



RESEARCH ARTICLE

RURAL-URBAN MIGRATION AND URBAN INFORMAL SECTOR IN INDIA:
AN INTER-STATE ANALYSIS

*¹Debasis Chakraborty and *²Dr. Pravat Kumar Kuri

¹Department of Economics Durgapur Government College

²Department of Economics Burdwan University

ARTICLE INFO

Article History:

Received 21st January, 2012

Received in revised form

25th February, 2013

Accepted 24th March, 2013

Published online 13th April, 2013

Key words:

Employment,
Rural-Urban Migration,
Informal Sector,
Organised Sector,
Unorganised Sector.

ABSTRACT

Migration is a process that gets intensified with the process of economic development. Among the various migration streams like rural-urban, rural-rural, urban-rural and urban-urban, population mobility from rural to urban areas is a common and ever-increasing phenomenon in India. Interestingly, this rural-urban migration is observed to have significant implications to the development of urban informal sector. Less skilled migrated labour are, in fact, less equipped for the urban formal jobs due to their lack of knowledge and experience and hence they end up forming 'urban informal sector'. Thus there is an intense linkage between rural-urban migration and the expansion of urban informal sector. In fact there exists a two-way causation: migration helps in booming of urban informal sector, while the development of informal sector attracts further. Using mainly census and National Sample Survey data sources, this paper attempts to examine the nature and pattern of internal migration and its determinants across the states of India. Among various factors explaining the extent of internal migration in India, rural unemployment, rural indebtedness, opportunity cost of migration, rural industrialization, extent of urban informal sector etc. have been identified as key variables. Attempts have also been made to examine the inter-relationship between the extent of rural-urban migration and the expansion of urban informal sector in India.

Copyright, IJCR, 2013, Academic Journals. All rights reserved.

INTRODUCTION

Migration is an inevitable process associated with economic development. Globally this process of population distribution does have a profound effect on both the areas from which the migrants come and the areas in which they finally settled. Depending on the origin and destination place of a migrant the migration is divided in four major streams namely, rural-rural, rural-urban, urban-rural and urban-urban migration¹. Each of these streams has their own set of push-pull factors which compel a migrant to take the decision to move. Here we are concerned with rural-urban migration stream. In the migration literatures, several socio-economic, cultural and political factors have been identified to explain the causes and determinants of migration. One of the major determinants of rural-urban migration flow is the 'difference in expected income between urban and rural' as has been pointed out by Harris and Todaro (1970). But studies thereafter have revealed the fact that expected income gap hypothesis explains only a portion of migration stream. There are quite a few evidences where migration flow is low enough instead of the existence of this expected income gap. In these cases quality of standard of living comes into play to be a major determinant (Harvey, 1968). Studies have shown that people choose to stay at their respective native places rather than moving to a place away from their friends and relatives. In these cases family ties play a pivotal role in explaining the extent of migration rather than expected income gap (Conway and Brown, 1980; Cherunilam, 1987). Among the other determinants that are found to have considerable impact on rural-

urban population mobility are urbanization (Goldstein and Mayer, 1965; Chakraborty *et al.* 2011), basic amenities in the destination towns (Harvey, 1968), ethnic factors (Ahmed, 1992), cost of migration (Sjaastad, 1962), easy accessibility of job (Fields, 1975), state of agricultural performance (Shafi, 1998), lesser employment in rural sector (Rao, 2005, Chakraborty *et al.* 2008), literacy rate (Nagraj, 2000), urban poverty, rural poverty (Afsar, 2003), family decision (Mincer, 1978), etc. Explaining migration as a third demographic process, Haq (2007) in his well-researched book entitled "Sociology of Population in India" examined the general trends of migration and the distribution of different streams of migration in various states of India along with its social context, causes and consequences. In present era of urban development informal sector plays a vital role. There have been various attempts to define informal sector in a meaningful way. But the most accepted definition of informal sector is that has been presented by ILO in UNDP Report on Kenya². Overtime it has been found that there is a profound interdependence between rural-urban migration and urban informal labour market (Shafi, 1998; Mukherjee, 2001, Gope and Bagchi, 2008). The massive influx of rural people into the urban areas has changed the job structure of the destination places. Rural peoples are mainly attracted to migrate by economic incentives as well as by other attractions of an urban life. But in reality very few of the fortunate migrants are able to manage to secure jobs in urban industries. Some of the others wait to get a job in the formal sector and thus form a 'reserve army of labour' which in case of India is 'the number of open urban unemployment (Chaudhuri and Mukhopadhyay, 2010)'. The rest get absorbed only in the urban informal sector. Again low wage, low security, high labour intensity in the informal jobs has reduced living standard of the migrants who are involved into those

*Corresponding author: debesischakraborty2@gmail.com, pravatmarkuri@rediffmail.com

1. **Rural-Rural Migration:** Migration stream whose place of origin and place of destination are both rural. **Rural-Urban Migration:** Migration stream whose place of origin is rural but place of destination is urban. **Urban-Rural Migration:** Migration stream whose place of origin is urban but place of destination is rural. **Urban-Urban Migration:** Migration stream whose place of origin and place of destination are both urban.

2. "a sector to which entry by new enterprises is comparatively easy; enterprises in this sector rely on indigenous resources and are family owned; they operate on a small scale, in unregulated and competitive markets and use labour intensive and adaptive technology; their workers have skills acquired outside the formal schooling system" (ILO, 1972).

jobs. So, simply there is a shift of poverty from rural to urban. Thus destitute people, migrating from their rural places end up into a job market which is vulnerable in many aspects. Under this backdrop, the present study intervenes into the nature and pattern of internal migration in India over the period 1961-2001. It also analyses the trend of informal sector jobs in India. It has also tried to find that very interdependence between rural-urban migration and urban informal sector. Finally it has tried to find the major determinants of migration across the states of India. In fact, internal migration is of two types: inter-state and intra-state migration³. Highlighting the nature and pattern of both inter-state as well as intra-state migration this paper attempts to identify the causes and determinants of inter-state migration in India. For convenience, the paper is divided into five sections. In the first section we have represented the data sources used and the methodology adopted. The second section deals with the analysis of nature and pattern of internal migration of India. Third section takes into account the trends and pattern of informal sector in India. Fourth section deals with the inter-linkage between rural to urban migration and urban informal sector. The results of the regression analysis have been discussed in the fifth section specially to explore the causes and determinants of rural-urban migration. The conclusion appears in the last section.

Data Sources and Methodology

The empirical investigation of the study is mainly based on secondary data. Data on migration have been compiled mostly from census information published by government of India from 1961 to 2001. The study has also used migration information published by the National Sample Survey Organization (NSSO). Apart from this, several official statistics⁴ published time to time by government of India, have been consulted. The determinants of rural-urban migration in India have been classified as: rural determinants (like rural man-land ratio, opportunity cost of migration, extent of rural industrialization, rural unemployment rate, and extent of rural indebtedness), urban determinants (opportunity cost of migration, urban-rural expected income gap, job availability in the rural informal sector, job availability in the urban informal sector). Accordingly, multiple regression models have been used separately to provide explanation of rural-urban migration. The specific econometric framework has been drawn to provide – explanation of rural-urban migration based on rural determinants, explanation of rural-urban migration based on urban determinants.

Pattern of Internal Migration in India

Historically population mobility is a very common phenomenon in India. The incidence of internal migration is found to be directly related to the process of economic development and it seems to have a causal relation with the degree of integration with the global economy. Census of India reveals that in 2001 total number of persons that has internally migrated across the states of India is almost double of that of 1971. Presently almost 30 per cent of Indian population is away from their place of birth. In 1991 it was 27.4 per cent excluding Jammu and Kashmir. Again across the states it has been seen that relatively less developed states have higher proportion of rural-urban migration compare to relatively developed states.

In Table-1 we have presented the change of different streams of migration in total migration of India. Out of total migration streams of India, in percentage term, rural-rural migration is found to observe a declining trend over the period covering 1961-2001. But still it dominates the Indian migration scenario. During the decade 1961-71, rural-rural migration stream is accounted for 62.66 per cent of the total internal migration. Interestingly, the extent of rural-urban migration is ever increasing since 1961-71 both in absolute as well as in percentage terms. The rural-urban migration is the second most important stream of population mobility in India after rural-rural type.

3. Inter-state Migration: When people migrate within the territory of a state and not outside. **Intra-state Migration:** When people migrate outside the boundary of the state, alternatively, when migration occurs between two or more states.

Among the remaining two streams, urban-rural migration is found to occupy the lowest position with 6.58 per cent of total migration streams during 1991-2001, while urban-urban migration explains 15.16 per cent of total migration streams in India. Now to intervene into the share of each stream within the states of India we have tabulated the census data on percentage of different streams of lifetime intra-state migration for the census year 2001 in Table- 2. It is clear from Table-2 that after so many years of independence, rural-rural migration stream is still the dominant stream of migration followed by rural-urban migration. One of the striking features of internal migration in India is that backward states (e.g Rajasthan, Orissa, Uttar Pradesh, Bihar) are found to have experienced with higher degree of rural-rural mobility compared to the relatively advanced states. This may be due to the reason that these states do not have sound urban base to accommodate the displaced peoples. As a result, instead of moving towards the urban centers, people moves easily to the rural areas of these states where the scenario is much of their native villages.

Trends and Pattern of Informal Sector in India

In India, “the organized sector could not keep pace with the growing workforce, and the employment elasticity of output produced in the organized sector is declining continuously over time from 0.56 in 1972-73 to 0.38 during Ninth Plan” (Mukherjee, 2009). As a result, it is found that 90 percent of the workforce is presently found to be engaged with the informal sector. In case of India “.....the terms ‘informal sector’ and ‘unorganised sector’ are taken to be synonymous” (NSS report no. 459: Informal Sector in India, 1999-2000 – Salient Features). Unorganised sector mainly consists of self-employment and small business. From Table-3 we can see that in 1999-2000 bulk of the employment has been in this unorganised sector except ‘Electricity, Gas and Water’ industry. 6 out of 8 industries has unorganized employment more than 60 percent of total employment. Percentagewise first three industries that are having share of unorganised sector more than 90 percent are Agriculture, Hunting, Forestry and Fishing, Trade, Hotels, Restaurants and Construction industries.

Trend of employment in both organized as well as in the unorganised has been shown in Table-4. It depicts that in India, over the years, most of the labourforce has been involved in the employment of unorganised sector. Among these industries most of the share of labourforce in unorganised sector has been in Agriculture, Hunting, Forestry and Fishing industry. Among all other industries unorganised labour force in Manufacturing, Trade, Hotels, Restaurants and Transport, Storage and Communication industries has increased continuously. Table-5 shows the industry-wise Compound Annual Growth Rate (CAGR) in India from 1983 to 1999-00. It can be seen that prior to liberalization most of the employment has grown in the ‘Electricity, Gas and Water’ industry. But over time it has declined to become negative in 1999-2000 period. In the post liberalization period, 1993-94, the growth has been scattered, involving all the industries. In 1999-2000 period almost 3 industries namely, Mining and Quarrying, Electricity, Gas and Water and Services have a negative growth rate. During this phase, it is Construction, Trade, Hotels, Restaurants, Transport, and Storage and Communication industries that are growing at a faster rate than the other industries. In the (Table-6) we have shown the

4. Manpower Profile India Yearbook 2004; Employment and Unemployment Situation in India, 1999-2000, NSS 55th Round, Report No. 458 (55/10/2); 1993-94, NSS 50th Round, Report No. 409; Wages Annual Report 2005-2006 published by Labour Bureau, Government of India; National Human Development Report 2001; Provisional Population Totals, Census of India, 1961-2001; Informal sector in India 1999-2000, NSS 55th Round, Report No. 459 (55/2.0/2); Household Indebtedness in India, All India Debt and Investment Survey, NSS 59th Round, Report No. 501, (59/18.2/2); Compendium of Environment Statistics, India, 2003; Statistical Abstract (India-2004).

Table 1. Percentage Change of Different Types of Migration in India

Stream	1961-1971		1971-1981		1981-1991		1991-2001	
	No.*	%	No.	%	No.	%	No.	%
Rural to Rural	42.49	62.66	46.26	57.23	46.25	57.33	53.3	56.52
Rural to Urban	10.98	15.19	15.73	19.46	16.77	20.78	20.5	21.74
Urban to Rural	5.33	7.86	6.45	7.98	6.08	7.54	6.2	6.58
Urban to Urban	9.01	13.29	12.39	15.33	11.58	14.35	14.3	15.16
Total	67.81	100	70.83	100	80.68	100	94.3	100

Source: Migration Tables, Government of India. *in million

Table 2. Lifetime Intra-state Migration in India (Percentage)

States	1991				2001			
	R-R	U-R	R-U	U-U	R-R	U-R	R-U	U-U
Andhra Pradesh	79.74	6.53	1.78	11.95	66.08	6.19	16.53	11.2
Assam	89.42	1.92	0.58	8.08	46.48	1.58	46.48	5.46
Bihar	86.83	2.87	0.44	9.86	87.29	1.95	7.9	2.86
Gujarat	65.51	7.15	1.70	25.64	58.23	4.4	22.91	14.46
Haryana	77.84	3.58	1.01	17.57	67.91	3.6	18.42	10.07
Karnataka	67.97	4.82	2.19	25.02	61.7	5.84	18.22	14.24
Kerala	69.23	4.16	4.54	22.07	64.44	11.14	17.19	7.23
Madhya Pradesh	77.13	4.39	1.33	17.15	70.71	3.94	15.28	10.07
Maharashtra	61.66	6.00	2.23	30.11	55.07	6.34	21.72	16.87
Orissa	86.55	3.16	0.72	9.57	78.13	2.83	13.88	5.16
Punjab	70.92	4.50	1.67	22.91	43.14	2.84	43.14	10.88
Rajasthan	76.71	3.36	1.26	18.67	76.64	3.96	12.1	7.3
Tamil Nadu	86.80	6.12	3.16	3.92	42.01	8.39	23.2	26.4
Uttar Pradesh	79.81	2.31	0.70	17.18	78.96	2.94	10.7	7.4
West Bengal	73.98	2.67	0.93	22.42	70.28	4.77	12.72	12.23
India	74.38	3.92	1.41	20.29	68.69	4.73	15.53	11.05

Source: Migration Tables, 1991, 2001, Government of India.

Table 3. Employment in Organised and Unorganised Sectors in India (1999-2000)

Industry	Total	No.*		%	
		O	U	O	U
Agriculture, Hunting, Forestry and Fishing	190.4	1.39	189.01	0.73	99.27
Mining and Quarrying	2.26	1.02	1.24	45.1	54.87
Manufacturing	40.79	6.75	34.04	16.6	83.45
Electricity, Gas and Water	1.15	1	0.15	87	13.04
Construction	14.95	1.18	13.77	7.89	92.11
Trade, Hotels, Restaurants	37.54	0.48	37.06	1.28	98.72
Transport, Storage and Communication	13.65	3.15	10.5	23.1	76.92
Services	35.46	13.1	22.32	37.1	62.94

Source: Gope and Bagchi (2008). O= Organised, U=Unorganised, * in million

Table 4. Trend Employment in Organised and Unorganised Sectors in India

Industry	1983 (million)			1987-88(million)			1993-94(million)			1999-00(million)		
	O*	U**	All	O	U	All	O	U	All	O	U	All
Agriculture, Hunting, Forestry and Fishing	1.3	203.8	205.1	1.4	209.9	211.3	1.4	238.3	239.7	1.4	238.6	240
Mining and Quarrying	1	0.8	1.8	1	1.3	2.3	1.1	1.6	2.7	1	1.3	2.3
Manufacturing	6.3	25.7	32	6.3	29.9	36.2	6.4	33.4	39.8	6.5	37.2	43.7
Electricity, Gas and Water	0.8	0.1	0.8	0.8	0.3	1.2	1	0.4	1.4	1	0.3	1.3
Construction	1.2	5.5	6.7	1.2	11	12.2	1.2	11	12.2	1.1	16.4	17.5
Trade, Hotels, Restaurants	0.4	18.5	18.9	0.4	22.8	23.2	0.5	28	28.5	0.5	40.1	40.6
Transport, Storage and Communication	2.9	4.5	7.4	3	5.7	8.7	3.1	7.4	10.6	3.1	11.4	14.5
Services	10	15.1	25.2	11	19.2	30.4	13	27.2	39.9	13	24.7	37.8
Total	24.1	274	297.9	25	300.1	325.5	27.3	347.3	374.8	28	370	397.7

Source: Gope and Bagchi (2008). *O= Organised, **U=Unorganised

Table 5. Compound Annual Growth Rate of Employment in Unorganised Sector in India

Industry	1983 to 1987-88	1987-88 to 1993-94	1993-94 to 1999-00
Agriculture, Hunting, Forestry and Fishing	0.59	2.14	0.02
Mining and Quarrying	10.2	3.52	-3.4
Manufacturing	3.07	1.86	1.81
Electricity, Gas and Water	24.57	4.91	-4.68
Construction	14.87	0	6.88
Trade, Hotels, Restaurants	4.27	3.48	6.17
Transport, Storage and Communication	4.84	4.45	7.47
Services	4.92	5.98	-1.59
Total	1.84	2.46	1.06

Source: Calculated from Table-4.

Table 6. Employment Status in Urban Informal Sector

States	Percentage						
	1999-2000	2000-01	2002	2003	2004	2004-05	2005-06
Andhra Pradesh	56.5	59.49	59.25	62.43	57.71	63.35	59.78
Assam	50.46	61.65	53.89	68.71	59.88	54.15	62.54
Bihar	59.78	76.26	75.49	70.7	74.32	76.59	78.93
Gujarat	59.41	60.19	59.38	54.55	60.54	54.46	60.83
Haryana	55.85	57.53	61.51	60.07	57.28	57.02	57.46
Karnataka	52.6	69.81	64.4	58.45	63.43	60.85	56.83
Kerala	64.95	68.88	72.47	67.21	63.64	69.91	67.24
Madhya Pradesh	57.52	64.88	65.73	60.33	67.81	63.8	58.73
Maharashtra	42.27	47.93	50.42	46.18	49.03	53.09	48.1
Orissa	55.81	57.1	59.55	62.92	59.87	62.88	60.12
Punjab	54.57	56.67	58.33	54.39	54.57	55.33	56.94
Rajasthan	56.02	63.39	71.72	66.56	63.69	66.47	62.14
Tamil Nadu	45.43	57.62	57.58	51.05	53.44	55.49	51.51
Uttar Pradesh	61.67	67.44	65.47	70.69	71.62	70.17	64.38
West Bengal	53.56	62.57	62.21	67.54	61.73	62.37	60.43
India	53.72	59.33	59.88	58.13	59.12	59.71	57.23

Source: Various NSSO Reports.

Table 7. Rural to Urban Migration and Urban Informal Sector

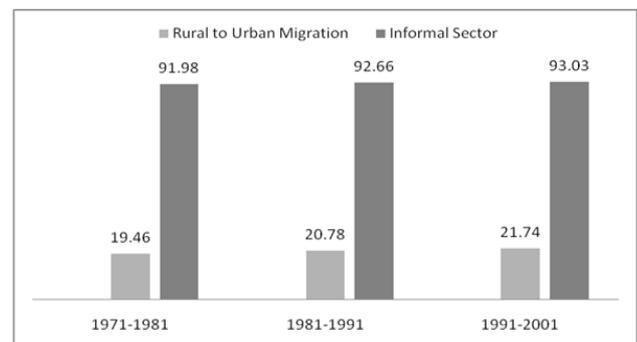
States	1991 (%)		2001 (%)		1993-94 (%)	1999-2000 (%)
	Inter-State	Intra-State	Inter-State	Intra-State	Urban Informal Sector	Urban Informal Sector
Andhra Pradesh	21.8	6.53	18.91	16.53	54.79	56.5
Assam	27.2	1.92	34.87	46.48	47.62	50.46
Bihar	27.6	2.87	8.74	7.9	56.97	59.78
Gujarat	41.7	7.15	53.05	22.91	50.06	59.41
Haryana	22.97	3.58	28.63	18.42	52.77	55.85
Karnataka	22.2	4.82	25.9	18.22	52.12	52.6
Kerala	12.59	4.16	17.62	17.19	67.33	64.95
Madhya Pradesh	31.6	4.39	28.1	15.28	49.95	57.52
Maharashtra	49.65	6	52.76	21.72	42.16	42.27
Orissa	26.58	3.16	29.81	13.88	43.91	55.81
Punjab	25.13	4.5	37.27	43.14	56.28	54.57
Rajasthan	18.68	3.36	19.16	12.1	53.56	56.02
Tamil Nadu	24.64	6.12	27.07	23.2	54.98	45.43
Uttar Pradesh	17.01	2.31	18.32	10.7	62.1	61.67
West Bengal	50.2	2.67	50.28	12.72	45.51	53.56
India	34.33	3.92	39.33	15.53	51.94	53.72

Source: Census Table of India, 1981, 1991, 2001 and Gope & Bagchi (2008).

trend of employment in urban informal sector in India. Here informal sector employment has been taken as a combination of number of self-employed and casual labour per thousand distribution of persons by broad current weekly activity status. It shows that all the states, except Maharashtra, has largest share of urban employment in informal sector. Overall India has a stable rate of urban informal sector employment (around 60 percent) from 2000-2001 to 2005-2006.

Linkage between Rural to Urban Migration and Urban Informal Sector

The flow of rural-urban migration is observed to have a linkage with the expansion of urban informal sector. Various aspects of this linkage have been discussed in detail in this section. Table-7 shows that the all India rural to urban migration has increased over the years along with the employment in informal sector. The bulk of the employment has been in the informal sector. Here we can see that with the increasing trend of rural to urban migration in some of the economically backward states, the employment in informal sector also has increased. This reaffirms the statement that there is a broad association between rural to urban migration and growth of urban informal sector jobs. The following figure clearly establishes the positive association between the rural-urban migration and the expansion of informal sector. Figure-1 shows that the decadal increment in rural-urban migration and the expansion of urban informal sector provides an interesting picture in 1991 and 2001. The relationship between rural-urban migration and the development of urban informal sector is depicted in the following scattered diagram (Fig.- 2 and 3).



Source: Census and NSSO Reports.

Fig 1. Decadal Increment (Percentage) of Rural-Urban Migration and Employment in Informal Sector

Here total urban in-migration constitutes of rural-urban migration and urban-urban migration. Here each figure has been classified into four zones. These zones are such that first zone constitutes of those states which have experienced with higher inter-state urban in-migration but lower incidence of urban informal jobs. The second zone constitutes of those states which have experienced with higher inter-state urban in-migration and higher incidence of urban informal jobs. The third zone is such that states which belong to this zone have experienced with lower inter-state urban in-migration and lower incidence of urban informal jobs. The fourth zone constitutes of those states which have experienced with lower inter-state urban in-migration but higher incidence of urban informal jobs. The result shows that in 1991, seven out of fifteen states are found to occupy the place in third zone.

This implies that states having lower degree of urban informal jobs have attracted lower people into their urban areas. This is quite obvious because urban employment situation has been one of the driving forces of urban in-migration. Again one of the inherent characteristics is that these states are economically backward as well. Thus from this we can draw the conclusion that informal job creation has a direct role with the economic development of the state. In 2001 there is a shift of paradigm. Here we can see that seven out of fifteen states are now in second zone where we have high inter-state urban in migration due to high urban informal job creation. Again, it can be seen that, these states are relatively economically better off states. Thus we can conclude that in the post liberalization era due to an upsurge of urban informal sector, there has been an influx of migrant peoples into urban areas across the states of India.

enumerated during the census is other than his place of immediate last residence” (Census of India, 2001). Reasons for migration in India have been classified in following headings i.e., work/employment, business, education, family moved, marriage, moved after birth, moved with households, natural calamities, and other. The proportional importance of different factors influencing the migration decision over the years can be seen from Table-8. Table-8 explains the trend of migration depending on various reason of migration in India. The reasons of migration under first two categories can be grouped under economic reasons. From the census we can say that, over the period of 1991-2001 migration induced by work/employment has increased significantly, while, migration relating to education and other declined marginally. Migration induced by marriage or social bondage is found to be dominant in Indian migration pattern. In 2001, 43.9 per cent of total migration is induced by marriage. It is to be noted in this context that among marriage induced migration, the percentage of female migration is much higher (64.9 per cent) than the male counterpart (2.1 per cent). ‘Moved with households’ occupies the second place as a reason for migration having almost 21 per cent contribution to total internal migration. It is evident from the table that except marriage and movement with households, people mostly have migrated due to economic reasons. Economic reasons explain almost 16 per cent of total internal migration. Interestingly, male migrants are found to have migrated mainly for availing new opportunities of work/employment in their place of destinations. Migration for better economic opportunities is found to be much more frequent among the male than the female. During 1991-2001, under the category of work/employment, male migrants have increased from 30.4 per cent to 37.6 per cent; where as female migrants have increased from merely 3 per cent to 3.2 per cent. But percentage of people revealing ‘business’ as the reason for migration has decreased considerably irrespective of gender.

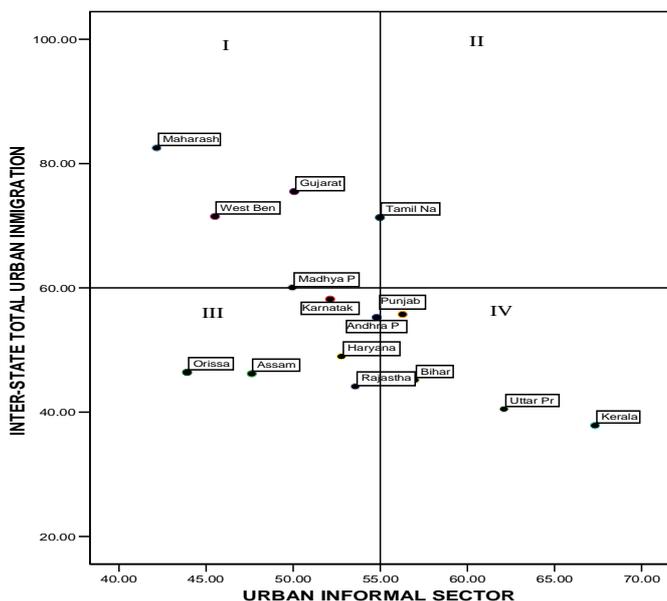


Fig. 2. Relationship between Inter-state Total Urban In-migration and Urban Informal Sector (1991)

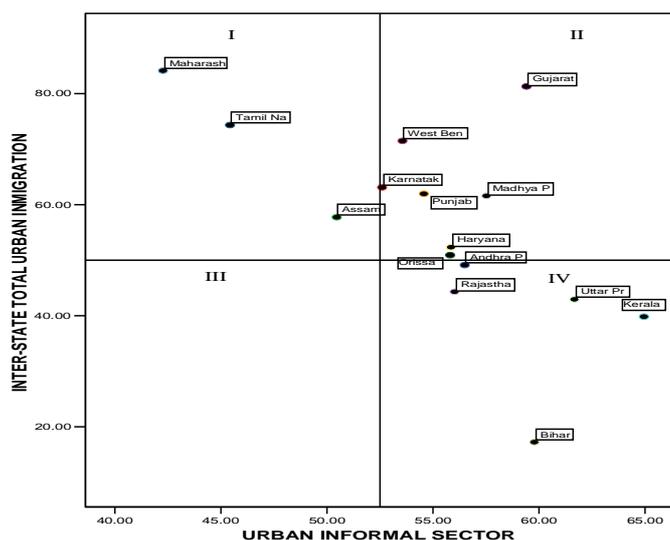


Fig. 3. Relationship between Inter-state Total Urban In-migration and Urban Informal Sector (2001)

Causes and Determinates of Migration in India

Indian census started collecting data on ‘reasons for migration’ from 1981 census based on place of last residence. “A person is considered as migrant by place of last residence, if the place in which he is

Determinants of Migration – A Regression Analysis

An attempt has been made to identify the determinants of rural-urban migration using regression results. The determinants of rural-urban migration have been analyzed empirically under three perspectives: determinants based on rural socio-economic variables, urban socio-economic variables and determinants based on both rural and urban sectors’ socio-economic variables taken together. The identification of variables, regression specifications and the hypotheses relating to the determinants of internal migration is shown in Table – 9. The results of regression analysis have been presented in Table – 10. The table reveals that in the case of rural sector all the variables have come up with the expected sign. A positive relationship between migration rate and rural man-land ratio (X_1) implies that as per capita land holding (which is reciprocal of X_1) increases migration from rural to urban declines. It is because each person now has more share of productive land so that their intensity to migration declines. The result shows that there is an inverse relationship between opportunity cost of migration⁵ (X_2) and migration rate . This implies that as the former increases the later decreases and vice-versa. Similarly, extent of rural industrialization (X_3) is found to exert a negative impact on the rural-urban migration. With obvious reason, rural unemployment rate (X_4) is found to be positively related with the intensity of rural-urban migration. Rural unemployed will certainly intend to migrate to the urban areas rather than remain idle in their native rural place having no work and thus having no earning. This movement becomes more intensive for them who do not possess any bequest property from their ancestors. But it is evident from the result that the magnitude of the effect is very small. Similar is the case for extent of rural indebtedness (X_5). Rural indebtedness is the outcome of greater dependence on informal sources of rural credit. The informal lenders charge excessively high interest and that result into heavy debt burden for the rural poor. This compels them to migrate to the urban areas. Unlike Harris-Todaro model the expected urban-rural income gap (X_6) have failed to explain the rural-urban migration in India. On the other hand the job availability in urban informal sector (X_8) is found

Table 8. Reasons for Migration and Their Trend of Share, 1991 – 2001

Reasons for Migration	Persons				Male				Female			
	Total		%		Total		%		Total		%	
	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Work/Employment	9.94	14.4	12.1	14.7	8.29	12.3	30.4	37.6	1.65	2.06	3	3.2
Business	2.25	1.13	2.7	1.2	1.81	0.95	6.6	2.9	0.44	0.18	0.8	0.3
Education	3.45	2.9	4.2	3	2.44	2.03	9	6.2	1.01	0.87	1.8	1.3
Family moved	18.5	-	22.5	-	8.27	-	30.4	-	10.2	-	18.6	-
Marriage	36.9	42.9	44.9	43.9	0.78	0.67	2.6	2.1	36.1	42.3	65.9	64.9
Moved after birth	-	6.57	-	6.7	-	3.42	-	10.5	-	3.14	-	4.8
Moved with households	-	20.5	-	20.9	-	8.21	-	25.1	-	12.3	-	18.8
Natural calamities	0.42	-	0.5	-	0.25	-	0.9	-	0.18	-	0.3	-
Other	10.7	9.45	13.1	9.7	5.48	5.13	20.1	15.7	5.26	4.33	9.6	6.6

Source: Migration Tables 1991, 2001, Government of India.

Table 9. Migration Determinants

Dependent Variable: Percentage migration from rural to urban (M_m)		Exp. Sign.
Sectors	Independent Variables	
Rural Sector	$P_r / L_{ar} = X_1$ = Rural man-land ratio, where land signifies the agricultural land presented in sq.km.	(+)
	$C_m = X_2$ = Opportunity cost of migration.	(-)
	$E_{ri} = X_3$ = No. of rural enterprises both Own Account Enterprises (OAEs) and Establishments.	(-)
	$U_r = X_4$ = Rural unemployment rate.	(+)
Urban Sector	$C_r = X_5$ = Extent of rural indebtedness.	(+)
	$C_m = X_2$ = Opportunity cost of migration.	(-)
	$C_r = X_5$ = Extent of rural indebtedness.	(+)
	$N_r = X_6$ = Urban-rural expected income gap.	(+)
	$J_S = X_7$ = Job availability in the rural informal sector.	(-)
	$U_i = X_8$ = Job availability in urban informal sector	(+)

Table 10. Determinants of Migration: OLS Regression

Independent Variables	Rural Sector	Urban Sector
<i>Intercept</i>	70.527*	43.135
	(-6.016)	(-1.367)
X_1	2329772.399	-
	(-1.377)	
X_2	-0.391**	-0.216
	(-2.426)	(-1.413)
X_3	-0.001	-
	(-0.384)	
X_4	0.015	-
	(-0.124)	
X_5	0.997	1.244**
	(-1.38)	(-2.183)
X_6	-	-0.020
		(-0.215)
X_7	-	0.034
		(-0.071)
X_8	-	0.913**
		(-2.384)
R^2	0.489	0.316
Adj. R^2	0.205	0.129
F – Statistics	1.722	1.693

Note: The statistics significant at 1%, 5% and 10% levels are indicated by *, **, *** respectively. In the parenthesis we have t-statistics.

to exert a positive impact on the rural-urban migration stream. The expansion of urban informal sector acts as a pull factor for rural-urban migration, the greater the scope for job in urban informal sector, higher the extent of rural-urban migration. On the other hand, the expansion of rural informal sector (X_7) is seemed to have an insignificant impact on the rural-urban migration.

Conclusion

The extent of rural-urban migration has increased significantly in India during the period of economic liberalization. On economic front, better employment opportunities in the urban centers attracted a sizeable proportion of workers from the rural to the urban areas and

5. “There are no data to my knowledge on the expenses incurred by migrants in the course of moving” (Sajaastad, 1962). So data on cost of migration is very tough to collect. Here cost of migration has been approximated as that amount of money income that a migrating person has to forgo due to his migration from rural to urban. Here this money income has been taken as the prevailing rural minimum wage rate.

thus induced rural-urban migration. The extent of net migration of the developed states is found to be much higher than that of the backward states. As regards the intra-state migration, backward states have experienced with higher population mobility both in terms of rural-rural as well as rural-urban migration streams. In terms of the socio-economic determinants of internal migration in India, some of them are found to act as push factors, while others act as the pull factors. The sub-division and fragmentation of the rural agricultural land induces the process of rural-urban migration in India. The higher the extent of sub-division and fragmentation of agricultural land (i.e. lower man-land ratio) lower will be the agricultural productivity and thus higher will be the extent of rural-urban migration. Rural industrialization is found to play a significant role to determine the extent of rural-urban migration in India. Higher the degree of rural industrialization, higher will be employment opportunities in rural areas and thus lower will be the extent of rural-urban migration. On the other hand, rural unemployment acts as a push factor in the

process of rural-urban migration. In many cases, it has been found that because of the non-availability of job in the rural sector, people are compelled to migrate from rural to urban sector. Among the other determinants of rural-urban migration, rural indebtedness is found to play an important role as push factor. The higher the extent of rural indebtedness the greater is the degree of rural-urban migration. The extent of rural-urban migration is directly associated with the spreading of urban informal sector. The greater scopes for informal activities at the urban centers induce people to migrate from rural to urban areas. In fact, urban informal sector acts as a major pull factor for rural-urban migration in India. However it is to be noted that the growing extent of migration, in many cases, is found to be inconsistent with the infrastructure availability in the urban centers to accommodate the migrated people. This leads to a crisis of urban amenities and thus results in the degradation of urban environment. To reduce this mismatch, the process of economic development needs to be integrated strictly with the urban planning for attaining a sustainable urban future.

REFERENCES

- Afsar, Rita (2003): "Internal migration and the Development Nexus: The Case of Bangladesh". This paper is one of twelve prepared and presented at the "Regional Conference on Migration, Development and Pro-poor Policy Choices in Asia". The Conference was jointly organized by the Refugee and Migratory Movements Research Unit, Bangladesh, and the Department for International Development, UK, and took place on 22-24 June, Dhaka, Bangladesh.
- Ahmed, Nuzhat (1992): "Choice of location and mobility behaviour of migrant households in a third world city". *Urban Studies*; 29(7), pp. 1147-1157.
- Census of India: "Series - 1, India, General Population Tables, Part - II - A (i), Provisional Population Totals, Paper - 2, Rural-Urban Distribution", 1991, 2001.
- Census of India: "Migration in India". 1961 - 2001. D - Series.
- Chakraborty, Debasis and Dr. Pravat Kumar Kuri (2008): "Internal Migration in India: Causes and Determinants". *IASSI Quarterly*, Vol. 26, Issue 4, pp. 47-63.
- Chakraborty, Debasis and Dr. Pravat Kumar Kuri (2011): "Urbanization and Migration in India: Nature and Determinants". Lambert Academic Publishing, March 2011.
- Chaudhuri, Sarbajit and Ujjaini Mukhopadhyay (2010): "Revisiting the Informal Sector: A General Equilibrium Approach". Springer Publications.
- Cherunilam, Francis (1987): "Migration-causes, correlates, consequences, trends and policies". Himalaya Publishing House.
- Compendium of Environment Statistics, India; 2003.
- Conway, D. and Brown, J. (1980): "Intra urban relocation and structure; low income migrants in Latin America and the Caribbean". *Latin American Research Review*; 15, pp. 95-125.
- Fields, G.S. (1975): "Rural-urban migration, urban unemployment and underemployment, and job search activity in LDCs". *Journal of Development Economics*, 2, June, pp. 165-187.
- Goldstein, Sidney and Mayer, Kurt B. (1965): "Impact of migration on the socio-economic structure of cities and suburbs". *Sociology and Social Research*; 50(1), October, pp. 5-23.
- Gope, Nirupam and K.K. Bagchi (2008): "Socio-Economic Impacts of Informal Sector Economy". Abhijeet Publications.
- Haq, Ehsanul (2007): "Sociology of Population in India", New Delhi: Macmillan India Ltd.
- Harris, J.R. and M.P. Todaro (1970): "Migration, Unemployment and Development: A Two-Sector Analysis" *American Economic Review*, 60, pp. 126-142.
- Harvey, Milton (1968): "Implications of migrations to free town; a study of the relationship between migrants, housing and occupation". *Civilizations*; 18(2), pp. 247-269.
- ILO (1972): "Employment, incomes and equality: A strategy for increasing productive employment in Kenya", (Geneva, 1972).
- Labour Bureau, Govt. of India: "Wages; Annual Report, 2005-2006". Manpower Profile India Yearbook 2004.
- Mincer, Jacob (1978): "Family Migration Decisions" *The Journal of Political Economy*, Vol. 86, No. 5, pp. 749-773.
- Mukherjee, Dipa (2009): "Informal Sector in Indian Economy: The Way Ahead". Rawat Publications.
- Mukherjee, Shekhar (2001): "Low quality migration in India the phenomena of distressed migration and acute urban decay". 24th IUSSP Conference, Salvador, Brazil, August.
- Nagraj, K. (2000): "The socio-economic basis for rural-urban continuum; A case study of Dakshina Kannada district in Karnataka". Sited in Amitabh Kundu ed. "Inequality, Mobility and Urbanisation". Manak Publication Pvt. Ltd.
- National Human Development Report, 2001.
- National Sample Survey Organisation (NSSO): "Employment and Unemployment Situation in India, 1999-2000, Part - I and Part - II". Report No. 458 (55/10/2), 55th Round (July 1999-June 2000).
- : "Migration in India, 1999-2000". Report No. 470 (55/10/8), 55th Round (July 1999-June 2000).
- : "Informal Sector in India, 1999-2000". Report No. 459 (55/2.0/2), 55th Round (July 1999-June 2000).
- : "Household Indebtedness in India as on 30.06.2002, All India Debt and Investment Survey". Report No. 501 (59/18.2/2), 59th Round (January - December 2003).
- Rao, Vasudeva D. (2005): "Decadal changes in magnitude and direction of migration". *Social Action*, 55, July-September, pp. 271-286.
- Shafi, Sayed S. (1998): "Rural-urban interface; aspects and prospects". *Nagarlok*; 30(2). April-June, pp. 1-25.
- Sjaastad, Larry A. (1962): "The cost and returns of human migration". *The Journal of Political Economy*; Vol. 70. 5(2), pp. 80-93.
- Statistical Abstract, India; 2004.
