Chapter 2

Volume, Trend and Pattern of Migration in West Bengal

In this chapter we should focus our attention to the pattern of migration to both backward and relatively developed districts of West Bengal along with the volume and trend of such migration. Our analysis will, however, be constrained by paucity of statistical data in this regard for the Census year 2011. In fact disaggregated data on such migration trend at the district level within West Bengal as well as state level of India have not yet been published by the census authority till now. However, while indicating this trend we shall normally consider such migration classified on the basis of last residence[1]. Several types of migration such as rural-rural migration, rural-urban migration, urban-rural migration and urban-urban migration and also their growth pattern will be analysed. This growth rate can be compared with respect to relatively backward and developed districts. Thus inter-districts comparison with regard to such migration behaviour will also be analysed in this chapter.

When we analyse the migration pattern on the basis of census data we only get figures related to in-migrants. However, there are also out-migrants from several districts of West Bengal for which we had to depend on census data but for a clear picture of out-migrants we had to depend on NSSO data for different intermittent rounds. In order to find out trend and pattern of migration in West Bengal, first of all, we have examined the nature of such migration during the first and second decade of the post-reform period.

This chapter contains five sections. Section 2.1 presents the volume and trend of migration by Place of Last Residence in West Bengal. Section 2.2 analyses the reasons for migration in the state. The pattern of migration in West Bengal by place of last residence is discussed in section 2.3. The nature and trend of inter-district migration based on district level Census data of 1991 and 2001are dealt in section 2.4. Comparison of cross-district

migration (in-migration and out-migration) between backward districts and relatively developed districts across West Bengal are discussed in section 2.5.

2.1 Volume and Trend of Migration by place of Last Residence

The decadal variation indicates that during 1981 to 1991 the total migrants were about 227 million in case of India and it increased to about 454 million during 2001 to 2011. It implies that in a country having a population about 1210 million in 2011, in every three persons one is a migrant. During last three decades migration in India has increased at an unprecedented rate along with long distance permanent migration, the rate of increase in short distance temporary and circular migration has also been phenomenal.

The migration of workers from any particular region to the other may be either on temporary or permanent basis. Again it might be of seasonal and circular in nature. Such a pattern of migration has long been considered as the major livelihood strategy of the poor people.

It has been found that while out of total in-migrants in West Bengal the proportion of in-migration from other states declined from 41per cent in 1991 to 34per cent in 2001, i.e. by 7 percentage points, in-migration within the state itself has increased remarkably by 7 percentage points, i.e., from 59 per cent to 66 per cent during the same period. It appears that the employment opportunities in West Bengal and income expectation could not attract migrant labourers from other states of India. However, within the states of West Bengal the labourers are always expected to migrate from the relatively backward districts (with low income and employment opportunities) to the relatively advance districts (with high employment and income opportunities; though low compared to other states).

At the all-India level, the numbers of total migrants based on their place of last residence were 453.6 million in 2011 (Table 2.1). Out of which about 69 per cent were female migrants. In case of West Bengal this figure for 2011 was about 33.3 million out of which about 71 per cent constituted the female migrants.

Table 2.1 Migration statistics by the place of last residence (Figures in **millions**)

Census Year	India			West Bengal		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
1991	64.3 (27.7)	167.8 (72.3)	232.1 (100)	5.5 (30.7)	12.4 (69.3)	17.9 (100)
2001	90.4 (29.4)	216.7 (70.6)	307.1 (100)	7.7 (30.5)	17.5 (69.5)	25.2 (100)
2011	140.9 (30.9)	312.7 (69.1)	453.6 (100)	9.6 (28.8)	23.7 (71.2)	33.3 (100)

Source: Census India, D Series, 1991, 2001 and 2011(Provisional) (Figures in the parentheses is *per cent*)

The Table 2.2 presents the trend and volume of migration in West Bengal according to the place of last residence from 1991 to 2011. It becomes clear from the census data that while the volume of in-migration in rural West Bengal has gradually decreased during 1991-2001 (3.34 per cent) to 2001-2011 (2.21 per cent) but the annual average growth rate remained 3.15 per cent per annum during 1991 to 2011. The volume of in-migration in

Table 2.2 Volume and Trend of Migration Classified by Place of Last Residence in West Bengal, 1991 to 2011

Year / Sector	1991	2001	2011	Growth Rate		
				1991 -2001	2001-2011	**1991 - 2011**
Rural	12524233 (70.1)	16708897 (66.6)	20406304 (61.2)	3.34	2.21	3.15
Urban	5346548 (29.9)	8388732 (33.4)	12947686 (38.8)	5.69	5.43	7.11
Total	**17870781 (100)**	**25097629 (100)**	**33353990 (100)**	**4.04**	**3.29**	**4.33**

Source: D-Series, Census Data 1991, 2001, and 2011(Provisional)

urban West Bengal indicated an upward trend during 1991 to 2011, although with a marginal fall in this growth rate during 1991-2001 to 2001-2011, with an annual average growth rate of 7.11 per cent. Hence the trend of overall growth rate of in-migration in West Bengal has been observed to be about 4.33 per cent during 1991 to 2011. However, such aggregate in-migration figures can conceal more than it reveals. It would be clear when we represent the disaggregated in-migration data for rural and urban West Bengal according to the purpose of migration and sex structure of the migrants.

2.1.1 Volume and Trend of Male Migration by Place of Last Residence

Now if we classify the trend of in-migrants among the male migrants (both in rural and urban area) of West Bengal then it becomes clear that urban area of West Bengal attracted more such migrants during 1991-2011 compared to the rural area. It clearly signifies the fact that rural area or rural growth centers failed to generate enough pull factors to attract the in-migrants not only from other states but also from other districts of West Bengal.

Table 2.3 Trend of Male Migration Classified by Place of Last Residence in West Bengal

Year	1991	2001	2011	Growth Rate (1991-2001)	Growth Rate (2001-2011)	**Growth Rate (1991-2011)**
Rural	2867487 (52.4)	3575999 (46.8)	4067401 (42.2)	2.47	1.37	2.09
Urban	2608734 (47.6)	4058867 (53.2)	5562869 (57.8)	5.56	3.71	5.66
Total	**5476221 (100)**	**7634866 (100)**	**9630270 (100)**	**3.94**	**2.61**	**3.79**

Source: D-Series, Census Data 1991, 2001, and 2011(Provisional)

Further the Table 2.3 clearly shows that during 2001 to 2011 the average annual growth rate of in-migrants to urban area of West Bengal decreases from 5.56 per cent (1991 to 2001) to 3.71 per cent during 2001 to 2011. Such a decreasing growth rate during 2001 to 2011 does not, however, outweigh the positive growth rate in this regard during 1991 to 2001 and resulted in an average annual growth rate of 5.66 per cent of in-migrants in urban area of West Bengal during 1991 to 2011.

2.1.2 Volume and Trend of Female Migration by Place of Last Residence

In a similar fashion we can represent the trend of female migrants to both rural and urban West Bengal during 1991 to 2011. Here from Table 2.4 we observe that though the total volume of female migrants in West Bengal has increased from about 12.4 million in

1991 to 23.7 million in 2011, the pattern was dissimilar for rural and urban West Bengal. Here the average annual growth rate of female in-migrants to rural area of West Bengal declined during 1991-2001to 2001-2011 periods as observed also in case of male in-migrants, but this decline was not very much sharp for rural area of West Bengal. However, during 1991 to 2011 the average annual growth rate of female in-migrants to urban area has increased continuously at a pace of 8.49 per cent. Hence an average annual growth rate of 4.57 per cent of female in-migrants in West Bengal during 1991-2011 has been more influenced by higher growth rate of such in-migrants in urban West Bengal compared to the rural area of West Bengal.

Table 2.4 Trend of Female Migration Classified by Place of Last Residence of West Bengal , 1991 to 2011

Year	**1991**	**2001**	**2011**	Growth rate (1991-2001)	Growth rate (2001-2011)	**Growth Rate (1991-2011)**
Rural	9656746 (77.9)	13132898 (75.2)	16338903 (68.9)	3.60	2.44	3.46
Urban	2737814 (22.1)	4329865 (24.8)	7384817 (31.1)	5.82	7.06	8.49
Total	**12394560 (100)**	**17462763 (100)**	**23723720 (100)**	**4.09**	**3.59**	**4.57**

Source: D-Series, Census Data 1991, 2001, and 2011(Provisional)

Table 2.5 Distribution of Male & Female Migration of West Bengal Classified by Place of Last Residence, 1991 to 2011

Area	**1991**		**2001**		**2011**	
Rural	Male	Female	Male	Female	Male	Female
	22.90	77.10	21.40	78.60	19.93	80.07
Total	100.00		100.00		100.00	
Urban	48.79	51.21	48.38	51.62	42.96	57.04
Total	100.00		100.00		100.00	

Source: D-Series, Census Data 1991, 2001, and 2011(Provisional)

However, when we compared the proportion of male in-migrants in both rural and urban West Bengal then in many cases it has been observed that the percentage of female

in-migrants (Table 2.5) in urban area remains more than that of male in-migrants (say, 57.04 per cent of female migrants for 2011 in urban area) and this might be particularly due to the migration of females to their li-laws house after marriage. This fact becomes clear when we analyse the *motivational factors or bottom lines* behind such migration.

2.2 Reasons for Migration

Based on the census data source we can segregate seven basic reasons or motivational factors responsible for any in-migration in any particular area namely, work/employment, business , education, marriage, moved with family, moved after birth and any other reasons.

2.2.1 Reasons for Migration (Male and Female): For Migrants Who Moved to Rural Area

Table 2.6 reveals one of the most important *non-economic factors* responsible particularly for in-migration in rural West Bengal for leading a conjugal life after marriage by the female migrants. Since the share of this factor is very high ranging between 78 per cent – 82 per cent during 1991-2011 it has certainly influenced the average reason for female migration to rural West Bengal during the same period. It has actually influenced the proportion of rural migration to total migration in rural West Bengal.

So far as the male migration in rural West Bengal is concerned the bottom line is certainly not the employment or job opportunities. Here the dominating factors are found to be '*movement with family*' and '*other reasons*'. However, given the motivational factor of job search the male in-migrants have certainly dominated their female counterpart in all the relevant census years under the study.

Table 2.6 Reasons for Migration, Moved to Rural Area

Reasons for Migration	1991		2001		2011	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Work/Employment	11.6	0.8	10.9	0.8	8.8	0.6
Business	2.6	0.2	2.6	0.1	2.4	0.2
Education	2.9	0.3	1.5	0.1	1.2	0.2
Marriage	4.4	81.1	4.1	78.6	7.1	82.2
Moved with Family	30.8	7.2	24.7	7.6	20.8	4.5
Moved after Birth	0.0	0.0	11.8	2.3	27.6	4.9
Others	47.8	10.3	44.4	10.4	32.2	7.4
Total Moved to Rural	**100**	**100**	**100**	**100**	**100**	**100**
Annual Growth rate	**-**	**-**	**2.47**	**3.60**	**1.37**	**2.44**
Total Migration to Rural	**12524233**		**16708897**		**20406304**	

Note: Moved after birth was not classified in 1991 Census as reason for migration; Unclassifiable are not shown. Also, Migration data for calamities as a reason are negligible, so we add that data to other reasons for 1991

Source: D-Series, Census Data 1991, 2001, and 2011(Provisional)

2.2.2 Reasons for Migration (Male and Female): Migrants Who Moved to Urban Area

As opposed to the rural migration the bottom lines of urban in-migration tell a different story indeed. Here a motivational factor behind male in-migration seems to be the '*job search*' in urban area and '*movement with families*'. However, in this case also the principal determining force behind female in-migration in urban West Bengal is leading a conjugal life in-law house after marriage.

A large number of female moved to urban West Bengal with the family and this was about 24 per cent in 1991 and 20 per cent (Table 2.7) in 2011 census but field study indicated that (in Chapter 5) many of them took up employment later at their destinations. Census data fails to capture such huge masses of women migration for work, because they ask only single reason, ignoring secondary reasons.

Table 2.7 Reasons for Migration, West Bengal, Moved to Urban Area

Reasons for Migration	1991		2001		2011	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Work/Employment	34.1	3.4	27.7	2.4	23.3	2.3
Business	5.4	0.5	4.3	0.3	4.9	0.6
Education	3.4	1.1	2.0	0.5	2.4	0.8
Marriage	1.9	52.4	0.7	43.9	1.7	52.3
Moved with Family	26.6	24.5	25.3	26.0	25.6	19.9
Moved after Birth	0.0	0.0	6.3	3.9	13.3	6.4
Others	28.6	18.0	33.7	23.0	28.8	17.6
Total Moved to Urban	**100**	**100**	**100**	**100**	**100**	**100**
Annual Growth Rate	**-**	**-**	**5.6**	**5.8**	**3.7**	**7.1**
Total Migration to Urban	**5346548**		**8388732**		**12947686**	

Note and Source: As in Table 2.6

2.3 Pattern of Migration in West Bengal by Place of Last Residence

Pattern of Migration are broadly classified as *rural-rural* migration, *rural-urban* migration, *urban-rural* migration and *urban-urban* migration. Table.2.8 and figure 2.1 summarily represents the pattern of in-migration in West Bengal according to the place of *last residence anywhere in India* including all duration of residence. Among the four pattern of migration rural to rural in-migration was substantially high compare to others and in West Bengal it was 68.35 per cent in 1991. There was a sharp increase in annual growth rate of *rural to urban* and *urban to rural in*-migration during 1991-2011.

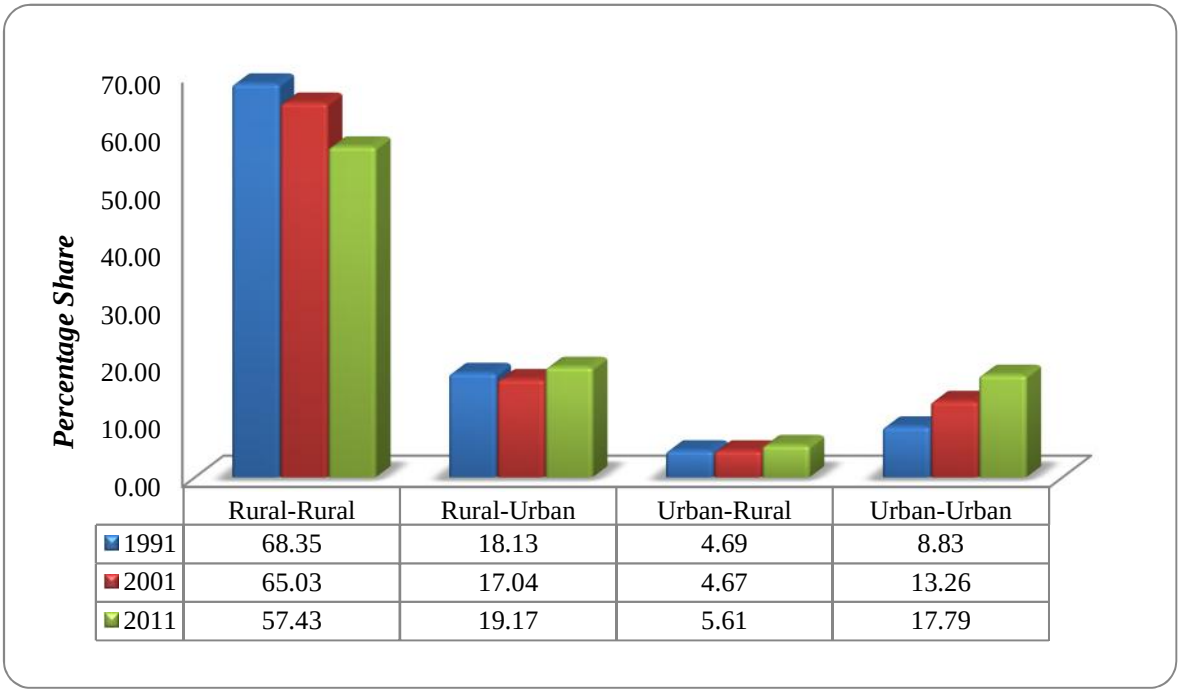
Table 2.8 Growth Rate of Migration of West Bengal during 1991 to 2011

Pattern of Migration	**Number of Migrants**			***Annual Growth Rate***	
	1991	**2001**	**2011**	**1991-2001**	**2001-2011**
Rural-Rural	10284756	12994223	16946335	2.63	3.04
Rural-Urban	2727946	3405729	5658340	2.48	6.61
Urban-Rural	705324	932623	1656008	3.22	7.76
Urban-Urban	1328551	2648585	5249685	9.94	9.82
Total Migration	**15046577**	**19981160**	**29510368**	**3.28**	**4.77**

Note: Place of last residence as unclassifiable as '*Rural*' and '*Urban*' is excluded from this table and also we include place of last residence as only "*Last residence in India*".
Source: D-Series, Census Data 1991, 2001, 2011(Provisional)

However, so far as the percentage share of the patterns of migration (such as rural-urban, rural-rural, urban-rural and urban-urban) in the total migration for each census year, the most prominent share goes to the pattern of urban-urban migration and rural-rural migration where the former shows an increasing share while the latter indicates a declining share during the said time period. This implies that during the last three decades the urban area of West Bengal could attract more in-migrants compare to the rural area. If we judge the implication of such migration pattern it might reveal a disparity in the urban growth centers either within West Bengal or in adjacent states.

Figure 2.1 Percentage share of Pattern of Migration of West Bengal during 1991-2011



	Rural-Rural	Rural-Urban	Urban-Rural	Urban-Urban
1991	68.35	18.13	4.69	8.83
2001	65.03	17.04	4.67	13.26
2011	57.43	19.17	5.61	17.79

Source: D-Series, Census Data 1991, 2001, 2011(Provisional)

2.3.1 Rural to Rural Migration

So far as the rural-rural migration as classified by place of last residence of West Bengal is concerned, it is observed that the shares of both male and female migrants increase with an increase in their duration of stay in the destination areas.

Table 2.9 Rural to Rural Migration Classified by Place of Last Residence in West Bengal

Duration of Residence	1991		2001		2011	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
< 1 Year	4.1	1.3	6.1	1.6	4.1	2.1
1 - 4 Years	17.8	14.2	18.6	14.0	11.3	12.9
5 - 9 Years	14.6	16.1	15.9	15.5	13.0	14.4
10 Years and Above	48.4	64.2	52.6	66.8	71.5	70.5
All Duration Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: 'Period of last residence does not specified' includes in All duration of residence and Emigration from other countries does not include here.
Source: D-Series, Census Data 1991, 2001, and 2011(Provisional)

Thus, in 1991 this share of male migrants residing for 10 years or more in the destination rural area was 48.4 per cent and it gradually increased to 52.6 per cent and 71.5 per cent in the subsequent census years of 2001 and 2011 respectively (Table 2.9). Similar was the case with female migrants whose share for such duration of stay, i.e., 10 years or above in destination rural area increased gradually from 64.2 per cent in 1991 to 66.8 per cent and 70.5 per cent in the subsequent census years of 2001 and 2011 respectively. Since, the shares of both male and female migrants from rural to rural area are found to be less for relatively short duration of stay at destination areas, it may signify that rural area of West Bengal has not created sufficient short term employment opportunities for the migrant labourers for male migrants with in the category of duration of stay for 1-4 years and 5-9 years in the destination rural area, the shares show a declining trend in both the categories during 2001 and 2011. Thus, those who have already migrated before a long time and found a scope of earning their livelihood in the destination rural area have not returned to their respective last residence located in rural area.

2.3.2 Rural to Urban Migration

Similar picture evolves when we consider *rural-urban* migration for both male and female migrants during the census years (1991 to 2011) in accordance with their duration of stay in destination urban area. For instance, for male migrants the shares of small duration

of stay in destination areas gradually increased from 41.2 per cent in 1991 to 65.9 per cent in 2001 and then up to 72.2 per cent in 2011 (Table 2.10).

Table 2.10 Rural to Urban Migration Classified by Place of Last Residence of West Bengal

Duration of Residence	1991		2001		2011	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
< 1 Year	5.3	2.7	2.5	2.0	4.1	3.0
1 - 4 Years	24.1	19.5	13.3	14.7	11.6	13.6
5 - 9 Years	17.9	18.5	12.8	14.6	12.0	14.2
10 Years and Above	41.2	53.6	65.9	63.9	72.2	69.2
All Duration Total	100.0	100.0	100.0	100.0	100.0	100.0

Note and *Source*: As in Table 2.9

Since, the shares of male migrants, with medium duration of stay namely, for 1-4 years and 5-9 years in the destination urban area, gradually declined during 2001-2011, it also clearly signifies inadequacy of better job opportunities for the migrant workers in the urban area of West Bengal.

2.3.3 Urban to Rural Migration

Table 2.11 and table 2.12 indicating urban to rural and urban to urban migration pattern as classified by the place of last residence and duration of stay reveal the same feature.

Table 2.11 Urban to Rural Migration Classified by Place of Last Residence in WB

Duration of Residence	1991		2001		2011	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
< 1 Year	2.3	1.8	8.1	3.8	8.7	5.2
1 - 4 Years	15.7	16.9	22.5	20.5	20.6	19.4
5 - 9 Years	14.2	17.0	18.9	18.9	19.7	19.2
10 Years and Above	60.1	58.7	44.9	53.5	51.0	56.1
All Duration Total	100.0	100.0	100.0	100.0	100.0	100.0

Note and *Source*: As in Table 2.9

2.3.4 Urban to Urban Migration

Table 2.12 Urban to Urban Migration Classified by Place of Last Residence in WB

Duration of Residence	1991		2001		2011	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
< 1 Year	2.3	2.1	2.2	2.1	3.9	3.5
1 - 4 Years	17.6	18.4	14.8	16.4	13.7	15.4
5 - 9 Years	15.4	17.7	13.5	15.8	14.0	15.8
10 Years and Above	56.1	55.8	60.2	58.6	68.3	65.3
All Duration Total	100.0	100.0	100.0	100.0	100.0	100.0

Note and *Source*: As in Table 2.9

Like other states such as Delhi, Maharashtra, Karnataka, Punjab, Haryana, and Gujarat, the state of West Bengal has also been one of the main migration-destination states for both male and female migrants. These are supposed to be economically more developed states towards which they move for job search, subsistence living or for shelter (1991-2011). Migration occurs as a response to regional disparities in the levels of economic development across India and hence migration occurs from the economically less developed states (Uttar Pradesh, Bihar etc.) to comparatively more developed states (Delhi, Maharashtra, Gujarat, West Bengal etc.) (Sengupta, 2012).

2.4 Nature and Trend of *Inter-District* Migration in 1991 and 2001

The broad classification of inter-district migration can be classified in the following categories:

- Rural-Rural migration
- Rural-Urban migration
- Urban-Rural migration
- Urban-Urban migration

From Table 2.13 it has been found that, while the cross-district rural-rural migration has always been a dominant form of short distance migration in West Bengal, there has been a moderate increase in cross-district rural-urban migration and a sharp increase in cross-district urban- urban migration during the post-economic reform period. Table 2.13 also gives an inter-temporal overview on cross-district migration of workforce in West Bengal. It is evident that inter-district rural-rural and urban-rural migration grew at the rates of 2.8 per cent and 1.79 per cent per annum during 1991-2001 while the inter-district rural-urban and urban-urban migration grew at the rates of 4.36 per cent and 13.07 per cent per annum respectively. Moreover, the proportions of cross-district rural-rural, rural-urban and urban-rural migrants out of the total inter-district migrants have fallen by 6.78 (from 44.55 per cent to 37.77 per cent), 1.26 (from 25.86 per cent to 24.6 per cent) and 2.22 (from 10.11 per cent to 7.89 per cent) percentage points, the proportion of cross-district urban-urban migrants out of the total cross-district migrants has increased remarkably by 10.26 (from 19.48 per cent to 29.74 per cent) percentage points during 1991-2001.

Table 2.13 Growth Rate of Cross-District Migration of West Bengal during 1991 -2001

Pattern of Migration	**Number of Migrants**		**Annual Growth Rate**	***Percentage share in***	
	1991	2001	**1991-2001**	**1991**	**2001**
Rural-Rural Migration	1216539	1557659	2.80	44.55	37.77
Rural-Urban Migration	706240	1014462	4.36	25.86	24.60
Urban-Rural Migration	275936	325438	1.79	10.11	7.89
Urban-Urban Migration	531805	1226721	13.07	19.48	29.74
Total Migration	**2730520**	**4124280**	**5.10**	**100**	**100**

Note: District level migration information for the year 2011 not yet published by Census of India
Source: D-Series, Census Data 1991, 2001

The possible reason behind the comparatively lower rates of growth of cross- district rural-rural and urban-rural migration may be that continuous reduction in agricultural subsidies has raised the cost of production and in addition to that, cheap import of agricultural products from other states as well as from other neighboring countries has

reduced the prices of agricultural products produced within the state and as a result agricultural wages could not rise sufficiently over the years (Sengupta, 2012).

Therefore, migration to the rural area of the agriculturally prosperous districts to do manual works in foodgrain production does not seem to be a lucrative option of migration for the marginal farmers and landless agricultural workers of the state. On the other hand, the possible explanation behind the comparatively higher rates of growth of cross-district *rural- urban* and *urban-urban* migration may be that rapid but lopsided Kolkata-centric urbanization and phenomenal expansion of urban informal sector, especially in Kolkata and the highly urbanized peripheral districts of the city and failure of other medium and small towns to create enough urban employment during the post-reform period have made urban venture in Kolkata and its peripheral districts easy and profitable for both the agricultural workers in the rural area and the non-agricultural workers in the small and medium towns of the source districts.

2.4.1 Trend of Inter-District Rural to Rural and Rural to Urban In and Out-Migration

Table 2.14 clearly shows that cross-district rural-urban in-migration has grown at a faster rate than cross-district rural-rural in-migration in most of the destination districts. It is also clearly evident from Table 2.14 that most of the relatively developed districts[2] such as North 24 Parganas, Hooghly, Howrah and South 24 Parganas experienced relatively higher growth rates of rural-urban in-migration compared to rural-rural in-migration. It is to be noted that these five districts are peripheral districts of Kolkata and they are found to be highly urbanized.

Table 2.14 Comparison of Annual Growth Rates of Rural-Rural and Rural-Urban In-migration in Different Destination Districts during 1991 to 2001

	Destination District	*Rural to Rural* In-migration		*Rural to Urban* In-migration		Annual Growth Rate (per cent)	
		1991	2001	1991	2001	R-R	R-U
Less Developed Districts	Bankura	99433	132326	9700	9662	3.31	-0.04
	Birbhum	93210	106924	13393	16525	1.47	2.34
	Dinajpur	59430	71847	9130	8325	2.09	- 0.88
	Jalpaiguri	37260	80337	17580	34052	11.56	9.37
	Koch Behar	26860	35470	3370	6589	3.21	9.55
	Maldah	29860	40619	8394	9143	3.6	0.89
	Medinipur	104325	108217	29517	28747	0.37	-0.26
	Murshidabad	87450	106113	15747	19428	2.13	2.34
	Puruliya	40670	41383	8490	10011	0.18	1.79
	Average	**64278**	**80360**	**12813**	**15831**	**3.10**	**2.79**
Developed Districts	Bardhaman	176790	232028	133973	149197	3.12	1.14
	Darjeeling	17744	19724	17375	20267	1.12	1.66
	Hooghly	125510	195718	60466	111780	5.59	8.49
	Howrah	56285	65778	65940	92559	1.69	4.04
	Kolkata	0	0	138163	201067	–	4.55
	Nadia	95564	120553	27403	36958	2.61	3.49
	North 24 Parganas	63120	94069	123790	222080	4.9	7.94
	South 24 Parganas	103028	106553	23809	38072	0.34	5.99
	Average	**91149**	**119203**	**73865**	**108998**	**2.77**	**4.66**
	State Average	**76034**	**97354**	**41544**	**59674**	**2.96**	**3.67**
	Total	**1216539**	**1557659**	**706240**	**1014462**	–	–

(Note: We have Uttar and Dakshin Dinajpur as Dinajpur (combined) and Paschim and Purba Medinipur as Medinipur (combined)).
Source: D-Series, Census Data 1991, 2001

In a similar fashion, the pattern of out-migration from relatively backward and developed districts of West Bengal can also be looked into. Table 2.15 shows that cross-district *rural-urban* out-migration has also grown at a faster rate than cross-district *rural-rural* out-migration from most of the source districts of West Bengal over the period between 1991 and 2001. In fact, the workers are likely to be inclined to migrate to those districts where they can get higher expected urban wage than the average agricultural wage they get in the rural area of the source districts.

Table 2.15 Comparison of Annual Growth Rates of Rural-Rural and Rural-Urban Out-Migration from Different Source Districts during 1991 to 2001

	Source District	*Rural to Rural* Out-migration		*Rural to Urban* Out-migration		Annual Growth Rate (per cent)	
		1991	2001	1991	2001	R-R	R-U
Less Developed Districts	Bankura	114945	139018	65662	82203	1.43	2.52
	Birbhum	79490	99230	40194	50230	1.78	2.5
	Dinajpur	29804	34288	13363	15545	3.29	7.78
	Jalpaiguri	35110	46457	14183	19412	0.26	1.63
	Koch Behar	30000	62984	16732	29746	1.93	3.69
	Maldah	50340	63820	12640	15681	-0.47	2.41
	Medinipur	123270	126637	80634	119672	-0.37	4.84
	Murshidabad	121074	149714	47398	65921	-0.2	3.51
	Puruliya	42953	60920	25480	29252	1.12	1.48
	Average	**69665**	**87007**	**35143**	**47518**	**0.97**	**3.37**
Developed Districts	Bardhaman	164790	220616	68566	96480	-0.5	4.07
	Darjeeling	10470	16788	9300	13244	-0.71	4.24
	Hooghly	112855	154515	70883	99479	-0.78	4.03
	Howrah	67770	81520	53571	87455	-0.31	6.33
	Kolkata	–	–	–	–	–	–
	Nadia	98970	135693	64200	102162	-0.56	5.91
	North 24 Parganas	84308	101971	58849	70049	-1.49	1.9
	South 24 Parganas	50390	63528	64585	117931	1.76	8.27
	Average	**84221**	**110661**	**55708**	**83829**	**-0.37**	**4.96**
	State Average	**76034**	**97354**	**44140**	**63404**	**0.36**	**3.83**
	Total	**1216539**	**1557659**	**706240**	**1014462**	–	–

Note and Source: As in Table 2.14

Normally it is expected that when the destination districts experience higher rates of urbanisation compared to those in source districts then the urban area of destination districts can attract more out-migrants from the rural area of source districts[4] by providing better job opportunities, higher wage rates, opportunities of learning by doing and develop the skill required to earn higher wages and ensuring an upward social mobility.

As a fall out, workers are supposed to migrate from the rural area of districts having lower urbanization to the urban areas of the districts having higher

urbanization. Better quality of infrastructural facilities in urban area of the destination districts, being an added advantage, is supposed to play the role of a pull factor. On the other hand, the low level of human development in a source district can also play the role of a push factor. Moreover, the income-inequality may force the workers to migrate from agricultural activities in the rural area of the home districts to the non-farm activities in the urban areas of destination districts[4] with a view to supplement their income-gap for subsistence.

2.4.2 Trend of Inter-District Urban to Rural and Urban to Urban In and out migration

The inter-district in-migration and out-migration patterns in West Bengal during 1991-2001 for *urban to rural* (U-R) and *urban to urban* (U-U) in-migration represent the other side of the coin as reflected in Table 2.14 and Table 2.15.

Table 2.16 clearly reveals that the annual growth rates of *urban-rural* in migration in the relatively less developed districts of West Bengal from other districts within West Bengal (from relatively developed and less developed districts) have been almost same compared to the same for relatively developed districts but for some relatively less developed districts like Puruliya and Medinipur, the growth rates have been found to be negative. However, for *urban-urban* in-migration the average annual growth rate during 1991-2001 have been found to be much higher (about 12.8 per cent) for relatively developed districts in comparison with that of relatively less developed districts. In this case also some of the less developed districts like Bankura and Medinipur have indicated negative growth rates of *urban-urban* in-migration. As opposed to this relatively developed districts such as North 24 Parganas, South 24 Parganas, Hoogly and Howrah experienced spectacular growth rates in this regard during the reference period. Thus the urban center of relatively developed districts of West Bengal could generate higher pull factor to attract the in-migrants.

Table 2.16 Comparison of Annual Growth Rates of Urban-Rural and Urban-Urban in-migration in Different Destination Districts during 1991 to 2001

	Destination District	*Urban to Rural* In-migration		*Urban to Urban* In-migration		Annual Growth Rate (per cent)	
		1991	2001	1991	2001	U-R	U-U
Less Developed Districts	Bankura	14590	18960	9759	9649	3.00	-0.11
	Birbhum	13840	16099	11293	13531	1.63	1.98
	Dinajpur	6130	7620	11092	14446	2.43	3.02
	Jalpaiguri	10390	18588	20229	34620	7.89	7.11
	Koch Behar	3740	4767	4690	8418	2.75	7.95
	Maldah	4920	5968	8630	8931	2.13	0.35
	Medinipur	26890	25299	31764	30603	-0.59	-0.37
	Murshidabad	10460	11224	15300	17378	0.73	1.36
	Puruliya	6410	6366	10645	11455	-0.07	0.76
	Average	**10819**	**12766**	**13711**	**16559**	**2.21**	**2.45**
Developed Districts	Bardhaman	27460	32668	84676	87273	1.90	0.31
	Darjeeling	5060	6943	19156	21296	3.72	1.12
	Hooghly	27150	39250	43900	119995	4.46	17.33
	Howrah	14341	18125	37480	90075	2.64	14.03
	Kolkata	–	–	55230	78778	0	4.26
	Nadia	26415	31426	35096	49752	1.90	4.18
	North 24 Parganas	32740	35240	100555	543030	0.76	44.00
	South 24 Parganas	45400	46895	32310	87491	0.33	17.08
	Average	**25509**	**30078**	**51050**	**134711**	**2.24**	**12.80**
	State Average	**17246**	**20340**	**31283**	**72160**	**2.22**	**7.31**
	Total	**275936**	**325438**	**531805**	**1226721**	–	–

Note and Source: As in Table 2.14

When we consider the cross district out-migration pattern namely *urban to rural* (U-R) and *urban to urban* (U-U) Table 2.17 clearly reveals that on an average the growth rate of *urban to rural* out-migration form the relatively less developed districts has been higher compared to that for relatively developed districts during 1991-2001. This is obvious since, the migrant workers of relatively backward districts feel higher urge towards out-migration from urban centers of the relatively less developed districts to even rural area in

search of livelihood. If we consider these growth rates in the relatively less developed districts like Koach Bihar, Dinajpur, Puruliya and Maldah the fact become more revealing.

Table 2.17 Comparison of Annual Growth Rates of Urban-Rural and Urban-Urban Out-Migration from Different Source Districts During 1991 to 2001

	Source District	*Urban to Rural* Out-migration		*Urban to Urban* Out-migration		Annual Growth Rate (per cent)	
		1991	2001	1991	2001	U-R	U-U
Less Developed Districts	Bankura	8070	9581	18293	23260	1.87	2.72
	Birbhum	6490	8088	14270	18222	2.46	2.77
	Dinajpur	3600	4733	9852	11321	9.14	5.66
	Jalpaiguri	5320	6675	15100	19976	3.15	1.49
	Koch Behar	4380	8383	12140	19017	2.55	3.23
	Maldah	4210	5713	9950	15168	3.57	5.24
	Medinipur	9250	10264	29980	43222	1.1	4.42
	Murshidabad	12400	15739	24410	34102	2.69	3.97
	Puruliya	3190	4450	9060	11021	3.95	2.16
	Average	**6323**	**8181**	**15895**	**21701**	**3.39**	**3.52**
Developed Districts	Bardhaman	25375	32415	43988	59824	2.46	3.60
	Darjeeling	5210	7889	15680	22433	5.14	4.31
	Hooghly	15570	20714	32568	46203	3.3	4.19
	Howrah	17650	19872	33100	51128	1.26	5.45
	Kolkata	106330	111796	151210	688564	0.51	35.54
	Nadia	16910	22764	41664	65000	3.46	5.64
	North 24 Parganas	23941	26339	47790	58047	1.00	2.15
	South 24 Parganas	8040	10023	22750	40213	2.47	7.68
	Average	**27378**	**31477**	**48594**	**128927**	**2.45**	**8.57**
	State Average	**16232**	**19143**	**31283**	**72160**	**2.95**	**5.90**
	Total	**275936**	**325438**	**531805**	**1226721**	–	–

Note and Source: As in Table 2.14

So far as the out-migration is concerned the average annual growth rate of *urban to urban* migration from the relatively developed districts of West Bengal has been much higher, particularly in districts like Kolkata, compare to the relatively backward districts of West Bengal. It is important to note that within relatively developed districts if the abnormally high growth rate of *urban-urban* out-migration form Kolkata is considered to be

an outlier (35.4 per cent) then the average growth rate of out-migration from relatively developed districts would come down to about 4.71 per cent per annum. Though, still higher compared to the average figure (3.52 per cent) from relatively less developed districts, even within the relatively less developed districts this growth rate of *urban-urban* out-migration has been found to be relatively higher in districts like Koach Bihar and Maldah.

The plausible explanation may be that the workers have migrated from the urban area of the source districts to the urban area of the nearby destination districts in search of non-agricultural works during the first decade of the post-economic reform. Again it seems plausible that the workers have migrated from the urban area of the districts having lower urbanization to the urban area of the districts having higher urbanization for doing non-agricultural works. The higher expected urban wage of the destination district has always been a highly significant pull factor for the inter-district urban-urban migration in post-economic reform period.

2.5 Comparison of Inter-District Migration between relatively Backward and Developed Districts

Based on the analysis of trend and pattern of migration by using ***census data*** by place of last residence and by the *place of birth*[3] and also the reason for migration, we find that females migrate mainly due to matrimonial reasons (75 per cent or above) and non-economic reasons which are difficult to identify. So, while analysing the inter-district comparison of migration, female migrations are excluded from our study. Here we can consider only the male migration of West Bengal for the analysis in the years 1991 and 2001.

Table 2.18 Inter-Districts Male In and Out Migration to Rural and Urban area in 1991

	Districts	In-migration	Out-migration	Net Migration
Less Developed Districts	Bankura	62380	21929	40451
	Birbhum	38270	29654	8616
	Jalpaiguri	23490	37617	-14127
	Koch Behar	25832	10930	14902
	Maldah	30280	15850	14430
	Medinipur	103500	45762	57738
	Murshidabad	69473	27190	42283
	Puruliya	25530	15870	9660
	West Dinajpur	20230	33890	-13660
	Mean	**44332**	**26521**	**17810**
Developed Districts	Bardhaman	75402	145348	-69946
	Darjeeling	17660	28002	-10342
	Howrah	49840	50248	-408
	Hoogly	52806	75430	-22624
	Kolkata	102284	98300	3984
	Nadia	70906	50833	20073
	North 24 Parganas	65328	123700	-58372
	South 24 Parganas	49050	71708	-22658
	Mean	**60410**	**80446**	**-20037**
	Total	**882261**	**882261**	**0**

Source: D-Series, Census Data 1991

If we now review the *in-migration and out-migration* pattern for *male migrants* for both rural and urban area in the census year 1991(Table 2.18) then it seems to be clear that the average ***net migration***[5] (i.e., *in-migration* J *out-migration*) is *negative* among the relatively developed districts of West Bengal. It may signify that the male migrants from the developed districts might be better informed regarding the job opportunities available in other areas of West Bengal and hence the average out-migration remained higher compared to the in-migration of relatively developed districts of West Bengal.

However, for relatively less developed districts of West Bengal the average out-migration was found to be lower than that of in-migration of male workers causing the net

migration to be positive. Does it indicate that the relatively backward districts of West Bengal could attract more migrant labourers or do these districts fail to indicate enough scope for out-migration?

The possible explanation may be the paucity of the scope of out-migration for the workers leaving in the relatively backward districts (in view of their poor education, skill, inadequate information regarding employment and income opportunities in other urban area). It is the evidence of distress migration within the relatively backward districts of West Bengal.

Table 2.19 Inter-Districts Male In and Out Migration to Rural and Urban area in 2001

	Districts	In-migration	Out-migration	Net Migration
Less Developed Districts	Bankura	28931	72014	-43083
	Birbhum	34801	44962	-10161
	Dakshin Dinajpur	11739	16985	-5246
	Jalpaiguri	67368	29224	38144
	Koch Bihar	13502	45960	-32458
	Maldah	18137	39374	-21237
	Medinipur	43798	127266	-83468
	Murshidabad	27921	97754	-69833
	Puruliya	13451	34965	-21514
	Uttar Dinajpur	36913	15902	21011
	Mean	**29656**	**52441**	**-22785**
Developed Districts	Bardhaman	158540	102579	55961
	Darjeeling	32377	25885	6492
	Howrah	93499	71434	22065
	Hoogly	146923	72055	74868
	Kolkata	144168	358786	-214618
	Nadia	62371	102847	-40476
	North 24PGS	383857	74536	309321
	South 24 PGS	99471	85239	14232
	Mean	**140151**	**111670**	**28481**
	Total	**1417767**	**1417767**	**0**

Source: Census of India, 2001

Again if we now review the *in-migration and out-migration* pattern for *male migrants* for both rural and urban area in the census year 2001(Table 2.19) then it is evident that the average ***net migration***[5] is *positive* among the relatively developed districts of West Bengal. It may signify that the male in-migrants from the other less developed districts might be attracted in these districts and hence the average out-migration remained lower compared to the out-migration of relatively less developed districts of West Bengal. And it was observed that in relatively less developed districts of West Bengal the average out migration was *more* than that of in-migration of male workers causing the net migration to be negative. This may either imply that the relatively backward districts of West Bengal could generate enough employment opportunities for migrant labourers or they could not create enough scope to attract migrant labourers. The plausible explanation may be the paucity of the scope of in-migration for the workers staying in the relatively backward districts (in view of their poor infrastructure, income opportunities in these areas).

- When we compare the average in-migration in the rural and urban area of relatively less developed districts and developed districts of West Bengal, the average figure for

Table 2.20 t-Test of equality of mean between Male In-migration and Male Out-migration in 1991

Backward Districts			**Developed Districts**		
	In-migration	**Out-migration**		**In-migration**	**Out-migration**
Mean	44332	26521	Mean	60410	80446
Variance	800489941	131172812	Variance	605528928	157752542
Observations	9	9	Observations	8	8
Pooled Variance	465831376.4		Pooled Variance	109152720	
Hypothesized Mean Difference	0		*Hypothesized Mean Difference*	0	
df	16		df	14	
t Stat	1.751		t Stat	-1.213	
P(T<=t) one-tail	0.050		P(T<=t) one-tail	0.123	
t Critical one-tail	1.746		t Critical one-tail	1.761	
P(T<=t) two-tail	0.099		P(T<=t) two-tail	0.245	
t Critical two-tail	2.120		t Critical two-tail	2.145	

Source: Computed from Census of India, 1991

Table 2.21 t-Test: Male In-migration v/s male Out-migration in 2001

Backward Districts			Developed Districts		
	In-migration	***Out-migration***		***In-migration***	***Out-migration***
Mean	29656	52441	Mean	140151	111670
Variance	298013558	1304500259	Variance	11612714430	1055024156
Observations	10	10	Observations	8	8
Pooled Variance	801256908.7		Pooled Variance	11081477996	
Hypothesized Mean Difference	0		*Hypothesized Mean Difference*	0	
df	18		df	14	
t Stat	-1.800		t Stat	0.541	
P(T<=t) one-tail	0.044		P(T<=t) one-tail	0.298	
t Critical one-tail	1.734		t Critical one-tail	1.761	
P(T<=t) two-tail	0.089		P(T<=t) two-tail	0.597	
t Critical two-tail	2.101		t Critical two-tail	2.145	

Source: Computed from Census of India, 2001

relatively less developed districts is found to be smaller than that of relatively developed districts. This was true for both in-migration and out-migration. Hence we have done the separate statistical test for mean difference of in-migration and out-migration within backward and developed districts for the census years 1991 and 2001 as well as between developed and backward districts (Table 2.20 and 2.21).

Within the relatively backward districts of West Bengal the male in-migration in 1991 is significantly higher than the male out-migration. Though, within relatively developed districts male out-migration is higher than the male in-migration but this difference is not significant.

In 2001, the male out-migration is significantly higher than the male in-migration in the relatively less developed districts/backward districts (Table 2.21).

- As we compare the relatively developed districts with relatively less developed districts the volume of out-migration was significantly higher in the former than that of the latter in 1991 as well as 2001.

Table 2.22 t-Test: Comparison between backward and developed districts, 1991

In-migration			Out-migration		
	Developed Districts	***Backward Districts***		***Developed Districts***	***Backward Districts***
Mean	60410	44332	Mean	80446	26521
Variance	605528928	800489941	Variance	1577525492	131172812
Observations	8	9	Observations	8	9
Pooled Variance	70950813.8		Pooled Variance	806137395.9	
Hypothesized Mean Difference	0		*Hypothesized Mean Difference*	0	
df	15		df	15	
t Stat	1.242		t Stat	3.909	
P(T<=t) one-tail	0.117		P(T<=t) one-tail	0.001	
t Critical one-tail	1.753		t Critical one-tail	1.753	
P(T<=t) two-tail	0.233		P(T<=t) two-tail	0.001	
t Critical two-tail	2.131		t Critical two-tail	2.131	

Source: Computed from Census of India, 1991

In case of in-migration the volume was also significantly higher in the relatively developed districts than that of relatively less developed districts in 2001. In 1991 there was no significant difference of in-migration between developed and backward districts (Table 2.22 and Table 2.23) of West Bengal.

Table 2.23 t-Test: Comparison between backward and developed districts, 2001

In-migration			Out-migration		
	Developed Districts	***Backward Districts***		***Developed Districts***	***Backward Districts***
Mean	140151	29656	Mean	111670	52441
Variance	11612714430	298013558	Variance	10550241561	1304500259
Observations	8	10	Observations	8	10
Pooled Variance	5248195190		Pooled Variance	5349512079	
Hypothesized Mean Difference	0		*Hypothesized Mean Difference*	0	
df	16		df	16	
t Stat	3.2155		t Stat	1.7072	
P(T<=t) one-tail	0.0027		P(T<=t) one-tail	0.0536	
t Critical one-tail	1.7459		t Critical one-tail	1.7459	
P(T<=t) two-tail	0.0054		P(T<=t) two-tail	0.1071	
t Critical two-tail	2.119905299		t Critical two-tail	2.1199	

Source: Computed from Census of India, 2001

Notes:

1. A person is considered as migrant by *place of last residence*, if the place in which he is enumerated during the census is other than his place of immediate last residence.
2. We segregate the various districts of West Bengal into "***relatively developed districts***" and "***relatively backward districts***" using the ranking methodology, based on "Indian Rural Development Report, 2013-14". 8 districts rank among the developed districts with Kolkata in the first position and ending with south 24 Parganas. The reason for backwardness has numerous contributing factors among which geographical realm or positioning has special mention. Among rest of the 10 districts (2 in the hills, 5 constituted of the eastern plains and 3 in the Jangalmahal or forest zone), the relatively developed districts in terms of rural sector is Puruliya.
3. Migrants by *place of birth* are those who are enumerated at a village/town at the time of census other than their place of birth.
4. When inter-districts in-migration occurred from rural area of West Bengal we consider 17 destination districts (including Kolkata). We have combined Uttar Dinajpur and Dakshin Dinajpur as Dinajpur (combined) and Paschim Medinipur and Purba Medinipur as Medinipur (combined) for all the four kinds of inter-district migration.
5. ***Net migration*** for any districts/states, may be defined as the difference between in-migration and out-migration.