining variable is state category. The different categories are General category, Other Backward Classes (OBC), Scheduled Caste (SC) and Scheduled Tribe (ST). Scheduled Tribes have been taken as the reference category. It is possible that the migrants belonging to the general category have higher family incomes than the other categories.

The third predictor variable is the education of the head of the household. The different categories are illiterate, those who have studied up to primary level, those who have studied up to Class VI-IX, those who have completed up to secondary education, those who have studied up to Class XI-XII and those with a bachelor's degree or an equivalent degree or above. The last category has been kept as the base category. It is likely that a more educated head of the household will not only earn more, but also ensure that other family members are educated, thus increasing their earning capacity as well.

The next predictor variable is the duration of migration which has been classified as less than five years, 5-15 years and more than 15 years, which has been taken as the base. As the duration of migration increases, it is likely that the spouses start working. As the children grow up, they are also likely to contribute to the family income.

The last variable is ownership of agricultural land. Households who own land in the native areas are likely to be economically better off than those without land, who may have migrated due to 'distress migration'.

Table 9: Regression result of Multinomial Logit Model for Monthly Family Income (Model 2)

	Family Income 0-15000			Family Income 15000-35000		
	Coefficient	Wald	p	Coefficient	Wald	p
Constant	17.295*	83.761	.000	17.024*	142.712	.000
Proportion of working members	-3.020 (.049)**	5.270	.022	-1.710 (.181)	1.820	.177
Category-General	-14.901 (3.37E-007)*	120.600	.000	-14.535 (4.869E-007)*	388.835	.000
Category-OBC	-14.091 (7.594E-007)*	74.993	.000	-14.153 (7.133E-007)*	147.603	.000
Category-SC	-14.542 (4.836 E-007)*	161.505	.000	-14.274 (6.323E-007)		
Category-ST						
Illiterate	.655 (1.924)	.219	.639	.308 (1.360)	.055	.815
Education: Upto primary level	.946 (2.576)	.488	.485	.020 (1.020)	.000	.988
Education: Class VI-IX	15.207 (4021660.482)	.001	.977	13.973 (1170192.473)	.001	.979
Education: Secondary	2.762 (15.832)***	2.986	.084	1.906 (6.723)	1.536	.215
Education: Class XI-XII)	1.111 (3.039)	.592	.442	.516 (1.675)	.142	.706
Education: Bachelor's degree or above						
Years since migration (0-5 years)	15.983 (8738915.865)	.000	.987	14.316 (1649489.616)	.000	.988
Years since migration (5-15 years)	14.340 (1688971.990)	.001	.977	13.585 (794018.182)	.001	.978
Years since migration (15 years and above)						
Ownership of Agricultural land in native area	-1.421 (.242)***	3.814	.051	-.851 (.427)	1.393	.238
Cox & Snell R square	0.173					
Nagelkerke R square	0.213					
Omnibus Tests (Chi-square)	57.036		.000			
Observations	300					

Note: Values in the parenthesis are odd ratio coefficient;

*1 percent level of significance, **5 percent level of significance, ***10 percent level of significance

The reference category is monthly family income above 35000 rupees per month

The Chi square value is significant implying that the predictor variables taken together have a significant effect on the dependent variable. The Nagelkerke R square, which shows the explained variation by the model is 0.213 and Cox and Snell R square is 0.173. The dependent variable is on the logit scale showing the probability of a migrant household being in a particular family income class, for a unit change in the predictor variables, holding other variables constant. The comparison is made with case of having family income above 35000 rupees per month.

Caste turns out to be a significant variable affecting the probability of a household being in a particular income bracket. Migrants belonging to the general caste have a lower probability of being in the income bracket of 0-15000 rupees per month compared to scheduled tribes. Similarly, there is a significant difference in the probability of migrant households of OBC and scheduled castes, being in the different family income brackets compared to scheduled tribes.

The education of the head of the household is not a significant factor affecting the probability of migrant households being in different family income brackets. It appears that less educated heads of households could also have family members who are educated and earn correspondingly. Hence, the education of the head does not significantly affect family income.

The duration of migration does not turn out to be a significant factor affecting the probability of family income being in a particular income bracket. People with varying durations of migration are found in different family income groups.

The last predictor variable, ownership of agricultural land is significant for migrants with family income below 15000 rupees per month. Table 9 depicts a negative relation between having agricultural land in the native area and the probability of having income less than 15000 rupees per month. However, there is no such significant relation between owning agricultural land and having family income between 15000 and 35000 rupees per month.

CONCLUSION

The study has shown that an overwhelming majority of migrants in Delhi's slums are typically employed in the informal tertiary sector. They earn low wages, are not protected by any social protection scheme and face a constant threat of removal and eviction.

Econometric results support the hypothesis that as the duration of migration increases, the household per capita income also increases. Those who arrived in the city 0-5 years ago earn the lowest income. The nature of employment at entry is significantly affected by informal ties and the education of the head of the household. There is a significant relation between the nature of job at entry and the current employment status of the migrants. The occupational mobility is dependent on the duration of migration. As migrants continue to stay in the city for longer durations, they become more aware of the labour market and are able to look for better employment opportunities. However, the nature of job at entry significantly affects occupational mobility. Those who worked as casual labourers when they entered the city, tend to be more occupationally mobile than those who were self-employed. This seems rational as most migrants work as casual labour on construction sites, factories when they migrate. But they remain occupationally mobile and try to change their occupation as soon as they get the opportunity. An interesting fact borne by the results is that while informal contacts have a significant impact on the nature of job at entry, they don't significantly influence the occupational mobility of the migrants. Hence, one can reasonably assume that informal ties do not constrain the migrants in any way by tying them down to particular employment options.

Econometric results support the hypothesis that the family income of the migrants is significantly affected by the caste of the household. General caste households have the least probability of being in the lower most income bracket. Secondly, having agricultural land in the villages also reduces the probability of being in the lower most income bracket. Migrants who have land in the villages are economically better off than the landless migrants, as the latter may have migrated in distress. Moreover, those with land may also be better educated than the landless, and hence have a higher earning capacity. Incidentally, family income does not include any income earned by the migrants in their villages.

The study has shown how migrants tend to improve their wellbeing in the city. They become occupationally mobile and are able to increase their incomes. However, they remain constrained to the informal tertiary sector and continue to live in poverty with only limited improvements in their socio-economic condition. Urban employment programmes, better access to education, health and sanitation facilities is pertinent to pull them out of the abject conditions in which they live in the slum areas.

ACKNOWLEDGEMENTS

The author would like to thank Professor Praveen Jha for his invaluable contribution towards this research work. His suggestions and comments have provided the expertise during the course of this research.

FUNDING

The author received no financial support for the research, authorship, and/or publication of this article.

References / Notes

- Abraham, V. (2017), "Stagnant Employment Growth", *Economic and Political Weekly*, Vol. 52 (38).
- Acharya S, Sen S, Punia M, Reddy S (2017), "Marginalization in Globalizing Delhi: Issues of Land, Livelihoods and Health", Springer.
- Aggarwal, S C (2016), "Structural Change, Jobless Growth and Informalization of Labor: Challenges in Post Globalized India", 34th IARIW General Conference, Germany.
- Banerjee, B. and Kanbur, S.M. (1981), "On the Specification and Estimation of Macro Rural-Urban Migration Functions: With an Application to Indian Data", *Oxford Bulletin of Economics and Statistics*, Vol.43 (1).
- Breman, J. (2001), "An Informalised Labour System", *Economic and Political Economy*, Vol. 36 (52).
- Chakraborty, D. and Kuri, P.K. (2013), "Rural-Urban Migration and Urban Informal Sector in India: An Inter State Analysis", *International Journal of Current Research*, Vol. 5(4).
- Chakrapani, C. and Mitra, A. (1995), "Rural to Urban Migration- Access to Employment, Incidence of Poverty and Determinants of Mobility", *Indian Journal of Social Work*, Vol.56 (3).
- Datta, A. (2016), "*Migration from Rural Bihar: Insights from a Longitudinal Study (1981-2011)*", The Changing Village in India, Oxford University Press.
- Delhi Rozi Roti Adhikar Abhiyan & Satark Nagrik Sangathan. 'Peoples' Assessment of the Implementation of Transparency, Grievance Redress and Accountability Measures of the National Food Security Act in Delhi', March, 2017.
- Ghaffari, H. and Singh, S.P. (2004), "Rural-Urban Migration: A Search for Economic Determinants", *Indian Journal of Economics*, Vol.84 (3).

- Handbook of Urban Statistics (2019), Ministry of Housing and Urban Affairs, Government of India, New Delhi.
- Himanshu, Jha, P. and Rodgers, G. (2016), *"The Changing Village in India: Insights from Longitudinal Research"*, Oxford University Press.
- Jha, P. and Thakur, A. (2016), "Thirty Years On: Work and Well-being in Rural Bihar", *The Changing Village in India*, Oxford University Press.
- Kumar, N. and Aggarwal, S C (2003), "Patterns of Consumption and Poverty in Delhi Slums", *Economic and Political Weekly*, Vol. 38 (50).
- Mehrotra, S., Parida, J., Sinha, S. and Gandhi, A. (2014), "Explaining Employment Trends in the Indian Economy: 1993-94 to 2011-12", *Economic and Political Weekly*, Vol. XLIX (32).
- Mitra, A. (2004), "Informal Sector, Networks and Intra-City Variations in Activities: Findings from Delhi Slums", *Review of Urban and Regional Development Studies*, Vol. 16 (2).
- Mitra, A. (2010), "Migration, Livelihood and Wellbeing: Evidence from Indian City Slums", *Urban Studies*, Vol. 47 (7), 1371-1390.
- Mitra, A. and Gupta, I. (2002), "Rural Migrants and Labour Segmentation: Micro Level Evidence from Delhi Slums", *Economic and Political Economy*, Vol. 37(2).
- National Sample Survey (2012), *Urban Slums in Delhi*, Directorate of Economics and Statistics, New Delhi.
- Ness, Immanuel (2013), *"The Encyclopedia of Global Human Migration"*, Wiley-Blackwell.
- Oberoi, A.S., Prasad, P. and Sardana, M.G. (1989), "Determinants and Consequences of Internal Migration in India: Studies in Bihar, Kerala and Uttar Pradesh", Oxford University Press.
- Papola, T.S. and Sharma, A., "Labour and Employment in Fast Growing India: Issues of Employment and Inclusiveness" in Uma Kapila (ed.).
- Parida, J.K. and Madheswaran, S. (2011), "Determinants of Migration and Remittance in India: Empirical Evidence", Working Paper 272, Institute for Social and Economic Change.
- Patnaik, B.C.M, Satpathy, I., Mohanty, J. And Mandal, A. (2015), "Determinants of Migration from Rural to Urban India by the Labourer – An Overview", *Journal of Business Management and Social Sciences Research*, Vol 4(1).
- Rawal, V. and Bansal, P. (2019), "Surgical Strike on Employment: The Record of the First Modi Government", International Development Economics Associates.
- Singh, S.P. and Aggarwal, R.K. (1998), "Rural Urban Migration: The Role of Push and Pull Factors Revisited", *Indian Journal of Labour Economics*, Vol. 41 (4).
- Society for Labour and Development (2017), "Exploring Rural-Urban Dynamics: A Study of Inter-State Migrants in Gurgaon.
- Srivastava, R. (1998), "Migration and the Labour Market in India", *Indian Journal of Labour Economics*, Vol. 41 (4).
- Standing, G. (1977), "Urban Workers and Patterns of Employment" in S. Kannappan (ed.), *Studies of Urban Labour Market Behaviour in Developing Areas*, International Institute for Labour Studies, Geneva.
- Stark, O. (1995), *"Altruism and Beyond: An Economic Analysis of Transfers and Exchanges within Families and Groups"*, Cambridge University Press.
- Tilche, A. (2016), "Migration, Discontent and Bachelorhood Among the Patidars", *Economic and Political Weekly*, Vol. LI No. 26&27.
- Vijay, Devesh (2013), "Structure and Mobility inside a Delhi Slum 1998-2008", NMML Occasional Paper, Perspectives in Indian Development.