

**DYNAMICS OF INTER-STATE MIGRATION IN 1991
AND 2001: A CASE STUDY OF WEST BENGAL**

*Dissertation submitted to Jawaharlal Nehru University
in partial fulfillment of requirements for the award of the degree of*

MASTER OF PHILOSOPHY

MD. SELIM REJA



**CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI 110067
INDIA
2011**



जवाहरलाल नेहरू विश्वविद्यालय
JAWAHARLAL NEHRU UNIVERSITY
Centre for the Study of Regional Development
School of Social Sciences
New Delhi-110067

25th JULY, 2011

DECLARATION

I, MD. SELIM REJA, hereby declare that the dissertation entitled "DYNAMICS OF INTER-STATE MIGRATION IN 1991 AND 2001: A CASE STUDY OF WEST BENGAL" submitted by me for the award of the degree of MASTER OF PHILOSOPHY is my bonafide work and that it has not been submitted so far in part or in full, for any degree or diploma of this university or any other university.

Md. Selim Reja
(MD. SELIM REJA)

CERTIFICATE

It is hereby recommended that the dissertation may be placed before the examiners for evaluation.

Bhaswati Das
Dr. Bhaswati Das

(Supervisor)



Centre for the Study of Reg. Dev.
School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067

Prof. Ravi S. Srivastava

(Chairperson)



Centre of the Study of Reg. Dev.
School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067

DEDICATED TO MY PARENTS AND SISTERS

Acknowledgement

Research poses tremendous challenge to a researcher and calls for in-depth study as well as utmost care and patience. For doing a good research many hurdles and hindrances have to overcome. So a researcher requires emotional strength and constant encouragement as feedback. To complete this dissertation, I have benefited from support, guidance and interaction with a lot of people whom I wish to acknowledge and thank. All types of interaction may not have any obvious academic significance but they nevertheless provided me an opportunity to develop and express some of the thought included here. I hope those who may not be acknowledge individual but have lent support in various ways during the period as a sincere appreciation of their gesture of goodwill.

*This research owes a lot to my supervisor **Dr. Bhaswati Das**. I wish to express my deep sense of gratitude to her for her scholarly and valuable guidance throughout this work. Without her constructive comments this dissertation could never have been seen the light of the day. Despite her able and constant guidance if there is any error I am solely responsible for it.*

This work would not have been realized without my family support. So I am grateful to my loving Parents and sisters.

I am very thankful to my friends for their outstanding cooperation, moral and emotional support. Here I want to mention few of their names. They are Rajpal, Tarun, Obaid, Anis, Rabiul, Awadesh, Shewli, Khalid, Binod Jena, Anjum and Arvind.

I acknowledge all authors whose papers helped me to carry out this gigantic exercise. I also acknowledge the helpful cooperation extended by library staff, staff of CSRD Office and Documentation unit.

I own the responsibility for all the errors and omissions that might have in this work.

Date 25 July 2011
Place: New Delhi

Md. Selim Reja
MD. SELIM REJA

CONTENTS

	Page No.
Acknowledgement	i
List of Tables	iv
List of Maps	vii
Chapter 1: Introduction	1-14
1.1 Statement of the problem	
1.2 Research Questions	
1.3 Objectives	
1.4 Database	
1.5 Methodology	
1.6 Study Area	
1.7 Organisation of the Study	
Chapter 2: Review of Literature	15-31
Chapter 3: Trends and Patterns of Inter-State Migration	32-51
3.1: Trends and Patterns of Inter-state In-migration into West Bengal	
3.1(a): In-migration from Other States.	
3.1(b): Patterns of In-Migration and Migration Streams.	
3.1(c): Patterns of In-Migration to Study State from four major contributing states	
3.1(d): In Migration into Different Districts of West Bengal.	
3.2: Trends and Patterns of Inter-state Out-migration from West Bengal	
3.2(a): Out-migration to Other States.	
3.2(b): Patterns of Out-migration and Migration Streams.	
3.2(c): Pattern of Out-Migration from Study State to six Major States	
3.3: Preference Index	

Chapter 4: Reasons for Migration and Sectoral Distribution of Migrants	52-77
4.1: Reasons for In-migration to West Bengal.	
4.1(a): Reasons for In-migration from Other States.	
4.1(b): Reasons for In-Migration in Rural and Urban Areas.	
4.1(c): Migration Streams and Reasons for In- Migration.	
4.2: Reasons for Out-migration from West Bengal	
4.2(a): Reasons for Out-Migration to other states.	
4.2(b): Migration Streams and Reasons for Out- Migration.	
4.3: Sectoral Distribution of Inter-state In-Migrants	
4.3(a): Distribution of migrants workers over the districts of West Bengal.	
Chapter 5: The Determining Factors for In-Migration in West Bengal	78-90
5.1: Significance of the Selected Variables.	
5.2: List of the Selected Variables.	
5.3: Analysis of Correlation Matrix.	
5.4: Analysis of the Regression Model.	
Chapter 6: Conclusions	91-95
Bibliography	96-103
Appendices	104-110

LIST OF TABLES

Table No.	Page No.
3.1 The percentage distribution of the migrants by different migration types in the state of West Bengal (1991-2001).	33
3.2 The share of in-migrants by various states to the total inter-state in migration in West Bengal, 1991.	34
3.3 The share of in-migrants by various states to the total inter-state in-migrants in West Bengal, 2001.	35
3.4 The Percentage share of Inter-state In-migrants by different major states of India (1991-2001)	36
3.5 Percent distribution of lifetime in- migrants into the state of West Bengal from other States/Union territories of India of each sex by migration stream (1991- 2001).	37
3.6 Rural-Urban composition of Inter-state migrants in West Bengal (1991-2001).	39
3.7 Rural-Urban composition of Inter-state male migrants in West Bengal (1991-2001).	40
3.8 Rural-Urban composition of Inter-state female migrants in West Bengal (1991-2001).	41
3.9 Share of Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.	43
3.10 Share of Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.	44
3.11 Share of total Male Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.	45

3.12 Share of total Male Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.	45
3.13 Share of total Female Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.	45
3.14 Share of total Female Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.	46
3.15 Percent distribution of lifetime out- migrants from the state of West Bengal to other States/Union territories of India of each sex by migration stream (1991- 2001).	47
3.16 Rural-Urban composition of Inter-state out- migrants in different states of India 1991.	48
3.17 Rural-Urban composition of Inter-state out- migrants in different states of India, 2001.	48
3.18 Preference Indices of Inter-state migration streams, West Bengal. (1991-2001).	50
4.1 Reasons for Inter-state In-Migration to West Bengal by sex (1991-2001).	
4.2 Reasons for Inter-state In-migration to West Bengal in 1991.	57
4.3 Reasons for Inter-state In-migration to West Bengal in 2001.	58
4.4 Reasons for interstate in-migration by place of residence and sex in West Bengal (1991-2001).	60
4.5 Percentage distribution of reasons for total in- migration to West Bengal by sex and streams of migration, 1991.	62
4.6 Percentage distribution of reasons for total in-migration to West Bengal sex and streams of migration, 2001.	62

4.7 Reasons for Migration from West Bengal to other States/Union Territories by sex (1991-2001).	63
4.8. Reasons for out-migration from West Bengal to major states/union territories in 1991.	67
4.9. Reasons for out-migration from West Bengal to major states/union territories in 2001.	68
4.10. Percentage distribution of reasons for total out- migration from West Bengal by sex and streams of migration, 1991.	70
4.11. Percentage distribution of reasons for total out- migration from West Bengal by sex and streams of migration, 2001.	70
4.12 The work participation rate among inter-state in-migrants in West Bengal by sex and migration streams in 1991 and 2001.	72
4.13 Distribution of Inter-state migrant workers among major industrial categories by streams, 2001.	73
4.14 Distribution of workers among migrants and total population in major industrial categories, 2001.	73
4.15 Percentage distribution of inter-state migrants by sex in different sectors of economy across the districts of West Bengal, 2001.	75
5.1 The dependent and independent variables at the district level of West Bengal, around 2001.	83
5.2 Correlation Matrix Showing Relationship between Dependent Variable (Percent in-migrants to the total interstate migrants) and	84

Different Independent Variables at district level (N=18), around 2001.	
5.3 Correlation Matrix Showing Relationship between Dependent Variable (Percent male in-migrants to the total interstate male migrants) and Different Independent Variables at district level (N=18), around 2001.	85
5.4 Regression Model Showing Relationship between Dependent Variable (Percent in-migrants to the total interstate migrants) and Different Independent Variables at district level (N=18), around 2001.	87
5.5 Regression Model Showing Relationship between Dependent Variable (Percent male in-migrants to the total male interstate migrants) and Different Independent Variables at district level (N=18), around 2001.	88

LIST OF MAPS AND FIGURES

	Page No
1.1 Administrative Boundaries of West Bengal	14
3.1 Migration Stream in West Bengal (1991-2001)	38
3.2: Percent immigrants in different district of West Bengal, 2001	42

CHAPTER 1

INTRODUCTION

CHAPTER 1

INTRODUCTION

Migration and movement of human population have always been an integral element in the history of mankind. The incessant flows of population movement from one place to another deserve a special mention because many socio-economic and demographic conditions of a place of origin and place of a destination depend upon the nature of flow of population. This type of flow of population from one place to another place is generally termed as migration. In other way the term 'Migration' may be defined as "a form of spatial mobility of population involving a permanent change of residence." (UN: 1958). Migration is a dynamic and complex social process due to continuous interaction of economic, demographic, social and political factors. Many hypotheses have been put forward to find out the factors regarding the movement of population from one area to another area. In his hypothesis, Lee (1966) clearly has shown that the efficiency of migration stream varies with the economic conditions, being high in the prosperous time and low in the times of depression. Zelinsky's hypothesis of mobility transition (1971) also supports this relationship that in different economic development levels in the society migration changes accordingly. Clark (1966) also concluded that population mobility has increased with technical and economic progress. It has been observed that the industrialization and economic development attract large scale movements of people from countryside to town and from towns from city or from one country to another (Bouge, 1961). On the other hand some scholars tried to find out the relationship between migration and distance, which suppose to be covered by migrants. Ravenstein's papers published in 1885 and 1889, entitled "The Laws of Migration" stated that the volume of migration decrease with increasing distance. Zipf (1941) in his "Inverse Distance Law" also expressed the same view that the volume of migration tends to vary inversely with the distance. Heer (1978) opined that 'Since the cost of migration generally varies in direct proportion to the distance travelled, the number of migrants to tends to vary inversely with the distance. But some scholars like Stouffer expressed a different view. Stouffer's "Model of intervening opportunities" denies that there is any relationship between population mobility and distance. Rather the number of persons migrating over a

given distance is directly proportional to the number opportunities at the place of destination and indirectly proportional to the number of intervening opportunities.

Migration which is a core component of demography, others are being fertility and mortality, is a dynamic phenomena and associated with not economic development or distance but related with number others social phenomena like culture of the people, the structure of the society, level of the industrialization and urbanization etc. Davis (1951) was of the view that the continuous dependence of most of the people on agriculture, the caste system, diversity of language and culture, lack of education, low level of industrialization was the main factors responsible for the immobility of Indian population. Though, the migration rate has increased in India over the years but at sluggish rate. On the hand, there migration is closely linked with urbanization. Urbanization has been a major driver of internal migration in many countries. It was because the urban areas are characterized with better infrastructural facilities for the location of industries, trades and other economic activities leading to the creation of more and more employment opportunities which in turn attracts labour force. According to Greenwood (1971) rural and urban persons alike were found to migrate to rapidly growing cities, perhaps because of the likelihood that such cities also had rapidly growing job markets. However, the tendency for rural persons to migrate to rapidly growing cities is greater than that for urban persons. The reason for this may be the relative lack of job opportunities in rural as compared to urban areas. Observing the mass migration to cities particularly in the third world countries, Hoselitz (1957) propounded the theory of "over-urbanization" which predicts that: migrants supply far more labour than the formal sector can absorb and labour is absorbed into the informal sector which then leads to low productivity and limited prospects for exiting poverty. Mukherjee (2001) was also view that, In India, there is mainly a tale of massive poverty-induced migration of illiterate and unskilled peasants into Mega cities and large metropolises, who are compelled to migrate to such metropolises, and absorbed in poor urban informal sectors. So, it is very low quality migration which leads to low quality urbanization. Therefore, In the developing part of the world like India, the rapid population growth, the substantial increase in the size of the urban population and in the level of urbanization, and a sharp rise in the number and the size of big cities, all argue for increased attention to population

movement as a key component in population dynamics and in urban and rural development.

The regional disparity within a country also acts as a catalyst of migration. In India, there exist large scale regional disparities between the states as well as within the state. Historically, the existence of backward region started accentuating from the British rule in India. The British developed those areas which possessed for manufacturing and trading facilities. It was because of they developed the port cities like Calcutta, Bombay, Madras for exporting facilities. So, the locational pattern of industrial growth had been influenced by the British Policy and the surrounding areas these port cities experienced major development. Not only that, after independence also, these well developed areas continued to be dominant in respect of development perspective. The introduction of green revolution in Punjab and Haryana leads to the over-all development of rural areas and other sectors of the economy generated huge employment opportunities. The higher wage rate and higher level of living conditions also attracted labour force from other states, which was looking for survival. This has led to increase in the inflows of labour force from other states to both rural and urban locations in Punjab (Kainth, 2003). Therefore, the migration follow more or less same pattern that people tend to migrate to developed states from the backward region.

The study of migration is important not only to demographers but also to economists, sociologists, human geographers, policy makers and public administrators. The analysis of migration pattern is important to understand the changes taking place in the people's movement within the country. It is most volatile component of population growth and most sensitive to economic, political and cultural factors (Singh, 1998). Not only that, the proper understanding of the patterns of migration would help in the estimation of future population redistribution. The reliability and dependability of these estimates depend much on the consideration of all the temporal factors of birth, death and internal migration on which population grows in its finest precision (Chakravarty, 1997). Particularly, the internal migration is an important process has a greater impact on others process like urbanization, industrialization, population distribution, economic development, cultural diffusion and social integration of any country.

Keeping in view above all, in this present study an attempt has been made to discuss the dynamics of migration in West Bengal, a state of India for the two different time period i.e. 1991 and 2001. In the discourse, special focus is given on the trends and pattern of migration, reasons for migration and determinates factors of in-migration to the study state with respect to other states/union territories of India.

1.1 Statement of the problem

It has been argued at length that the flow of migration depends largely on the differential level of economic development of different regions. People can be 'pushed' off the farm after repeated droughts or for other reasons. Others can be 'pulled' in city as urbanization emerges alongside societal development. It is the nature of mankind to tend to migrate to city areas from the beginning of the history.

The migration flow to West Bengal from different parts of the Indian continent is an old phenomenon which can be traced back to the beginning of the 19th century when the process of urbanization began in the areas of Eastern India, based on the Kolkata city. Historically Kolkata was developed by the Britishers as a port city. It was also the seat of the colonial administration and the centre of colonial trade. Most of the major labour movement from Bihar, Uttar Pradesh and Orissa to the tea gardens in Assam and plantation in Africa took place through Calcutta. (Giri,1998). Industrial growth was also observed in the surrounding area of Calcutta as it had certain facilities such as internal river transport facility, port facility etc. Therefore, Calcutta was the main city of the eastern part of the country from the very past and it played a decisive role in attracting the mass population from the surrounding states as well as from the other parts of the country. So from the very beginning, there was a flow of migrants into the state of West Bengal from the other parts of the country.

In the present study an attempted has been made to assess the quantum of in-migration to the state from other states/union territories of India. It also deals with the pattern of out-migration. In addition this study also discussed the inter-state in and out migration with four migration streams i.e., rural-rural, rural-urban, urban-urban and urban-rural for two different time period i.e. 1991 and 2001. By comparing the data of two census year the

study tries to capture the trend the inter-state migration in respect of West Bengal. It also addressed the reasons for both in and out migration to and from West Bengal to other states. The economic activities of in-migrants have also been addressed. Though the state West Bengal at present experienced a considerable proportion of out-migration, still its net migration is positive means it gains more population than loses at inter-state level. In this study, the determining factor for in-migration to study state has also been addressed.

.1.2 RESEARCH QUESTIONS:

In the course of the study about the dynamic aspect of inter-state migration in West Bengal for two time period (1991 and 2001), following questions are to be addressed.

- What is the trend of interstate migration?
- Whether the pattern of migration follows the distance decay model or not?
- What are the emerging reasons for migration other than work/employment and marriage?
- What kind of gender differences among migrants exist in work participation rate by sectors?
- What are the determining factors for immigration into the districts of the study state?

1.3 OBJECTIVES

- To find out the trends for both in and out migration to and from West Bengal to other states/union territories of India.
- To understand the pattern of both in and out migration to and from West Bengal in respect of inter-state migration with four migration streams i.e., rural-rural, rural-urban, urban-urban and urban-rural for two different time periods i.e. 1991 and 2001.
- To find out the reasons for both in and out migration to and from West Bengal to other states/union territories of India.
- To examine the occupational pattern of migrants in various sectors.
- To identify the main determinants of in migration in the state of West Bengal.

1.4 DATABASE:

The present study is based entirely on the secondary sources of data. The main secondary source of data will be the Census of India. For the purpose of the study data will be used from two census years, 1991 and 2001.

Since the beginning of 20th century, data on migration based on place of birth has been collected by Indian census. However, since 1971 migration data were also collected on the basis of place of last residence and duration of migration. 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. By capturing the latest of the migration in cases where persons have migrated more than once, this concept would give a better picture of current migration scenario that means the criterion of place of last residence gives the migration information related to the last move of the migrants. This study is based on the place of last residence criterion of defining migrants by the Indian census. The village and towns are lowest units for determining the place of last residence. Any residence change within the village or administrative town/city is not considered migration. Data on migration were provided as change in residence elsewhere in the district (within district), from one district to another within the state (inter-district), and from one state to another state (inter-state). Administratively, India is divided into 28 states, 7 Union Territories and 585 districts according to 2001 census. Districts are the lowest unit for which migration data are available. Inter-state migrations are generally long distance migration compared to short distance of intra-state migrations. The inter-state migrants are considered for the analysis of the study.

A new addition of in 1981 census was reason for migration from place of last residence. The reasons were coded under five categories as employment, education, family moved, marriage and others. In 1991 census, two more reasons were added i.e. business and natural calamities like flood, drought etc. However, in 2001, the reason 'Natural Calamities' was dropped from the list. An additional reason was also added in this list on 'Moved after birth'. This reason was added in 2001 Census as it was felt that a large number of mothers moved to either their natal residence or to a place with better medical facility for delivery. Whereas the women are not treated as migrants at these temporary

places of residence, the children born are treated as migrants when they accompany their parents to their place of normal residence. Though technically, this is migration, the place of birth being different from the place of enumeration for the children born, it was useful to separate this information from other categories.

The data related to the economic activity of the migrants classified by the last residence were provided in both the census year. To know the sectoral distribution of the migrants at the districts level, these data also is also used in this study.

So, for the purpose this study data will be used from the following tables of 1991 and 2001 population census.

- D-2: Migrants classified by place of last residence, sex and duration of residence in the place of enumeration.
- D-3: Migrants by place of last residence, duration of residence and reason for migration.
- D-8: Migrant workers by place of last residence and industrial category.
- D-11: Migrant workers by place of last residence by industrial category

To find out the determining factor for in-migration to West Bengal from other states various variables have been taken from the field of agriculture, industry etc. The information for different variables is taken from the Bureau of Applied Economics and Statistics of West Bengal (2002-03), West Bengal Human Development Report-2004.

1.5 METHODOLOGY:

This study is based on secondary data. The following steps have been attempted for the present study.

- The whole analysis of the study is carried out using simple statistical techniques like rates, ratio and percentage etc.
- Cartographic techniques like Bar diagrams and Choropleth maps have been used to represent the data.
- To get a comprehensive picture about the migration pattern to and from West Bengal to others states, the categorization or grouping of the states has been done. The states were categorized into four groups' i.e. High, Medium, Low and Very Low on the basis of their percentage share of migrants, both in and out migrants. For this grouping quartile technique has been applied. The following way the grouping has been done.

Name of the category	Categorisation
High	above 3Quartile
Medium	2Q-3Quartile
Low	1Q-2Quartile
Very low	below 1Quartile

- To measure the relative attractiveness between West Bengal and other states for migration, Migration Preference Index (Bachi, 1957) is used. The Preference Index indicates whether migration streams are greater or smaller in a standardized form.

Let m = Proportion turnover migrants in West Bengal with respect to all other states and union territories in India to the total population of India.

M_{ws} = Number of in-migrants in West Bengal from a particular state 'S'

M_{sw} = Number of out-migrants from West Bengal to a particular state 'S'.

ΣP_i = Population of India

P_w = Population of West Bengal

P_s = Population of any state 'S'

Then the Preference Index of in-migration in West Bengal with respect to all any state 'S'

$$P.I. = \frac{M_{ws}(\Sigma P_i - P_s)}{mP_wP_s} \quad 0 < P.I. < \infty$$

This indicates the attractiveness of in-migrants in West Bengal with respect to all any state 'S'. Similarly the Preference Index of out-migration from West Bengal to any state

$$P.I. = \frac{M_{ws}(\Sigma P_i - P_w)}{mP_wP_s} \quad 0 < P.I. < \infty$$

If P.I. equals 'zero' then there is no attractiveness between places of origin and destination i.e. no migration between two places. Similarly when P.I. equals to ∞ indicates almost all are migrants.

- To know the determining factors behind the in-migration to West Bengal, a set of independent variables and dependent variables has been taken. Then the **correlation matrix** is calculated which the correlation co-efficient between all the explanatory variables and the dependent variables. The explanatory variables having the highest correlation co-efficient would be the one to explain best. For the purpose of the study following dependent and independent variables are taken.

- **Dependent Variables:**

- (1) **Percentage of in-migrants to the total interstate in-migrants into different districts of West Bengal**
- (2) **Percentage of male in-migrants to the total interstate male in-migrants into different districts of West Bengal**

- **Independent Variables:**

- **(1)Economic Variables**

- Per Capita Income(in Rs) at Current Price 1993-94
- Per Capita Domestic District Product (in Rs) at Current Price 1993-94

- **(2)Social Variables**

- Percentage of School Enrolment
- Primary school/100 sq.km
- High school/100 sq.km
- No. of hospital beds per 10,0000 population
- No. of hospitals per 10000/PP
- Percentage of Population using adequate sanitation facilities (This refers to the percentage of population/households with availability of bathroom within house).

- Density of surface road per sq.km of Area

- **(3) Secondary and Tertiary sector Variables**

- Number of Registered factory workers/ 10,0000 population
- No. of registered factories per 100 sq.km
- Percentage of population in secondary activities (Secondary activities includes Manufacturing and repairs; Electricity, Gas and Water Supply and Construction)
- Percentage of population in tertiary activities. (Tertiary activities includes Wholesale and Retail Trade; Hotels and Restaurants; Transport, Storage and Communications; Financial Intermediation; Real Estate, Renting and Business Activities; Real Estate, Renting and Business Activities; Other Community, Social and Personal Service Activities; Private Households with Employed Persons; Extra-Territorial Organisations and Bodies)

(4) Agriculture Variables

- Percentage of net cropped area to total reporting area. (The net cropped area represents the total area sown with crops and orchards. Areas sown more than once in the same year is counted only once. Whereas, the Reporting area stands for the area which data on land use classification is available. In areas where land utilisation figure are based on land records, reporting area is the area according to village paper prepared by village accountants.)
- Cropping Intensity (It is the ratio of Total Cropped Area to Net Sown Area.)
- Gross irrigated area (in '000 hectare.) (It is the total area under crops, irrigated once and/or more than once in a year. It is counted as many times the areas are cropped and irrigated a year.)
- Total fertilizer consumption (in '000 tones)

Among the above listed variables, there are a lot of variables under the head of social, secondary and tertiary and agriculture variables. Keeping in view, the **Principle Component Analysis**- a branch of factor analysis-which is a technique to synthesize a large number of variables into a smaller number of general components which retain the maximum amount of descriptive ability, is used in this study. The PCA is also useful when there is a severe high degree of correlation present in the multi-attributes.

- **Regression Model** is also constructed to find out how the average value of the dependent variables i.e. Percentage of in-migrants to the total interstate in-migrants and Percentage of male in-migrants to the total interstate male in-migrants varies with the given value of set of the independent variables i.e. per capita income (in Rs) at current price 1993-94 (X_1), per capita DDP(Rs) at current price 1993-94 (X_2), Agriculture Index (X_3), Index of secondary and tertiary sectors (X_4), Social Index(X_5), Level of Urbanization(X_6).

1.6 STUDY AREA:

This study is based on the state of West Bengal, which is located at the eastern part of India. West Bengal is extended from 21°25' to 26°50' and 86°30'E to 89°58'E and it embraces an area about 80,968 sq.km. It is extending from the Darjeeling Himalaya in the north to the Bay of Bengal in the south and from the edge of Chotanagpur highland in the west to the border of Bangladesh and Assam in the east. West Bengal is the nation's fourth most populous with population of 8, 036, 6461 according to Census of India, 2001. The state can be divided into three main regions. These are discussed below

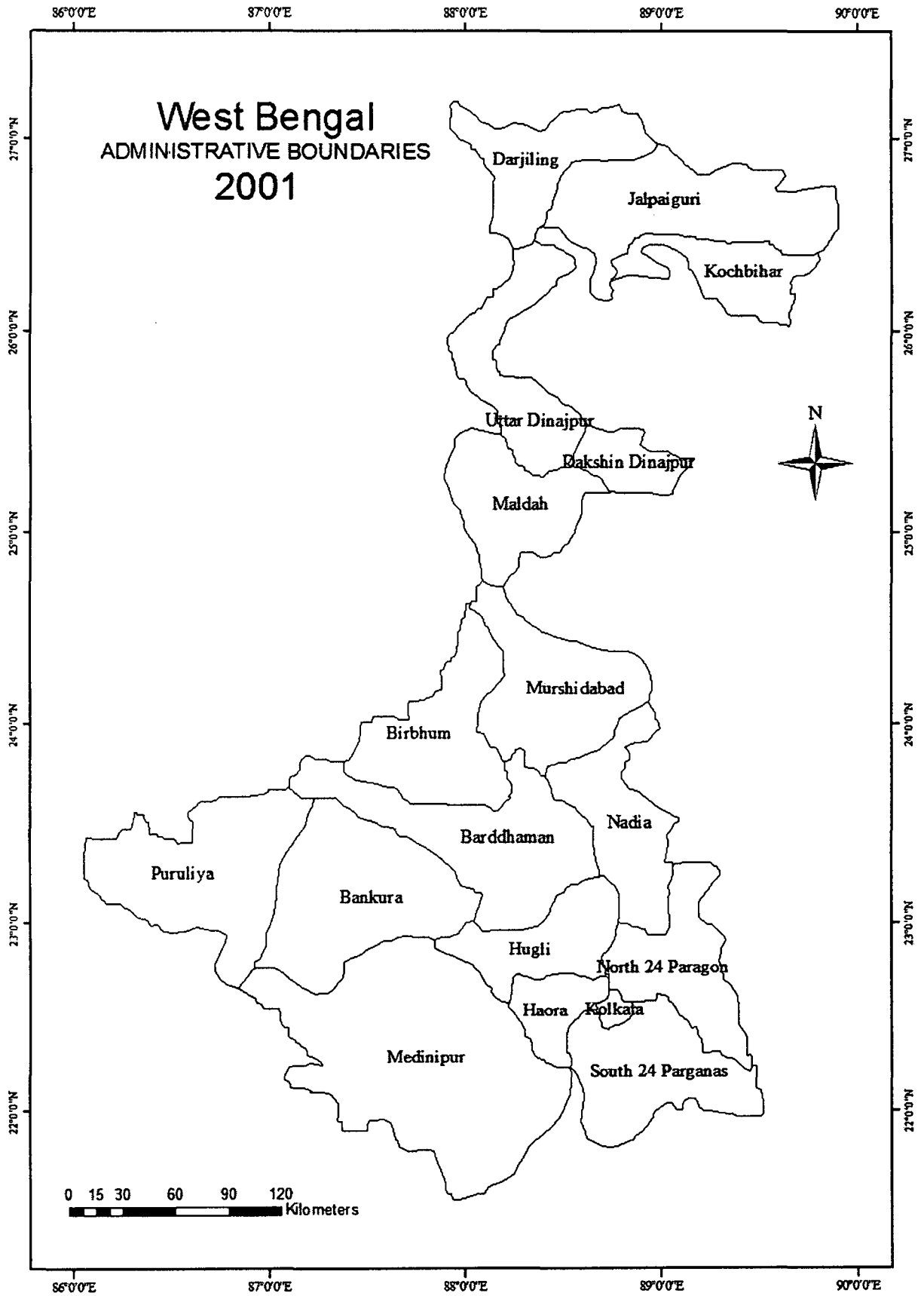
(1) The North-Bengal hilly and plain area : This area is situated in the northern part of Bengal and it consists the districts of Darjeeling, Jalpaiguri, Coach Bihar and Malda. Most of the Darjeeling diatrict has been formed by the mountanous tract of Himalayas. The other districts form the plain area of the region. This region is still exhibiting the lowest population density with overwhelming rural population. The economy mainly dominated by primary sector expect for urban centres.

(2) The Delta Region : This is relatively low lying region comprising districts mainly Murshidabad, Nadia, 24-Parganas (North and South), kolkata, Haora and parts of Medinipur. It is the region, where the great industrial conurbation kolkata has been developed. About half of the population of West Bengal is concentrated here.

(3) The Rahr Plain : The rahr Plain consists of Birbhum, Bankura, Purulia, western part of Bardhaman and Medinipur districts. This laterite region is characterized by lower population density with predominant agrarian economy, except the Ajay-Dmodar interfluence, where the Asansol-Durgapur industrial area is located.

1.7 Organisation of the Study:

This study is basically divided into six chapters. The first chapter deals with introduction, statement of the problem, research questions, objective of the study, database, study area and methodology. The second chapter contains the review of existing literature .The third chapter deals with the trends and patterns of interstate migration in West Bengal. The fourth chapter deals with the reasons for migration in 1991 and 2001 and sectoral distribution of interstate in- migrants. The fifth chapter addressed the determining factors for inmigration to West Bengal. The last chapter deals with summary and conclusion.



CHAPTER 2

REVIEW OF LITERATURE

CHAPTER 2

REVIEW OF LITERATURE

There is a large scale variation in the migration patterns across the world and the extremely complex combination of microeconomic and social motivations for migration. One region may be characterised with in-migration and other region may be experienced large scale out-migration. An area's development milieu can affect the various components of the migration process. Other than development, there are many other factors which affect the individual to migrate. So, Migration by which human relocation is occurred through the world is very important to address. A lot of literatures are there regarding the various component of migration process. For the sake of the present study, the various relevant literatures have been reviewed in the following section for the purpose of the present study.

(I) Theories of Migration

Raventein's papers published in 1885 and 1889, entitled "The Laws of Migration" are the starting points for the empirical generalization to describe pattern of migration. Though Raventein's laws have been challenged or some exceptions have been pointed out, his observations have provided the basis for the fundamental idea underlying the gravity model of Zipf. Stouffer's (1940) "model of intervening opportunities", however denies that there is any relationship between population mobility and distance. Rather the number of persons migrating over a given distance is directly proportional to the number of opportunities at the place of destination and indirectly proportional to the number of intervening opportunities. However Wolpert (1970) has shown the weakness of Stouffer and other models for giving emphasis to push-pull factor and excluding behavioral parameters. He has borrowed much of the concept in his model building from the behavioral theorists.

Later Everett S. Lee(1966) in his paper entitled, 'A Theory of Migration' enlisted factors which enter into the decision to migrate and the process of migration in four headings i.e.(i) Factors associated with the area of origin (ii) Factors associated with the area of

destination (iii) Intervening obstacles and (iv) Personal Factors. In every area there are countless factors which act to hold people within the area or attract the people to it, and there are others which tend to repel them. Some of the factors affect most people in much the same way, while others affect different people in different ways. Thus a good climate is attractive and a bad climate is repulsive to nearly everyone. Other than the factors associated with the area of origin and factors associated with the area of destination, between every two points there stands a set of intervening obstacles which may be slight in some instances and insurmountable in others. The most studied of these obstacles is distance, which, while omnipresent, is by no means the most important. Actual physical barriers like mountain barriers may be interposed, or immigration laws may restrict the movement. Different people are, of course, affected in different ways by the same set of obstacles. What may be trivial to some people, the cost of transporting household goods, for example, may be prohibitive to others. Nonetheless, the balance in favor of the move must be enough to overcome the natural inertia which always exists. Zelinsky (1971) has approached migration in a completely different perspective. He in his 'hypothesis of mobility transition' has applied the principle of spatial diffusion of innovation to the laws of migration, especially to Lee's assertion that "unless severe checks are imposed both volume and rate of migration tends to increase with time".

The push-pull hypothesis has proved to be useful for listing all the factors affecting a given migratory movement and has produced lucid and convincing expositions of the underlying factor in migration. The forces of accumulated push-pull factors can be so overwhelming that it can neglect to make clear, why some migrate and some do not. The use of Lee's conceptual framework, which incorporates push and pull factors at the both place of origin and place of destination, would overcome these limitations. The 'Rural Push' theory seems to dominate the whole gamut of migration researches in India. It is argued that at length that the flow of migration depends largely on the differential level of economic development of different regions. People can be 'pushed' off the farm after repeated droughts; others can be 'pulled' in city as urbanization emerges alongside societal development. Indeed some people are eventually pulled from the city to city suburbs in their search for a better life as Ravenstein pointed out a century ago.

Brigg (1971) suggests that, educated migrants are primarily attracted by the 'pull' factor at the place of destination, whereas the illiterate migrants are primarily force out by the 'push' factor at the place of destination. Similar results were found by Lipton (1980) who concluded that most of the migrants in the third world countries originate because the very poor landless laborers and illiterates are predominately 'pushed' from villages, relatively well-off better educated are likely to 'pulled' by urban centers providing attractive economic opportunities.

(II) The Pattern of Migration

(A) Migration streams:

The spatiality of migration can be discussed in four migration stream: rural-urban rural-rural, urban-rural and urban-urban. In many poor countries rural-rural migration still dominates with laborers from poorer regions traveling to the agriculturally prosperous, often irrigated, areas which have more work. In India for instance rural-rural migration accounted for roughly 62% of all movements in 1999-00 according to National Sample Survey data (Srivastava and Bhattacharyya 2003). Workers from backward states like Bihar, Uttar Pradesh, Orissa and Rajasthan routinely travel to the developed green revolution states of Maharashtra, Punjab and Gujarat for the transplant and harvesting season. Premi (1984) while analyzed the internal migration in India during 1961-1981 revealed that rural to rural migration formed the dominant migration stream in all three census. The proportion of the rest three streams increases after every census. Bose (1977) while analyzing the internal migration in India, stated marriage migration and associated migration is predominate among females which constitute a significant rural to rural migration.

Likewise in Nepal rural-rural migration from poor mountain areas to the agriculturally prosperous plains accounts for 68% of the total population movement and rural-urban for only 25% (Bal Kumar 2003) despite the country's image of being an exporter of Ghurkha workers where mountain dwellers go to the plains to work as drivers, security guards and so on. Rural-rural migration is typically undertaken by poorer groups with little education and other assets as it requires lower investments. Due to the scattered nature of the

destinations and remoteness of sending areas, this is the least regulated of all kinds of migration.

Rural to Urban migration is a response to diverse economic opportunities across space. Historically it has played a significant role in the urbanization process of several countries and continues to be significant in scale, even though migration rates have slowed down in some countries (Lall, Selod and Shalizi, 2006). According to Williamson (1988) the rapid city growth can be explained by two hypothesis i.e.(1) unusually rapid rates of population growth pressing on limited farm acreage and pushing landless labour into cities, and (2) migrants being pulled into the cities by the economic forces such as domestic terms of trade squeezing agriculture, the diffusion of technology from the developed world favouring modern large scale urban industries, foreign capital flows into urban infrastructure, housing, power, transportation, and large scale manufacturing. As per the first view, the main cause of rapid urban growth is traced to the increasing pressure of population on farmland in densely populated agrarian economies. Deficiency of reproducible tangible capital relative to labour in the face of a high-population density exacerbates the problem of rural unemployment and underemployment, which in turn fosters the rural-urban population movement. In the face of limited demand for labour in the formal sector, in particular the organized industrial sector, excess supplies in the urban labour market force them to be engaged in the informal service sector. The low rate of growth of industrial employment and the high rate of rural-to-urban migration make for excessive, even explosive urbanization involving a transition from rural unemployment to excessive urban unemployment and underemployment. In explaining migration across space, income differentials are taken as motivating factor in moving people from low-income areas to relatively high-income areas (Harris and Todaro, 1970).

Although still not the main form of migration in many developing countries, rural-urban migration is rapidly gaining in importance especially in the urbanizing economies of Asia as rural-urban wage differentials grow and the returns from migration increase. For example, in Bangladesh two-thirds of all migration from rural areas is to urban areas and is increasing very rapidly (Afsar, 2003). In Thailand, as in other countries in Southeast Asia, rural-rural migration has been decreasing, while the share of rural-urban migration

has been increasing (Guest 2003). Zablan (1983), while studying the determinate and consequences of rural to urban migration of 1972 in Cuba city, revealed that most of migrants to Cuba city were from within the region. Rural to Urban migration was primarily due to employment and education.

Todaro (1969) while analyzing rural to urban labor migration in Kenya with reference to Kisumu, Namjuki and Nyeri mentioned that they draw their migrants predominately from their immediate province in which their urban centers were located.

In India where rural-rural movements from poor areas to rich areas have been the dominant form of migration, there has been a sharp increase in rural-urban migration in recent years (Dev and Evenson 2003, Srivastava and Bhattacharyya 2003) as more young men travel to work in construction and urban services in the expanding informal sector. For example studies in areas of Bihar that have experienced a doubling of outmigration rates since the 1970s show that migration is now mainly to urban areas and not to the traditional destinations in irrigated Punjab where work availability has declined (Karan 2003). Both the supporters and critiques of the new economic policy in the year 1991-popularly known as liberalization of the Indian economy believed that economic reforms would increase internal migration. The proponents believed that the new impetus would boost economy and job opportunities leading to increased pull factors conducive for accelerated rural to urban migration. On the other hand, the opponents held that economic reforms would adversely affect the village and cottage industries and impoverish rural population leading to increased rural-urban migration (Kundu 1997). An analysis of unit level data in urban areas suggests that poor households are likely to send out one or more of their adult members to other locations, possibly for creating an outside support system for livelihood. In case of economically better-off strata, however, migration often means shifting of the entire family. The motivations for migration are, thus, diverse and varied depending on the socio-economic characteristics of the household. These entire questions the proposition that push factors have been the major determinants of mobility or that poverty holds the key to migration in the nineties.

But some expressed opposite views regarding the nature of the migrants such as according to Bhagat (2009), it is not the poor and disadvantaged who are migrating more,

but migrants belong largely to better off sections of Indian society in the context of rural to urban migration. Greenwood (1971) was also in the opinion that migrants to urban areas tend to come from relatively high-income rural areas. It may be due to fact that a person's level of education is likely to be highly correlated with his level of income, and income and educational levels of the residents of many parts of rural India may be so low that the persons simply do not possess the requisite skills for employment in urban areas. Such persons are also likely to have little information concerning other regions of the country and to have strong family ties. On the other hand with increasing income levels, and simultaneous increases in education and information, the propensity of rural persons to move to cities may also increase. While rural income may be high relative to other rural areas, it remains low relative to most urban areas.

According to Greenwood (1971) rural and urban persons alike were found to migrate to rapidly growing cities, perhaps because of the likelihood that such cities also had rapidly growing job markets. However, the tendency for rural persons to migrate to rapidly growing cities is greater than that for urban persons. The reason for this may be the relative lack of job opportunities in rural as compared to urban areas. Rapid expansion of the job market in cities in a given region also tends to attract to those cities migrants from rural areas of that region, and this reduces migration from rural area of the region to urban areas of other regions.

Caste-kinship bonds and other kinds of village networks help rural job seekers to arrange such urban-based jobs (Banerjee, 1986) and aggravate the rural-urban migration. Though the social networks which play an important role in the context of migration are prevalent among the short distance migrants and tend to lose their significance with a rise in the distance between the place of origin and destination though there are some exceptions to this (migrants from Bihar to Delhi or Maharashtra or West Bengal for example.(Murayama, Mayumi 2008). Shivamurthy and Kadi (1985) had set a model for the determinants of interstate migration in India in which besides conventional factors, authors have introduced a variable 'stayer' which they describe as a friend or relative for the initial help in social assimilation of migrants. This variable according to them plays an important role to induce or sustain in migration.

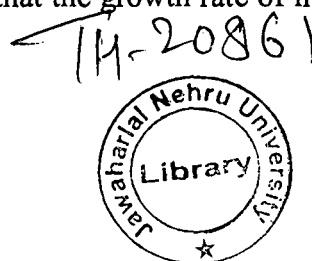
Urban-rural movement can occur when people retire back to their villages or as in Sub-Saharan Africa in the 1980s and 1990s with retrenchment under structural adjustment programmes especially in the case of Uganda and Zambia (cf. Potts 1995; Tacoli 2001). In Ethiopia, over half a million men were demobilized from the army in the early 1990s after the end of the civil war. Many had been taken from their villages as youth, and a proportion of them gained skills useful for non-agrarian pursuits. It is estimated that about half of them returned to rural areas (Bryceson 1999).

In India, the volume of urban to rural migration is very little. This little migration is mainly associated with shrinking of urban job market and problem of unemployment and under employment in urban area (Premi 1980, Dasgupta 1986, Singh 1989).

In India, there has also been an increase in the proportion of urban-to-urban migrants (Lusome and Bhagat (2006). As institutions of higher learning, particularly professional and technical institutions, are not available in each district, an urge for higher education motivates urban dwellers as well as some of the rural folk to migrate over long distances. This is also partly due to the creation of jobs in the modern sector in major metropolises and big cities (Premi, 1990).

(B) Inter-state Migration Pattern in India.

In the context of internal migration in India, researchers like Kingsley Davis (1951) have attributed the low level of mobility among Indians. He attributed this immobility in the country to the prevalence of caste system, joint families, traditional values, diversity of language and culture, lack of education and predominance of agriculture and semi-feudal land relations. However in spite of development of transport and communication system and also change in the economic policy of the country i.e. liberalization of economic policy, many scholars think that the mobility of population has declined systematically between 1961-1991. The increasing immobility in the country has been attributed to growing assertion of regional and language identity, adoption of Master Plans and land use restrictions at the city level etc., that have been considered fallouts of the process of globalization (Kundu 2006). However, it may be noted that the growth rate of inter-state



migrants has been very high during 1991-2001 compared to previous decades. There is no doubt that the inter-state mobility has considerably increased during 1991-2001 coinciding with India's economic liberalization programme initiated in 1991 (Bhagat 2009).

The metamorphosis of internal migration substantially revealed the myth of population pressure, which addresses itself to the nature of development process in which "underdevelopment" has made places of origin highly sensitive to the flight of people. A study in this context inferred that the patterns of poverty-induced migration of marginalized peasants and laborers from Uttar Pradesh and Bihar to relatively developed and favoured states of Maharashtra, West Bengal, Punjab, Haryana, and Delhi is the sign of underdevelopment, not development (Mukherji S., 2001). The analysis of interstate migrants, attempted on the basis of Census at the time of Independence reveals that the less developed states had a high percentage of net out migrants. The developed states, on the other hand, were in-migrating in character (Kundu 2007). In the post Independence period until 1990, however, migration pattern turned out to be different. There was a decline in the rates of net outmigration from the backward states like Bihar, Rajasthan, and Uttar Pradesh etc. Importantly, Madhya Pradesh and Orissa stood out as exceptions as these reported significant inflow of population. This could be explained in terms of massive public sector investment, resulting in creation of job opportunities in industry and business in the two states. Local population, unfortunately, were not able to take advantage of these developments due to their low level of literacy and skill (Kundu 2007). Correspondingly, the developed states like Karnataka, Maharashtra, Tamil Nadu and West Bengal that had attracted large scale immigration during the colonial period, reported decline in immigration rates. Only the state of Gujarat did not show this decline due to its growing dominance in the industrial map of India. Haryana reporting high immigration rates may be explained in terms of migration from Punjab due to political instability and communal tensions. The data for the nineties, however, suggest some sort of stepping up of outmigration from poor states and of immigration in to developed states, leading to possibly a marginal increase in the rate of overall migration in the country (Kundu 2007).

Another dimension of inter-state migration is its regional concentration biasness. In- and out-migrants to and from Bihar and West Bengal are mostly confined to the states of North India, while in- and out-migrants to and from Kerala are mostly confined to the states of South India. Though regionalism has impeded inter-state migration to some extent, the fact that the volume of migration is inversely related to distance is also an important factor.

The majority migrants are intra-district migrants and most of the intra-district migrants are females who customarily change their parental households and join her husband's households after marriage (Srivastava and Sasikumar, 2003). Bose, (1977) while analyzing the internal migration in India, stated marriage migration and associational migration is predominant among females which constitute a significant higher percentage from rural to rural migration. Economic factors are relatively unimportant female migration in India. However with the passage of time, the gender dimension of migration pattern has been also changed and many scholars have discussed about this changing gender dimension in migration pattern. Of late labour migration is getting feminized especially in developing countries. (U.N., 2004, Karlekar, 1995, Fawcett et al, 1984, Fernandez Kelly & Patricia, 1983). The trade liberalization and market orientation have had far reaching consequences on the pattern of demand for labour. In many developing countries export led economic growth and an invitation to foreign capital have given a big boost to electronic, chemical, information technology and garment industries which by and large employ significant number of female. Kabeer (2000) in her study finds Bangladeshi women (with a long tradition of female seclusion) taking up jobs in garment factories and joining the labour markets of Middle East and South East Asian Countries. Migration for domestic service is largely a female-driven phenomenon, based on personal and social relationships. Social networking, which is largely female centered, is found to influence the migration decision, the process of migration and also the day-to-day life of the migrants. The migration of women domestics needs to be understood as a collective endeavor that represents the experience within a set of family relationships, as opposed to the commonly perceived notion of male migration, which is autonomous and individualistic. (Neetha, 2004). In India, in the recent past 'independent migration' of females is on the increase in response to the employment opportunities in export

industries, electronic assembling and garment units. In all the states in South India this percentage is high. (Shanthi. 2006).

Shivamurthy and Kadi (1983) identified different factors associated with migration for different states. The authors are of the view that better economic condition and shortest destinations are conducive to the incidence of migration. The authors attributed socio-linguistic barrier of the country to the variations among states. On the other hand, Singh and Yadav (1974) conceptualized that previous migrants, distance and opportunities at the migratory places are the factors affecting migration which they proved with demographic survey of Varanasi conducted during 1969-70. While studying population mobility and economic development in eastern India, Mahto(1985) finds that except economically attractive areas, all the areas have predominantly short distance migrants. The study finds, in Bihar and Orissa a decline in the share of short distance migrants. In contrast most Bengal experienced an increase in the share of short distance migrants. Soni(1985) provides a comprehensive analysis on 1971 and 1981 census data on inter-state migration. The study finds that proportion of male migrants to male population is low when compared to the same population for females. The study finds that interstate migration is very low as against intra-district and inter-district migration. The study concludes marriage as the most important reason for females and employment for the males to migration

Kshirsagar (1973) explained the pattern of male in migrants in various states for the period 1951-61. According to her, 25 million males migrated during 1951-61 for one place to another, forming 11 percent of male population of the state. More than 80% of the movement was intra-state rural-urban flow accounted for one fourth of the total movement of males indicating the shift away from agriculture. The study by Murthy and Murthy (1980) examined the pattern of internal migration in Maharashtra in relation to age, sex, marital status, rural-urban residence movements by distance and occupation on the basis of 1971 census migration data. Some of the important findings of the study were-in migrants are largely from neighbouring states especially from Gujarat, the volume of migration age inversely related to the duration of residence in the states etc. Goyal (1990) studied migration and rural development in Punjab. He attempted to study

the inter-relationship between rural developments and rural out migration in Punjab. Though Punjab is one of the most developed states, it experienced considerable out migration from its rural areas. The paper mainly tried to empirically identify the micro-determinants of development affect in migration. It thus examined village level characteristics which were directly related to rural out-migration. He concluded that even a reasonably high level of rural development has not been able to contain the out-migration of people from the villages of Punjab. More strong push factors were male literacy, proportion male workers in non agricultural sector and the level of development of infrastructural facilities. He concluded that in the initial stages rural development was helpful in containing out migration, but later it added it. Singh (1990) examined the age-sex pattern of inter-state migrants in Indian states from census data for 1971 and 1981. According to him the reason for migration reported nearly 3/4th of male migration due to employment ant family related reasons while females moved due to marriage and family related reasons.

There were many scholars who tried to address the work participation rate among the migrants. Using the census and the NSS data, Sarkar(1978), analysed that the work participation of migrants and non migrants in India. He found that half of the in migrants in big cities came in search of employment which is accelerated, according to authors, why employment policies as well as resource gaining nature of cities. Visria(1980) also shows that worker rates of intra rural migrants were significantly higher than those of non migrants as well as Urban-Rural migrants. It is proved that rural-urban migrants recorded much higher work participation rates which increased directly with distance moved. The author also finds that incidence of unemployment is lower among migrant than among migrants.

(III) Socio-economic Factors of Migration

There are two dominant micro levels economic theories in the qualitative study of migration .These are neo-classical economic theory and the new economics of labor migration (NELM). Neo- classical economic theory of migration owns its current formation of Todaro (1969). The probability of migrating is positively associated with the wage differential between origin and destination, and negatively associated with costs.

Todaro (1969) notes the importance of defining the wage differential as the expected in the destination minus the expected wage in the origin. The wage in either origin or destination is determined both by the prevailing wage for individuals with given characteristics (age, education, experience etc.) and by the probability of employment for individuals with those characteristics. The new economics of labor migration (NELM) theory criticizes the neo-classical comparison of income in the origin to income in the destination. These researches argue that the household members compare themselves and their standard of living not to some potential standard of living, but instead to the households in the origin area. (Stark and Taylor, 1989; Stark and Taylor, 1991; Stark and Yitzhaki, 1988). So, therefore members of households comparing unfavorably to their households in their home village will be more likely to migrate to cities to improve their standard of living.

There are many literatures available which incorporates relationship between migration and land ownership. Having little access to land in a predominantly agrarian society leaves the land-less with few alternatives to migration. In some Latin American countries access to land is so limited that nearly all poor young people view migration as their main and perhaps only livelihood option. The situation in parts of Cambodia is the same where there are reports of “a new and growing breed of land-less workers which has led to increased migration from rural areas to cities and other countries” (Acharya, 2003). Zhao Zhu (2002) find land size has significant negative effect on migration in China. Each additional mu (a measure unit in China) of land reduces the probability of migration by 4.4% if the decision model is individual-based and by 2.8% if the decision model is household-based (Zhao, 1999b).

Research by Hugo (1985) in Java and by Connell and others (Connell et al., 1976) in India shows the relationship between land and migration. Hugo (1985) examines circular migration in Java. Larger landowners produce enough to cover their consumption needs throughout the year, while smaller landowners and the landless migrate seasonally to supplement what they can earn on their own land and in their home community. Connell et al. (1976) argue from their village studies in India that land availability at the village level is the primary economic force driving emigration. Many small farmers are

forced to sell their land to the large land owners and seek wage labor in the area, to work as temporary or seasonal workers in other areas or to migrate permanently away from the area. It is said that “the more an individual is poor, landless and socio-economically deprived, the greater the chance of his migration from rural to urban areas”. (Mukherjee, S. 1979). Other than the small land-to-man ratio, another factor which is affecting people’s decision to migrate to other areas is inter-regional disparities in economic growth caused either by industrial or by agriculture (e.g. The Green Revolution) development. It was suggested that migrant labors help to raise their household’s standard of living.

Political-economic dimensions of market economy features on the agrarian landscape also are relevant. Land distribution changes, for example, generally have been adverse to the peasant, leading to out migration from many areas of Costa Rica (Seligson 1980). More specifically, improving the productivity of raising cattle in Guanacaste and Alajuela provinces involved formalizing landholdings rights, which undercut subsistence agricultural practice; that manual labor requirements for raising cattle’s are considerably less than for other types of agricultural production also contributed to outmigration (Taylor 1980).

There are many literatures found which discussed about the relationship between migration and urbanization in detail. Urbanization has been a major driver of internal migration in many countries and has overtaken other factors in many Asian locations. Rates of urbanization influence rural-urban wage differences: an increase in the demand for labour in urban areas can push up urban wages and increase migration. Rural-urban differences in average incomes increased in many South and East Asian countries during the 1990s, especially in China and fell in most African countries (IFAD, 2001; Eastwood and Lipton, 2000). Contrary to conventional wisdom on urbanization and migration, high rates of migration (permanent and temporary) into urbanized areas have continued despite rising levels of (formal) unemployment and persistent urban poverty. The explanation lies in the expanding urban informal sector which represents a significant pull. In addition, urban areas offer many economic opportunities to rural people for changing jobs rapidly and becoming upwardly mobile with a very low asset-base and

skills. Even if urban wages are not higher, work is available more regularly than in subsistence agriculture. As Devereux et al. note in their study of the Amhara region in Ethiopia “younger men (many of them unmarried and either landless or unable to farm through lack of other resources) were attracted by the more open-ended experience of urban migration, with its greater risks but greater and more varied opportunities. Informal economic opportunities may be particularly beneficial to historically disadvantaged groups such as tribal’s, lower castes (in South Asia) and women.

A majority of migrant workers find work in the informal sector. This is what the “over-urbanization” theory of Hoselitz (1957) predicts: migrants supply far more labour than the formal sector can absorb and labour is absorbed into the informal sector which then leads to low productivity and limited prospects for exiting poverty. Deshingkar and Start (2003) document accumulative migration streams in both informal farm and non-farm work which have allowed numerous poor people in Andhra Pradesh to improve their standard of living. Papola (1981) noted in the case of Ahmadabad city in India that although a majority of the migrants were in informal sector employment, their urban earnings after migration were double their rural earnings. Kaur (1996) finds that the areas with relatively high proportion of intra-state rural-urban male migrants were mainly found in areas which experienced low to moderate rate of urbanisation in recent decades. In contrast, the regions with high inter-state rural-urban male migration experienced high rate of urbanization in recent decades. They included industrial-mining areas, Assam region, Punjab-Haryana tract and areas with considerable agricultural colonization.

The process of decision making, however, is stimulated through various socio-cultural factors. Mehta (1991) in his study finds that persons belonging to poor and landless sections and illiterates have higher frequency of migration, which due to the fact that their poor socio-economic condition forces them to migrate. However the migrants from higher economic groups are lower in proportions, who are motivated by the desire to obtain prestigious ‘white collar jobs.’

Generally lower unemployment levels in the destination areas and higher unemployment levels in the origin areas are linked with the higher migration rates. The pressure of population is not the only or even the principle cause of the increasing unemployment

and poverty of the rural population.(Boserup, E. 1965).Equally important causes are the low rate of investment in agriculture, fragmentation of land, inequalities in the distribution of land and productive assets, institutional mechanism which discriminate in favor of the owners of wealth and a pattern of relative prices and therefore investment and technological change, biased against labour.(Mukherjee, S. 1979). Several other studies have noticed the flow of migration from rural economy to industrial economy. This kind of migration is due to small landholdings, unemployment, underemployment and the growth of rural population. (Dara 1981). Glantz (1975) has also observed that the poor migrate to areas offering more employment opportunities and higher welfare benefits.

In his paper entitled, "A Regression analysis of migration to urban areas of a less developed country: The case of India", Greenwood (1971) showed that in a less-developed country such as India, economic factors such as transportation costs, income, and job opportunities enter importantly into the individual's decision to migrate to a city. It was found that migrants to cities from both rural and urban areas tend to come from nearby, but this tendency appears to be significantly more pronounced for rural-urban migration. He was also in the opinion that interurban-area migrants tend to move from cities with relatively low income levels to cities with relatively high income levels. On the contrary, while migrants from rural areas tend to move to relatively high-income cities, these same migrants also tend to come from relatively high-income rural areas.

The rapid development of industrial and urban economy particularly after 1950's had opened up employment opportunities which pulled the rural masses. Davis comes to the conclusion that modern migrations are an ebb and flow process that result from technological and economic inequalities. Kadi and Sivanurthy (1988) pointed out that "the states with large industrial and urban bases, those experiencing agricultural development and those are favored by the government policies experienced significant immigration during the decade".

Davis (1975) pointed out that rural to urban migration in India has had a profound impact on the rate of urbanization and economic development. It provides a great source of cheap labor for the industries in cities change in the occupational structure of household villages. (Sing, 1982).

It has been widely observed that the propensity to migrate increases with education (Connell et. Al., 1976, Banerjee, 1986). Banerjee's study (1986) on the inter-state migrants in Delhi finds the share of matriculated and graduates among migrants in the sample were many times higher than that among the population from which they originated (in this case, Punjab, Rajasthan and UP). If we compare the educational level of migrants and non-migrants at the place of destination, broad-based information is rather limited. A study which canvassed information regarding socio-economic characteristics of in-migrants and non-migrants in three states of Bihar, Kerala and Uttar Pradesh shows that in case of Bihar and Kerala, the educational level of in-migrants is higher than that of non-migrants whereas in UP the pattern was reversed (Oberai, Prasad and Sardana, 1989). The level of education is again significantly related to regional and ethnic characteristics of migrants. Among the migrant domestic workers studied, the majority of live-out domestics who are mostly married are found to be illiterate whereas live-in workers, largely single are comparatively better educated (Neeta, 2004). Researcher like Kundu (2006) showed the relationship between incidence of poverty and levels of education for RU and UU migrants and non-migrants. Probability of falling below poverty line declines monotonically with increase in level of education, for all the three categories. However, the curve for the non-migrants is above that of the other two categories. One would note a higher incidence of poverty among the locals than the RU migrants which again is higher than UU migrants, for all levels education. Impact of education is seen as positive in all city sizes. A study has suggested that migrants tend to be better educated and thus perhaps of higher status than non-migrants. (Long, L.H. 1973). Implicit in this assumption is that the less educated are not as likely to realize such potentials elsewhere and tend to remain behind.

Income is generally expected to play an important role in the individual's decision to migrate. If persons are moving away from relatively low-income and to relatively high-income regions, then the sign associated with the origin-income variable should be negative while that associated with the destination-income variable should be positive (Greenwood 1971). The reason is that, first the persons with higher income levels are better able to afford the cost of a long-distance, interstate move. Second, since persons with relatively high incomes are better able to afford the cost of acquiring information

about alternative destinations, the risk and uncertainty associated with migration will not be as great for them as for low-income persons. Third, with increasing income levels, and simultaneous increases in education and information, the propensity of those persons to migrate also increases. With regard to income differentials a bimodal pattern of migration is conceived with the poor migrating for economic reasons, and the rich for better economic pursuits. (Rao, 1974). Persons having better economic position has a higher propensity to migrate from rural to urban areas. (Gupta, 1961).

The above review of literature portray that, there is more migration in the short distance i.e. intra-district Rural to Rural migration. It also finds that males generally migrated for employment reason in long distance migration and females mostly for marriage in short distance Rural to Rural migration. Many literatures also show the regional biasness in inter-state migration. Other than the pattern of migration, the literature also addressed many determining factors that affect the migration process like income, rapid development of industrial and urban economy, rate of urbanisation etc. On this background, in the present study an attempt has been made to examine the pattern of inter-state migration in West Bengal whether it follows the regional biasness or not. This study also enquired the reasons for interstate migration in relation to both males and females. Lastly the present study also addressed many socio-economic factors which affect the interstate migration in West Bengal.

CHAPTER 3

TRENDS AND PATTERNS OF INTER-STATE MIGRATION

CHAPTER 3

INTRODUCTION

Migration is a very dynamic and complex social process. The movement of people from one place to another place is often related with the socio-economic and demographic conditions of place of origin and place of destination. So, in this sense, the migration pattern has paramount important to understand the socio-economic as well as demographic characteristics of the place of origin and place of destination.

This chapter focused on the trends and patterns of migration to and from West Bengal to other states/union territories of India. The first section deals with the trends and patterns of interstate in-migration while the second chapter deals with the inter-state out-migration. In the last section, to know the relative attractiveness between West Bengal and other states for migration Preference Index has been discussed in detail.

West Bengal is the fourth largest populous state in India according to 2001 census. The findings based on the place of last residence collected in the 1991 census indicates that, in the state of West Bengal 6, 80, 77,965 persons were migrants whose last residence was elsewhere in India. They constitute 22.25% of the total population of West Bengal in comparison to 27.4% in the whole country. In 2001, the total number of migrants of West Bengal increased to 8, 02, 21, 171 which constitute 28.06% of the total population in comparison to 30.6 % of the total population of the whole country. One of the interesting features is that in both the census years, the percentage of migrants to the total population is low in the state of West Bengal than the national average. However, there is a definite increase in the absolute number of migrants as well as the share of the percentage of migrants to the total population of West Bengal. Therefore in this context, West Bengal follows same trend as India i.e. the increasing proportion of migrants to the total population.

The total migrants of the study state were firstly divided into different migration types i.e. intra-district, inter-district and inter-state, to get a comprehensive picture of migration pattern. It is evident from the Table.1 that intra-district migrants hold the lion share of the percentage to total migrants which was 67.59% in 1991 and 68.12% in 2001, that was a

slight increase. In this regard, it may be said that the majority of the migrants are of short distance migrants. The sex-wise differences among the migrants at the intra district level, is very distinctive. It was the female who outnumbered the male in both the census years. The share of the female and male migrants to the total migrants was 49.13% and 74.28% in 1991 respectively which was increased to 51.62% and 74.45% in 2001 respectively. Thus, the intra-district level migration is hugely dominated by females and it is believed that marriage is the most important factor for this female migration.

At the inter-district level migration, male outnumbered females. The percentage share of male and female migrants to the total migrants was 23.72% and 17.52% in 1991 which was increased to 27.07 and 18.62% in 2001. The noticeable fact here was that, about 4 points increase in the percentage share of the male migrants to the total migrants at the inter-district level migration.

Now a close look at the inter-state migration patterns in the state of West Bengal revealed that the percentage shares of the inter-state migrants to the total migrants is less than the intra and inter-district migrants. Therefore, this showed the fact that, with the increase of distances the volume of migration decreases. The percentage share of the inter-state migrants to the total migrants was 13.24% and 10.91% in 1991 and 2001 respectively. The noticeable point here was that, the proportion of inter-state migrants decreased over the last decade. The sex difference among the migrants at inter-state level was very distinctive. It was all the way, the male who dominated the scene. The share of male and female migrants to the total migrants at inter-state level was 27.15% and 8.19% respectively in the year of 1991. But the share of total inter-state migrants to total migrants had decreased over the decade and it was true for both sexes.

Table3. 1: The percentage distribution of the migrants by different migration types in the state of West Bengal (1991-2001).

Types of Migration	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
Intra-district migrants	67.59	68.12	49.13	51.62	74.28	74.45
Inter-district migrants	19.17	20.97	23.72	27.07	17.52	18.62
Inter- state migrants	13.24	10.91	27.15	21.31	8.19	6.92

3.1 Trends and Patterns of Inter-state In-migration to West Bengal:

3.1. (a) In-migration from Other States:

As the basic objective of this study is to analyze the inter-state level migration pattern of the state of West Bengal, this chapter would discuss the volume of in-migration to West Bengal from various states of India at two different points of time i.e. 1991 and 2001 census years. The discussion of in-migration to West Bengal from various states at two points of time would help to understand the changing dimension of in-migration to study state over the decade.

The close look at the percentage share of in-migrants to the total inter-state migrants of the state of West Bengal, it revealed that (Table3.4) the neighboring states have the lion share. The state Bihar topped the list which was followed by Uttar Pradesh, Orissa and Assam and so on. To get a comprehensive picture of the migration sending states, the categorization or grouping of the states has been done. The states were categorized into four groups. The states which sent high percentage of migrants came under 'High' category and the states which sent a medium percentage of migrants fell into 'Medium' category. The other states came to 'Low' and Very Low category groups according to their percentage share of migrants.

Table3.2: The share of in-migrants by various states to the total inter-state in migration in West Bengal, 1991.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	above 5.00	Bihar, Uttar Pradesh, Orissa, Assam
Medium	2Q-3Q	1.00-5.00	Rajasthan, Andra Pradesh, Madhya Pradesh, Punjab
Low	1Q-2Q	0.5-1.00	Gujarat, Haryana, , Tamil Nadu, Maharashtra
Very low	below 1Q	below 0.5	Delhi, Kerala, Karnataka

It is evident from the Table 3.2 that only two states namely Bihar and Uttar Pradesh came into the 'high' category. The close look at the (Table3.4) also showed that the percentage share of these two states was just over 75% in 1991, that meant three fourth of

total inter-state in-migrants came from these two states and this also spoke the volume of in-migrants came from these two states. The reason for the in-migrants from these two states would be discussed in the next chapter. In 2001 also, these two states continued to dominant the scene with same propensity and came into the 'high' category (Table3.3). The other two states which came in the 'high' category in both the census years were Orissa and Assam. The states namely Rajasthan, Madhya Pradesh*** Andra Pradesh came into the 'Medium' category. The southern states namely Kerala, Tamil Nadu, and Karnataka were the least migrant sending states to West Bengal in both the census years.

Table3.3: The share of in-migrants by various states to the total inter-state in-migrants in West Bengal, 2001.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	above 5.00	Bihar*, Uttar Pradesh**, Assam ,Orissa
Medium	2Q-3Q	1.00-5.00	Rajasthan, Madhya Pradesh*** , Andra Pradesh
Low	1Q-2Q	0.5-1.00	Punjab, Haryana, Delhi, Maharashtra, Gujarat
Very low	below 1Q	below 0.5	Kerala, Tamil Nadu, Karnataka

*including Jharkhand, ** including Uttaranchal, *** including Chattisgarh

From the above discussion the most important point which came out was that, in the last census year 2001 as well as in 1991, the two states namely Bihar and Uttar Pradesh were standing out to be the most dominant migrants sending states to West Bengal. If we add two more states namely Orissa and Assam with those two states mentioned above, in the last census year these four states accounted 88.45% of the total inter-state migrants. This huge share of percentage by these four states revealed the regional biasness, which meant the adjoining states accounted for a large part of the inter-state migrants.

Table 3.4: The Percentage share of Inter-state In-migrants by different major states of India (1991-2001)

Place of Last Residence	Place of Enumeration-West Bengal					
	1991			2001		
	Total	Male	Female	Total	Male	Female
Punjab	1.25	1.18	1.34	0.89	0.9	0.88
Haryana	0.51	0.53	0.48	0.61	0.63	0.58
Delhi	0.49	0.42	0.58	0.72	0.66	0.78
Rajasthan	2.33	2.31	2.35	2.48	2.53	2.43
Uttar Pradesh (including Uttaranchal for 2001 census)	13.81	16.13	11.02	12.41	14.11	10.39
Bihar(including Jharkhand for 2001 census)	62.43	61.57	63.45	63.68	63.43	63.99
Assam	5.33	4.6	6.2	5.91	4.95	7.05
Orissa	6.71	6.87	6.53	6.45	6.4	6.5
Madhya Pradesh (including Chattisgarh for 2001 census)	1.12	1	1.25	1.22	1.09	1.36
Gujarat	0.64	0.6	0.7	0.82	0.79	0.86
Maharashtra	0.66	0.54	0.81	0.89	0.83	0.96
Andhra Pradesh	1.33	1.21	1.48	1.06	0.94	1.19
Karnataka	0.15	0.14	0.17	0.24	0.23	0.25
Kerala	0.45	0.45	0.45	0.43	0.41	0.45
Tamil Nadu	0.68	0.57	0.82	0.43	0.41	0.46

Data Presented in Table3.4 showed the changing percentage share of inter-state in-migrants by sex from major states of India. It was evident from this table that, the four major contributing states namely Bihar, Uttar Pradesh, Orissa and Assam, to the inter-state in-migrants to West Bengal, Bihar and Assam registered slight increase in the percentage of the inter-state migrants whereas Uttar Pradesh and Orissa showed a decline trend. The percentage share of the other states to the inter-state in-migrants to West Bengal has gone up but the percentage is very negligible, only 0.17%. It was also very clear that the percent share of inter-state in-migrants to West Bengal by different states had little changed over the decade.

The data presented in Table 3.4 also revealed that, out of the total inter-state male in-migrants in West Bengal, the percentage of male migrants from Uttar Pradesh has decreased from 16.13% to 12.41% and in case of Orissa where it was decreased from

6.87% to 6.40%, between 1991 and 2001. On the other hand, in case of Bihar in the proportion of male in-migrants has increased from 61.57% to 63.43% followed by Assam where it has increased from 4.60% to 4.95%, between 1991 and 2001. Of the total inter-state female migrants, the proportion of female migrants from Bihar has increased slightly from 63.45% in 1991 to 63.99% in 2001 whereas Assam registered an increase from 6.20% in 1991 to 7.05% in 2001. In case of Uttar Pradesh, the percentage share of female migrants to the total inter-state migrants has decreased from 11.02% in 1991 to 10.39% in 2001.

3.1. (b) Patterns of In-Migration and Migration Streams:

Total migrants can conveniently be classified into four groups on the basis of the direction of movement. These are rural-rural, rural-urban, urban-rural and urban-urban. The classification of the inter-state in-migrants to West Bengal has been done into those four groups to understand the definite pattern of those inter-state in-migrants.

Table 3.5: Percent distribution of lifetime in- migrants into the state of West Bengal from other States/Union territories of India of each sex by migration stream (1991-2001).

Pattern of migration	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
Rural-Rural	24.24	23.08	16.03	15.07	34.12	32.55
Rural-Urban	48.49	47.06	57.12	55.54	38.12	37.03
Urban-Rural	3.86	3.6	3.04	3.06	4.83	4.24
Urban-Urban	20.96	19.85	21.21	19.53	20.67	20.23

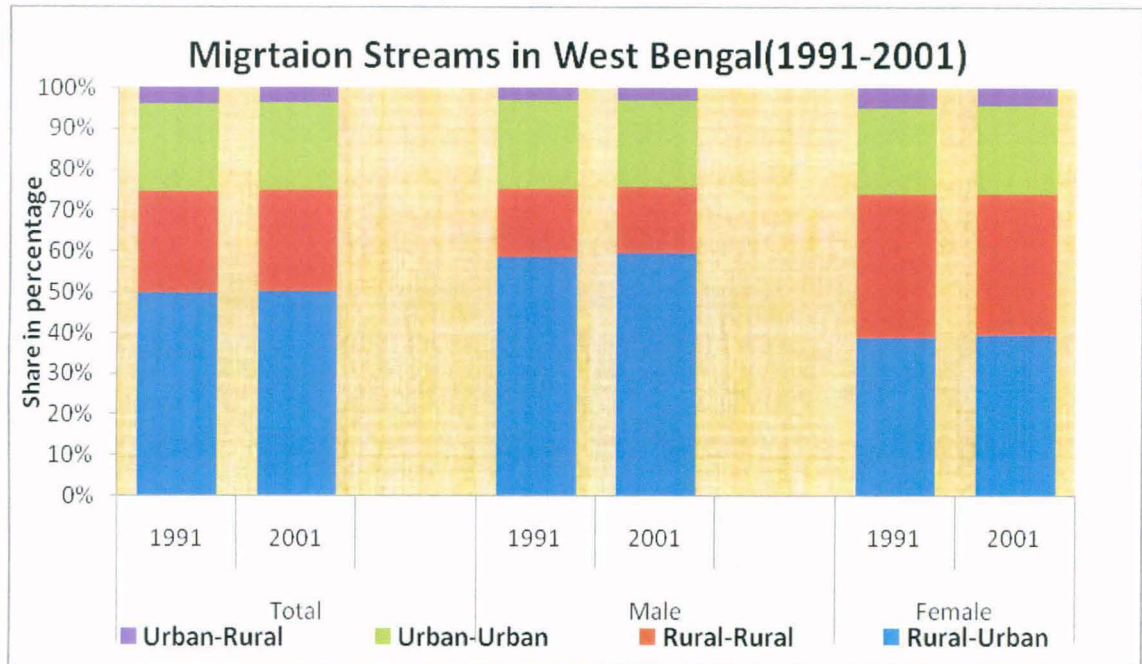


Fig.3.1

It is evident from the Table 3.5 that, nearly half of the inter-state migrants of West Bengal were in the rural to urban stream in both the census years. The next dominant stream among the migrants was rural to rural followed by urban-urban and urban-rural. The sex wise differences among the migrants in various stream is very distinctive. The rural ward migration was dominating among females because of marriage and association. (Later we discussed it at length). It was important to mention that, females also have a considerable share in urban ward migration. Infact the percentage share of female migration in Rural-Urban migration was highest and the percentage share in Urban-Urban stream has increased over the period though the increase was very negligible. Among males rural to urban stream is dominating because this is purely economic reason and they also leave their families in the rural areas because of higher living cost in urban areas. The urban-rural migration though statistically not very significant but has paramount importance in an agrarian economy, which in addition to return migration also reflects the extent of diversification of rural economy. During 1991, the urban-rural migration stream constitutes about 3.86 percent of the total inter-state immigrants. The proportion of migrants in urban-rural stream has slightly declined to 3.6 percent in 2001 (Table 3.5). The close look at the Table 3.5 also revealed the fact that the not much change in the migrants by streams of migration at two point of time i. e. 1991 and 2001 was observed. It

meant the percentage share of the migrants by the different streams was more or less same at two different point of time.

3.1. (c) Patterns of In-Migration to Study State from four major contributing states:

Table3.6: Rural-Urban composition of Inter-state migrants in West Bengal (1991-2001).

Place of Last Residence		Place of Enumeration-West Bengal			
		1991		2001	
		Rural	Urban	Rural	Urban
Bihar	Rural	27.83	49.24	26.18	50.83
	Urban	3.32	17.58	2.41	14.72
Uttar Pradesh	Rural	7.93	65.77	7.41	59.15
	Urban	2.55	21.56	2.83	23.60
Orissa	Rural	33.49	42.04	29.30	42.89
	Urban	3.74	18.97	2.79	19.29
Assam	Rural	40.16	21.81	41.30	18.55
	Urban	7.54	23.60	7.41	26.45

In the following paragraph, the pattern of inter-state migrants to West Bengal coming from four major states namely Bihar, Uttar Pradesh, Orissa and Assam at two different points of time i.e. 1991 and 2001 census years. The four states have been taken for discussion because it held share more than fourth-fifth of inter-state in-migrants.

It is evident from the Table 3.6 that, in case of Bihar, Uttar Pradesh and Orissa, the Rural-Urban stream was dominated by male inter-state migrants while in case of Assam, the percentage of male inter-state migrants was more in the Rural-Rural stream than the Rural-Urban stream. The close look at the table also revealed the fact that, the migration to rural areas of West Bengal from the rural areas of three states namely Bihar, Uttar Pradesh and Orissa have decreased over the decade. It is from 27.83% in 1991 to 26.18% in 2001, from 7.93% in 1991 to 7.41% in 2001 and 33.49% in 1991 to 29.30% in 2001 for Bihar, Uttar Pradesh and Orissa respectively. In case of Assam, the Rural-Rural stream has registered slight increase i.e. from 40.16 % in 1991 to 41.30% in 2001. The another interesting feature that come out was that, the percentage share of inter-state migrants in Urban-Urban stream is on the rise from the three states namely Uttar Pradesh,

Orissa and Assam over the decade while the state Bihar registered a decrease in the share of Urban-Urban migration i.e. from 17.58% in 1991 to 14.72% in 2001. The other important noticeable fact was that, there was a drastic decline in the percentage share of inter-state migrants in Rural-Urban stream for Uttar Pradesh. It is declined from 65.77% in 1991 to 59.15% in 2001 that means the urban areas of West Bengal are no more attractive to the rural mass of Uttar Pradesh.

The breakdown of the inter-state in-migrants of the study state, coming from the four major migrant sending states, into sex-wise showed that, the Rural-Urban stream was dominated by male migrants. Uttar Pradesh occupied the top position in the percentage share of male inter-state migrants to West Bengal in the Rural-Urban stream i.e. 61.96% in 2001 followed by Bihar (61.09%) and Orissa (56.24%). But the interesting fact here was that there was a decrease of seven points in male migrants in Rural-Urban stream from Uttar Pradesh while it had registered an increase of three points in Urban-Urban stream. But Bihar had showed an opposite scenario to Uttar Pradesh. From Bihar there was an increase of two points in male migration in Rural-Urban stream while it registered a decline of three points in Urban-Urban migration stream over the decade. Unlike these three states, Assam registered a low share of male inter-state migrants in Rural-Urban stream than the Rural-Rural stream. Not only that, Assam also registered a decrease of four points of male migrants in Rural-Urban stream but interestingly enough it had registered an increase of two points in Urban-Urban stream (Table 3.7).

Table 3.7: Rural-Urban composition of Inter-state male migrants in West Bengal (1991-2001).

Place of Last Residence		Place of Enumeration-West Bengal			
		1991		2001	
		Rural	Urban	Rural	Urban
Bihar	Rural	17.51	59.47	16.12	61.09
	Urban	2.38	18.40	1.81	14.71
Uttar Pradesh	Rural	7.22	68.77	6.96	61.96
	Urban	2.11	19.68	2.37	21.88
Orissa	Rural	18.63	54.43	13.62	56.24
	Urban	2.94	21.73	2.30	21.29
Assam	Rural	38.07	23.20	39.96	19.19
	Urban	7.62	24.24	7.37	26.83

It is evident from the Table 3.8 that, from all the three states namely Bihar, Orissa and Assam, a sizeable percentage of female inter-state migrants came from rural areas of these states to rural areas of West Bengal i.e. 37.95%, 47.56%, 42.41% in 2001 respectively. A considerable share of female in-migrants in Rural-Urban stream was also observed from the state of Bihar and Uttar Pradesh. From these two states the percentage share of females in Rural-Urban stream was even more than the Rural-Rural stream in the census year of 2001. In case of Uttar Pradesh more than half of the female inter-state migrants came from rural areas to urban areas of West Bengal though it had shown a decline of six points over the decade. On the other hand, in case of Uttar Pradesh and Assam it was constituted one-fourth of the total female in-migrants in Urban-Urban stream while the percentage of female migrants from the states namely Uttar Pradesh, Orissa and Assam in Urban-Urban stream had increased over the decade.

Table3.8: Rural-Urban composition of Inter-state female migrants in West Bengal (1991-2001)

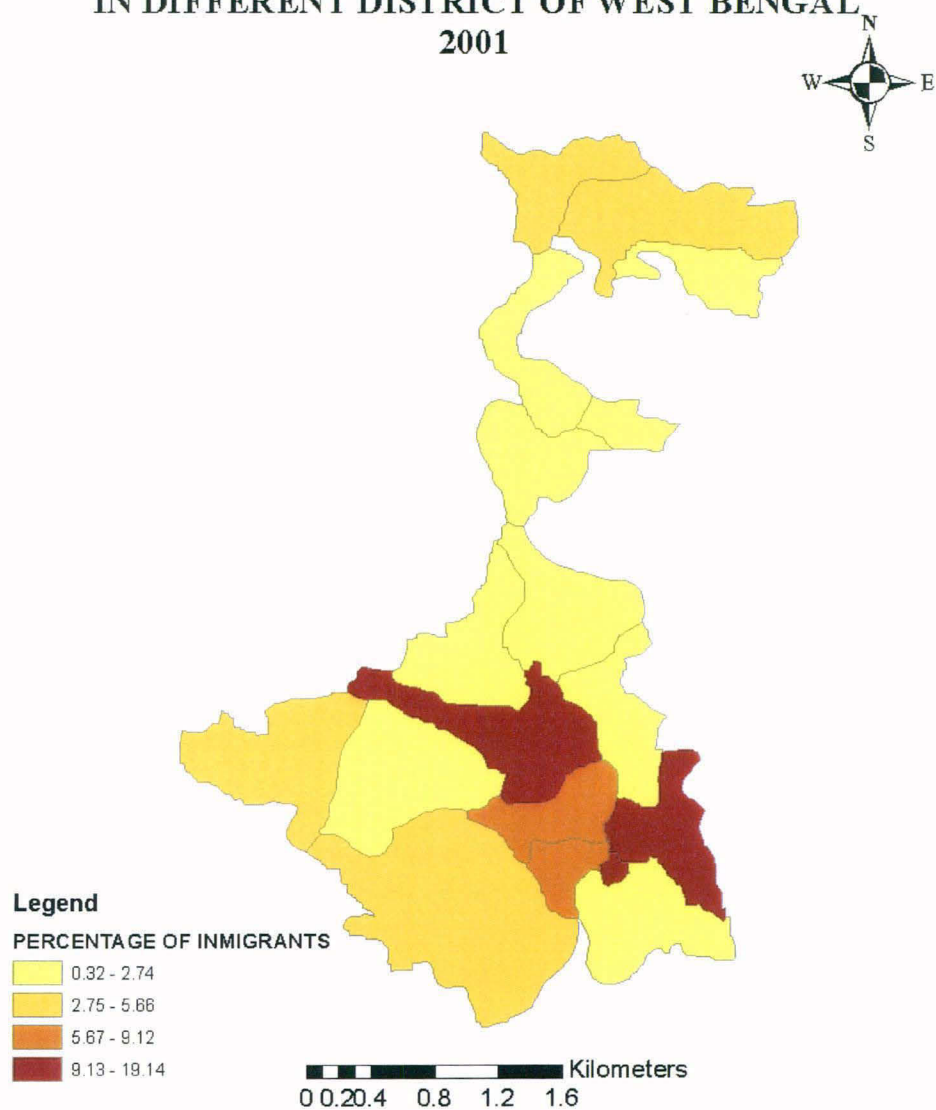
Place of Last Residence		Place of Enumeration-West Bengal			
		1991		2001	
		Rural	Urban	Rural	Urban
Bihar	Rural	39.86	37.31	37.95	38.81
	Urban	4.41	16.62	3.11	14.72
Uttar Pradesh	Rural	9.17	60.48	8.14	54.65
	Urban	3.33	24.86	3.58	26.37
Orissa	Rural	52.29	26.36	47.56	27.35
	Urban	4.74	15.47	3.35	16.97
Assam	Rural	42.03	20.56	42.41	18.02
	Urban	7.47	23.04	7.44	26.14

3.1. (d) In Migration into Different Districts of West Bengal:

The following paragraphs would examine the distribution pattern of inter-state in-migrants at district level. The distribution of in-migrants into different districts was shown in Fig.3.1. The figure depicted the uneven distribution of migrants across the districts. The districts namely Kolkata, Bardhaman and North 24-Paraganas, which were

also regarded as most urbanized and industrialized districts, accounted nearly half of the total migrants. (Appendix Table 3.4). If two more districts, namely Haora and Hugli which were also developed districts, were added with those three, then these five districts accounted nearly two-third of the total migrants. It was also worthy to mention that, all these districts are in the vicinity of Kolkata, which was the main metropolis city of the eastern India.

**PERCENT IMMIGRANTS
IN DIFFERENT DISTRICT OF WEST BENGAL
2001**



3.2 Trends and Patterns of Inter-state Out-migration from West Bengal:

3.2. (a) Out-migration to Other States:

After the detailed discussion on inter-state in-migration to West Bengal from different major states of India, the following section would examine the scenario of out-migration from West Bengal to different major states at two different points of time i.e. 1991 and 2001 census. The percentage distribution of the out-migrants was presented in (Appendix Table 3.2 and 3.3). For the sake of better understanding we grouped the different states into four categories i.e. high, medium, low and very low on the basis of their share of inter-state migrants coming from West Bengal to the respective states.

Table 3.9: Share of Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	above 8.00	Bihar, Uttar Pradesh , Orissa
Medium	2Q-3Q	2.5-8.00	Assam, Madhya Pradesh , Maharashtra, Delhi
Low	1Q-2Q	1.5-2.5	Gujarat, Andra Pradesh, Rajasthan, Punjab, Haryana
Very low	below 1Q	below 1.5	Kerala, Tamil Nadu, Karnataka

It is evident from the Table 3.9 that, the states namely Bihar, Uttar Pradesh, Orissa comprised the 'High' category group that meant these states were the most preferred state for the people of West Bengal to migrate. The next sizeable percentage of migrants went to the states like Assam, Delhi, Maharashtra, and Madya Pradesh which comprised the 'Medium' category. The states namely Gujarat, Andra Pradesh, Rajasthan, Punjab, and Haryana were came in 'Low' category group whereas the least migrated states for the Bengali people were the ones which formed the 'Very Low' category group namely Karnataka, Kerala and Tamil Nadu. It may be said that, likewise in case of in-migration, the neighbouring states like Bihar, Uttar Pradesh, and Orissa comprised the 'High' category group in case of out-migration also and it also revealed its regional biasness. But the pattern of out-migration from West Bengal to other different states had changed a lot over the decade and it has been seen from the Tables 3.9 and 3.10.

Table3.10: Share of Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	above 9.5	Bihar *, Maharashtra, Delhi, Uttar Pradesh **,
Medium	2Q-3Q	2.5-9.5	Assam, Orissa, Madhya Pradesh ***, Rajasthan, Punjab, Haryana
Low	1Q-2Q	1.5-2.5	Gujarat, Andra Pradesh, Karnataka,
Very low	below 1Q	below 1.5	Kerala, Tamil Nadu,

The Table 3.10 revealed the fact that, the states like Maharashtra, Delhi which was into the 'Medium' category in 1991 census, shifted to 'High' category in 2001. Not only that the states like Rajasthan, Punjab, Haryana were earlier into the 'Low' category came into 'Medium' category and the state Orissa came into 'Medium' category from 'High' category over the decade. From the above fact, it could be infer that, over the decade the pattern of out-migration had changed a lot and more people now would like to go to the distant state namely Maharashtra, Delhi, and Haryana and so on and it was mainly for work/employment. So, it may be also said that, the regional biasness in case of out-migration has been reduced to some extent over the decade.

The close look at the tables 3.11 and 3.12 showed very distinctive differences among the pattern of male out-migrants in between the two census periods. In 1991, the male migrants mostly migrated to the surrounding states like Bihar, Uttar Pradesh, and Orissa. But the scenario has drastically changed in 2001. The more males migrated to distant states namely Delhi, Maharashtra instead to go to Uttar Pradesh or Orissa which earlier held a considerable percentage of Bengali migrated people. The states like Haryana, Rajasthan also became a preferred destination for the male migrants earlier which was not so much preferred. In case of the pattern of female out-migrants it was somewhat different from the pattern of male out-migrants. The comparison of the Tables 3.13 and 3.14 revealed that, the percentage of female migration into the neighbouring states namely Bihar, Uttar Pradesh, and Orissa continued to be high over the decade. But one of the important points here was the female migration to the states like Delhi and Haryana had increased a lot over the decade.

Table3.11: Share of total Male Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	above 9.00	Bihar, Orissa, Uttar Pradesh
Medium	2Q-3Q	2.5-9.00	Assam,, Madhya Pradesh , Maharashtra, Delhi
Low	1Q-2Q	1.5-2.5	Rajasthan, Punjab, Andra Pradesh, Gujarat
Very low	below 1Q	below 1.5	Kerala, Tamil Nadu, Karnataka, Haryana

Table3.12: Share of total Male Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	8.00 and above	Maharashtra, Bihar*, Delhi, ,
Medium	2Q-3Q	3.5-8.00	Uttar Pradesh, Assam, Orissa, Haryana, Rajasthan
Low	1Q-2Q	2.5-3.5	Gujarat, Madya Pradesh***, Punjab
Very low	below 1Q	below 2.5	Kerala, Tamil Nadu, Andra Pradesh, Karnataka

Table3.13: Share of total Female Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	7.00 and above	Bihar, Orissa, Uttar Pradesh, Assam
Medium	2Q-3Q	2.5-7.00	Delhi, Maharashtra, Madhya Pradesh,
Low	1Q-2Q	1.00-2.5	Punjab, Rajasthan, Gujarat, Andra Pradesh
Very low	below 1Q	below 1.00	Kerala, Tamil Nadu, Karnataka, Haryana

Table3.14: Share of total Female Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.

Name of the category	Categorisation	Percentage of migrants	Name of the States
High	above 3Q	8.00 and above	Bihar*, Uttar Pradesh**, Orissa, Delhi
Medium	2Q-3Q	2.5-8.00	Maharashtra, Assam, Haryana
Low	1Q-2Q	1.5-2.5	Punjab, Rajasthan, Gujarat, Andra Pradesh, Madhya Pradesh***
Very low	below 1Q	below 1.5	Karnataka, Kerala, Tamil Nadu

3.2. (b) Patterns of Out-migration and Migration Streams :

The following paragraph, would examine the stream wise pattern of the out-migration into the other states of India for two different point of time i.e. 1991 and 2001. The (Table 3.15) revealed that among the four migration streams, Urban-Urban was the most dominating one which was followed by Rural-Rural, Rural-Urban and Urban to Rural in both the census years. It is quite interesting to note that, the large percentage of people migrated from urban areas of West Bengal to urban areas of other states, while in case of in-migration to West Bengal from other states, it was mostly the rural people of other states who migrated the urban areas of West Bengal. It was nearly two-third of total out-migrants migrated to the urban areas of other state. The propensity to migrate, particularly from rural areas, to the urban areas of other states also has increased by 7 points over the decade.

It is also evident from the same Table that, the percentage share of out migrants in Rural-Urban is less the percentage share of out migrants in Rural-Rural stream. Although it was to be mentioning that the percentage share of out migrants in Rural-Rural has declined from 31.74% to 27.55% over the decade.

The sex-wise difference was also very distinctive. Data presented in Table3.15 showed that, in case of male out- migrants, the Urban to Urban stream was the dominating one while the Rural-Rural stream was the dominating among the female out migrants in both the census years. In case of male out-migrants the Rural-Urban stream constituted one-third of the total male out-migrants. The percentage share of male out-migrants in Rural-Urban stream has increased from 22.56% in 1991 to 31.80%. The percentage female out-

migrants in Rural-Urban stream have also increased and it had recorded an increase of 4 points as compared to male's 9 points increase over the decade. All together it may be concluded that male out-migrants predominate in urban ward migration and nearly three-fourth of male migrants migrated to urban areas in 2001. Another interesting aspect was that the percentage share of out-migrants in Rural-Rural stream has decreased for males and females and both recorded a decrease of more or less 3 percentage points over the decade. In urban ward male migration work/employment was considered as the main reason while most of the females migrated to urban areas as associational members. On the other hand, the Rural-Rural stream which was dominated female out migration was mostly for marriage purpose.

Table3.15: Percent distribution of lifetime out- migrants from the state of West Bengal to other States/Union territories of India of each sex by migration stream (1991- 2001).

Pattern of migration	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
Rural-Rural	31.74	27.55	18.27	15.68	40.04	37.01
Rural-Urban	17.42	24.04	22.56	31.80	14.25	17.85
Urban-Rural	11.53	8.40	10.68	7.11	12.05	9.42
Urban-Urban	38.67	38.06	47.77	42.92	33.07	34.18

3.2. (c) Pattern of Out-Migration from Study State to six Major States:

Now, in the following section an attempt has been made to examine the definite pattern of the out-migrants to the six states namely Bihar, Maharashtra, Delhi, Orissa, Uttar Pradesh and Assam because these six states had the share of about three-fourth of total migrants in 2001. Data presented in Table3.16 and 3.17 highlighted some interesting feature about the migrants migrated to the above six states at two different points of time i.e. in 1991 and 2001. In all the six states the percentage of migrants in Rural-Urban stream had increased over the decade. The highest increase was observed in the state of Delhi, an increase of about 20 percentage points, followed by Maharashtra (10 points), Orissa (6 points), Assam (4 points) and Uttar Pradesh (3points).

But it was equally worthy to mention that, the percentage of out-migrants in Urban-Urban stream has decreased over the decade except in case of Bihar and Orissa which recorded a slight increase. Though, still more than fifty percent of the total out-migrants migrated to the urban areas of states of Maharashtra and Delhi from the urban areas of the study state, the highest decline in the share of out-migrants in Urban-Urban stream has been observed in these two states. The percentage decline of the out-migrants in Urban-Urban stream was 26 points in case of Delhi which was followed by Maharashtra (15 points), Uttar Pradesh (7 points) and Assam (1point). The close look at the table also indicated that, in the surrounding states namely Bihar, Orissa, Uttar Pradesh and Assam, the percentage share in Rural-Rural stream was highest. It was considered that it was because of the huge female migration to these states and mostly it was due to marriage purpose. But in all these surrounding states the percentage share out-migrants in Rural-Rural stream had considerably declined over the decade. The percentage share of the out-migrants in Rural-Rural stream had declined from 48.44% to 46.84%, from 49.76% to 44.66% and from 38.30% to 32.88% for Bihar, Orissa and Assam respectively over the decade. Uttar Pradesh was the only state which had registered an increase in the share of out-migrants in Rural-Rural stream i.e. from 25.72% in 1991 to 31.51%in 2001.

Table3.16: Rural-Urban composition of Inter-state out- migrants in different states of India 1991.

Migration Streams	Place of Enumeration					
	Delhi	Maharashtra	Bihar	Uttar Pradesh	Orissa	Assam
Rural-Rural	1.03	2.06	48.44	25.72	49.76	38.3
Rural-Urban	20.91	19.97	21.36	10.07	14.23	17.53
Urban-Rural	1.79	3.98	8.3	27.5	13.28	9.17
Urban-Urban	76.19	73.86	21.52	35.41	21.94	33.69

Table3.17: Rural-Urban composition of Inter-state out- migrants in different states of India, 2001.

Migration Streams	Place of Enumeration					
	Delhi	Maharashtra	Bihar	Uttar Pradesh	Orissa	Assam
Rural-Rural	1.86	3.89	46.84	31.51	44.66	32.88
Rural-Urban	41.03	30.45	20.08	13.2	20.99	21.64
Urban-Rural	2.07	3.15	7.15	19.94	7.22	7.25
Urban-Urban	50.93	58.79	24.84	28.74	22.78	32.23

3.3 Preference Index:

In order to show the relative attractiveness between West Bengal and other states for migration, Migration Preference Index has been executed. It indicates whether migration stream are greater or smaller in a standardized form. A preference index for inter-state migration stream in West Bengal was presented in Table 3.18 for two different time period i.e. for 1991 and 2001 census years. The temporal dimension enabled us to comprehend the changing preferred states for migration in the context of West Bengal.

It was observed from the Table 3.18 that, for total in- migrants in West Bengal the most preferred index was from Bihar followed by Assam, Orissa, Uttar Pradesh, and Punjab and so on and the least preferred state for in-migrants to West Bengal was from Karnataka followed by Maharashtra, Tamil Nadu Gujarat and so on. In 2001, more or less same sequence of preference index by various states was observed.

In case of out-migrants from West Bengal, Delhi occupied the top position with highest score in the preference index while Kerala ranked last in preference index among the major states in 1991. In 2001, Delhi continued to be most preferred state for out-migrants, followed by Bihar, Orissa, Assam, Haryana, and Maharashtra and so on. The least preferred state for out-migrants from West Bengal was Kerala, followed by Tamil Nadu, Andra Pradesh, Karnataka, and Madya Pradesh and so on.

Table 3.18: Preference Indices of Inter-state migration streams, West Bengal. (1991-2001).

States	Preference Index			
	1991		2001	
	In-migration	Out-migration	In-migration	Out-migration
Punjab	635.37	437.31	472.47	913.57
Haryana	318.40	374.90	369.81	1316.13
Delhi	544.64	4150.55	674.76	6152.51
Rajasthan	527.07	237.68	545.87	397.49
Uttar Pradesh*	872.79	369.52	775.88	464.13
Bihar*	6827.67	2340.45	6811.31	2135.82
Assam	2435.64	1955.71	2841.85	1512.09
Orissa	2147.37	1949.85	2227.76	1892.99
Madhya Pradesh*	163.41	516.51	180.74	281.31
Gujarat	156.08	263.35	203.73	392.54
Maharashtra	80.21	422.25	109.36	1065.83
Andhra Pradesh	194.23	176.33	170.33	194.22
Karnataka	34.13	108.66	55.93	292.31
Kerala	157.21	62.50	171.14	82.26
Tamil Nadu	119.57	87.92	86.33	96.16

Major Findings:

In the state of West Bengal, the volume of inter-state migration was low as compared to intra and interstate migration. The state also witnessed a decrease in the proportion of inter-state in-migrants between 1991 and 2001 and it was true for both sexes. The neighbouring states namely Bihar, Uttar Pradesh, Orissa and Assam were the major contributors of inter-state immigrants to West Bengal.

Most of the migrants, both males and females, came into the urban areas of the study state. In urban areas of the state, nearly half of the total male migrants came from rural areas and one-fifth migrants came from urban areas. On the other hand, more than one-third of female migrants (37.03%) came from rural areas and one-fifth female migrants came from urban areas of other states. Though it was to be mentioned that, the percentage of in-migrants to the urban areas of the study state had decreased marginally over the

decade and it was for both males and females. In case of female in-migrants, the Rural-Rural stream also constituted a sizeable percentage of female migrants (32.55%).

The pattern of outmigration, especially male outmigration, from West Bengal to other states exhibits somewhat different pattern than immigration. A considerable percentage of male migrants went to the distant states namely Maharashtra, Delhi, and Haryana. These three states accounted one-fourth of total male out-migrants to the total out-migrants. On the other hand, most of the females migrated to the neighboring states namely Bihar, Uttar Pradesh, and Orissa and so on. Although more than five percent of female migrants also migrated to state of Delhi (8.11%) and Maharashtra (7.67%).

Preference Index which has been executed to show the relative attractiveness between West Bengal and other states for migration revealed that, for total in- migrants in West Bengal the most preferred index was from Bihar and the least preferred index was from Karnataka. In case of out-migrants from West Bengal, Delhi occupied the top position with highest score in the preference index while Kerala ranked last in preference index among the major states.

CHAPTER 4

REASONS FOR INTER-STATE MIGRATION AND SECTORAL DISTRIBUTION OF MIGRANTS

CHAPTER 4

INTRODUCTION

Migration of people from one place to another has been going on since the dawn of human history. A number of reasons viz., the economic, social and environmental may be cited out behind this movement. This chapter is divided into two sections where firstly it will discuss reasons for migration and second section will discuss the distribution of migrants into different sectors. The whole study is based on the census data. The Indian census started collecting information on reasons for migration since 1981 based on place of last residence. In 1991, the reasons for migration have been classified into seven broad groups – work/employment, business, education, marriage, and natural calamities like flood, drought etc, family moved and others. In 2001, the reason ‘Natural Calamities’ was dropped from the list. An additional reason was also added in this list on ‘Moved after birth’. This reason was added in 2001 Census as it was felt that a large number of mothers moved to either their natal residence or to a place with better medical facility for delivery. Whereas the women are not treated as migrants at these temporary places of residence, the children born are treated as migrants when they accompany their parents to their place of normal residence. Though technically, this is migration, the place of birth being different from the place of enumeration for the children born, it was useful to separate this information from other categories.

This study restricted to those reasons listed by the census of India and it was one of the constraints of the present study as it deals with some specific listed reasons. In this present study, the first part analysed the reasons behind the movement of the people from various states/union territories to the state of West Bengal. For better understanding, the reasons for movement of the people also examined in the light of migration streams that means the reasons behind the movement of people from rural areas of other state to rural areas of West Bengal and vice-versa and also same for urban areas. A comparative analysis of the reasons behind the movement of the people from and towards West Bengal has also been done by comparing the census data of 1991 and 2001. In the second part, the reasons for the movement of people from West Bengal to other states/union territories have been discussed in the same way.

In the second section of this chapter, an attempt has been made to examine the sectoral distribution of the migrants in the state of West Bengal. Census data are available on participation of migrant workers by nine industrial categories for rural, urban origin and the destination at the district level. Using these data, in this present study we try to calculate the proportion of workers among the migrants and the same in different streams. In the later part, an analysis has been done about the distribution of migrant workers in different industrial categories with respect to each migration stream. The pattern of work participation at interstate level was compared with that of the workers of the total population also. Lastly, a district wise analysis of the proportion of the interstate in-migrant workers in various industrial categories in the state of West Bengal has been done.

4.1 Reasons for In-migration to West Bengal:

4.1(a) Reasons for In-migration from Other States:

Census data presented in Table 4.1 relates to the “reasons for migration”. For the sake of comparisons the reason ‘Natural Calamities like flood, drought etc’ which was included in 1991 census and was dropped in 2001 and the reason ‘Moved after Birth’ which was introduced in 2001 census, both reasons have been excluded from the discussion. The exclusion of these two reasons has very little impact as the proportion of migrants moved due to those reasons was very low. The result showed that out of the total inter-state in-migrants in 1991, more than one-third of the migrants (34.88 percent) came to the state for “employment” and “business” purposes, and this proportion has declined to 31.67 percent in 2001. The gender differentials in relation to specific reasons of migration were also showing the same trends. Out of the total inter-state in-migrants the percentage of males moved because of “employment” and “business” had shown more than four points decline. However, for female, the decline was only one percentage points. The reason ‘Marriage’ was the most dominant one for female migration in both the census years but along with the decline of migrant worker the proportion of female migration due to marriage has declined substantially, nearly about eight points. A negligible percentage of migrants stated education as a reason for their migration to West Bengal. It was only 2.15% out of total in-migrants which was declined to 1.1% in 2001. Interestingly enough,

the proportion of total migrants due to reason of 'Moved with household' and 'Others' has increased in 2001 in compare to previous census. Out of the total inter-state in-migrants the proportion of total migrants moved because of the reason 'Moved with household' has increased from 20.68 percent in 1991 to 23.24 percent in 2001. The total migrants to West Bengal due to 'Others' reason has increased from 13.23% in 1991 to 17.29% and same trends remained for both males and females. The specific reasons behind their movement were hard to decompose as it was categorised as 'Others' reason in the census data.

Table4.1: Reasons for Inter-state In-Migration to West Bengal by sex (1991-2001).

Reasons for migration	1991			2001		
	Total	Male	Female	Total	Male	Female
Work/Employment	29.90	50.39	5.28	27.69	47.39	4.42
Business	4.98	8.54	0.71	3.98	6.95	0.47
Education	2.15	3.10	1.02	1.06	1.64	0.38
Marriage	28.53	2.06	60.34	24.40	1.08	51.96
Moved with household	20.68	19.17	22.50	23.24	19.97	27.10
Others	13.23	16.13	9.75	17.29	20.29	13.75

The census data regarding the migrants moved to West Bengal from other states due to various reasons was accommodated in Table 4.2 and 4.3. The data indicated that 'Work/employment' was the dominant one behind the movement of male in-migrants to West Bengal from other major states whereas the reason 'Marriage' was the most dominant one for female migration in both the census year. A close look at both the table revealed the fact that the reason 'Work/employment' continued to be most important reason for the male migration to West Bengal from other states. Over 50% male came to West Bengal from Bihar, Orissa, Uttar Pradesh for the reason of 'Work/employment' in both the census years. For Bihar, the percentage of total male migrants came to West Bengal due to 'Work/employment' was 52.20% in 1991 which was slightly decreased to 50.51% in 2001, for Uttar Pradesh, it was 56.76% in 1991 and decreased to 50.48% in 2001 and for Orissa it was 61.41% in 1991 and decreased to 59.54% in 2001. The interesting fact here was that, the proportion of male migrants came to West Bengal due to Work/

employment from the southern states namely Tamil Nadu, Karnataka, and Kerala recorded highest decrease. For example, the percentage of male migrants came to West Bengal from Tamil Nadu due to Work/ employment was 47.42% in 1991 and it was declined to 36.94% in 2001, for Karnataka, it was 46.41% in 1991 to 31% in 2001 and for Kerala it was 52.56% in 1991 to 42.58%. Besides the proportion of male migrants to West Bengal due to reason of 'Work/ employment' from the states like Punjab, Maharashtra, Madya Pradesh, and so on has decreased over the decade in the study state.

Apart from 'Work/ employment', Business was another important reason behind the movement of the migrants especially those came from the states of Rajasthan, Haryana, Gujarat and Punjab. The proportion of migrants came from Rajasthan, Haryana, Gujarat and Punjab due to Business purpose were 22.68%, 24.36%, 22.63% and 12.42% in 1991 which was declined to 18.78%, 17.03%, 16.17% and 11.87% in 2001 respectively. Therefore, it has seen that the proportion of migrants came to the State for "employment" and "business" purposes from other states of India showed a decline trend over the decade. It implies that the state's attraction to the migrants for "employment" and "business" purposes has lesser over the decade.

'Marriage' is the most dominant reason for female migration. The data revealed the fact that the proportion of female migrant's to West Bengal was high from the neighbouring states namely Bihar, Uttar Pradesh, Orissa and Assam. But with the increase in distance, the proportion of female migration to the study state has decreased. A closer look at both Table 2 and 3 also revealed the fact that, a decline proportion of female in-migration to West Bengal due to reason of 'Marriage' was observed from more or less from all the states. For example, among the female migrants came to West Bengal due to marriage reason from Bihar recorded a decline of 11 percentage points over the decade i.e. from 65.22% in 1991 to 56.37% in 2001, from Uttar Pradesh it was from 51.71% in 1991 to 43.40% and from Orissa it was from 66% in 1991 to 60.34%.

Apart from marriage, the next important reason behind the female movent was 'Moved with Household'. Female migrants have outnumbered male migrants in both the census

year. From all the states the proportion of female migrants to West Bengal due to reason of 'Moved with Household' has increased on an average four to five percentage points. But unlike the female migrants, few states like Rajasthan, Maharashtra, and Delhi recorded a decrease in the proportion of male in-migrants to West Bengal due to the reason of 'Moved with Household'.

The percentage of migrants came to West Bengal from other major states due to 'Other' reasons has increased in 2001 from the previous census year, 1991. All the major states showed a high percentage increase in this category which was very hard to decompose the specific reasons for their movement. The another noticeable fact here is that, the increase in the percentage of immigrants to West Bengal in 'Other' category was high among the distant state like Maharashtra, Delhi, Gujarat and so on. For example, among the migrants came to West Bengal from Maharashtra due to 'Other' reasons, the percentage increased from 15.55% in 1991 to 24.76%, for Delhi it was from 18.30% in 1991 to 26.80% in 2001, for Haryana it was from 12.66% in 1991 to 20.60%, for Punjab it was from 15.30% in 1991 to 21.20% and for Gujarat it was from 13.93% in 1991 to 20.35% in 2001.

A very low proportion of migrants stated 'Education' as their cause of migration to West Bengal. The state like Assam, Maharashtra, Tamil Nadu, and Kerala hold a considerable percentage of migrants who moved to West Bengal for 'Education'. In this case male outnumbered the females. Among the male migrants came to West Bengal for 'Education' as reasons, the percentage increased from 3.41% in 1991 to 6.68% for Assam, it was from 5.09% to 5.26% for Maharashtra and it was from 4.09% to 4.43% for Kerala. The state d Karnataka showed a substantial decrease in the male in-migrants to West Bengal for 'Education' which was 9.15% in 1991 to 2.99% in 2001.

Table 4.2: Reasons for Inter-state In-migration to West Bengal in 1991.

Origin States	Sex	Total Migrants	Work/employment	Business	Education	Family moved	Marriage	Natural Calamities	Others
Bihar	Both	1251850	30.75	5.16	1.96	18.05	31.29	0.44	12.34
	Male	673929	52.20	9.05	2.94	17.45	2.20	0.53	15.65
	Female	577921	5.73	0.64	0.81	18.76	65.22	0.35	8.49
Uttar Pradesh	Both	276953	37.90	5.21	2.75	21.00	19.70	0.20	13.25
	Male	176545	56.76	7.68	3.45	16.16	1.50	0.15	14.31
	Female	100408	4.74	0.88	1.51	29.50	51.71	0.29	11.37
Orissa	Both	134621	36.90	2.76	1.44	16.44	30.38	0.38	11.71
	Male	75183	61.41	4.55	1.96	14.78	2.22	0.57	14.51
	Female	59438	5.89	0.49	0.79	18.54	66.00	0.13	8.16
Assam	Both	106890	10.20	2.39	2.23	36.68	25.91	0.98	21.61
	Male	50380	19.15	4.17	3.41	42.12	1.27	1.45	28.42
	Female	56510	2.21	0.80	1.17	31.84	47.89	0.57	15.54
Rajasthan	Both	46635	17.13	13.14	2.19	30.52	23.82	0.24	12.95
	Male	25270	29.68	22.68	2.97	27.90	2.06	0.20	14.52
	Female	21365	2.29	1.87	1.26	33.63	49.57	0.28	11.09
Madya Pradesh	Both	22363	26.61	2.06	2.20	30.18	23.57	0.31	15.07
	Male	10933	44.00	3.48	3.41	27.71	2.56	0.37	18.48
	Female	11430	9.97	0.70	1.05	32.55	43.66	0.26	11.81
Andra Pradesh	Both	26723	27.65	2.06	2.47	20.67	30.35	3.74	13.06
	Male	13243	50.97	3.25	3.40	17.92	3.62	4.76	16.08
	Female	13480	4.75	0.89	1.56	23.37	56.60	2.74	10.09
Punjab	Both	25166	21.85	6.91	1.67	28.73	24.58	0.95	15.30
	Male	12960	39.81	12.42	2.01	23.77	2.08	1.39	18.52
	Female	12206	2.79	1.07	1.31	34.00	48.47	0.49	11.88
Maharashtra	Both	13310	16.90	3.38	2.70	38.77	22.01	0.68	15.55
	Male	5890	31.07	7.13	5.09	36.84	0.85	0.68	18.34
	Female	7420	5.66	0.40	0.81	40.30	38.81	0.67	13.34
Gujarat	Both	12920	17.03	12.38	2.86	28.48	24.92	0.39	13.93
	Male	6540	31.04	22.63	3.82	23.85	2.75	0.61	15.29
	Female	6380	2.66	1.88	1.88	33.23	47.65	0.16	12.54
Delhi	Both	9890	16.38	2.93	3.64	38.62	19.92	0.20	18.30
	Male	4630	30.89	5.40	6.26	34.77	2.16	0.43	20.09
	Female	5260	3.61	0.76	1.33	42.02	35.55	0.00	16.73
Haryana	Both	10190	19.33	14.33	1.77	30.03	21.79	0.10	12.66
	Male	5830	31.56	24.36	2.06	25.04	3.60	0.17	13.21
	Female	4360	2.98	0.92	1.38	36.70	46.10	0.00	11.93
Tamil Nadu	Both	13630	24.80	2.42	3.74	27.44	26.12	0.44	15.04
	Male	6200	47.42	4.84	5.97	24.19	1.61	0.65	15.32
	Female	7430	5.92	0.40	1.88	30.15	46.57	0.27	14.80
Kerala	Both	9030	33.78	2.99	3.77	24.81	15.28	0.89	18.49
	Male	4890	52.56	5.11	4.09	16.56	1.02	1.23	19.43
	Female	4140	11.59	0.48	3.38	34.54	32.13	0.48	17.39
Karnataka	Both	3090	26.21	1.62	4.85	37.22	14.56	1.29	14.24
	Male	1530	46.41	2.61	9.15	26.14	1.96	1.96	11.76
	Female	1560	6.41	0.64	0.64	48.08	26.92	0.64	16.67

Table 4. 3: Reasons for Inter-state In-migration to West Bengal in 2001.

Origin States	Sex	Total Migrants	Work/employment	Business	Education	Marriage	Moved after Birth	Moved with household	Others
Bihar*	Both	15,64,787	29.64	3.88	0.85	26.61	2.18	20.53	16.31
	Male	8,44,184	50.51	6.84	1.36	1.21	2.56	18.14	19.37
	Female	7,20,603	5.19	0.42	0.25	56.37	1.74	23.32	12.73
Uttar Pradesh*	Both	3,04,882	32.02	4.55	1.11	17.10	2.71	24.77	17.73
	Male	1,87,825	50.48	7.03	1.53	0.71	2.78	18.72	18.75
	Female	1,17,057	2.41	0.58	0.44	43.40	2.61	34.47	16.09
Orissa	Both	1,58,486	33.95	2.29	1.03	28.63	1.91	17.38	14.81
	Male	85,248	59.34	4.00	1.65	1.40	2.09	14.13	17.40
	Female	73,238	4.39	0.31	0.31	60.34	1.70	21.16	11.79
Assam	Both	1,45,242	10.01	2.75	1.32	25.06	1.85	37.72	21.29
	Male	65,837	22.81	5.89	6.68	0.67	1.79	34.22	27.94
	Female	79,405	2.04	0.36	0.65	45.00	1.36	35.60	14.98
Rajasthan	Both	60,963	16.23	10.88	1.39	18.67	3.56	30.26	19.00
	Male	33,628	28.06	18.78	2.17	0.52	4.16	25.26	21.06
	Female	27,335	1.69	1.16	0.43	41.01	2.81	36.42	16.48
Madhya Pradesh	Both	29,775	22.97	1.61	1.61	18.18	2.96	32.79	19.89
	Male	14,534	37.64	2.90	2.66	0.85	3.59	28.92	23.44
	Female	15,241	8.98	0.37	0.61	34.71	2.36	36.47	16.49
Andhra Pradesh	Both	26,024	24.20	1.32	1.76	24.10	4.64	25.92	18.05
	Male	12,572	47.11	2.40	3.08	0.61	5.76	20.04	21.00
	Female	13,452	2.79	0.31	0.54	46.06	3.60	31.42	15.29
Punjab	Both	21,966	18.17	6.86	1.29	17.32	2.72	32.45	21.20
	Male	12,010	31.70	11.87	1.77	0.72	3.16	25.77	25.00
	Female	9,956	1.85	0.81	0.70	37.33	2.18	40.50	16.62
Maharashtra	Both	21,830	14.88	2.90	1.85	15.25	4.25	36.11	24.76
	Male	10,992	26.72	5.26	2.55	0.59	4.83	28.24	31.81
	Female	10,838	2.88	0.52	1.13	30.12	3.65	44.09	17.61
Gujarat	Both	20,262	16.18	9.42	1.15	19.14	3.72	30.05	20.35
	Male	10,563	28.33	16.17	1.75	0.68	4.26	24.59	24.22
	Female	9,699	2.95	2.06	0.48	39.24	3.12	36.00	16.14
Delhi	Both	17,617	14.44	2.71	2.23	14.57	3.66	35.61	26.80
	Male	8,833	26.24	4.77	3.34	0.75	4.05	27.74	33.11
	Female	8,784	2.57	0.64	1.10	28.46	3.26	43.52	20.45
Haryana	Both	14,876	15.58	9.99	1.82	16.00	2.96	33.05	20.60
	Male	8,374	26.38	17.03	2.69	0.47	3.42	25.90	24.12
	Female	6,502	1.66	0.92	0.71	36.00	2.38	42.25	16.07
Tamil Nadu	Both	10,666	21.34	2.82	3.11	14.36	3.35	31.49	23.52
	Male	5,488	36.94	4.74	5.05	0.69	3.37	22.58	26.64
	Female	5,178	4.81	0.79	1.06	28.85	3.32	40.94	20.22
Kerala	Both	10,509	27.08	1.71	2.82	12.12	3.13	28.76	24.38
	Male	5,420	42.58	2.92	4.43	0.52	3.19	20.61	25.76
	Female	5,089	10.57	0.43	1.10	24.48	3.07	37.43	22.91
Karnataka	Both	5,810	17.66	1.82	1.82	11.39	2.93	39.66	24.72
	Male	3,013	31.00	2.99	3.09	0.56	3.32	30.20	28.84
	Female	2,797	3.29	0.57	0.46	23.06	2.50	49.84	20.27

4.1(b) Reasons for In-Migration in Rural and Urban Areas:

The following section would examine the reasons behind the movement of people from other state/union territories into the rural and urban areas of West Bengal. In both rural and urban areas, 'Work/ employment' was the dominant one behind the movement of male in-migrants whereas the reason 'Marriage' was the most dominant one for female migration from other major states in both the census years. The noticeable fact here was that, the percentage of migrants came to these areas for the purpose of 'Work/ employment' and Business has decreased over the decade and it was true for both the sexes. The percentage of male migrants came to rural and urban areas for the purpose of 'Work/ employment' and Business was 45.83% and 62.14% respectively in 1991 which was declined to 40.57% and 57.68% in 2001. The female marriage migration was higher to the rural areas than the urban areas. But the proportion of female migrants has also decreased over the decade. It was 70.5% and 53.7% in 1991 in rural and urban areas respectively which was declined to 62.6% and 45.4% in 2001. From the analysis of the proportion of migrants came to this state from other state/union territories due to 'Family Move' some interesting features revealed. Firstly, the proportion of male migrants came in the rural areas due to 'Family Moved' was higher than in urban areas whereas the proportion of female migrants was higher in the urban areas than the rural areas for the same. It simply means more males migrated to rural areas than the urban areas to this state from other state/union territories due to the reason of 'Family Move' and more female migrated to urban areas for the same reason. Secondly, the proportion of female migrants has increased and it was 14.78% in 1991 in rural areas which increased to 20.06% in 2001. In urban areas, the percentage increased for male migrants was from 17.16% in 1991 to 18.07 in 2001 and for female migrants it was from 27.58% to 31.46% in 2001. Lastly, the increase in the proportion of female migrants due to reason of 'Family Moved' was more than the male migrants. Now if we focussed on the movement of the people to this state from other state/union territories due to the 'Other' reason, we would see that, it hold a considerable percentage of migrants who moved to this state due to this reason and the percentage has also increased over the decade. In case of male migrants it has increased from 19.55% in 1991 to 24.58% in 2001 in rural areas and from 15.30% to 19.24% in 2001 in urban areas. For female migrants, it has increased from

7.30% in 1991 to 10.02% in 2001 in rural areas and from 11.35% in 1991 to 16.05% in 2001 in urban areas for the same reason. Only a negligible percentage of migrants stated 'Education' as a reason for migration and it was true for both sexes. In rural areas only 2.09% male migrants stated 'Education' as a reason for their migration which was declined to 1.31% in 2001 and for female it was only 0.46% in 1991 which was further declined to 0.19% in 2001. In urban areas, 3.34% male migrants stated 'Education' as a reason for their migration which was declined to 1.72% in 2001 and for female it was only 1.38% in 1991 which was further declined to only 0.50% in 2001.

Table 4.4: Reasons for interstate in-migration by place of residence and sex in West Bengal (1991-2001).

Reasons for migration	Place of Enumeration							
	Rural-1991		Rural-2001		Urban-1991		Urban-2001	
	Male	Female	Male	Female	Male	Female	Male	Female
Employment	38.01	5.89	34.40	5.93	53.43	4.88	50.54	3.49
Business	7.82	0.52	6.17	0.30	8.71	0.84	7.14	0.57
Education	2.09	0.46	1.31	0.19	3.34	1.38	1.72	0.50
Marriage	3.27	70.49	3.38	62.56	1.76	53.67	0.52	45.40
Moved with household	27.34	14.78	27.78	20.06	17.16	27.58	18.07	31.46
Others	19.55	7.30	24.58	10.02	15.30	11.35	19.24	16.05

4.1(c) Migration Streams and Reasons for In- Migration:

The analysis of migration by streams and reasons revealed that 'Work/ employment' had evolved as the main reason behind the movement of especially male migrants and 'Marriage' reason was dominant among female migrants in case of all the migration stream in both the census years. The higher proportion of male migrants reported as 'Work/ employment' as main reason in Rural-Urban stream followed by Urban-Urban, Rural-Rural and Urban-Rural in both the census years but their proportion had changed a little bit over the decade. In all the streams, except Rural-Urban, the proportion of male migrants reported as 'Work/ employment' had decreased over the decade and the range of decline varied from one to six points (Table 4.5 and 4.6). The proportion of male migrants in Rural-Urban reported as 'Work/ employment' had shown marginal increase from 56.38% in 1991 to 57.84% in 2001.

Though dominance of females in marriage migration remained yet the proportion of female migrants reported as 'Marriage' had decreased over the decade and it was true for all the migration streams. The proportion of female migrants had decreased over the decade and the decline was highest for Urban-Rural stream and lowest for Rural-Urban stream (Table 4.5 and 4.6). The female movement due to purpose of 'Marriage' continued to be dominant in Rural-Rural migration stream in both the census years.

After discussing two most important reasons, this part would examine the 'Family Move'. The proportion of both for male and female migration due to reason of 'Family Moved' had showing an increasing trend in case of all streams. The highest percentage of male and female movement due to 'Family Move' was observed in Urban-Rural stream in 2001 for both the sexes. For male migrants it was 32.70% and for female migrants it was 38% in 2001. Another important fact here was that, in both the census years, the proportion of female migrants, migrated to West Bengal from other state/union territories due the reason of 'Family Move', was higher than the male migrants.

In 'Others' category, the proportion of migrants' showed very insignificant change between two census periods and it was true for the both sexes. The highest percentage of male migrants due to 'Others' reason was observed in Urban-Rural stream (25.58%), followed by Rural-Rural (19.03%), Urban-Urban (17.35%) and Rural-Urban stream (14.22%). On the other hand, the highest percentage of female migrants due to 'Others' was observed in Urban-Urban stream (12.33%) followed by Rural-Urban (11.20%), Urban-Rural (9.84%) and Rural-Rural stream (7.65%) in 2001 census. In this 'Others' category reasons the proportion of male migrants was higher than the female migrants. The percentage of male migrants due to 'Others' reason had increased in all the streams except Rural-Urban stream which showed a slight decline i.e. from 14.34% to 13.13%. The highest increased observed in Urban-Rural stream which recorded an increase of five percentage points. On the other hand, the percentage of female migration due to 'Others' reason had increased one point on an average in case of all the streams. (Table. 4.5 and 4.6)

In case of all migration streams, the proportion of migrants reported 'Education' as the reason for migration was very low in both the census years and it was true for both sexes also. The highest percentage of total migrants came to West Bengal from other

state/union territories for the purpose of 'Education' were observed in Urban to Urban stream in both the census year. It was 2.80% in 1991 which recorded a slight decline to 2.17% in 2001.

Table4.5: Percentage distribution of reasons for total in- migration to West Bengal by sex and streams of migration, 1991.

Stream of Migration	Reason for Migration (%)							
	Sex	Work/Employment	Business	Education	Family Moved	Marriage	Natural Calamities	Others
Rural-Rural	Total	18.01	3.19	0.92	17.90	47.94	1.11	10.93
	Male	39.72	7.97	1.89	26.38	3.36	2.00	18.67
	Female	5.76	0.49	0.37	13.11	73.11	0.61	6.56
Rural-Urban	Total	38.10	5.71	2.52	19.84	20.46	0.25	13.13
	Male	56.38	8.42	3.21	15.62	1.80	0.23	14.34
	Female	5.18	0.82	1.29	27.43	54.06	0.28	10.94
Urban-Rural	Total	17.08	3.39	1.95	28.84	32.98	0.74	15.02
	Male	31.37	7.11	3.21	33.29	2.91	1.44	20.65
	Female	6.27	0.57	1.00	25.47	55.74	0.20	10.75
Urban-Urban	Total	27.25	5.80	2.80	24.24	24.97	0.37	14.57
	Male	45.94	9.80	3.80	21.25	1.71	0.44	17.06
	Female	4.22	0.88	1.57	27.92	53.63	0.29	11.49

Table4.6: Percentage distribution of reasons for total in-migration to West Bengal sex and streams of migration, 2001.

Stream of Migration	Reason for Migration (%)							
	Sex	Employment	Business	Education	Marriage	Moved after Birth	Moved with household	Others
Rural-Rural	Total	17.99	2.46	0.44	44.49	1.19	21.75	11.67
	Male	38.99	6.45	1.03	3.96	2.05	28.49	19.03
	Female	6.50	0.28	0.12	66.67	0.72	18.06	7.65
Rural-Urban	Total	38.52	4.48	0.92	17.83	2.43	22.50	13.13
	Male	57.84	7.01	1.26	0.48	2.43	16.76	14.22
	Female	4.25	0.54	0.31	48.58	2.42	32.68	11.20
Urban-Rural	Total	12.87	3.53	1.86	25.51	3.59	35.56	17.08
	Male	25.05	7.11	3.14	1.82	4.61	32.70	25.58
	Female	2.48	0.49	0.77	45.70	2.73	38.00	9.84
Urban-Urban	Total	23.09	5.11	2.17	22.31	3.50	28.81	15.00
	Male	41.07	8.99	3.28	0.69	3.99	24.62	17.35
	Female	2.57	0.68	0.90	46.98	2.94	33.59	12.33

4.2 Reasons for Out-migration from West Bengal:

4.2(a) Reasons for Out-Migration to other states.

Table 4.7: Reasons for Migration from West Bengal to other States/Union Territories by sex (1991-2001).

Reasons for migration	1991			2001		
	Total	Male	Female	Total	Male	Female
Work/Employment	18.15	42.77	3.00	26.78	55.33	3.86
Business	4.42	10.24	0.84	2.40	4.96	0.35
Education	2.27	4.12	1.13	1.39	2.40	0.58
Marriage	43.34	1.94	68.79	35.48	0.87	59.41
Moved with household	21.51	24.44	19.72	21.42	17.88	24.27
Others	9.63	15.36	6.10	12.53	15.82	9.88

After detailed discussion on reasons for in-migration in West Bengal from other states/union territories, the following paragraphs would examine the reasons for out-migration from West Bengal to other states/union territories at length. The census data related to reasons for out-migration has been accommodated in Table (4.7). The data revealed the fact that the movement of people from West Bengal to other states/union territories due to purpose of 'Work/Employment' has increased over the decade. The data showed that, out of total interstate out-migrants, 18.15% went to other states for the purpose of 'Work/Employment' in 1991 which had increased to 26.78% in 2001. The gender differential in relation to this specific reason was huge. It was all the way, the male migrants who dominated the scene. Among total male migrants, 42.77% migrated to other states for 'Work/Employment' in 1991. In 2001, the figure jumped to 55.33%, registered an increase of 12.56 points over the decade. On the other hand, the proportion of migrants, migrated to other states due to 'Business' purpose, has declined from 4.42% in 1991 to 2.40% in 2001 and among the male migrants, the decline was rather huge, it was from 10.24% in 1991 to 4.96%.

Another important reason for which the people migrated to other states/union territories was marriage and it was predominately related to female migrants. More than half of the female migrants migrated to other states due to the reason of 'Marriage' in both the

census years. However the proportion of female marriage migrants had declined from 68.79% in 1991 to 59.41% in 2001.

The next important reason behind the movement of people to other states was 'Moved with Household'. The data showed an interesting feature i.e. 'Moved with Household' as a reason for migration reported the highest proportion among male migrants in 1991 and among female migrants in 2001. The percentage of male migrants who migrated to other states due to the reason of 'Moved with Household' has declined from 24.44% in 1991 to 17.88 in 2001 while in case of female migrants, it has increased from 19.72% in 1991 to 24.27% in 2001.

The proportion of migration from West Bengal to other states/union territories for 'Other' causes reported highest among male migrants. However the percentage of both male and female migrants, moved to other states due to 'Other' reasons, has increased over the decade. In case of male migrants, the increase was very marginal where and for female migrants it registered an increase of three percentage points over the decade.

Only a negligible percentage of migrants cited 'Education' as a reason for migration from West Bengal to other states/union territories. The proportion of migrants, migrated for 'Education', had declined for both male and female migrants.

The data related to reasons for out-migration from the state of West Bengal to other states/union territories was presented in Table 4.8 and 4.9. The comparison of the data for two census periods revealed some interesting facts. The close look at those table revealed that, the proportion of migrants moved to other states due to 'Work/employment' reason, has increased a lot over the decade. The percentage points of increase was observed highest in the state of Maharashtra (26 points) followed by Rajasthan (21 points), Punjab (20 points), Haryana (15 points) and so on. Therefore it may be concluded that males liked to migrate to distant state namely Maharashtra, Rajasthan, and Punjab etc for 'Work/employment' over the decade.

Another important reason for migration was 'Business' and this reason was exclusively belongs to males. A considerable proportion of male migrants migrated to the states of Orissa, Assam and Gujarat from West Bengal. Among the total male migrants migrated

to other states/union territories due to 'Business' purposes 26.85%, 21.18% and 12.48 percent went to the states of Orissa, Assam and Gujarat in 2001 respectively and these states hold together 60.51 percent share.

The reason 'Marriage' was one of the dominant reasons behind the movement of the people and it was exclusively related to female migration. A close look to the tables revealed that, the female marriage migrants from West Bengal were dominant in the neighbouring states like Bihar, Uttar Pradesh, Orissa and Assam. Among the total female migrants moved to the states of Bihar, Uttar Pradesh, Orissa and Assam, 78.87%, 65.67%, 65.05 and 63.15 percent reported marriage as their reason for migration in 2001 as compared to 85.40%, 74.13%, 69.72% and 63.92% in 1991 respectively. The dominancy of these four states in case of female marriage migrants from West Bengal could be gauged from the following statistics. Out of the total female migrants moved to other states/union territories due to 'Marriage' reason, these four states namely Bihar, Uttar Pradesh, Orissa and Assam constituted 51.02%, 13.33%, 9.79% and 5.30% and together hold 79.44 percent and this figure revealed the flow of female marriage migration to these states.

Another important reason was 'Family Moved'. The proportion of female migrants due to this reason was much higher than the male migrants. It was interesting to see that, in case of distant states like Delhi, Gujarat, Haryana, the proportion of female migration from West Bengal due to 'Family Moved' was higher than the marriage migration. For example, the percentage of female migrants due to 'Family Moved' and 'Marriage' reason to the states of Delhi, Rajasthan, Haryana, Gujarat, and Karnataka were 50.24% and 28.72%, 45.80% and 32.70%, 49.54% and 30.10%, 36.34% and 27.92% in 2001 respectively to the total female migration to those respective states. Another noticeable fact was that, the percentage of female migration due to 'Family Move' from West Bengal to other states has increased a lot in 2001 than the previous census period.

The proportion of migrants moved to other states from West Bengal due to 'Education' purpose was low and in this case the male migrants outnumbered female migrants. A close look at the percentage of migrants moved to other states for 'Education' purpose at two different time period i.e. 1991 and 2001, showed that, the state level scenario has

drastically changed. According to 1991 census, the most preferable state for migration due to 'Education' purpose was Bihar, followed by Uttar Pradesh, Maharashtra, Madhya Pradesh, Orissa and Assam . But the scenario has changed a lot in 2001 and now Karnataka became the most preferable states for the migrants moved from West Bengal to other states for education purpose which was followed by Maharashtra, Bihar, Delhi and Uttar Pradesh. These states i.e. Karnataka, Maharashtra, Bihar, Delhi and Uttar Pradesh, constituted 18.55%, 16.89%, 12.48%, 12.17% and 11.74% respectively to the total education related migrants.

The percentage of migrants migrated due to 'Others' reason has increased in 2001 than the previous census from West Bengal to less to all other states.

Table 4.8: Reasons for out-migration from West Bengal to major states/union territories in 1991.

Receiving States	Sex	Total Migrants	Work/employment	Business	Education	Family Moved	Marriage	Natural Calamities	Others
Bihar	Both	419032	13.44	1.91	1.82	11.62	65.59	0.82	4.79
	Male	101918	49.06	6.33	4.75	21.84	3.94	2.19	11.88
	Female	317114	1.99	0.49	0.88	8.34	85.40	0.38	2.52
Uttar Pradesh	Both	106552	10.60	2.79	3.09	17.61	52.44	0.97	12.51
	Male	32639	29.69	7.26	7.72	24.94	3.31	1.62	25.46
	Female	73913	2.18	0.81	1.04	14.37	74.13	0.68	6.79
Orissa	Both	127959	10.26	6.43	1.26	23.12	43.42	2.94	12.57
	Male	50053	24.01	14.94	2.32	29.04	2.50	5.25	21.94
	Female	77906	1.42	0.96	0.58	19.32	69.72	1.45	6.55
Assam	Both	90864	10.20	10.03	1.53	26.63	35.67	1.63	14.31
	Male	41324	20.62	20.41	2.27	32.21	1.80	2.42	20.27
	Female	49540	1.51	1.37	0.91	21.98	63.92	0.97	9.34
Delhi	Both	81049	32.79	4.59	1.66	38.87	16.24	0.22	5.62
	Male	43438	55.96	7.80	2.05	27.58	0.50	0.23	5.88
	Female	37611	6.04	0.87	1.22	51.91	34.43	0.21	5.33
Madhya Pradesh	Both	70856	27.20	5.72	2.24	30.64	20.75	0.27	13.18
	Male	38010	47.14	9.63	2.97	25.05	0.39	0.34	14.47
	Female	32846	4.13	1.19	1.40	37.11	44.30	0.18	11.69
Maharashtra	Both	69090	28.60	9.39	2.37	25.73	17.48	0.20	16.21
	Male	38730	46.79	15.54	3.02	17.61	0.93	0.15	15.96
	Female	30360	5.40	1.55	1.55	36.10	38.60	0.26	16.53
Andhra Pradesh	Both	24309	24.56	3.33	2.76	35.17	18.92	0.21	15.05
	Male	11660	45.03	6.09	3.09	28.82	0.43	0.09	16.47
	Female	12649	5.69	0.79	2.45	41.03	35.97	0.32	13.75
Gujarat	Both	22550	23.46	13.53	2.08	27.98	14.94	0.04	17.96
	Male	12660	36.26	19.83	2.92	21.56	0.87	0.08	18.48
	Female	9890	7.08	5.46	1.01	36.20	32.96	0.00	17.29
Rajasthan	Both	21680	22.88	5.49	3.55	28.41	23.48	0.42	15.77
	Male	10850	40.92	9.40	5.35	23.69	1.01	0.37	19.26
	Female	10830	4.80	1.57	1.75	33.15	45.98	0.46	12.28
Punjab	Both	18385	19.74	1.47	1.52	29.28	35.41	0.60	11.98
	Male	7382	40.91	2.57	2.71	34.81	1.63	0.81	16.55
	Female	11003	5.54	0.73	0.73	25.57	58.08	0.45	8.91
Haryana	Both	12794	25.55	4.69	1.80	30.40	29.51	0.16	7.89
	Male	5794	50.03	9.15	2.76	27.10	0.78	0.17	10.01
	Female	7000	5.29	1.00	1.00	33.14	53.29	0.14	6.14
Tamil Nadu	Both	10180	22.40	3.05	11.20	37.23	14.54	0.49	11.10
	Male	5110	36.40	4.70	16.24	29.55	1.17	0.59	11.35
	Female	5070	8.28	1.38	6.11	44.97	28.01	0.39	10.85
Karnataka	Both	10130	26.65	3.75	8.69	37.81	10.37	0.20	12.54
	Male	5540	41.52	6.68	14.62	24.19	0.00	0.18	12.82
	Female	4590	8.71	0.22	1.53	54.25	22.88	0.22	12.20
Kerala	Both	3770	19.89	2.12	3.45	45.09	6.10	0.00	23.34
	Male	2080	31.73	3.85	4.81	28.37	0.48	0.00	30.77
	Female	1690	5.33	0.00	1.78	65.68	13.02	0.00	14.20

Table 4.9: Reasons for out-migration from West Bengal to major states/union territories in 2001.

Receiving States	Sex	Total Migrants	Work/employment	Business	Education	Marriage	Moved after Birth	Moved with household	Others
Bihar*	Both	4,75,348	13.07	0.67	0.62	60.30	1.67	12.99	10.68
	Male	1,15,609	48.72	2.29	1.92	2.54	4.05	19.78	20.70
	Female	3,59,739	1.61	0.15	0.20	78.87	0.91	10.81	7.47
Maharashtra	Both	2,09,044	50.10	1.33	1.90	12.93	4.14	19.05	10.56
	Male	1,38,563	72.29	1.84	2.18	0.20	3.43	10.33	9.71
	Female	70,481	6.46	0.31	1.35	37.94	5.53	36.18	12.23
Delhi	Both	1,71,904	41.27	0.82	1.67	12.57	1.95	32.75	8.97
	Male	97,458	65.60	1.28	2.03	0.24	1.92	19.39	9.54
	Female	74,446	9.43	0.23	1.18	28.72	1.99	50.24	8.21
Uttar Pradesh*	Both	1,64,212	15.95	0.80	1.86	45.57	0.76	19.65	15.40
	Male	51,812	43.04	1.75	5.02	1.31	1.37	22.73	24.78
	Female	1,12,400	3.47	0.36	0.41	65.97	0.48	18.23	11.08
Orissa	Both	1,40,860	14.46	7.49	1.09	39.23	1.30	23.18	13.25
	Male	57,114	32.95	17.52	2.03	1.44	1.98	25.61	18.46
	Female	83,746	1.85	0.64	0.44	65.00	0.84	21.52	9.70
Madhya Pradesh	Both	82,931	30.62	1.62	0.96	19.86	3.47	31.87	11.61
	Male	42,710	55.82	2.87	1.37	0.40	3.83	22.21	13.51
	Female	40,221	3.87	0.28	0.52	40.52	3.08	42.14	9.59
Assam	Both	81,654	12.38	10.07	0.45	36.76	1.87	20.60	17.89
	Male	34,949	26.12	22.58	0.79	1.49	2.57	21.97	24.48
	Female	46,705	2.10	0.70	0.19	63.15	1.34	19.57	12.96
Haryana	Both	56,250	42.84	0.35	0.52	12.50	1.24	31.91	10.65
	Male	33,093	65.67	0.47	0.64	0.18	1.22	19.58	12.24
	Female	23,157	10.21	0.17	0.34	30.10	1.26	49.54	8.37
Rajasthan	Both	45,505	38.95	1.24	0.88	14.11	1.98	30.07	12.77
	Male	26,108	61.92	1.80	0.90	0.30	2.03	18.39	14.66
	Female	19,397	8.02	0.49	0.86	32.70	1.92	45.80	10.22
Punjab	Both	44,983	36.93	0.70	0.75	18.12	2.09	24.66	16.75
	Male	25,473	60.29	0.91	1.07	0.43	2.21	16.72	18.36
	Female	19,510	6.42	0.42	0.34	41.20	1.94	35.03	14.65
Gujarat	Both	40,262	31.25	12.10	1.59	13.20	4.47	27.14	10.26
	Male	24,895	48.85	18.69	2.10	0.23	4.14	15.36	10.62
	Female	15,367	2.72	1.42	0.77	34.20	5.00	46.22	9.66
Karnataka	Both	31,248	36.16	2.93	13.97	9.65	2.85	19.42	15.03
	Male	20,683	50.39	4.01	17.74	0.31	2.42	10.78	14.35
	Female	10,565	8.29	0.81	6.58	27.92	3.69	36.34	16.37
Andra Pradesh	Both	29,815	27.42	4.03	1.47	14.79	4.09	26.67	21.52
	Male	16,071	56.63	12.43	0.60	0.15	1.91	12.56	15.73
	Female	13,744	4.62	1.01	1.01	31.39	3.98	36.60	21.39
Tamil Nadu	Both	12,108	29.59	1.69	2.56	8.40	3.47	26.07	28.22
	Male	7,123	45.49	2.44	3.27	0.62	3.27	17.28	27.63
	Female	4,985	6.88	0.62	1.54	19.52	3.75	38.62	29.07
Kerala	Both	5,309	33.72	1.60	1.75	6.84	1.92	32.85	21.32
	Male	3,284	49.45	2.25	2.01	0.88	1.74	20.89	22.78
	Female	2,025	8.20	0.54	1.33	16.49	2.22	52.25	18.96

4.2 (b) Migration Streams and Reasons for Out- Migration:

There was a huge increase in the proportion of out-migrants, migrated to other states/union territories from West Bengal, seeking for work/employment. Particularly, the proportion of male migrants, migrated for seeking work/employment to other states, had increased a lot from 1991 to 2001 and it was true for all migration streams (Table 4.10 and 4.11). The highest percentage of male migrants reported work/employment as a reason for migration was observed in Rural-Urban stream followed by Urban-Urban, Rural-Rural and Urban-Rural stream in 2001 census. The percentage of male out migration has increased over the decade due to the reason of 'work/employment' in all four streams. The Rural-Urban stream had registered highest increase which was 16.85 percentage points.

Another important reason which constituted a considerable percentage share among migrants was 'Marriage' which was entrusted basically to female migrants. It had been observed that, female marital migration was highest in Rural-Rural stream followed by Urban-Rural, Rural-Urban and Urban-Urban stream. But it was important to notice that the female out migration for marriage had decreased over the decade and it was true in case of all streams. The Rural-Urban stream had registered highest decrease which was 12.10 percentage points.

The next two important reasons which had a considerable percentage share among migrants were 'Moved with Household' and 'Others' reasons. The percentage of total migrants, migrated to other states with household, had shown marginal changes between 1991 and 2001. The gender differences among the migrants, migrated to other states due to the reason of 'Moved with Household', existed with respect of all migration streams. The proportion of female migrants was higher in urban migration whereas the male migrants dominated in rural migration.

Migration for 'Others' causes reported maximum in Urban-Rural stream followed by Urban-Urban, Rural-Urban and Rural-Rural. There were substantial increases in the proportion of total migrants migrated to other states due to the reason of 'Others' reasons in all migration stream except the Rural-Urban migration stream which recorded a marginal decrease. The gender differences among the migrants were observed in respect

of migration streams. In all the migration stream, the proportion of male migrants were higher than the female migrants but in case of Rural-Rural and Urban-Rural stream, the gender differences were maximum for both the census years.

Table 4.10: Percentage distribution of reasons for total out- migration from West Bengal by sex and streams of migration, 1991.

Migration Streams	Sex	Reasons for Migration(%)						
		Employment	Business	Education	Family Moved	Marriage	Natural calamities	Others
Rural-Urban	Total	27.63	6.70	2.91	22.93	30.33	0.56	8.94
	Male	51.54	12.37	4.41	18.65	1.50	0.66	10.86
	Female	4.28	1.16	1.45	27.10	58.49	0.47	7.06
Rural-Rural	Total	9.50	2.84	0.83	13.91	65.01	1.46	6.46
	Male	33.63	9.24	2.17	30.20	3.31	4.21	17.25
	Female	1.94	0.83	0.41	8.80	84.35	0.60	3.08
Urban-Urban	Total	23.26	6.19	2.94	29.25	26.97	0.27	11.13
	Male	44.09	11.82	4.26	25.11	1.18	0.29	13.25
	Female	4.71	1.17	1.77	32.93	49.93	0.25	9.24
Urban-Rural	Total	13.42	3.84	1.78	19.18	48.35	0.49	12.94
	Male	33.31	8.91	3.42	26.22	1.96	0.76	25.43
	Female	2.43	1.04	0.88	15.28	73.99	0.35	6.03

Table 4.11: Percentage distribution of reasons for total out- migration from West Bengal by sex and streams of migration, 2001.

Migration Stream	Sex	Reasons for Migration(%)						
		Work/Employment	Business	Education	Marriage	Moved after birth	Moved with household	Others
Rural-Rural	Total	13.92	1.18	0.31	61.53	0.60	14.09	8.36
	Male	48.56	4.16	1.01	2.88	1.46	25.07	16.85
	Female	2.21	0.17	0.08	81.35	0.31	10.38	5.50
Rural-Urban	Total	42.74	3.11	1.15	19.38	1.88	22.66	9.08
	Male	68.39	5.05	1.68	0.39	1.83	13.09	9.58
	Female	6.30	0.35	0.39	46.37	1.96	36.27	8.36
Urban-Rural	Total	20.91	1.83	1.20	41.17	1.86	19.69	13.34
	Male	48.19	4.05	2.26	1.22	2.74	19.49	22.05
	Female	3.05	0.38	0.51	67.32	1.29	19.81	7.64
Urban-Urban	Total	30.00	3.15	2.43	22.56	3.57	27.79	10.49
	Male	54.86	5.76	3.56	0.48	4.01	19.71	11.61
	Female	4.88	0.52	1.29	44.88	3.12	35.95	9.36

4.3 SECTORAL DISTRIBUTION OF INTERSTATE IN-MIGRANTS:

From the above discussion it has been found that, most of the people migrated to other places for seeking employment especially males. However females also participated in economic activities, particularly in Rural-Rural stream. Data are available on participation of migrant workers by nine industrial categories for rural, urban origin and the destination at the district level from 1961 census onwards. With the help of these data, in the following paragraphs the calculation of the proportion of migrant workers has been done. Secondly an analysis of the distribution of inter-state migrant workers in different industrial categories with respect to each migration stream has been done. Next, the pattern of work participation at the inter-state level is compared with that of the workers of the total population. Lastly, an attempt to show the participation of migrants who came to West Bengal from other states in various sectors and their distribution at district level has been made.

Distribution of Migrant Workers by Major Industrial Categories:

Following the International Standard of Industrial Classification, nine industrial categories of workers are available in the census. For the convenience and better understanding, the workers were grouped into three sectors i.e. Primary, Secondary, Tertiary sector. In the study Agriculture, Hunting and Forestry; Fishing; Mining and Quarrying were included in Primary sector while the Secondary sector included Manufacturing and repairs; Electricity, Gas and Water Supply and Construction. In Tertiary sector, Wholesale and Retail Trade; Hotels and Restaurants; Transport, Storage and Communications; Financial Intermediation; Real Estate, Renting and Business Activities; Real Estate, Renting and Business Activities; Other Community, Social and Personal Service Activities; Private Households with Employed Persons; Extra-Territorial Organisations and Bodies were included.

Before going in detailed about the distribution of migrants workers among major industrial categories, firstly the work participation rate among the migrants came to West Bengal from other states by migration streams has been done. The Table 4.12 showed that, the work participation rate among the migrants was high in Rural-Urban followed by

Rural-Rural, Urban-Urban and Urban-Rural migration streams. The gender differential among migrants in respect of work participation rate was huge. The work participation rate among males was much higher than the female migrants. The percentage of total male migrant workers by stream revealed that the Rural-Urban stream recorded highest percentage (79.87%) followed by Rural-Rural (76.98%), Urban-Urban (71.46%) and Urban-Rural (61.75%). Though, it should be mentioned that, in Rural-Rural stream, more than one-fourth of the females took part in work. A considerable change in the work participation rate of female in-migrants has been observed in Rural-Rural stream. The female work participation had increased by four percentage points over the decade.

Table 4.12: The work participation rate among inter-state in-migrants in West Bengal by sex and migration streams in 1991 and 2001.

Migration Stream	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
Rural-Rural	41.68	54.19	75.29	76.95	22.71	26.97
Rural-Urban	53.53	54.75	80.12	79.87	5.63	3.68
Urban-Rural	33.76	36.87	60.79	61.75	13.29	8.46
Urban-Urban	44.09	42.46	74.46	71.46	6.65	4.38

The stream wise sectoral distribution of migrants accommodated in Table 4.13, showed in Rural-Rural and Urban-Rural migration streams, the percentage share of male migrants in primary sector was 33.97 and 17.49 respectively whereas the percentage share of female migrants in primary sector was much higher i.e. 63.80 and 47.35. It was because the number of female marriage migration was very high in Rural-Rural and they mostly engaged in the activity available in their in-laws place even after migration.

In urban ward migration, maximum number of migrants was involved in secondary and tertiary sectors. In Rural-Urban stream, the percentage of male migrants worked in secondary and tertiary sector was 40.41 and 38.48 as compared to female which was 37.09 and 22.12 and in Urban-Urban stream the percentage of male migrants in secondary and tertiary sector was 32.57 and 47.32 as compared to female migrants which was 18.72 and 30.70 respectively. Therefore, in Rural-Urban stream, more percentage of migrants were engaged in secondary sector than the tertiary sector and in Urban-Urban stream, higher percentage of migrants were involved in tertiary sector than the secondary

sector and it was true for both sexes. In Rural-Urban stream difference between males and females engaged in secondary sector was only 3 points whereas for Urban-Urban stream the difference was about 14 points. This may be because of absorption of female in low and semi skilled secondary job, when they were coming from rural areas. Whereas from Urban-Urban, mostly informed migrants came which reduced their proportion in secondary section.

Table4.13: Distribution of Inter-state migrant workers among major industrial categories by streams, 2001.

Migration Stream	Total			Male			Female		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Rural-Rural	48.82	32.27	18.91	33.97	34.60	31.42	63.80	29.91	6.29
Rural-Urban	7.51	40.19	52.31	7.24	40.41	52.35	11.26	37.09	51.65
Urban-Rural	24.34	30.00	45.66	17.49	32.37	50.13	47.35	22.01	30.64
Urban-Urban	2.93	31.14	65.93	2.90	32.57	64.53	3.22	18.72	78.07

The data related to the proportion of migrants workers and of total workers in different sectors of economy was presented in Table 4.14. The comparison of the data revealed the fact that the proportion of total male migrants engaged in secondary and tertiary sectors was higher than the total male workers. But in primary sector reverse was the case i.e. the percentage of total male workers engaged in primary sector (46.78) was much higher than the percentage of total male migrants engaged in primary sector (10.48). Therefore, it may be concluded that, most of the male migrants engaged themselves in non-agricultural activities.

Table4.14: Distribution of workers among migrants and total population in major industrial categories, 2001.

Industrial Classification	Total		Rural		Urban	
	Male	Female	Male	Female	Male	Female
Migrants						
Primary	10.84	46.76	31.06	62.82	6.10	8.44
Secondary	37.05	29.82	33.47	29.61	37.89	30.32
Tertiary	52.11	23.42	35.47	7.57	56.01	61.24
Total Population						
Primary	46.78	54.93	63.41	65.26	4.87	5.31
Secondary	20.64	25.93	15.70	24.72	33.10	31.71
Tertiary	32.57	19.14	20.89	10.02	62.03	62.97

4.3 (a) Distribution of migrant workers over the districts of West Bengal.

After detailed discussion about migrants' workers among major industrial categories by migration streams, the following paragraphs would focus on the distribution of migrant workers among major industrial categories in different districts of West Bengal. The Table 4.15 showed that, the district Kolkata, which is the most important metropolis city of the eastern part of India, and its surroundings districts namely Haora, Hoogly, North and South 24-Parganas which were regarded as most industrialised and urbanised one, recorded a negligible proportion of migrants workers in primary sector and a higher proportion of migrants workers in secondary and tertiary sectors. The district of Bardhaman which was also were regarded as most industrialised and urbanised one, recorded more or less equal proportion of migrants in all three sectors, because it was also most agriculturally developed districts. The district Murshidabad, in spite of its low urbanisation and industrialisation level, recorded a low percentage of migrants in primary sector. It may be due to a large percentage of migrants were engaged in household industry in this districts i.e. 43.59%. In the districts of Purulia, Uttar Dinajpur, Maldah, Birbhum more or less half of the migrants were engaged in primary activities as agriculture was the mainstay for the people of these districts.

There was a large difference between two sexes with regard to their distribution in different sectors of economy. Out of total male migrant workers came to West Bengal from other states, 37.05 percent were engaged in secondary sector and 52.11 percent were engaged in tertiary sector while a very low percentage (10.84) was involved in primary activities. The highest percentage of male migrant workers in secondary sector was observed in the districts of Hoogly (63.52) followed by North 24-Paraganas (59.08), South 24-Paraganas (54.60), Kolkata (48.34) and so on. The districts of Darjeeling, Kolkata, and Jalpaiguri recorded higher percentage of male migrant workers in tertiary sector. On the other hand, higher percentage of female migrant workers came to West Bengal from other states were engaged in primary activities almost in all districts except a few districts like Kolkata, Hoogly and Haora and so on. The highest percentage of female migrants workers in primary sector was observed in the districts of Purulia (85.81) followed by Uttar Dinajpur (77.35), Maldah (72.43), and Birbhum (66.85) and so on.

District Murshidabad, Nadia, Hoogly and South 24-Parganas had recorded very high percentage of females in secondary sector. It is noteworthy to mention here that first three districts form the famous weaving belt in the state most of which are household industry. South 24-Parganas, on the other hand reported concentration of feminine industries mostly agro-industries.

Table4.15: Percentage distribution of inter-state migrants by sex in different sectors of economy across the districts of West Bengal, 2001.

Districts	Primary sector			Secondary sector			Tertiary sector		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Darjiling	12.99	8.11	41.43	14.66	15.67	8.79	72.35	76.22	49.78
Jalpaiguri	30.46	23.32	59.44	15.94	17.01	11.62	53.6	59.68	28.93
Koch Bihar	42.53	34.5	61.53	18.61	18.66	18.47	38.86	46.84	20
Uttar Dinajpur	57.52	42.92	77.35	13.91	16.16	10.85	28.57	40.92	11.8
Dakshin Dinajpur	38.16	29.99	58.62	20.35	20.83	19.15	41.5	49.19	22.23
Maldah	50.39	24.96	72.43	20.16	22.09	18.49	29.45	52.96	9.09
Murshidabad	13.21	14.8	12.06	62.13	33.46	82.72	24.66	51.75	5.22
Birbhum	48.14	28.83	66.85	23.71	25.14	22.32	28.16	46.03	10.82
Barddhaman	34.9	33.85	40.9	26.74	26	30.94	38.37	40.15	28.16
Nadia	9.63	10.61	7.21	54.52	47.83	71.02	35.85	41.56	21.76
North Twenty Four Parganas	3.17	3.02	4.69	58.4	59.08	51.73	38.43	37.9	43.58
Hugli	4.66	3.88	9.83	64.23	63.52	68.95	31.11	32.59	21.22
Bankura	25.84	15.64	48.55	41.23	44.01	35.04	32.93	40.35	16.41
Puruliya	75.66	31.14	85.81	10.82	19.61	8.82	13.52	49.26	5.37
Medinipur	37.54	18.04	59.04	30.72	30.02	31.5	31.73	51.94	9.46
Haora	1.87	1.77	3.48	48.8	48.34	55.9	49.33	49.89	40.62
Kolkata	1.06	1.02	1.7	24.25	24.88	14.36	74.7	74.11	83.94
South Twenty Four Parganas	5.88	5.28	10.13	55.39	54.6	60.95	38.73	40.12	28.92
West Bengal (In total)	17.55	10.84	46.76	35.7	37.1	29.8	46.8	52.11	23.4

Major Findings:

Out of the total inter-state in-migrants to West Bengal from other states/ union territories, the reason 'Work/ employment' was the dominant one behind the movement of male in-migrants, whereas, the reason 'Marriage' was the most dominant one for female in-migration in both the census years. Though it was worthy to mention that, male migration for 'Work/ employment' in both rural and urban areas of the study state, had decreased, between 1991 and 2001. The percentage of female in-migration for 'Marriage' was also decreased over the decade. The male migrants stated 'Work/ employment' as main reason for their migration, came from mainly neighbouring states. For example, over 50% of male migrants came to West Bengal for 'Work/ employment' from the states namely Bihar, Uttar Pradesh, Orissa. But one thing should be mentioned here was that, from all these states the proportion of migrants had decreased, between 1991 and 2001. The higher proportion of male migrants reported as 'Work/ employment' as main reason in Rural-Urban stream followed by Urban-Urban, Rural-Rural and Urban-Rural in both the census years. The proportion of both for male and female migration due to reason of 'Family Moved' and 'Others' has showed an increasing trend.

The movement of people from West Bengal to other states/union territories due to purpose of 'Work/Employment' has increased over the decade. Out of the total male out-migrants, one-fourth of male migrants went to other states because of 'Work/Employment'. The male migrants not only went the neighbouring states but also went to the far distant states for 'Work/Employment'. That's why the percentage points of increase was observed highest in the state of Maharashtra (26 points) followed by Rajasthan (21 points), Punjab (20 points), Haryana (15 points) and so on. The highest percentage of male migrants reported work/employment as a reason for migration was observed in Rural-Urban stream followed by Urban-Urban, Rural-Rural and Urban-Rural stream in 2001 census. The Rural-Urban stream had registered highest increase which was 16.85 percentage points. On the other hand, female marriage migrants from West Bengal were dominant in the neighbouring states like Bihar, Uttar Pradesh, Orissa and Assam. But the percentage of female out-migration for 'Marriage' has decreased, between 1991 and 2001. Still, Out of the total female migrants moved to other

states/union territories due to 'Marriage' reason, these four states namely Bihar, Uttar Pradesh together accounted 79.44 percent and this figure revealed the flow of female marriage migration to these states. The out-migration for the reason of 'Education' and 'business' has decreased over the decade and it was true for both sexes.

The work participation rate among the migrants was high in Rural-Urban followed by Rural-Rural, Urban-Urban and Urban-Rural migration stream. The gender differential among migrants in respect of work participation rate was huge. The work participation rate among males was much higher than the female migrants. Though considerable percentage female work participation had observed in Rural-Rural stream and it had also increased by four percentage points over the decade. The proportion of migrants in secondary and tertiary sector was highest in the districts of Kolkata, Haora, Hoogly, North and South 24-Parganas, which were regarded as most industrialised and urbanised one. On other hand, in the districts of Purulia, Uttar Dinajpur, Maldah, Birbhum more or less half of the migrants were engaged in primary activities as agriculture was the mainstay for the people of these districts.

CHAPTER 5

DETERMINING FACTORS OF INTER-STATE MIGRATION

CHAPTER 5

5.1. Significance of the Selected Variables

Migration is a very complex phenomena and it is very difficult to list the variables which dictates the migration process. The complexity of migration phenomena is so much that it gives birth of a number of theories related to the factors that caused human migration. This chapter examined the relationship between migration and some development indicators in the context of West Bengal, though it may be said that the relationship between migration and development is not straight forward.

However, it is generally said that migration is positively correlated with economic development which means that the economically developed region is generally associated with in-migration while relatively less economically developed region is associated with out- migration. The income has taken as the indicator because it's close relationship with migration phenomena. Greenwood (1971) clarified the relations between migration and income in his paper entitled, "A Regression analysis of migration to urban areas of a less developed country: The case of India", if persons are moving away from relatively low-income and to relatively high-income regions, then the sign associated with the origin-income variable should be negative while that associated with the destination-income variable should be positive. According to Kennan and Walker (2003) migration decisions are indeed influenced to a substantial extent by income prospects. There is evidence of a response to geographic differences in mean wages, as well as a tendency to move in search of a better locational match when the income realization in the current location is unfavourable. Neo- classical economic theory of migration owns its current formation of Todaro (1969) mentioned that the probability of migrating is positively associated with the wage differential between origin and destination, and negatively associated with costs. However new economics of labour migration (NELM) theory criticizes the neo-classical comparison of income in the origin to income in the destination and concluded that the household members compare themselves and their standard of living not to some potential standard of living , but instead to the households in the origin area. (Stark and Taylor, 1989; Stark and Taylor, 1991; Stark and Yitzhak, 1988).

It has been observed that social indicators and level of social development may not necessarily move with economic development and economic indicators. As a result, studies relating to disparities in development, attempt to measure social development independent of indicators such as per capita income, poverty and so on. To know the disparities across the state in the level of development, the study used the indicators of education and health to represent the social infrastructure. In this study literacy, percentage of school enrolment, primary school/100 sq.km, high school/100 sq.km have taken as education related indicators while number of hospital beds per 10,000 population, number of hospitals per 10000/population, percentage of population using adequate sanitation facilities have taken as health related indicators. All the indicator are positively correlated with each other that means the higher the positive value of these indicator, higher will be the index value of education an health index. The social indicators have taken in the sense that migration is not only related with the region's economic development but also with the region's social and physical infrastructure. Moreover, we can say people tend to migrate to those areas which experienced not only the economic development but also the overall development. The indicator road density has taken because it partly indicates the level of transportation facilities across the state which in turn affects the human migration.

The relationship between the movements of population and the development of secondary and tertiary sectors is very close. The influx of population into the sectors is a very common phenomenon irrespective of space and time. It is because of fact that these sectors are more capital and labour intensive and hence the employment opportunities in these sectors are very high. In this study, number of registered factory workers/ 100000 populations, number of registered factories per 100 sq.km, percentage of population in secondary activities, percentage of population in tertiary activities in all districts of West Bengal, has taken as indicators of secondary and tertiary sectors development. All the indicators are positively correlated with each other and the increasing value of each indicator is associated with the better sectoral (secondary and tertiary sectors) development. With the help of these indicators, an attempted has been made to make an index which would show the level of development in the secondary and tertiary sectors across the states of West Bengal. The purpose of the creation of composite index is to

asses the disparity in the level of sectoral development across the states and simultaneously the flow of migration from different states to these various sectors of the West Bengal.

Migration and agricultural development are closely connected. Empirical evidences suggest that rural-rural migration generally occurred from less developed agricultural region to more developed agricultural region due to better wages and work opportunities in the destination area. Rural-rural migration is largely seasonal and stays of workers in most cases, is less than six months. The high rate of growth of productivity and value addition during green revolution period in the agriculture sector has given big push to raise the level of living in the rural economy of Punjab. During the era of early green revolution, the over-all development of rural areas and other sectors of the economy generated huge employment opportunities. The higher wage rate and higher level of living conditions also attracted labour force from other states, which was looking for survival. This has led to increase in the inflows of labour force from other states to both rural and urban locations in Punjab (Kainth, 2003). In order to know the agricultural development across the state certain indicators have taken. These indicators are percentage of net cropped area to total reporting area, cropping intensity, gross irrigated area (in '000 hectare.), total fertilizer consumption (in '000 tonnes). All these indicators are positively correlated with each other. The higher percentage of net cropped area to total reporting area, the more gross irrigated area and consumption of fertilizer will push the agricultural productivity and helps in overall agricultural development. The irrigation facilities and availability of fertilizer consumption increases the cropping intensity and doing so it gives boost to agricultural productivity. So, with the help of these indicators, an index has constructed applying Principal Component Analysis method to know the overall agricultural development across the state of West Bengal. Migration pattern has also observed along the different districts of the state in the context of agricultural development.

Migration and urbanisation are closely linked with each other. Urbanization has been a major driver of internal migration in many countries and has overtaken other factors in many Asian locations. Rates of urbanization influence rural-urban wage differences: an

increase in the demand for labour in urban areas can push up urban wages and increase migration. On the other hand, particularly in the developing countries, in India also, the growth rates in agricultural production and income has been noted to be low, unstable and disparate across regions over the past several decades, resulting in lack of livelihood opportunities in rural areas. A low rate of infrastructural investment in public sector in the period of structural adjustment - necessary for keeping budgetary deficits low – also have affected agriculture adversely (Kundu, 2007). This resulted in the out-migration from several backward rural areas, most of the migrants being absorbed within urban informal economy. Therefore it may be said that the rural-urban migration is related to the rate of urbanisation. Billsborrow and Winegarden(1982) hold that the rate of urbanisation is so powerful that if one disregards the absorptive capacity of cities, the macro-level studies of migration in low income countries are likely to be seriously biased. In the present study the percentage of population to the total population in various districts of West Bengal has taken as indicator of urbanisation across the state of West Bengal.

5.2 List of the Selected Variables:

In this chapter an attempt has been made to correlate migration with those mentioned above variables and for this the correlation matrix has been constructed. The lists of the variables are given below.

(1) Economic Variables

- Per Capita Income(in Rs) at Current Price 1993-94 (X_1)
- Per Capita Domestic District Product (in Rs) at Current Price 1993-94(X_2)

(2) Social Variables

- Percentage of School Enrolment
- Primary school/100 sq.km
- High school/100 sq.km
- No. of hospital beds per 10,0000 population
- No. of hospitals per 10000/PP
- Percentage of Population using adequate sanitation facilities
- Density of surface road per sq.km of Area

(3) Secondary and Tertiary sector Variables

- Number of Registered factory workers/ 10,0000 population
- No. of registered factories per 100 sq.km
- Percentage of population in secondary activities
- Percentage of population in tertiary activities

(4) Agriculture Variables

- Percentage of net cropped area to total reporting area
- Cropping Intensity
- Gross irrigated area (in '000 hectare.)
- Total fertilizer consumption (in '000 tonnes)

Among the above listed variables, there are a lot of variables under the head of social, secondary and tertiary and agriculture variables. Keeping in view, the principle component analysis- a branch of factor analysis-which is a technique to synthesize a large number of variables into a smaller number of general components which retain the maximum amount of descriptive ability, is used in this study. Executing the principle component analysis method the factors or principal components for social, secondary and tertiary and agriculture variables for each districts are tabulated in (Table5.1). These values are used in the correlation matrix as independent variables in the later stage of this study.

Table5.1: The dependent and independent variables at the district level of West Bengal, around 2001.

Districts	Percent in-migrants to the total interstate migrants (Y)	Percent male in to the total interstate male in-migrants(Y1)	Per Capita Income(in Rs) at Current Price 1993-94 (X ₁)	Per Capita DDP(Rs) at Current Price 1993-94 (X ₂)	Agriculture Index** (X ₃)	Index of secondary and tertiary sectors** (X ₄)	Social Index**(X ₅)	Level of Urbanization**(X ₆)
Darjiling	4.03	4.05	10415.9	18529.2	-1.29	0.02	0.25	32.34
Jalpaiguri	5.66	5.43	8830.71	16749.1	-0.62	-0.26	-0.46	17.84
Koch Bihar	1.71	1.27	7779.86	13855.4	-0.08	-0.63	-0.34	9.10
Uttar Dinajpur	2.74	1.74	6778.81	11182.9	0.20	-0.71	-0.62	12.06
Dakshin Dinajpur	0.32	0.28	8866.4	14579.2	-0.09	-0.66	-0.53	13.10
Maldah	2.18	1.19	8339.28	14777.2	-0.13	-0.34	-0.62	7.32
Murshidabad	1.21	0.77	8009.3	13392.4	0.70	-0.19	-0.47	12.49
Birbhum	2.36	1.31	7738.07	12791.7	-0.02	-0.49	-0.32	8.57
Bardhaman	15.73	14.91	11445.1	17538	0.88	-0.02	0.06	36.94
Nadia	1.57	1.57	9606.47	16211.5	0.87	-0.12	0.07	21.27
North Twenty Four Parganas	13.43	14.98	9440.25	14768.3	0.24	0.84	0.08	54.30
Hugli	8.41	9.40	10344.6	16279.7	0.83	0.42	0.22	33.47
Bankura	0.74	0.58	9361.52	15741.6	-0.31	-0.57	-0.35	7.37
Puruliya	4.19	1.18	7905	13044.7	-1.09	-0.49	-0.34	10.07
Medinipur	4.85	2.93	9263.49	15526	1.01	-0.40	-0.26	10.24
Haora	9.12	11.09	10365.6	15591.4	-0.20	1.60	0.25	50.36
Kolkata	19.14	24.33	19896	33299.5	0.00	1.51	3.82	100.00
South Twenty Four Parganas	2.62	3.00	8394.74	13630.2	-0.88	0.48	-0.44	15.73

** Index has been calculated by using the method of Principle Component Analysis.

5.3 Analysis of Correlation Matrix:

Table 5.2: Correlation Matrix Showing Relationship between Dependent Variable (Percent in-migrants to the total interstate migrants) and Different Independent Variables at district level (N=18), around 2001.

	(Y)	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)
(Y)	1						
(X ₁)	.773**	1					
(X ₂)	.692**	.981**	1				
(X ₃)	0.209	0.087	0.009	1			
(X ₄)	.727**	.676**	.590**	0.003	1		
(X ₅)	.733**	.969**	.956**	0.046	.680**	1	
(X ₆)	.882**	.893**	.836**	0.071	.864**	.900**	1

Table **Correlation significant at the .01 level (2- tailed)

Correlation matrix has been executed between the dependant variables i.e. percent in-migrants to the total interstate migrants(Y) and independent variables such as per capita income (in Rs) at current price 1993-94 (X₁), per capita DDP(Rs) at current price 1993-94 (X₂), Agriculture Index (X₃), Index of secondary and tertiary sectors (X₄), Social Index(X₅), Level of Urbanization(X₆). The result shows that the percent in-migrants to the total interstate migrants are positively correlated with all those independent variables and it is also statistically significant. This means that with higher level of income, per capita DDP, higher Index value of secondary and tertiary sectors, , higher social index value and high urbanisation level the districts would show higher percentage of inter-state in-migration. For example, the district Kolkata and its surrounding districts namely Haora, North-24 Parganas, Barddhaman have high per capita income, per capita DDP, higher Index value of secondary and tertiary sectors, higher social index value and high urbanisation level, show higher inter-state in-migration in these districts.

On the other hand it also means that an increase in the unit value of independent variables such as Per Capita Income, Level of Urbanization etc. would also increase the percent in-migrants to the total interstate migrants in the district. The close look at the

correlation matrix also reveals the fact that the correlation of co-efficient, which shows the strength of the relationship, between percent in-migrants to the total interstate migrants and level of urbanisation is highest (0.882) followed by per capita income (in Rs) at current price 1993-94 (0.773), Social Index (0.733), Index of secondary and tertiary sectors (0.727), per capita DDP (Rs) at current price 1993-94 (0.692). Therefore, it may be said that the increasing level of urbanisation, societal development, per capita income, development in secondary and tertiary sector in the districts of West Bengal would increase the percentage of in-migrants to the respective districts from other states. In other way it could be said that, the high level of urbanisation level, high per capita income, high level in the secondary and tertiary sectors etc. at the district level of West Bengal will certainly increase the in-migrants to this state from other states of India.

Table 5.3: Correlation Matrix Showing Relationship between Dependent Variable (Percent male in-migrants to the total interstate male migrants) and Different Independent Variables at district level (N=18), around 2001.

	(Y ₁)	(X ₁)	(X ₂)	(X ₃)	(X ₄)	(X ₅)	(X ₆)
(Y ₁)	1						
(X ₁)	.838**	1					
(X ₂)	.764**	.981**	1				
(X ₃)	0.183	0.087	0.009	1			
(X ₄)	.807**	.676**	.590**	0.003	1		
(X ₅)	.809**	.969**	.956**	0.046	.680**	1	
(X ₆)	.947**	.893**	.836**	0.071	.864**	.900**	1

**Correlation significant at the .01 level (2- tailed)

In the second correlation matrix an attempt has been made to show the relationship between the dependant variables i.e. percent male in-migrants to the total interstate male migrants (Y₁) and independent variables such as per capita income (in Rs) at current price 1993-94 (X₁), per capita DDP(Rs) at current price 1993-94 (X₂), Agriculture Index (X₃), Index of secondary and tertiary sectors (X₄), Social Index(X₅), Level of

Urbanization(X_6). In the correlation matrix female in-migrants has been opted out because females mainly migrated to the state of West Bengal from other states due to marriage purpose. Likewise percentage of total in-migrants, the correlation between percent male in-migrants to the total interstate male migrants and independent variables such as per capita income (in Rs) at current price 1993-94 (X_1), per capita DDP (Rs) at current price 1993-94 (X_2), Index of secondary and tertiary sectors (X_4), Social Index(X_5), Level of Urbanization(X_6) is positive and statistically significant at .01 level. The correlation between percent male in-migrants to the total interstate male migrants and Agriculture Index is positive but statistically not significant.

The correlation matrix also reveals the fact that the correlation of co-efficient between percent male in-migrants to the total interstate male migrants and level of urbanisation is highest (.942) followed by per capita income (in Rs) at current price 1993-94 (.838), Social Index (.809), Index of secondary and tertiary sectors (.807), per capita DDP (Rs) at current price 1993-94 (.764). So it can be said that among the independent variables, the urbanisation is one of the most important variable to attract the migrants from other states.

The correlation matrix presented in Table 5.2 and 5.3 also reveals the fact that, the variables like per capita income, per capita DDP, Index of secondary and tertiary sectors, Social Index and level of urbanisation also are positively correlated and it is statistically significant also. This means the districts which have high per capita and District Domestic Product, show higher level industrial (higher index value of secondary and tertiary sector) and societal (higher index value of social index) development and also higher level of urbanisation. For example, Kolkata and its surrounding districts namely Haora, North-24 Parganas, Hugli shows all the above characteristics that is high per capita, high DDP, higher index value of secondary and tertiary sectors, higher value for social index and higher level of urbanisation level (Appendix Table..). Another important point here is that, the agriculture index is not significantly correlated with dependent and independent variables. It means that the agriculture dominated districts does not show higher per capita income or higher level of societal development. For example, the agriculturally dominated districts like Nadia, Murshidabad, and Medinipur

show low per capita income and show low level of societal development. The percent in-migrants to the total interstate migrants and percent male in-migrants to the total interstate male migrants in those districts were also very low. (Appendix Table 3.4)

5.4 Analysis of the Regression Model:

In the following section to know the how the average value of dependent variables like percent in-migrants to the total interstate migrants and percent male in-migrants to the total interstate male migrants varies with the given value of set of independent variables such as per capita income, index of secondary and tertiary sectors and agriculture index, simple linear regression has been done. It is important to mention here is that, there exists a strong multi-colinearity among the variables such as per capita DDP (Rs) at current price 1993-94, Social Index and Level of Urbanisation. Due to this multi-colinearity problem, these variables are not included in the regression model.

Table 5.4: Regression Model Showing Relationship between Dependent Variable (Percent in-migrants to the total interstate migrants) and Different Independent Variables at district level (N=18), around 2001.

Independent Variables	Standardized Regression Coefficients (Beta)
Per capita income (in Rs) at current price 1993-94 (X1)	0.492**
Agriculture Index(X3)	0.165
Index of secondary and tertiary sectors (X4)	0.393*

** Significant at 5% level

* Significant at 10% level.

R-Square=0.700

Regression analysis has been done by taking the dependent variable percent in-migrants to the total interstate migrants and the independent variables per capita income (in Rs) at current price 1993-94, secondary and tertiary sectors index and agriculture index. The result of regression analysis presented in Table 5.4. It shows that the regression model explains 70 percent (R-square-0.700) of the variance in the dependent variable. Among

the independent variables per capita income (in Rs) at current price 1993-94 and secondary and tertiary sectors are found to have statistically significant effect on percent in-migrants to the total interstate migrants at 5 percent and 10 percent level respectively. The result shows that per capita income (in Rs) at current price 1993-94 has a great positive impact on the percent in-migrants to the total interstate migrants. One unit increase in per capita income would also increase 0.492 units in percent in-migrants to the total interstate migrants. On the other way, it can be said that 100 percent increase in per capita income of any district would increase nearly 50 percent increase in percent in-migrants to the total interstate migrants in that districts. On the other hand, one unit increase in secondary and tertiary sectors index would also increase 0.393 units in-migrants to the total interstate migrants. This means also that 100 percent increase in the index of secondary and tertiary sector indicator of any district would increase about 39.3 percent in-migrants to the total interstate migrants in that districts. The impact of other independent variable i.e. agriculture index on the dependent variable i.e. percent in-migrants to the total interstate migrants has very minimum and the relationship between these two variables is also statistically not significant.

Table 5.5: Regression Model Showing Relationship between Dependent Variable (Percent male in-migrants to the total male interstate migrants) and Different Independent Variables at district level (N=18), around 2001.

Independent Variables	Standardized Regression Coefficients (Beta)
Per capita income (in Rs) at current price 1993-94 (X1)	0.518***
Agriculture Index(X3)	0.136
Index of secondary and tertiary sectors (X4)	0.456***

*** Significant at 1% level

R-Square=0.827

Another regression model has been constructed taking the dependent variable which is defined as percent male in-migrants to the total interstate male migrants and the independent variables per capita income (in Rs) at current price 1993-94, secondary and tertiary sectors and agriculture. Other independent variables namely per capita DDP (Rs)

at current price 1993-94, Social Index and Level of Urbanization has been excluded from this model because of multi-colinearity problem. The result of regression analysis presented in Table 5.5. It shows that the regression model explains 82.7 percent (R-square-0.827) of the variance in the dependent variable and it is more than first model. Among the independent variables per capita income (in Rs) at current price 1993-94 and secondary and tertiary sectors are found to have statistically significant effect on percent in-migrants to the total interstate migrants at both 1 percent level. The result also reveals that per capita income (in Rs) at current price 1993-94 has a greater impact on the percent male in-migrants to the total interstate male migrants. One unit increase in per capita income would also increase 0.518 units in percent male in-migrants to the total interstate male migrants. Therefore, it can be said that 100 percent increase in per capita income of a district would increase 50 percent more interstate male migrants into that district. On the other hand, one unit increase in secondary and tertiary sectors index would also increase 0.456 units in male in-migrants to the total interstate male migrants. That means if there is an increase of 100 percent in the index of secondary and tertiary sector indicator of any district it would increase about 39.3 percent in-migrants to the total interstate migrants into that districts. The impact other independent variable i.e. agriculture index on the percent male in-migrants to the total interstate male migrants is very minimum and it also failed to achieve statistical significance. To see the both regression model it can be inferred that the influence of per capita income on the percent male in-migrants to the total interstate male migrants is more than the percent in-migrants to the total interstate migrants.

Major Findings:

The determining factors of migration such as per capita income, per capita DDP, Index of secondary and tertiary sectors, Social Index and level of urbanisation are positively correlated with percent in-migrants to the total interstate migrants and percent male in-migrants to the total interstate male migrants and it is also statistically significant. This also means that the districts with their high per capita income, high DDP, higher index value of secondary and tertiary sectors, higher value of social index and higher level of urbanisation, also show higher percentage of interstate in-migrants to the total interstate migrants and higher percentage of male in-migrants to the total interstate male migrants. For example districts like Kolkata its surrounding districts namely, Haora, North-24 Parganas, Hugli which have high per capita income , high DDP, higher index value of secondary and tertiary sectors, higher index of social index and higher level of urbanisation level, attracts more interstate in-migrants. The Regression Model is used as explanatory model which explains how the average values of dependent variables i.e. percent in-migrants to the total interstate migrants and percent male in-migrants to the total interstate male migrants varies with the given value of per capita income and index of secondary and tertiary sector and index of agriculture. The result shows that one unit increase in per capita income would also increase 0.492 units in percent in-migrants to the total interstate migrants and 0.518 units in percent male in-migrants to the total interstate male migrants. On the other hand, one unit increase in secondary and tertiary sectors index would also increase 0.393 units in percent in-migrants to the total interstate migrants and 0.456 units in percent male in-migrants to the total interstate male migrants. Whereas, the influence of agriculture on percent in-migrants to the total interstate migrants and percent male in-migrants to the total interstate male migrants, was statistically insignificant.

CHAPTER 6

CONCLUSIONS

CHAPTER 6

CONCLUSIONS

Migration is an integral part of human life. However, the scale, type and implications of migration vary greatly between individuals and societies. Migration determines the size, rate of growth, composition and distribution of population in combination with fertility and mortality and hence the component has significant consideration in Regional Planning. The economically developed region is generally associated with in-migration while relatively less economically developed region is associated with out-migration. On the other hand, generally the flow of migration, particularly Rural-Urban migration, is from rural agrarian society to the industrialised and urbanised society. Thus the flow of migration reflects the socio-economic development and the level of industrialisation and urbanisation of the area of origin as well as of the destination to some extent. Therefore to see the trends and pattern of migration at interstate level in India, one can understand at least the economic disparity that prevailed among the states to some extent. In this study migration trends, patterns, its reason and also the determining factors for in-migration into the state of West Bengal have been discussed at length.

The migration flow to West Bengal from different parts of the Indian continent is an old phenomenon which can be traced back to the beginning of the 19th century when the process of urbanisation began in the areas of Eastern India, based on the Kolkata city. Till, 1961, Kolkata was the sole metropolis city in India. So flow of people from other parts of the country to the study state was a common phenomenon. However, with the passage of time, state experienced sluggish rate of in-migration from other states of the country. The state witnessed a decrease in the proportion of inter-state in-migrants between 1991 and 2001 and it was true for both males and females. The neighbouring states namely Bihar, Uttar Pradesh, Orissa and Assam were the major contributors of inter-state immigrants to West Bengal. The contribution of other states in in-migration to West Bengal was very negligible. In-migration to this state is mainly urban centric. For example, the Rural-Urban migration stream constituted nearly half of the total male migrants whereas, one-fifth migrants came in Urban-Urban stream. On the other hand, more than one-third of female migrants came to urban areas of the study state from rural

areas whereas one-fifth female migrants came from urban areas of other states. Though, it was to be mentioned that, Rural-Rural stream also constituted a sizeable percentage of female migrants. As far as the pattern of out migration was concerned, it showed somewhat different pattern than immigration. A considerable percentage of male migrants went to the distant states namely Maharashtra, Delhi, and Haryana. These three states accounted one-fourth of total male out-migrants to the total out-migrants. On the other hand, most of the females migrated to the neighbouring states namely Bihar, Uttar Pradesh, and Orissa and so on. Although more than five percent of female migrants also migrated to the distant states like Delhi and Maharashtra.

Preference Index which shows the relative attractiveness between West Bengal and other states for migration revealed that, for total in- migrants in West Bengal the most preferred index was from Bihar and the least preferred index was from Karnataka. In case of out-migrants from West Bengal, Delhi occupied the top position with highest score in the preference index while Kerala ranked last in preference index among the major states.

After detailed discussion on the trends and pattern of migration at inter-state level, it also highlighted the reasons for migration to and from West Bengal to other states of India. Out of the total inter-state in-migrants to West Bengal from other states/ union territories, the reason 'Work/ employment' was the dominant one behind the movement of male in-migrants, whereas, the reason 'Marriage' was the most dominant one for female in-migration in both the census years. Though it was important to mention that, male migration for 'Work/ employment' and female in-migration for 'Marriage in the study state, had decreased, between 1991 and 2001. The male migrants stated 'Work/ employment' as main reason for their migration, came from mainly neighbouring states. For example, over 50% of male migrants came to West Bengal for 'Work/ employment' from the states namely Bihar, Uttar Pradesh, Orissa. The proportion of in-migrants stated 'Business' and 'Education' as reason for their migration had also decreased over the decade and it was true for both males and females. Therefore, it was very clear that, West Bengal lost its importance to interstate migrants who earlier came to the state for jobs and other opportunities over the census decades. However, the Rural-Urban stream constituted the higher proportion of male migrants reported as 'Work/ employment' as

main reason followed by Urban-Urban, Rural-Rural and Urban-Rural in both the census years. The higher proportion of females migration for 'Marriage' was observed in Rural-Rural migration stream followed by Rural-Urban, Urban-Urban and Urban-Rural. The proportion of both for male and female migration due to reason of 'Family Moved' and 'Others' has showed an increasing trend.

The reason for out migration from West Bengal to other states has also discussed. The 'Work/Employment' was the main reason for the out migration, especially in case of male migrants. The migration due to purpose of 'Work/Employment' to other states/union territories has increased over the decade. Out of the total male out-migrants, one-fourth of male migrants went to other states because of 'Work/Employment'. The male migrants went not only to the neighbouring states but also to the far distant states for 'Work/Employment'. That's why the increase of percentage points of male out-migrants was observed highest in the state of Maharashtra (26 points) followed by Rajasthan (21 points), Punjab (20 points), Haryana (15 points) and so on. The highest percentage of male migrants reported work/employment as a reason for migration was observed in Rural-Urban stream followed by Urban-Urban, Rural-Rural and Urban-Rural stream in 2001 census. This also meant that from the rural areas of West Bengal, most of the males migrated to the distant states in search of jobs. Not only that, the Rural-Urban stream had also registered highest increase which was 16.85 percentage points, between 1991 and 2001. On the other hand, female marriage migrants from West Bengal were dominant in the neighbouring states like Bihar, Uttar Pradesh, Orissa and Assam. But the percentage of female out-migration for 'Marriage' has decreased, between 1991 and 2001. Out of the total female migrants moved to other states/union territories due to 'Marriage' reason, these four states namely Bihar, Uttar Pradesh together accounted 79.44 percent. The percentage of out-migration from the study state to other states, for the purpose of 'Education' and 'Business', had also declined, between 1991 and 2001, and it was true for both sexes.

The study also enquired about the economic activities of the inter-state in-migrants. It found that there exists a huge gender differential among migrants in respect of work participation rate. The work participation rate was greater among males which reflected

the economic significance of male migration. The work participation rate among the migrants was high in Rural-Urban migration stream followed by Rural-Rural, Urban-Urban and Urban-Rural stream. Though considerable percentage of female work participation had observed in Rural-Rural stream and it had also increased by four percentage points over the decade.

The distribution of migrant workers over the districts has also examined in this study. The urbanised districts had higher proportion of male workers than the less urbanised districts. The proportion of migrants in secondary and tertiary sector was highest in the districts of Kolkata, Haora, Hoogly, North and South 24-Parganas, which were regarded as most industrialised and urbanised one. In the districts of Murshidabad, Nadia, Hoogly and South 24-Parganas a very high percentage of female migrants were engaged in secondary sector. It is noteworthy to mention here that first three districts form the famous weaving belt in the state most of which are household industry. South 24-Parganas, on the other hand reported concentration of feminine industries mostly agro-industries. On other hand, in the districts of Purulia, Uttar Dinajpur, Maldah, Birbhum more or less half of the migrants were engaged in primary activities as agriculture was the mainstay for the people of these districts.

After the detailed discourse about the migration trends, patterns, its reasons, the economic activity of migrants and their distribution over all the districts of West Bengal, at the end this study tried to identify the determining factors for inter-state immigration in view that West Bengal witnessed positive net migration in spite of the decrease of percentage of inter-state in-migrants over the decade. Though migration is very complex and dynamic social aspect and it is very difficult to find out the determining factors, a number of variables affecting migration process have been selected and then correlation and regression model have constructed at district level, to know the effect of the selected variables on migration process. In this study the independent variables that are selected are per capita income, per capita DDP, Agriculture Index, Index of secondary and tertiary sectors, Social Index and level of urbanisation and the dependent variables are percent in-migrants to the total interstate migrants and percent male in-migrants to the total interstate male migrants. The correlation matrix showed that the dependent variables and

all the independent variables except agricultural index are positively correlated with and it is also statistically significant. This also means that the districts with their high per capita income , high DDP, higher index value of secondary and tertiary sectors, higher index value of social index and higher level of urbanisation level, also show higher percentage of interstate in-migrants to the total interstate migrants and higher percentage of male in-migrants to the total interstate male migrants. The study found that the districts like Kolkata and its surrounding districts namely Haora, North-24 Parganas, Hugli which are most urbanised and industrialised districts attracts more interstate in-migrants. Therefore the interstate immigration to the state of West Bengal is closely linked with per capita income, level of industrialisation and urbanisation.

At the end it may be said that development of West Bengal was very much Kolkata-centric. Since British period till date, no important node has emerged in the state. At the same time, the city has reached a saturation level in terms of congestion and associated phenomena. Other parts of the state also remained unattractive for business investment. If West Bengal wants to maintain its attraction towards the migrants, it requires new boost in development.

BIBLIOGRAPHY

BIBLIOGRAPHY

Afsar, R. (2003) "Dynamics of poverty, development and population mobility: the Bangladesh case", Ad Hoc Expert Group Meeting on Migration and Development, organized by the Economic and Social Commission for Asia and the Pacific, Bangkok, 27-29 August.

Bachi, Roberto. (1957), "Statistical Analysis of Geographic Series", *Bulletin de l'Institute internationale de Statistique*, 36, 2, pp. 234-235.

Banerjee, B. (1986). "Rural to Urban Migration and the Urban Labour Market", Himalaya Publishing House, Delhi.

Bal Kumar KC. (2003) "Migration, poverty and development in Nepal Ad Hoc Expert Group Meeting on Migration and Development", Ad Hoc Expert Group Meeting on Migration and Development, organised by the Economic and Social Commission For Asia And The Pacific, Bangkok, 27-29 August.

Bhagat, R.B. (2009), "Internal Migration in India: Are the Underclass More Mobile?" Paper presented in the 26th IUSSP General Population Conference held in Marrakech, Morocco, 27

September- 2 October 2009.

Bhowmik, S. (1984), "Determinants and Consequences of Migration", *Economic and Political Weekly*, Vol. 19, No. 14 (Apr. 7, 1984), pp. 589-590.

Billsborrow, R.E. and C.R. Winegarden (1982), "Interrelationships between demographic and agricultural development: A cross-country econometric exploration". Paper presented at the Annual Meeting of the Population Association of America, 29 April-1 May, San Diego, California.

Bose, A. (1983), "Migration in India: Trends and Policies" in Oberai A.S. (Eds.). *State Policies and Internal Migration - Studies in Market and Planned Economies*, London, Croom Helm.

- Boserup, E. (1965), "The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure", London, Allen and Urwin.
- Bouge, D.J. (1961), "International Migration" in Phillip M. Hausen and Otis Dudley Duncan (Eds.). *The Study of Population*, New Delhi: Asia Publishing House, pp-486.
- Bryceson, D.F. (1999) "Sub-Saharan Africa Betwixt and Between: Rural Livelihood Practices and Policies", ASC Working Paper 43/1999, De-Agrarianisation and Rural Employment Network, Afrika-Studiecentrum, University of Leiden.
- Census of India (1991): Migration Tables, D-Series Tables, Office of the Registrar General and Census Commission, New Delhi.
- Census of India (2001): Migration Tables, D-Series Tables, Office of the Registrar General and Census Commission, New Delhi.
- Chakravarty, B. (1997). "The Census and the NSS Data on Internal Migration", in Ashish Bose, Davendra B. Gupta, and Gaurisankar Raychaudhuri (eds.), *Population Statistics in India*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Clark, J.I. (1966), "Population Geography". Pergamon Press London, pp. 123.
- Connell, J., Dasgupta, B., Laishley, R. and Lipton, M. (1976). "Migration Rural Areas: The Evidence from Village Studies". Oxford University Press, Delhi
- Das Gupta, Biplab and Lishley, R. (1975). "Migration from Villages", *Economic and Political weekly*, 10, 1652-1662.
- Datta, Pranati. (1985), "Inter-state Migration in India". *Margin*, October, 69-82.
- David, M. Heer. (1978), "Society and Population", Prentice Hall of India, New Delhi, pp-97.
- Davis, K. (1974), "The Migration of Human Population", *Scientific American*, Vol. 231, No. 3, pp. 92-105.

Deshingkar, P., and D. Start (2003), "Seasonal Migration For Livelihoods, Coping, Accumulation And Exclusion", Working Paper No. 220, Overseas Development Institute, London.

Eastwood, R. and Lipton, M. (2000), "Rural–urban dimensions of inequality change". Working Paper 200. Helsinki: World Institute for Development Economics Research.

Giri,P.(1998), "Urbanisation in West Bengal, 1951-1991," *Economic and Political Weekly*, Vol. 33, No. 47/48, pp. 3033- 3035+3037-3038.

Glantz,F.B. (1975), "The Determinants of the Inter metropolitan Migration of the Poor", *The Annals of Regional Science*, 9(2), pp-25-39.

Government of West Bengal, (2002-03): Applied Economics and Statistics of West Bengal,Kolkata.

Gupta,T.R. (1961), "Rural Family Status and Migration: A Study of Punjab Village", *The Economic Weekly*, XIII(4).

Guest P. (2003), "Bridging the Gap: Internal Migration in Asia, Population Council Thailand", paper prepared for Conference on African Migration in Comparative Perspective, Johannesburg, South Africa, 4–7 June.

Hoselitz, B. (1957) "Urbanisation and Economic Growth in Asia", *Economic Development and Cultural Change*, Vol. 6, No 1.

Hugo, G., (1985). "Circulation in west Java, Indonesia", in R. M. Prothero and M. Chapman (eds), *Circulation in Third World Countries*. Routledge and Kegan Paul, Boston.

IFAD (International Fund for Agricultural Development) (2001). *Rural Poverty Report 2001: The Challenge of Ending Rural Poverty*. Oxford: Oxford University Press.

Karan, A. (2003), "Changing Patterns of migration from rural Bihar" pp 102-139 in Iyer, G. (2003) (ed.) *Migrant Labour and Human Rights in India*, New Delhi: Kanishka Publishers.

- Kabeer N. (2000), "The Power to Choose, Bangladeshi Women and Labour Market Decisions in London and Dhaka", London and New York Verso Press.
- Kadi,A.S. and Sivamurthy,M. (1988), "Interstate Migration in India, 1971-81", *Cnadian Studies in Population*, vol.15, No.1.
- Kundu, A. and Gupta,S(1996), "Migration,Urabanisation and Regional Inequality", '*Economic and Political Weekly*', #31(52),Dec.
- Kundu, A. (2007) "Proceedings of Dr C. Chandrasekaran Memorial Lecture on Migration and Exclusionary Urban Growth in India", IIPS Newsletter, Vol. 48, Number 3&4, pp. 5-23.
- Lall, Somik V., Harris Selod and Zmarak Shalizi (2006), "Rural-Urban Migration in Developing Countries: A Survey OF Theoretical Predictions and Empirical Findings." Development Research Group. The World Bank.
- Lee,S.E.(1966), "A Theory of Migration", *Demography*, Vol. 3, No. 1, pp. 47-57.
- Lipton, M. (1980), "Migration form Rural Areas of Poor Countries: The Impact on Rural Productivity and Income Distribution", *World Development*, Vol.8, No.1, pp.1-24.
- Long,L.H. (1961). "Migration Differentials by Education and Occupation, Trends and Variations", *Demography* 10.
- Lusome, R. and R.B.Bhagat (2006), "Trends and Patterns of Internal Migration in India (1971-2001)", paper presented in IASP Conference, Thiruvananthapuram, June, 2006.
- Majumdar,P.K.(1993), "A Sfrom study of Net Migration in West Bengal from Various States in India: 1971-81" in Ray.B.(eds.), *West Bengal Today: A Fresh Look*, Mittal Publications, New Delhi.
- Mahto, Kailash (1984), "Population Mobility and Economic Development in Eastern India", Inter India Publications, New Delhi.

Mehta, G.S. (1991), "Characteristics and Economic Implication of Migration", *Journal of Rural Development*, Vol. 10(6).

Mitra, Arup and Mayumi Murayama (2008), "Rural to Urban Migration: A District Level Analysis for India", IDE Discussion Paper No. 137, Institute of Economic Development, New Delhi.

Mahmood, Aslam (2008), *Statistical Methods in Geographical Studies*, Rajesh Publication, New Delhi, India.

Mukherji S. (2001) "Low Quality Migration In India: The Phenomena Of Distressed Migration And Acute Urban Decay", paper presented at the 24th Iussp Conference, Salvador, Brazil, August.

Multilingual Demographic Dictionary. (1958), *Population Studies*, No.29, United Nations, Department of Economic and Social Affairs, New York.

Neetha, N. (2004), "Making of Female Breadwinners: Migration and Social Networking of Women domestics in Delhi", *Economic and Political Weekly*, Vol. 39, No. 17, April 24, 2004, p.-1681-1688.

Papola, T. S. (1981) *Urban Informal Sector in Developing Economy*, Vikas, New Delhi

Premi, M.K.(1980), "Aspects of Female Migration in India", *Economic and Political Weekly*, Vol. 15, No. 15 (Apr. 12, 1980).

Premi, M.K.(1984), "Internal Migration in India, 1961-81", *Social Action*, 34(3), pp. 274-285.

Premi, M. K. (1990), "India". In Charles B. Nam, William J. Serow, and David F. Sly (eds.), *International Handbook on Internal Migration*. New York: Greenwood Press.

Rao, M.S.A.(1959), "The Migration to City", *Yojana*, XVIII(20).

Rele, J.R. (1969). "Trends and Significance of Internal migration in India", *Sanhya: The Indian Journal of Statistics, Series B*, Vol.31, No.3/4, pp-501-550.

- Ravenstein, E.W. (1889), "The laws of Migration", *Journal of the Statistical Society of London*, Vol.-52, No.-2, p.-288.
- Samsuddin, S. Dara (1981), "Aspects of Migration Rural areas to Industrial Urban Centres of Bangladesh" in Mandal,R.B.(eds.), *Frontiers in Migration Analysis*, New Delhi, Concept Publishing Co.
- Sarkar,B.N. (1978), " Development, Migration and Work Participation", *Demography India*, vol.xii. No.1 and 2, pp 211-232.
- Shanthi, K. (2006), "Female Labour Migration in India: Insight form NSS data", working paper 4/2006, Madrash School of Economics, Chennai.
- Soni,N.K (1985), " Dimensions of Migration in India", *Journal of Labour Economics*, vol.xxvii. No.3, pp 146-170
- Stark, O. and Taylor, J. E. (1989), "Relative deprivation and international migration", *Demography*, 26 pp. 1-14.
- Stark, O. and Taylor, J. E. (1991), "Migration incentives, Migration types: The role of relative deprivation", *The Economic Journal*, 101: 1163-1178.
- Stark, O. and Yitzhaki, S. (1988). "Labour migration as a response to relative deprivation", *Journal of Population Economics*, 1: 57-70. Stata Corp, 1997.
- Singh, D.P.(1990), "Interstate Migration in India: A Comparative Study of Age-Sex Pattern" *Journal of Social Work*, 51(4),pp. 679-702.
- Singh, D.P. (1998), "Internal Migration in India: 1961-1991" *Demography India* 27(1), pp.245-261.
- Singh, S.N and Yadava, K.N.S. (1974), "A Study of Pattern of the Rural-Urban Migration", *Demography India*, 3,278-286.
- Sivamurthy,M and Kadi,A.S (1983), " Inter-state migration in India: 1961-71", *Demography India*, vol.xii.2,pp 239-258.

Srivastava, R. and S. Bhattacharyya (2003) "Globalisation, reforms and internal labour mobility: analysis of recent Indian trends", *Labour and Development* (special issue on migration) Vol 9 No 2 December pp 31–55.

Srivastava, R. and Sasikumar, S. K. (2003), "An overview of migration in India, its impacts and key issues", Migration, Development and Pro-poor Policy Choices in Asia, Regional Conference, Refugee and Migratory Movements Research Unit/DFID, Dhaka, Bangladesh.

Stouffer, S. (1940), "Intervening Opportunities; A theory relating to mobility and distance", *American Sociological Review*, 5, pp. 298-305.

Todaro, M. (1969), "A Model of Labour Migration and Urban Unemployment in Less Developed Countries", *American Economic Review*, LIX-1, pp 138-48.

Thomas, Dorothy. (1941), "Social and Economic Aspect of Swedish Population Movements", 1750-1933, *Co. New York*, chap.7.

Thomlinson, R. (1962), "The Determination of a Base Population for Computing Migration Rates", *The Milbank Memorial Fund Quarterly*, Vol. 40, No. 3 (Jul., 1962), pp. 356-366.

Williamson, J.G. (1988), "Migration and Urbanisation" In H. Chenery and T.N.Srinivasan eds. *Handbook of Development Economics*, Vol.I, North-Holland: Elsevier Science Publishers, B.V.

Visaria, P. (1980), "The Level and Pattern of Economic Activity by Migration Streams in India", *Demography India*, vol.9. No.1 and 2, pp 1-14.

Wolpert, J. (1970), "Behavioural Aspect of the Decision to Migrate", in G.J.Demko, et al., op.cit., pp.298-305

Yadava, K.N.S. (1989) "Rural to Urban Migration in India: Determinants, Patterns and Consequences", Independence Publishing House, Delhi.

Zablan, A.I.E.(1983), "Determinants and Consequences of Migration, Philippines" in

Acre, W.F.and Alvares, G.V.(eds.), Population Change in South-East Asia, Institute of South-East Asian Studies.

Zachariah, K.C(1959), "Migration to Greater Bombay, 1941-51", *The Indian Journal of Social Work*, XX(III), p.45.

Zelinsky, W. (1971), "The Hypothesis of the Mobility Transition" *Geographic Review*, 61(2), pp. 219-49.

Zipf, G.K. (1946) "The P¹P²/D Hypothesis: On the intercity movement of persons", *American Sociological Review*, II (DEC, 1946), p.677-86.

APPENDICES

Table3.1: Number of in-migrants, out-migrants and net migrants in the state of West Bengal, 2001.

States	In-migrants	Out-migrants	Net migrants
Jammu & Kashmir	5,999	5,595	404
Himachal Pradesh	2,055	7,070	-5,015
Punjab	21,966	44,983	-23,017
Chandigargh	1,690	9,639	-7,949
Uttranchal	6,526	19,801	-13,275
Haryana	14,876	56,250	-41,374
Delhi	17,617	1,71,904	-1,54,287
Rajasthan	60,963	45,505	15,458
Uttar Pradesh	2,98,356	1,44,411	1,53,945
Bihar	11,23,729	1,29,655	9,94,074
Sikkim	5,108	25,326	-20,218
Arunachal Pradesh	1,297	7,734	-6,437
Nagaland	1,713	3,673	-1,960
Manipur	1,947	703	1,244
Mizoram	440	751	-311
Tripura	15,705	4,457	11,248
Meghalaya	5,611	5,357	254
Assam	1,45,242	81,654	63,588
Jharkhand	4,41,058	3,45,693	95,365
Orissa	1,58,486	1,40,860	17,626
Chhatisgargh	14,482	45,592	-31,110
Madhya Pradesh	15,293	703	14,590
Gujarat	20,262	40,262	-20,000
Daman & Diu	51	1,790	-1,739
Dadra & Nagar Haveli	45	1,215	-1,170
Maharashtra	21,830	2,09,044	-1,87,214
Andhra Pradesh	26,024	29,815	-3,791
Karnataka	5,810	31,248	-25,438
Goa	566	3,272	-2,706
Lakshadweep	11	139	-128
Kerala	10,509	5,309	5,200
Tamil Nadu	10,666	12,108	-1,442
Pondicherry	146	1,075	-929
A & N Islands	1,083	18,461	-17,378
TOTAL	24,57,162	16,51,054	8,06,108

Table3.2. Share of Out-Migrants by different states to the total inter-state out-migration from West Bengal, 2001.

States	Total	Male	Female
Punjab	2.72	3.48	2.12
Haryana	3.41	4.52	2.52
Delhi	10.41	13.30	8.11
Rajasthan	2.76	3.56	2.11
Uttar Pradesh**	9.95	7.08	12.24
Bihar*	28.79	15.78	39.16
Assam	4.95	4.77	5.09
Orissa	8.53	7.80	9.12
Madhya Pradesh***	2.80	3.24	2.46
Gujarat	2.44	3.40	1.67
Maharashtra	12.66	18.91	7.67
Andhra Pradesh	1.81	2.19	1.50
Karnataka	1.89	2.82	1.15
Kerala	0.32	0.45	0.22
Tamil Nadu	0.73	0.97	0.54

Table3.3. Share of Out-Migrants by different states to the total inter-state out-migration from West Bengal, 1991.

States	Total	Male	Female
Andra Pradesh	2.13	2.68	1.79
Assam	7.97	9.50	7.03
Bihar	36.76	23.44	44.98
Delhi	7.11	9.99	5.33
Gujarat	1.98	2.91	1.40
Haryana	1.12	1.33	0.99
Maharashtra	6.06	8.91	4.31
Madhya Pradesh	6.22	8.74	4.66
Orissa	11.23	11.51	11.05
Punjab	1.61	1.70	1.56
Rajasthan	1.90	2.50	1.54
Tamil Nadu	0.89	1.18	0.72
Tripura	0.50	0.66	0.40
Uttar Pradesh	9.35	7.51	10.48
Kerala	0.33	0.48	0.24
Karnataka	0.89	1.27	0.65

Table3.4: The Percentage share of Inter-state In-migrants by different districts of West Bengal, 2001.

Districts	Total	Male	Female
Darjiling	4.03	4.05	4.01
Jalpaiguri	5.66	5.43	5.94
Koch Bihar	1.71	1.27	2.23
Uttar Dinajpur	2.74	1.74	3.92
Dakshin Dinajpur	0.32	0.28	0.37
Maldah	2.18	1.19	3.36
Murshidabad	1.21	0.77	1.74
Birbhum	2.36	1.31	3.60
Barddhaman	15.73	14.91	16.70
Nadia	1.57	1.57	1.57
North Twenty Four Parganas	13.43	14.98	11.59
Hugli	8.41	9.40	7.23
Bankura	0.74	0.58	0.93
Puruliya	4.19	1.18	7.74
Medinipur	4.85	2.93	7.11
Haora	9.12	11.09	6.79
Kolkata	19.14	24.33	13.00
South Twenty Four Parganas	2.62	3.00	2.18

Table5.1: Social Indicators

Districts	School Enrolment	Primary school/100 sq.km	High school/100 sq.km	No.of hospital beds per 10,000 population	No.of hospitals per 10000/PP	Population using adequate sanitation facilities	Density of surface road per sq.km of Area	Social Index
Darjiling	70.1	37.85	5.59	151	0.74	28.4	45	0.25
Jalpaiguri	51.9	31.59	4.54	39	0.29	17.7	33	-0.46
Koch Bihar	58.8	53.44	6.7	60	0.44	8.6	31	-0.34
Uttar Dinajpur	49.6	44.71	4.55	30	0.17	9.3	28	-0.62
Dakshin Dinajpur	46.2	59.08	7.53	54	0.27	11	35	-0.53
Maldah	41.5	53.28	8.06	35	0.27	10.6	36	-0.62
Murshidabad	49.8	58.21	8.64	48	0.27	13.5	45	-0.47
Birbhum	57.5	54.74	8.54	75	0.3	13.9	50	-0.32
Barddhaman	60.8	55.38	12.23	100	0.56	32.4	50	0.06
Nadia	64.1	67.61	10.67	113	0.56	25.4	67	0.07

North Twenty Four Parganas	69.6	103.1	28.48	29	0.23	39.4	129	0.08
Hugli	66.4	95.05	19.21	73	0.59	32.7	150	0.22
Bankura	60.6	49.83	5.73	87	0.28	10	23	-0.35
Puruliya	54.1	46.94	4.41	89	0.47	8.1	26	-0.34
Medinipur	70.7	68.33	8.1	48	0.35	9.1	33	-0.26
Haora	68.5	149.69	35.24	80	0.54	29.4	114	0.25
Kolkata	72.3	783.78	423.24	434	1.75	75.2	843	3.82
South Twenty Four Parganas	63	37.46	6.69	22	0.22	11.3	48	-0.44

Total Variance Explained

Component	Initial Eigenvalues		
	Total	Percentage of Variance Explained	Cumulative Percentage
1	5.82	83.141	83.141
2	0.81	11.578	94.719
3	0.196	2.797	97.515
4	0.146	2.088	99.604
5	0.021	0.303	99.906
6	0.004	0.063	99.969
7	0.002	0.031	100

Extraction Method: Principal Component Analysis.

Component Matrix

	Component
	1
School Enrolment	.552
Primary school/100 sq.km	.971
High school/100 sq.km	.967
No.of hospitals per 10000/PP	.961
No.of hospital beds per 10,0000 population	.959
Population using adequate sanitation facilities	.916
Density of surface road per sq.km of Area	.977

Extraction Method: Principal Component Analysis.

Table5.2: Secondary and Tertiary Sector Indicators

Districs	Number of Registered factory workers/ 100000 PP	No.of registered factories per 100 sq.km	Percentage of pop.in secondary activities	Percentage of population in tertiary sector	Index of Secondary and Tertiary Sector
Darjiling	784.07	8.35	13.70	49.32	0.02
Jalpaiguri	776.41	7.32	13.56	32.48	-0.26
Koch Bihar	41.79	0.83	12.02	22.28	-0.63
Uttar Dinajpur	107.18	1.44	10.14	19.61	-0.71
Dakshin Dinajpur	107.11	1.31	11.37	21.07	-0.66
Maldah	46.35	0.99	23.92	20.99	-0.34
Murshidabad	70.14	0.56	30.20	19.81	-0.19
Birbhum	177.32	3.21	14.84	24.80	-0.49
Barddhaman	1204.81	11.18	18.96	33.03	-0.02
Nadia	309.22	4.46	25.03	28.72	-0.12
North Twenty Four Parganas	2504.53	79.14	27.92	47.43	0.84
Hugli	2001.87	17.43	27.59	34.93	0.42
Bankura	204.59	2.15	13.66	21.43	-0.57
Puruliya	192.82	1.1	15.36	23.57	-0.49
Medinipur	333.99	1.75	16.40	25.88	-0.4
Haora	3732.91	175.94	44.53	41.38	1.6
Kolkata	399.81	515.14	24.36	74.50	1.51
South Twenty Four Parganas	2504.53	25.39	25.20	35.56	0.48

Total Variance Explained

Component	Initial Eigenvalues		
	Total	Percentage of Variance Explained	Cumulative Percentage
1	2.445	61.125	61.125
2	1.123	28.063	89.187
3	0.346	8.643	97.83
4	0.087	2.17	100

Extraction Method: Principal Component Analysis.

Component Matrix

	Component	
	1	2
Number of Registered factory workers/ 100000 PP	.728	.590
No.of registered factories per 100 sq.km	.782	-.567
Percentage of pop.in secondary activities	.767	.506
Percentage of population in tertiary activities	.845	-.444

Extraction Method: Principal Component Analysis.

Table5.3: Agricultural Indicators

Districts	Percentage of net cropped area to total reporting area	Cropping Intensity	Gross irrigated area(in '000 hect.)	Total fertilizer consumption(in '000 tonnes0	Agricultural Index
Darjiling	45.00	120	15.44	32.2	-1.29
Jalpaiguri	58.92	151	99.89	53.8	-0.62
Koch Bihar	81.49	184	63.64	58	-0.08
Uttar Dinajpur	87.21	188	157.65	62.4	0.20
Dakshin Dinajpur	86.41	157	114.87	58.3	-0.09
Maldah	60.13	199	277.01	43.3	-0.13
Murshidabad	76.33	225	539.77	51.7	0.70
Birbhum	76.33	167	209.59	64.6	-0.02
Barddhaman	71.01	185	593.86	118.1	0.88
Nadia	67.66	278	526.15	51.1	0.87
North Twenty Four Parganas	71.69	209	266.97	63.7	0.24
Hugli	72.35	230	413.84	102.3	0.83
Bankura	55.71	141	411.07	54.5	-0.31

Puruliya	53.88	106	50.74	47	-1.09
Medinipur	64.95	166	633.15	162.8	1.01
Haora	58.92	209	129.3	57.9	-0.20
South Twenty Four Parganas	39.52	157	67.07	63.1	-0.88

Total Variance Explained

Component	Initial Eigenvalues		
	Total	Percentage of Variance Explained	Cumulative Percentage
1	2.071	51.768	51.768
2	1.044	26.102	77.87
3	0.678	16.94	94.81
4	0.208	5.19	100

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component	
	1	2
Cropping Intensity	.717	.486
percentage of net cropped area to total reporting area	.571	.578
Gross irrigated area(in '000 hect.)	.874	-.288
Total fertilizer consumption(in '000 tonnes0	.683	-.626

Extraction Method: Principal Component Analysis.

