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# Regional Disparity in patterns of Out-migration from West Bengal: Evidences from census data

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**Abstract:** Regional disparity in development has long been acknowledged as a reason for migration. West Bengal, which always remained a net positive receiver, became net negative during the 2011 census. The objectives of the study are to analyse the trends and patterns of out-migration from the state and to identify the impact of regional disparity on out-migration from the state. Both secondary data and primary observation have been used. The streams of migration show the dominance of rural to urban till 2001 but urban to urban during 2011. Gender differential remained conventional with predominance of marriage migration among females and economic purpose among males. However, there is a decline in marriage migration and increase in economic reason related migration among females. It has been observed that the state used to be net positive because more migrants from the eastern and north-eastern states used to reach West Bengal. However, the volume started declining since 2001. During this decade even the state itself started sending more people out towards southern and western states which were fairing in terms of economic indicators. Observation from 7 districts reveals that men prefer to migrate to southern and western states whereas women from Darjeeling opt for international migration.

**Keywords**: Internal migration, Out-migration, Migration streams, Decadal change, Regional disparity, Regional development.

## Introduction

Migration in the country along with fertility and mortality is an essential component of population change. Migration impacts the socio-economic and political setting at the national and international levels. It is an indication of the existing social and economic disparities between the place of origin and the place of destination (UNFPA, 1993). Unlike fertility and mortality, migration does not belong to the biological arena. It influences the size, composition and distribution of the population. Advancement in transportation and communication system has led migration in becoming a worldwide phenomenon. Industrialization and economic development have paved the way for large scale movement of people from villages to towns (Bhagat, 2014). Migration plays a vital role in changing the population growth rate in some states. The volume of migration has considerably increased over the census decades, from 159.6 million in 1971 to 201 million in 1981; 226 million in 1991 to 309 million in 2001 then further to 455 million in 2011. In spite of increase in the volume, the percentage of migrants to the total national population has decreased from 30.3 percent in 1981 to 27.4 per cent in 1991; later it increased to 30.6 percent in 2001 to further 37.6 per cent in 2011 (Lusome and Bhagat, 2006; Census of India, 2011).

The importance of analysing the trends and patterns of migration lie with how the change influences people's motive to move within the country. Migration can bring the most unpredictable changes in population growth and has the ability to change a country's economic,

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social and cultural factors (Singh, 1998). To get an estimation of future population redistribution it is essential for the demographers to understand the patterns of migration. The temporal factors like birth, death and internal migration create the base for the analysis of patterns which is quite reliable (Chakraborty, 1997). In developing countries like India, migration is mostly driven by push factors from the place of origin rather than pull factors of the place of destination. People are forced to migrate due to prevailing conditions of poverty, unemployment, underemployment, natural calamities and under-development in the place of origin (Das and Saha, 2013). The broad objective of this paper is to analyse the trends and patterns of migration from West Bengal with special emphasis on regional disparity in development.

***Regional Disparity and Migration***

There is a strong association between migration and regional disparities. Lee (1966), in his hypothesis, has mentioned that each place possesses certain positive and negative factors. The positive factors hold people within the place or attract people from other places and the negative factors tend to repel them. These positive and negative factors can act as differential levels of economic development and accessibility of the place. A similar hypothesis has been provided by Zelinsky in mobility transition model (1971) where he states that migration flow changes according to the different levels of economic development in the society. Likewise, other scholars have also concluded that population mobility has increased with progress in the economy and technical advancement. It has been observed that industrialization and economic development attract a large population from the countryside to the town and from town to city or from one country to another (Clarke, 1978; Bouge, 1961).

With time, there has been a remarkable change in the patterns of migration in India. At the time of independence, the under-developed states experienced a high percentage of net out-migration. On the other hand, the developed states saw high in-migration from the backward areas. In the post-independence period the patterns changed, the developed states like Karnataka, Maharashtra, Tamil Nadu and West Bengal started to show declining in-migration trends. The changing migration pattern over the decade proves that migration being the complex phenomena it is difficult to find out the precise factors affecting migration but, in India, migration is majorly driven by regional disparities (Kundu, 2006). People tend to move away from backward underdeveloped regions to the developed and affluent regions to improve their standard of living (Dash *et al.* 2017). Due to regional disparity, poor, landless, illiterate and unskilled agricultural labours move towards the large cities like Mumbai, Delhi, Chennai, in search of minimum livelihood which in turn is the cause of urban decay (Mukherjee, 1977). Some eminent scholars have attempted to bring out the association between migration and regional disparities in development. A study by Voices of Youth (UNICEF, 1995) evokes that poor socioeconomic conditions of a region such as low wages, high rates of unemployment, underemployment in the rural areas and poverty are the driving force of youth migration. Better economic conditions and prospects in the place of destination persuade more population from the place of origin. While analysing migration data from 1971 to 2001 of India, significant correlation has been observed between internal migration and Gross National Income (GNI) per capita. The result represented those regions with high GNI per capita attract migrants from the regions with comparatively low GNI per capita. Moreover, a strong linkage has been observed between changing patterns of migration and various socioeconomic factors like GDP, literacy rate, population density and urbanization (Waingankar and Thakar, 2012). Similar indications were found in another study which exhibits, that out-migration has a positive association with per capita income, percentage of workforce share and share of GDP in the non-agricultural sector (Bhagat, 2012). When census of 2001 is concerned, it has been revealed

that states with higher literacy rates expected more interstate migrants for education and states with high GDP attracted inter-state migrants coming for work (Singh, 2005).

***Migration Scenario in West Bengal***

The migratory flow to West Bengal from different parts of India is an old phenomenon which can be traced back to the beginning of the 19th century when the process of urbanization began in the Eastern India based on Kolkata city. Today's Kolkata city was the capital during the major part of British rule in India. Due to its well-developed internal river facility and port facility industrial growth was prominent in the surrounding areas of Kolkata. Therefore, Kolkata was a migrant receiving city from different parts of the country as well as outside the country. In 1960, West Bengal was one of the richest states in the country, the state was the hub of manufacturing and it had abundance of social and physical infrastructure which the state inherited from longstanding capital of the British Empire. In spite of the availability of rich resources, West Bengal went down from a relative per capita income of about 105 per cent of Maharashtra to an income of around 69 per cent. The serious fall in the state's development is attributed to low aggregate productivity and poorly functioning labour markets and sectoral misallocation (Lahiri and Mu Yei, 2005). The strong trade union movements dominated by the communist rule in the state have turned the state into an investment unfriendly location leading to economic decline (Mallick, 2008). Due to the slow development in the state, the migration scenario changed over the decade. According to 2011 census, more and more people migrate out to other states and countries. The net migrationin West Bengal, as reported in Census 2011 has decreased over the decades which indicate increased out-migration in the state (Das and Mistry, 2015).

Most of the migrants from West Bengal are engaged in construction sites, petrol pumps, hotels, tea estates and even paddy fields and a major part of these migrants hail from the districts of Murshidabad and Malda. Migration flow from West Bengal has been observed to the states of Kerala, Tamil Nadu, Delhi and a significant flow is seen towards Gulf countries (Rogaly *et al.,* 2001; Rogaly and Rafique, 2003). Pertaining to the changing pattern of migration in the state, it will be interesting to understand the flow of people from West Bengal to other states over the three decades. Available literature based on trends and patterns of migration in West Bengal has taken into account two decades of census data so far, i.e. 1991 and 2001, the present paper has analysed 2011 data along with 1991 and 2001 data. The paper also attempts to throw some light on how the development level of different states regulates the migration flow from West Bengal.Recent migration pattern in the country shows substantial variation in different regional zones among interstate migrants (Waingankar and Thakar, 2012). Therefore, a zone-wise migration pattern is studied in the present research.

## Objectives

There are two main objectives of the paper:

1. To compare the inter-state out-migration from West Bengal towards different regional zones of India along with its reasons for migration.
2. To identify the impact of regional disparities in development on the out-migrating nature of West Bengal.

## Classification of Indian States

According to the State Reorganization Act, 1956, Indian states can be classified into six zones:

*Northern zone* consists of seven states and three union territories (Jammu and Kashmir, Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh, Chandigarh, Delhi and Ladakh). Ladakh was recognised as a union territory in October 2019; hence in the census of 2011 it is a part of Jammu and Kashmir.

*North-eastern zone* consists of eight states (Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Assam)

*Eastern zone* consists of four states including West Bengal (Bihar, Jharkhand and Odisha)

*Central Zone* consists of two states (Madhya Pradesh and Chhattisgarh)

*Western Zone* consists of three states and two union territories (Gujarat, Goa, Maharashtra, Daman and Diu and Dadra and Nagar Havelli)

*Southern zone* consists of five states and three union territories (Andhra Pradesh, Karnataka, Telangana, Tamil Nadu, Kerala, Puducherry, Lakhshadweep and Andaman and Nicobar Island). Telanga formed a separate state in June 2014, hence in census data of 2011, it is part of Andhra Pradesh.

## Data and Methods

The present study is based on both primary and secondary data. The analysis has been carried out with secondary data from Census of India. Migration data from census has been used for three decades i.e. 1991, 2001 and 2011. The socio-economic variables are collected from various sources:

- Population Density, percentage share of urban population, literacy rate, percentage share of workers in the agricultural and non-agricultural sector are calculated from Census data of 2011.
- Values of Human Development Index are obtained from Human Development Report of 2011.
- Gross State Domestic Product (GSDP) and Net State Domestic Product (NSDP) per capita both at a constant price for the year 2010-11 has been taken from National Statistical Office, Ministry of Statistics and Programme Implementation
- Poverty rate for the year 2010-11 has been taken from National Sample Survey and Niti Aayog report.

Primary data obtained from a field survey in seven districts of West Bengal has been used in the present paper. The survey was part of a project funded by MHRD under IMPRESS scheme facilitated by ICSSR (Indian Council for Social Science and Research) titled "Demographic and Socio-economic Consequences of Male out-migration from Rural West Bengal". The 1$^{st}$ phase of the survey was conducted between January and March 2020 (prior to nationwide lockdown was announced) followed by the 2$^{nd}$ phase of the survey which was conducted in April-May, 2021. Qualitative information obtained through in-depth interviews with the village heads are used to provide gainful insights about the current scenario of migration in West Bengal and update the findings obtained from secondary data analysis.

Methods used in this paper are proportion of migrants to the total population, distribution of migrants by gender, stream of migration and reasons for migration are used to study the changing pattern of migration in West Bengal. In- and out-migration rate to and from

West Bengal is used to calculate the net migration rate. Apart from these, various other methods like percentage distributions and cartographic techniques are used. Karl Pearson correlation has been used to determine the relationship between out-migration and development of the region.

Migration variable: For correlation analysis, 2011 census migration data are taken into consideration to understand the recent trend. Two migration variables have been considered as dependent variables. They are: a) Out-migration rate from West Bengal and b) Proportion of people migrated due to economic reasons like work or business from West Bengal.

Development variables: To establish the relationship between development and migration, nine development variables have been considered as independent variables. They are: 1) Population Density, 2) Percentage share of urban population, 3) Literacy rate, 4) GSDP at constant price, 5) Per capita NSDP at constant price, 6) Poverty rate, 7) Human Development Index, 8) Percentage of workers engaged in the agricultural sector and 9) Percentage of workers engaged in the non-agricultural sector.

## Changing Patterns of Migration in West Bengal

As mentioned above that during the independence, West Bengal was in-migrating in nature but after the independence the proportion of out-migrants started to increase continuously. Here, the net migration rate for three census decades has been analysed.

The net migration rate of West Bengal decreased notably from 1.86 in 1991 to 1.44 in 2001, further to -1.02 in 2011. In-migration from the eastern region is generally higher in West Bengal as a majority of the population prefers to travel short-distance so that they can be close to their homes. In the recent decade the in-migration rate to West Bengal from eastern region has decreased but female in-migrants are still comparatively higher than the male migrants which are mostly because of short distance marriage migration. The in-migration from the northern region has decreased considerably over the decades. Highest in-migrants from the northern region have been received from Uttar Pradesh. In-migration rate has been noticed to be rising from the north-eastern state especially from Assam. This has happened mostly due to the Bodo land movement in Assam where non-Boro people living in the adjacent villages of West Bengal shifted their residence (Das and Ansary 2015). A very low rate of in-migration has been observed from the western and southern regions.

Table 1: In-migration rate to West Bengal from other states (1991-2011)

| State | 1991 | | | 2001 | | | 2011 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** |
| J and K | 0.03 | 0.03 | 0.03 | 0.05 | 0.06 | 0.04 | 0.05 | 0.05 | 0.04 |
| Himachal Pradesh | 0.05 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| Punjab | 0.38 | 0.38 | 0.37 | 0.28 | 0.29 | 0.26 | 0.20 | 0.20 | 0.20 |
| Chandigarh | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| Uttarakhand | 0.00 | 0.00 | 0.00 | 0.08 | 0.09 | 0.08 | 0.04 | 0.03 | 0.04 |
| Haryana | 0.16 | 0.18 | 0.14 | 0.20 | 0.22 | 0.18 | 0.13 | 0.14 | 0.12 |
| Delhi | 0.13 | 0.11 | 0.15 | 0.16 | 0.14 | 0.18 | 0.14 | 0.12 | 0.15 |
| Rajasthan | 0.72 | 0.75 | 0.69 | 0.83 | 0.90 | 0.77 | 0.70 | 0.72 | 0.68 |
| Uttar Pradesh | 4.16 | 5.10 | 3.14 | 3.86 | 4.60 | 3.06 | 2.74 | 2.90 | 2.57 |
| **North** | **5.65** | **6.62** | **4.58** | **5.51** | **6.35** | **4.62** | **4.02** | **4.18** | **3.85** |
| Sikkim | 0.09 | 0.05 | 0.12 | 0.06 | 0.04 | 0.08 | 0.13 | 0.06 | 0.20 |
| Arunachal Pradesh | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 |
| Nagaland | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| Manipur | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 |
| Mizoram | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| Tripura | 0.23 | 0.20 | 0.26 | 0.19 | 0.20 | 0.19 | 0.24 | 0.24 | 0.24 |
| Meghalaya | 0.06 | 0.05 | 0.07 | 0.07 | 0.06 | 0.07 | 0.08 | 0.07 | 0.09 |
| Assam | 1.41 | 1.20 | 1.64 | 1.70 | 1.45 | 1.96 | 1.85 | 1.48 | 2.24 |
| **North-east** | **1.84** | **1.56** | **2.15** | **2.07** | **1.80** | **2.36** | **2.39** | **1.93** | **2.87** |
| Jharkhand | 0.00 | 0.00 | 0.00 | 5.51 | 3.85 | 7.28 | 5.08 | 2.73 | 7.56 |
| Odisha | 1.99 | 2.14 | 1.83 | 2.01 | 2.09 | 1.92 | 1.59 | 1.32 | 1.86 |
| Bihar | 18.68 | 19.32 | 17.99 | 14.48 | 17.09 | 11.68 | 12.59 | 12.96 | 12.20 |
| **East** | **20.67** | **21.46** | **19.82** | **21.99** | **23.03** | **20.87** | **19.26** | **17.01** | **21.62** |
| Chattisgarh | 0.00 | 0.00 | 0.00 | 0.17 | 0.16 | 0.18 | 0.09 | 0.07 | 0.10 |
| Madhya Pradesh | 0.32 | 0.29 | 0.34 | 0.18 | 0.17 | 0.20 | 0.17 | 0.15 | 0.20 |
| **Central** | **0.32** | **0.29** | **0.34** | **0.35** | **0.33** | **0.38** | **0.26** | **0.22** | **0.30** |
| Gujarat | 0.18 | 0.18 | 0.18 | 0.23 | 0.23 | 0.24 | 0.15 | 0.13 | 0.16 |
| Daman and Diu | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| D and N Havelli | 0.03 | 0.02 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maharashtra | 0.19 | 0.15 | 0.22 | 0.23 | 0.20 | 0.25 | 0.25 | 0.21 | 0.30 |
| Goa | 0.02 | 0.02 | 0.03 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| **West** | **0.42** | **0.38** | **0.47** | **0.47** | **0.44** | **0.50** | **0.40** | **0.35** | **0.46** |
| Andhra Pradesh | 0.39 | 0.36 | 0.42 | 0.32 | 0.30 | 0.35 | 0.18 | 0.16 | 0.21 |
| Karnataka | 0.04 | 0.04 | 0.04 | 0.07 | 0.07 | 0.07 | 0.04 | 0.04 | 0.05 |
| Lakshadeep | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Kerala | 0.14 | 0.15 | 0.14 | 0.15 | 0.15 | 0.15 | 0.08 | 0.08 | 0.09 |
| Tamil Nadu | 0.24 | 0.21 | 0.28 | 0.14 | 0.14 | 0.14 | 0.08 | 0.08 | 0.09 |
| Puducherry | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| A and N Island | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 |
| **South** | **0.83** | **0.77** | **0.90** | **0.69** | **0.66** | **0.72** | **0.41** | **0.37** | **0.46** |

Source: Census of India (1991 to 2011)

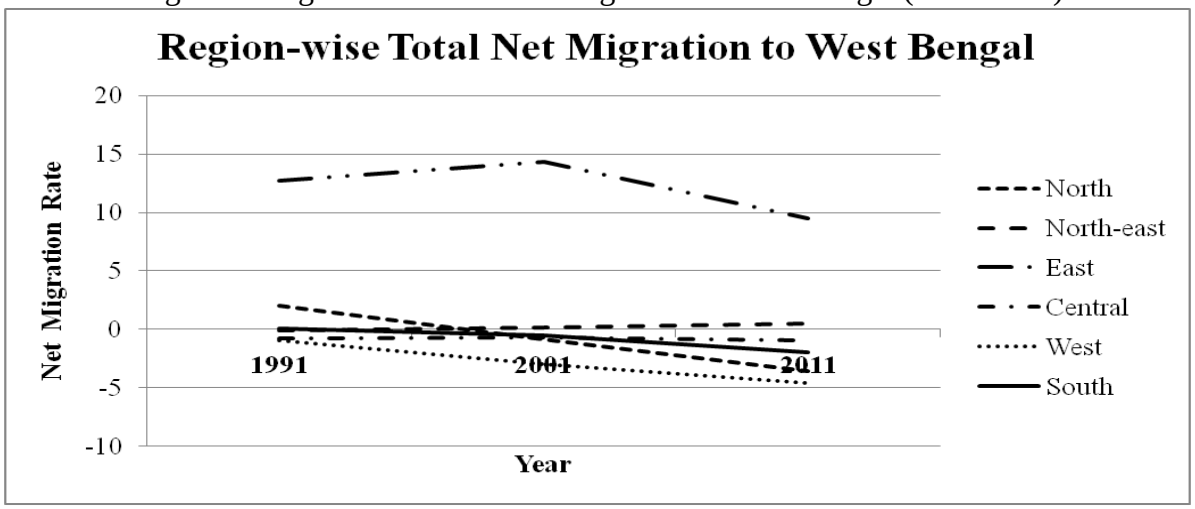
Table 2: Out-migration rate from West Bengal to other states (1991-2011)

| State | 1991 | | | 2001 | | | 2011 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** |
| J and K | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.06 | 0.11 | 0.06 | 0.17 |
| Himachal Pradesh | 0.00 | 0.00 | 0.00 | 0.09 | 0.13 | 0.05 | 0.07 | 0.08 | 0.06 |
| Punjab | 0.03 | 0.02 | 0.03 | 0.57 | 0.62 | 0.52 | 0.55 | 0.49 | 0.62 |
| Chandigarh | 0.00 | 0.00 | 0.00 | 0.12 | 0.15 | 0.10 | 0.08 | 0.08 | 0.08 |
| Uttarakhand | 0.00 | 0.00 | 0.00 | 0.24 | 0.22 | 0.27 | 0.31 | 0.28 | 0.35 |
| Haryana | 0.02 | 0.02 | 0.02 | 0.74 | 0.83 | 0.64 | 0.92 | 0.85 | 0.99 |
| Delhi | 0.12 | 0.12 | 0.11 | 2.11 | 2.29 | 1.91 | 2.08 | 2.04 | 2.13 |
| Rajasthan | 0.03 | 0.03 | 0.04 | 0.56 | 0.61 | 0.50 | 0.76 | 0.71 | 0.80 |
| Uttar Pradesh | 0.16 | 0.09 | 0.23 | 1.84 | 1.02 | 2.71 | 2.68 | 1.27 | 4.15 |
| **North** | **0.36** | **0.28** | **0.45** | **6.34** | **5.94** | **6.76** | **7.57** | **5.87** | **9.36** |
| Sikkim | 0.03 | 0.02 | 0.03 | 0.37 | 0.34 | 0.40 | 0.41 | 0.35 | 0.47 |
| Arunachal Pradesh | 0.01 | 0.01 | 0.01 | 0.13 | 0.15 | 0.10 | 0.10 | 0.12 | 0.08 |
| Nagaland | 0.00 | 0.01 | 0.00 | 0.05 | 0.06 | 0.04 | 0.04 | 0.05 | 0.04 |
| Manipur | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Mizoram | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Tripura | 0.01 | 0.01 | 0.01 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 |
| Meghalaya | 0.01 | 0.01 | 0.01 | 0.08 | 0.08 | 0.07 | 0.06 | 0.06 | 0.07 |
| Assam | 0.14 | 0.12 | 0.16 | 1.24 | 1.03 | 1.45 | 1.20 | 0.86 | 1.57 |
| **North-east** | **0.20** | **0.18** | **0.22** | **1.93** | **1.74** | **2.14** | **1.90** | **1.51** | **2.31** |
| Jharkhand | 0.00 | 0.00 | 0.00 | 4.37 | 2.12 | 6.78 | 5.51 | 2.28 | 8.91 |
| Odisha | 0.18 | 0.13 | 0.24 | 1.75 | 1.34 | 2.20 | 1.80 | 1.21 | 2.41 |
| Bihar | 0.62 | 0.28 | 0.98 | 1.58 | 0.56 | 2.67 | 2.46 | 0.59 | 4.43 |
| **East** | **0.80** | **0.41** | **1.22** | **7.70** | **4.01** | **11.65** | **9.77** | **4.09** | **15.75** |
| Chattisgarh | 0.00 | 0.00 | 0.00 | 0.58 | 0.57 | 0.59 | 0.64 | 0.62 | 0.66 |
| Madhya Pradesh | 0.11 | 0.11 | 0.11 | 0.50 | 0.50 | 0.50 | 0.54 | 0.55 | 0.54 |
| **Central** | **0.11** | **0.11** | **0.11** | **1.08** | **1.06** | **1.09** | **1.18** | **1.17** | **1.20** |
| Gujarat | 0.03 | 0.04 | 0.03 | 0.59 | 0.70 | 0.47 | 1.07 | 1.26 | 0.87 |
| Daman and Diu | 0.00 | 0.00 | 0.00 | 0.02 | 0.04 | 0.01 | 0.06 | 0.08 | 0.02 |
| D and N Havelli | 0.00 | 0.00 | 0.00 | 0.02 | 0.03 | 0.01 | 0.04 | 0.05 | 0.02 |
| Maharashtra | 0.10 | 0.11 | 0.09 | 2.78 | 3.53 | 1.98 | 3.75 | 4.52 | 2.95 |
| Goa | 0.00 | 0.00 | 0.00 | 0.05 | 0.06 | 0.03 | 0.07 | 0.10 | 0.05 |
| **West** | **0.14** | **0.15** | **0.13** | **3.46** | **4.36** | **2.49** | **4.99** | **6.01** | **3.92** |
| Andhra Pradesh | 0.03 | 0.03 | 0.04 | 0.37 | 0.38 | 0.36 | 0.61 | 0.62 | 0.60 |
| Karnataka | 0.01 | 0.01 | 0.01 | 0.39 | 0.49 | 0.27 | 0.78 | 0.94 | 0.60 |
| Lakshadeep | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Kerala | 0.00 | 0.00 | 0.00 | 0.05 | 0.06 | 0.04 | 0.35 | 0.59 | 0.09 |
| Tamil Nadu | 0.01 | 0.01 | 0.01 | 0.14 | 0.16 | 0.12 | 0.33 | 0.39 | 0.28 |
| Puducherry | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| A and N Island | 0.01 | 0.01 | 0.01 | 0.23 | 0.29 | 0.16 | 0.26 | 0.33 | 0.19 |
| **South** | **0.08** | **0.08** | **0.08** | **1.20** | **1.41** | **0.97** | **2.34** | **2.89** | **1.77** |

Source: Census of India (1991 to 2011)

There has been a remarkable increase in the out-migration rate towards the northern and western region 1991 to 2011 specifically to Delhi, Uttar Pradesh and Mahrashtra. Out-migration rate is highest among the females to the eastern region towards Jharkhand followed by Bihar. This is mainly because females migrate to neighbouring states after marriage. A notable increase in out-migration has also been seen towards the southern region from 1991 to 2011. Southern states have embraced the liberalisation process in the first leg of its initiation and grabbed multiple opportunities for job creation where West Bengal failed.

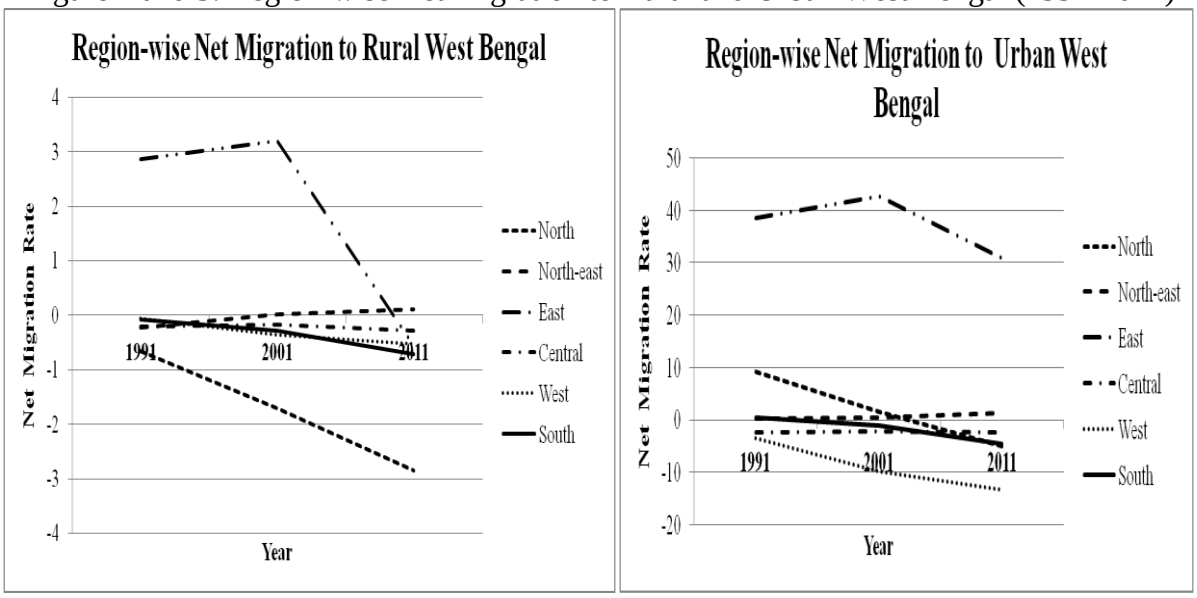
Figure 1: Region-wise Total Net Migration to West Bengal (1991-2011)




Source: Census of India (1991 to 2011)

A positive net migration rate from the northern (2.05) and southern region (0.05) in 1991 was evident which suggests more in-migration from north and south to West Bengal. Later, from 2001 net migration became negative suggesting more out-migration from West Bengal towards the northern and southern regions. North-eastern region has become prominent in sending migrants to West Bengal since 2001 as shown by the positive net migration value. The western region has recorded negative net migration in all three decades, i.e. -0.97 in 1991, -2.99 in 2001 and -4.58 in 2011; moreover, the intensity of migration has also been increasing over the decade. This indicates that the western region has always attracted a large volume of migrants from West Bengal and the number is increasing over the decades. The eastern region has recorded positive net migration in all the three decades which depicts West Bengal has always attracted migrants from the eastern region.

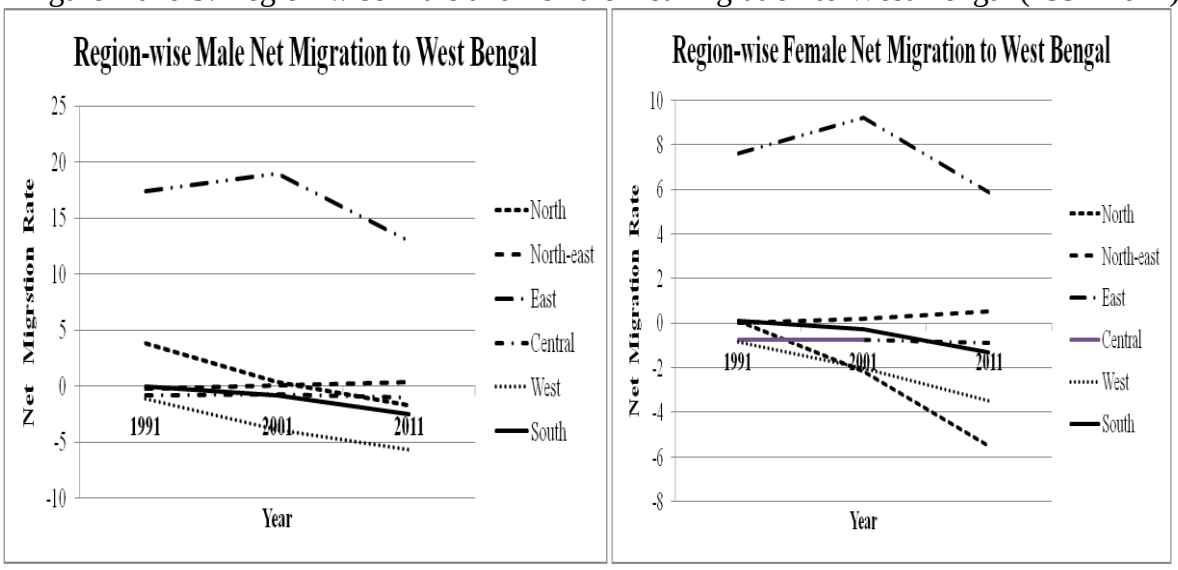
Figure 2 and 3: Region-wise Net Migration to Rural and Urban West Bengal (1991-2011)




Source: Census of India (1991 to 2011)

The rural areas of West Bengal experience the highest out-migration to the economically developed states as a result of which, except north-east and east region, all the other regions recorded negative net-migration. The negative net migration was observed in the north-eastern region during 1991 census, after that, the state has attracted migrants exceeding the number they are sending. High out-migration from West Bengal towards northern region has been recorded and the intensity of out-migration also increased over the decades from -0.656 in 1991 to -2.84 in 2011. The central and western region has always attracted migrants from the urban West Bengal that is the reason negative net migration has been recorded in case of these two regions. The intensity of out-migration towards the western region has increased over the decade.

Figure 4 and 5: Region-wise Male and Female Net Migration to West Bengal (1991-2011)




Source: Census of India (1991 to 2011)

Positive net migration is seen in the northern region during 1991 and 2001 for the male population, whereas for the female population the net migration became negative after 1991. The percentage of women migrating to the northern region is considerably high than the male population. This is evident from the field survey conducted in rural West Bengal in January 2020; a significant number of women has migrated to Delhi and Uttar Pradesh with their husbands and are working as a house help. The eastern and north-eastern region has noted positive net migration in all the three decades. West Bengal received the highest in-migrants from the eastern region for both the genders, but the net migration was high in the case of male migrants (17.3) compared to female migrants (7.6) in 1991. In 2011, the net migration for both male and female decreased to 12.9 and 5.9 respectively. Negative net migration is reported for the western and southern region and a higher percentage of males are migrating towards the western region compared to females. This is because in long distance migration women generally do not migrate with their husbands, they stay at home and look after his family. Female those are migrating are mostly migrating for work purpose (Mahapatro, 2010). In case of the southern region, positive net-migration was recorded in 1991, but after that the net migration became negative for both male and female. Like western region, the percentage of male out-migrants is higher towards south compared to female.

## Reasons for Migration

The first information on reasons for migration was collected in the 1981 census based on place of last residence. The reasons for migration were divided into seven broad categories in 1991, work/employment, business, education, marriage, family moved, natural calamities and others. In 2001, natural calamities were removed and a new category was added i.e., moved after birth as many women moved to their maternal homes or to places with better medical facilities during childbirth. Those women are not treated as migrants as it is their temporary place of residence and they will go back to their normal residences after childbirth. In such cases, children of those women are considered migrants as their place of birth is different. This type of migration is prominent within the states; the percentage of inter-state migration in this category is very low (Bhagat, 2006).

Table 3: Region-wise Reasons for Out-Migration from West Bengal (1991-2011)

| Reasons for Migration | | Economic Reasons | | | Education | | | Marriage | | | Moved with Family | | | Other reasons | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| North | 2011 | 28.0 | 26.6 | 39.0 | 29.7 | 30.9 | 27.2 | 22.7 | 14.9 | 22.9 | 34.5 | 31.5 | 36.4 | 27.0 | 27.2 | 26.8 |
| | 2001 | 32.4 | 31.6 | 41.5 | 30.7 | 30.1 | 32.5 | 14.6 | 14.6 | 14.6 | 33.7 | 31.1 | 35.4 | 26.0 | 29.0 | 21.9 |
| | 1991 | 24.1 | 23.9 | 25.8 | 25.5 | 26.9 | 22.3 | 17.2 | 18.2 | 17.2 | 27.4 | 25.2 | 29.1 | 21.6 | 21.0 | 22.6 |
| North-east | 2011 | 6.0 | 6.0 | 6.3 | 5.2 | 4.3 | 7.1 | 6.5 | 6.5 | 6.5 | 5.4 | 6.3 | 4.8 | 7.7 | 7.7 | 7.7 |
| | 2001 | 19.4 | 37.0 | 4.6 | 4.7 | 3.9 | 7.3 | 8.6 | 14.6 | 8.5 | 7.1 | 8.1 | 6.5 | 13.4 | 13.7 | 13.0 |
| | 1991 | 11.8 | 11.9 | 10.4 | 9.3 | 8.8 | 10.4 | 7.9 | 12.1 | 7.9 | 13.1 | 15.3 | 11.4 | 15.3 | 15.7 | 14.6 |
| East | 2011 | 17.5 | 17.1 | 20.3 | 19.3 | 18.1 | 21.9 | 60.6 | 63.6 | 60.5 | 24.8 | 27.0 | 23.3 | 28.9 | 23.6 | 34.9 |
| | 2001 | 20.3 | 20.1 | 22.6 | 20.3 | 19.9 | 21.8 | 72.6 | 70.9 | 72.7 | 27.5 | 29.3 | 26.4 | 41.2 | 35.9 | 48.2 |
| | 1991 | 34.3 | 34.0 | 36.9 | 37.8 | 35.5 | 43.2 | 67.0 | 60.5 | 67.1 | 31.5 | 33.6 | 29.9 | 35.0 | 36.6 | 32.4 |
| Central | 2011 | 5.8 | 6.0 | 4.2 | 3.3 | 3.4 | 3.0 | 2.2 | 2.3 | 2.2 | 6.5 | 6.2 | 6.6 | 3.6 | 4.0 | 3.1 |
| | 2001 | 5.6 | 5.7 | 4.5 | 3.6 | 3.4 | 4.2 | 3.5 | 3.2 | 3.5 | 7.7 | 7.5 | 7.9 | 5.7 | 6.0 | 5.3 |
| | 1991 | 9.3 | 9.7 | 6.6 | 6.5 | 6.7 | 6.1 | 3.0 | 1.7 | 3.0 | 8.7 | 8.7 | 8.8 | 7.7 | 7.4 | 8.2 |
| West | 2011 | 32.5 | 33.7 | 23.3 | 16.0 | 16.2 | 15.5 | 5.7 | 8.7 | 5.6 | 19.5 | 19.5 | 19.6 | 21.4 | 24.3 | 18.1 |
| | 2001 | 27.2 | 28.2 | 14.8 | 21.1 | 20.9 | 21.7 | 7.0 | 6.4 | 7.0 | 16.5 | 16.5 | 16.5 | 15.8 | 17.1 | 14.1 |
| | 1991 | 14.1 | 14.2 | 12.8 | 8.7 | 9.2 | 7.7 | 3.2 | 5.4 | 3.1 | 9.9 | 8.9 | 10.8 | 12.5 | 11.3 | 14.4 |
| South | 2011 | 15.2 | 15.5 | 13.0 | 26.5 | 27.1 | 25.2 | 2.3 | 4.0 | 2.2 | 9.4 | 9.4 | 9.3 | 11.4 | 13.2 | 9.4 |
| | 2001 | 7.4 | 7.4 | 6.9 | 24.3 | 25.6 | 19.7 | 2.3 | 4.9 | 2.3 | 7.4 | 7.6 | 7.3 | 11.3 | 12.0 | 10.4 |
| | 1991 | 6.4 | 6.3 | 7.5 | 12.2 | 13.0 | 10.3 | 1.7 | 2.0 | 1.7 | 9.3 | 8.3 | 10.2 | 7.9 | 8.0 | 7.8 |

Source: Census of India (1991 to 2011)

Table 3 shows the reasons for out-migration from West Bengal to different regions. In the present study, the categories have been modified to simplify the analysis. Migration due to Work/employment and Business are clubbed together and termed as 'Economic reasons'. The percentage of migrants who moved after birth was very low pertaining to the above reason, as a result, it is clubbed with 'Moved with family'. Migration due to natural calamities is clubbed with 'Other' reasons for migration.

A stark gender difference is observed in terms of reasons for migration wherein the economic reason dominates male migration and marriage dominates female migration. Majority of the female migrate to eastern region after marriage as marriage is preferable in the neighbouring states of West Bengal. Due to economic reason, western region receives the highest male migrants from West Bengal. Migration due to associational reasons like accompanying parents or any member of the family is evoked second most important reason among both male and female migrants. Eastern and central region has attracted majority of the migrants those moved with their family from West Bengal.

Table 4: Region-wise Percentage Distribution of Out-migrants from West Bengal by Streams (1991-2011)

| Streams of Migration | | Urban to Rural | | Urban to Urban | | Rural to Rural | | Rural to Urban | |
|---|---|---|---|---|---|---|---|---|---|
| | | Male | Female | Male | Female | Male | Female | Male | Female |
| North | 2011 | 6.1 | 19.2 | 45.7 | 37.7 | 9.7 | 19.5 | 33.8 | 19.2 |
| | 2001 | 6.8 | 20.9 | 43.2 | 52.1 | 14.9 | 30.5 | 42.1 | 30.2 |
| | 1991 | 10.8 | 22.0 | 61.4 | 48.9 | 7.9 | 17.5 | 19.3 | 10.7 |
| North-east | 2011 | 8.3 | 8.1 | 35.4 | 32.1 | 26.2 | 36.4 | 25.0 | 17.9 |
| | 2001 | 11.9 | 9.4 | 30.0 | 30.0 | 31.8 | 39.1 | 23.8 | 18.1 |
| | 1991 | 12.5 | 11.8 | 34.0 | 32.9 | 33.9 | 38.0 | 18.2 | 15.6 |
| East | 2011 | 8.7 | 5.9 | 33.2 | 18.9 | 23.2 | 53.5 | 30.5 | 18.3 |
| | 2001 | 8.6 | 6.6 | 30.4 | 18.3 | 23.0 | 55.4 | 31.8 | 15.8 |
| | 1991 | 10.2 | 9.2 | 31.0 | 18.0 | 27.2 | 57.1 | 31.0 | 15.4 |
| Central | 2011 | 8.2 | 8.5 | 52.4 | 60.0 | 13.1 | 9.2 | 22.8 | 18.9 |
| | 2001 | 9.6 | 8.7 | 55.9 | 60.8 | 11.5 | 10.2 | 19.3 | 16.6 |
| | 1991 | 13.1 | 10.1 | 57.3 | 62.7 | 10.1 | 9.4 | 18.9 | 17.5 |
| West | 2011 | 3.3 | 4.2 | 50.6 | 65.8 | 5.1 | 2.9 | 36.6 | 22.5 |
| | 2001 | 4.1 | 4.0 | 52.9 | 70.3 | 6.2 | 2.8 | 33.2 | 18.7 |
| | 1991 | 5.3 | 5.0 | 70.8 | 78.3 | 3.6 | 1.6 | 20.0 | 15.0 |
| South | 2011 | 7.9 | 8.4 | 50.9 | 65.5 | 15.3 | 9.3 | 18.7 | 10.9 |
| | 2001 | 10.1 | 11.0 | 51.8 | 56.4 | 15.3 | 13.6 | 14.4 | 8.8 |
| | 1991 | 15.1 | 14.8 | 59.9 | 62.8 | 14.9 | 12.9 | 9.5 | 9.0 |

Source: Census of India (1991 to 2011)

Table 4 shows proportion of migrants moving out from West Bengal to the different states based on streams. It depicts that the percentage of migrants moving from urban areas of West Bengal to the urban areas of western and southern region are comparatively higher than other regions for both male and female migrants. During 1991, urban to urban migration had the highest share in all the regions. Later on a sharp increase in rural to urban migration has been noticed due to expanding of informal sector which opened opportunities for young men from rural areas to work in the construction and urban services (Srivastava and Bhattacharyya, 2003). Therefore, rural to urban migration became the second most dominant stream in the case of male migrants. Due to lack of proper livelihood in the rural areas of West Bengal, male out-migrate to urban areas of other states. (Greenwood, 1997 and Mukherjee, 2001). Rural to rural migration is quite prominent among the female population in the eastern region because of marriage. Marrying in the neighbouring states is preferred by the rural families in West Bengal (Bose, 1977 and Singh, 1990). A very low proportion of migrants moves from urban to rural areas. This type of migration occurs mostly because of return migration. Though, urban to rural migration has been completely neglected in India, but studies on different countries suggest that people usually return to their native places when they move from urban areas to rural areas. For instance, return migration from urban to rural maybe due to crisis, old age, retirement, and invasion of pests and diseases (Hance, 1970). Congestions in the city, traffic jams, underemployment, housing problems in the urban areas has led to migrants returning to the rural areas (Gboyega, 1992). A study on the financial crisis in China's export sector has led to thousands of urban migrant workers to return home (Zhao, 2009).

## Differential in Regional Development

To understand the effect of differential in regional development on migration some variables have been identified on the basis of literature used in this article which is presented in Table 5.

Table 5: State-wise Socio-economic variables (2010-11)

| States | Population Density (2011) | % share of urban population (2011) | HDI (2010) | Literacy Rate (2011) | GSDP at Constant price (2010-11) | Poverty rate (2011-12) | Per capita NSDP at constant price (2010-11) | % workers' in agricultural sector | % of workers in non-agricultural sector |
|---|---|---|---|---|---|---|---|---|---|
| A and N Island | 46 | 37.5 | 0.739 | 77.3 | 345963 | 0.4 | 64712 | 12.6 | 78.8 |
| Andhra Pradesh | 308 | 33.4 | 0.65 | 66.5 | 20827348 | 21.1 | 37708 | 47.7 | 48.1 |
| Arunachal Pradesh | 17 | 22.9 | 0.66 | 55.4 | 522041 | 25.9 | 34548 | 55.9 | 40.6 |
| Assam | 397 | 14.1 | 0.614 | 61.5 | 7344442 | 37.9 | 21146 | 46.5 | 43.5 |
| Bihar | 1,102 | 11.3 | 0.576 | 50.4 | 13017089 | 53.5 | 12090 | 70 | 29.5 |
| Chandigarh | 9252 | 97.3 | 0.775 | 76.3 | 1333780 | 9.2 | 83319 | 0.9 | 98.3 |
| Chattisgarh | 189 | 23.2 | 0.613 | 60.2 | 7890295 | 48.7 | 25991 | 67.3 | 31.6 |
| D and N Havelli | 689 | 46.8 | 0.663 | 64.9 | 0 | 39.1 | 0 | 22.2 | 76.8 |
| Daman and Diu | 2169 | 75.3 | 0.708 | 77.5 | 0 | 33.3 | 0 | 1.8 | 91.3 |
| Delhi | 11297 | 97.5 | 0.746 | 75.9 | 18076539 | 14.2 | 103619 | 1.1 | 98.6 |
| Goa | 394 | 62.2 | 0.761 | 59.8 | 2249908 | 8.7 | 110306 | 58.4 | 40.5 |
| Gujarat | 308 | 42.6 | 0.672 | 68 | 36758128 | 23 | 53813 | 45.4 | 51.3 |
| Haryana | 573 | 34.9 | 0.708 | 65.5 | 16377020 | 20.1 | 57797 | 40.7 | 57.0 |
| Himachal Pradesh | 123 | 10 | 0.725 | 73.4 | 3905441 | 9.5 | 46682 | 47.9 | 50.4 |
| J and K | 124 | 27.4 | 0.688 | 56.4 | 3826996 | 9.4 | 27666 | 27.4 | 69.0 |
| Jharkhand | 414 | 24 | 0.599 | 55.6 | 8949114 | 39.1 | 24330 | 47.5 | 51.6 |
| Karnataka | 319 | 38.7 | 0.682 | 79.9 | 27272131 | 23.6 | 40699 | 7.3 | 91.7 |
| Kerala | 859 | 47.7 | 0.784 | 84.2 | 18985071 | 12 | 50146 | 15.7 | 74.2 |
| Lakshadeep | 2013 | 78.1 | 0.75 | 81.5 | 0 | 6.8 | 0 | 0 | 93.2 |
| Madhya Pradesh | 236 | 27.6 | 0.606 | 59 | 17814354 | 36.7 | 21706 | 65.4 | 33.6 |
| Maharashtra | 365 | 45.2 | 0.696 | 72.6 | 74204180 | 24.5 | 59587 | 51.5 | 47.9 |
| Manipur | 122 | 29.2 | 0.696 | 66.8 | 668061 | 47.1 | 20711 | 52.5 | 45.1 |
| Meghalaya | 132 | 20.1 | 0.656 | 60.2 | 1041308 | 17.1 | 31418 | 57.1 | 39.5 |
| Mizoram | 52 | 52.1 | 0.705 | 77.3 | 497932 | 21.1 | 40072 | 55.2 | 42.5 |
| Nagaland | 119 | 28.9 | 0.679 | 67.9 | 925399 | 20.9 | 43992 | 59.7 | 38.2 |
| Odisha | 269 | 16.7 | 0.606 | 63.7 | 12513105 | 37 | 23968 | 53.2 | 44.9 |
| Puducherry | 2598 | 68.3 | 0.738 | 76.7 | 1080640 | 1.2 | 84142 | 15.4 | 80.7 |
| Punjab | 550 | 37.5 | 0.723 | 67.4 | 14767012 | 15.9 | 44769 | 35.2 | 62.1 |
| Rajasthan | 201 | 24.9 | 0.629 | 55.8 | 21307929 | 24.8 | 27502 | 57.2 | 40.6 |
| Sikkim | 86 | 25.2 | 0.716 | 72.9 | 478428 | 13.1 | 66136 | 41.4 | 56.5 |
| Tamil Nadu | 555 | 48.4 | 0.708 | 71.8 | 40341573 | 17.1 | 53507 | 39.7 | 57.5 |
| Tripura | 350 | 26.2 | 0.663 | 76.3 | 1438667 | 17.4 | 36718 | 41.7 | 53.6 |
| Uttar Pradesh | 828 | 22.3 | 0.596 | 57.3 | 39630943 | 18 | 17388 | 56.7 | 41.9 |
| Uttarakhand | 189 | 30.2 | 0.684 | 68.2 | 5566681 | 37.7 | 48525 | 45.1 | 53.6 |
| West Bengal | 1028 | 31.9 | 0.572 | 67.4 | 30883705 | 20 | 31314 | 39.2 | 60.8 |

Source: Planning Commission Report, 2010-12; Census of India, 2011; Human Development India Report, 2011; NSSO 68th Round Report

1. Population density (2011) can be used as an indicator as it is an indicator of both natural increase and increase through net positive migration. Among the states, Bihar (1102 persons per sq. kms) has recorded the highest population density followed by Kerala and West Bengal. Delhi (11297 persons per sq. km) has recorded highest among the union territories followed by Chandigarh, Pondicherry and Daman and Diu. Except Dadra and Nagar Havelli, all the Union territories have recorded high population density than Bihar. This is because these Union territories have high economic development which attracts large number of population but the area is smaller, therefore, the population density is high. In case of Bihar, the state is among the lowest performing states in terms of development but has a high natural increase; as a result, it has a high population density.

2. Percentage share of urban population (2011) is another relevant indicator of development. Regional variation in level of urbanization is prominent in India. Delhi's urban population is as high as 97 per cent compared to Himachal Pradesh where the urban population is as low as 10 per cent.
3. Literacy rate (2011) of an area is an important measure to understand the socio-economic development of the region. The literacy rate is measured by dividing the number of literates with the total population of the states and then multiplying it with 100 to get the percentage. Kerala (84.2%) has the highest literacy rate among all the states and UTs followed by Lakshadweep (81.5%) and Karnataka (79.9%). The southern region of the state has a comparatively higher literacy rate than all the other regions. Bihar (50.4%) has recorded the lowest literacy rate among all.
4. Gross state domestic product (GSDP) at a constant price (2010-11) is an important indicator of the economic development of the region. It is calculated by summing the total value added by different sectors of the economy. GSDP at constant price is used as it measures the actual change in the output (Directorate of Economics). The north-eastern states of the country have recorded comparatively a lower GSDP than all the other regions. Maharashtra (₹74204180) has recorded the highest GSDP among the states and Delhi (₹18076539) has recorded the highest among the UTs.
5. Per capita Net State Domestic Product (NSDP) at constant price (2010-11) is another relevant measure of economic development. NSDP at constant price represents the average income of the people in a state. To measure the per capita NSDP, the value of NSDP is divided by the total population of the unit. Goa (₹110306) has the highest per capita NSDP among the states and Delhi (₹103619) among the UTs. Among the north-eastern states, Sikkim (₹66136) has satisfactory per capita NSDP compared to other states in the north-eastern region. Bihar (₹12090) has recorded the lowest per capita NSDP exhibiting low economic development.
6. Poverty Rate (2010-11) is measured as the ratio between the number of people whose income is below the designated income of the poverty line and the total population of the state. Tendulkar (2009) methodology has been used to determine the designated income of the poverty line. According to reports of the Tendulkar committee, the below poverty line income was ₹446.68 per capita per month for rural areas and ₹578.80 per capita per month for urban areas. Bihar (53.5%) has recorded the highest poverty rate among the states and Dadra and Nagar Havelli (39.1%) among the UTs. Goa (8.7%) has the lowest poverty rate among the states and Andaman and Nicobar (0.4%) Island among the UTs. Except, Dadra and Nagar Havelli all the UTs has fairly low poverty rate.
7. Human Development Index (2010) is the composite measurement of average achievement in key dimensions of human development, i.e. a healthy long life, having sufficient knowledge and having a decent standard of living. It is the geometric mean of normalised indices for each of the three dimensions. (UNDP). As the name suggests, HDI is an indicator of overall development. Kerala (0.784) has the highest HDI among the states and Chandigarh (0.774) among the UTs. Again, Bihar (0.576) occupies the last slot in terms of development.
8. Though agricultural sector is the core sector of the nation but gross value added from the sector is as low as 14.65 per cent compared to 30.19 per cent and 55.17 per cent from the industrial and service sector respectively (MOSPI). Therefore, workers engaged in the agricultural sector (Census, 2011) usually had low income which brings down the overall development of the state. Percentage of workers in agricultural sector can be used as an important indicator of development. Bihar (70%) has the highest percentage of workers engaged in the agricultural sector. The states in the central and eastern regions have a comparatively larger share of workers in the agricultural sector than the other states.

9. Most of the UTs and the states of southern India have comparatively higher percentages of workers engaged in the non-agricultural sector (Census, 2011). Delhi (98.6%) has recorded the highest percentage among the UTs and Karnataka (91.7%) among the states.

## Result and Discussion

In the present analysis, two outcome variables are taken into account to understand the effect of the development indicators on out-migration from West Bengal. The first variable is the out-migration rate and the second variable is the proportion of migrants moving out of West Bengal due to economic reasons. The result of Karl Pearson correlation analysis has been represented in Table 6.

Table 6: Karl Pearson Correlation Matrix

| | Total out-migration rate | % distribution of out-migrants from WB due to economic reason | Population density | % share of urban population | HDI | Literacy rate | GSDP at constant price | Per capita NSDP at constant price | Poverty rate | % share of workers engaged in the agricultural sector | % share of workers engaged in the non-agricultural sector |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total out-migration rate | 1 | -.399* | .399* | -.169* | -.461** | -.334* | .527*** | -.065 | .329* | .210* | -.180 |
| % distribution of out-migrants from WB due to economic reason | -.399* | 1 | .073 | .513*** | .582*** | .578*** | -.071 | -.014 | -.291* | -.491** | .464** |
| Population density | .064 | .073 | 1 | .759** | .394* | .308 | -.047 | .454** | -.237 | -.571** | .614** |
| % share of urban population | -.170 | .513** | .759** | 1 | .692** | .587** | -.033 | .447** | -.426* | -.736** | .760** |
| HDI | -.461** | .582** | .394* | .692** | 1 | .742** | -.157 | .610** | -.717** | -.656** | .650** |
| Literacy rate | -.334 | .578** | .308 | .587** | .742** | 1 | -.016 | .304 | -.512** | -.712** | .693** |
| GSDP at constant price | .527** | -.071 | -.047 | -.033 | -.157 | -.016 | 1 | .095 | .041 | .150 | -.128 |
| Per capita NSDP at constant price | -.065 | -.014 | .454** | .447** | .610** | .304 | .095 | 1 | -.577** | -.194 | .224 |
| Poverty rate | .329 | -.292 | -.237 | -.426* | -.717** | -.512** | .041 | -.577** | 1 | .488** | -.472** |
| % share of workers engaged in the agricultural sector | .210 | -.491** | -.571** | -.736** | -.656** | -.712** | .150 | -.194 | .488** | 1 | -.993** |
| % share of workers engaged in the non-agricultural sector | -.180 | .464** | .614** | .760** | .650** | .693** | -.128 | .224 | -.472** | -.993** | 1 |

**Note**: *: P < 0.05; **: P < 0.01; ***: P < 0.001

Out-migration Rate of West Bengal: The out-migration rate is defined as the total number of migrants leaving West Bengal per 1000 population of the state. When overall out-migration rate concerned it is noticed that high out-migration is happening to the eastern region (9 migrants per 1000 population) of the country. Out of which Jharkhand (6 persons per 1000 population) receives the highest migrants than the other states in the east. Overall out-migration rate takes into account all types of migration including marriages or migrating with family, in which female migrating after marriage has the highest share in the eastern region. Karl Pearson correlation has been used to understand the relation between out-migration rate from West Bengal and development scenario of different states. Population density (0.39*) has shown a significant positive relation with out-migration rate from West Bengal which indicates out-migration from West Bengal will be higher in those states or UTs where the population density is high. Similarly, GSDP at constant price (0.52***), the poverty rate (0.32**) and the

percentage of workers engaged in agricultural sector (0.21*) has a significant positive relation with out-migration rate. While, percentages share of urban population (-0.16*), HDI (-0.46***) and literacy rate (-0.33***) has a significant negative relation with the out-migration rate. Negative correlation indicates lower the values of development indicators more people will migrate to those states from West Bengal. When overall out-migration is taken into consideration, there is not much influence of development factors as neighbouring state effect also plays a significant impact. Female out-migration from state is highest due to 'Marriage' and marriages usually take place in the neighbouring states which also influences the overall out-migration rate. Per capita, NSDP at constant price and percentage share of workers in the non-agricultural sector do not have a significant result with dependent variable.

Proportion of out-migrants from West Bengal for economic reasons: Out-migration from West Bengal due to economic reasons like work or employment or starting their own business is taken as the second dependent variable in the study. Maharashtra (23%) in the western region receives the highest share of migrants from West Bengal due to economic reasons followed by Delhi (10%) situated in the northern zone of the country. Population density (0.073*), percentage share of urban population (0.513***), HDI (0.582***), literacy rate (0.578***) and percentage share of workers engaged in the non-agricultural sector (0.463**) are significantly positively correlated to the proportion of out-migrants moved due to economic reasons from West Bengal. This indicates as the regions with high values of development indicators attract higher migrant workers from West Bengal. Poverty rate (-0.291***) and percentages of worker engaged in the agricultural sector (-0.490***) shows significant negative correlation with the out-migration rate from West Bengal. Negative correlation depicts that the higher the values of development indicators lower the proportion of migrants will come to these regions for work purposes.

Out-migration due to economic reasons from West Bengal to the western and southern region has increased significantly over that decade. The proportion of migrants moving to western region was 14.1 per cent in 1991; in 2011 the percentage rose remarkably to 32.5 per cent. Similarly, in the southern, in 1991 the proportion of migrants from West Bengal was recorded as 6.4 per cent which increased to 15.2 per cent in 2011. The eastern region used to receive the highest share of migrants from West Bengal back in 1991 when people preferred travelling short distance for work. With development and innovation in the country, people became more aware of the job opportunities in other states, and hence started travelling longer distance in search of work (Das and Saha. 2013). Therefore, in the recent decade, the out-migration to eastern region reduced from 34.3 per cent in 1991 to 17.5 per cent in 2011.

The result of the correlation analysis has shown population density, percentage of urban population, HDI, literacy rate and percentage share of workers engaged in non-agricultural sector have a significant impact on migration. The states and UTs with better development attract more migrants from West Bengal for economic purposes. Delhi tops in terms of population density, percentage share of urban population and has the highest percentage of workers engaged in the non-agricultural sector. As a result, Delhi receives about 10 per cent of migrants from West Bengal who migrants in search of work or setting up their businesses. Kerala takes up the top position in terms of HDI and literacy rate and the state too receives a substantial number of migrants from West Bengal. Poverty rate and proportion of workers engaged in the agricultural sector has a negative impact on migrants. The states with a high poverty rate or has a high percentage of workers in the agricultural sector are less preferred by the people of West Bengal. Bihar has recorded the highest poverty rate and has the highest proportion of workers in the agricultural sector and receives the lowest percentage of migrants

from West Bengal. The GSDP is an eminent indicator of economic development and Maharashtra among all the states has the highest GSDP, pertaining to this reason, the state receives a major share of migrants (23%) from West Bengal who moved due to economic reasons.

Table 7: Share of Out-migrants by different states to the total inter-state out-migration due to economic reasons from West Bengal (2001-2011)

| Receiving States | Place of Origin: West Bengal | | | | | |
|---|---|---|---|---|---|---|
| | 2011 | | | 2001 | | |
| | Total | Male | Female | Total | Male | Female |
| Jammu and Kashmir | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 |
| Himachal Pradesh | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 |
| Punjab | 1.9 | 1.8 | 2.4 | 3.6 | 3.6 | 3.6 |
| Chandigarh | 0.4 | 0.4 | 0.4 | 0.9 | 1.0 | 0.6 |
| Uttarakhand | 1.1 | 1.1 | 1.3 | 0.4 | 0.4 | 0.7 |
| Haryana | 4.7 | 4.1 | 8.9 | 5.1 | 5.0 | 6.5 |
| Delhi | 10.1 | 9.9 | 11.4 | 15.2 | 14.9 | 19.3 |
| Rajasthan | 3.7 | 3.6 | 4.0 | 3.9 | 3.8 | 4.4 |
| Uttar Pradesh | 5.5 | 4.9 | 10.0 | 2.6 | 2.3 | 5.8 |
| **North** | **28.0** | **26.6** | **39.0** | **32.4** | **31.6** | **41.5** |
| Sikkim | 1.8 | 1.7 | 3.0 | 2.0 | 1.8 | 4.6 |
| Arunachal Pradesh | 0.6 | 0.5 | 0.6 | 0.3 | 0.3 | 0.6 |
| Nagaland | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 |
| Manipur | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mizoram | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| Tripura | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 |
| Meghalaya | 0.2 | 0.3 | 0.2 | 0.4 | 0.4 | 0.4 |
| Assam | 2.9 | 3.0 | 2.1 | 3.9 | 3.9 | 3.5 |
| **North-east** | **6.0** | **6.0** | **6.3** | **7.2** | **7.0** | **9.8** |
| Jharkhand | 9.1 | 9.0 | 10.2 | 11.1 | 11.1 | 11.9 |
| Odisha | 4.9 | 5.1 | 3.6 | 6.5 | 6.6 | 5.6 |
| Bihar | 2.2 | 1.9 | 4.5 | 2.6 | 2.4 | 5.1 |
| **East** | **16.2** | **16.0** | **18.3** | **20.3** | **20.1** | **22.6** |
| Chattisgarh | 2.7 | 2.8 | 1.6 | 2.9 | 3.0 | 2.4 |
| Madhya Pradesh | 2.7 | 2.8 | 2.1 | 2.7 | 2.8 | 2.1 |
| **Central** | **5.4** | **5.6** | **3.7** | **5.6** | **5.7** | **4.5** |
| Gujarat | 5.9 | 6.2 | 3.0 | 3.7 | 3.8 | 1.7 |
| Daman and Diu | 0.6 | 0.6 | 0.2 | 0.3 | 0.3 | 0.1 |
| D and N Havelli | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.0 |
| Maharashtra | 23.0 | 23.8 | 17.4 | 22.6 | 23.5 | 12.8 |
| Goa | 0.4 | 0.5 | 0.2 | 0.4 | 0.4 | 0.2 |
| **West** | **30.2** | **31.4** | **20.9** | **27.2** | **28.2** | **14.8** |
| Andhra Pradesh | 2.5 | 2.5 | 2.6 | 2.0 | 2.0 | 2.1 |
| Karnataka | 4.9 | 4.8 | 5.9 | 2.6 | 2.6 | 2.6 |
| Lakshadeep | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kerala | 3.6 | 3.9 | 0.9 | 0.4 | 0.4 | 0.5 |
| Tamil Nadu | 1.6 | 1.5 | 1.7 | 0.8 | 0.8 | 1.0 |
| Puducherry | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| A and N Island | 1.5 | 1.6 | 0.6 | 1.6 | 1.6 | 0.6 |
| **South** | **14.1** | **14.5** | **11.7** | **7.4** | **7.4** | **6.9** |

Source: Census of India (2001 to 2011)

## Insights from Field

The results from the secondary data matches undoubtedly with the facts collected from the field investigation from rural West Bengal. It was elicited that the majority of the male population have migrated to Maharashtra to work as goldsmiths and flower decorators. A significant proportion of the population has migrated to the southern states and is working as construction workers. A certain proportion of tribal population situated in various districts of West Bengal has reported distress migration. These people hardly own any land and mostly work as agricultural labourers. Due to their low income from agricultural they took up loan to meet up the extra expenses like health care, marriages or building house. Later, the male members of the household migrate mostly to southern region as construction worker to earn extra income to pay their debts. While, the female members stay at home and continue their work as agricultural labourers. In many instances, agents from Kerala, Mumbai and Delhi visits the villages of state and offers them work at construction sites, restaurants and in pipeline industries. A major chunk of the male population migrates with these agents in order to take up those jobs. These types of jobs are seasonal jobs, the male members migrate for 6 to 7 months and return home and work in their agricultural field and again migrate when jobs are available. It has been noted that there is prominent migration network established in most of the villages of West Bengal, wherein people from the same village migrate to same destination. The male members migrate with their friends, relatives and neighbour to the same destination as they tend to feel safe and secure when known people are around them in an unknown place. As per as female migration is concerned, Darjeeling stands out as many female members migrate out of the country to work as house helps or work in the care giving economy. Whereas in other parts of West Bengal, female migrates mostly because of marriage or they accompany their husband at the place of destination.

Majority of the population is in rural areas (68.1%) and rural areas in West Bengal is characterised by lower agricultural output, skewed distribution of land (only 30% has land), higher dependency on agriculture, lack of industrialization and other socioeconomic barriers. All these factors significantly contribute to heavy out-migration from the rural areas. Some districts in West Bengal like Murshidabad, Malda, and North 24 Parganas have a trend of male out-migration (Ali, 2018).

## Conclusion

In the beginning of the 19$^{th}$ century, migration in West Bengal was confined to the Kolkata city due to initiation of port centric economic processes. The scenario changed completely over the decades and according to the 2011 census, West Bengal has become an out-migrating state as the state has lagged behind in many development factors. Regional disparity is very prominent in the country due to uneven development which has fuelled the movement of the people from one place to another. Regions with urban centres, administrative headquarters and flourishing business centres have always attracted migrants from the backward regions. Due to these very reasons, the highest share of migrants from West Bengal is moving to economically favourable places like Maharashtra, Delhi and Haryana in search of work or employment. During 1991, people majorly migrated to the eastern region but with advancement in transportation and communication facilities, people started to migrate to distant states. Long-distance migration is mostly preferred by the male population as men are considered to be the bread winner in our society and females are expected to stay behind and look after the family. This gendered pattern is very much evident when the reason for migration is analysed wherein migration due to economic reason is dominant among the male population.

On the other hand, 'Marriage' was the dominant reason for migration among the female population. Despite this extreme gender biased migration, a little ray of light can be seen as female out-migration due to economic reasons is rising over the decade and out-migration due to marriage is declining.

Insights from the field have suggested that the migration pattern in West Bengal follows the rural-urban divide wherein migration in rural West Bengal is mainly due to push factors. Poverty, under-employment pushes the people to edges so they move out of the state in search of better opportunities. The development process in the state took place in a very uneven way which mainly happened around Kolkata. However, due to past rejection of liberalisation the opportunities created in the city became slow. Therefore, in the recent decade, a huge proportion of the educated working population is moving out of Kolkata city to take up jobs in the IT sectors of Bangalore, Delhi and Gurgaon. As far as urban West Bengal is concerned it is mostly associated with Kolkata, where the out-migration is influenced by pull factors, unlike the rural areas. From a glorious past, West Bengal has declined to become one of the states with poor economic opportunities. In spite of being under communist regime for a long period of time development has remained Kolkata centric and the rural-urban gap in development is quite significant. There is an urgent need to re-accelerate the development schemes so that the state as a whole can escalate its growth process and become as appealing to the migrants as it was before.

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