# An Economic Analysis of Education and Employment led Migration from North- Eastern States to various other States of India

Dissertation submitted in partial fulfilment of the requirements for the award of the degree of Master of Philosophy in Economics of the Jawaharlal Nehru University

> Pinak Sarkar MPhil Programme in Applied Economics 2010-2012



CENTRE FOR DEVELOPMENT STUDIES
June, 2012

I hereby affirm that the work for this dissertation, "An Economic Analysis of Education and Employment led Migration from North-Eastern states to various other states of India", being submitted as a part of the requirements of the M.Phil. Programme in Applied Economics of the Jawaharlal Nehru University, was carried out entirely by myself. I also affirm that it was not part of any other programme of the study and has not been submitted to any other University for the award of any Degree.

June 30, 2012

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Certified that this study is the bona fide work of Pinak Sarkar carried out under our supervision at the Centre for Development Studies.

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# Dedicated to God who strengthens me. My parents-

Sri. Satya Lal Sarkar and Smt. Sefali Sarkar and my sisters Poulami and Priyanka.

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All errors and omissions are mine.

-Pinak Sarkar

#### Abstract of the Dissertation

An economic analysis of education and employment led migration from Northeastern states to various other states of India

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Migration is assuming greater significance with the emerging development dynamics and its ensuing implications. The Census 2001 shows that the internal migration in India has gained impetus and is intensifying rather rapidly. Although migration is due to varied reasons, this study primarily focuses on youth migration, which mainly comprises of education and employment led mobility and examines the sustainability potential of education-linked migration with that of employment linked ones, where, by sustainability it is meant the continuation of a migrant's stay at a place. The study highlights the student migration to the four destination states of Delhi, Maharashtra, Karnataka and West-Bengal from North-Eastern states in particular and makes an attempt to contrast the durational aspect of such mobility with the other lower income states. The first set consists of the eight north-eastern peripheral states of Arunachal Pradesh, Assam, Mizoram, Manipur, Meghalaya, Nagaland, Tripura and Sikkim; these states have varied geographical and cultural features from the rest of India. The second set comprises of eight lower income states in the Indian mainland which includes Uttaranchal, Jharkhand, Bihar, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Rajasthan and Orissa.

This study mainly addresses the two facets of sustainability, i.e., to identify the likelihood of greater duration of stay at the destination by the probabilistic approach and to examine the retained stock of migrants with accumulated duration of stay to measure dominance at each duration group with the distributional approach. It is found that in the case of education led migration, the observed duration or dominance is higher but the propensity to go up to the higher duration is slower. On the contrary, in the case of employment led migration the dominance at each group is lesser but propensity to go up is higher. The study also addresses the issues of education-employment divide in migration in relation to developmental disparity in general and imbalance in educational infrastructure in particular which is observed across Indian states.

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#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Overview

The term migration refers to movement of people from one place to another. It is a process which takes place both domestically and internationally<sup>1</sup>. Huge mobility of people was witnessed not only in the present times but as early as 5<sup>th</sup> century B.C, when the Buddhist monks started traveling for propagating knowledge and religion.

The purpose for which people usually migrate cannot be captured under a singular dimension. It varies depending on the conditions under which migration takes place thus, differs across population and region. Migration can be seen as a process of mobility for achieving the goals of livelihood improvement, and the extent to which households succeed in achieving these goals depends on the destination and selectivity of migration (Hein de Haas 2009).

In present times, some of the determining reasons for migration in India are marriage, employment, business and education. According to Census 2001, marriage as a reason of migration, constituted for about 43.1 million (43.8 per cent) of total migrants in India, followed by employment 14.4 million (14.7 per cent), education 2.9 million (3 per cent) and business 1.1 million (1.2 per cent). Hence excluding marriage as a reason for migration, education and employment attains the dominant share in migration. These two reasons are gaining much intensity in the recent times and thus we need to analyze

In the case of domestic migration, the mobility occurs within the national boundary. Whereas, for international migration the mobility occurs among countries, i.e., crossing the national boundary.

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the two groups who have migrated due to education and employment. The migration for education and employment mainly occurs among the country's youth who move out to pursue higher education and attain better employment opportunities at destinations which are better-off places in terms of economic well-being and infrastructures than the place of origin.

Prior to engaging in the motivation and background of the study, precise discussion has been made on the two reason specific migration.

# 1.2 An Overview of Reasons for Migration

# 1.2.1 Migration for Education

It is evident from the earlier studies on education related migration (e.g., Bogue 1969; Long 1973; Connell 1976) and recent studies in the Indian context that education is a major migration facilitating factor (Zachariah and Rajan 2001). Usually there occurs two types of education related migration, viz. students migrate to attain higher education and skills within the national boundary (inter-state/domestic) and crossing the national boundary, i.e., moving out of the country usually to the developed world such as United States, United Kingdom, Australia etc. Indian students accounted for 4 percent of all foreign students enrolled in tertiary educations in the OECD<sup>2</sup> countries in 2001<sup>3</sup>. According to the Census Report, 2001, the total number of people migrated within the national boundary for education purpose was 2, 915, 189; which is around 3 percent of the total internal migrants in India.

<sup>&</sup>lt;sup>2</sup> The Organization for Economic Co-operation and Development comprises of Twenty- three countries, namely, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Argentina, Brazil and Chile.

<sup>&</sup>lt;sup>3</sup> Policy Brief of OECD, August (2004).

## 1.2.2 Migration for employment

Historically human beings have been mobile searching for better economic opportunities. This has to do with the fact that better employment opportunities exist in other countries or some regions within the concerned country's boundary. From early ages people migrated to earn a living and to improve their livelihood. Migration for employment can be seen as a process which tends to be a livelihood strategy by social groups or households in reaction to relative deprivation, (Quinn, 2006; Stark and Taylor, 1989). According to Census, D-series data<sup>4</sup>, 2001, the all India employment related domestic migration is accounted for around 14.4 million, i.e., 14.7 per cent of the total internal migration in India. This is also the second most dominant reason for migration, next to marriage.

# 1.3 Background of the Study

#### 1.3.1 Motivation

As migration is much more complex and dynamic phenomenon than what it is understood in simple sense of the term, it is not possible to focus on every aspect of it. There occurs both in-migration and out-migration in each and every part of the country and among each section of the society for various reason specific purposes. The motivation of this study is to explore the sustainability<sup>5</sup> of migrants from the Northeastern states at the place of destination through the durational analysis. The focus is on youth migrants who mainly comprise of the educational and employment related migrants.

<sup>&</sup>lt;sup>4</sup> Indian Census, in its 'D-series' provides migration data.

<sup>&</sup>lt;sup>5</sup> Though, the meaning of the term 'Sustainability' might have different connotations. In this study it is exclusively used to describe the continuation or longevity of a migrant's stay at a destination.

The reason behind choosing North-eastern states is the higher likelihood among the migrants of these states to migrate for the purpose of education and employment compared to the rest of the Indian states. This is discussed in details in chapter three of the study. In addition, very few studies exists on migration and other related issues in the North-east.

People migrating for various purposes, tend to sustain at the place of destination for a certain period of time. Whereas, in this study, by sustaining means continuation of a migrant's stay at a place of destination. Some of the migration process sustains for short duration whereas certain groups of migrants settle for relatively longer duration, and also some other groups tend to settle permanently. Sustaining at a place of destination depends upon the choices made by migrants. To begin with, in the case of education led migration, students after completing their education may enter the job market and continue to stay in the place of destination for longer period, some may even settle permanently. Whereas, there are also students who may choose to move out of the destination as soon as they complete their education resulting in return migration or migration to a new destination for better opportunity for further education or employment. Such difference of choices also happens for employment category. Some migrants may choose to settle down at the place of employment, where as some may move out after some years of work experience to some other state, or may even return to their origin states. The dearth of literature in the Indian context limits the information on the durational aspect of migration.

Before getting into the details of the study, it becomes interesting to get an idea about the various features of the north-eastern states and the factors which make them unique among all the Indian states.

## 1.3.2 Geography and Population of North-Eastern States

The North-Eastern region of India consists of eight states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. These states are connected with the rest of India's mainland with a corridor popular as the "Chickenneck" or "Siliguri Corridor" which is a slight piece of land, only about 21 kilometers wide in parts. This connects the north-eastern states with the "mainland" India, the term extensively used in the literature.

According to Census 2011, the total population of the region was 45.5 million, covering a geographical area of 262,179 square kilometers. The north-east region is relatively sparsely populated compared to other states of India. Further, there exists a huge disparity in the population density of north-east states. Assam and Tripura are the most densely populated states with over 350 people per square kilometer while, Arunachal Pradesh is the least densely populated with 17 people per square kilometer (Census, 2011). Over 64 percent of the land area is forested, ranging from over 80 percent in Mizoram and Arunachal Pradesh to 35-45 percent in Assam and Sikkim. Jhum cultivation (Shifting cultivation) is widely practiced in the hills and a steadily shrinking jhum cycle has resulted in degradation with a growing area of abandoned jhum fields, and soil erosion.

## 1.3.3 Economic Development

In the North-Eastern States, the urbanization is well below national average, except in Mizoram. Compared to the rest of India the population of the north-east is predominantly rural. The region is facing persistent economic backwardness. The main reason for binding constraint on the development of the region and economic activities are the role played by the five I's, *viz.* initial conditions, infrastructural deficiency, insurgency, imperfection in factor and product market, and indifferent governance

(Sarma, 2006, as cited in Singh, 2009). Agriculture plays an important role in determining poverty levels in the North-eastern states and it remains the major economic activity.



Figure-1.1 Map of North-Eastern states

In most of India's rapidly growing states, the share of the agricultural sector is in relative decline when compared to the growing service and manufacturing sectors with growth accelerating. But, in the case of the North-eastern states, agriculture remains the backbone of the economy with Jhumming (shifting cultivation) mostly practiced in these

hills states which is leading to a decline in the productivity of soil. There is very little evidence of economic diversification in these states (Sachdeva 2006).

In the absence of requisite economic development, the educated youth find it difficult to get employed, as a result a considerable proportion of educated people move out of the region in search of employment.

#### 1.3.4 Educational Infrastructure

Focusing on the educational infrastructure of the eight north-eastern states, there exists only 12 Universities, with 500 arts, science and commerce colleges, 6 engineering colleges, 10 medical and 16 poly-technique colleges which is very limited when compared to 17,000 colleges and 330 Universities<sup>6</sup> at the national level. In terms of budget allocation, the north-eastern region allocates more than half of their budget for primary education, secondary receives one-third to one-fourth of the budget expenditure. In five out of eight states higher education receives budget allocation of less than the national average. Technical Education receives the lowest percentage of 1.25 per cent, which is also lower than the national average of 2.64 per cent. The alarming feature is that technical education receives the lowest percentage of the total budget, which is also lower than the national average.

Lack of infrastructure and employment opportunity in the land motivates the native people to migrate to other states and cities where they get better opportunity of employment. On the other hand, the students migrate to attain higher education in several fields such as management, engineering, medical, research, etc.

<sup>&</sup>lt;sup>6</sup> For further detail, please check (www.ugc.in).

Table-1.1: Literacy Scenario in North-Eastern States

NE States	Total	Male	Female
Mizoram	91.6	93.7	89.4
Tripura	87.8	92.2	83.1
Sikkim	82.2	87.3	76.4
Nagaland	80.1	83.3	76.7
Manipur	79.8	86.5	73.2
Meghalaya	75.5	77.2	73.8
Assam	73.2	78.8	67.3
Arunachal Pradesh	67.0	73.7	59.6
India	74.0	82.1	65.5

Source: Census 2011

# 1.3.5 Trend in students' migration from North-Eastern States

The trend in student migration from the North-Eastern states has witnessed a high rise in recent years. The number of students who migrated from the North-Eastern region increased to about 30 thousands in 2001 from about 26 thousands in 1991 and about 18 thousands in 1981, (Census, 1981, 1991 and 2001). According to the Assam Chronicle Report (2011), the migration of students from North-East India to other cities has increased to about 57 thousands in 2009.

It is also evident from the literature that the most preferred destinations for the students are developed or rapidly developing cities like Delhi, Bangalore, Mumbai, Hyderabad etc. Delhi receives the maximum flow 18.45 percent of total student migrants from North-eastern regions; followed by Maharashtra 16.17 percent, West-Bengal, 15.84 percent and Karnataka, 15.12 percent respectively, (Census, 2001).

## 1.3.6 Problems specific to youth mobility from the North-Eastern states

Youth migration is a common phenomenon in the country. But, it becomes important to study the youth mobility of north-east states in particular because there are specific

issues relating to the trend of migration from these states which are different from the other states.

To begin with, the pattern of education and employment led migration faced by the North-eastern region is completely different from the one taking place in rest of the country. It is characterized as one-way, i.e., from the periphery<sup>7</sup> to the core. In the case of student migration, unlike other states, majority of the students do not return to their respective state/region after completing their education. Rather prefer to settle down in the place of destinations due to lack of employment opportunity at the place of origin. According to the report provided by the North-Eastern Career Center, only 5 percent of the migrated students return to their respective home state which creates "Backwash Effect<sup>8</sup>" of migration in the region; as a result, the region is deserted of its young talent pool. The reason for this "Backwash-Effect" is the lack of economic activity and hence the lack of employment opportunity in the regions other than agriculture. As a result young people are forced to move out of the region to take up employment in some other part of the country. Thus, the absence of quality educational infrastructure, job opportunity and the loss of the young talent pool in the region are reducing the possibility of socioeconomic development in the North-East. This similar phenomenon is also witnessed to some extent in other lower income and politically unrest states like Chhattisgarh, Jharkhand, Jammu & Kashmir, etc. But in case of North-Eastern states the effect is much more severe because of its already existing economic backwardness. Whereas, the migration pattern, especially for students in rest of the Indian states is more or less a "two-way" process, i.e., there is both in-flow and out-flow of students. States witnessing this "two-way" phenomenon are progressing continuously like Tamil-Nadu, West-Bengal, Maharashtra, Karnataka, Andhra-Pradesh etc. For example, as young people move out of Karnataka or Delhi for education and employment purposes, these states

<sup>&</sup>lt;sup>7</sup> Periphery is the term used extensively in the literature, to refer the North-Eastern (rontie) states.

<sup>&</sup>lt;sup>8</sup> The cumulative movements or out-migration which tends to economically weaken a region can be understood as backwash effect of migration. This may happen due to continuous movement or out-flow of labour and youth population, while deserting the talent pool of a region.

does not lose anything, as there is also a large inflow of youths from other states to these states for education and employment purposes. Therefore, the city or state does not bear the backwash-effect of migration.

In case of north-eastern students, distance would be a greater constraint, but with the improvement in transportation facilities and considerable reduction in travel costs in the recent years, distance is no more seen as a constraint to student migration.

The other important aspect of north-eastern migration which cannot be ignored is that students from the north-eastern regions migrate to a totally new cultural environment which is not always easy to adjust, additionally; there are also instances where students have to face discrimination in the metropolitan cities. According to the North-East Support Centre report (2011), the students from north-eastern India face racial discrimination in Delhi.

#### 1.3.7 Factors facilitating the process of migration

There may be several factors that facilitate migration from the region, such as employment opportunity and educational infrastructure as discussed earlier. However, there might be other factors also not so widely in the literature in Indian context.

One of such factors could be the in-job-placement facility, provided by majority of the educational institutes in the metropolitan cities. Conversely the North-eastern region lacks such educational facilities. As a result students may want to avoid investing in education in the region in the absence of job placement on completion of their education. Thus, a risk aversion tendency might influence them to migrate to cities where they can fetch jobs post education or training.

The other factor could be "Network-Effect", i.e., once a critical number of migrants have settled at the destination, migration becomes self-perpetuating because it creates the social structure to sustain it, (Castles and Miller, 2003). The social network actually

reduces the cost of migration in terms of information and other benefits such as getting into an educational institution.

## 1.4 Background of the Research Problem

In the context of north-eastern youth mobility, it is found from the above discussion that the factors which are determining migration from the region are essentially very different from the rest of India. The north-eastern states are lying as a set of neglected peripheral states which are essentially backward. Industrially the region continues to be the most lagging when compared to the rest of India (Dev et al, 2008). The lack of higher educational and employment opportunities along with the continuous political instability, and infiltration have deprived the native people of economic well-being, thus, boosting out-migration among the youth population to the developed regions (push-factors). On the other hand, the availability of higher education facility and employment opportunity in the metropolitans' cities draws people from these states, (pull-factors).

Most of the literature informs about the economic backwardness, political unrest, lack of educational infrastructure and the boost in mobility in the recent years from the North-east (Lama 2006; Singh, 2007; Shimray and Devi 2009). These literatures do not provide much information on the durational stay of these migrants at the various destinations. As the youths from the North-eastern states migrate to a totally new cultural environment travelling thousands of kilometers. It becomes interesting to investigate the durational aspect of youth migration at the place of destination.

#### 1.5 Research Hypothesis

Does duration of a migrant's stay is conditional upon the stated reason for migration, in this case, education and employment.

To investigate the above framed hypothesis, the following set of objectives has been framed.

#### 1.6 Objective of the Study

- Specifically highlight the special feature of the education and employment led migration from the north-eastern states.
  - -Comparing the education-employment divide of the Indian states.
- To analyze whether there exist any differential in sustainability of migrants at the place of destination between those migrating for education vs. those migrating for employment.
- 3. Analyze the same, for examining the difference in pattern between the Northeastern states and other lower income states in India.
- 4. To analyze the migration cohorts by the states of origin.

# 1.7 Data source and Methodology

# 1.7.1 Secondary Source of data

In India, migrants are not required to register either at the place of origin or at the place of destination. In the absence of this information, Census and National Sample Survey Organization (NSSO) are two main sources of data on internal migration in the country.

In this study we use Census 2001, in the absence of Census 2011 data on migration, and NSSO 64<sup>th</sup> round to get the migration trend of students from various North-Eastern states to other cities. Both Census and NSS captures the student mobility; the Census data of D3 and D5 series provides records of student mobility on place of last residence and place of destination which provides detailed information on state-wise student mobility. Such information is useful for understanding the sending states with maximum out-flux of students and also the states which receive maximum number of education and employment led migrants from the North-east. The Census also informs about the capability level of migrants in terms of educational status of migrants.

The data on educational infrastructure is provided by MHRD, Department of Higher Education 2010, and the Abstract of Selected Educational Statistics 2004-05.

## 1.7.2 Methodology

The methodology used in this study are simple statistical methods such as Probabilities for calculating "Progression", the Percentages, Shares and the "Odds-Ratio" to calculate the likelihood of an event occurring. The odds ratios is a widely used descriptive statistic which indicates the measure of effect size and the likelihood of an event occurring.

The odds ratios are mainly used in the chapter three, to study the likelihood pattern of education and employment related out-migration among the Indian states using the NSSO data. In the fourth chapter, the analysis is based on simple calculations of probabilities and percentages to calculate the stock of migrants at each duration groups. The fifth and sixth chapters deals with the analysis on the dominance of migrant's stock at each destinations and the cohort groups mainly based on simple calculations of shares and percentages using the Census data.

### 1.8 Chapter Scheme

The study has been organized into seven chapters. The first chapter discusses the importance and scope for studying the migration issues in the north-eastern states of India. It also includes the objectives for the present study.

Chapter two focuses on different literature revolving in and around the theoretical frameworks and migration issues. Various frameworks have been discussed just to provide a general understanding.

Chapter three simply provides a background which motivates research in northeastern region for having higher education and employment led out migration among the Indian states, and inquiring the prevailing inequality in education in the region.

Chapter four examines the issue of sustainability of reason specific migrants at the place of destinations from two approaches-probabilistic and distributional approaches, and compares this sustainability quotient with the other lower income states.

The fifth chapter attempts to rank the four destination states to assess higher sustainability by employing the distributional approach.

Chapter six investigates the capability and skill level of migrants from the northeastern states and analyses the cohorts of reason specific migrations at the place of destination.

The Seventh Chapter summarizes and concludes the present study, thereby providing scope for further research.

#### **CHAPTER TWO**

# REVIEW OF LITERATURE AND ANALYTICAL FRAMEWORK

#### 2.1 Introduction

Debates around migration and its different forms can be found in volumes. The present chapter has attempted to discuss studies mainly focusing in education and employment related migration. The chapter is organized into two sections. The first section reviews the existing literature relevant for this study. This is further classified into four sections, namely, 2.2.1 Literature on Theoretical Perspective, 2.2.2 Literature on Infrastructural and Educational Constraints in North-East, 2.2.3 Literature on Student mobility and its impact on the origin state, and 2.2.4 Literature on "Network-Effect". The second section deals with Analytical framework. The purpose of this section is to view the existing theories which are extensively used in the migration studies, both in the international and Indian context in general and North-eastern states in particular.

# 2.1.1 Literature on Migration Issues

# 2.1.2 Literature on Theoretical Perspective

Shrestha (1988) argued that there are five types of modeling approaches that can be used to study migration behavior of community or individuals namely-economic/behavioral models that premised on the utility maximization, i.e., migrants always seek better economic opportunities and they usually migrate to a place where they get better facilities; eco-demographic "push" models, where people migrate due to excessive population pressure and reduction in wages; spatial attraction model, i.e., "pull" factors, which enables moving to a location which provides better

employment and economic well-being; anthrosociological models, emphasizing on the importance of group networks which draws migrants from backward to advanced regions with the help of connection or network effect of friends and relatives who migrate; and Neo- Marxist dependency models that views uneven development and the articulation of pre-capitalist with capitalist models of production as the root cause of migration. All these five models have shaped migration studies since Ravenstein's influential 1885 article, "The Laws of Migrations".

Beine and Noel (2011) arguing on the human capital perspective, discussed the two migration models which explains the flow of students to developed countries. First, they discussed the "School-constraint model", according to which students migrate due to lack of educational facilities in the home country, so they move to a place for acquiring human capital and then prefer to return home to reap the benefits of higher returns to education. Secondly, they stressed on "Migration Model", where students migrate to places for education and prefer to work there because of higher returns on education at the place of destination rather than coming back to the place of origin where the returns on higher education are less. Thus, their main argument is that, in the "School-Constraint Model" increase in returns from education in the home country pushes more students to migrate, as there is incentive to come back home with higher education and skills because of higher returns at home. Therefore, if the quality and the quantity of educational institutions at home are increased then the flow of students who migrate to obtain education from outside will decrease in the "School-Constraint model". On the contrary, in the "Migration Model" the outflow of student will still increase. This study was done on the basis of student mobility data from 125 countries to the United States.

Dzvimbo (2003) argues that there are two main determinants of migration namely, "push" and "pull" factors. Discussing the "Pull" factors he argues that they are mostly economic in nature and therefore, it leads to a gravitational centre which allows undirected migration flow from the under-developed regions. On the other

hand, the push factors mainly related to lack of educational attainments and lack of employment opportunities. He mainly focuses on the African migration and argues that in the case of South-Africa, in addition to "push" and "pull" factors there exist among the people, dissatisfaction with the political situation. All this subsequently leads to a loss of confidence in the government's ability to improve living conditions, especially in a situation when violence appears to play an additional important role. While discussing the economic reasons as the main motive to move abroad for skilled personnel from Africa, he argues that, the establishment of a subsidiary of an international company, or the relocation of plants, pushes skilled workers abroad especially in the developed worlds where IT companies relocate certain skilled categories to countries such as India. He has also pointed out that, "Wage Differentials" is another important element which motivates migration.

# 2.1.3 Review of Literature on Infrastructural and Educational Constraints in North-East

Sachdeva (2006) argued that it the case of North-Eastern region; the economic and social development is always neglected. His proposition is that the central government should take special care for the development of the North-east, with the help of adequate allocation of funds and massive development assistance. To quote him, "the socio and economic development of the North-eastern region falls within the premise of absolute neglect".

Shimray and Devi (2009) studies that the decades 1990s and 2000s has witnessed an increasing flow of students from the North-eastern states to cities like Bangalore, Mumbai, Kolkata, Delhi etc, and he argued that, the pattern of migration is mainly dominated by education and employment. This pattern of student mobility reflects the lack of education and employment opportunity in the region. The reason he gives for such education related migration is that, on the one hand the literacy rate has increased on the other hand there are lack of avenues for higher education. He also

argues that it is natural to expect that people move to those areas wherein employment opportunities are higher. Migrants from north-eastern regions categorically fall within the factor of the decision triggered by "push-pull' factor particularly for higher education and employment. He further argued that inappropriate economic policy framework has created an unbalanced economy in which destroyed the basic aspects of the market economy. Therefore, the failure of economic strategy for the north-eastern region in India can be attributed to appropriate policy, rather than mere economic neglect.

Baruah (2006) argued that, a large number of young people after completing college/university education are unable to create any vocations for themselves in the North-Eastern regions. At the best, they can only manage to get employed in readymade jobs which are also very few in numbers. The overall trends in higher education opportunities in the north-eastern region are very limited, as a result students finds it extremely difficult to get suitable employment after completing their education. She argues that facilities provided in the universities and colleges vary widely in the institutions of higher education in the region. Some are offering resources whose relevance and utility are constantly questioned. Therefore, she further argues that, "content-up gradation exercise" should be undertaken to catch up with the developments elsewhere in the world. She stated that, though the enrollment in higher education especially in humanities and social sciences is high, it cannot be considered as a positive indicator of development. A deeper analysis in her study reveals that the options at the secondary stage education are very limited.

Chyrmang (2010) argued that a large number of students migrate from the northeastern regions of India to other states to pursue higher studies due to various reasons like lack of infrastructure and absence of competitive environment even though the enrollment ratio in the elementary school and literacy rate in the Northeastern region are better than the national average. Students after completing their schooling intend to pursue professional and technical courses such as management and engineering. However, lack of such institutions and limited seats limits the interested students finds who in turn prefer to move to cities like Delhi, Bangaluru, Chennai, Hyderabad, etc. On completion, some of them may come back; but most prefer to remain in the same destination enabling them to opt for better employment opportunities.

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Dev et al, (2008) argued that, the region lacks private sector and non-governmental business establishments. According to their study, due to socio-political crisis in the region, the private sector companies do not bear the risk of investing in North-east. The region has considerable amount of unexploited and untapped natural resource potential, industrially the region continues to be the most back-ward when compared to the rest of India. The main causes of backwardness and under development in the region as pointed out by them is the result of factors such as poor governance, lack of infrastructural development, inadequate supply of electricity, violence and extortion, etc.

Chandra (2007) after studying the student mobility from the north-eastern states to the metropolitan centers in India, concludes that, Delhi is the most favored destination for North-Eastern students aiming to study basic sciences, humanities and commerce; on the other hand Bangalore is the most preferred destination for students who wish to pursue higher education in the technical and professional courses such as management and engineering, etc.

Lama (2006) has pointed out that the North-eastern states have high development potential because of its natural resources. But, the natural and human resource development of the region has been very limited due to prolonged negligence of the development process. He argued that over the years, the region has been deprived of institutional and overall development infrastructure. As a consequence, these regions continue to lag behind other Indian states in terms of some critical economic indicators such as per capita income. Throughout the north-eastern states the employment generation has been basically in the field of agriculture alone, pushing the skilled work force to migrate for employment.

Maithani (2006) has commented that, "North-East India is a development ostrich which has feathers but cannot or does not want to fly". He argued that, the north-eastern region has remained isolated physically, economically and socially resisting change and participation in the main stream development process; partially some of its own features and circumstances in the region are responsible. Thus, claiming that, the forces of globalization are particularly strong and intrusive and even with its weak integration in national economy the north-east region cannot avoid getting swept by the ties of globalization.

#### 2.1.4 Literature on Student mobility and its impact on the origin state

Singh (2007) argued that students who score good marks and acquire higher ranks in the 10<sup>th</sup> and 12<sup>th</sup> standards, tend to compulsorily moved outside the region for the pursuance of professional courses in higher education, thus, deserting the origin state of its bright young minds. He further argued that, the students who wish to acquire good and in-depth knowledge of education need to migrate. The parents according to their convenience send children for further studies to different parts of India and the world irrespective of their economic conditions. This phenomenon in the recent years seems to have become the sole responsibility of parents.

Premi et al (1983) found that there are tendency for people to migrate to the areas of new industrial development and with high per capita income. Ray (1998) argued that the main inducement for migration is better economic opportunities. Whereas, Kothari (1980) believed that educated people tend to move into towns because they develop distaste for traditional work in the village. Zachariah and Rajan (2002), on the other hand, observes education as a major migrating facilitating factor.

Winters et al. (2003) showed that the migrants themselves and the receiving countries derive the most benefits while leaving the sending countries worse off. On the same line, Kapur and Mc Hale (2005) argues that high-skill migration strips the

sending countries of their national builders- the very people needed in developing countries to build a productive society.

Mendola (2006) examines the empirical research on migration-development nexus. In his paper which is based on theoretical review, the author finds labour migration, especially from rural areas in low-income countries as a pervasive feature of economic development. After studying the rural out-migration and its impact on economic development at the place of origin, he argued that due to lack of appropriate data it is difficult to understand the multi- faceted migration pattern. Hereby, pointing the necessity for the need of better data on remittances and their use. He also pointed the importance of the family chain and networks effect, migration histories, return migration and the use of lifecycle data for understanding the migration-development nexus, but again pointed out on the need of such data which are in most cases unavailable. After a brief review of the existing literature the author pointed that most often, the migrants seems to belong to spatially extended families and communities that played a crucial role in helping the social and economic development in their home countries.

This motivates further research aiming at a better understanding of the migrationdevelopment nexus, both when migrants intend to go back home and when they deepen their integration in the host country.

Khadria (2008), argued, that the highly skilled Indians to the developed countries have not only migrated through "employment gate", but also through the "academic gate". Whereas, Saxenian (2000), argued that, migrants studied and worked abroad return to their home country brings not only technical skills but also managerial and institutional know-how to formerly peripheral regions. Stark (2004) argued that the prospect of emigration to a developed country induces investment in the sending country leading to "Brain-Gain".



#### 2.1.5 Literature on "Network- Effect"

Winters et al (2001) analyze whether there are any strong or weak ties which serve similar or dissimilar functions in aiding migration. They tested the factors such as family networks which provide informational or other advantages to the migrants. The main argument was that, the family networks are proved to be much more useful than the public knowledge; thus, it was tested by controlling for the impact of individual, household and community characteristics on the probability to migrate. The study mainly focuses on the migration trend from Mexico to the United States; they examined the effects of family and community social networks on the propensity to migrate. Their findings indicated a catalytic role for locational ties, supporting the idea that once established at the community level, migration becomes a widely available rather than an exclusively confined option.

Lucas (1997) argues that migrants prefer places of destination where they are better connected, i.e., a place with higher network effect.

Mendola (2006) argues that family chains and network- effects plays a very important role in the growth of migration and also in determining the pattern for it. His main argument is that the literature on these issues is limited because of lack of data.

Straubhaar (2001) argued that, network between people of the same home country is based on common culture and origin, a common language, or a common historical background. According to this theory, only the first migrant has to pay the full migration costs, whereas, for every following migrant, they receive the benefit from the experiences of those who are already living there. The theory of network effect accordingly points out that, the cost of migration decreases with the increase in the stock of migrants already living in the receiving country. This includes, advantages regarding information, finding a job, and having a social environment. As a result, "the material and psychological costs of migration are reduced; this in turn leads to an increased migration".

## 2.2 Research Gap

After reviewing the above mentioned literature, it becomes clear that the issues relating to youth migration from the North-eastern states is a very fertile ground for research. The reason behind calling it a fertile-ground is that, there are few studies done to highlight the patter of migration from North-Eastern regions, especially, the youth mobility in particular. Most of the existing literature on these lines mainly deals with the out-flux of student from the region and the growing trend of it; but the existing literature overlooks the durational pattern of migrant's stay and the emerging cohort groups at the place of destination.

## 2.3 Analytical Framework

There are various theories which can be applied in the context of this study, however, the "Push-Pull" framework is found to be the most appropriate. The other theories discussed are the theory of "Network effect" in migration, Migration System theory, Rational choice theory, Theory of migration under Uncertainty, Backwash effect theory and Human Capital theory etc. All these theories are discussed in the subsequent paragraphs in the context of the study, and will also help to explore the objectives critically.

To begin the discussion, the main reason for out-migration from the North-eastern region is the lack of infrastructural facilities and educational facilities, which "push" the young generation to move out of the region to a destination which provides better educational facilities and opportunity in term of employment which works as an agent of "pull" from the cities.

#### 2.3.1 Pull-Push Framework

The "Push-Pull framework" was used as early as 1958 by Petersen, but it is attributed to Lee (1966) as cited in Cited from Hein de Haas (2008), even though he did not apparently invent or employ the term himself. Lee (1966) argued that the decision to migrate is determined by the following factors: factors associated with the area of origin; factors associated with the area of destination; and personal factors. According to Lee (1966), "migration tends to take place with in a well defined 'streams', from specific places at the origin to the specific places at the destination, not only because opportunities tend to be highly localized but also because the flow of knowledge back from destination facilitated the passage for latter migrants". This argument of Lee (1966), implicitly explains the role of social network or network effect in migration.

Arguing on these lines, the north-eastern student mobility can be well placed and explained with the help of "Push-Pull" framework.

## i. Push factors for the North-East student migrants

Lack of educational infrastructure with limited choice of courses, and lack of job opportunities after education in North-East India are a major Push-factor for migration of students to various other cities and overseas. Professional schools are lacking, the region as a whole is backward in technical and other professional studies, medical education in the North-East India is highly inadequate and more importantly after completing a course, a student does not get any job- placements opportunities unlike in mega cities like Delhi, Chennai, Bangalore, Hyderabad, etc.

#### ii. Pull factors for the North-East student migration

Metropolitan centers like Bangalore, Delhi, Chennai, Kolkata, etc, attract students from North-East India because of strong educational infrastructure which provides students with wide range of choices in different streams. Moreover, students after completing education get employment opportunity in the city. Thus, good

employment opportunity and economic development of a region always attracts migrants.

The main factors which accelerate this process of "Push" and "Pull" are the "jobplacement" facilities in the educational institutions of metropolitan cities. Secondly, the student may want to averse the risk of not getting a job in their region, and as a result they choose to study at a place where they will get employed without much difficulty. The other factor which also facilitates such mobility in the region is the opportunity provided in the form of network effect or social capital.

Due to the strong "Push" and "Pull" factors working in the north-eastern region, the region gets deserted of its young talented population leading to "backwash-effect" of migration.

#### 2.3.2 Backwash Effect

Huge out flow of youth from the North-eastern states creates "Backwash Effect" of migration in origin states. Most of the students who migrate from these states do not return to their origin states after completing their education. They prefer to settle down in the destination states; thus, the loss to origin states is severe as it loses its talent pool. As a result, this region faces the problem of lack of technical experts and professionals undermining the development process.

#### 2.3.3 Theory of Network Effect and Social Capital

The "theory of network effect" in migration, mainly points out that, the cost of migration is decreasing with the stock of migrants already living in the receiving country. The reason for this is the so called the network effect. A network between

<sup>&</sup>lt;sup>1</sup> Only 5 percent of the migrated students return to the home states, (Assam Chronicle, "Student out flux from North East India", Report 2011).

people of the same home country is based on common culture and origin, a common language, or their historical background, (Straubhaar, 2001). According to this theory, only the first migrant has to pay the full migration costs, every following migrant benefit from the experiences of those who are already living there. This includes, advantages regarding information, finding a job, and having a social environment. Thus, the material and psychological costs of migration are reduced; this in turn leads to an increased migration. A social connection to someone with migrant experience at a particular destination represents an important resource that can be utilized to facilitate movement. Social capital is the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of institutional relationship, mutual acquaintance and recognition. Such network increases the likelihood of migration by reducing cost and risk, Bouriou and Wacquent 1992, as citied in Chyrmang, 2010).

Network theory is also closely linked to another approach known as the "Migration System theory", which is also very much relevant in the context of North-East student mobility. The fundamental assumption of this theory is that migration alters the social, cultural, economic, and institutional conditions at both the sending and receiving ends.

#### 2.3.4 Migration System Theory

Mabogunje (1970) was the founder of migration system theory, he defined migration system as a set of places linked by flows and counter flows of people, goods, services, and information, which tend to facilitate further including migration between places. In this theory, he focused on the information flow and feedback mechanisms, through which the information about the migrants' reception and progress at the destination is transmitted back to the place of origin. In the case of out-migration from the north-eastern states, such feedback mechanisms could

encourage further migration and lead to situations of almost organized flows of people from particular villages to particular cities.

## 2.3.5 Rational Choice Theory

The absence of job opportunity in the NER and prevailing backwardness does not provide any incentive for the migrated students to return, because as rational individuals the migrated students want to settle in a destination where they can earn higher wages at work, after completing their education. In this context, an individual migrant is seen as a rational being who wishes to get educated in a place where his education will earn him/ her higher returns.

Every individual desires to maximize his or her income and earnings. Therefore, people migrate to places where they get higher wages. Employment scopes differ between place of origin and place of destination. Migration can take place to a region which has better educational and earning opportunities.

#### 2.3.6 Theory of migration under uncertainty and risk

The migration under uncertainty theory also vey much fits in the case of student migration from North-eastern states. In this case, it can be assumed that, students may feel that it is worth investing in education in a destination where, the student will have less risk, i.e. return for education is higher. On the other hand it is quite risky for a student to invest in education in the north-east region, where there are risks or higher possibility for not getting suitable employment. Therefore, it can be argued that uncertainty of expected return from education mobilizes student migration to a destination where there is certainty of higher returns from education. It may also lead to continuation of residence in a place for longer period of time.

#### 2.3.7 Human Capital Theory

The theory of human capital stresses that, investment in human capital through training and education will make men more capable and productive. Investment in education, increases returns to education and contributes to economic growth, Scultz (1961). According to this theory education is considered as an investment which influences future earnings and employment. There are many ways to invest in human capital; some of them include investment in schooling, on-the-job training, medical care and acquiring information about the economic system (Becker, 1962).

Similarly, if the present value of the future income is greater than the cost of migration, student will move to a country yielding the highest net present value, (Beine and Noel, 2011). Students' location decisions are not independent but are taken sequentially; first, the educational location and then the working location.

#### 2.4 Summary

This chapter has elaborated upon the various theoretical models which influence the migration research all over the world. An attempt is made to briefly discuss the literature which is relevant in the context of this study. After a critical review of the existing literature it is found that, though the studies in the Indian context and also in the context of North-eastern states youth mobility for both education and employment purposes is flooded with the information on mobility trend. Most of the studies on internal migration have established the existence of causes and consequences of migration. There is hardly any study done to examine the durational aspects of migrant's stay at the place of destination.

The second section discusses the various analytical frame-works which can be used to study international migration dynamics in India. Thus, reflecting the "Pull-Push" Frame-work as one of the appropriate theoretical frame work in this study.

#### **CHAPTER THREE**

# TRENDS AND PATTERNSOF REASON SPECIFIC OUT-MIGRATION FROM THE NORTH-EASTERN STATES

#### 3.1 Introduction

In India, after excluding marriage (43.8 per cent), employment and education are the main driving reasons for a person to migrate, with employment (14.7 per cent) and education (3 per cent) of the total internal migration in India, (Census, 2001). These two reason specific migration can be both voluntary and non-voluntary, it is voluntary when people choose to move out for acquiring higher education and employment opportunity. Whereas, non-voluntary when migration is driven out of poverty, political unrest, lack of higher educational and employment opportunity. The motivation in this chapter is to examine the state-wise out-flow of these two reason specific mobility.

This chapter makes an attempt towards statistically exploring the patters and likelihood of education and employment led migration across the 28 Indian states. Additionally it also intends to examine the pattern of the North-eastern states particularly in comparison to that of the other states. This will also provide a ground for studying the sustainability issue of the North-eastern migrants at the place of destination in the next chapter.

The chapter is organized in the line of discussing the dominant age group at which migration takes place, and the states where the likelihood of out-migration for education and employment is highest. This is followed by a corresponding attempt to identify the inter-state educational inequality which can be studied in relation to the education-employment divide among the states. Such a divide will inform about the distribution, i.e., the share of education and employment led migration by aggregating both as 100.

### 3.2 Dominant age group for migration in India

The age distribution of the migrants especially the out-migration to other states, informs about the dominant age group at which people usually migrate. To get a better validity of the result, the data chosen for the analysis is restricted to the male category; the female category has not been considered because of the fact that marriage is the most dominant reason for migration.

To access the dominant migration age group, the odds ratios are calculated for age distribution of migrants, odds-ratio are simply the ratio of odds; in general they refer to the likelihood of an event occurring in one group versus another. It is found that for the distribution between 15 to 29 years range the odds ratios are quite higher than the "All-Age" group which is 1. The dominance of migration at this age group implies that the young people are more migratory, and the people who belong to this category are mainly dominated by the education and employment related migration. With further detailed look into the dominance migratory age, it is found that the odds ratios are highest for the 20 to 24 years age category, which is generally the age group at which students migrate for acquiring higher education after completing their schooling.

The argument which can be developed in line of such observation is that, people prefer to migrate at a younger age, i.e., between 15 to 29 years of age for higher education and employment purposes. Studies in the Context of United states (see Guo, 2009) and (Pandit, 1997; Long, 1992 and Lee, 1966) also reveals that youth have higher migration rates than other age groups.

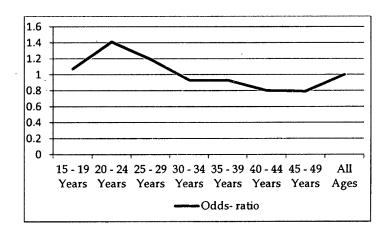
The migration for acquiring higher education can be viewed as a rational choice by the migrants, as investments in higher education brings higher returns on entering job markets. Such educational investments can also be viewed as risk-aversion strategy adopted by the migrants, i.e., investing in higher education at a place where returns are guaranteed, and thus migration. Whereas, there are people who migrate with the purpose of directly entering the job market, these include unskilled/illiterate, semi-skilled and high-skilled migrants with varying wage earning capability.

Table -3.1: Distribution (per 1000) of Male Out-Migration from both Urban and Rural Areas

Age	Migrants	Odds- ratio
15 - 19 Years	455	1.07
20 - 24 Years	523	1.41
25 - 29 Years	481	1.19
30 - 34 Years	432	0.93
35 - 39 Years	421	0.93
40 - 44 Years	384	0.80
45 - 49 Years	380	0.79
All Ages	438	1.00

Source: Author's calculation from NSSO 64th round

Graph-3.1: Distribution (per 1000) of Male Out-Migration from both Urban and Rural Areas



## 3.3 Likelihood of education-employment in-migration and out-migration across states

The purpose of both these reason specific migration group as discussed above is for economic well-being. This section explores the flow of reason specific mobility to view the states where the likelihood of migration for education and employment are highest. It also further creates opportunity to investigate the issue of education-employment divide across the states in India, and also to find out whether such divide is in accordance with all the Indian states or whether, differentiated pattern are emerging for different states.

Before getting into the issue of education-employment divide, it will be useful to take a look at the out-flow pattern of the Indian states and compare the likelihood of education and employment linked migration across the states. To begin with, the odds ratios are calculated for both the groups, i.e., employment and education led migration.

The odds ratios are widely used descriptive statistic which indicates the measure of effect size and the likelihood of an event occurring. The odds are first calculated and then divided by the national average to get the state wise effect size of each of the categories. The odds ratios for India (the national average) for both the group of migrants is 1, because odds for all the Indian states are divided against the odd of India category (taken as the reference category) to derive the odds ratio. Next the odd ratio for all the states in each group is compared with the odds ratio of India which is 1. This clearly distinguishes the states which fall below or above the all India level.

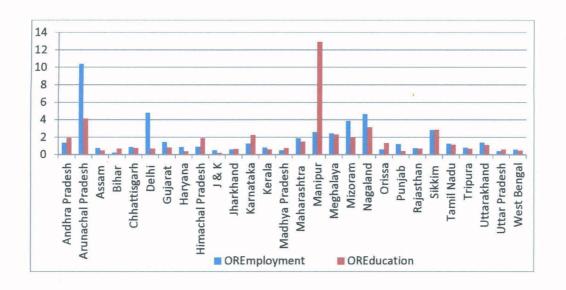
At first, the mobility is captured for total in-migration and out-migration for education and employment led migration, for both male and female from both urban and rural areas in India. It is observed that specifically for the north-eastern states the odds are considerably higher than 1, for education and employment led migration. This indicates a high likelihood of mobility among the six out of eight north-eastern states, i.e., Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Sikkim.

Table-3.2: Total Migration (Male + Female/ Urban + Rural/ In- Migration + Out-Migration)

States	Odds	ratio	States	Odds	ratio
	Employment	Education		Employment	Education
Andhra Pradesh	1.37	1.92	Maharashtra	1.90	1.47
Arunachal Pradesh	10.39	4.12	Manipur	2.60	12.91
Assam	0.76	0.49	Meghalaya	2.43	2.32
Bihar	0.22	0.70	Mizoram	3.88	1.96
Chhattisgarh	0.87	0.75	Nagaland	4.65	3.16
Delhi	4.79	0.70	Orissa	0.61	1.34
Gujarat	1.46	0.79	Punjab	1.22	0.41
Haryana	0.86	0.37	Rajasthan	0.77	0.70
Himachal Pradesh	0.92	1.87	Sikkim	2.84	2.87
J&K	0.52	0.20	Tamil Nadu	1.26	1.17
Jharkhand	0.59	0.66	Tripura	0.82	0.70
Karnataka	1.26	2.28	Uttarakhand	1.40	1.13
Kerala	0.79	0.58	Uttar Pradesh	0.41	0.58
Madhya- Pradesh	0.51	0.75	West Bengal	0.60	0.49
India	1.00	1.00	India	1.00	1.00

Source: Author's calculation from NSSO 64th round

Graph-3.2: Total Migration (Male + Female/ Urban + Rural/ In- Migration + Out-Migration)



## 3.4 Likelihood of education-employment out-migration across states

For a better understanding, the same analysis is done and the odds ratios are again calculated excluding the in-migration, as the study mainly focuses on the out-migration of reason specific migrants. It is observed that, like the previous section, here too, the likelihood of education and employment led migration are much higher for the north-eastern states.

Table-3.3: Distribution Per (1000) of out-Migration (Male+ Female/ Urban+ Rural)

States	Employm	ent	Educa	tion
	Per 1000	Odds Ratio	Per 1000	Odds ratio
Andhra Pradesh	241	0.81	138	2.88
Arunachal Pradesh	607	2.04	219	4.56
Assam	477	1.60	13	0.27
Bihar	565	1.90	25	0.52
Chhattisgarh	296	0.99	39	0.81
Delhi	37	. 0.12	4	0.08
Gujarat	177	0.59	47	0.98
Haryana	110	0.37	25	0.52
Himachal Pradesh	300	1.01	74	1.54
Jammu and Kashmir	298	1.00	6	0.13
Jharkhand	576	1.93	117	2.44
Karnataka	304	1.02	63	1.31
Kerala	328	1.10	42	0.88
Madhya- Pradesh	181	0.61	47	0.98
Maharashtra	221	0.74	53	1.10
Manipur	629	2.11	206	4.29
Meghalaya	486	1.63	398	8.29
Mizoram	592	1.99	152	3.17
Nagaland	401	1.35	154	3.21
Orissa	. 447	1.50	49	1.02
Punjab	229	0.77	.40	0.83
Rajasthan	245	0.82	38	0.79
Sikkim	270	0.91	298	6.21
Tamil Nadu	447	1.50	67	1.40
Tripura	494	1.66	61	1.27
Uttarakhand	380	1.28	46	0.96
Uttar Pradesh	318	1.07	27	0.56
West- Bengal	252	0.85	13	0.27
India	298	1.00	48	1.00

Source: Author's calculation from NSSO 64th round

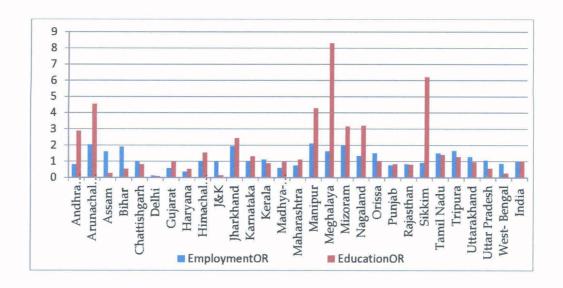
After calculating the odds ratio, keeping the all India average odds ratio 1 as the reference category<sup>1</sup>, it is observed that, in case of the north-eastern states the odds ratios for both the education and the employment category exceeds the reference category. This indicates a high intensity/likelihood of mobility among the six out of eight north-eastern states, i.e., Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. In case of Assam, the education or study related odds ratio is only 0.27, which indicates Assam as an exception when compared to the other north-eastern states. It's being an exception, is not because of less student mobility compared to other states, but, because of the fact that, in Assam, the share of employment led mobility is too high i.e., for every 100 education-employment led migrants, the share of education is only 3 to that of 97 for employment. In Assam, employment constitutes 477 (per '000) of total migrants, contrary to this education is only 13 (per '000), which indicates huge labor mobility from Assam to other states.

The other reason for less intensity of student out- migration can be because of the fact that, Assam provides better education facility when compared to the other north-eastern states, which also attracts huge number of students from the neighboring states for higher education.

On the other hand, Sikkim is another exceptional among the north-eastern states, where, the odds ratio for employment is less than 1 i.e., (0.91), along with a very high odds ratio for education (6.21). Sikkim is the only states where migration for education per '000 is higher than employment per '000, i.e., 298 (per '000) for education as compared to 270 (per '000) for employment. The reason behind this can be relatively very high mobility for education. Meghalaya has the highest likelihood for education led migration; the odds-ration for the states is (8.29) which act as an outlier, (Graph-3.3).

<sup>&</sup>lt;sup>1</sup> 'All India level' is taken as the reference category to compare the likelihood of out migration from different state vis-à-vis all India level. It shows whether a state lies above or below the reference category which is 1.

Graph-3.3: Distribution Per (1000) of out-Migration (Male+ Female/ Urban + Rural)



The pictorial representation (Graph- 3.3) provides a clear understanding of the fact that the migration for education and employment purpose is gaining momentum. Additionally, the graph indicates that the odds ratios for employment category fluctuate in and around the all India average; the fluctuation for education category is too severe. The states where the education odds ratios are well above the India level are mainly the north-eastern peripheral states, for example, Meghalaya (8.29), Arunachal Pradesh (4.56), Manipur (4.29), Nagaland (3.21) etc. Also some states have a higher odds ratio than the national level such as Tamil-Nadu, Andhra-Pradesh, Jharkhand, etc, but they are no match when compared to the north-eastern states.

The above inquiry prompts oneself to investigate into the issues of educationemployment divide especially from the north-eastern peripheral states of India.

## 3.5 Assessing Education-Employment Divide

The Education-Employment divide is assessed by taking the share of employment and education from the aggregated value of both taken as 100. It is quite visible from the Table-3.4; the share of employment is much higher compared to education. But, the purpose of assessing the share of these two groups is to find the dominance of each migrant group across states.

Table-3.4: Education-Employment Divide for Out- Migration (Male+ Female/ Urban+ Rural)

States	Emp/Edu	States	Emp/Edu
Andhra Pradesh	64/36	Maharashtra	81/19
Arunachal Pradesh	73/27	Manipur	75/25
Assam	97/03	Meghalaya	55/45
Bihar	96/04	Mizoram	80/20
Chhattisgarh	88/12	Nagaland	72/28
Delhi	90/10	Orissa	90/10
Gujarat	79/21	Punjab	85/15
Haryana	81/19	Rajasthan	87/13
Himachal Pradesh	80/20	Sikkim	48/52
Jammu and Kashmir	98/02	Tamil Nadu	87/13
Jharkhand	83/17	Tripura	89/11
Karnataka	83/17	Uttarakhand	89/11
Kerala	89/11	Uttar Pradesh	92/08
Madhya Pradesh	79/21	West- Bengal	95/05
India	86/14	India	86/14

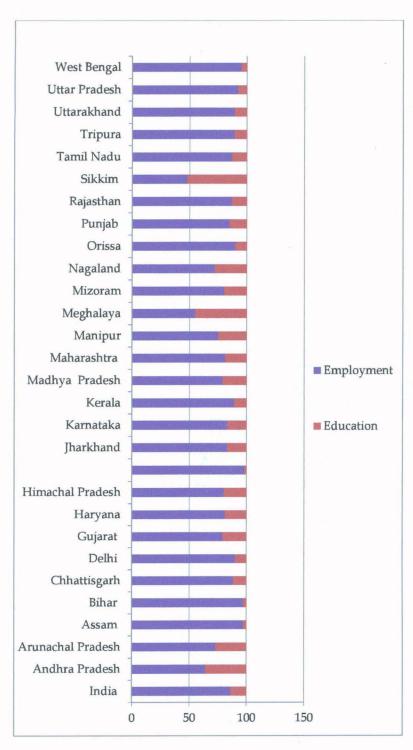
Source: Author's calculation from NSSO 64th round

Note: Emp refers to Employment and Edu refers to Education or study.

Table-3.4. shows that there exists differential pattern of educational and employment share of migration across Indian states. The pattern mainly reflects that, the education shares across the states are much higher for the north-eastern states. Whereas, for the employment led migration, the relative share across the states are much lower for the north-eastern states.

The top five states with highest share of education migration are Sikkim (52 per cent), Mizoram (45 per cent), Andhra Pradesh (36 per cent), Nagaland (28 per cent), and Arunachal Pradesh (27 per cent). This reflects some kind of desperation among the north-eastern youth population to move out for education. It not only brings to the fore the emerging educational migration within India but also situates states that are prone to educational migration more than others. Such observations also indicate the educational inequalities among the Indian states which accelerate the migration intensity from these disadvantageous states to the states which have advantages in the form of educational infrastructure and facilities.

Graph-3.4: Education-Employment Divide for Out-Migration



## 3.6 Reason behind difference in the pattern from North-Eastern States

Focusing on the educational infrastructure of the eight north-eastern states of Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Sikkim, there exists only 12 Universities; with 500 arts, science and commerce colleges, 6 engineering colleges, 10 medical and 16 poly-technique colleges which indicates shortage of educational facilities when compared to 17,000 colleges and 330 Universities<sup>2</sup> at the national level. In terms of budget allocation, the North-eastern states allocate more than half of their budget for primary education. Secondary education receives one-third to one-fourth of the budget expenditure. In five out of eight states higher education receives budget allocation of less than the national average. Technical Education receives the lowest percentage of 1.25 per cent, which is also lower than the national average of 2.64 per cent. Much emphasis is given to primary education that resulted in higher literacy rate in the region, which also means more demand for higher education (Shimray and Devi, 2009). On the other hand, very less investment is made in higher education and technical education, these results is demand supply mismatch of higher education in these states.

Table- 3.5: Share of Budget allocation to different levels, to that of total budget on education: (Figures are in Percentage) (2006-07 to 2008-09)

NE States	Primary	Secondary	Higher	Technical
Sikkim	47.93	45.09	2.77	1.47
Arunachal Pradesh	67.41	20.58	9.58	Nil
Nagaland	63.88	23.72	7.23	2.18
Manipur	43.28	31.24	20.31	0.87
Mizoram	52.36	25.82	11.41	2.74
Tripura	43.08	41.18	4.78	0.53
Meghalaya	51.13	28.73	14.65	1.46
Assam	57.03	28.52	10.47	1.00
India	50.11	34.41	11.09	2.64

Source: MHRD, Department of Higher Education 2010.

<sup>&</sup>lt;sup>2</sup> For further detail, please check (www.ugc.in).

Table-3.6: Number of educational institutions on Higher education in the Northeastern Region: 2003- 2004\*

States	General Education	Professional Education	Universities
Sikkim	2	4	4
Arunachal Pradesh	10	4	4
Nagaland	37	1.	. 1
Manipur	58	5	2
Mizoram	26	2	1
Tripura	14	3	. 1
Meghalaya	54	2	. 1
Assam	317	50	7
NER	518	71	20
Share to All India (per cent)	5	2	4
All India	10377	3201	500

Source: Abstract of Selected Educational Statistics 2004-05.

#### Notes:

- 1. General Education includes Arts, Science and Commerce.
- 2. Professional Education includes Engineering, Technology and Architecture, Medical and Teacher Training.
  - 3. \* Provisional Data

### 3.7 Factors facilitating student migration from North- eastern states

The factors which facilitate student migration and also the migration for employment can be explained through the "Push-Pull framework". This framework was used as early as 1958 by Petersen, but it is attributed to Lee (1966), as cited in Cited from Hein de Haas (2008), even though he did not apparently invent or employ the term himself. Lee (1966) argued that the decision to migrate is determined by the following factors: factors associated with the area of origin, factors associated with the area of destination and personal factors. In the case of the north-eastern states as already discussed, the literacy rate is quite high when compared to the national average because of well provided primary education in these states. On the other hand the educational infrastructure for higher and technical education is very poor, which neither provides enough

opportunities to the aspirants nor does it provide opportunities to the students who have already acquired higher education. Therefore, in the absence of better educational and employment opportunity the younger people are pushed out of the region for better opportunities in big cities. Conversely, metropolitan cities and also the new emerging economic centers in the country acts as destination centers and attract people with better education and employment opportunities.

The other reason which could be of much relevance is the risk aversion mechanism, i.e., people would like to invest in higher education in a place where the returns are guaranteed, for example, if a student acquires higher skills in terms of technical education in a city like Delhi or Bangalore, there is a high probability that they will be easily absorbed by the new emerging job markets such as IT sectors in the form of job placements provided by the educational institutions. On the other hand, such opportunities are not available in the north-eastern regions, where making investment in higher education is risky. Therefore, the tendency to move out of the region whether for education or employment seems more beneficial. According to Lee (1966), "migration tends to take place within a well-defined 'streams', from specific places at the origin to the specific places at the destination, not only because opportunities tend to be highly localized but also because the flow of knowledge back from destination facilitated the passage for latter migrants". Through this argument Lee (1966), implicitly explains the role of social network or network effect in migration, this kind of networking effect can also be a vital reason for increase in the student migration from north-eastern regions.

As it is already discussed that, people from north-eastern states have a very different cultural environment which is very much different from the rest of India, it becomes very difficult for them to adjust and settle in a new social environment. Therefore, the role of social network cannot be declined which facilitates the migration process in the form of information and other facilities provided by the earlier migrants. As it is not possible to investigate the issue of social network in this study due to data constraint, it will be

beneficial to address the issue of migrant's sustainability at the place of destination in the next chapter.

#### 3.8 Summary

This chapter mainly provides a brief understanding of the importance of focusing on the migration trends from the North-eastern regions of India which exhibits a pattern different from the rest of Indian states. It also reveals that educational inequality and the corresponding desperation among the youth is intensifying education and employment led mobility from these states. Such outcomes, also prompts one to investigate the issue of sustainability of the reason specific migrants at the place of destination, as the migrants from the north-eastern states migrate to a very different cultural environment where settlement is not easy. Thus, indicating that the migration issues in the North-eastern states is a very fertile ground for research.

#### CHAPTER FOUR

## SUSTAINABILITY QUOTIENT OF THE EDUCATION AND EMPLOYMENT LED-MIGRATION IN VARIOUS DESTINATIONS IN INDIA

#### 4.1 Introduction

Migration is assuming greater significance with the emerging development dynamics and its ensuing implications. The Census 2001 shows that the internal migration in India has gained impetus and is intensifying rather rapidly. Having discussed in the previous chapter that there exists higher likelihood of education and employment led migration from the north-eastern states, it becomes interesting to address the issue of the longevity of a migrant's stay at the place of destination.

Although the process of migration has various dimensions, this chapter primarily focuses on the sustainability potential of education-linked migration with that of employment linked ones. The term 'sustainability¹' in this study is exclusively referred to, as the continuation of a migrant's stay or the longevity of a migrant's stay at the place of destination. In the context of this study, we analyze sustainability through two dimensions-firstly, the propensity to move, through which we examine the probability that the migrant will enter the next duration level and secondly, we examine sustainability as retaining of the quantum stock at initial duration category. The two dimensions are discussed in the subsequent section in detail.

<sup>&</sup>lt;sup>1</sup> Though, the meaning of the term 'Sustainability' might have different connotations. This study makes an attempt to exclusively use the term 'sustainability' to describe the continuation of a migrant's stay at a destination.

Using the Census 2001, this chapter attempts to address, firstly, the differential in sustainability of migrants at the place of destination between those migrating for education vs. those migrating for employment. Secondly, a contrast is drawn to examine the sustainability of migrants from the north-eastern regions against those originating from other lower income states of India. The reason behind such comparative analysis between the north-eastern states and the other lower income states is made to examine, if any differential pattern exists across the states in consideration.

The four destinations considered in study are Delhi, West-Bengal, Maharashtra and Karnataka; along-side the two group of origin states (North-eastern states in the periphery and a set of lower income states in the core). The first set consists of the eight north-eastern peripheral states of Arunachal Pradesh, Assam, Mizoram, Manipur, Meghalaya, Nagaland, Tripura and Sikkim. These states have very different geographical and cultural features which are not identical to the rest of India. The second set comprises of lower income states in the Indian mainland which includes Uttaranchal, Jharkhand, Bihar, Uttar-Pradesh, Madhya-Pradesh, Chhattisgarh, Rajasthan and Orissa.

#### 4.2 Migration Sustainability quotient

As defined above, we address 'sustainability', through two dimensions. Firstly, it is meant to explain the likelihood of greater durational stay at the destination by calculating probability, which is termed in this study as probabilistic approach. This approach informs about the migrant's probability to progress or enter into the next duration level. For example, a person in the duration category say, "1 to 4 Years", probably would stay longer than that, hence we examine the probability of entering the higher duration category. However, analyzing sustainability through probabilistic approach does not explain anything about the retained stock of migrants at a particular duration category.

The second dimension, through which 'sustainability' is analyzed in this study, is by calculating the retained stock of migrants with accumulated duration of stay at the initial duration category 2. This is done by calculating the Relative Frequency (RF) which provides the distribution of migrants across durations to examine the dominance of migrants or stock of migrants at each duration group. This we termed as the distributional approach.

The theories of migration are inter connected and operates in a migrant's life which provokes a migrant to move out in search of better opportunity and to settle in a place of destination. There exist models and approaches which explain the migration process and in a way can be used to understand the determining factors that motivate a migrant to sustain at a place of destination.

As argued by Shrestha (1988), there are five modeling approaches, to begin with, the migration process is determined by the economic/behavioral models that premised on the utility maximization, i.e., migrants always seek better economic opportunities and they usually migrate to a place where they get better facilities. Secondly, the ecodemographic "push" models, where people migrate due to excessive population pressure and reduction in wages. Thirdly, the spatial attraction model, i.e., "pull" factors, which enables moving to a location with better opportunities of employment and economic well-being. Fourthly, anthrosociological models, which emphasizes on the importance of group networks which draws migrants from backward to advanced regions with the help of connection or network effect of friends and relatives who have already migrated. Finally the Neo-Marxist dependency model that views uneven

<sup>&</sup>lt;sup>2</sup> There are four duration categories used in this chapter, as Census data provides only four durations groups of 'Less than 1 Year', '1 to 4 Years', '5 to 9 Years' and '10 Years and above' in D-3 Series which provides information on 'Migration by place of last residence, duration of residence and reason for migration'.

development and articulation of pre-capitalist with capitalist models of production, as the root cause of migration.

The sustainability of youth migration from the backward states to that of a better-off state is to a large extent determined by the theoretical approaches mentioned above. The above migration modeling approaches explains the contexts that promote migrations and also determines the sustainability of various reason specific migrations.

## 4.3 Dynamics of Migration in understanding sustainability

First we focus on employment as a reason for migration. It is a process where people after completing their education or attaining some minimum level of qualification prefer to migrate to a destination which provides better employment opportunity and higher remuneration than their state of origin. This includes the skilled labor force, at different skill levels and educational backgrounds; and the unskilled labor force without any educational background or training. The skilled labor force are comparatively less mobile than unskilled labor migrants because they try to get some work experience and expertise in the present job, which includes a skill up gradation process; and later try to maximize their opportunity by shifting from their old jobs to some new jobs which provides better income. On the other hand, the unskilled labor forces are mainly the lowly paid workers in the industries and constructions etc. They tend to be more flexible as they continuously search better jobs either due to uncertainty of job after a period or due to fluctuation of demand for labor in an industry, for example, shifting from agriculture to construction. Most of these unskilled and low income work forces fall in the category of short duration migrants which can also be understood in some cases as seasonal migrants. Therefore, it can be argued that as the migration for employment constitutes people at different skill level, there durational stay also depends on their respective skills.

Our second focus is on education as a reason for migration. Under such process migration takes place for attaining higher education and skills through trainings at a destination of migration. This is done by the students with the hope of higher expected income in future when they would enter the work-force.

The student migration occurs usually through two dynamic processes as argued by Beine and Noel (2011). Firstly, as discussed by them the "School-constraint model", according to which students migrate due to lack of educational facilities in the home country, so they move to a place for acquiring human capital and then prefer to return home to reap the benefits of higher returns of education at home.

Secondly, the "migration model" according to which students migrates to a place for education and prefers to work there because of higher returns on education at the place of destination than the place of origin. It happens when the returns on higher education are less in the home country, or if the employment opportunity at the place of destination after attaining higher education is more. In the case of student migration from the backward states in India, "the migration model" dominates, as the students who migrate for attaining higher skills and education level enter the job market after completion of their course and prefer to stay back in the place of destination.

The migration model can be further complicated by arguing that, there usually occur two types of stay or sustainability. One group of education led migrants may prefer to take up jobs after completing their education, thus, higher durational stay at a particular place. Secondly, there may be the other group of students who after completing their education may further migrate to some other better-off destination for employment or for attaining some higher level of education rather than continuing at the same destination. Therefore, it can be argued that sustainability of migrants is a very complex phenomenon.

## 4.4 Limitations of Census data on reason specific migration

Before analyzing the issue of sustainability, it would be necessary to discuss the limitations of the Census in capturing the reason specific duration data.

In the case of education as a reason specific migration, the migrated students usually enter the job market after completing their education. Thus, there occurs a transformation of a migrant from educational category to employment related category after a specific period of time. This phenomenon of transformation leads to some kind of confusion, i.e. the reason for migration of the persons who initially migrated for educational purpose, and later entered the job market after completing their education is likely to be captured by the Census as migration for employment. Thus, the actual reason for migration might not get recorded. Due to such a shift in the category of migration, that is from educational to employment, the Census which only provides decadal information, does not capture the transmission from educational related migration to employment related migration. This leads to under-estimation of education led migration in the durational data, and over- estimation of employment as a reason of migration.

#### 4.5 Analyzing Sustainability through the Probabilistic Approach

In this section, we examine sustainability through probabilistic approach. Through this approach we intend to calculate progression among migrant groups to the higher duration categories.

#### 4.5.1 North-eastern migrants

The sustainability of reason specific migrants in this section is examined through the probabilistic approach. The durational data is aggregated for all the four destinations,

namely Delhi, Maharashtra, Karnataka and West-Bengal. This is done to visualize the current pattern of migration duration and the expected changes in the pattern which will occur in the near future. Table- 4.1(a) shows the durational data for the reason specific migration for four durational categories of "less than a year", "1 to 4 years", "5 to 9 years" and "10 years and above". On the other hand, table- 1(b) exhibits the probability values for the individual migrants at each duration category to progress to the category of higher durations.

Table-4.1 (a): Reason specific migration duration from North- Indian states to Delhi,

Maharashtra, West- Bengal and Karnataka

Reason	<1 year	1- 4 years	5- 9 years	10 years+	Total
Employment	2378	13864	9311	24381	49934
Education	1156	9039	1951	1979	14125

Source: Calculated from D-3 Series, Census 2001

Table-4.1 (b): Progression Probability

Reason	Group- A	Group- B	Group- C
Employment	0.95	0.71	0.72
Education	0.92	0.30	0.50

Source: Calculated from D-3 Series, Census 2001

#### Note:

- a) Group- A explains the probability<sup>3</sup> of an individual in "less than 1 Year" category to move to the categories of higher durations.
- b) Group- B explains the probability of the individual in the "1-4 Years" category to move to the category of higher durations.
- c) Group- C explains the probability of the individual in the "5- 9 Years" category to enter the "10 years and above" category.

<sup>&</sup>lt;sup>3</sup> To be specific, say for the "employment" group, it is the ratio of (13864 + 9311 + 24381) to the group total value of 49934. We follow this rule in defining the other probabilities also reported below.

The probability value of Group-A for both the employment and education related migrants informs that, the migrants who belongs to the category of "Less than 1 year", the probability for them to progress further to the groups of higher durations are higher for both the categories. There hardly exist any difference between the probability values of employment (0.95) and education (0.92) related migrants, i.e., they sustain for more than a year. This could be because of the fact, that a migrant whether seeking employment or education will definitely stay for any duration of more than 1 year, though there can be exceptions.

In Group-B, though the probability values of both the employment and education category reduces to 0.71 and 0.30 respectively. The reduction in probability value for education is much higher than the employment category. This is because of the fact that, in the case of employed category, migrants after working for three to four years tend to settle down at the place of destination, thus, higher probability for them to continue further at same destination. On the other hand, people migrating for educational purposes after completing their education in three to four years, tend to move out, resulting in considerable reduction in probability to sustain further.

In Group-C, the probability values for both employment and education improves to 0.70 and 0.50 compared to Group-B values. It is because of the fact that migrants who settle at a destination for five to nine years will always find it more convenient to continue residence at the same place.

#### 4.5.2 Other lower income states

To examine, whether the pattern of migration from the other lower income states follows the North-eastern states, the probability values are calculated to get the level of progression for the migrants in each duration category.

Table-4.2 (a): Reason specific migration duration from the backward states to Delhi,

Maharashtra, West- Bengal and Karnataka

Reason	<1 year	1-4 years	5-9 years	10 years +	Total
Employment	197987	831367	760392	2103462	3893208
Education	9569	72756	21602	31808	135735

Source: Calculated from D-3 Series, Census 2001

Table-4.2 (b): Progression Probability

Reason	Group- A	Group- B	Group- C
Employment	0.95	0.77	0.73
Education	0.92	0.42	0.60

Source: Calculated from D-3 Series, Census 2001

Note: Same as above.

Here, too the probability values at different duration category gives similar progression pattern to that of the North-eastern states, for both the reason specific migration groups.

After calculation the progression using the probabilistic approach for both the set of states, which is also a very different and unique attempt made in this study to address sustainability. It can be argued that, irrespective of the migrants from north-eastern states or other lower income states, the migrants with employment reason manifest higher progression to that of lower progression in case of migrants for educational purposes.

#### 4.6 Verifying migration sustainability through distributional approach

In the previous section, we dealt with the issue of progression. Whereas, in this section, the main objective is to make a comparison of these two reason specific migration in accordance with their retained stock at each duration level. The emphasis is

given on the initial duration categories to investigate the issue of sustainability from the distributional dimension. In doing so, the relative frequency of each of the four groups of migration tenure namely, "Less than 1 year", "1 to 4 Years", "5 to 9 Years", and "10 Years and above" are calculated. The relative frequency for each of the two categories, viz. education and employment gives the dominant duration span. Next, the Cumulative Relative Frequency (CRF) for both the reason specific migration groups are calculated and compared to determine the dominance of migrated stock in the duration groups. Settlement or continuation in a place of destination is a cumulative stochastic process and not a fixed trait of the migrant population, the relative number of settlers at any point in time depends on the number of migrants settled in the past. Through such comparisons, the (less than type) cumulative relative frequencies of each group are obtained which are then plotted in a single figure to access the dominance of both.

 $Relative frequency for a category = \frac{Number of Observations falling in that category}{Total number of Observations}$ 

Instead of the relative frequency for a given category one can also use percentage for a category, which can be computed as follows.

Percentage for a category = Relative frequency for the category  $\times 100 \%$ 

In this section, the analysis is done separately for both the north-eastern states (peripheral states) and the other lower income states (States in the mainland India), for both the reason specific migration.

#### 4.6.1 Migration from the North-Eastern States of India

## i. Migration for Education

The Relative Frequency (RF, hereafter) in Table-4.3 (a) shows that in the case of education specific migration duration, the RF for the duration, '1- 4 years' is highest at 0.64. As it can also be used as a percentage of a category, this result shows that 64 per cent of the education related migration from the north-eastern states sustained for the duration of 1-4 years. This can be because of the fact that, the duration span for most of the higher education degrees or courses is between three to five years. Therefore, the stock of students in this duration group has to retain, as students have less flexibility to move out as compared to the employment led migrants. Thus, it can be argued that, the stock of education related migrants have to retain in the duration group of "1 to 4 Years" and in this sense of the term more sustainable then the employment category with higher retention of stock in the initial period.

Table- 4.3 (a): Education specific migration duration for North- Eastern States' migrants to Delhi, Maharashtra, West- Bengal, and Karnataka

Duration	Frequency (F)	Cumulative Frequency (CF)	Relative Frequency ( RF)	Cumulative Relative Frequency (CRF)
< 1 Year	1156	1156	0.08	0.08
1- 4 Years	9039	10195	0.64	0.72
5- 9 Years	1951	12146	0.14	0.85
10 Years +	1979	14125	0.14	1.00

Source: Calculated from D-3 Series, Census 2001.

#### ii. Migration for Employment

On the other hand, in the case of employment related migration the migrants are free to move out of the duration category with much more flexibility, as a result the retained stock in initial duration category is much lesser for employment related migrants, especially at "Less than 1 year" and "1 to 4 Years "duration categories (see Table-4.3 (b)).

As in this section, we explore the sustainability of migrants through the distributional approach. It can be argued that the employment led migrant group is less sustainable in the initial duration categories due to the lesser dominance of migrant stock.

Table-4.3 (b): Employment specific migration duration for North- Eastern States' migrants to Delhi, Maharashtra, West- Bengal, and Karnataka

Duration	Frequency (F)	Cumulative Frequency (CF)	Relative Frequency ( RF)	Cumulative Relative Frequency (CRF)
< 1 Year	2378	2378	0.05	0.05
1-4 Years	13864	16242	0.28	0.32
5-9 Years	9311	25553	0.19	0.51
10 Years +	24381	49934	0.49	1.00

Source: Calculated from D-3 Series, Census 2001

# iii. Comparison of the Cumulative Relative Frequency (CRF) for both the educational and employment led migrants

To examine the retained stock of migrants with accumulated duration of stay to measure dominance at the initial duration groups with the distributional approach. The CRF for both education and employment led migration are compared.

It is observed from the Table- 4.3 (c) that the stock cumulating of migrant stock is higher for education led migration than employment category.

Table-4.3 (c): Cumulative Relative Frequency (CRF) for both the educational and employment led migrants

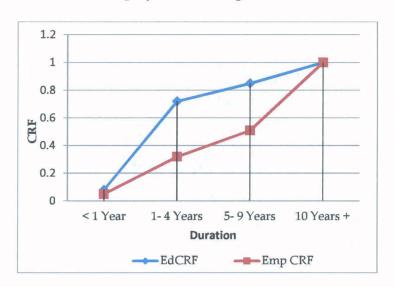
Duration	EdCRF	Emp CRF
< 1 Year	0.08	0.05
1-4 Years	0.72	0.32
5-9 Years	0.85	0.51
10 Years +	1.00	1.00

Source: Calculated from D-3 Series, Census 2001

Note: a) EdCRF = Cumulative Relative Frequency for Education.

b) EmpCRF = Cumulative Relative Frequency for Employment.

Graph-4.1 Cumulative Relative Frequency (CRF) for both the educational and employment led migrants



It can be observed from the Graph 4.1, that in the case of migration from the northeastern states, the stock cumulating or dominance in the initial duration groups are higher for education category. Whereas, for the employment group, the Stock cumulation is much lesser, displaying lesser sustainability. However, this result should not be confused with the results obtained from the probabilistic way of looking into the issue of sustainability discussed in the previous section. Because the former informed about the propensity to move through progression probability and in that sense sustainable. Whereas the later informs about the dominance of migrant stock at the initial duration category and in this sense sustainable. Therefore, it can be argued that, in the case of education led migration, the observed duration or dominance is higher (distributional approach), but the propensity to go up to the higher duration is lesser (probabilistic approach). On the contrary, in the case of employment led migration the dominance at initial groups are lesser but propensity to go up is higher.

#### 4.6.2 Migration from other lower income states of India

An attempt is made to compare the migration pattern of the North-eastern states to that of the other lower income states for the purpose of examining the pattern to determine whether the results are in conformity with each other.

#### i. Migration for Education

In the case of education related migration from the other lower income states to the same set of destinations, a similar pattern is reflected. The dominant duration is observed for "1- 4 years" group, with a RF value of 0.54, which means that 54 per cent of the migrants belong to this duration category. Here too, the same argument holds as discussed in the case of North-eastern states, that, people migrating for educational purposes have less flexibility to move out compared to the employment led migrants, as students have to complete their educational courses which lasts for at least three to four years in most of the cases. As a result, the retained stock of migrants for education category at the duration group of "1 to 4 Years" always dominates and in this sense called sustainable.

Table-4.4 (a): Education specific migration duration from the eight other lower income States to Delhi, Maharashtra, West-Bengal, and Karnataka

Duration	Frequency (F)	Cumulative Frequency (CF)	Relative Frequency ( RF)	Cumulative Relative Frequency (CRF)
< 1 Year	9569	9569	0.07	0.07
1-4 Years	72756	82325	0.54	0.61
5-9 Years	21602	103927	0.16	0.77
10 Years +	31808	135735	0.23	1.00

Source: Calculated from D-3 Series, Census 2001

## ii. Migration for Employment

In the case of migration for employment, the dominant group obtained is the "10 Years and above" category with 54 per cent of migrants. Where, the stock of migrants are very sparsely distributed in the initial duration categories and hence, less sustainable because of lesser retained stock of migrants in the initial duration categories.

Table-4.4 (b): Employment specific migration duration from the eight lower income

States to Delhi, Maharashtra, West-Bengal, and Karnataka

Duration	Frequency (F)	Cumulative Frequency (CF)	Relative Frequency ( RF)	Cumulative Relative Frequency (CRF)
< 1 Year	197987	197987	0.05	0.05
1-4 Years	831367	1029354	0.21	0.26
5- 9 Years	760392	1789746	0.20	0.46
10 Years +	2103462	3893208	0.54	1.00

Source: Calculated from D-3 Series, Census 2001

# iii. Comparison of the Cumulative Relative Frequency (CRF) for both the educational and employment related migrants from the backward states:

To compare the density of the stock of migrants at the initial duration groups for both the reason specific migration from the other lower income states, the Cumulative Relative Frequency (CRF) of both the groups are compared, which gave a similar result to that of north-eastern states.

Table-4.4 (c): Cumulative Relative Frequency (CRF) for both the educational and employment related migrants from the backward states

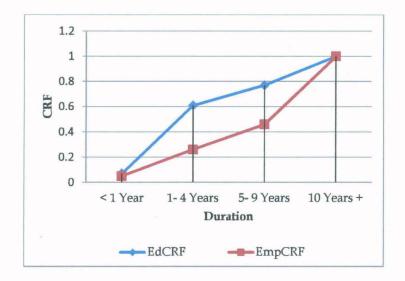
Duration	EdCRF	EmpCRF
< 1 Year	0.07	0.05
1-4 Years	0.61	0.26
5- 9 Years	0.77	0.46
10 Years +	1.00	1.00

Source: Calculated from D-3 Series, Census 2001

Note: a) EdCRF = Cumulative Relative Frequency for Education.

b) EmpCRF = Cumulative Frequency for Employment.

Graph-4.2 Cumulative Relative Frequency (CRF) for both the educational and employment related migrants from the backward states



Here also (in the Graph 4.2), the Education CRF cumulates much higher than the Employment CRF thus, clearly reflecting that the education related migration has dominance with higher stock cumulation and hence, more sustainable.

After analyzing the values of the RFs and CRFs of both the North-eastern and other lower income states, it can be concluded that, irrespective of the characteristics' of the states, whether a set of peripheral states or states in the mainland; students migration from those states to any of the well to do states will have a similar pattern, i.e., the dominant migration duration will be between "1 to 4 years". On the other hand for the employment related migrants, the dominant duration will be "10 years and above".

## 4.7 Cross-Comparison of the two sets of north-eastern and the other lower income states

The comparative results in the previous section, shows that the Cumulative Relative Frequency (CRF) is higher for education related migration for both the North-eastern states and the backward states. Therefore, undoubtedly the dominance of migrant stock of education related migration at the initial duration categories are higher than the employment related migration in the decadal years starting from 1991 to 2001. Now in this context, it becomes provocative to make a curious attempt towards making cross-comparisons of both the education and employment related migration separately across the two sets of backward states.

#### 4.7.1 Comparison of education led migration stock

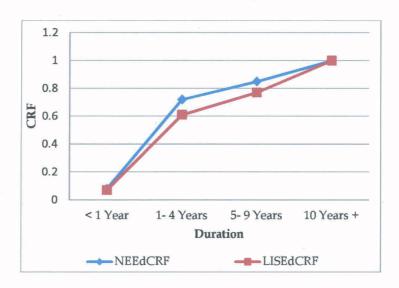
The education cumulative relative frequency for north-eastern states 'NER Ed CRF' is compared with the education cumulative relative frequency for other lower income states 'LIS Ed CRF'. Clearly from the graph it is observed that the, 'NER Ed CRF' is having higher retention of migrants' stock than the 'LIS Ed CRF'.

#### 4.7.2 Comparison of Employment led migration stock

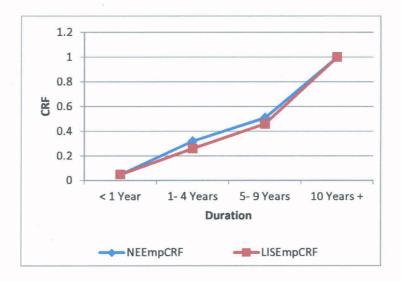
Similarly, in the case of employment led migration, the retention of migration stock is higher for the North-eastern states with 'NER Emp CRF' is above the 'LIS Emp CRF'.

Therefore, it can be argued that for both the employment and the education category the migrants from the North-Eastern states have higher retention than the migrants from the other lower income states.

**Graph-4.3 Education led migration stock** 



Graph-4.4: Employment led migration stock



### 4.8 Summary

In this chapter, the term sustainability is exclusively used to investigate the longevity of migrants' stay at the place of destination. In doing so, two approaches are used to understand sustainability. This we termed as, viz. the 'probabilistic approach', to measure progression of migrants to higher durations and the 'distributional approach' to measure the retained stock of migrants in the initial durations.

As sustainability in this chapter is viewed in two different sense of the term, it should not be confused because when sustainability is viewed as progression, employment led migration is more sustainable as it represents higher progression than the education category. On the other hand, when sustainability is viewed as 'retained stock of migrants', the education led migration seems to be more sustainable at the initial duration category. This is because of higher dominance of migrant stock in the initial durations. Both, these results should not be seen as contradictory, as the one dimension reflects progression, whereas the other reflects quantum stock.

- From the probabilistic view point, the migrants with educational reason witnesses lesser progression to longer duration of stay as against migration with employment.
- From the distributional prospective, the migration stock cumulates higher for education, implying higher dominance of education led migrants at the initial duration and in this sense of the term sustainable.

The two dimensions of sustainability informs, that, though the two reason specific migrant groups reflects different results, the pattern is identical for both the Northeastern states and the other lower income states. However, when the cross comparison is made between both the categories among the two sets of states, it is found that for both the education and employment category, the comparative retained stock is higher for north-eastern states. This also reflects higher intensity of migration from the North-east to the four destinations of Delhi, Maharashtra, Karnataka and West-Bengal.

#### **CHAPTER FIVE**

# AN ANALYSIS OF MIGRATION SUSTAINABILITY AT THE PLACE OF DESTINATION

### 5.1 Introduction

The previous chapter was engaged on addressing the issue of migration sustainability from two dimensions, i.e., from progression probability approach and distributional approach. This chapter focuses in investigating sustainability only through the distributional approach at each destination states. The rationale behind limiting only to the distributional perspective of accessing sustainability<sup>1</sup> is to compare the density of the reason specific migrants at each destination. It becomes interesting to identify and rank the destination states based on the dominance of migrants (sustainability) at each duration categories because such categorization will inform about the destinations which provides higher incentive to migrants' stay. Following the flow of the previous chapter, here too, the migrant stock from the lower income states are compared with the migrant stock from north-eastern states, to verify the ranking of the four destinations and the possible change in ranking for both the reason specific migrants.

The main thrust of this chapter is to explore the variation in dominance at each destination states, and comparing such variance between both the sets of states, and ranking the states on the basis of retention of migrants.

There is a wide array of factors which prompts migration to certain directions. In this study as the core of the discussion is in and around education and employment led migration, it becomes very interesting to investigate the factors which attract migration

<sup>&</sup>lt;sup>1</sup> Here, sustainability is viewed in distributional perspective.

or in other words, places which become choicest destinations over others. As already discussed, the push and pull effects in the introductory chapter which facilitates migration, it will be useful to gather some detailed understanding on the characteristics of destination states which attracts people from the far away regions.

Migration is not a phenomenon confined to only few states, but it is a phenomenon which is occurring in almost each and every region in the world for various purposes over time. As this study is confined to only education and employment led migration from the eight north-eastern states in reference to the eight lower income states with the four common destination states concerned, it will be useful to reflect on some of the characteristics of these choicest destinations.

Equivalent to the previous analysis, the four destinations selected are on the basis of highest education led migrants' share from the north-eastern states. Delhi receives the highest share of education related migrants from the north-eastern states with a share of 18.45 per cent of the total educational related migrants from North-east. It is followed by Maharashtra, 16.17 per cent, West- Bengal, 15.84 per cent and Karnataka, 15.12 per cent. The reason behind not choosing the destinations on the basis of share of employment led migrants is that, the migration for employment comprises of skilled and unskilled workers, the skilled workers can also be classified under high-skilled, semi-skilled and low-skilled workers. Therefore, it would be confusing to choose destination states on the basis of employment category, as different destinations attract people of different skilled level. On the other hand, selection of destination on the basis of education led migration gives a much clearer picture because the favorite destinations for education are also the destinations which usually provide better employability after the completion of educational courses, such as engineering, management, medical, etc.

Table- 5.1, shows the percentages of out-flow of migrants for educational purposes from the North-eastern states to the various Indian states.

Table-5.1: Out- Migration for education from the Northeastern states to the other

States and Union Territories

(Figures are in percentages)

States	Sikkim	AP *	Ngld *	Mani *	Mizo *	Tripura	Meghl *	Assam	Total
J & K	-		-	0.02	-	0.14	-	0.26	0.12
HP :	1.07	5.02	0.68	0.20	0.33	0.07	2.48	0.48	0.80
Punjab	0.59	0.24	0.21	0.34	0.11	0.63	0.50	1.34	0.77
Uttaranchal	3.80	2.55	6.87	2:03	1.43	0.70	2.15	2.23	2.54
Haryana	2.50	1.51	2.19	3.26	1.32	0.77	2.56	2.14	2.28
Delhi	12.01	10.43	22:96	31.13	19.74	6.03	15.36	14.45	18.45
Rajasthan	2.50	1.59	1.09	2.82.	0.99	2.10	2.56	2.43	2.28
UP	3.92	3.98	3.02	5.99	1.54	4.48	2.73	14.96	8.80
Bihar	0.59	1.67	22.85	0.46	1.54	1.05	1.90	4.51	4.39
West Bengal	19.26	5.02	3.96	4.28	6.58	50.39	16.6	21.33	15.84
Jharkhand	0.71	0.16	0.47	0.97	0.55	0.98	0.74	1.12	0.90
Orissa	0.36	1.11	0:78	0.76	0.11	3.08	3.55	1.24	1.25
Chattishgarh	0.71	0.56	0.36	0.22		0.28	0.50	0.75	0.50
MP	1.43	2.15	1.09	3.46	2.30	1.75	3.3	1.69	2.18
Gujarat	0.48	0.56	0.42	5.27	0.55	4.2	0.41	1.98	2.46
Maharashtra	8.92	8.52	14.84	16.29	38.71	7.22	24.36	16.16	16.17
AP	1.78	0.96	2.29	2.67	1.64	0.21	1.40	1.08	1.56
Karnataka	37.57	45.06	11.87	15.77	12.83	13.52	16.52	9.47	15.12
Goa	0.48	0.42	1:98	0.04	0.11	•	0.58	0.01	0.09
Kerala	0.48	3.03	1.67	1.11	3.51	1.47	0.41	0.91	1.28
Tamil Nadu	1.31	5.81	1.67	2.92	6.14	0.91	1.40	1.48	2.23
India	100	100	100	100	100	100	100	100	100

Source: Table 3, Census 2001

Note: AP\*- Arunachal Pradesh, Ngld\*- Nagaland, Mani\*- Manipur and Meghl\*- Meghalaya.

# 5.2 Characteristics of Destination states which attract Migrants

The characteristics of the destinations which attract migration are as follows:

5.2.1 Educational Infrastructure: One of the important driving factors which are determining migration from the north-eastern and other lower income states is the poor educational infrastructure at the origin state in terms of both quality and

quantity. Quality in educational infrastructure can be defined in terms of teaching, training and educational amenities' such as libraries etc. On the other hand, quantity includes the number of educational institutes available in a region, number of seats for each course, number of teachers or trainers available and also the range of courses provided in terms of technical, non-technical and professional courses. It is in these qualitative and quantitative aspects of educational infrastructure that enables Delhi, Maharashtra, Karnataka and West-Bengal to attract migrants from the North-eastern states.

- 5.2.2 Employment opportunity: States with industrialization and growing cities such as Delhi, Pune, Bangalore, etc. always attract people from the lower income states. Such states, to be more precise cities always provide better employability for migrants with different skill levels, such as, low-skilled, semi-skilled, high skilled and also the unskilled labour.
- 5.2.3 Distance: Earlier distance was a very important factor in deciding locations for educational and employment led migration. But with the current boom in the travel industry and with the improvement in transportation, distance ceases to be a constraint. The 2001 census data reveals that huge mobility is witnessed from the north-eastern states to the far distance states such as Maharashtra, Delhi, Tamil-Nadu, Karnataka, and Andhra-Pradesh with an average distance between 2500 to 3000 kms. West-Bengal is also a favorite destination for north-eastern states, as it accommodates large number of education and employment led migration.
- 5.2.4 Cost: Though cost of living in most of the cities such as Delhi and Bangalore are quite high compared to the north-eastern states, people migrating for education and employment are willing to pay high cost as the wages and returns to education are much higher in these cities. Sjaastad, (1962), viewed migration as an investment in obtaining access to a labour market with higher wages. On the other hand, parents of the migrant students are willing to pay for higher costs, as the quality of education in the origin states are not good and also because

obtaining higher education in the cities will bring higher returns to education in terms of better employability in the cities. It can also be seen as "Risk-Aversion Mechanism", i.e. parents are wiling to spend on education at a place where there is assurance of better employment. On the contrary, investment in education within the north-eastern region may not fetch a good employment opportunity at all, thus, bearing a risk on educating in the peripheral region.

### 5.3 An Analysis of Migration Sustainability at destination

In order to estimate the four destination states on the basis of the retaining stock of migrant population, only the relative frequency (RF) and the cumulative relative frequency (CRF) of migrants' stay are computed. In this section we do not take into account the progression probability of migrants<sup>2</sup> to access sustainability, as the main concern is to access the dominance of each group of migrants at the destination across durations. Therefore, we consider only the distributional perspective of stock cumulation as sustainability. Here, we compare the state wise ranking of higher dominance to see whether there exhibits a common preference of destination for both the reason specific migrants from the two separate sets of backward states.

It is already established in the previous chapter, that, people migrating for employment has higher flexibility to move out at the first two duration categories. On the other hand, for people migrating for education are less flexible at the initial duration category because when a person has enrolled into an academic institution, he or she has to complete the educational courses such as graduation or masters etc, unless, some may want to drop out. As a result the education led migration proves to have higher dominance at the initial level and in this sense sustainable.

<sup>&</sup>lt;sup>2</sup> The propensity of the migrants to enter the higher duration levels.

# 5.4 Dominance of migrants from the northeastern states

But Same

### 5.4.1 Migration for Employment

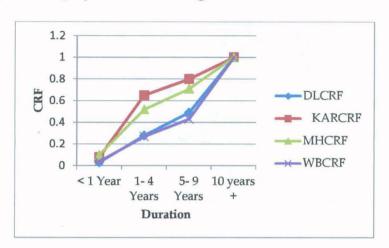
The results obtained for the employment led migration is that, the distribution is very sparse compared to the education led migration at the initial duration groups. For employment group, Delhi and West-Bengal have higher dominance in the duration category of 10 years and above. On the other hand, for Karnataka and Maharashtra, the dominance is highest at the initial duration group of "1 to 4 years" at RF values of 0.56 and 0.42 respectively.

Two points can be inferred-firstly, the stock of migrants in Karnataka and Maharashtra retain at this particular duration group and in this sense of the term sustainable between 1 to 4 Years. The second interpretation of is that, as "1 to 4 Years" duration period is much more recent, it can be conferred that compared to Delhi and West Bengal, the intensity of recent flow of employment led migrants are highest for Karnataka followed by Maharashtra. Such recent increase in the in-flow of migrants resulting in denser stock means that, Karnataka and Maharashtra are emerging as the choicest destinations. (Refer Table-5.2).

Table-5.2: Employment related migration from North-Eastern India

States/ UTs	tates/ UTs Delhi		Karna	ıtaka	Mahar	ashtra	West Bengal		
Duration	RF	CRF	RF	CRF	RF	CRF	RF	CRF	
< 1 Year	0.03	0.03	0.08	0.08	0.10	0.10	0.04	0.04	
1- 4 Years	0.25	0.28	0.56	0.65	0.42	0.52	0.23	0.27	
5- 9 Years	0.21	0.49	0.16	0.80	0.19	0.71	0.16	0.43	
10 years +	0.51	1.00	0.20	1.00	0.29	1.00	0.57	1.00	

Source: Calculated from D-3 Series, Census 2001



Graph-5.1 Employment related migration from North- Eastern India

The above discussed phenomenon is supported by the pictorial representation (Graph-5.1), showing Karnataka and Maharashtra cumulates much higher than Delhi and West-Bengal, implying, the higher dominance for employment led migration in the initial duration categories with higher density stocks from the north-eastern states.

### 5.4.2 Migration for education

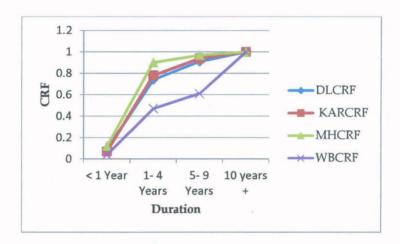
For education led migration, the most dominant duration group is "1 to 4 years", as already explained; people migrating for education have very less flexibility to move out at the initial duration group, i.e. "1 to 4 Years", given the limitation to complete the course. Therefore, at this initial duration group they do not hold much flexibility like the employment led migrants' who have higher freedom of exit and entry. Now, comparing the dominance of the education led migrants through the CRF, it is observed from the figure 5.2 that the relative share of migrants at the duration group of "1 to 4 years" is highest for Maharashtra (78 per cent), followed by Karnataka (71 per cent), Delhi (65 per cent) and West-Bengal (43 per cent).

Table-5.3: Education related migration from North- Eastern India

States/ UTs	Delhi		Karnataka		Maharashtra		West Bengal	
Duration	RF	CRF	RF	CRF	RF	CRF	RF	CRF
< 1 Year	0.09	0.09	0.07	0.07	0.12	0.12	0.04	0.04
1-4 Years	0.65	0.74	0.71	0.78	0.77	0.90	0.43	0.47
5-9 Years	0.17	0.91	0.16	0.94	0.08	0.97	0.14	0.61
10 years +	0.09	1.00	0.06	1.00	0.03	1.00	0.39	1.00

Source: Calculated from D-3 Series, Census 2001

Graph-5.2: Education related migration from North- Eastern India



From the above analysis it is observed that the there exist differential in pattern in the choices of destinations made by north-eastern migrants for education and employment.

In the case of education led mobility the choicest destination is Maharashtra followed by Karnataka and Delhi as seen in the graph (Graph 5.2), with the trend lines lying close to each other, projecting not much difference in the density. Conversely for, West-Bengal, the difference in density is very high thus gathers the last rank.

Thus, it can be conferred that the choice pattern for education led migrants are very different from the employment led migration. Here, the favored destinations in terms of the dominance in the initial duration period are higher for Karnataka followed by Maharashtra with similar dominance, which are much higher than the Delhi and West-Bengal.

### 5.5 Dominance of migrants from eight lower income states

### 5.5.1 Migration for employment

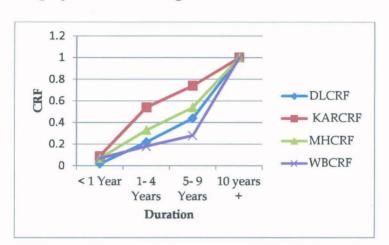
In the case of other lower income states, the stock of migrants for employment is dominant in Karnataka, followed by Maharashtra, Delhi and West-Bengal. The ranks attained by both the set of states are same for employment category, but, the dominance does not display any conformity of pattern.

In the case of the north-eastern states both Karnataka and Maharashtra displayed higher dominance in the "1 to 4 Years" category, whereas, in the case of migration from the other lower income states, Karnataka alone displays higher dominance. Thus, informing that migration from the other lower income states to Karnataka is a much more recent phenomenon, which is emerging as the choicest destination.

Table-5.4: Employment related migrants from Lower income states of India

States/UTs	Delhi		Karnataka		Maharashtra		West Bengal	
Duration	RF	CRF	RF	CRF	RF	CRF	RF	CRF
< 1 Year	0.02	0.02	0.09	0.09	0.07	0.07	0.07	0.07
1-4 Years	0.20	0.22	0.44	0.54	0.26	0.33	0.11	0.18
5- 9 Years	0.22	0.44	0.20	0.74	0.21	0.54	0.10	0.28
10 years +	0.56	1.00	0.26	1.00	0.46	1.00	0.72	1.00

Source: Calculated from D-3 Series, Census 2001



Graph-5.3: Employment related migrants from Lower income states of India

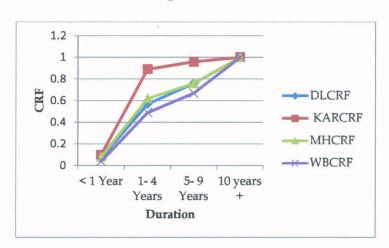
# 5.5.2 Migration for Education:

Unlike, the north-eastern pheripheral states, the migration domination or density of stock at the duration category of "1 to 4 Years" is highest at Karnataka. Where the share of migrant stock for educational purposes at Karnatka is 79 per cent, followed by Maharashtra (55 per cent), Delhi (50 per cent) and West-Bengal (44 per cent).

Table-5.5: Education related migrants from Lower income states of India

States/UTs	Delhi		Karnataka		Maharashtra		West- Bengal	
Duration	RF	CRF	RF	CRF	RF	CRF	RF	CRF
<1 Year	0.07	0.07	0.10	0.10	0.08	0.08	0.04	0.04
1-4 Years	0.50	0.57	0.79	0.89	0.55	0.62	0.44	0.49
5-9 Years	0.19	0.76	0.07	0.96	0.14	0.76	0.18	0.67
10 years +	0.24	1.00	0.04	1.00	0.24	1.00	0.33	1.00

Source: Calculated from D-3 Series, Census 2001



Graph-5.4: Education related migrants from Lower income states of India

The pictoral representation (Graph 5.4) depicts that the dominance of migrant stock for education purpose from the lower income states in much higher in Karnataka, than the rest of the three states, implying that in the present times, Karnataka has become a very important migrant hub, for both education and employment led migration.

# 5.6 Ranking of States on the basis of migration dominance

After analyzing both the set of north-eastern states and the other lower income states, an attempt is made to rank the states on the basis of highest density of migrants, as observed in the Table 5.6.

Table-5.6: Ranking of States/ UTs on the basis of migration dominance

Rank		NE Employment	NE Education
	1	Karnataka	Maharashtra
	2	Maharashtra	Karnataka
	3	Delhi	Delhi
	4	West- Bengal	West- Bengal
Rank		LIS Employment	LIS Education
	1	Karnataka	Karnataka
	2	Maharashtra	Maharashtra
	3	Delhi	Delhi
	4	West- Bengal	West- Bengal

Source: Author's own compilation

From The ranking of the two sets of states in reference to the two reason specific migration category, it is observed that, the ranking of states according to the dominance of migrants are same for the north-eastern employment, other lower income states employment and lower income states education. But, on the contrary, only for the north-eastern education the first two ranking differs, i.e. Maharashtra is followed by Karnataka. This may be because of the fact that, in the case of student migration from the north-eastern states, Maharashtra holds the most sustainable destination.

Additionally, the reason behind higher dominance of migration stock at the "10 years and above" duration category for employment led migration, is the accumulation of migrants over very longer period of time, as employment led migration is a phenomenon which is a much more a older practice, both in terms of flow and continuity, i.e., people tend to settle down at the place of enumeration.

Whereas, education as a migration process is intensifying rather rapidly in the recent years, though, it was even prevalent during the older times; it was restricted to only few better-off groups. But, with the improvement in educational facilities at cities, flow of information, accessibility, growth of social network (flow of information), bank loans and improvement in the mode of transportation, etc, education related migration is no longer confined to a particular group of households. As a result in recent times the flow of people with the purpose for attaining higher educational degrees has increased resulting in higher domination in the initial duration groups. The other reason can also be that, students have to sustain at a place to complete their higher education for a period of at least three to four years, as a result the dominance is much higher at '1 to 4 Years' category, but, after that they may move out, resulting in lesser dominance in higher duration categories.

### 5.7 Summary

An attempt is made in this chapter to study the education and employment led migrants' stock at the destination states, to verify and rank the states on the basis of dominance. It is found that in the case of education related migration from the Northeastern states; the highest dominance (sustainability) is achieved at Maharashtra, whereas for employment category Karnataka assumes higher dominance.

On the other hand, for the migrants from the other backward states, the highest dominance is achieved at Karnataka for both the employment and education related migration. However, from both the set of states, West Bengal holds the lowest position in ranking for both the reason specific migration groups with the lowest dominance. This helps to identify Karnataka as an emerging migration hub. The ranking pattern of migration dominance for both the sets of backward states are in conformity with each other, except for the fact that, unlike the other categories' where Karnataka assumes the highest dominance, in case of education related migration from the North-eastern states, Maharashtra holds the dominant position.

### **CHAPTER SIX**

# CAPABILITY QUOTIENT OF THE NORTH-EASTERN OUT-MIGRANTS AND THE COHORTS OF MIGRANTS BY THE STATES OF ORIGIN

#### 6.1 Introduction

The capability quotient mainly addresses the skill level of migrants in the form of educational attainments from the north-eastern states of India. As this study is primarily focused on youth migration in reference to the durational aspect of the migrant's stay at the place of destination, it becomes interesting to explore the skill level of migration and the formation of cohort groups at the place of destination.

In the previous chapter, much emphasis was made in ranking the states according to the retained stock of migrants for both the education and employment led migration category. This chapter further attempts to investigate the skill level of migrants of age bracket between 15 to 34 years of age. Information on skill level can be informative for analyzing the work force participation of the migrants from the North-eastern states that education and labour force participation is closely related with the former affecting the latter (Van der Lippe, 2001). In determining the skill level, the analysis is limited to only male migrants. The exclusion of female migrants seems to be a reasonable solution in this context because the inclusion of it would have provided biased information, as a considerable proportion of it would be dominated by migration for marriage. The main limitation of the Census data in this context is that, it captures educational attainments of migrants in totality, without differentiating it for various reason specific migration groups.

On the other hand, the main purpose behind analyzing the cohorts by place of origin is to get find out the dominant groups from the north-eastern states at the destination states. While doing so, Assam is excluded as it is the largest state among all the eight

north-eastern states, and it alone comprises around 50 per cent of the total youth migrants from these states, (Census, 2001). Therefore, the exclusion of Assam in analyzing dominant cohort groups provides a much clearer picture of the remaining dominant groups.

 $\mathcal{C}^{(k)} = \{ (J_{i}, J_{i}) : \mathcal{L}_{i} \in \mathcal{L}_{i} \}$ 

 $\tilde{s}\in\mathbb{C}$ 

The arguments in this chapter are logically arranged; firstly an attempt is made to capture the capability level of migrants from the North-eastern states in reference to the all India level. Then, emphasis is given on exploring the state wise cohorts groups of migrants at the place of destination.

# 6.2 Capability level of north- eastern youth migrants

The capability level of the north-eastern youth migrants are determined while focusing on the age group between 15 to 34 years of age. This is the most mobile age group at which young people migrate in search of better employment opportunity and attaining quality education.

Though this age group constitutes both education and employment led migration, this section mainly addresses the combined mobility of both the reasons in reference to the skills acquired at the place of origin before migration. The major limitation in this section is the inability to differentiate between both the categories', as the education-level data provided by the Census limits only to the duration and age category, and not specifying the reason specific cause of migration. Therefore, while accessing capability in this section, we lack information on the reason for migration. As a result we confined this section to only male migrants in the age group between 15 to 34 years, and attempted to compare the capability or skill level of migrants of youths from the north-eastern states to that of the all India level.

### 6.3 The capability level of migrants addresses various aspects of migration dynamics

Firstly, the capability level of migrants tells about the quality of migrants from a region in terms of skill level.

Secondly, it defines the level of migration streams such as low skilled, medium skilled and high-skill migration.

Thirdly, the capability level of migrants from a particular region also defines the availability of educational infrastructure in a region.

To verify the skill level of migrants, the absolute number as provided by the Census 2001 are converted to per '000 of total migrants for both the north-eastern migrants and the migration at all-India level. From Table 6.1 and 6.2, we can observed that for the illiterate category the dominance is higher for the migrants from the north-eastern states with 230 migrants (per '000) of total migrants, to that of the all-India figure of 141 migrants (per '000) total migrants. Whereas, for the literate category the dominance is 771 (per '000) in the north-eastern region, which is much less than the all India level of 859 (per '000). Interestingly, though the literacy rate of six out of eight north-eastern states are higher than the all India level, (Census, 2001), the out flow of illiterate migrants from the north-eastern states are much higher, which means that the illiterate workforce are not able to find much opportunity at their own states.

Table-6.1: North-East Migration with education level per '000 for male 15-34 years

Duration	ILL :	LiTT	LiTT B M/S	M/S B Grd	Tec < Deg	Grad nt Tec	Tec = PG
< 1 year	268	732	416	224	5	62	12
1-4 Years	211	789	392	274	8	83	18
5-9 Years	240	766	420	235	5	74	11
10 + Years	234	766	439	231	3	68	8
All Duration*	230	<i>7</i> 71	420	244	5	74	11

Source: Census 2001.

Table-6.2: All India Migration with education level per '000 for male 15-34 years

Duration	ILL	LiTT	LiTT B M/S	M/S B Grd	Tec < Deg	Grad nt Tec	Tec = PG
< 1 year	288	712	346	243	15	69	22
1-4 Years	141	859	335	333	25	110	39
5-9 Years	140	860	366	324	19	108	26
10 + Years	119	881	383	341	19	102	20
All Duration*	141	859	364	329	21	103	26

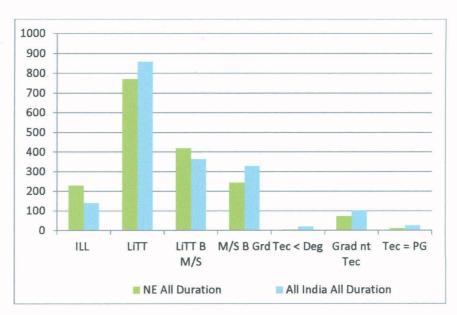
Source: Census 2001.

Note: All Duration\* is the average of all the duration groups.

- ILL- Illiterate
- LiTT- Literate
- LiTT B M/S- Literate below matric/ secondary.
- M/S B Grad- Matric/ Secondary but below graduate.
- Tec< Deg-Technical diploma or certificate not equal to degree.
- Grad nt Tec- Graduate and above other than technical degree.
- Tec= PG- Technical degree or diploma equal to degree or Post- Graduate degree.

From the Table-6.1 and 6.2, it is understood that, in the case of out-migration from the north-eastern region, except for the group, "Literate below matric/secondary", the number of migrants with higher educational level (capability) for every thousand total migrants is considerably lesser than the all India level in all the duration groups. The reason behind higher number of migrants (per '000 total migrants) for north-eastern states only for the "Literate below matric/secondary" group is the availability of quality primary and school level education in the region. As argued by Shimray and Devi, (2009), that on the one hand the literacy rate has increased, on the other hand, there is lack of avenues for higher education.

The data provided by the MHRD, Department of Higher education, 2010, reveals that, in five out of the eight states, the budget allocation for higher education is less than the national average. These states allocate more than half of their budget for primary education, while secondary education receives only one-third to one-fourth of the total budget expenditure. Resulting to two types of skill based mobility usually occurring in this region, one group of mobility occurs out of desire among the parents to send their children outside the region to acquire higher education after completing matriculation and higher secondary. Singh, (2007) argued that students securing good marks and higher ranks in the 10th and 12th standards have a tendency to compulsorily move outside the region for the pursuance of higher and technical education. The other type of mobility occurs among the people who after completing school level education prefer to move out of the region for employment purpose in the absence of better scope in the region both in terms of higher education, employment opportunity and poverty as agriculture remains the main occupation and the only choice, Lama, (2006).



Graph-6.1: Capability level of migrants

The Graph-6.1 shows a pictorial representation of the skill level of migrants from the north-east regions as against the all India level. It gives the average representation of the entire duration groups in Table-6.1 and Table-6.2, which is given as India all duration and North-east all duration. As already discussed, it is evident from the above graph that, the flow of skilled migrants to that of per '000 migrants from the region starts decreasing in comparison to the all-India level with every higher educational attainment. The graph, thus depicts the skill base of migrants from the north-eastern regions are very low, with very less number of migrants having technical or higher education skills. Therefore, adding majorly to the low-skilled migrant work force of the country.

### 6.4 Migration Cohorts

## 6.4.1 Cohorts of employment-led migrants by the states of origin

A cohort of migrants generally means the number of people staying at a particular destination from the same place of origin or in this case, the state. Investigation into the issue of migration cohort holds significant as this study revolves around the issues of mobility from the place of origin to the place of destination and its durational aspect. It becomes very interesting and useful to detect the origin wise migration cohorts at the destination. In this section, all the four destination- Delhi, Karnataka, Maharashtra and West Bengal are clubbed together and an attempt is made to identify the states which have higher dominance in migration.

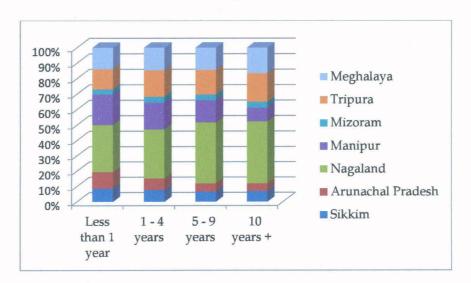
Table-6.3: Migration for Employment to Delhi, Karnataka, Maharashtra and West-Bengal

NE states	Less than 1 year	1 - 4 years	5 - 9 years	10 years +
Sikkim	8.60	7.70	6.60	70
Arunachal Pradesh	10.60	7.40	5.30	4.90
Nagaland	30.80	32	39.80	40.30
Manipur	19.70	17.20	14.20	8.90
Mizoram	3.40	3.90	3.80	3.90
Tripura	12.90	16.90	15.90	18.50
Meghalaya	14.00	14.70	14.40	16.50
Total	100	100	100	100

Source: Census 2001, GoI

Note: Assam is excluded, as it alone constitutes more than half of the total share.

Graph-6.2: Migration for Employment to Delhi, Karnataka, Maharashtra and West-Bengal



The migration cohorts are determined taking each duration group of "Less than 1 Year", "1 to 4 Years", "5 to 9 Years" and "10 Years +" as 100. Then at each duration group, the percentage share is calculated to analyze the dominant state-wise cohort at the

four combined destinations. Assam, which constitutes more than half of the total migrations share is excluded to get a much clearer picture of the dominance of state-wise migration groups.,

The pictorial representation in Graph-6.2 shows that, Nagaland has the biggest cohort group in the four combined destinations in all the durations after Assam. The next biggest migrant cohorts after Nagaland are Manipur, Meghalaya and Tripura. In the case of Manipur, the important observation is that, there is huge difference in its share in the "Less than 1 Years" group, with very high domination, (share) at 19.7 per cent and comparatively less domination in the "10 years +" group at 8.9 per cent. The major reason for such inconsistency in the migration trend can be attributed to the fact, that, among the bigger cohort groups or states, migration from Manipur has increased recently acquiring a very modest share in the first two duration groups. This can be attributed to the growing political instability and insurgency in Manipur, pushing the young population to move out to cities for exploring better employment opportunities. As this increase in mobility is a recent phenomenon, the share of people from Manipur at "10 years and above" duration group has comparatively very less share than the other bigger cohort states.

A similar pattern is also witnessed for Arunachal Pradesh, where, the migration cohort at each individual duration group is in accordance with a pattern very much alike Manipuri cohorts. Though, the share of Migrants from Arunachal Pradesh is lower than Manipur, the pattern is very similar, i.e., the percentage share for the duration group is higher at "Less than 1 Year" group at 10.6 per cent, whereas, at the duration group at "10 Years and above" the share is only 4.9 per cent, which reveals the fact that increase in mobility from Arunachal Pradesh is a much more recent phenomenon, or the other way of arguing it is that, migrants from this state does not stay for longer duration.

In the case of employment led migration from Nagaland, the pattern is opposite to that of Manipur and Arunachal Pradesh. It is observed that, the share is lower at 30.8 per cent for the duration group of "Less than 1 Year", and higher at 40.3 per cent at the

duration group of "10 Years and above". The main reason behind such reverse tendency can be beca

use of the fact that, as over the years the shares of migrants from the other northeastern states are increasing, the share of Nagaland is reducing in the more recent duration groups.

### 6.4.2 Cohorts of education-led migrants by the states of origin

This section explains the pattern of migrant cohorts for the education led migration from the eight north-eastern origin states to that of the combined destinations which include Delhi, Karnataka, Maharashtra and West-Bengal. In this section, the purpose is to investigate into the pattern of education led migration cohort at the destination, and verify, whether the pattern is in conformity to that of employment led migration cohort as discussed in the previous section.

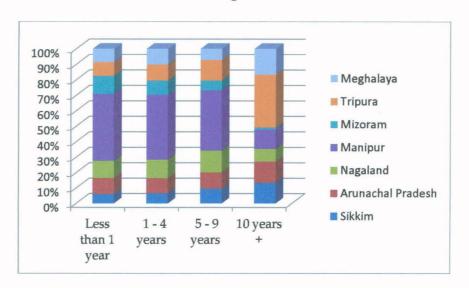
Table-6.4: Migration for Education to Delhi, Karnataka, Maharashtra and West-Bengal

NE states	Less than 1 year	1 - 4 years	5 - 9 years	10 years +
Sikkim	6.00	6.60	9.50	13.40
Arunachal Pradesh	10.40	9.60	10.50	13.60
Nagaland	11.10	12.10	14.10	8.20
Manipur	43.50	41.90	39.10	12.60
Mizoram	11.60	9.20	6.40	1.30
Tripura	8.80	10.30	13.20	34.10
Meghalaya	8.70	10.20	7.20	16.80
Total	100	100	100	100

Source: Source: Census 2001.

Like the previous section, here too, the migration cohort from Assam is excluded. It is observed that the Manipuri population for education constitutes the dominant group after Assam, whereas, it is Naga (Nagaland) population for employment.

Graph-6.3: Migration for Education to Delhi, Karnataka, Maharashtra and West-Bengal



The Manipur cohort, has the highest share of people at the duration group of "Less than 1 year", which is 43.5 per cent, but the share is reduced to 12.6 per cent, at the duration group of "10 Years and above" (Graph-6.3). The main reason is the socioeconomic crisis in the Manipur valley, as it is argued by Oinam, (undated), because of political instability and infiltration most parents think, it is better to exile their children to any part of India without having a second thought about the kind the courses their children take up, but to keep their children in safer place rather than to stay at Manipur. As the share is very high in the lower duration group and very less in the higher duration group, it can be concluded that, that out-migration from Manipur to cities for the purpose of education is a much more recent phenomena.

Similar trend in mobility is also observed in the case of cohort group from Mizoram, with a huge difference between the share in the lower and upper duration groups. It is observed that, in the lower duration group of "Less than 1 Year" the share is 11.6 per cent, whereas, at the higher duration group of "10 Years and above", the share is as low as 1.3 per cent. It means that, out-migration from Mizoram for education purposes is gaining prominence in the recent times.

On the other hand, a dissimilar patter is observed for migration cohorts from Tripura, Meghalaya and Sikkim. Here, the patter is completely opposite, i.e., the pattern is dominated with higher share in the higher duration groups and lower share in the lower duration groups. Thus the pattern, is most visible and investigation for Tripura, where at the lower duration group of "less than 1 Year", the share is 8.8 per cent, whereas, for the higher duration group of "10 Years and above", the share is astoundingly higher at 34.1 per cent. Implying, the flow of migration from Tripura for education is not a very recent phenomena, as a huge chunk of migrants from the state are settled in the destination for ten years and above, whereas, a very low share in the lower duration groups need not be confused, because reduction in the share has happened due to a sparkling increase in the share of migrants from the other states in the recent years like Manipur and Mizoram.

### 6.5 Reason specific migration Cohorts at each destination states

In order to get a detailed picture of the migrant cohort groups at each destination states, and to access the differences in pattern which exists between them, this section tries to analyze the duration wise dominant cohort groups for both employment and education led migration at the four destinations of Delhi, Karnataka, Maharashtra and West-Bengal. Like the previous section, this section too excludes Assam in the analysis.

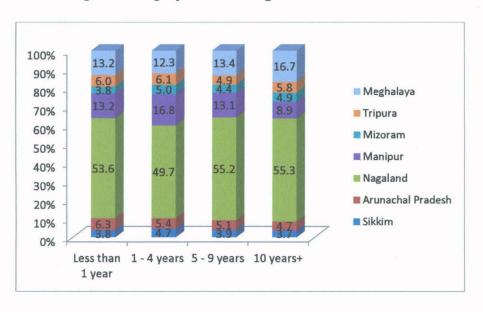
# 6.5.1 Cohort groups for employment led migration

This section tries to identify the dominant cohort groups at each state across duration from the north-eastern states. All the states with respective shares in migrant dominance are calculated for comparisons. In the previous section it was observed that the Nagaland cohort group is the most dominant group across durations, but, in this section, it is observed that, the dominance of Nagaland cohort is highest only in Delhi across all the durations, which on average is around 50 per cent of the total share (Graph 6.4). This high share of Nagaland cohort at Delhi had influenced the previous section, where on aggregate analysis of all the states, Nagaland was projected with highest dominance across durations.

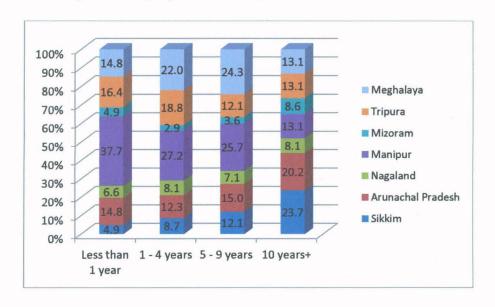
In the case of Karnataka (Graph 6.5), the Manipur cohort acquires the highest share with 37.7 per cent in "Less than 1 Year" category, whereas, in the "10 Years and above" category, the share is only 13.1 per cent. It means that in Karnataka, increase in share of Manipuri migrants is a very recent phenomenon or a recent boom in the increase in Manipuri migrants.

On the other hand, the share of Sikkim cohort which has a higher share of 23.7 per cent in "10 Years and above" duration group, has only 4.9 per cent in "Less than 1 Years" duration group, which either means increase in the share of other cohort groups in the recent years or actual reduction in the flow of employment related migrants from Sikkim to Karnataka in recent Years.

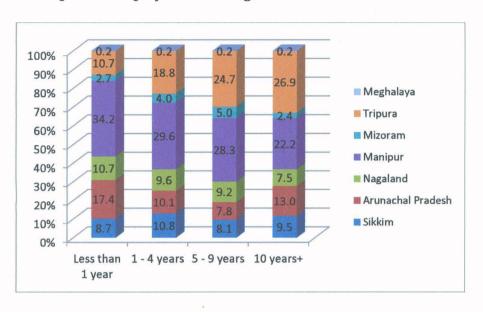
Graph-6.4: Employment led migration cohorts in Delhi



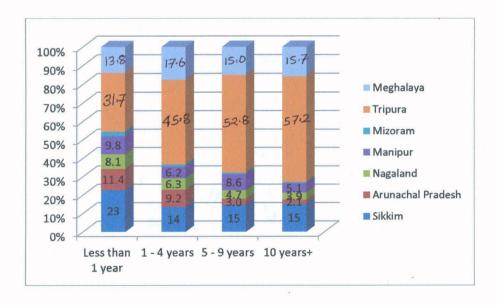
Graph-6.5: Employment led migration cohorts in Karnataka



Graph- 6.6: Employment led migration cohorts in Maharashtra



Graph-6.7: Employment led migration cohorts in West Bengal



In the case of Maharashtra (Graph 6.6), again the share of Manipur cohort is highest with a dominant share of 34.2 per cent in the "Less than 1 Year" category, implying increase in flow in the recent years, whereas, for Tripura the share in the "Less than 1 year" is reduced to 10.7 per cent, from 26.9 per cent in the "10 Years and above" category. In the state of West Bengal, the share of Tripura cohort is dominant across all the duration categories. But, the recent year, i.e. "1 to 4 Years" and "Less than 1 Year" category the share is reduced to 45.8 per cent and 31.7 per cent (Graph 6.7).

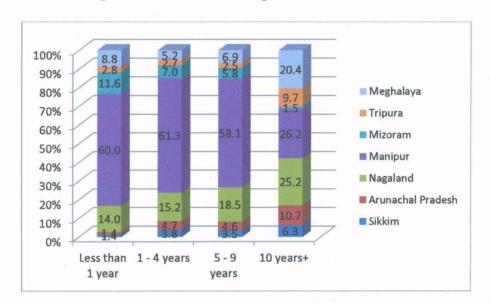
### 6.5.2 Cohort groups for education led migration:

In the previous section, where the share of cohort groups across duration were analyzed aggregating the four destination states, it was observed that, Manipur cohort obtained the dominant share. Similar observation is also made when the analysis is disaggregated for each state separately except for West-Bengal, where Tripura holds the dominant share.

To start with Delhi, it is observed that the Manipur cohort is dominating across the durations, with 60 per cent in "Less than 1 Year", where the share increased from 26.2 per cent in the "10 Years and above" category (Graph 6.8). This tremendous increase in Manipur share has considerably reduced the share of Tripura, Arunachal Pradesh and Meghalaya. Unlike, these states, Mizoram like Manipur, though less in number has witnessed increase in share in the recent Years, for example, the share for Mizoram Cohort in "10 Years and above" duration is only 1.5 per cent, but in the "Less than 1 year" duration category, it has acquired a share of 11.6 per cent.

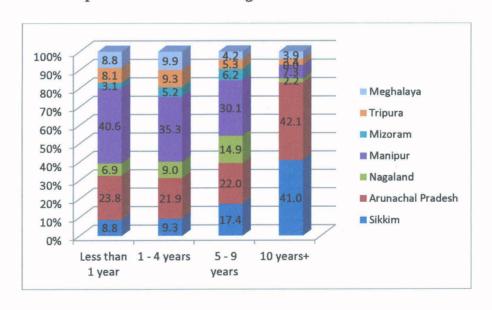
From Graph 6.9, we see in the case of Karnataka too, Manipur cohort has the highest dominance with 40.6 per cent share in "Less than 1 Year" category, with an increase from 7.3 per cent in "10 Years and above" category. Whereas, for Arunachal Pradesh and Sikkim, the dominance pattern in the duration categories is just the reverse. In the case

of Sikkim the share of "Less than 1 Year" duration category has reduced considerably from 41 per cent in "10 Years and above" duration class to 8.8 per cent.

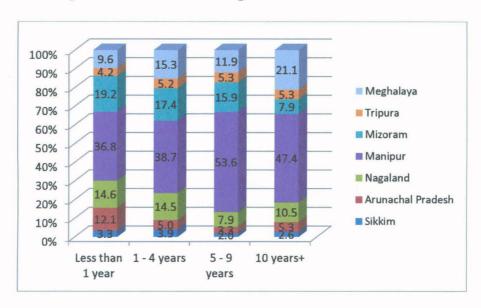


Graph 6.8: Education led migration cohorts in Delhi

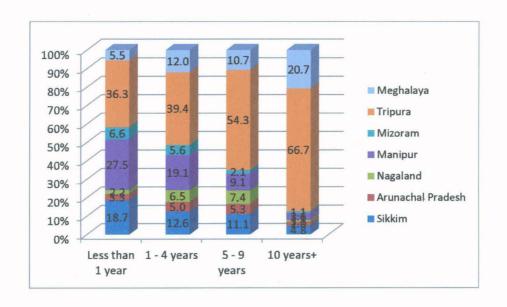




Graph 6.10: Education led migration cohorts in Maharashtra



Graph 6.11: Education led migration cohorts in West Bengal



In the case of Maharashtra, though as usual the share of Manipur cohort is highest across durations, including the share at the "Less than 1 Year" category, which is 36.8 per cent. It is observed that, it is lower than the "10 Years and above" duration group, where the share is 47.4 per cent as can be seen from Graph 6.10. On the other hand, the share of Arunachal Pradesh cohort has increased from 5.3 per cent in "10 Years and above" category to that of 12.1 per cent in "Less than 1 year" category.

For the cohort groups in West Bengal for educational purposes, Tripura is the most dominant group across all the durations followed by Manipur (Graph 6.11). But, it is observed that Tripura is losing its share in the recent years with only 36.3 per cent in "less than 1 Year" category from 66.7 per cent in "10 Years and above" category. Whereas, Manipur, which has acquired second position in the "Less than 1 Year" category with a share of 27.5 per cent has emerged strongly with very negligible share in the higher duration groups. Same is also observed for Sikkim cohort, where the share at "Less than 1 Year" is 18.7 per cent, which increased from 4.8 per cent in "10 Years and above" category.

### 6.6 Summary

The analysis in this chapter which examines the capability level of migrants from the north-eastern states helps to conclude, that the migration stream is mainly dominated by the illiterates. This is a very peculiar and strange observation in the sense that the literacy rates in the north-eastern states are higher than the national average. While examining the literate group, it is observed that except in the case of "literate below matric/secondary", the number of educated or skilled migrants from the region is far less than the all-India average, with very few possessing technical skills. This shows the backwardness in higher education facilities which is prompting low skilled migration.

The second objective of this chapter which deals with the migrant cohorts at the place of destination from the north-eastern states helps in concluding that, the changes in the trend and share of cohort groups in the duration categories, and the emerging of certain cohort groups as dominant groups in the recent years, suggests that, there is a transition occurring in the streams of migration in terms of states of origin and destination.

The increase in flow as a tendency to move out to a new destination is witnessed as the share of certain groups of migrants in the duration category of "Less than 1 Year" has increased tremendously.

This suggests that migration from certain states is gaining tremendous momentum. For example, the share of Manipuri cohort for education as a reason for migration has grown tremendously in the recent years. It is understood as a recent phenomenon because the share of it in almost all the destination states in the duration category of "10 Years and above" is very negligible. In the case of employment led migration cohort, when the destination states are taken in aggregation, Nagaland becomes the most dominant cohort group, whereas, when taken in dis-aggregation, only in the case of Delhi, it has the highest dominance share. Whereas, for Karnataka and Maharashtra, the dominant migrant group in all duration for employment is Manipur, while for West Bengal it is Tripura.

Such observation concludes that Manipur is emerging as a major migratory region from the north-eastern India. The reason behind the increase in this out-flow of Manipuris for education and employment can be attributed to the socio-political unrest, insurgencies and disorder the state has been suffering for quite some time.

### **CHAPTER SEVEN**

# SUMMARY, CONCLUSIONS AND POLICY RECOMMENDATIONS

### 7.1 Overview

Evident from various studies conducted (Baruah, 2006; Sachdeva, 2007; Shimray and Devi, 2009), etc on migration issues informs that migration from the North-eastern states are gaining momentum in the recent times. The main reasons behind such intensification of migration from these states are the prevailing backwardness in terms of educational infrastructure, employment opportunities, and the continuous political disorders. The theoretical stands which are drawn in the mainline debate and the explanations of the intellectual work to understand the reason for such migration trend is the dominance of the Pull-Push factors in these regions. Thus, the core of the argument is that the backwardness of some regions pushes the people to move out for seeking opportunities and on the other hand, the advancement or development of certain regions pulls or attracts people from these backward regions.

Most of these aspects of Pull and Push effects are commonly discussed in the literature in the context of North-eastern states, thus, gaining much of intellectual attraction in the present times. The present study titled "An Economic Analysis of Education and Employment led Migration from North-Eastern states to various other states of India" has attempted to highlight the higher likelihood of education and employment led out-migration from the North-eastern states in relation to other states, and to address the issue of

sustainability<sup>1</sup> of migrants from a very different perspective for both the reason specific migrant groups at the four destination, *viz.* Delhi, Maharashtra, Karnataka and West-Bengal.

The issue of sustainability in this study is addressed through two approaches, i.e., the progression of migrants in the duration classes through calculating progression probability which we termed as probabilistic approach, and the retaining of migrant stock at the duration categories, termed as distributional approach. The inquiry into the issue of sustainability and the durational analysis makes this study unique and also seeks to contribute to the existing literature, as the abundant literature available fails to provide information about the longevity of migrants at the place of destination.

This study in particular, while exploring the account of migration sustainability for the education led migrants in relation to the employment linked migrants, does not premise only to the north-eastern migrants. But a greater attempt is also made to compare the results with that of other lower income states to identify, whether there exist any conformity or disconformities of patterns among the two sets of states. The North-eastern states comprises of eight states of Assam, Arunachal-Pradesh, Nagaland, Meghalaya, Manipur, Mizoram, Tripura and Sikkim. Whereas, the eight lower income states included, Uttaranchal, Jharkhand, Bihar, Uttar-Pradesh, Madhya-Pradesh, Chhattisgarh, Rajasthan and Orissa.

After addressing the core objective of exploring the issue of sustainability, the study also attempts to identify the capability and skill level of Northeastern migrants to that of all-India level, and also identified the different

<sup>&</sup>lt;sup>1</sup> Though, the meaning of the term 'Sustainability' might have different connotations. This study makes an attempt to exclusively use the term 'sustainability' to describe the continuation or longevity of a migrant's stay at a place of destination.

North-eastern cohort groups at the various destinations with dominance in different duration categories.

In view to address this concern the major objectives formulated for the study are as follows:

1. Specifically highlight the special feature of the education and employment led migration from the north- eastern states.

-Comparing the education- employment divide of the Indian states

- 2. To analyze whether there exist any differential in sustainability of migrants at the place of destination between those migrating for education vs. those migrating for employment.
- 3. Analyze the same, for examining the difference in pattern between the North-eastern states and other lower income states in India.
  - 4. To analyze the migration cohorts by the states of origin.

Though, as argued by Shrestha (1988), that there are five types of modeling approaches that can be used to study migration behavior of community or individuals namely- economic/behavioral models that premised on the utility maximization, i.e., migrants always seek better economic opportunities and they usually migrate to a place where they get better facilities; ecodemographic "push" models, where people migrate due to excessive population pressure and reduction in wages; spatial attraction model, i.e., "pull" factors, which enables moving to a location which provides better employment and economic well being; anthrosociological models, which emphasizes on the importance of group networks which draws migrants from backward to advanced regions with the help of connection or network effect of friends and relatives who migrate; and Neo-Marxist dependency models that views uneven development and the articulation of pre-capitalist with capitalist models of production as the root cause of migration.

This study mainly develops the argument based on the "Push-Pull framework", It is argued in the introductory chapter and also in the review of literature section that, youth migration from the North-eastern states are the result of "Push-factors", such as, lack of educational infrastructure, lack of employment opportunities, socio-economic and political unrest in the region. On the other hand, employment opportunity and higher educational benefits in the metropolitan centers are attracting people from the backward regions, acting as the "Pull-factors", of migration.

The analysis in this study is based on the secondary source of information. The data sources used for information relating to migration duration is the Census, 2001, D-Series data on migration. The data used to explore the flow of education and employment led migration across the India states is the National Sample Survery Organization, (NSSO) 64th Round, 2007-08; and the data on educational infrastructure is provide by MHRD, Department of Higher Education 2010, and the Abstract of Selected Educational Statistics 2004-05.

The basic statistical methods which are used in this study are the Likelihood estimation using odds-ratios, shares, percentages and probabilities to calculate progression.

### 7.2 Major Findings

Observing the flow of out-migration among the states, it is found that migration is a dominant phenomenon among the youths between the age group of 15 to 29 years of age which comprises of the educational and employment led migration. After estimating the likelihood of education and employment led out-migration across the Indian states using the odds-ratio<sup>2</sup>, it is found that for education and employment led mobility, the likelihood for

<sup>&</sup>lt;sup>2</sup> Odds-ratios refers to the likelihood of an event occurring in one group versus another

moving out of the state is specifically highest for the north-eastern states. With some further exploration into the issue, it is revealed that, there exists educational inequality across states especially for the North-eastern regions, which has lead to desperation among the youth to move out for attending higher education and employment opportunities at the better-off states of India.

The main objective of this study which addresses the issue of sustainability of migrants at the place of destination, reveals that, sustainability (continuation at a place of destination), can be studied through two approaches, i.e., the probabilistic approach and the distributional approach.

From the probabilistic view point, the migrants with educational reason witnesses lesser progression to high duration of stay as against migration with employment. In this case, employment led migration is more sustainable as it has higher progression.

Whereas, exploring sustainability from the distributional approach, revealed higher stock cumulation implying higher dominance of education led migrants at the initial duration group of "1 to 4 years". This is because of the fact that students do not enjoy much flexibility to move out, as most of the higher qualification courses need three to four years for completion. Thus, the retained stock of education related migrants are higher in this duration group, and hence, more sustainable in this sense of the term. Both, this approaches of understanding sustainability should not be confused as, one approach defines sustainability as a progression phenomenon and hence sustainable. The other approach defines sustainability from the distributional perspectives, and thus sustainable at higher dominance at each duration class.

The two dimensions of sustainability informs, that, though the two reason specific migrant groups reflects different results, the pattern is identical for both the North-eastern states and the other lower income states. However, when the cross comparison is made between both the categories among the two sets of

states, it is found that for both the education and employment category, the comparative retained stock is higher for north-eastern states. This also reflects higher intensity of migration from the North-east to the four destinations of Delhi, Maharashtra, Karnataka and West-Bengal.

After analyzing sustainability from two approaches, an attempt is further made to access the state wise dominance by ranking them, using only the distributional approach of stock cumulation. It is found that, the ranking of the two sets of states in reference to the two reason specific migration category are same only for the three groups, *viz.* the North-eastern employment, other lower income states employment and other lower income education. Where, the ranking with highest dominance is obtained at Karnataka, followed by Maharashtra, Delhi and West-Bengal. But, on the contrary, only for the North-eastern education the first two ranking differs, i.e. Maharashtra is followed by Karnataka.

Investigating the capability and skill level of migrants from the North-eastern states, it is found that the capability level of migrants in terms of educational attainment is quite lower than the all-India level, especially for the higher education and technical skills. On the other hand, while exploring the cohorts group after excluding Assam which constitutes the biggest cohort group, it is found that for employment led mobility from the north-eastern states, Nagaland has emerged as the biggest cohort group. Whereas, for education led mobility, Manipur has emerged as the biggest cohort group.

### 7.3 Conclusion

The first objective of this study was to highlight the special feature of the education and employment led migration from the North-eastern states in contrast to the other states, and also to compare the education-employment divide of the Indian states. After analyzing the trends and patterns using the odds-ratio, and also after investigating into the educational infrastructure, it can be concluded that

North-eastern states emerges as the set of states which has high likelihood to migration for education and employment purposes. It is also found that though the literacy rate is high in the region with well developed primary education, the higher education facilities are lacking behind most of the Indian states. This has created educational inequalities for the North-eastern states in particular thus, reflecting a peculiar education-employment divide among these states, where the share of education led mobility is much higher when compared to the other states. Thus after exploring the first objective it can be concluded that there exists desperation among the youths from North-east to move out for educational and employment purposes.

Analyzing the second and third objectives, that addressed the issue of migration sustainability of reason specific migration from both the north-eastern states in comparison of the other lower income states. We can conclude that, from the probabilistic view point, employment led migration is more sustainable because of higher progression. On the other hand, from the distributional perspective, it is found that, the education led migration is more sustainable in the "1 to 4 Years" duration category because of higher dominance of migrant stock.

It is also found that for both the education and employment category, the retained stock is higher for North-eastern states. This reflects higher intensity of migration from the north-eastern states to the four destination states of Delhi, Maharashtra, Karnataka and West-Bengal. On the other hand, the ranking of destination states helps us to conclude that, except for the North-east education category for which Maharashtra has assumed higher dominance. Karnataka is emerging as the choicest destination with higher dominance for the three categories of North-east employment, other lower income states education and other lower income states employment.

Investigation the fourth objective, we can conclude that, Manipuris<sup>3</sup> have emerged as a dominant cohort group for education. The Nagas<sup>4</sup> have emerged as a dominant cohort group for employment purposes after excluding Assam.

### 7.4 Limitations

This study analyzes the macro perspective of North-eastern youth migration in reference to education and employment led mobility which arises due to educational inequalities and lack of opportunity at the home states. The scope of this study is limited around the issues of sustainability at the place of destination and defining of sustainability from two different view points, i.e., the progression of migrants (progression-probability), and the distribution of migrants (distributional approach) as already discussed; and the dominance of various migrants' cohorts from the north-eastern states to the destination states. In doing so, this study failed to address the issues which lead to the dominance of some cohort groups to that of other and the continuation of stay of some groups. As this study is based upon only secondary sources of information, Census 2001, and NSSO, 64th Round, it had to bear the limitations of it. The study has not been able to reflect on certain core issues while addressing sustainability and cohort groups, such as, the after effects of migration both positive and negative at the place of destination and origin, which is possible only with primary survey of migrant groups at the destination and the villages back at origin.

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<sup>&</sup>lt;sup>3</sup> People from Manipur.

<sup>&</sup>lt;sup>4</sup> People from Nagaland.

### 7.5 Scope for further research

Migration is a well-researched area, this study particularly focused on the issues of out migration among the youth from the north-eastern states to various destinations. Studying reason specific migration sustainability at the destination states in this study has opened further scope for research in this area. As it is witnessed in the current study about the higher likelihood among the north-eastern states to move out for education and employment led purposes, it would be interesting to explore the presence of social network or network effect, in the context of north-eastern states and the way the existence of such network in the form of information is facilitating migration at certain destinations. The other import aspect of youth migration which can be further researched in details is the problems faced by these migrants in terms of discrimination and harassment both at the educational institutes and place of work. Thus, studying the context under which the migrants from the North-eastern states settle in a totally new cultural environment and sustain for certain duration will become very interesting.

### 7.6 Suggested Policy Implications

This study will also be significant from policy point of view, as it can be useful for the state governments of North East India (Assam, Arunachal Pradesh, Mizoram, Sikkim, Manipur, Tripura, Meghalaya and Nagaland), to introduce and implement appropriate actions to address the trend of migration and the challenges faced by the migrated students. Not only that, the challenges of push factors of North-East migration such as lack of educational and employment infrastructure addressed in this study will be significant for the Union and the respective State Governments to include suitable projects and policies to address the challenges in the region and also the challenges faced by the students at the place of destination.

# Appendices: Appendix- A

- Internal Migration: When migration takes place across the various regions of a country, it is normally known as internal migration.
- Migrant: If the place of birth (POB) or place of last residence (POLR) is different from the place of enumeration, a person is defined as a migrant.
- Non- Migrant: if the place of birth and place of enumeration is the same, the person is a non- migrant.
- Lifetime Migrants: It is defined on the basis of POB or POLR, persons are classified into lifetime migrants if the time of their move is not known.
- Birth Place Migrant: If at the time of census enumeration, there is a change
  in the usual place of residence of an individual with reference to his/ her
  birth place, he/ she is defined as a migrant in accordance with the 'birth
  place' concept.
- Last Residence Migrant: if at the time of census enumeration, a change in the usual place of residence of an individual is noted with reference to his/ her previous usual residence, he/ she is termed as a migrant in accordance with the 'last residence' concept.
- Education led Migration: Any person who has moved to join a school or college for education purpose is called as educational migrant. However, census makes a distinction between persons who moved voluntarily for education and persons who moved along with earning members of the family.
- Employment led Migration: Any person who has moved out for the purpose of employment is called employment related migration. It occurs among both the skilled and un-skilled persons.
- Migration Sustainability: The term sustainability in this study is exclusively referred to, as the continuation of a migrant's stay or the longevity of a migrant's stay at the place of destination.
- Odds- Ratio: The odds ratios are widely used descriptive statistic which
  indicates the measure of effect size and the likelihood of an event occurring in
  relation to a reference category.
- Peripheral states: The bordering states of a country lying at the periphery are called the peripheral states. In this study the North-eastern states are the peripheral states.

### Appendix B

Table B.1: Total number of male migrants with educational levels at each duration category from the North-eastern states between the age group of 15 to 34 years

Duration	TM	ILL	LiTT	LiTT B M/S	M/S B Grd	Tec < Deg	Grad nt Tec	Tec = PG
All Duration	1346096	294670	1051426	558721	356189	5206	92569	12951
< 1 year	42189	11307	30882	1 <b>7</b> 556	9447	221	2623	506
1-4 Years	223702	47142	1 <b>7</b> 6560	87601	61243	1689	18628	3929
5-9 Years	167930	40266	128664	70560	39421	· 767	12502	1813
10 + Years	337672 <sup>.</sup>	79081	258591	148333	78024	1104	23068	2542
All Duration*	771493	177796	594697	324050	188135	3781	56821	8790

Table B.2: Total number of male migrants with education levels at each duration category in India between the age group of 15 to 34 years:

Duration	TM	ILL	LiTT	LiTT B M/S	M/S B Grd	Tec < Deg	Grad nt Tec	Tec = PG
All Duration	33746449	4977628	28768821	12373372	11004555	636047	3265979	801342
< 1 year	1672114	482229	1189885	578662	406147	25806	114984	36106
1-4 Years	7111629	1000373	6111256	2385259	2365947	175367 ·	780528	273929
5-9 Years	5010826	699531	4311295	1834112	1623444	95698	539456.	129604
10+ Years	11503273	1373578	10129695	4404297	3920719	223798	1170227	225316
Duration*	25297842	3555711	21742131	9202330	8316257	520669	2605195	664955

Source: Census 2001.

#### Note:

- 1. All Duration: Aggregate of all the duration classes including the unknown durations which include migrants for whom duration is not known.
  - 2. All Duration\*: Aggregate of all the mentioned durations.

## Appendix C

Table C.1: Distribution (Per 1000) of both In-Migration and Out-Migration Rural+Urban+Male+Female:

States	Employment	Education
Andhra Pradesh	131	45
Arunachal Pradesh	533	92
Assam	77	12
Bihar	24	17
Chhattisgarh	87	18
Delhi	345	17
Goa	261	38
Gujarat	138	19
Haryana	86	. 9
Himachal Pradesh	92	44
Jammu and Kashmir	54	5
Jharkhand	61	16
Karnataka	122	53
Kerala	80	14
Madhya- Pradesh	53	18
Maharashtra	173	35
Manipurr	222	241
Meghalaya	211	54
Mizoram	299	46
Nagaland	338	72
Orissa	63	32
Punjab	118	10
Rajasthan	78	17
Sikkim	238	66
Tamil Nadu	122	28
Tripura	83	17
Uttarakhand	133	27
Uttar Pradesh	43	14
West- Bengal	62	12
India	99	24

Source: NSSO 64th Round

Table C.2: Distribution (Per 1000) of Out-Migration Rural+Urban+Male+Female:

States	Employment	Education
Andhra Pradesh	241	138
Arunachal Pradesh	607	219
Assam	477	13
Bihar	565	25
Chhattisgarh	296	39
Delhi	37	4
Gujarat	177	47
Haryana	110	25
Himachal Pradesh	300	74
Jammu and Kashmir	298	6
Jharkhand	576	117
Karnataka	304	63
Kerala	328	42
Madhya- Pradesh	181	47
Maharashtra	221	53
Manipur	629	206
Meghalaya	486	398
Mizoram	592	152
Nagaland	401	154
Orissa	447	49
Punjab	229	. 40
Rajasthan	245	38
Sikkim	270	298
Tamil Nadu	447	67
Tripuṛa	494	61
Uttarakhand	380	46
Uttar Pradesh	318	27
West- Bengal	252	13
India	. 298	48

Source: NSSO, 64th Round.

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