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**EDUCATION AND MIGRATION FROM THE NORTHEASTERN
REGION IN INDIA**

JAWAHARLAL NEHRU UNIVERSITY

Education and migration from the Northeastern Region in India

*Dissertation submitted in partial fulfillment of the requirements for the Degree of Master
of Philosophy in Applied Economics of the Jawaharlal Nehru University*

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M.Phil Programme in Applied Economics

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Centre for Development Studies

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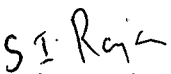
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June, 2008


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


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'Education is the most powerful weapon that use to change the world'

*DEDICATED
TO
MY PARENTS*

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ABSTRACT

In recent times, migration from Northeastern region of India to the different states in India has been increasing. With the growing consciousness among the people of the Northeastern states regarding the importance of acquiring better education for better career prospects, especially in the present context of information and communication technology facilities, a large number of people have started moving out of the Northeastern region to others parts of the country for capacity building. The underlying factors contributing to the migration could basically be the lack of infrastructure facilities including educational institutions and other internal factors. It is important to note that the annual growth rate of migration from the region is growing faster than the rate of growth of population. Out-migration has major implications for the region. Most of the migrants after completing their education outside the region one found to take up jobs in the destinations themselves due to scarcity of work/employment opportunities in their respective states or origin. This study analyses the trends and patterns of migration in the Northeastern region of India during 1981 to 2001. It analyses the correlation between education and migration and the motivations to migrate. The analysis is mainly based on the census data relating to 1981, 1991 and 2001. The other sources of secondary data, wherever, available have also been used in the study. Since not much work is available on out-migration from the Northeastern region, this study contributes to the understanding of the link between internal migration flows and educational development there in the region. We used the Compound Annual Rate of Growth (CARG) for examining the decadal growth rates of total out-migration for education from the region. The major findings of the study are the following: The decadal growth rates of total out-migration for education and employment from the Northeastern region have been positive. The states which show positive decadal growth rates of out-migration are Nagaland, Manipur, Mizoram and Assam. The states showing negative growth rates of out-migration include Meghalaya, Arunachal Pradesh, Sikkim and Tripura. The annual growth rate of migration from the region is growing more rapidly than the rate of growth of the population. The majority of the persons who migrate from the region are found in New Delhi, West Bengal, Bihar, Maharashtra and Karnataka. New Delhi received the highest number of migrants for educational purposes from the Northeastern region. The high standards of the infrastructure available in New Delhi attracted the migrants. Marriage is the predominant reason for out-migration of females in India. It is particularly true for the Northeastern states as well. Males are proportionately more than females among the migrants, from the Northeastern region. In the case of migration from the urban region, more males than females migrate, for the purpose of education. Males migrate for capacity-building through education and for reaping economic opportunities through employment and business. The persons who migrate for education, stay in the destinations for 1 to 4 years, on an average. The supply of higher education facilities in the Northeastern region is too inadequate to meet the burgeoning demand.

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Chapter 1

Introduction

Education is an influential factor that enhances the overall growth of the national economy and individual earnings. It ensures greater balanced personal income distribution. Thus education enables to achieve economic progress and social and economic equality. By widening the horizons of knowledge of people, education enables them to overcome ignorance and superstitions. Development of education is of immense significance in the case of India which spreads over 6 lakh villages and that has multi-castes, multi-social groups and multi-languages. Migration for education purpose can contribute significantly to the development of an economy in various ways (for example, return migration of the skilled persons contributes to the growth of the home economy).

Migration for educational purposes may help in improving the quality of family life through acquisition of better health, nutrition, family planning, childcare etc. and by widening the scope of earning higher income. Education is an important factor that influence rural to urban migration (movement of individuals from rural areas to urban areas for seeking job opportunities either with the intention of permanently or temporarily settling there). Several studies on migration in many countries have documented that there is positive relationship between educational attainment of an individual and the individual's propensity to migrate from rural to urban areas. This is due to the fact that individuals with higher levels of education face wider urban-rural real income differentials; and further the probability of obtaining modern sector jobs is higher for the persons with higher levels of education as compared to those with lower levels of education. The present study analyses the relationship between migration and education in the case of Northeastern region in India.

1.1 Northeastern Region

The Northeastern region comprises of eight states. They are Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim¹. It covers an area of 2.62 lakh sq.km and accounts for 7.9 per cent of the total geographical area of the country. Arunachal Pradesh lies to its north and Sikkim a little away in the North West bordering China and Bhutan. Bangladesh and Myanmar lie to its southwest and east bordering Assam, Meghalaya, Tripura, Mizoram and Manipur. The Northeastern region is different from the other regions of the country, both historically and geographically. Its social history is also different and it has been lagging behind in infrastructural and industrial development (Sharma, 2006). The region has both hilly areas and plain valleys. The plain valleys are more fertile in comparison to the hilly areas.

1.2 Demographic features

The total population of the eight states in the Northeastern region is around 39 million. This is about 3.8 per cent of the total population of India (Census, 2001). Among the Northeastern states, the population is highest in Assam (26.65 millions) and lowest in Sikkim (0.54 million). The average rate of growth of population in the region is around 2 per cent and is comparable to the national average. Some states in this region grow much higher than the national average.

The Northeastern region is predominant with tribal population. The tribal population is around 4.35 million. Scheduled tribes constitute 54 per cent and scheduled castes constitute 4.15 per cent of the total population in this region.

¹Sikkim is included as part of the Northeastern states of India.

The tribal population lives in small tribal groups. Most of their homes lie across the state borders. Each tribal group has its own distinct characteristics. The tribal population is highly heterogeneous. The distribution of tribal population varies from state to state in this region. For instance the proportion of tribal population is very high in four states and very low in other states. The percentage of tribal population is 94.5 per cent, 89 per cent, 86 per cent and 64 per cent in Mizoram, Nagaland, Meghalaya and Arunachal Pradesh respectively. The percentage of tribal population is 34 per cent, 31 per cent, 20 per cent and 12 per cent in Manipur, Tripura, Sikkim and Assam respectively.²

The density of population³ is very low in the Northeastern region (149 persons per sq.km) as compared to that of national average (313 persons per sq.km). The density of population is 340 in Assam and 304 in Tripura (refer to Table B.1 in Appendix B). The low density of population may be attributable to the nature of the terrain in this region. The sex ratio (per 1000 males) in the Northeastern region (929) doesn't differ very much that of the national average (933).

The Northeastern region is less urbanized as compared to India as a whole. The share of urban population is 14.6 per cent in the Northeastern region; whereas it is 27.8 per cent for the whole country.

Infant mortality rate in this region (35.6 per 1000 live births) is much lower than that of the national average (58 per 1000 live births). The male infant mortality rate is 37.6 per 1000 live births in the case of Northeastern region and 56 in the case of India. The female infant mortality rate is (25.1 per 1000 live births) in the Northeastern region lower than India (61 per 1000 live births). On

²The proportions of tribal population in the Northeastern region are taken from the Primary Census Abstract, Census of India 2001, Registrar General of India.

³Density of population is defined as the number of persons per sq km. The population density of India in 2001 was 324 persons per sq km. See Book of the Year (2006), Competition Refresher, published by Bright Career Institute, New Delhi.

the whole the number of newborn babies dying under the age of one year is very high in India but lower in the Northeastern region. Among the Northeastern states, infant mortality rate is highest in Assam with 67 newborn persons dying under a year of age. The infant mortality rate is lowest in Manipur with 11 per 1000 live births. The male newborn babies who died under the age of one year is highest in Assam (70 per 1000 live births) and lowest in Manipur (11 per 1000 live births) during 2006. The female infant mortality rate is highest in Meghalaya with 43 per 1000 live births and lowest in Manipur.

The crude birth rate in the Northeastern region (19.5 per 1000 population) is lower than the national average (24.8 per 1000 population). The birth rate in rural area of the region is (20.6 per 1000 population) and (26.4 per 1000 population) in the case of India. The birth rate in urban area of the region (15.9 per 1000 population) and (19.8 per 1000 population) for India.

The crude death rate in the Northeastern region (6.1 per 1000 population) is lower than the national average (8 per 1000 population). The death rate in rural area of the region is (6.3 per 1000 population) and (8.7 per 1000 population) in the case of India. The death rate in urban area of the region (4.9 per 1000 population) and (6 per 1000 population) for India.

Among the Northeastern states, the crude birth rate is the highest in Meghalaya (24.7 per year per 1000 population) and lowest in Manipur (13.4 per year per 1000 population) in 2006. In Meghalaya the population in all areas - rural and urban - has shown considerably low death rates during the period 1976 to 2001 (Dey and Goswami, 2007), and the death rates are found to be lower than one-third of the birth rates; the rural rates are much higher than the urban rates.

Birth rate in rural areas is highest in Meghalaya (26.1 per 1000 population) and lowest in Manipur (13.5 per 1000 population). Birth rate in urban areas is

highest in Nagaland (19.2 per 1000 population), and lowest in Manipur (13.1 per 1000 population).

Among the Northeastern states, the death rate is highest in Assam (8.7 per 1000 of total population) compared to the National average of (8 per year per 1000 population) and in the rural area of Assam (9.2 compared to the National average of 8 per year per 1000 population) and the lowest death rate has recorded in Manipur, namely (4.5 per 1000 population). The urban area of Tripura has high death rate as compared to all the states of the Northeastern region, the lowest being in Arunachal Pradesh (refer to Table B.1 in Appendix B).

1.3 Education

Even though, the enrolment ratio in the elementary school and the literacy rate in the Northeastern region are better than the national average. However, due to various reasons like lack of infrastructure, absence of competitive environment etc., a large number of students migrate from the region annually to the other parts of the country to pursue higher studies.

Students soon after completing their 10+2 level of schooling intend to pursue professional courses; but the availability of technical education within the region is few and far between. Most of them find it difficult to secure admission for the desired higher education courses within the region. The only way out in a situation in which through the state quota, move out of the state. Later on after achieving good education, some of them might come back; but most remain in the destination places for employment purposes. Not all return to their home state.

Though India has made rapid industrial progress, the entire Northeastern region has remained largely an agrarian economy. The only industries in this

region are in the public sector. Further, the entire Northeastern region is not well connected with other industrially developed region of India.

For higher education Northeastern region does not have adequate number of educational infrastructures facilities. There are only very few technical educations in the region. Therefore, skilled labour is not available in adequate numbers. Though the labour participation is high in the region; but mostly they are engaged in agricultural activities. Critical skills like construction skills are scarce. Necessary skills are required in large numbers for implementation of extensive programme of manpower development. Job availability is very little in the region. Unemployment rate is high. It is close to 12 per cent. It is higher than the national average of 7.7 per cent during 1999-2000 (Nerdatbank, 2002).

1.4 Health care facilities

The health care facilities in the Northeastern States are very much inadequate to serve the population. As a result, people seek for quality health care services outside the region. The number of doctors per thousand populations available in the area is extremely low. The average population served by a doctor in India is 17.84 lakh, whereas it is 29.70 to 66.60 lakh people in the Northeastern region in year 2003-04 (Nerdatbank, 2006). Most of the states in the region do not have adequate primary health care centre (refer to Table B.2 in Appendix B).

1.5 Economic development

In the Northeastern region, the development issues are often treated with a touch of emotion rather than analysing them objectively and against hard facts. The development process in the Northeastern region has been very slow and hesitating in spite of the fact that the region is rich in natural resources; the common feeling in many quarters is that of continued economic neglect of the

region (Sinha, 2006). But according to Sachdeva (2006) the failure of economic strategy for the region is not because of any so-called economic neglect, but because of inappropriate economic policy framework, which has created and unbalanced economy and destroyed the basic institutions of market economy in the region.

There are some initiatives in recent to study and analyse the problem of Northeastern region. There may be a number of reasons – this historical, administrative, financial and political - which have led to the slow growth and development of the region. The complex scenario in the Northeastern region attracted a large number of writers, scholars and journalists to study the socio-economic situation, the backwardness and the disturbances in the region (Sharma, 2006). Nearly 32 per cent of the total population lives below the poverty line in this region; this proportion is far higher than the national average (26.1 per cent) in 1999-2000. The recent poverty estimates for 2004-05 in India shows that the poverty rates have come down from 26.1 to 21.8 per cent. And in the case of the Northeastern region it has declined sharply from 32 per cent to 13.7 per cent according to the Planning Commission (2007) estimates.

The per capita net state domestic product (NSDP) of the region is lower than the national average. Neither the agricultural growth rate nor the industrial growth rate nor service sector growth rate has picked up during the past several decades. The unemployment rate and poverty rate continue to be higher in the region than the national average (Nerdatbank, 2006).

It is important to examine the level of development and economic performance of the states in this region by looking into their Net State Domestic Product (NSDP) and Per capita Income (PCI) data (refer to Table B.3 in Appendix B). The share of the primary sector to the gross domestic product is 41 per cent; Secondary sector accounts for 15 per cent and the service sector for 44 per cent during 2005-2006 (Nerdatbank, 2006). The levels of development in

the hilly areas and the plain areas of the Northeastern region differ considerably. The Brahmaputra valleys are economically the most fertile areas of the region. There are differences among the eight states in the region with respect to their resource endowments, levels of industrialization as well as infrastructure facilities. Assam is one of the important states in the Northeast and it acts as the gateway to the entire Northeastern region in terms of trade link, transport and communication etc. Assam has registered the highest industrial sector growth rate in Northeast. For example, tea estates, petroleum products and natural gas etc. are plenty in Assam. Whereas mines, saw mills and steel fabrication units are more in other states of the Northeastern region.

The region is primarily an agrarian economy; its resources are yet to be utilized to the fullest extent. Agriculture and industry have failed to grow rapidly in this region in spite of its having abundance natural resources. The contribution of agriculture to State domestic income is much higher in this region, except Meghalaya and Nagaland. Mining (in Meghalaya) and forestry and logging (in Arunachal Pradesh and Nagaland) are important contributors to NSDP. The Net Domestic Product of the Northeastern region has increased from Rs 46521 crore in 2000-01 to Rs 56082 crore in 2002-03 (RBI, 2006). The contribution of construction is also high in this region. But it cannot be quantified due to non-availability of the required information.

The per capita income in the Northeastern region, on an average, is Rs. 9391 as compared with the national average of Rs. 10754 at constant prices of 2001-02. It has slightly increased to Rs. 9783 in 2004-05⁴, whereas the national per capita income has risen to Rs. 12416 during the same period (RBI, 2006). CSO' (Central Statistical Organisation) advance estimates state that the per capita income at factor cost in real terms is up by 7.5 per cent to Rs. 24256 during 2007-08.

⁴Data for Mizoram, Nagaland and Tripura are not available at constant prices during 2004-05.

The Compound Annual Rate of Growth in Net state Domestic product (NSDP) shows that Manipur, Meghalaya, Mizoram and Tripura have been growing at higher rates than the national average. Interestingly, Assam is reported to be better developed than the rest of the states in the region, but has recorded the lowest per capita income (Nerdatbank, 2006)

1.6 Migration

The word, '*migration*' refers to movement of people from one place to another. Migration may take place within or beyond national boundaries. Migration beyond national boundaries may be legal or illegal. People may migrate in search of better livelihood. Or people may migrate in order to avoid major threat to life or livelihood. Migration may take place between states or regions. Migration may take place within national boundaries or across national boundaries. It may be permanent or temporary in nature. Migration may be voluntary or involuntary. It can take place within the purview of the laws of the concerned states or outside their legal frameworks. Migration may be from rural to rural, rural to urban, urban to rural or urban to urban areas.

Migration of people has been taking place in India since the ancient times. But migration into the Northeastern region has caused an increase in ethnic diversities⁵ in that region. Besides the tribal groups in the region, a new class of people has come into existence as a consequence of prolonged interactions among cultures of the in-migrants and those of the indigenous people. Migration has transformed the social, cultural, economic and political situation in the Northeastern region.

⁵Ethnic diversities: The present-day population of India is an outcome of the very long process of population movement of the subcontinent. Human groups with different ethnic backgrounds have entered the region with different points of time. Their immigration, their settlement in India and later movements within the country has led to a high degree of intermingling of various ethnic and cultural streams. The ethnic and cultural diversities displayed by the Indian population today have acquired their distinguishing traits through this process of social intermixing. See Bright B.S (2005) "*Competition Refresher Book of the Year 2006*" Published by India's largest book sellers, Competition Books 1525, Delhi p. 349.

The factors causing this rising trend may be the growing ambition of the students in the region to attain higher education, to improve the capacity, to find secure employment and to bag better marriage alliances. The growth of such consciousness may be attributed to the development of information and communication technology.

The trend of migration has changed in the recent years due to complexities of the socio-economic structure. A person migrates for better economic opportunities due to scarcity of jobs and lack of educational facilities in rural areas. Migration can also take place for religious and education purposes.

The migration from rural to urban areas takes place due to several reasons. The level of poverty in rural areas is identified to be the most important cause. Poor rural population migrates to urban areas in search of employment opportunities. The remittances that they send to their homes supplement the income of the household (Mehta, 1991).

A question arises whether the people from the Northeastern region who migrate to cities like Mumbai, Delhi, Kolkata, Chennai and Bangalore for economic opportunities and education purposes belong to the lower income strata of the society. The cost of living is very high in these metropolitan cities. How do they meet their financial requirements regarding the direct and indirect costs of migration? The direct costs of investment for migration include transportation costs, opportunity costs and rental cost which they have to pay in money terms. Indirect cost includes expenditure on food, clothing and miscellaneous items. Migration to the metropolitan cities for seeking employment and getting better education requires some kind of social networking and basic knowledge about how to access the available information.

Some researchers argue that the tendency to migrate does not differ much from the low income group to high income group, it depends more on the availability of resources (Connel, 1976). It is also argued that the political problems in some states like Manipur, Nagaland, Tripura and Assam the reason for out-migrants being higher than in-migrants (Krishan, 2007).

Normally migration takes place from rural to urban areas for the purpose of work/employment and education. Some times migration takes place in the opposite direction too for various reasons.

1.7 Rationale of the study

A good number of studies exist on the inflows of migrants into the Northeastern region (Singh, 1987; Ali and Das, 2003; and Sharma, 2006). But no significant initiative has been made to analyze the outflows of migration from the region that link education and migration in the Northeastern region. The dearth of literature and the importance of this problem lead credence to the motivation for this study.

If one looks at the literatures on education and migration, one might expect to find a relationship between the two; but such an effort to link these two is found wanting in the literature. In this dissertation, an attempt is made to link the education and migration that take place in tandem in the Northeastern region. Regional development is suggested as a probable explanation for the existence of migration in the country. Support to this line of enquiry is drawn from the studies on education and migration done by Laura, Soto and Shingmila. The migration rates of the States could be attributed to differences that exist in the levels of development of the States concerned. The state-specific shortcomings are associated with the quality of human capital of out-migration. Taking into account the shortcomings in the earlier studies,

The study on education and migration faces severe problems of availability of data problem at international, national, regional and state levels. In India only Kerala has maintained a good data base on migration; a similar effort on the part of the other states in India is highly essential to provide a good data base on migration. For the past nearly three decades, the people from the Northeastern region have been moving out of the region to pursue higher studies and those who finish studies come back to the respective states or regions for employment purposes. They should be registered as returns migrants and the data on them are to be maintained in order to know how many go out for education and how many come back. Such information would be useful for the region or the state governments, to measure how many their educated migrants contribute to the state or the region, for development and prosperity.

The problems of both social and economic backwardness in the Northeastern region became very sensitive issues for several decades. Its result to slow growth and prosperity due to disturbances, inadequacy of infrastructure facilities, unaccountability, and mismanagement of funds. The lack of opportunities in the region, the aspiring persons may have a tendency to migrate to the less disturbance area where the opportunities are available. To my limited knowledge, there's no study so far that tried to address the movement of persons from the Northeastern region to different parts of India. This may be mainly due to unavailability of data. As Rajan pointed out that most of the states in India do not have a good data base on migration except Kerala. In addition, Chandrashekar and Ghosh (2007) also mentioned that the census data do not capture the short term duration of migration.

1.8 Problem of the study

This study aims to analyse the trend, the magnitude and the dimension of out-migration from the Northeastern region of India to other states in India. The study also makes an attempt to understand the relationship between education and migration from the Northeastern region of India. However, the dearth of literature in the present context of Northeastern region in particular thus, against this backdrop the present study is envisaged.

1.9 Objectives of the Study

The main objectives of this study are set as follows:

1. To analyse the trend and the pattern of migration from the Northeastern region of India during 1981 to 2001;
2. To study the importance of education as a motivation factor for out-migration from the Northeastern region of India;
3. To assess the educational development in the Northeastern region; and
4. To find out the growth rate of out-migration from the Northeastern region in relation to education and employment.

1.10 Scope and limitation of the study

This study aims at investigating into the relationship between education, migration and employment purposes. Owing to non-availability of secondary data on return educated migrants into the Northeastern region and time constraint, we found it very difficult to capture this particular aspect. Therefore, there is further scope for in depth enquiry into the process for controlling the process of migration and assessing the economic implication of migration on the sending and receiving regions.

1.11 Organisation of this Dissertation

This dissertation is organised as follows. Chapter 2 presents an overview of the existing research: migration and development, impact of migration on education, and education and migration. It provides a context for the present research. The other section presents the data and methodology used in the study, theoretical framework and the concepts and definition of migration. Chapter 3 presents the educational development of the Northeastern region. Features of the Northeastern states relevant to the study and the data we gathered from various sources of selected education statistics. Chapter 4 presents migration from the Northeastern region and decadal growth rates of out-migration from the Northeastern region. Chapter 5 presents the relationships between education and migration with a focus in eight states of the Northeastern region. Chapter 6 presents the decadal growth rate of out-migration from the Northeastern region and compound annual growth rate Chapter 7 offers our main findings, summary and conclusion, with a focus on policy.

The overriding purpose of this dissertation is to present an approach for analysing education-migration interaction, to test this approach using census data and to draw relevant conclusions for educational migration and development policy.

1.12 Summary

This study presents the background on social, demographic and economic factors in the Northeastern region. Identifying of these factors whether the region is improving or not in terms of growth and development. This could be the possible reasons for determining the migration flows.

Chapter 2

Review of literature and Methodology

2.1 Introduction

This chapter is organized into two sections. The first section deals with a critical review of literature on the relationship between migration and education. The second section provides a brief description of data used in the study and the methodology adopted in the study.

There are a large number of studies on migration in India. This chapter discusses some of the studies. In this section, the major works on migration are presented. The objective is to provide the theoretical background to the present study on internal migration in India. This chapter also presents a review of the literature on migration and development, and the impact of migration on education and education and migration.

2.1.1 Migration and Development

Ravenstein was probably the first one who proposed the laws of migration, as early as in the 1880s. He pointed out that migrants move from areas of low opportunity to areas of high opportunity. One of the factors affecting the choice of destination is distance, with migrants from rural areas often showing a tendency to move first towards the nearby towns, and then towards large cities. He also observed that each stream of rural-urban migration produces a counter stream of urban-rural migration, although the former tends to outnumber the latter. Ravenstein's laws have since been discussed, systematized, and expanded by a number of researchers. The importance of the economic motive in the decision to migrate, the negative influence of distance, and the role of step-migration suggested by him are some of the important features in the literature on

migration. The main inducements for the movement of people from rural to urban areas mainly high wages and better economic opportunities (Ray, 1998). The following review provides some inside information from a global perspective.

The structural functional/Marxist approach to migration considers migration as a response to the over-all strategy of economic development. This approach concentrate on the organization of the society and its modes of production and argues that the transformation and disruption of the underdeveloped economies as a results of their integration with the colonial capitalist systems starts migration and its associated problems like the exploitation of labour (Amin, 1974; Meilink, 1978).

One important reason for the pessimism that characterizes most community studies is the lack of a good theoretical yardstick to measure the effects of migration on economic growth. Village studies universally confuse consumption with the non-productive use of remittances, ignoring the extensive and potentially large economic linkages that remittances create in local economies. They also tend to confound the use of remittances with the effect of remittances on family expenditures; and many studies employ a rather limited definition of “productive investments”, restricting them to investments in equipment while ignoring productive spending on livestock, schooling, housing, and land (Massey *et al.*, 1998: 262).

Mendola (2006) reviews studies on rural out-migration and economic development at the place of origin. The study is based on theoretical review. The paper examines the empirical research on migration-development nexus. The author finds labour migration, especially from rural areas in low-income countries, was a pervasive feature of economic development. Knowledge gaps are due in first place to the lack of appropriate data to understanding the multi-facet migration patterns. There is also the need for better data on remittances and their use, family chain and networks, migration histories, return migration

and lifecycle data. After a brief review of the existing literature the author pointed out that the migrants seem 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 migration-development nexus, both when migrants intend to go back home and when they deepen their integration in the host country.

There are various perspectives on the place of origins of labour migration; all contemporary scholarship converges on the concept of social networks as a key factor sustaining it over time (Portes and Bach 1985; Massey *et al.*, 2002). Social networks not only link migrants with their kin and communities in sending countries; they also link employers in receiving areas to migrants. These ties underlie the emergence of such phenomena as chain migration, long-distance referral systems to fill job vacancies, and organization of a dependable flow of remittances back to sending communities. At later stages, they are also the key factor in the consolidation of transnational organizations that endow migrant populations with increasing voice in the affairs of their localities and even countries of origin (Guarnizo *et al.*, 2003; Goldring, 2002).

Social networks operate as a double-edged sword on the effects of migration on community and national development. The operation of social networks over time hence lies at the core of the contradictory accounts of the effects of labour migration on development. A kind of network gives an outcome with the two key factors, i.e., governmental intervention and the character of migration itself (Portes, 2006). For some authors, remittances can have a key role in resolving past financial bottlenecks and furnishing the necessary resources for long-term development. But they argue that no precedent shows that any country has taken the road toward sustained development on the basis of the remittances sent by its expatriates. More importantly, the positive effects of such contributions are contingent on other factors. Depending on them,

migration may lead to vastly different consequences – economic stagnation, the emptying out of sending places, and massive loss of talent vs. the energizing of local economies, new productive activities, and significant contributions for scientific and technological development. The extent to which the normative pattern was return after temporary stays abroad, governs the potential of the movement for strengthening local economies and preventing depopulation. Cyclical migrations work best for both the sending and the receiving societies. Returnees are much likely to save and make productive investments at home; they leave families behind to which sizable remittances are sent while working at the migration destinations. More importantly, temporary migrants do not compromise the future of the next generation by placing their children in danger of downward assimilation abroad. To the extent that sending country governments provide the necessary educational resources, these children can grow up healthy in their own countries, benefiting from the experiences and the investments of their parents. The nightmare of young deportees carrying with them the crime culture learned abroad could thus be effectively avoided.

Professional migration need not be formally cyclical to become so in practice. For reasons explained previously, migrant professionals commonly have the necessary motivation and resources to engage in transnational activities in favor of their home country institutions. As the case of India, Taiwan, and other major sources of professional migrants attest, these activities could often make major contributions to scientific and technological development in sending nations.

One of the early comprehensive models on the process of rural-urban labour transfer was the one given by Lewis (1954), and later improved by Ranis and Fei (1961), which is also known as the L-F-R model. This model considers migration mechanism that equilibrates the two sectors, the labour-surplus sector transferring labour to the labour-deficit sector, and brings about equality between the two sectors. The model is based on a concept of dual economy, which

comprises a subsistence agricultural sector characterized by unemployment and underemployment, and a modern industrial sector characterized by full employment. "Capitalists" reinvest the full amount of their profit. In the subsistence sector, the marginal productivity of labour is zero or very low, and workers are paid wages which are equal to their cost of subsistence. Therefore in this sector wages exceed marginal productivity. In the modern sector, wages are maintained at levels much higher than the average agricultural wage.

de Han's (2006) reviews the study on 'Migration and Development. The study based on both empirical and theoretical model of migration. This paper explores the role migration has played in development studies, and in debates on economic growth and poverty. The finding from both empirical and theoretical reviews was significant differences in understandings of migration and its role in shaping wellbeing, but also complementarities. He argued that migration and development are both context-dependent, complex, multi-sectoral, assessments depending on the indicator of well-being chosen, and different effects possibly off-set one another. The general finding for understanding migration–development links lies around the importance of network, and migration streams. Owing to the segmentation of migration streams (and how they 'mature' over time), migrants tend to come from specific areas, and they are not necessarily the poorest from rural areas, particularly not when the jobs for migrants are relatively attractive and carry high returns. Persons who are better off may lead the way for migrants with fewer resources. There was some evidence that the poorest, the least skilled, the least physically capable and without networks, tend to migrate less. However, the types of migration the poorest engage in are also the least likely to be captured in surveys and censuses. With respect to international migration and receiving countries, the consensus seems to be that immigration has improved economic welfare, including raising tax revenue; given restrictive immigration policies this were unsurprising as receiving countries allow mainly people with skills for which there was an excess demand in the labour market. According to Skeldon (1997a), it was not possible to envisage

development without migration, and migration was development; for example, while Japan was urbanizing, emigration was increasing.

Taylor (2006) argued that migration could be used as a tool for development. However, there are ways to enhance migration's contribution to economic development in migrant-sending areas. These are especially true for international migration, because remittances per migrant abroad tend to be much larger than those from internal migrants and remittances from foreign migrants are likely to have a low correlation with local income, making international migrants an ideal income-insurance policy. These are some of the ways in which governments and foreign aid donors have begun to think about and design policies to make migration a highly productive tool for development.

Rajan and Kumar (2007) studied the international migration from India in the last two centuries. This paper was divided into two time period; pre-independence period and the post-independence period. The authors compiled the data from different sources. They analysed the magnitude and trend in migration from India, to selected industrialized countries in two time period, 1834-1937 and 1951-2001. This study highlighted the economic impact of labour migration on labour markets, financial flows, social, and demographic. They argued that evidence to assess the demographic consequences of international migration from India was limited. But in the case of Kerala it was a known fact. They argued that it may be concluded that migration, as a tool for development for both the individuals and the society and that it is a viable option if managed in a proper manner.

Furthermore, there were other studies in migration from Kerala to Gulf countries. The primary concern of all these studies has been for assessment of the magnitude of migration and remittances and their impact on the home economy (Nayyar, 1994; Issac, 1997; Prakash, 1998; Pushpangadan, 2003; Zacharia, Rajan and Mathew 1999, 2004; Kannan, 2002).

2.1.2 Impact of migration on education

McKenzie *et al.*, (2006) examined the impact of migration on educational attainments in rural Mexico. They found that there was significant negative effect of migration on schooling attendance and attainments of 12 to 18 year-old boys and of 16 to 18 year-old girls. The negative effect of migration on schooling, however, was somewhat mitigated as the low-educated mothers who migrated sent remittances to relax the credit constraints on educational investment for the young, poor girls. However, for the majority of rural Mexican children, the net effect was that family migration depressed educational attainment.

Zachariah *et al.*, (1999) studied the impact of migration on Kerala's economy and society. The data for the study was collected from a large-scale sample survey conducted in all districts in Kerala during the months of March to December in 1998. Multistage sampling method was adopted. Two hundred Panchayats and Municipal wards were selected in such a way to represent all taluks and districts of Kerala. Fifty households were selected from each selected Panchayat and Municipal ward. Thus the sample comprised of 10,000 households. The overall objective of the study was to analyse the characteristics of the migrants and to examine its consequences on the society and economy of the State. The study highlighted that the major end use of remittances were reported to be household consumption. Eighty-six per cent of the households used the remittances for meeting the living expenditure. The other important uses were as follows: education (36 per cent), repayment of debt (27 per cent), construction and repairs of buildings (11 per cent) and bank deposits (8 per cent). Although a large number of emigrant households used a significant part of the remittances for education of their children, there was not much difference between the expenditure incurred on education by emigrant and non-migrant households. On the other hand, the overall educational attainment of the members of the non-migrant households was higher than that of the emigrant

households. The internal migrant families had slightly higher average years of schooling than non-migrants. The return migrants, both internal and external, had higher proportion of persons among them with higher education (secondary level or degree) than that of the out-migrants - internal as well as external. The overall conclusion was that migration was highly selective. The observed difference between the migrants and non-migrants was a mixture of selectivity and consequence.

Zachariah and others (2000) did another study on socio-economic and demographic consequences of migration on Kerala's economy. This study was a companion issue of CDS working paper 297 (Zachariah, Mathew and Rajan, 1999). The study highlighted the strong impact of migration on employment, unemployment, poverty, health, families and individuals as a result of emigrants who sent remittances back home. Specifically education of children was a sphere where migration had exercised tremendous influence. At the school level there has been a strong preference on the part of the emigrant households and of out-migrant households to a lesser degree, for English-medium schools compared to non-migrant households. Besides, preference for unaided private schools was the highest among emigrant households and the lowest among non-migrant households. The study found that the costs of education vary with the type of management and the medium of instruction. Migrant households spend, on average, more on tuition fees and private tuition compared to non-migrant households irrespective of the type of school. The proliferation of English-medium schools in the private sector in Kerala may largely be attributed to Gulf migration. At the college level, emigrant households rely on private aided colleges to a greater extent than out-migrant and non-migrant households. As for professional colleges, out-migrant households account for the highest enrolment. However, Alappuzha has been ahead of Kasaragod regardless of the migration status of the households. A sizeable proportion (37 per cent) of the enrolment in professional colleges is accounted for by self financing institutions. Emigrant

households in Alappuzha and non-migrant households in Kasaragod had recourse to self-financing colleges to a greater extent than others.

Sabira (2006) studied the educational mobility of Muslim women in Malappuram District of Kerala. The study carried out during 2006 where she collected both the primary and secondary data. The main objectives of the study was to identify how the Gulf migration accelerate the growth of educational infrastructure and compare intergenerational educational mobility of the female population coming from migrant and non-migrant households. She found that the proportion of women with lower educational level has improved as a result of Gulf migration. She point out that remittances have been found to have acted as the source for migrant to invest in educational sector since all the unaided schools are either owned or supported by the migrants.

A few studies also seem to support the oft-repeated hypothesis that migrants are attracted to cities in their search for better entertainment or “bright city lights” (Findley, 1977). Educational opportunities, medical services, cultural and entertainment activities do not exist in villages, or they are at best available on very modest scales. In addition, a number of other factors, such as the presence of friends and relatives in the urban areas who often provide initial help and financial security, and instill the desire of the migrants to break away from the traditional constraints of inhibiting rural social structures, have been cited as likely determinants of migration.

The study by Regassa and Yusufe (2007) analysed the socio-economic correlates of out-migration in Southern Ethiopia. The study used primary data collected from 1258 households selected from four of the most populous districts (zone) of Southern Ethiopia. They generated the data from primary sources through the uses of questionnaires and heads of the households is interviewed. The study has also used secondary data sources. The required data for their study was collected for around 20 days (January 1-20-2006). The study has

employed a multivariate analysis (logistic regression) to estimate the socio-economic correlates of out-migration. The shortage of land and food insecurity found to be one of the most determinates important of rural out-migration at least one household members. The authors suggest that one of the promising strategies to enable households to become food self-sufficient is diversification activities by building their capacity and introducing various off-farm activities.

2.1.3 Education and migration

Taylor and Yunez (1999) conducted a study in Mexico on 'education, migration and productivity. The required data was drawn through a survey organized in the rural areas in Mexico. The fieldwork was carried out in 391 randomly selected households (comprising 2986 household members) during the period 1993 to 1996. Data relating to only 352 households were finally selected for econometrics analysis. The main objectives were to examine the links between schooling and productivity (i.e. returns to investment in human capital) and the link between schooling and migration. A probit model was adopted in the study. The study revealed that the returns from schooling in terms of total household income are high in rural Mexico. The returns increased as education (in terms of years of schooling) increased. The returns from schooling in specific production activities were significantly positive even in the production of traditional crops. The authors argued that education was the most important variables shaping the family incomes in rural Mexico. They suggests that efforts by the Mexican government to make secondary schooling universally available will have a significant and positive effect on rural incomes.

Barrientos (2007) has analyzed the level of education (E) in the origin country and its relation to migration. It is expected that the relation between education and migration looks like the relation of Gross Domestic Product (GDP) and migration. In countries in which education is on an average low, an increase in education will make people more prepared to move away from their country; and for people who live in countries with high levels of education, an

increase in their education will make it less attractive for them to move to a new place. In order to assess the relation between education and migration (Pedersen, Pytlikova and Smith, 2006) used to estimate education based on the illiteracy rate which is the percentage of the population above 15 years of age and who cannot read or write even a short statement. They found a positive relation between education and migration: higher education increases migration (from points 1 to 2). Normally, in poor countries, people with low education move to better places inside the same country (national migration) while people with more education move to other countries (international migration). After all, educated people (from poor countries) will be able to find better opportunities abroad than at home, since their work requirements increase with the level of education.

Soto (2006) make an attempt to study the reasons for migration and its meaning for children and youth. This study was carried out among the immigrant children and youth after arrival in the United States and their experience within schools. The studies rely on the temporal⁶ and spatial framework analysis. The study used the transnational literature about immigrant families and motherhood, fictional work, as well as a novels and short stories, to examine the life histories of immigrant children and youth. "Better education" is the sole reason for migration, which is based on the narrow spatial frame that focuses exclusively on the experiences of children and youth at school.⁷ Education was often a very common motive for migration, but many labour migrants come back with some newly acquired skills. She concludes that perpetual movement of labour, goods, capital, and people, families are deeply affected. For this reason she suggested that a different approach to migration – one that moves beyond the nuclear family – needs to be developed. There need

⁶Temporal are matters of but fleeting moment or limited by time.

⁷Narrow spatial frame is the studies on immigration children and youth which not only tends to overlook the "prior to" as part of the story of migration, but also focuses instead on the young cohort's experiences after their arrival at school.

to understand the complexities of how this migration in stages within the family affects children and youth in order to know how best to assist them once they arrived in the United States. Sometimes practical skills help returned migrants to set up trading or other activities and, occasionally, to improve productivity in agriculture. Migrants tend to invest in education, and help to build or teach in schools, through remittances or after their return (de Haan and Rogaly, 2002). Like the material returns from migration, these education gains may also increase differentiation and inequality, as was shown in Western Kenya (Francis and Hoddinott, 1993).

Linked to the issue of migration was also the new setting for higher education in a more globalized society, characterized by the growing importance of the knowledge society/economy, the development of new trade agreements which cover trade in education services, and the growth of different forms of cross-border higher education provision. As part of the debate are the issues related to the value of the qualifications offered and their acceptance by the labour market, quality assurance and the need to provide student protection from non-reputable providers. It therefore sheds a new light on the issues of qualifications recognition and the related fields of quality assurance and accreditation, shifting attention from a technical level to a policy debate.

Giani (2006) carried out a study on Child migrants in rural Bangladesh. The study based on theoretical review of literature on child labour and of academic studies on child labour migration. Though the paper not deal with migration for education but it rather tries to explain the effects and consequences that the migration process driven by economic and social reasons has on children's education that move to Dhaka city, either on their own or with their parents. She found that the inter-links between migration and education are more complex than the simple assumption that children's migration undermines their education and the literature suggests are unable to decide about what course to follow. However, she argues that poverty as well as the poor

standards of education in the country is strong arguments in explaining these linkages.

Lucas (1997) examines how human capital, in terms of education, skills, knowledge, age and health, determines access to economic opportunities. Individual human capital therefore has long been seen as a key determinant of migration probability, and there exist a significant amount of evidence indicating that persons with better education and skills have a comparative advantage in destination labour markets and are more likely to migrate. This suggests that the better off are likely to be represented disproportionately highly in migration streams. However, educational attainment may be of limited significance in migration decisions in cases in which other assets are important.

Barnum and Sabot (1976) studied about the migration, education and urban surplus labour in the case of Tanzania in 1971. They used the primary data conducted by National Urban Mobility, Employment and Income Survey of Tanzanian Town (NUMEIST), a random sample of 5,500 households in seven Tanzanian Towns was selected. Their objective was to analyses the determinants of migrant's behaviour in Tanzania for assessing the theory that causally links rural-urban migration and urban labour market imbalance. The method adopted in the study was calculating costs of and return to migration. They pointed out that education and migration appear to be complementary to human capital investment, and a strong positive relationship between the propensity of rural residents to migrate and their level of formal education is observed in number of contexts. The results indicate that job probability and rural urban income differentials are significant determinants of urban migration. They also found that education influences the rate of migration primarily as a consequence of its association with urban expected incomes. Rural residents with more education have a higher propensity to migrate independently of income differentials.

Prakash *et al.*, (1999) conducted the primary survey on inter-regional migration of educated labour from Kerala to Delhi during 1999. The study uses the secondary data report on migration survey by the department of economics and statistics 1992-93, Kerala. The study on migration divided into two phases. The first phase, between 1950 and 1975, witnessed a steady increase in the migration of educated labour. The second phase since the mid-1970s, witnessed a decline in the rate of migration to other parts of India. For primary survey, the study carried out in Delhi with the sample sizes of 60 educated labours. They collected the information from the sample migrants by distributing the questionnaires among them and care was taken by Malayalee Association to select a sample of educated migrants belonging to all categories. The main objective of the study was to examine the causes of migration and to study the factors that helped out-migrants to secure jobs in the formal sector. The Authors argues that many out-migration studies suggest that migrants to cities usually belong to the category of the poor. But Malayalee migrants are found not to be poor. They found that due to lack of jobs in the formal sector in Kerala, the educated unemployed labours are forced to migrate to big cities in India. The crucial factor is the educational level of the migrants. They are able to get jobs in the formal sector due to their better educational status, vocational training, knowledge of the working languages in the cities of their destination and help and support received from relatives and friends.

Corbett (2005) conducted a study on rural education and out-migration in Canadian coastal community. This study was carried out from the early 1960s to the late 1990s. The main aim of the study was to examine the relationship between formal education and out-migration in a Canadian coastal community. The method that adopted in the study is field investigation situated in ten coastal villages in southwestern Nova Scotia, along a 30-kilometre peninsula known as Digby Neck. These villages ranged in population from 29 to 206 residents, totaling 1055 for the entire Neck. The study pointed out that although high rates of village-level out-migration were chronic, most migration trajectories were short-

range. The author found a geographically stable population and persistently low high-school graduation rates among those who stayed in the proximal area. In the analysis of educational attainment and migration, schools served their traditional role of sorting and selecting youth for out-migration. However, education was very much associated with out-migration only when that migration took the individual outside the 50-kilometre circle. Inside this circle, the study suggests that formal credentials were much less common, and presumably much less necessary, for men to possess. Women's higher rates of out-migration from Digby Neck mirror higher levels of formal educational credentials, reflecting among other things, a lack of access to local fisheries employment related resources and paid employment. Education serves as a form of mobile capital that has a very different value beyond the 50-km circle both for men and for women. However, women who stayed in the local area also stayed in school longer, acquiring more educational credentials than men.

In the context of the Northeastern region, there is a dearth of literature on the subject of education and migration. Some of the existing studies are more focused on the influx of migration and rather than out-migration. This section makes an attempt to review some of the literature on migration in the Northeastern region.

Shingmila (2007) conducted a primary survey on the women migrants from the Northeastern states who are working in unorganized service sectors of Delhi. The main objective of the study was to understand the causes of women migrating from rural areas to the cities. She has taken up a pilot study to explore and go deeper into their lives that has various shades of struggles every day. The sample of the study was collected in a random basis that includes 34 respondents among the migrants from different states of the Northeastern region. The tools and techniques that she adopted in the study were through questionnaire method and schedule and interact with the interviewee. She found the migration from the Northeastern region has increased in recent times by

arguing that most of the migrants came for education purposes⁸, to pursue their graduation or other higher education courses, and finally landed up of working when their families in the place of origin could not support them financially any more. They quit their studies due to financial constraints and the pressure of supporting their younger sibling's education back home. The main findings of the study are: Most of the migrants work for 9 to 11 hours in a day, which is against the universal standard of working day; none of them like to work in a night shift such as nurses, call center and waitress of the hotel. The migrant's women are working in the hospital, salesgirls of shop, beauticians and hostess of the hotel. The cities attracted large number of migrants from other states as well, basically due to the availability of well-developed infrastructural facilities.

Singh (2007) argued that the students who wish to acquire good and in-depth knowledge of education need to go outside the region. To send children for further studies to different parts of India and the world according to their conveniences, irrespective of their economic conditions, seems to have become the sole responsibility of parents. It was not an exaggeration to say that the trend has become a fashion. It was also a fact that those students, who score goods marks and rank holders in the 10th and 12th standards, compulsorily, moved outside the region for pursuance of professional courses in higher education.

Shrivastava and Heinen (2005) studied the fertile floodplains of Brahmaputra Valley and found that most of the immigrants from within India and from neighboring countries have been attracted to the area by tea estates. Migration has been linked to Assam's high population density and agriculture expansion. Based on household surveys in 37 villages in the park's periphery,

⁸The factors that cause of the Northeast women to migrate are lack of opportunities, unemployment, absence of proper infrastructure and industry, conflict, lagging of the education system and its inability to prepare students to meet the demands of the markets in the professional service sector. There hardly existed in the region any private enterprise that could provide employment. Government jobs were not at all adequate to employ every one; as a result, persons have migrated to Delhi to seek better education, to seek livelihood, to remain independent and due to availability of job opportunities, which would enable them to help their families financially.

they compared home garden productivity and economic return among residents and immigrants of different ethnic groups and explored the hypothesis that residents had an advantage over immigrants in maximizing gains from home gardens resources. But the results indicated that, although resident home gardens were larger, production from immigrant home gardens was by over four times higher and that their economic returns were larger too. The major reason for the population migration into Assam was the economics development of the region during the British period. Among the opportunities for employment were the tea gardens that were established in the 1930s. Assam's tea gardens expanded rapidly by mobilising a large-scale of workforce from out-side the region. As for the tea gardens workers, there were many who, after the end of their employment contracts, obtained land in the vicinity of the tea gardens and settled down (1977; 1991 and Barpujari, 1998). Labour has also been in great demand from the oil and coal fields, and from road and railway construction, and as a result, the inflow of population has increased continuously (Barua, 1996: 46).”

Most of the in-migration is of uneducated and low-skilled persons; they are absorbed in agriculture and related sectors (Sharma, 2006). Singh (1987) argued that even after independence, a dual economy ethos is continuing in which the wages of the migrant labour is remitted to their homes outside the region and that this group of labour constitutes a majority on various construction projects. The contractors and traders, too, transfer their profits to their home states or other advanced urban centre for investment. This evidently showed that the migrant-receiving regions would not benefit from population influx; this will lead to the problem of ethnic diversity and polity (Kumar, 2007). Another study by Mishra (2007) pointed out that the population from other parts of India came to the state in response to the demand for workforce in the tertiary sector since the region has shortage of manpower and skilled workers.

2.2 Methodology

The concepts and definition of migration used in this study is given in the Appendix A. This study used the cross-tabulations to find out-migration differentials across the Northeastern region and we calculate the decadal growth rate of total out-migration, education and employment from across the entire Northeastern region by using the Compound Annual Rate Growth (CARG):

$$[\left(\frac{P_t}{P_0} \right)^{(1/r)} - 1] \times 100$$

Where,

P_t = Population in current year at time t

P_0 = Population in base year at time 0

r = Time period

The method used for getting better trend of the decadal growth of migration from the Northeastern region of India over the decade of 1981-1991 and 1991-2001 whether the variation of migration in relation to education and employment has been positive or negative. The states showing positive growth rate of migration indicates an increase of more out-migration and the states showing negative growth rate of migration indicates a decline of out-migration.

2.2.1 Data sources

This study depends on the secondary information as published by the Registrar General of India, New Delhi in the various volumes of the Census of India related to 1981, 1991, and 2001.

The two main secondary sources of data on population mobility in India are the Population Census and the National Sample Survey (NSS). These

censuses/surveys underestimate some migration flows, such as temporary, seasonal and circulatory migrations, both due to empirical and conceptual difficulties. Since such migration and commuting is predominantly employment-oriented, the data underestimate the extent of labour mobility. Furthermore, migration data relate to population mobility and not worker mobility, although economic theories of migration are primarily about worker migration. It is not easy to disentangle these, firstly because definitions of migrants used in both surveys (change from birthplace and change in last usual place of residence) are not employment-related. Secondly, migration surveys give only the main reasons for migration and that too only at the time of migration. Secondary economic reasons could be asked, as in the case of married women, who would cite other reasons for movement. Another problem is that the migration data relate to stocks of migrants and not to flows, although different policy concerns relate to stocks (of different ages) and flows. Many of these concerns can be handled only by micro surveys.

The Census of India provides data on migrants' place of birth (POB) and place of last residence (POLR). The 2001 Census, like the earlier censuses, collected migration details for each individual concerned by place of birth and the last residence. Data on last residence along with details like duration of stay in the current residence and reason for migration provide useful insights for studying migration dynamics of the population. The Indian Census provides information of reasons for migration only from 1981 onwards. The analysis is mostly based on the place of last residence using the data 1981, 1991 and 2001. For this purpose, the 8 major Indian States of the Northeastern region viz. Sikkim, Arunachal Pradesh, Nagaland, Mizoram, Manipur, Tripura, Meghalaya and Assam have been considered.

2.2.2 Theoretical Framework

Our main aim is to understand why some people migrate while others do not. There are a variety of theoretical models available which help us to build a conceptual framework. To serve our purpose we developed the following three theoretical models that fit to support our analysis. The Push-Pull Framework, the Micro Economic Model and the Social Capital Theory are the ones which have been followed.

The push-pull framework of migration takes place in many cases when there exist strong pressure of pull from the receiving state/country and strong forces of push from the sending states/countries. Some of the factors that push people to migration from the Northeastern region are lack of education infrastructure, lack of employment opportunities, social disturbances, and inhospitable environment for pursuance of studies. The pull factors; include good infrastructure, conducive study environment, transportation facilities, quality educational facilities, good sanitation, convenient location, adequate employment opportunities, fair health care facilities, and etc. Migration of people brings about certain equilibrium between forces of economic growth and contraction among different geographical regions of the world through process of remittances, utilisation of skilled manpower and provision of knowledge base to the economies concerned. Thus focus operating at both ends of the migration stream, namely in states/countries of origin and at the host states/countries, jointly result in migration. In this context both sending and receiving states will benefit from migration.

Human Capital Theory/Rational Choice Theory is the choice of an individual in a micro economic model is a rational and economically-based decision to maximize return to his/her human capital over space. A person is

likely to migrate if his/her expected income is greater in a location other than the place of his/her residence. Every individual desires to maximize his/her income and earning. But the wage rates and employment opportunities differ between the place of origin and the place of destination (Sjaastad, 1962; Todaro 1969).

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 relationships of mutual acquaintance and recognition. Many people gain when they access social capital through membership in networks. The network that contributes to social capital may be kinship, friendship and shared community origin. Such network increases the likelihood of migration by reducing cost and risk. Examples are; private recruiting agencies; Information, trade links, higher education links (Bourieu and Wacziarg 1992).

2.3 Summary

Some of the studies on education and migration that we reviewed are not seen to be strong in terms of analysis though they have made great contribution to theory formulation.

Several studies on internal migration have established the existence of causes and consequences of migration. Many researchers support the fact that migration could serve as a tool for development. It has benefited states/countries through various channels: through creation of knowledge economies, through remittances and through production of skilled manpower. Several studies on migration have been carried out in the Indian context too. But no studies exist on the links between education and migration. Therefore, there exist greater scopes for investigation into this area.

In Northeastern states, most of the literature pointed out that the pressure of population has become a serious issue that leads to increasing social tensions. They hamper development of the regions. Another problem of concern was the outflow of the young population of this region to different parts of the country. Despite increasing out-migration from the region in recent times, the region does not seem to be reaping adequate benefits from the process. Another set of problem arises from the non-availability of reliable data. Studies have in general failed to address the implications of migration from the Northeastern region. The region has to maintain well-documented accounts of remittances, and of migrants who return after completion of their professional courses outside the region. Researchers have come to widely differing conclusions based on the particular techniques and indicators they have used for their studies.

The present study aims at developing an objective and systematic approach to examine the magnitudes and dimension of the increasing trend of out-migration from the Northeastern region of India to other states in India.

Educational Development of the Northeastern Region

3.1 Introduction

The previous Chapter 2 that has been discussed provides the relationship between education and migration. This Chapter presents the educational facilities and student's enrolment in various level of education. Thus will get some idea that possibly the inadequacy of educational infrastructure compel the student to migrate for education outside the region. Natural capital like land, physical capital such as machinery and financial capital in the form of shares are no doubt, necessary but certainly are not a sufficient condition for economic growth in an economy. Human capital like education and dexterity of the workforce would facilitate the process. That is why the human capital has traditionally been regarded as one of the key factors behind economic growth. Societies with a better endowment of human capital are considered to have a greater development potential than societies with scarce or inadequate human resources. Education is considered as a factor of input. The contribution made by knowledge resulting from additional education expands the capacity to produce, and increases the demand for goods and services and the desire for greater leisure. The dual function of education is stressed: the demand and supply effect. Education is examined both as a cause and a consequence of economic growth, economic development and economic progress, through its contribution to the quality of the labour force, earning capacity, both individual and national, productivity, the rate of economic growth and the character of economic development.⁹

⁹ See Firestone, O. J. (1968), Education and economic development-the Canadian case Review of income and wealth, Volume 14 Issue 4 p. 341-385, December 1968

3.2 Educational Development in the Northeastern states

The educational development in the Northeastern states has been briefly analyzed below. While analyzing the educational development in the Northeastern states, data has been obtained from the *Basic Statistics of North East, 2002*, the *Selected Educational Statistics: 2000-01, 2003-04 and 2004-05* of the MHRD (Ministry of Human Resources Development). It may be noted that school is the basic unit of collection in the Ministry of Human Resources Development.

Table 3.1
State-wise literacy rates (1951–2001)

States	State-wise literacy rates					
	1951	1961	1971	1981	1991	2001
Sikkim	-	-	17.74	34.05	56.94	68.81
Arunachal Pradesh	-	7.13	11.29	25.55	41.59	54.34
Nagaland	10.52	21.95	33.78	50.28	61.65	66.59
Manipur	12.57	36.04	38.47	49.66	59.89	70.53
Mizoram	31.14	44.01	53.80	59.88	82.26	88.80
Tripura	-	20.24	30.98	50.10	60.44	73.19
Meghalaya	-	26.92	29.49	42.05	49.10	62.56
Assam	18.53	32.95	33.94	0	52.89	63.25
NER	9.09	23.65	31.18	38.94	58.09	68.50
INDIA	18.33	28.30	34.45	43.57	52.21	64.84

Source: Office of the Registrar General, India

Table 3.1 shows the literacy rates in the Northeastern states have improved since 1951. The trend of literacy rates in the Northeastern region has increased from 9.09 per cent in 1951 to 68.50 per cent in 2001. In the case of India it has increased from 18.33 per cent in 1951 to 64.84 per cent in 2001. However, most of the states in the Northeastern region had literacy rates higher than the national average in 2001: Mizoram with 88.8 per cent had the highest literacy rates in the region and also among all the Indian states, second only to Kerala.

Table 3.2
Gross Enrolment Ratio in Primary and Secondary Schools

States	Gross Enrolment Ratio (GER)- All Categories					
	I-VIII (6-14yrs)			IX-X(14-16 yrs)		
	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	113.47	99.63	106.7	58.12	46.6	52.58
Assam	92.99	90.81	91.92	53.6	44.93	49.41
Manipur	132.45	126.75	129.65	73.46	72.2	72.84
Meghalaya	118.78	125.17	121.93	41.58	45.01	43.28
Mizoram	112.47	106.47	109.51	63.31	67.5	65.35
Nagaland	76.23	75.26	75.76	26.74	27.19	26.96
Sikkim	109.36	113.66	111.49	40.46	42.35	41.41
Tripura	112.14	106.92	109.59	59.23	55.43	57.39
NER	108.48	105.58	107.06	52.06	50.15	51.15
INDIA	96.91	89.87	93.54	57.39	45.28	51.65

Source: Selected Educational Statistics, 2004-05, Ministry of Human Resource Development, Government of India

Table 3.2 shows the gross enrolment ratio of students in Classes I-VII (children in the age group of 6-14 years) is high in the Northeastern region and it is higher than the national average. At the high school stage (Classes IX-X), attended in general by children in the age group 14-16 years, the enrolment rate has declined drastically in all the states of the Northeastern region. As students reached higher and higher levels of education the enrolment ratios come down sharply, a tendency commons for both the Northeastern states and all India.

Table 3.3
Gross Enrolment Ratio in Higher secondary and Tertiary Education

States	Gross Enrolment Ratio (GER)- All Categories					
	XI-XII (16-18 yrs)			Higher Education (18-24)		
	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	36.10	25.05	30.82	7.12	4.50	5.85
Assam	17.54	11.00	14.38	8.17	5.70	6.94
Manipur	26.49	20.81	23.65	14.81	11.77	13.27
Meghalaya	23.84	22.86	23.36	12.67	10.52	11.58
Mizoram	25.14	23.83	24.48	12.85	7.77	10.39
Nagaland	16.25	15.12	15.71	4.96	4.40	4.70
Sikkim	-	25.31	25.78	10.88	8.15	9.61
Tripura	23.04	17.5	20.32	7.19	5.14	6.16
NER	21.05	20.18	22.31	9.83	7.24	8.56
INDIA	30.82	24.46	27.82	11.58	8.17	9.97

Source: Selected Educational Statistics, 2004-05, Ministry of Human Resource Development, Government of India

Table 3.3 shows the Gross Enrolment Ratio in Higher secondary and Tertiary Education across the states in the Northeastern region. The total enrolment of both boys and girls in classes XI-XII (16-18 years) is higher in India (27.82 per cent) as compare to Northeastern region (22.31 per cent). A similar trend shows for boys and girls. Only Arunachal Pradesh shows higher gross enrolment in class XI-XII (30.82 per cent) than the National average. For boys Arunachal Pradesh continued to be higher across the states of the Northeastern region and India as well. For girls also Arunachal Pradesh and Sikkim show better than the National average and Northeastern states.

The Gross enrolment in Higher Education (18-24 years) shows the National average is better than the Northeastern region average for both boys and girls. Across the states of the Northeastern region, Manipur (13.27 per cent), Meghalaya (11.58 per cent), and Mizoram (10.39 per cent) showed higher than the National average (8.17 per cent). For boys these states continued to shows a similar pattern. The enrolment for girls more or less is same from across the states of the Northeast region in comparison with the National average except few states are very low like; Nagaland (4.4 per cent) and Arunachal Pradesh (4.5 per cent) respectively.

Table 3.4
Ever Enrolment Rates (%) for Northeastern region, 2005

	Ever-Enrolment Rates for Household Income Groups (Rs. per year)			
	Up to Rs 20,000	Rs. 20,001-40,000	Rs. 40,001-62,000	Above Rs. 62,000
NE Region	78.3	80.1	90.1	84.5
All India	65.3	75.1	80.9	86.9

Source: Basic Statistics of North East, 2002

Table 3.4 shows that the proportion of students' ever-enrolment in schooling with household incomes up to Rs 20,000 per annum in the Northeastern region was 78.3 percent as against the all-India average of 65.3 percent. Households, having incomes of more than Rs. 62,000 showed 84.5 percent ever-enrolment rate in the Northeastern region which is higher than the all-India average of 86.9 per cent.

Table 3.5
Number of Educational Institutions in the North East: 2005

Prim + UP	Sec + HS	Arts/Sc/com Colleges	Engg.	Medical	Universities	Polytechnics	ITIs	IITs
56677	7716	497	6	6	13	18	49	1

Source: Draft Report of the Task force on Development Initiatives for the NER, Sept. 2005.

Table 3.5 shows the number of educational institutions in the Northeastern region during the year 2005. With a population of around 39 million, it is very difficult for the students to access education and obtain seats in professional institutions. With the existing educational facilities, students reaching higher levels of education are low and declining sharply at higher stages. The available educational institutions in the Northeastern region are inadequate in number. Students are thus constrained to drop out from school or to migrate for education outside.

Table 3.6
Dropout rates of all categories of students in classes I-V, I-VIII and I-X

States	Classes I-V			Classes I-VIII			Classes I-X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	45.86	48.01	46.85	63.23	61.90	62.63	69.59	72.30	70.79
Assam	51.58	48.34	50.07	72.41	74.60	73.38	75.18	74.69	74.96
Manipur	29.71	32.74	31.18	34.47	30.91	32.80	46.04	39.58	43.02
Meghalaya	51.77	48.15	49.97	65.99	62.43	64.21	79.64	78.65	79.15
Mizoram	50.84	48.71	49.84	68.09	64.34	66.84	69.52	64.11	66.95
Nagaland	41.79	43.66	42.69	41.09	43.93	42.49	66.98	67.63	67.29
Sikkim	52.01	46.80	49.44	72.48	70.02	71.22	83.34	81.15	82.30
Tripura	43.76	42.58	43.20	62.05	66.42	64.15	73.58	73.11	73.36
INDIA	31.81	25.42	29.00	50.49	51.28	50.84	60.41	63.88	61.92

Source: Selected education statistics 2003-04

Table 3.6 shows the dropout rates of all categories of students in elementary schools across the states of the Northeastern region. Dropout rate for boys in Classes I-V is highest in Sikkim (52 per cent) and lowest in Manipur (about 30 per cent). Among girls the highest is in Mizoram (about 49 per cent) and lowest in Manipur (32.74 per cent). The dropout rate of boys is higher than that of the girls.

The boys' dropout rates in Classes I-VIII are very high across all the Northeastern states. Sikkim (72.84 per cent) and Assam (72.41 per cent) recorded the highest dropout rates in the region, and the lowest is in Manipur

(34.47 per cent). For girls the highest dropout rate is recorded by Assam (74.6 per cent) and the lowest is recorded by Manipur (30.91 per cent).

The dropout rates in Classes I-X for both boys and girls are showing very high in Sikkim (83.34 per cent), and 81.15 per cent and the lowest are in Manipur (46.04 per cent) for boys and 39.58 per cent for girls.

Table 3.7
Number of educational institutions in elementary schools and intermediate college in the Northeastern region: 2003-04*

States	Primary/Junior Basic School	Middle/Senior Basic School	High Sch/Hr. Sec/ Intermediate/	Total
Arunachal Pradesh	1371	495	214	2080
Assam	30068	8143	5374	43585
Manipur	2552	831	706	4089
Meghalaya	5851	1759	711	8321
Mizoram	1481	939	512	2932
Nagaland	1520	480	379	2379
Sikkim	684	185	161	1030
Tripura	1776	1001	652	3429
INDIA	767520	274731	152049	67845

Source: Selected Educational Statistics 2003-04

*Provisional data

Table 3.7 shows the total numbers of educational institution in elementary schools and intermediate college in the Northeastern region during 2003-04. Though, the numbers of educational institution in recent times has increased, but still it is not adequate for region because the quality was not improved. As seen from the earlier the dropout rates continued to be very high and it is a matter of concern. Assam is the bigger state in the region with more population holding the highest numbers of educational institutions, and Sikkim being the smaller state holding the lowest number of educational institutions.

Table 3.8
Number of educational institutions on Higher Education in the
Northeastern Region: 2003-04*

States	General Education	Professional Education	Universities/Deemed Universities Instt. of National imp't/ Research Instt.	Total number of institutions
Sikkim	2	4	3	9
Arunachal Pradesh	10	4	4	18
Nagaland	37	1	1	39
Manipur	58	5	2	65
Mizoram	26	2	1	29
Tripura	14	3	1	18
Meghalaya	54	2	1	57
Assam	317	50	7	374
Total NER	518	71	20	809
All India	10377	3201	500	1418

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

Table 3.8 shows the educational infrastructure on Higher Education in Northeast during 2003-04. Assam is the biggest state in the Northeast having the highest number of colleges (518) for general education, professional institution (50) and universities of national importance (7). Interestingly, Sikkim and Arunachal Pradesh are small states having the lowest numbers of colleges for general education but they have more professional institutions and universities of national importance than the rest of the states in the region. Over all, there is demand more for professional institutions in the Northeast in order to increase their skill levels and professional qualifications to compete in the globalize markets. It is obvious that the students have to migrate in the absence of adequate facilities for pursuing higher education within the Northeast or adequate employment opportunities soon after they complete their 10 and 12 standard examinations. With the available educational infrastructure it is not possible for

the aspiring students to secure seats in institutions of higher education through the state quota.

The North Eastern Council (NEC) is the nodal agency for the economic and social development of the region. It was set up in 1971 by an Act of Parliament. NEC has been instrumental in setting in motion a new economic endeavour aimed at removing the basic handicaps that stood in the way of normal development of the region and it has ushered in an era of new hope in this backward area full of great potentialities. It sponsors short-term training programmes in various fields, such as Agriculture, Industry, Planning, Engineering, Horticulture, Health, Education, Rural Development, Science and Technology, Human Resource Development, Small Scale Industries and programmes for generating self-employment.

Table 3.9
Enrolment in Higher Education (Post Graduation)

States	ENROLMENT BY STAGES								
	Ph.D/D.Sc./D.Phil			M.A.			M.Sc.		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	17	5	22	255	165	420	28	18	46
Assam	429	323	752	4164	3367	7531	2670	1324	3994
Manipur	95	87	182	220	374	594	310	280	590
Meghalaya	261	237	498	404	671	1075	186	137	323
Mizoram	-	-	-	-	-	-	-	-	-
Nagaland	-	-	-	184	179	363	40	22	62
Sikkim	-	-	-	-	-	-	13	23	36
Tripura	14	1	15	416	440	856	131	110	241
Total NER	816	653	1469	5643	5196	10839	3378	1914	5292
INDIA	40275	25250	65525	230008	197226	427234	134939	102499	237439

Source: Selected education statistics 2003-04

There has been impressive growth in higher education and student enrolment rose from 7.26 million in 1997-98 to 10.48 million in 2004-05. Enrolment of women students rose from 2.45 million in 1997-98 to 4.04 million in 2004-05, constituting about 40 per cent of the total enrolment. As per the NSSO survey (55th Round 1999-2000), there were inequalities in enrolment in higher education across various social groups both in rural and urban areas, and also in

terms of gender. Women belonging to SCs and STs and those living in rural areas are the most disadvantaged.

Table 3.9 shows the total number of both boys and girls in the Northeastern region enroll for Ph.D/D.Sc./D.Phil programmes are very less in numbers. There's low level of enrolment for higher education among the states of the Northeastern region, Assam recorded the highest number of enrolment for PhD with 752. Since, it is the largest state in the Northeastern region, it is not surprising. The second rank goes to Meghalaya, with a total numbers of 387 boys and girls under this programme.

Three states of the Northeastern region namely, Mizoram, Nagaland and Sikkim, do not have PhD enrolment (Government of India, 2008). Student enrolment for the Arts stream is more than that for the science and commerce stream. Naturally therefore, the supply of professional and scientific manpower is small in these countries of the Northeast. Technical education facilities are also extremely poor in the region. There exist inadequate information and lack of patience to study sciences because of unreasonable fear on the part of students about the regress of scientific study and practical work. Therefore, students prefer easy courses or simple degrees. The majority of them in Northeast enroll for the Arts stream and only rarely for the science and commerce stream. In Sikkim the size of the state is larger and it has recorded the highest enrolment rates for M.Sc (Master of Science), M.A (Master of Arts), and M.Com (Master of Commerce) courses among the states of the Northeast. Sikkim also has the largest technical education courses than any other state in the Northeast. This can also be the reason why migration for education declined during the 1991-2001. Students' probability of getting opportunities for technical education is high; therefore, the decadal growth rates of migration in Sikkim after globalisation have become negative. Table 3.10 shows Mizoram and Sikkim had no enrolment for M.Com (Master of Commerce) courses.

Table 3.10
Enrolment in Higher Education (Post Graduate/Under Graduate)

States	M.Com			B.A./B.A.(Hons)			B.Sc./B.Sc.(Hons)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	19	8	27	3189	2037	5226	241	113	354
Assam	875	219	1094	86620	57985	144605	26167	5340	31507
Manipur	85	50	135	3760	2737	6497	3352	2017	5369
Meghalaya	47	37	84	6804	7310	14114	1526	1275	2801
Mizoram	-	-	-	2624	2376	5000	300	226	526
Nagaland	11	3	14	4683	4013	8696	520	259	779
Sikkim	-	-	-	1350	1459	2809	289	170	459
Tripura	89	12	101	7971	6955	14926	1936	870	2806
Total NER	1126	329	1455	117001	84872	201873	34331	10270	44601
INDIA	93854	48100	141954	2131144	1693689	3824833	974906	639161	1614067

Source: Selected education statistics 2003-04

Table 3.10 shows Assam had the highest number of enrolment rates for students pursuing B.A. /B.A. (Hons) (Bachelor of Arts with Honour), B.Sc. /B.Sc. (Hons) (Bachelor of Science with Honour) and B.Com. /B.Com. (Hons) (Bachelor of Commerce with Honour) for both boys and girls, and Sikkim being the smaller state had the lowest enrolment for both boys and girls during the period 2003-04 (See Table 3.11).

Table 3.11
Enrolment in Higher Education (Under graduation)

States	B.Com./B.Com.(Hons)			B.E./B.Sc.(Engg)/B.Arch.			*Medicine, Dentistry, Nursing, Pharmacy, Ayurvedic & Unani, Homeopathy etc.		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	274	89	363	289	48	337	38	34	72
Assam	14309	2387	16696	3460	350	3810	1765	791	2556
Manipur	205	169	374	372	65	437	91	65	156
Meghalaya	1482	574	2056	-	-	-	-	-	-
Mizoram	139	89	228	-	-	-	-	-	-
Nagaland	785	334	1119	-	-	-	-	-	-
Sikkim	193	79	272	1025	293	1318	48	51	99
Tripura	1321	84	1405	521	127	648	34	13	47
Total NER	18708	3805	22513	5667	883	6550	1976	954	2930
INDIA	016421	596953	1613374	588790	184134	772923	129404	93831	223235

Source: Selected education statistics 2003-04

Note*: These courses come under medical education

Table 3.11 shows that Assam had the highest enrolment for engineering and medical education for both boys and girls among the states in the Northeastern region. Within the Northeastern states there is wide disparity in terms of educational infrastructure facilities, enrolment rate, and development

pattern. Most of the states in the Northeastern region do not have professional colleges up to 2003-04, except Assam had few and thus the student's enrolment also continued to high for both boys and girls for B.Ed (Bachelor of Education), (See Table 3.12).

Table 3.12
Enrolment in Higher Education (Professional courses)

States	B.Ed./B.T.			Others (not included in specified faculty)			Total Enrolment (Higher Education)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	45	15	60	44	16	60	4439	2548	6987
Assam	1430	957	2387	5729	1649	7378	147618	74692	222310
Manipur	120	170	290	11654	10454	22108	20264	16468	36732
Meghalaya	87	204	291	5382	3525	8907	16179	13970	30149
Mizoram	81	81	162	3173	2484	5657	6317	5256	11573
Nagaland	78	86	164	1609	373	1982	7910	5269	13179
Sikkim	92	93	185	1149	464	1613	4159	2632	6791
Tripura	194	124	318	100	93	193	12727	8829	21556
Total NER	2127	1730	3857	28840	19058	47898	219613	129664	349277
INDIA	57473	57208	114681	640517	333356	973873	6037730	3971407	10009137

Source: Selected education statistics 2003-04

Table 3.12 shows Assam the largest states in the region, as already mentioned continued to dominate the total enrolment for both boys and girls in higher education. The state like Sikkim is smaller in size with less population recorded the lowest number of the total enrolment for both boys and girls in higher education.

Table 3.13
Enrolment in Higher Education (Training institutes)

States	Polytechnic Institutes			Schools Teacher Training			Tech. Indus., Arts and Crafts School		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	88	44	132	-	-	-	368	-	368
Assam	3995	505	4500	70	71	141	3798	762	4560
Manipur	358	108	466	16	44	60	332	208	540
Meghalaya	170	45	215	213	195	408	874	52	926
Mizoram	223	213	436	125	90	215	246	48	294
Nagaland	168	38	206	18	63	81	308	96	404
Sikkim	158	22	180	27	51	78	140	-	140
Tripura	328	141	469	127	158	285	316	84	400
Total NER	5488	1116	6604	596	672	1268	6382	1250	7632
INDIA	289036	83663	372699	53449	54485	107934	663990	46824	710814

Source: Selected education statistics 2003-04

Table 3.13 shows the numbers of boys and girls enrolment in Polytechnic Institutes. For both boys and girls, Assam recorded the highest numbers, and the lowest is recorded in Sikkim. Interestingly for Schools Teacher Training, Meghalaya recorded the highest number for both the sexes and no enrolment are recorded in Arunachal Pradesh. Further, Assam recorded highest enrolment of boys and girls for Technology, Industries, Arts and Crafts School and Sikkim continued to record the lowest enrolment among the states in the Northeastern region.

3.3 Educational Development Index (EDI) ranking for the States in India

According to the National University of Educational Planning and Administration report the educational development ranking of states in India shows that Kerala held the first rank followed by Delhi. Jharkhand and Bihar held the lowest rankings (Table C.1 in Appendix C).

Among the eight states of the Northeastern region, Mizoram occupied the highest position followed by Sikkim. At the all India level, Mizoram ranked 9th and Sikkim 11th. Interestingly, Mizoram also had the second highest literacy rate in the country, second only to Kerala. Assam held the lowest rank, 30th among the states though it is developed in some other sectors than other states in the Northeastern region.

Though the government is pumping great amounts of money into expenditure in education in the Northeastern region, it fails to check, monitor and implement the projects properly. There takes place leakage of funds and there is lack of transparency and accountability. As a result, the education system is turning from bad to worse, allowing pupils to withdraw from the system at early ages and leaving the region to suffer from very high rates of dropouts.

Those students who remain in the system and aspire to pursue higher studies/professional courses soon after completing of studies at the 12th standard, are constrained to move out of the region due to inadequacy of the educational infrastructure/professional institution in the region.

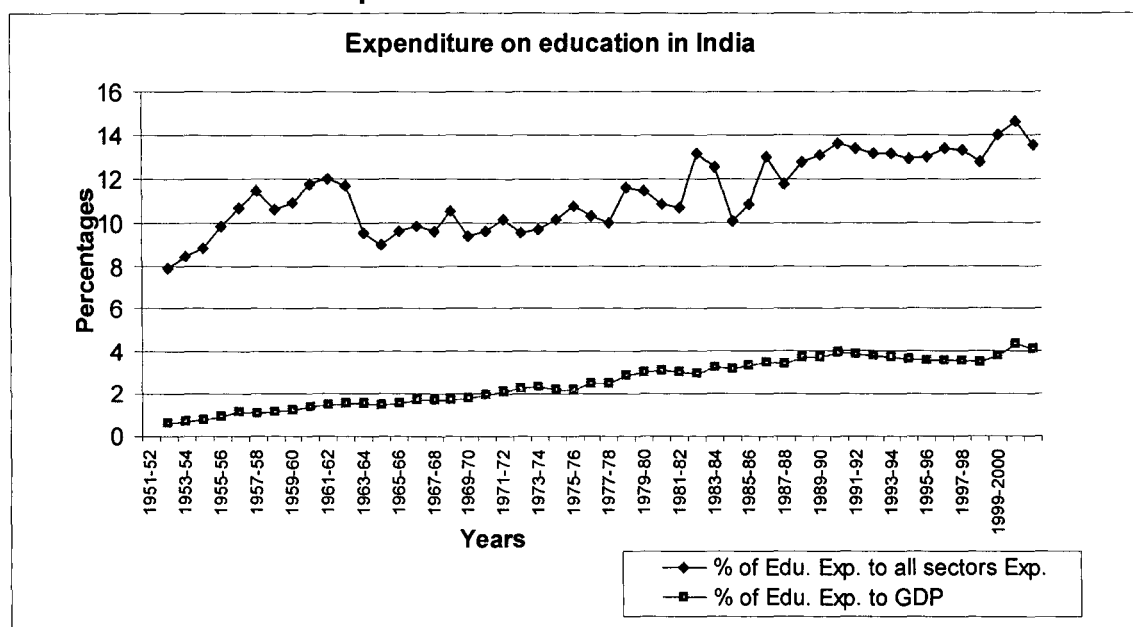
3.4 Public Expenditure on Education

Improving the quality of and access to education is an important policy objective in all countries. The role of education in economic development has been recognized for quite some time in mainstream economic literature. Divergence between the private and the social rates of return from education is the rationale for intervention by the state to ensure equity in opportunity across the population. The New Growth Theories predict that higher levels of schooling and better quality of workforce lead to increase the rate of growth, further strengthening the case for public expenditure on education. The outcome of these lines of research also has implications for the financing of education. However, question of effectiveness and efficiency of resource allocation by the government have generated considerable debate, both from ideological and technical points of view. It is widely acknowledged that there exists a large scope for improvement at both the levels and the quality of publicly-funded education. New institutional arrangements are being designed to address the deficiencies in incentives and monitoring, thereby improving quality.

India is home to 17 per cent of the World's total population, accommodated in 2.4 per cent of the World's total area. As against 2820 languages in the entire world, as many as 325 languages are effectively used in India. After every 8-10 kms, local dialects change in India. The country has witnessed phenomenal educational development – both in quantitative and qualitative terms-since independence. However, the national goals of universal elementary education and total eradication of illiteracy remain elusive. The

Government is committed to achieving these national goals and has been steadily increasing the budgetary allocation for education. The country has also made significant strides in higher and technical education. India spent 4.11 per cent of its GDP on education during 2000-2001 but about 44 per cent of its adult population still remains illiterate.

Figure 3.1
Expenditure on Education in India



Source: a) Selected Educational Statistics 2000-2001
b) National Accounts statistics, 2002

Figure 3.1 shows the expenditure on education in India during the period 1951-52 to 2000-2001. The expenditure on the education sector was slightly lower than 1 per cent of the GDP in 1951-52. The percentage of expenditure to GDP shows an irregular pattern. It rose to 2.33 per cent in 1972-73, 3.07 per cent in 1979-80 and to 4.11 per cent in 2000-2001. In 1973-74 and in 1981-82, it declined from the levels already reached. Similarly, the percentage of expenditure on education and training to total expenditure of all sectors during the past five decades indicates that it increased from 7.92 per cent in 1951-52 to 13.55 per cent in 2000-2001 i.e. by 6.37 percentage points. This translates to an annual growth rate of 0.13 per cent during the period 1951- 52 to 2000-2001 (Table C.2 in Appendix C).

The series of initiatives that were taken in the Budgetary developments in 2006-07 included hike in gross budgetary support (GBS) for the plan by 20.1 per cent from Rs.143,791 crore in 2005-06 (RE) to Rs.172,728 crore in 2006-07(BE); an increase of 54 per cent in the outlay for the six components of visionary development proposal Bharat Nirman - for building infrastructure, especially in rural areas – from Rs. 12,160 crore (including the North East component) to Rs. 18,696 crore; eight flagship programmes - Sarva Siksha Abhiyan, Mid-day Meal scheme, Rajiv Gandhi Drinking water mission, Total Sanitation Campaign, National Rural Health Mission, Integrated Child Development Programme, National Rural Employment Guarantee Scheme and Jawaharlal Nehru National Mission Urban Renewal Mission - from Rs.5.3 to 5.6 per cent in the past four years; a distinct recovery in gross tax- GDP ratio was envisaged with the ratio going up to 11.2 per cent (which with the recent upward revision in GDP now works out to 10.8 per cent) in 2006-07 (BE).

3.5 Expenditure on Education in the Northeastern region

The proportion of expenditure on education in the total budget in all states of the Northeastern region was higher than that of the national average in 1998-99. Except for Arunachal Pradesh, Nagaland and Sikkim, almost all the states allocated 20 to 31 percent of their total budgets on education. The figures of allocation to education as a percentage of Net State Domestic Product (NSDP) in all the states of the region were also higher than the national average in 1999-2000. However, the proportion of expenditure on education in the total budget differ widely one state to another. For instance, Manipur allocated about 18 per cent of its NSDP to education in 1999-2000, while Nagaland allocated only 4.88 per cent of its NSDP to education (Table 3.14 and 3.15).

Table 3.14
Education expenditure as percentage of annual states budget, 1998-99

States	Expenditure (%)
Arunachal Pradesh	16.69
Assam	31.39
Manipur	23.43
Meghalaya	26.31
Mizoram	20.73
Nagaland	15.68
Sikkim	6.71
Tripura	20.19
INDIA	13.78

Source: Mridula Sharma

Table 3.15
Percentage of total Budget expenditure on education to NSDP, 1999-2000

States	Expenditure (%)
Arunachal Pradesh	8.29
Assam	8.40
Manipur	17.64
Meghalaya	7.36
Mizoram	10.09
Nagaland	4.88
Sikkim	9.85
Tripura	9.82
INDIA	3.20

Source: Mridula Sharma

Table 3.18 reveals that almost all the Northeastern states allocated more than half their educational budgets to primary education. Secondary education received nearly one-third to one-fourth of the total budgeted expenditure during 1999-2000. Higher education received less than 10 per cent of the total budget in five out the eight states during the same year. Technical education got the lowest percentage of the total budget on technical education.

Table 3.16
Budget allocation to different level of education, 1999-2000
(Figures are in percentages)

States	Primary edu	Secondary edu	Adult edu	Higher edu	Technical edu	General edu
Sikkim	63.22	34.08	0.02	1.59	0.01	1.04
Arunachal Pradesh	61.50	23.20	1.26	8.08	-	5.97
Nagaland	64.57	24.29	0.93	5.46	1.40	-
Manipur	44.74	33.42	0.68	16.68	0.73	1.99
Mizoram	53.26	24.16	1.02	11.96	0.92	3.20
Tripura	46.94	36.67	4.99	5.23	1.07	1.86
Meghalaya	55.16	24.59	0.98	15.46	0.70	3.09
Assam	58.41	26.42	0.37	8.72	1.69	3.40
INDIA	49.89	35.05	0.25	10.06	2.81	1.50

Source: Mridula Sharma

3.6 Summary

This chapter highlights the educational development scenario across the states of the Northeastern region. The data used are compiled from various sources of selected education statistics. The gross enrolment ratio of students in the elementary schools is high in the Northeastern region and it is higher than the national average. At the high school stages, the enrolment rate has declined drastically in all the states of the Northeastern region. As students reached higher and higher levels of education the enrolment ratios come down sharply, a tendency common for both the Northeastern states and all India.

The literacy rates in the Northeastern region (68.5 per cent) are better than the national average 64.84 per cent (Census, 2001). The most striking pictures are that the dropout rates are very high across all states of the Northeastern region despite, having high enrolment rate and literacy rate which is better than that of the national average. There could be possible reasons of huge

numbers of untrained teachers, distances of the institutions and inadequate infrastructure facilities compel the students to leave out early schooling.

Improving access to and quality of education are the important policy objectives in all countries. The role of education in economic development has been recognized for quite some time in mainstream economic literature. To improve upon the education system investment in human capital should be the first priority. The percentage of expenditure on education and training to total expenditure of all sectors during the past five decades, indicates that it has increased from 7.92 per cent in 1951-52 to 13.55 per cent in 2000-2001 i.e. by 6.37 percentage points. The proportion of expenditure on education to the total budget in all the states of the Northeastern region was higher than that of the national average in 1998-99.

Migration: An aggregate analysis

4.1 Introduction

In chapter 2, we have discussed the existing theoretical and empirical literature on education and migration. Chapter 3 discussed about the educational development and expenditure on education in the Northeastern region. This chapter describe about the magnitudes of migration in the Northeastern region. According to the 2001 census, 307.2 million out of 1028.6 million persons or almost 30 per cent of the total population of India were migrants. Among them, 42.1 million were interstate migrants. Around 1.11 million out of 39 million populations were from the Northeastern region. Migration from the Northeastern region combines two contrasting situations. The politically troubled states, such as Manipur, Nagaland, Tripura and Assam recorded more of out-migrants than in-migrants. On the other hand, net in-migration to Sikkim, Arunachal Pradesh, Meghalaya and Mizoram is indicative of their relatively more stable political conditions (Krishan, 2007).

Migrants vote with their feet in favour of the destinations. They are motivated to move as forced by the pull of employment opportunities, higher wages, better quality of living, better education and better family considerations, and are prompted by the push of a hard situation at home, actual or perceived. In ultimate analysis, disparities in opportunity and quality indices of places are the underlying rationale for people to change their place of residence.

4.2 Approach

We used the census data from 1981-2001 for this chapter to analyse the trends and characteristics of migration situation from the Northeastern region.

We used simple calculation like cross tabulation methods in order to find out the migration differential from the region over the decades of 1981-91 and 1991-01.

4.3 Out-migration from the Northeastern region

In recent time the trends of out-migration has been increasing from the Northeastern region. The people from different states of the region move out for various reasons to different parts of the country. We can see from the following table as the population increases at the same time the migration also increases at faster rates.

Table 4.1
The trends of out-migration, 1981-2001

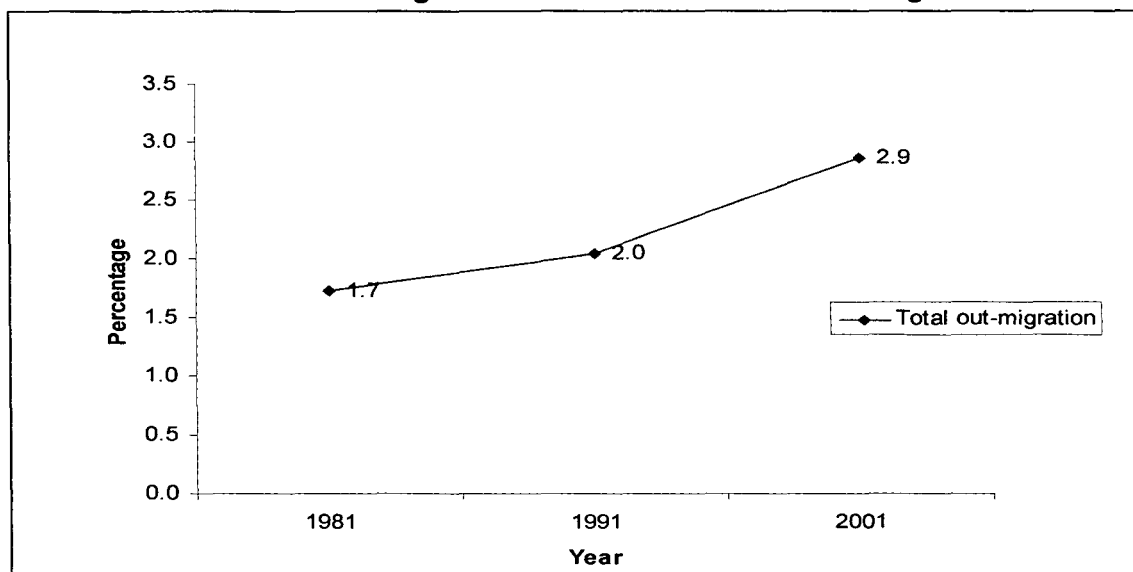
Year	Total Population	Total out-migration
1981	25032173	432367 (1.7)
1991	31953771	650489 (2.0)
2001	38857769	1111680 (2.9)

Source: Census 1981, 1991 and 2001 D series

Note: (Figures in parentheses show percentages)

Table 4.1 reveals that the proportion of out-migration from the Northeastern region has shown an increasing trend during 1981 to 2001 from 1.7 per cent to 2.9 per cent. This increased may indicates for better economics opportunities and acquiring better education out side the region. In the decade of 1981 to 1991 there was a steady increase. But in 1991 to 2001 the increased has been doubled. During 1981 there was a problem regarding the issues of huge inflow of population to the state of Assam, the population measures couldn't take placed at that particular point of times in Assam. Assam experienced the huge outflow of young population during 2001 as compared to the earlier period (see figure 4.1)

Figure 4.1
Trend of out-migration from the Northeastern region



Source: Census 1981, 1991 and 2001 D series

Table 4.2
Out-migration from the Northeastern states to other Indian states, 2001
(Figures are in percentages)

States	Sikkim	Arunachal Pradesh	Nagaland	Manipur	Mizoram	Tripura	Meghalaya	Assam	Total NER
Jammu & Kashmir	0.53	0.32	0.04	0.76	0.53	0.38	0.50	0.30	0.27
Himachal Pradesh	1.71	1.84	0.06	0.54	1.07	0.24	0.95	0.20	1.32
Punjab	1.53	1.57	0.11	1.68	1.40	0.89	1.90	1.64	1.32
Uttaranchal	2.45	4.94	4.23	3.25	10.94	1.28	5.27	1.45	2.28
Haryana	1.73	1.21	0.15	1.68	1.36	1.09	2.03	1.57	1.29
Delhi	13.44	16.15	12.75	25.51	34.43	7.98	31.44	5.74	8.95
Rajasthan	2.22	1.60	0.16	4.64	1.56	2.48	2.85	1.59	1.48
Utter Pradesh	2.19	5.68	5.81	20.34	6.29	6.16	3.90	20.27	15.91
Bihar	6.46	23.11	74.09	2.45	6.23	2.61	1.85	28.60	34.54
West Bengal	46.20	8.57	1.03	8.84	8.48	62.07	29.35	29.08	23.92
Jharkhan	0.67	1.31	0.09	1.52	1.62	1.54	1.10	0.72	0.67
Orissa	0.62	1.86	0.09	1.08	1.21	1.43	0.77	0.56	0.54
Chhatisgarh	0.48	0.56	0.05	0.69	0.30	1.01	0.47	1.06	0.81
Madhya Pradesh	1.04	1.23	0.07	1.62	1.40	1.19	1.49	0.79	0.72
Gujarat	1.44	0.86	0.07	2.49	0.51	1.70	0.89	1.01	0.89
Maharashtra	4.92	5.24	0.42	9.99	11.29	4.36	7.46	3.11	3.07
Andhra Pradesh	0.98	5.42	0.08	2.03	0.87	0.69	2.60	0.63	0.70
Karnataka	9.21	11.13	0.32	6.71	5.46	2.03	3.25	0.89	1.38
Goa	0.11	0.20	0.02	0.40	0.14	0.09	0.25	0.09	0.09
Kerala	0.72	1.94	0.21	1.07	1.82	0.34	0.88	0.25	0.33
Tamil Nadu	1.35	5.27	0.13	2.70	3.10	0.45	0.82	0.45	0.57

Source: Census, 2001

Table 4.2 (The absolute number of migration is given in Table D.1 in Appendix D) reveals that the highest numbers of out-migrants from the Northeast are in Bihar, West Bengal, Utter Pradesh and Delhi. West Bengal received the highest number of migrants from Tripura (62.07 per cent), Bihar from Nagaland (74.09 per cent), Utter Pradesh from Manipur (20.34 per cent) and Assam (20.27 per cent), and Delhi from Mizoram (34.43 per cent).

People from Sikkim mostly (46.20 per cent) migrates to the nearest destination that is West Bengal, Arunachal Pradesh (23.11 per cent) and Nagaland (74.09 per cent) are migrates to Bihar, Manipur (25.51 per cent), Mizoram (34.43 per cent) and Meghalaya (31.44 per cent) are migrates to Delhi. Tripura (62.07 per cent) and Assam (29.08) are migrates to the West Bengal.

Assam (467,614) had the highest number of out-migrants, followed by Nagaland (136,682) and the lowest is from Mizoram (4,943). Bihar and Bengal received the highest migration from the Northeastern states whereas; Goa Himachal Pradesh and Jammu and Kashmir received the lowest out-migrants.

4.4 Duration of stay of the out-migration from the Northeastern Region, 2001

The data have been collected on the place of last residence to understand the pattern of migration. It is likely that after one moves out of the place of birth, one may continue to migrate from one place to another. Data on migration by last residence reveals recent migrations over the years and therefore more informative on the current status of the population. The duration of residence details show that the migrations are evenly spread.

Table 4.3
Duration of Total Out-migration from Northeast by PLR

Duration of residence	Total Out-migration			Percentage		
	Total	Males	Females	Total	Males	Females
< 1 Year	35297	19250	16047	3.18	4.42	2.37
1-4 years	257247	120988	136259	23.14	27.77	20.16
5-9 years	166146	66745	99401	14.95	15.32	14.71
10-19 years	244338	84216	160122	21.98	19.33	23.69
20 years and above	305434	91778	213656	27.47	21.06	31.61
Not stated	103218	52769	50449	9.28	12.11	7.46
All duration	1,111,680	435746	675934	100	100	100

Table: D2, Census 2001

Table 4.3 shows the average duration of stay of migrants from the Northeastern region; a period of 1-4 years is the highest period of stay among males. For a maximum period of 20 years and above, females out-number males. The longer duration stayed by females is due mainly to marriage. Male migration for four years indicates that their migration is basically for better economic opportunities and attaining higher education (Figure 4.2).

Figure 4.2
Duration of migration from the Northeast by place of last residence (PLR)

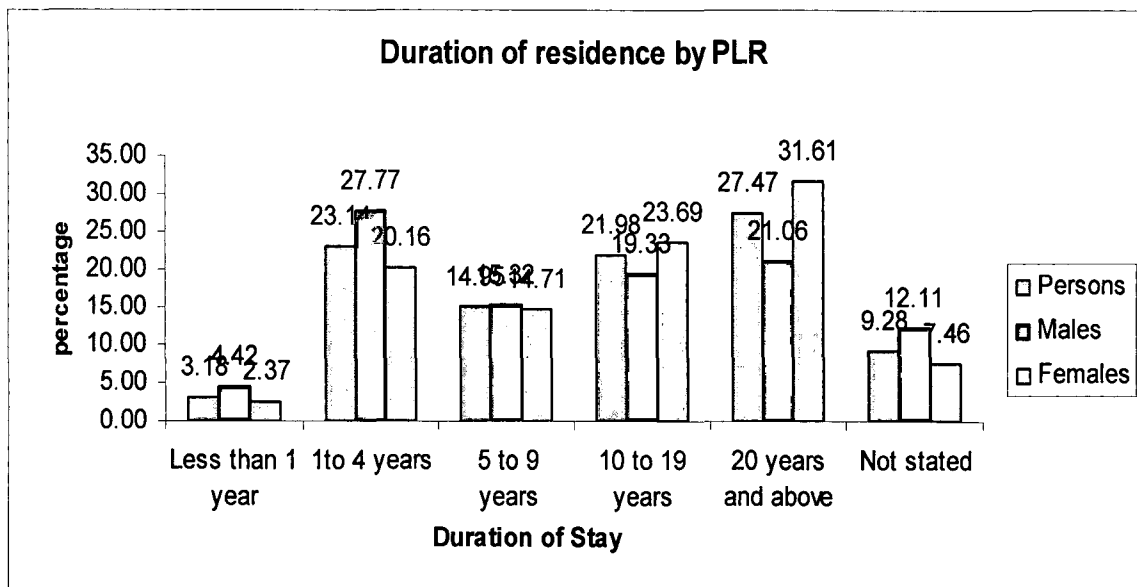
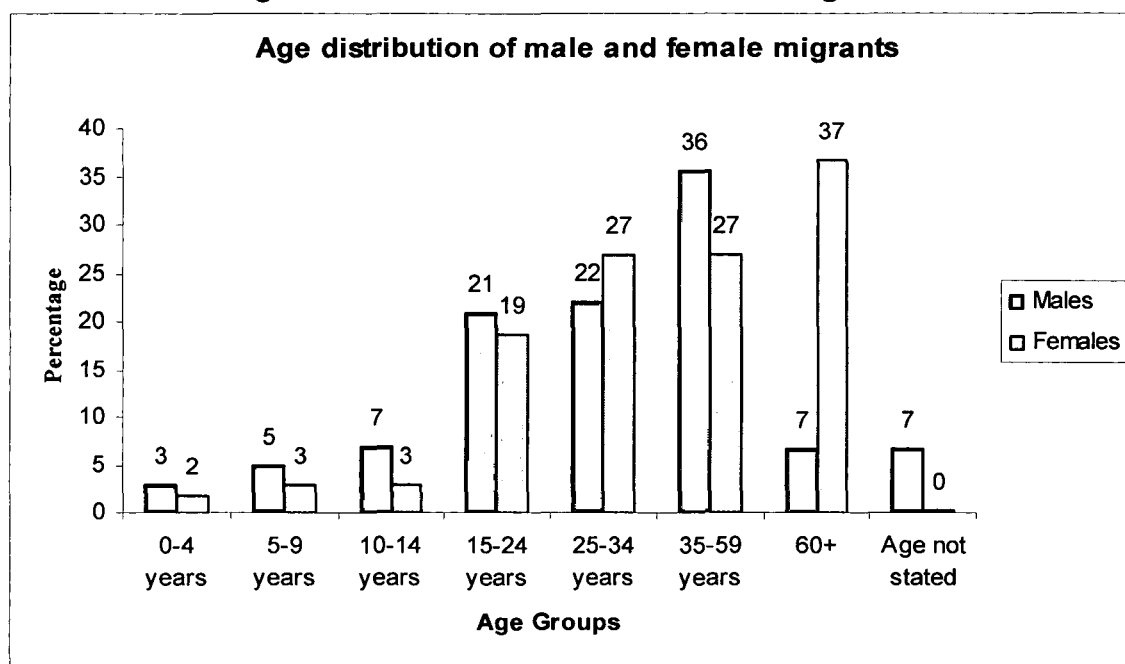


Table: D2, Census 2001

4.5 Age and gender of migrants from Northeastern region, 2001

The following graphs give information on migrants by age groups who migrate from the Northeastern region to others the different states in India. The high proportion of migrants is in the older age 35-59 years. This high proportion in the older age and economically active age groups perhaps reflect their migration for work in a new state.

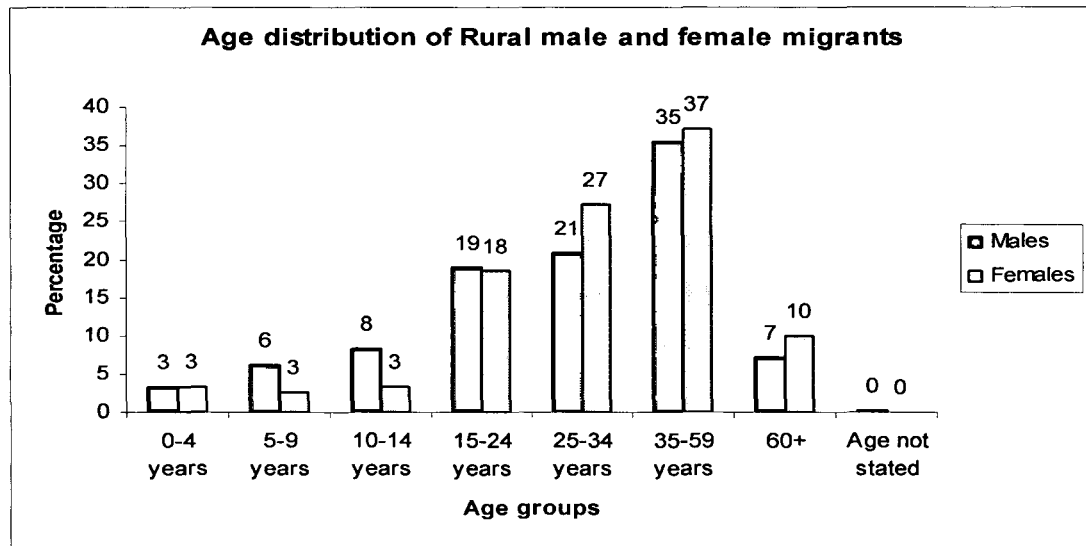
Figure 4.3
Age distribution of male and female migrants



Source: D7A, Census 2001

Figure 4.3 shows age groups of migrants from the Northeastern region during 2001. The highest percentage of the males migrants are in the age of 25-34 years and the lowest are in the age of 0-4 years. Female with the age of 60 years and more show the highest percentage (Table D.2 in Appendix D).

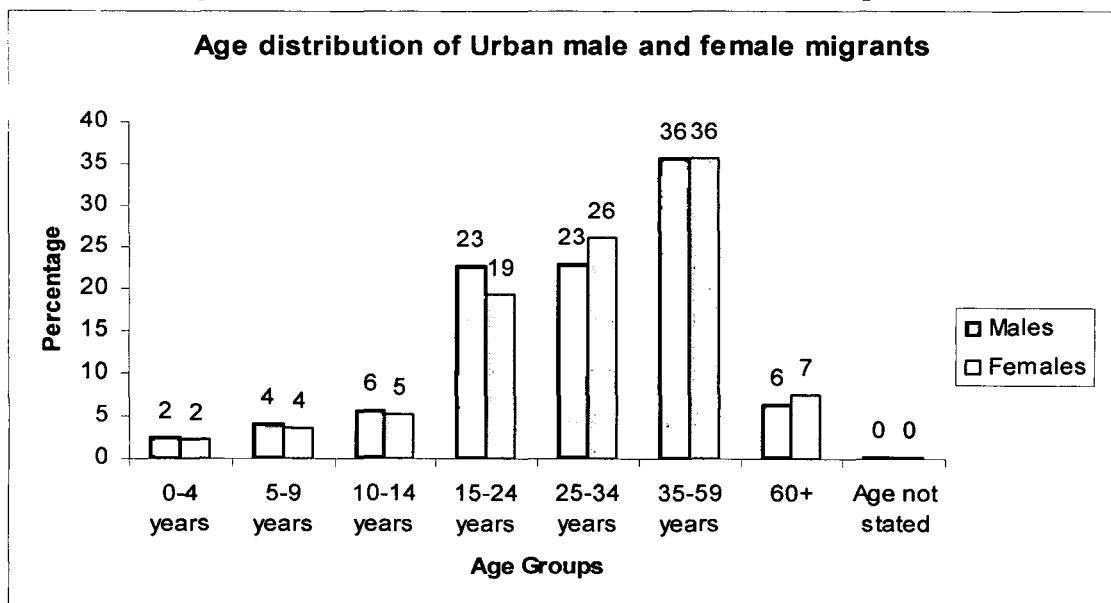
Figure 4.4
Age distribution of rural male and female migrants



Source: D₁A, Census 2001

Figure 4.4 showed both rural males and females migrants from the North eastern states. Male migrants in the age groups of 35-59 years had the highest percentage (35 per cent). For female, the migrants in the age groups of 35-59 years also had the highest percentage (37 per cent) (Table D.2 in Appendix D).

Figure 4.5
Age distribution of urban male and female migrants



Source: D₁A, Census 2001

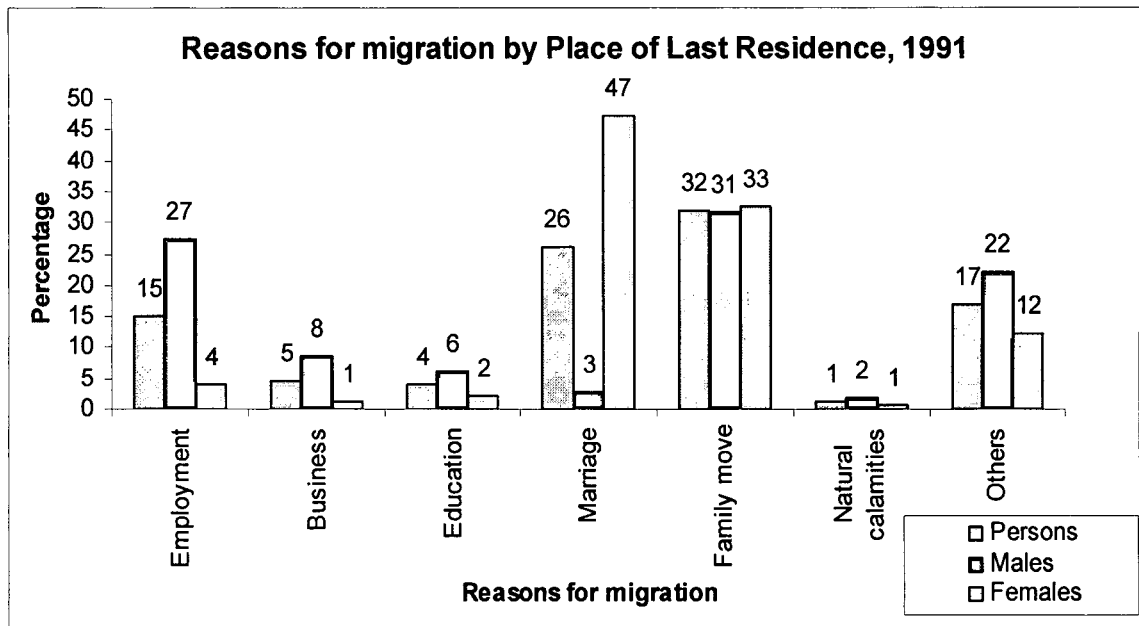
Figure 4.5 shows the age distribution of the migrants both males and females from the urban areas of the Northeastern states to other states in India. The highest proportion of the migrants for both males and females from urban areas is in the age groups of 35-59 years (Table D.2 in Appendix D).

4.6 Reasons for migration

With increasing duration of residence, employment becomes of greater importance as the reason for the migration of males, as does marriage in the case of females. Employment and marriage help to stabilize migration flows. Education is most significant as a reason for migration for those in the new location 1-4 years, particularly for males, indicating that movement for a few years to gain or continue education is an important factor in mobility in India (Skeldon, 1986).

In this section our analysis is based on the second objective of the study. There are several reasons for why people to migrate. This could be due to push and pull factors (ref: Chapter 2). A region like the Northeastern parts of India in which educational infrastructure is inadequate, and employment opportunities scarce, the young population is eager to migrate. The determinants of migration may be economic, demographic, socio-cultural, psychological, and political and institutional. The following diagram shows some of the major reasons for migration. This could be compared the decade-wise proportion of reasons for migration during the 1991 and the 2001 census. Figure 4.6 shows the proportion during 1991 and Figure 4.7 shows the proportion in term of percentage during 2001.

Figure 4.6
Reasons for migration by place of last residence, 1991



Source: Table D3, 1991 and 2001 Census

Figure 4.6 shows the reasons for migration. Marriage continues to be the most important factor, accounting for 47 per cent in 1991; the corresponding proportion in 2001 was 58 per cent. Our most important concern is to understand the economic aspects of migration. If we club employment, education and business motivation together, they would account for 24 per cent (Table 4.4).

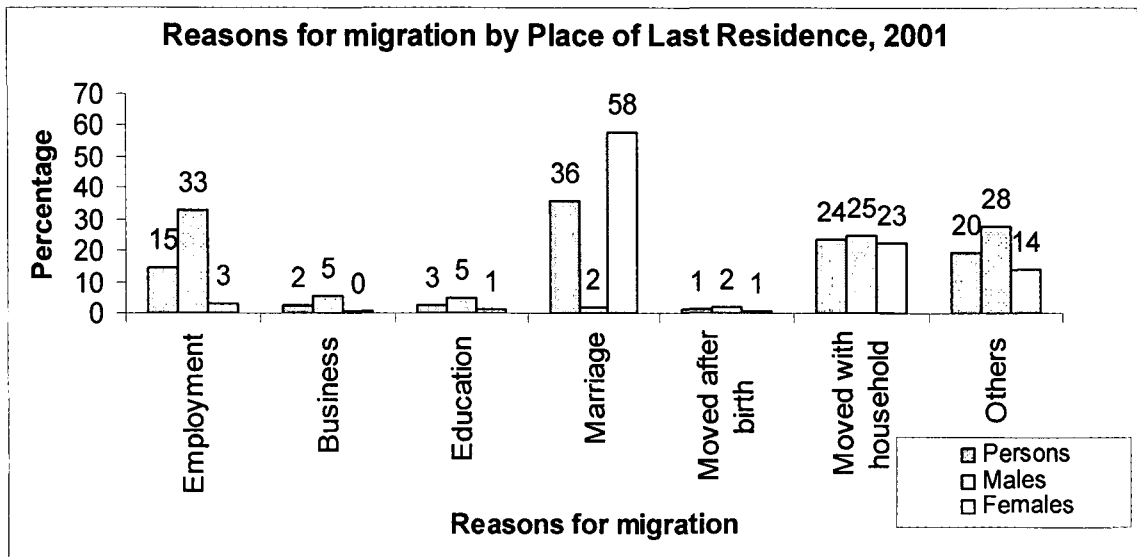
Table 4.4
Reasons for migration from the Northeastern region
By Place of Last Residence, 1991

1991 Census			
Reasons for migration	Number of migrants		
	Persons	Males	Females
Employment	96920 (14.90)	83744 (27.21)	13176 (3.84)
Business	30401 (4.67)	26115 (8.49)	4286 (1.25)
Education	26327 (4.05)	18466 (6.00)	7861 (2.29)
Marriage	170390 (26.19)	8732 (2.84)	161658 (47.17)
Family move	208447 (32.04)	96820 (31.46)	111627 (32.57)
Natural calamities	8112 (1.25)	5579 (1.81)	2533 (0.74)
Others	109892 (16.89)	68286 (22.19)	41606 (12.14)
Total migrants	650489 (100)	307742 (100)	342747 (100)

Source: Table D3, 1991 and 2001 Census

Note: (Figures in parentheses show percentages)

Figure 4.7
Reasons for migration by place of last residence, 2001



Source: Table D3, 1991 and 2001 Census

Figure 4.7 shows the proportions of migrants have come down in 2001. It is well-known that lack of educational facilities, and social and physical infrastructure in the region; but some developmental activities are also taking place, creating investment friendly, private investment and a look east policy, is being promoted which together provide some an opportunity for the people of the region to avail these facilities (Table 4.5).

Table 4.5
Reasons for migration from the Northeastern region
By Place of Last Residence, 2001

2001 Census			
Work/employment	164060 (14.76)	143596 (32.95)	20464 (3.03)
Business	26315 (2.37)	23824 (5.47)	2491 (0.37)
Education	30173 (2.71)	21054 (4.83)	9119 (1.35)
Marriage	398623 (35.86)	7299 (1.68)	391324 (57.89)
Moved after birth	12856 (1.16)	7412 (1.70)	5444 (0.81)
Moved with household	262753 (23.64)	109854 (25.21)	152899 (22.62)
Others	216900 (19.51)	122707 (28.16)	94193 (13.94)
Total migrants	1111680 (100)	435746 (100)	675934 (100)

Source: Table D3, 1991 and 2001 Census

Note: (Figures in parentheses show percentages)

Marriage was cited as the pre-dominant reasons for migration among females. About 58 per cent migrants of female migrants cited it as the reason for migration. Among males, the most important reasons for migration were 'Work/Employment'; accounts 33 per cent reported this reason.

If a migrant moves out for joining, setting up or running a business, he or she is said to have migrated on account of business. Census clarifies that business is different from job or employment for which wages/salary are paid in cash or in kind. Business means an economic activity, which involves risk-taking either on own account or in partnership with others. There is no commensurate category in National Sample Survey (NSS).

Education is included as a reason of migration in both census and National Sample Survey (NSS). Migration of males for education is more than of females. Any person who has moved to join a school or a college falls under this category. However, census makes a distinction between persons who moved voluntarily for education and persons who moved along with earning members of the family. In the latter case, family movement is the reason migration. According to NSS, the reason would be recorded as the migration of parent or the earning member. A large number of migrants from the Northeastern region are Located in New Delhi. But, by and large the proportion of migrants from the Northeast to the Eastern region is more compare to those to the Northern, Western, and Southern regions.

4.7 Reasons for out-migration from the Northeastern region, 2001

Table 3 Appendix on 2001 census gives information on the reasons for migration based on the place of last residence. One of the important aspects of studying migration is to find out the reasons for which any persons leaves his residence and finds a new residence. The question on reason for migration was canvassed for the first time in 1981 in Indian census. The following tables provide details of reasons for migration from the Northeastern states in case of migrants by last residence.

Table 4.6
Total out-migration from the Northeastern states
(Figures are in percentage)

States	Work/ Employment	Business	Education	Marriage	Moved after birth	Moved with household	Others
Sikkim	16.05	1.79	5.95	22.94	1.68	27.97	23.63
Arunachal Pradesh	13.84	1.26	8.98	21.01	1.93	27.72	25.27
Nagaland	8.10	0.56	1.91	60.42	0.80	13.55	14.67
Manipur	18.62	2.46	14.87	13.73	1.11	28.45	20.76
Mizoram	5.55	0.44	4.01	3.77	0.41	23.96	61.85
Tripura	15.82	6.34	3.52	22.68	1.19	30.77	19.68
Meghalaya	17.15	2.46	3.57	23.42	1.80	32.89	18.70
Assam	16.20	2.54	1.53	36.54	1.20	23.99	18.01

Source: Table 3, 2001 census

Table 4.6 shows the percentage of reason for migration to the total out-migrant from the Northeastern states. If we look into as a reason more migrants are from Manipur (18.62 per cent), Meghalaya (17.15 per cent) and Assam (16.20 per cent) respectively. The lowest migration for work/employment is from Mizoram (5.55 per cent), Nagaland (8.10 per cent) and Arunachal Pradesh (13.84 per cent) respectively.

For business purpose migration is more from Tripura (6.34 per cent), and Assam (2.56 per cent) respectively. The lowest migration for business is from Mizoram (0.44 per cent), and Nagaland (0.56 per cent) respectively.

Migration for education is more from Manipur (14.87 per cent), and Arunachal Pradesh (8.98 per cent) respectively, and the lowest is from Assam (1.53 per cent), and Nagaland (1.91 per cent) respectively.

Migration for marriage is from Nagaland 60.42 per cent), and Assam (36.54 per cent) respectively. The lowest least is from Mizoram (3.77 per cent), and Manipur (13.73 per cent) respectively.

Moved after birth as a reason for migration are taking place from Arunachal Pradesh (1.93 per cent), and Meghalaya (1.80 per cent) respectively, and the lowest is from Mizoram (0.41 per cent), and Nagaland (0.80 per cent) respectively.

Moved with households are more from Meghalaya (32.89 per cent) and Tripura (30.77 per cent) respectively, and the lowest are from Nagaland (13.55 per cent) and Mizoram (23.96 per cent) respectively. Migration for others reason is more from Mizoram (61.85 per cent), and Arunachal Pradesh (25.27 per cent) respectively and the lowest is from Nagaland (14.67 per cent and Assam (18.01 per cent) respectively.

Table 4.7
Males and Females out-migrations
(Figures are in percentage)

States	Work/ Employment		Business		Education		Marriage		Moved after birth		Moved with household		Others	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Sikkim	30.36	3.20	3.07	0.64	8.91	3.28	1.18	42.47	2.08	1.32	24.40	31.18	29.99	17.91
Arunachal Pradesh	25.83	2.70	2.18	0.41	13.20	5.06	0.76	39.82	2.10	1.78	23.59	31.55	32.35	18.69
Nagaland	30.96	1.08	1.92	0.14	5.52	0.81	2.19	78.30	2.07	0.41	22.92	10.67	34.42	8.60
Manipur	29.60	6.39	3.72	1.06	18.44	10.89	0.79	28.13	1.13	1.09	23.07	34.43	23.24	18.01
Mizoram	9.03	1.85	0.61	0.27	4.99	2.97	0.31	7.47	0.46	0.36	20.04	28.13	64.57	58.96
Tripura	28.78	2.58	11.93	0.65	5.36	1.65	1.21	44.60	1.37	1.00	27.15	34.46	24.21	15.06
Meghalaya	31.16	4.98	4.46	0.73	4.81	2.50	4.66	39.72	2.15	1.49	30.17	35.25	22.57	15.34
Assam	36.25	3.35	5.97	0.35	2.89	0.66	1.64	58.90	1.77	0.83	25.53	23.00	25.96	12.92

Source: Table 3, 2001 census

Table 4.7 shows the percentages of males and females migrants to the total out-migrant from the Northeastern states to the rest of India. Male's migrants for work/employment are more from Assam (36.25 per cent) and Nagaland (30.96 per cent). The lowest is from Mizoram (9.03 per cent), and Arunachal Pradesh (25.83 per cent). For females migration are more from Manipur (6.39 per cent) and Meghalaya (4.98 per cent) and lowest from Nagaland (1.08 per cent) and Mizoram (1.85 per cent). Overall, male migrants are more than that of female migrants.

For business purpose male's migration is more from Tripura (11.93 per cent), and Assam (5.97 per cent). The lowest is more from Mizoram (0.61 per cent), and Nagaland (1.92 per cent). For females migration is more from Manipur (1.06 per cent) and less from Nagaland (0.14 per cent). In this also males were migrated more than female and indirectly indicating that female migration mostly marriage related migration.

The male migration for education is more from Manipur (18.44 per cent), and Arunachal Pradesh (13.20 per cent) respectively, and the lowest is from Assam (2.89 per cent), and Meghalaya (4.81 per cent) respectively. For female the highest are from Manipur (10.89 per cent) and Arunachal Pradesh (5.06 per cent). The lowest are from Assam (0.66 per cent) and Nagaland (0.81 per cent). In this also males are migrating more than females.

Male migration for marriage purpose is from Meghalaya (4.66 per cent), and Nagaland (2.19 per cent) respectively. The lowest is from Mizoram (0.31 per cent), and Arunachal Pradesh (0.76 per cent) respectively. For female the highest are from Nagaland (78.30 per cent) and Assam (58.90 per cent). The lowest are from Mizoram (7.47 per cent) and Manipur (28.13 per cent). Female migrants are out-number male migrants.

Males migrants moved after birth as a reason for migration are taking place from Meghalaya (2.15 per cent) and Arunachal Pradesh (2.10 per cent), and the lowest is from Mizoram (0.46 per cent), and Nagaland (1.13 per cent). For females is more from Arunachal Pradesh (1.78 per cent) and less from Nagaland (0.41 per cent). Male's migrants are more than that of female.

The male migrants moved with households are more from Meghalaya (30.17 per cent) and less from Mizoram (20.04 per cent). Females also are more from Meghalaya (35.25 per cent) and less are from Nagaland (10.67 per cent). Female are migrants are more as compared to males.

Males migration for others reason shows highest from Mizoram (64.57 per cent) and lowest from Meghalaya (22.57 per cent). For females the highest are again from Mizoram (58.96 per cent) and the lowest are from Nagaland (8.60 per cent). Under this category male migrants are more than that of female migrants.

4.8 Summary

Internal migration is characterized by economic motivation and geographically characteristics. Most of these migrations take place to nearby states or cities. Most of the less developed states are the migrant sending states and agriculturally and industrially developed states constitute the receiving states. Male migrations take place mainly for economic or employment-related reasons which female migration is primarily due to marriages. Lack of educational infrastructure in the Northeastern region is also a prime mover of out-migration. Long distance and duration migration is dominated by males and short duration migrations by females. Populations from central parts of states migrate to the Northern region; the Northeastern states migrate more to the Western region. Thus internal migration in India diversified in terms of their destination places. Urban migration also a dynamics process next only to rural to

rural migration. Most of the migrants hail from rural areas and it happens due to the increasing agricultural crisis and lack of development in the rural areas.

Most of the interstate migrants moved to the neighbouring states, relatively more to the developed states, or distant metropolitan cities. While short-run interstate migration was predominately by females mainly for the reason of marriage, long-run migration was more male selective and economic in nature. In sum, considerations of economic opportunity and geographic proximity prevailed over consideration of ethnicity and political situation in determining the contours of interstate migration.

The overall out-migration from the Northeastern region shows an increasing trend. Majority are found in the states of Bihar, West Bengal, Uttar Pradesh and Delhi. Assam had the highest number of out-migrants, followed by Nagaland. Bihar and Bengal received the highest migrants from the Northeastern states whereas; Goa, Himachal Pradesh and Jammu and Kashmir received the lowest out-migrants. Nagaland, Manipur, Mizoram and Assam had net in-migrants.

The average duration of stay of migrants from the Northeastern region; a period of 1-4 years is the highest period of stay among males. For a maximum period of 20 years and above, females out-number males. The highest percentage of the male migrants is within the age of 25-34 years and the lowest are in the age of 0-4 years. Females with the age of 60 and above show the highest percentage. Both rural males and females with the age groups of 35-59 years had the highest percentages of the migrants.

Education and migration

5.1 Introduction

The relationships among education and migration in rural areas have not been a focus of theoretical or empirical research in development economics. Migration for the purpose of education is an important determinant of economic development. But there is a little consensus on the fact that exact contribution of different measures and indicators of educational migration to economic development and how the passage from educational migration endowment to economic growth is achieved. This pertains to study the link between educational migration and economic performance. Though the migration for higher study under the euphoria of globalization of education, as a measurement of the quantity, quality even availability of an area's human resources. However, only one of the possible ways of assessing the impact of educational migration on economic growth needs to look for alternative measures of human capital in economic analysis. Besides this a decent educational migration may have little impact on regional economic performance, if those migrants are remain idle or not found any job to the best of their capacity in the work place.

However the effectiveness of educational migration in economic development depends on the three parameters such as adjustment between educational supply and labour demand, of the degree of employment of the best qualified individuals (job satisfaction) and of the level of migration. However, with these three indicators are necessary to see how society can transfer its human capital into economic growth of it. Yet the use of such indicators in growth models is far rarer. Now migration is progressively becoming more frequent in certain regions of our country, their efficiency is less common which lies on the factors especially the correspondence between the education of workers and job they are performing or the satisfaction of employees and employers with the

education provided by the existing educational system.

Under the current liberalization and globalization euphoria when we think of our state, the scenario is even more disappointing. The status of educational development is poor, investment in education is low, agriculture is shambles and foreign capital flow is dismal. In such view of things the pivotal role of educational migration hardly needs any emphasis. Is this approach conducive to the process of development of the economy in the long run? Since, there have been some studies carried out on the efficacy migration and economic development, though very few in Indian context and Northeastern states. The results, both at the international level and in India, have been largely inconclusive in nature. Different models give different results regarding the link between the migration and its regional returns. Hence there is further research and exploration.

The phenomenon is not new, migration generally part of risk-spreading and co-insurance livelihood strategies perused by household and families. Migration also has potential to improve well being, stimulate economic development and reduce poverty directly and indirectly. Going abroad for higher study has been part of the education since for many years. Migration for learning higher education from relatively low developed institutions/universities to relatively high developed institutions/universities may be described "Educational migration" at one end of the universe of discourage or as the "Globalisation of human capital" on the other. However it is of two types: permanent migration refers to individuals who have migrated internationally and are currently living abroad and no longer classified as household members. On the other hand, return migrants are defined as current household members with past migration experience, who have returned to reside in own state.

The economic impact of educational migration does not solely depend on the quantity, quality and type of human resources, but also upon a myriad of factors that covers from the matching the educational supply to labour demand, to the level of job satisfaction etc. However a decent migration may have little impact on regional economic performance, if those migrants remain idle or not found any job to the best of their capacity in the work place. Again if the fruits of educational migration are spent in conspicuous consumption and non-productivity investments, such as housing, and may be conducive of increasing in leisure among household members left behind. Another theoretical model predicts the households that sort themselves into the regions that pay highest return to their skills. The individuals who find the mismatch between their skills and rewards to their skills are more likely to migrate. Highly educated individuals living in states with relatively low returns to education will migrate to a state with higher returns to education.

5.2 Education and migration

Education is widely hypothesised to influence migration-both internal and international –from rural areas of developing countries. The human capital migration model (Sjaastad, 1962) hypothesises that individuals allocate their time to the labour market in which their wages (or discounted future wage- income stream) are highest. Migration is viewed as a form of investment in human capital. People move where they can be most productive, given their skills. migration requires investment, to cover the material costs of material of travel, maintenance costs while moving and seeking work and any other financial and psychological costs of adjusting to a new (urban or foreign) environment. Education encourages migration according to their model if it either increases wages at migrant destinations relative to migrant-sending areas or reduces material or other costs of migration (Taylor and Naude, 1999).

In the early of 1960s, the bulk of empirical literature on the effect of migration was directed by *Sjaastad*. He viewed migration as an investment in obtaining access to a labour market with higher wages. The moving costs are treated as fixed costs of the investment while gain in earning is the return. A household chooses to migrate if the present value of the migration is less than the cost of undertaking it. He developed a theoretical model predicting that household will sort themselves into region paying the highest return to their skills. He fined that the individuals who face a mismatch between their skills and rewards to their skills are more likely to migrate i.e. highly educated individuals living in states with a relatively low returns to education will migrate to a state with higher returns to education. He concluded that it is difficult to demonstrate that export returns respond as predicted by the individual is differs from the level of skilled ness, education etc.

Bhagwati and Hamade (1974) tested the correlation coefficient between the skilled migration and GDP per capita, and they found that there is negative correlation between the two. Countries where fraction of highly educated workers and general productivity (GDP per capita) is already low also tend to lose relatively more skilled workers. Of course, this raises some difficult issues of interpretation. For example, if the productivity of skilled labour in these countries is low then migration of skilled labour may indeed be the best outcome. Further Allen (2007) examined the impact of federal grants on net migration for over 300 countries. He computes the marginal effects of programme spending that are decomposed into 3 distinct effects. The first was migration creation; the second was retention effect and finally migration diversification. But it does not account for in which area was specialised, whether physical sector or social sector.

Carrington (1998) provides a benchmark for skilled migration in the 1990's. They combined the U.S. (United States) Census and OECD (Organisation for Economic Cooperation and Development) migration statistics

for that year and they compared the immigrants stocks to the size of the educated population in the sending countries. Their study has several shortcomings they fail to take into account skilled migration to the middle-east, which for countries like India actually accounts for a large proportion of total migration. Despite their shortcomings, the Carrington estimates are probably the best the available estimates of brain drain. There exist a negative correlation between the migration rates and the total population. Hague and Kim (1994) used the indicators of educational stock, job satisfaction and the adjustment between educational supply and labour demand in their model, but one demerit was found that they didn't measure the use made of human capital on productivity activity, which are very vital from the point of view of effectiveness of educational migration in economic development.

Besides extensive literature on educational migration exists, most of it is inconclusive in nature. One final point to note is that most economic development is neither fully induced by human capital formation nor fully by educational migration. In India, for instance it is partially by the migration for higher studies in developed institutions. Of the different approaches the impact of skilled educated migrants on economic growth (GDP).

5.3 Out-migration for Education

For better understanding of the migration from the Northeastern region to others states in India since 1981-2001 we singled out the migrants for the purpose of education.

Table 5.1
Trend of Out-migration for education, 1981-2001

Year	Persons	Males	Females
1981	18402 (4.26)	12807 (5.48)	5595 (6.44)
1991	26327 (4.05)	18466 (6.0)	7861 (5.39)
2001	30173 (2.71)	21054 (4.83)	9119 (3.11)

Source: Table D3, 1981, 1991 and 2001 Census

Table 5.1 reveals that the trend of migration for education from the Northeastern region during 1981 to 2001 increased in absolute terms but it declined in relative terms. Though the proportion of total out-migration has increase from 1.7 per cent in 1981 to 2.9 per cent in 2001 but the migration for educational purposes has come down. This could be that the total out-migration is rising faster than the migration for education. For example, between 1981 and 2001, the total migration (persons) rose by more than 2.5 times while migration for education increased by less than 2 times. Naturally, in relative terms the latter has fallen.

Table 5.2
Trend of Education migration from North East India

Year	Entire NE Region			Rural			Urban		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1981	12807 (69.6)	5595 (30.4)	18402 (4.2)	5394 (69.7)	2337 (30.2)	7731 (42.1)	6977 (69)	3123 (30.9)	10100 (54.8)
1991	18466 (70.1)	7861 (29.8)	26327 (4.0)	8964 (70.7)	3701 (29.2)	12665 (48.1)	8961 (69.4)	3952 (30.6)	12913 (49)
2001	21054 (69.7)	9119 (30.2)	30173 (2.7)	9095 (73.0)	3348 (26.9)	12443 (41.2)	1133 (67.5)	5445 (32.4)	16782 (55.6)

Source: Table D3, 1981, 1991 and 2001 Census

Note: (Figures in parentheses are percentages)

Table 5.2 shows the description of migration in Nagaland, Manipur, Mizoram and Assam which experienced more out-migration than in-migration, is shown against the other for states of Sikkim, Tripura, Arunachal Pradesh, and Meghalaya which received more in-migration than that out-migrants. Overall, the aggregate of the entire region shows of net out-migration implying thereby of the region reap the benefits from migration.

Males migrants showed an increased of 69.60 per cent during 1981 and it marginally rose to 70.14 per cent in 1991, but fell back to 69.78 per cent during 2001. Female migrants showed an increase of 30.40 per cent, but declined to 29.86 per cent in 1991 and increased again to 30.22 per cent during 2001. On the whole, the comparison of the out-migration of males and females for

purposes of education from the Northeastern region during 1981-2001 showed that while male out-migration increased at an average of 70 per cent, the increase was on an average of 30 percent among females.

The total numbers of persons who migrate from rural areas constitute 42.01 per cent of the total number of migrants during 1981; it increased to 48.11 per cent in 1991 and declined to 41.24 per cent in 2001. The rural males' migration for education between 1981 and 2001 increased from 69.77 per cent to 73.09 per cent during 1981-2001. Among rural females the total number of out-migrants declined between 1981 and 2001 from 30.23 percent to 26.91 per cent.

The total number of migrant's persons from urban areas between 1991 and 2001 increased from 49.05 per cent to 55.62 percent. In the case of urban males, migration between 1981 and 2001 showed a declining trend from 69.08 percent to 67.55 per cent. Among the urban females, migration for education showed on the other hand, an increasing trend between 1981 and 2001 from 30.92 per cent to 32.45 per cent.

The trends in out-migration rural males and urban females during 1981 and 1991 are more or less similar. But during 2001 there has been a small change. For example, rural males migrant (73.09 per cent) were more than the urban males migrants (67.55 per cent). Out-migration of rural females exceeded that of urban females in 2001. Overall, the number of persons migrated for education from the Northeastern region to the rest of India between 1991 and 2001 was more from urban areas (55.62 per cent) than from rural areas (41.24 per cent).

5.4 Destination of out-migration for Education

Table 5.3
Out-migration for education from the Northeastern states to the other
Indian states, 2001
 (Figures are in percentages)

States	Sikkim	Arunachal Pradesh	Nagaland	Manipur	Mizoram	Tripura	Meghalaya	Assam	Total NER
Jammu & Kashmir	-	-	-	0.02	-	0.14	-	0.26	0.12
Himachal Pradesh	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
Utter Pradesh	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	16.60	21.33	15.84
Jharkhan	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
Chhatisgarh	0.71	0.56	0.36	0.22	0	0.28	0.50	0.75	0.50
Madhya Pradesh	1.43	2.15	1.09	3.46	2.30	1.75	3.30	1.69	2.18
Gujarat	0.48	0.56	0.42	5.27	0.55	4.20	0.41	1.98	2.46
Maharasthra	8.92	8.52	14.84	16.29	38.71	7.22	24.36	16.16	16.17
Andhra Pradesh	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	3.03	1.98	1.11	3.51	1.47	0.41	0.91	0.09
Kerala	0.48	5.81	1.67	2.92	6.14	0.91	1.40	1.48	1.28
Tamil Nadu	1.31	5.81	1.67	2.92	6.14	0.91	1.40	1.48	2.23

Source: Table 3, 2001 Census

Table 5.3 (The absolute number of migration is given in Table D.3 in Appendix D) reveals that Delhi, Maharashtra, West Bengal, Karnataka, and Utter Pradesh received the highest number of out-migrants for education from the Northeastern region.

For acquiring higher education most of the people from the different states of the region are migrated to the other Indian states where the educational

infrastructure facilities are adequate. From Sikkim 37.57 per cent are migrates to West Bengal, Arunachal Pradesh 45.06 in Karnataka, Nagaland 22.96 per cent and Manipur 31.13 per cent are in Delhi, Mizoram 38.71 per cent and Meghalaya 24.36 per cent are in Maharashtra. Migrants for education from Tripura (50.39 per cent) and Assam (21.33 per cent) prefer more of West Bengal as the distance is less.

The lowest percentages of out-migrants for education from the Northeastern region are in the state of Jammu and Kashmir and Goa.

Table 5.4
Out-migration for education from the Northeastern states, 2001
(Figure is in percentage)

States	Persons	Males	Females
Sikkim	5.9	70.9	29.1
Arunachal Pradesh	9.0	70.8	29.2
Nagaland	1.9	67.7	32.3
Manipur	14.9	65.3	34.7
Mizoram	4.0	64.2	35.8
Tripura	3.5	76.8	23.2
Meghalaya	3.6	62.6	37.4
Assam	1.5	73.7	26.3

Source: Table D3, Census 2001

Table 5.4 shows Manipur (14.9 per cent) had the highest proportion of educational out-migration from the Northeastern states by place of last residence and the lowest proportion in Assam (1.5 per cent). Among, males the highest proportion was in Tripura (76.8 per cent) and the lowest in Meghalaya (62.6 per cent). Interestingly, female out-migration for education contributed the highest proportion in Meghalaya (37.4 per cent) as compared to the other states of the Northeast, the lowest proportion being in Tripura (26.3 per cent).

5.5 Duration of Stay of the Out-migration

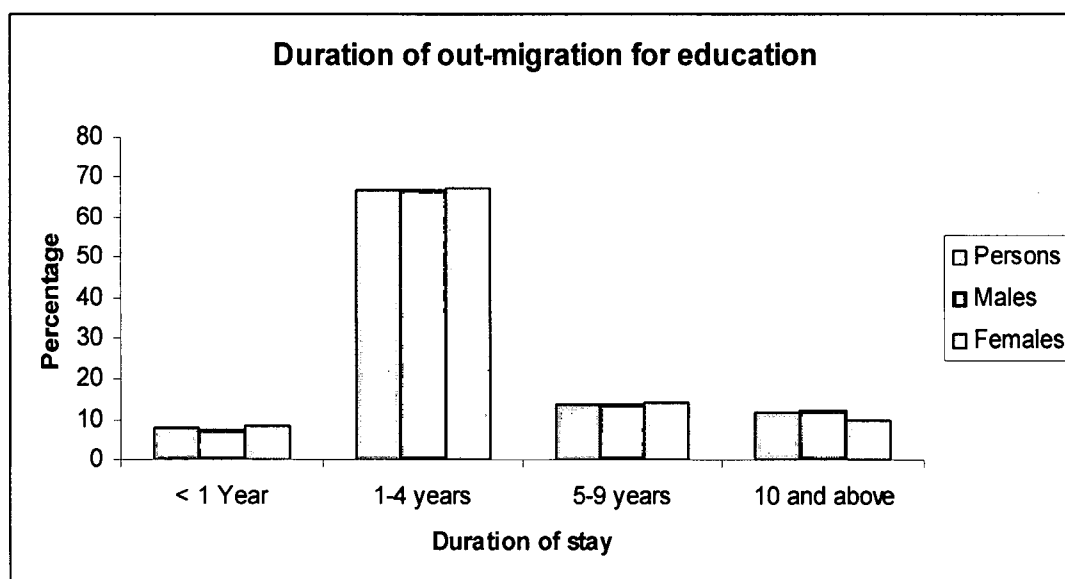
Table 5.5
Duration of out-migration for education from the Northeastern region, 2001

Duration of residence	Total migrants for education			Percentage		
	Persons	Males	Females	Persons	Males	Females
< 1 Year	2296	1515	781	7.61	7.20	8.57
1-4 years	20169	14034	6135	66.87	66.68	67.31
5-9 years	4194	2913	1281	13.91	13.84	14.06
10 years & above	3502	2585	917	11.61	12.28	10.06
All duration	30161	21047	9114	100	100	100

Source: Table D3, Census 2001

Table 5.5 shows the duration of out-migration from the Northeast for educational purposes. Most of the students, both males and females, migrate for a maximum duration of residence four years; they constitute 66.87 percent, the lowest proportion is of students whose duration of stay is less than one year (Figure 5.1)

Figure 5.1
Duration of out-migration for education from the Northeastern region



Source: Table D3, Census 2001

Table 5.6
Out-migration from the Northeastern states for education
(Duration 1-4 years), 2001

States	Total Out-migrants for education		
	Persons	Males	Females
Sikkim	540 (61.29)	366 (58.56)	174 (67.97)
Arunachal Pradesh	1,503 (73.42)	1,057 (72.95)	446 (74.58)
Nagaland	2,090 (68.55)	1,407 (68.14)	683 (69.41)
Manipur	5,780 (74.89)	3,775 (74.87)	2,005 (74.93)
Mizoram	1,184 (77.69)	800 (81.80)	384 (70.33)
Tripura	1,441 (62.33)	1,100 (61.94)	341 (63.62)
Meghalaya	1,174 (64.61)	735 (64.59)	439 (64.65)
Assam	6,457 (59.65)	4,794 (60.08)	1,663 (58.47)

Source: Table D3 Census 2001

Note: (Figures in parentheses show percentages)

Table 5.6 shows that the total proportion of persons who migrate for educational purposes live outside the state for period of less than four years. But the highest proportion of persons and of male's migrants is seen to be from Mizoram (77.69 and 81.80 per cent respectively). Among females, the highest proportion is from Manipur (74.93 per cent) and the lowest from Assam (58.47 percent). The Majority of the students from the Northeastern region migrate soon after their 12th standard examination to pursue higher education outside the region due to inadequate of professional institutions within the Northeastern region.

5.5 Duration of out-migration from each states, 2001

The statement below gives information of the duration of residence of out-migrants from each states of the Northeastern region only for education purposes during 2001.

Table 5.7
Duration of out-migration from Sikkim for education, 2001

Duration of residence	Total number of out-migrants for education		
	Persons	Males	Females
< 1 Year	76 (8.63)	35 (5.60)	41 (16.02)
1-4 years	540 (61.29)	366 (58.56)	174 (67.97)
5-9 years	153 (17.37)	123 (19.68)	30 (11.72)
10 + years	112 (12.71)	101 (16.16)	11 (4.30)
All duration	881 (100)	625 (100)	256 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.7 shows the total number of out-migrants for education from Sikkim for duration of stay between 1-4 years is seen to be 61.29 per cent; 17.37 per cent staying outside the state for 5-9 years and only 8.63 per cent stayed for less than 1 year. Nearly 59 per cent from the males stayed out for 1-4 years followed by 19.68 per cent for and 5.60 percent for less than one year. It is that 67.97 per cent of females stayed at the places of destination for 1-4 years followed by 16.02 per cent who stayed for less than one year; the lowest proportion (4.30 per cent) was of those whose period of stay for 10 years or more (4.3 per cent).

Table 5.8
Duration of out-migration from Arunachal Pradesh for education, 2001

Duration of residence	Total number of out-migrants for education		
	Persons	Males	Females
< 1 Year	164 (8.01)	105 (7.25)	59 (9.87)
1-4 years	1,503 (73.42)	1,057 (72.95)	446 (74.58)
5-9 years	241 (11.77)	179 (12.35)	62 (10.37)
10 + years	139 (6.79)	108 (7.45)	31 (5.18)
All duration	2,047 (100)	1,449 (100)	598 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.8 shows the total number of persons who migrate for education from Arunachal Pradesh out-migrants with a stay between 1-4 years is formed the highest proportion (73.42 per cent). Males account for 72.95 per cent and females 74.58 percent. Duration of stay for 10 years or more constituted the lowest proportion (6.79 per cent); Persons who stay for less than 1 year formed the lowest for males (7.25 per cent) and with duration of 10 years and above, the lowest proportion for females (5.18 per cent) side.

Table 5.9
Duration of out-migration from Nagaland for education, 2001

Duration of residence	Total Out-migrants for education		
	Persons	Males	Females
< 1 Year	189 (6.2)	127 (6.15)	62 (6.30)
1-4 years	2,090 (68.5)	1,407 (68.14)	683 (69.41)
5-9 years	599 (19.6)	416 (20.15)	183 (18.60)
10 year & above	171 (5.61)	115 (5.57)	56 (5.69)
All duration	3,049 (100)	2,065 (100)	984 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.9 shows that out-migration (persons) from Nagaland for a purpose of education was the highest for persons for whom the duration of stay was between 1-4 years is (68.55 per cent). Males constituted (68.14 per cent) and females (69.41 per cent). The lowest proportion of migrants was among those who stay for 10 years or more, persons (5.61 per cent); males (5.57 per cent) and females (5.69 per cent).

Table 5.10
Duration of out-migration from Manipur for education, 2001

Duration of residence	Total Out-migrants for education		
	Persons	Males	Females
< 1 Year	564 (7.31)	351 (6.96)	213 (7.96)
1-4 years	5,780 (74.89)	3,775 (74.87)	2,005 (74.93)
5-9 years	1,107 (14.34)	738 (14.64)	369 (13.79)
10 year & above	267 (3.46)	178 (3.53)	89 (3.33)
All duration	7,718 (100)	5,042 (100)	2,676 (100)

Source: Table D3 Census 2001

Note: (Figures in parentheses show percentages)

Table 5.10 shows Manipur out-migrants who stayed for 1-4 years formed the highest proportion (74.89 per cent); for males the corresponding proportion was 74.87 per cent and for females is 74.93 per cent. For those who stayed for 10 years or more, the proportion were the lowest, hardly about 3.5 per cent.

Table 5.11
Duration of out-migration from Mizoram for education, 2001

Duration of residence	Total Out-migrants for education		
	Persons	Males	Females
< 1 Year	138 (9.06)	75 (7.67)	63 (11.54)
1-4 years	1,184 (77.69)	800 (81.80)	384 (70.33)
5-9 years	155 (10.17)	79 (8.08)	76 (13.92)
10 and above	47 (3.08)	24 (2.45)	23 (4.21)
All duration	1,524 (100)	978 (100)	546 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.11 shows in Mizoram also, the proportion of out-migrants who stayed outside the state for 1 to 4 years was the highest (77.69 per cent) - 88.80 for males and 70.33 per cent for females. The lowest proportions were among persons who stayed outside the state for 10 years or more 3.08 per cent.

Table 5.12
Duration of out-migration from Tripura for education, 2001

Duration of residence	Total Out-migrants for education		
	Persons	Males	Females
< 1 Year	124 (5.36)	89 (5.01)	35 (6.53)
1-4 years	1,441 (62.33)	1,100 (61.94)	341 (63.62)
5-9 years	316 (13.67)	237 (13.34)	79 (14.74)
10 year & above	428 (18.51)	349 (19.65)	79 (14.74)
All duration	2,312 (100)	1,776 (100)	536 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.12 shows the pattern is seen to be same in Tripura also except that the lowest proportion is constituted by out-migrants who stay outside the state for less than a year

Table 5.13
Duration of out-migration from Meghalaya for education, 2001

Duration of residence	Total Out-migrants for education		
	Persons	Males	Females
< 1 Year	133 (7.32)	80 (7.03)	53 (7.81)
1-4 years	1,174 (64.61)	735 (64.59)	439 (64.65)
5-9 years	238 (13.10)	144 (12.65)	94 (13.84)
10 + years	269 (14.80)	177 (15.55)	92 (13.55)
All duration	1,817 (100)	1,138 (100)	679 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.13 in Meghalaya also; it is out-migrants who stayed for period of less than one year who form the lowest proportion and who stayed for period of 1-4 years form the highest proportion.

Table 5.14
Duration of out-migration from Assam for education, 2001

Duration of residence	Total Out-migrants for education		
	Persons	Males	Females
< 1 Year	908 (8.39)	653 (8.18)	255 (8.97)
1-4 years	6,457 (59.65)	4,794 (60.08)	1,663 (58.47)
5-9 years	1,385 (12.80)	997 (12.49)	388 (13.64)
10 + years	2,069 (19.11)	1,533 (19.21)	536 (18.85)
All duration	10,824 (100)	7,980 (100)	2,844 (100)

Source: Table D3, Census 2001

Note: (Figures in parentheses show percentages)

Table 5.14 shows the out-migrants is more in the case Assam too. Here, the overall proportion of those who stay outside the state for periods of 1-4 years was 59.65 percent and for period of less than one year, 8.39 percent.

5.5 Summary

The highest numbers of out-migration for educational purposes from the Northeastern region are found in Delhi, Maharashtra, West Bengal, Karnataka, and Utter Pradesh. Adequacy of educational infrastructure facilities attracted them to migrate to these states. The lowest percentages of out-migrants for education from the Northeastern region are in the state of Jammu and Kashmir and Goa.

The trend of migration for education had been on the increase from 1981-2001, in absolute terms. But in relative terms, it showed a declining trend during 1991-2001. This is because the increase in total out-migration is 3 times higher than the increase in educational out-migration.

Out-migration from the Northeastern Region: A state-wise analysis

6.1 Introduction

In the previous Chapter 5 we had already discusses about the relationship between education and migration in the Northeastern region. This chapter presents the trends of decadal growth rate of out-migration in relation to education and employment.

6.2 Approach

The methods describes for calculating decadal growth rates of migration. We first calculate migration in terms of the Net Migration Rate (NMR), In-migration Rate (IMR), Out-migration Rate (OMR) and Population growth Rate (PGR) in the Northeastern region. Second we calculate the decadal growth rates of total out-migration, educational migration and migration for employment.

The analysis in this chapter is based on the Compound Annual Growth Rate (CAGR). We used decadal growth rate to see the percentage change of out-migration over the decades of 1981-91 and 1991-01. CAGR is used to describe the growth over a period of time of some element. We used CAGR to check in an average the increase in out-migrants in each year from the Northeastern region¹⁰.

In demographics, population growth rate (PGR) is the fractional rate at which the number of individuals in a population increases. Specifically, PGR ordinarily refers to the change in population over a unit time period, often

¹⁰(1): We used the actual values for calculation, or normalized values that retain the same mathematical proportion.

(2): We use the following formula to calculate CAGR in Excel:
XIRR function " $=((\text{last number}/\text{first number})^{(1/\text{number of years})})-1$ "

expressed as a percentage of the number of individuals in the population at the beginning of that period. This can be written as the formula: $P = P_0 e^{kt}$, Growth rate = $(P_t - P_0) / P_0$, Where, P_t is the population at end of period and P_0 is the population at beginning of period.

The most common way to express population growth is as a ratio, not as a rate. The change in population over a unit time period is expressed as a percentage of the population at the beginning of the time period. That is: Growth ratio = growth rate $\times 100$ %.

A positive growth ratio (or rate) indicates that the population is increasing, while a negative growth ratio (or rate) indicates population decline. This is the case for out-migration too. A growth ratio of zero indicates that there was the same number of people at the two times -- net difference between births, deaths and migration is zero. However, a growth rate may be zero even when there are significant changes in the birth rates, death rates, immigration rates, and age distribution between the two times. Equivalently, percent death rate = the average number of deaths in a year for every 100 people in the total population.

A related measure is the net reproduction rate. In the absence of migration, a net reproduction rate of more than one indicates that the population of women is increasing, while a net reproduction rate less than one (sub-replacement fertility) indicates that the population of women is decreasing.

6.3 Relationships between Migration growth rate (MGR) and the Population growth rate (PGR).

Table 6.1
Share of migration in overall growth of the Northeastern states, migration rate and growth rate of population, 1991-2001

States	POP (1991)	IM (2001)	OM (2001)	NIM (2001)	MGR (per 100) (1991-01)	PGR (1991-01)
Sikkim	406,457	30,174	6,238	23,936	5.9	33.1
Arunachal Pradesh	864558	74,720	12,507	62,213	7.2	27.0
Nagaland	1,209,546	35,346	51,857	-16,511	-1.4	64.5
Manipur	1,837,149	4,711	30,867	-26,156	-1.4	17.9
Mizoram	689,756	31,035	31,739	-704	-0.1	28.8
Tripura	2,757,205	51,508	23,538	27,970	1.0	16.0
Meghalaya	1,774,778	34,864	20,434	14,430	0.8	30.7
Assam	22,414,322	126,856	281,510	-154,654	-0.7	18.9
North East	31953771	389,214	458,690	-69,476	-0.2	21.6
All India	846,387,888	17,567,746	16,826,879	740,867	0.1	21.5

Source: Calculated by the author

Notes:

1. POP: Population; IM: In-migration; OM: Out-migration; NIM: Net in-migration; MGR: Migration Rate; PGR: Population growth rate.
2. [In migrants – Out migrants] = Net Migrants
3. To get the migration rate we calculate the proportion of Net in migrants divided by the total population of that particular state multiplied by 100 that give us the rate of migration, [i.e. (Net in-migrants/Population) × 100] = Migration Rate (per 100).
4. Population growth rate¹¹ = $[(P_t - P_o) / P_o] \times 100$ where, P_t = the population at end of period. P_o = the population at beginning of period.

Table 6.1 showing 1991 population, number of net in-migrants, migration rate and a comparison with 1991-2001 growth in population brings out the contribution of migration in the growth of each state. In comparison the Northeastern region gains in terms of migration rate and India losses. The negative sign indicates that out-migration is more. Some of the states have shown marginal gains or losses in terms of migration ratio from 1991–2001, of the 7.2 percent of migration rate in Arunachal Pradesh the growth in population during 1991-2001 constituted 27 percent. In Sikkim, migration accounted for 5.9 per cent and the growth in population against overall growth of 33.1 per cent. These states received more in-migration. The states of Nagaland, Manipur, Mizoram, and Assam contributed more out-migration during 1991-2001.

¹¹We estimate the population growth rate following the same formula used by the Indian Census.

6.3 State-wise Decadal Variation of Out-migration

The following table 6.2 gives details of out-migration from different states of the Northeastern region of decadal variation (in %) over the decades of 1981-91 and 1991-01.

Table 6.2
Migrants from the Northeastern states, 1981-2001
(Figures are in decadal variation (in %))

States	1981-1991			1991-2001		
	Persons	Males	Females	Persons	Males	Females
Sikkim	203.5	152.5	252.8	-59.7	-53.4	-64.1
Arunachal Pradesh	590.6	413.5	841.5	-38.2	-31.8	-43.2
Nagaland	158.9	111.6	222.0	557.8	230.4	845.6
Manipur	80.6	35.5	145.5	40.9	67.5	19.7
Mizoram	242.1	207.0	280.8	34.1	47.2	22.5
Tripura	210.7	156.4	275.1	-17.1	-6.6	-25.7
Meghalaya	196.0	161.0	231.9	-7.3	-3.3	-10.5
Assam	6.2	-2.1	15.8	100.5	57.4	143.1
Total Migrants	50.4	31.8	72.4	70.9	41.6	97.2

Source: Calculated by the author

Table 6.2 indicates that the total out-migration from the Northeastern region by the place of last residence during 1981-1991 was 50.4 per cent and increases to 70.9 per cent in 1991-2001. Most of the states show a tremendous increase in total out-migration during the decade of 1981-1991, except Assam. The highest decadal variation in percentage was in Arunachal Pradesh. The decadal variations during 1981-1991 and 1991-2001 show that the total out-migration from the region varied during the two periods. Some of the states showed negative decadal variations in terms of percentage change, implying thereby that the proportion of total out-migration declined. In the case of Assam during 1981-1991, the variation has been only 6 percentages during 1981-1991; the rate jumped to 100.5 per cent during 1991-2001. The negative sign indicates

that some states had net in-migration (i.e. Sikkim, Arunachal Pradesh, Tripura and Meghalaya). In Nagaland, Manipur, Mizoram and Assam there was net out-migration. Taking the entire region as a whole, it is found that net out-migration has been positive (The absolute number given in Table E.1, in Appendix E).

6.4 Decadal variation of out-migrants for education 1981-2001

The following table 6.3 gives details of out-migration for education purposes from different states of the Northeastern region of decadal variation (in %) over the decades of 1981-1991 and 1991-2001.

Table 6.3
Migrants for Education from the Northeastern region by last residence, to different states in India: Decadal variation (in %) from 1981-2001

States	1981-1991			1991-2001		
	Persons	Males	Females	Persons	Males	Females
Sikkim	425.6	392.0	521.8	-75.0	-74.4	-76.3
Arunachal Pradesh	538.8	476.7	752.7	-35.6	-34.9	-37.4
Nagaland	81.3	77.3	91.8	101.4	92.8	122.1
Manipur	19.2	-1.2	100.0	149.6	146.2	156.3
Mizoram	82.0	113.3	31.5	3.9	-7.9	34.8
Tripura	78.1	84.4	61.2	-0.9	1.0	-6.6
Meghalaya	128.5	156.3	91.2	-23.0	-24.9	-19.6
Assam	-16.9	-12.0	-27.2	22.3	25.9	13.2
Total Migrants	43.1	44.2	40.5	14.6	14.0	16.0

Source: Calculated by the author

Table 6.3 shows over the decade of 1981-1991 and 1991-2001, migrants for education from the Northeastern region come down from 43.1 per cent to 14.6 per cent. The proportion of males shows a decline from 44.2 per cent to 14 per cent and for female also shown similar trend. Except Assam all the Northeastern states experienced tremendous increase in out-migration for education during 1981-1991. The decadal variation (in %) during 1991-2001 showed show a declines in relative terms, though it increased in absolute terms. Thus the

increase in the total out-migration was 2.5 times more than the increase of educational migration (The absolute number given in Table E.2, in Appendix E).

6.5 Growth rate of Out-migration, Education and Employment 1981-2001

We had calculated the decadal variation of out-migration (in %) during the two period 1981-91 and 1991-01. But the values seem to be very high and we can not conclude whether the out-migration has increase or decrease. This shows how much the change of migration in 1991 over 1981 and 2001 over 1991. Therefore, to get a better trend we used the Compound Annual Growth Rate formula. How much the increase of out-migration in each year in an average?

Table 6.4
Decadal growth rate of Out-migration, Education and Employment

1981-1991								
Total out-migrants			Education			Employment		
P	M	F	P	M	F	P	M	F
4.2	2.8	5.6	3.6	3.7	3.5	2.4	2.0	5.4
1991-2001								
5.5	3.5	7.0	1.4	1.3	1.5	5.4	5.5	4.5
Population growth rate: 1991-2001								
Northeastern Region				2.0				
All-India				2.0				

Source: Calculated by the author

Notes: P: Persons, M: Males, F: Females

Table 6.4 show the annual growth rate of population in the Northeastern region is same as of that All India during 1991 to 2001. The growth rate of migration has been more than the growth of population.

The decadal growth rate of total migrants from the Northeastern region increased from 4.2 per cent in 1981-1991 to 5.5 per cent 1991-2001. Both males and females showed an increasing trend. The decadal growth rate of migrants for education came down from 3.6 per cent to 1.4 per cent and there has been a

similar decline for both males and females. For employment the total number of persons had increased from 2.4 per cent to 5.4 per cent in 2001, it was caused by an increase in the case of males from 2 per cent to 5.5 per cent in 2001 and a decline in the number of females from 5.4 per cent to 4.5 per cent.

Though growth rate of migration for education has come down, a positive relationship still exists between education and employment because the decline in the growth of educational migration may be possibly due to the fact that the migration of persons for better employment and opportunities out side the region, has increased.

6.6 Annual Growth Rate of out-migration

The compound growth rate of out-migration from the Northeastern region is calculated using the census data 1981-2001.

Table 6.5
Decadal growth rates of Migration for Education, 1981-2001

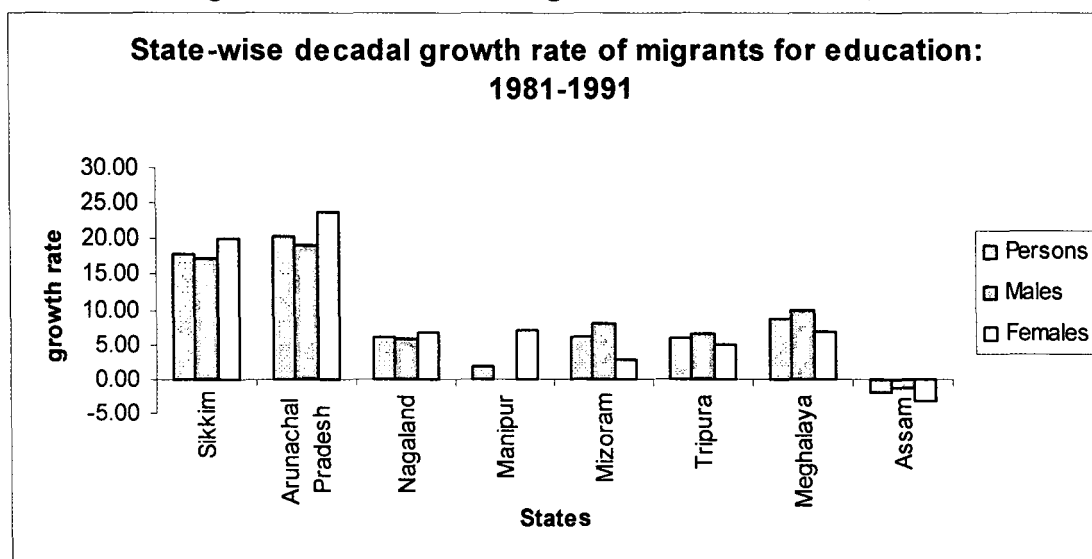
States	1981-1991			1991-2001		
	Persons	Males	Females	Persons	Males	Females
Sikkim	18.05	17.27	20.05	-12.9	-12.7	-13.4
Arunachal Pradesh	20.37	19.15	23.90	-4.31	-4.20	-4.57
Nagaland	6.13	5.89	6.73	7.25	6.79	8.31
Manipur	1.77	-0.12	7.18	9.58	9.43	9.87
Mizoram	6.17	7.87	2.78	0.38	-0.82	3.03
Tripura	5.94	6.31	4.89	-0.09	0.10	-0.68
Meghalaya	8.61	9.87	6.69	-2.58	-2.82	-2.16
Assam	-1.84	-1.27	-3.12	2.03	2.33	1.25
Total migrants	3.65	3.73	3.46	1.37	1.32	1.50

Source: Calculated by the author

Table 6.5 (Figure 6.1) shows the decline in the growth rates of out-migration for education from the Northeastern region over the period from 1981 to 2001. The trend is similar for both male and female. Most of the states in the

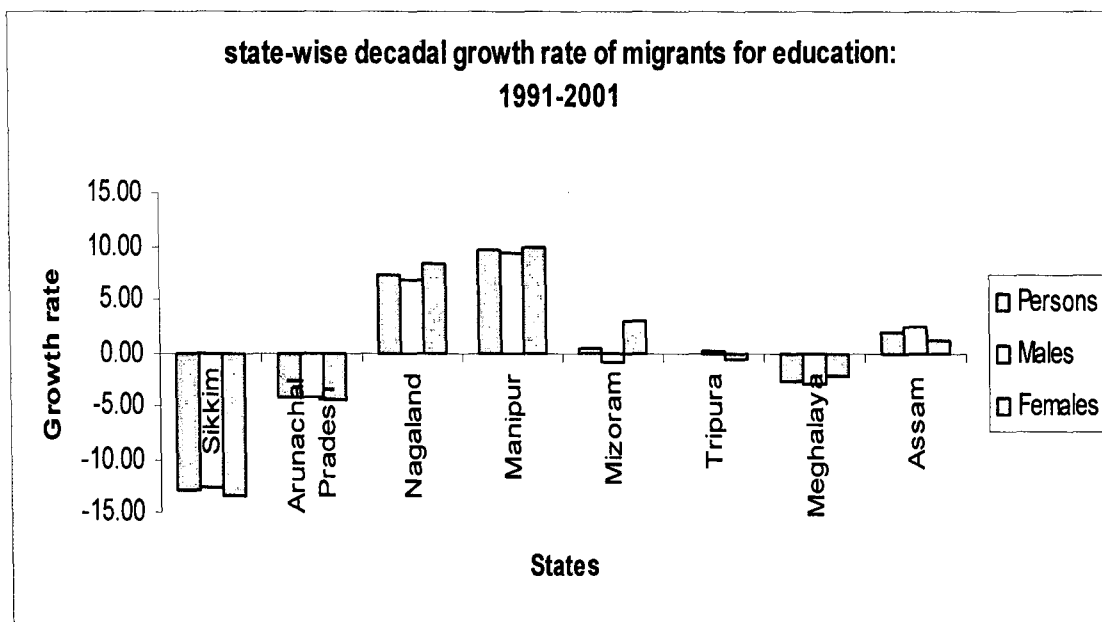
Northeastern region showed positive growth rates of migrants for education during 1981-1991, except Assam show negative growth rate. Manipur and Assam show negative growth rate for male and female only Assam show negative and rest of all the northeastern states shows positive. The trend has changed during the decade of 1991-2001. The growth rate of out-migrants for education has declines sharply. Interestingly, the states of Sikkim, Arunachal Pradesh, Tripura, and Meghalaya which shown positive growth during 1981-91 and became negative during the decades of 1991-01. The growth of Nagaland, Manipur, and Mizoram continued to be positive. Assam which showed a negative growth during 1981-91 became positive during the present decade (The absolute number given in Table E.3, in Appendix E).

Figure 6.1
Decadal growth rates of out-migration for education, 1981-1991



Source: Calculated by the author

Figure 6.2
Decadal growth rates of out-migration for education, 1991-2001



Source: Calculated by the author

Figure 6.2 shows both positive and negative growth rates for educational migration. The highest positive growth rate was in Manipur and the highest negative growth rate in Sikkim, in which the growth rate of education migration had been positive during 1981-1991. This might have happened since for several decades, development activities had been taking place in the region. Increase in expenditure on education, an increase in enrolment rates were very high including technical education and training; the educational index is greater in Sikkim than the national average and has more universities in comparison to the rest of the states in Northeastern region(Ref: Chapter 3, Table 3.8). This may be true also for the other states which showed negative growth rates in migration for educational purposes during the decade 1991-2001 (Table 6.5).

6.7 Annual Growth Rate of out-migration for Employment, 1981-2001

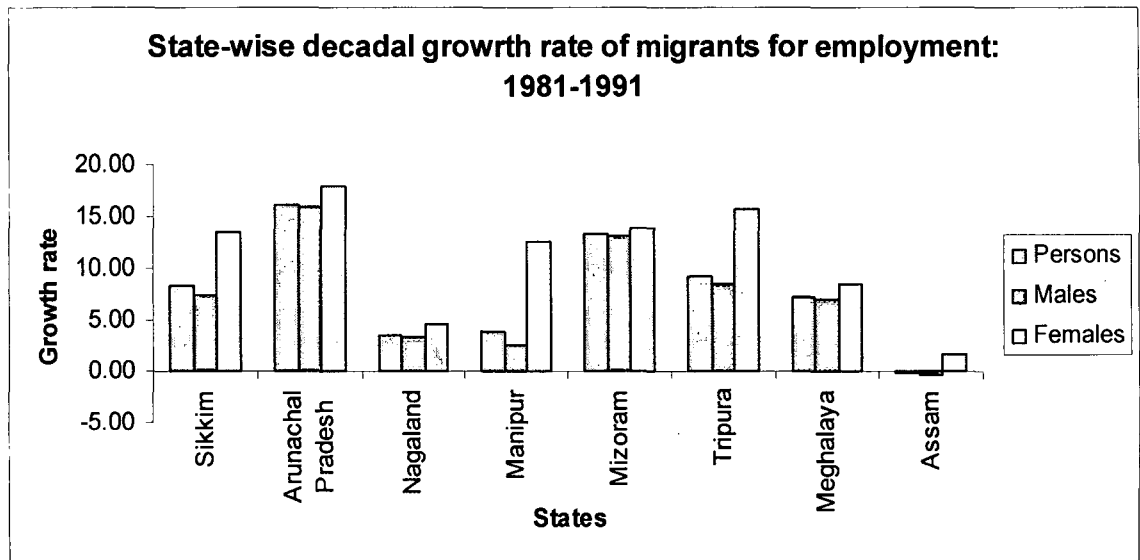
Table 6.6
Decadal growth rate of Migration for employment, 1981-2001

States	1981-1991			1991-2001		
	Persons	Males	Females	Persons	Males	Females
Sikkim	8.3	7.5	13.5	-4.5	-3.8	-8.8
Arunachal Pradesh	16.1	15.9	17.9	-4.8	-4.5	-7.5
Nagaland	3.5	3.3	4.6	16.6	16.8	14.5
Manipur	4.0	2.6	12.6	5.6	6.1	3.5
Mizoram	13.3	13.2	14.0	-5.5	-5.4	-5.9
Tripura	9.3	8.5	15.7	0.5	1.3	-5.9
Meghalaya	7.3	7.0	8.5	0.6	0.8	-0.1
Assam	-0.2	-0.4	1.7	7.1	7.0	7.7
Total migrants	2.4	2.0	5.4	5.4	5.5	4.5

Source: Calculated by the author

Table 6.6 (figure 6.3) shows the growth rates of migration for employment from the Northeastern region an in creasing trend over the decades of 1981-91 to 1991-01. Male's growth rate also shows better trend. The female the growth rate have come down in later period 1991-01. The decade 1981-1991, showed all the states in the Northeastern region except Assam, had high rates of growth during the period

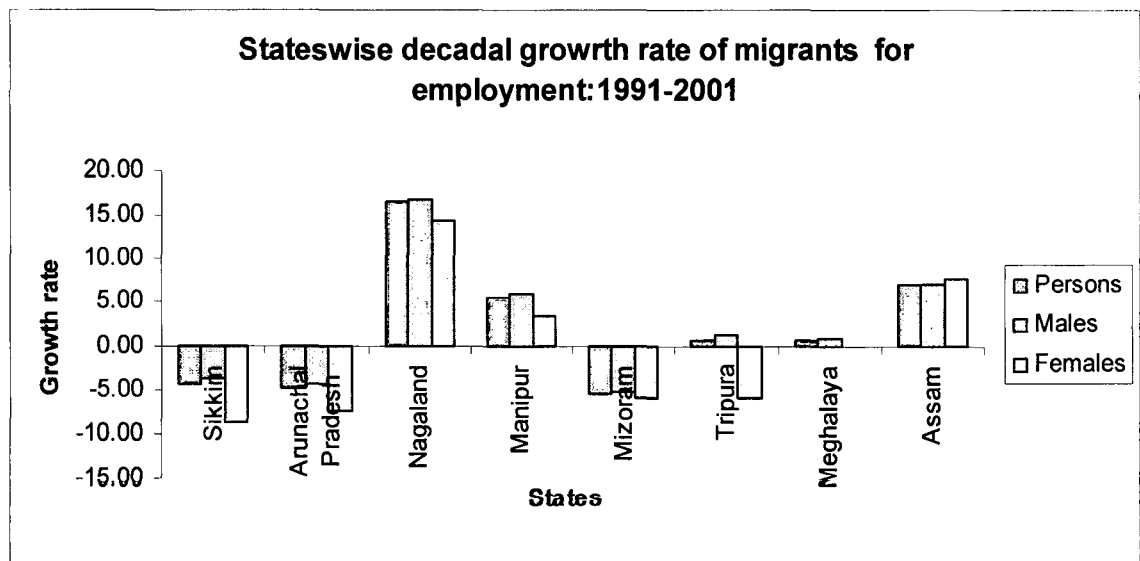
Figure 6.3
Decadal growth rate of migration for employment, 1981-1991



Source: Calculated by the author

The situation completely changed during 1991-2001, with the advent of the era of globalization.

Figure 6.4
Decadal growth rate of out-migration for employment, 1991-2001



Source: Calculated by the author

Figure 6.4 shows some states in the Northeastern region are seen to have experienced the negative growth rates of migration for employment during 1991-2001 (Table 6.6). Nagaland followed by Assam experienced positive growth rates. In these states, out-migration growth rates for employment had not been impressive during the earlier period of 1981-1991. Most of the states had their own sets of internal problem, but they were more severe in Nagaland and Assam, the disturbed conditions contributed in out-migration from the Northeast to different states in India (The absolute number given in Table E.4, in Appendix E).

6.8 Summary

The decadal growth rate of total out-migration from the Northeastern region to others part of the country has increased from 1981 to 2001.

From across all the states in the Northeastern region it had also shown a phenomenal increase for both males and females during the period of 1981 to 1991. But in the later period 1991-2001 some states shows the increasing in migration and some states shows a declining trend in migration. Sikkim, Arunachal Pradesh, Tripura and Meghalaya experienced negative growth rates. Nagaland, Manipur, Mizoram and Assam showed on the other hand, positive growth rates.

Chapter 7

Summary and Conclusions

7.1 Overview

Migration from the Northeastern region has been increasing in recent years. With the growing consciousness among people regarding the importance of acquiring higher education, for better career prospects, especially in the present-day conditions of information communication technology facilities, a large number of persons have been moving out to different parts of the country, for capacity building. The underlying factors contributing to migration have been basically the lack of infrastructure facilities and opportunities for education and employment in the region.

The study has found that the annual growth rate of migration from the region has been growing faster than the rate of growth of its population and that the decadal growth rate of out-migration for education and employment purposes has remained positive for several decades though it has decline over the decade of 1991-2001.

The literature on migration and Economic Development suggests that a relationship exist between the two; an effort to link these two is however found wanting. In this study, an attempt has been made to link education and migration in the Northeastern region of India with regional development as a probable answer for the existence of internal migration within the country. Several studies on internal migration have established the existence of both problem of and the benefits from migration at the places of origin and destination. The economic and social issues arising from migration have attracted the attention of economists like Ravenstein, Stark, Simon and Lewis. Ravenstein, Lewis, de Han and Todaro have produced models of migration. The migration rates of the States in India

may be attributed to differences that exist in the levels of development of States and the standards of infrastructure available.

In many developing countries, particularly in Asia, low agricultural incomes and agricultural unemployment and underemployment are the major factors pushing migrants towards areas with greater job opportunities. But in the Northeastern region, people migrate due to flood (Assam, Meghalaya and Tripura are the most flood-affected states), lack of employment opportunities, inadequacy of public and private enterprises, and lack of infrastructure on higher education. These factors push them to migrate to the states in which opportunities are better and infrastructure is developed. A study of several countries in Asia showed that unemployment is increasing and incomes of the rural poor are declining. The pressure of population resulting in high man-land ratio has been widely hypothesized as one of the important causes of poverty and rural out-migration. With a given mode of production, only a part of the labour force can be absorbed by agriculture. Unless non-crop husbandry sectors (dairying, poultry, forestry, fisheries) and cottage and small-scale industries in the rural areas can absorb the surplus labour, the rural unemployed move to urban centre for gainful employment. In the case of the North east, population pressure (influx of in-migrants) endangers the livelihood of local population and reduces the tribal communities into minorities. The growth and development in the region affected by both internal and external factors as well as the, unaccountable governance and the political agenda of the union government, will take some time to take off.

The pressure of population is certainly not the only cause for increasing unemployment and poverty of some sections of the rural population. Equally important causes seem to be the low rate of investment in agriculture and education, fragmentation of land ownership, inequalities in the distribution of land and other productive assets, inequitable allocative mechanisms which discriminate in favour of the owners of wealth and a pattern of investment, and

technological change which is biased against labour. One of the main reasons for such bias is the fact that much of the farm technology is imported from labour-scarce countries, and they favour the use of capital as against the use of labour.

Studies on education, migration and development in India have thrown up some interesting issues. Researchers have come to different conclusions based on the techniques and indicators they have used for their studies. The existence of both positive and negative impacts of migration in the places of destination and origin is found to be a related phenomenon.

7.2 Major findings

The major findings of the study are the following:

- The decadal growth rates of total out-migration for education and employment from the Northeastern region have been positive. The states which show positive decadal growth rates of out-migration are Nagaland, Manipur, Mizoram and Assam. The states showing negative growth rates of out-migration include Meghalaya, Arunachal Pradesh, Sikkim and Tripura. The annual growth rate of migration from the region is growing more rapidly than the rate of growth of the population.
- The majority of the persons who migrate from the region are found in New Delhi, West Bengal, Bihar, Maharashtra and Karnataka. New Delhi received the highest number of migrants for educational purposes from the Northeastern region. The high standards of the infrastructure available in New Delhi attracted the migrants.
- Marriage is the predominant reason for out-migration of females in India. It is particularly true for the Northeastern states as well.

- Males are proportionately more than females among the migrants, from the Northeastern region.
- In the case of migration from the urban region, more males than females migrate, for the purpose of education.
- Male's migrants proportionally high for capacity-building through education and for reaping economic opportunities through employment and business.
- The persons from the Northeastern region, who migrate for education purposes, stay in the destinations for 1 to 4 years, on an average.
- The supply of higher education facilities in the Northeastern region is too inadequate to meet the burgeoning demand.
- Owing to lack of infrastructure and opportunities within the Northeastern states for pursuing higher education, the people in the area face inhospitable situations and they pushed out to migrate to cities where they would get opportunities for education, employment and overall capacity building.
- Despite achieving high enrolment rates in elementary schools and high literacy rate. The region continued to have high numbers of population living below poverty line, high unemployment rate and high dropout rate which is higher than that of the national average.
- Students soon after completing their 10+2 level of schooling, intends to pursue professional courses; but the availability of technical education within the region is few and far between. Most of them find it impossible to

secure admission for the desired higher education courses within the region. The only way out in a situation in which through the state quota, move out of the state. Later on after achieving good education, some of them might come back; but most remain in the destination places for employment purposes due to limited of jobs availability in their home state.

7.3 Conclusion

The per-capita monthly income of the Northeastern region is lower than the national average. The level of investment in human capital (for example, education, health, sanitation and job training) is low. The region had low level of capital formation, communication and in-adequate infrastructure facilities.

The Northeastern region is rich in natural resources like mineral, hydro power and forests but still the growth and development is not picking up for several decades which may be due to improper utilization of the available resources and lack of direct investment. Hardly, any private enterprises operate in a big way which can provides more employment opportunities to the people of the region. It results to high un-employment and high poverty and high dropout rates from school, low progress in agricultural, industrial and services sectors.

Considering some of these factors, the aspiring population, the prevailing situation, started moving out of the region especially for higher education opportunities and capacity building.

The region needs to put more emphasis on investment in the social sector activities like education, health, water supply and sanitation. At the same time, the region should encourage the participation of private enterprise and must be investment-friendly in order to generate larger employment opportunities which can be translate into growth and development pattern of the entire Northeastern region. To achieve the target of development the region should resolved the conflict and ethnic problem internally.

Development of human resources needs to be taken up on the highest priority basis, by upgrading of skills of the work force. The teaching of Science and Mathematics in many Northeastern States happens to be a very weak and the result is the production of graduates who do not possess any employable skills at all. Therefore, redesigning of the educational map of the Northeastern region should be of priority policy concern. The problems of weak educational base are particularly acute in areas administered by District Autonomous Councils. The holistic planning of educational and vocational skills is essential for the youth to get ample opportunities for gainful employment. Science and Technology inputs at the grass-root level also are needed to improve quality.

This study is important since the Northeastern region lack in literature on this phenomenon; hardly any study has tried to explain the migration scenario in relation to the educational environment, in this part of the country.

This study will be of use to the governments and educational institutions to examine the implications of migration which prevails to a great extent in different parts of our country. Since there is lack of data base documented for the returns educated migrants, it is necessary for the states/region to maintain the data in order to have a clear cut picture how many skilled persons return back and how many stay back for employment and if employed elsewhere how much they send remittances to their family or home state.

7.4 Policy implications

Migration decisions are made through a complex process. It is not possible to explain migration decisions by single theory. But a holistic perspective derived from push-pull, rational choice, and social-network approaches provides a useful tool. However, the strategies to tackle internal migration can be controlled through policy interventions to strengthen, infrastructure facilities in the villages and remote areas in the sending region, generation of employment,

improved access to public health, provision of quality education, establishment of professional institutions and overall socio-economic development (Adkoli, B.V 2006).

As has been observed, during the last three decades this region has not been getting any direct benefit from in-migrant skilled workers because they send remittances back home. Therefore, it is very important for the region to rethink and produce their own manpower by investing more on human capital, creating more facilities for skill development, improvement of the standard of infrastructure with assured quality.

Higher economic growth may lead to a change in the structure of occupations and the returns to education (Banerjee and Newman, 1993). Depending on the nature of the growth process, the returns to certain types of skills increase. The supply of such skills, however, may be constrained on two grounds — the income level of the individual (or the family) and imperfections in the credit market. This is manifested through increases in the wage rates, caused by lower-than-optimum supply of labour, and higher-than-optimum rates of return. The degree of access to education and skills, therefore, may be crucial in determining the path of development in the long run.

The government pumps in so much money for project investment and aspiring for development of the entire Northeastern region. It has received 90 per cent of the grants from the central funding and 10 per cent from the others source. Some of the projects get delayed and the costs increase phenomenally. This basically happens due to lack of an efficient monitoring system, and lack of accountability and transparency of the government. There is a need to improve the system and make it more competence.

However, the most important aspect has been the weight assigned to education sector in the overall development strategy. If by some mechanism the

government is able to maintain and monitor the flow of migrants from rural to urban areas and manage the data on returns to educated migrants after completion of their studies in urban areas especially in the Northeastern region where some out-migrants come back and some do not, then there may be a possibility of reducing the disparities among the States. Retention of better quality manpower in the less developed States and putting an emphasis on investment in infrastructure and industries in poor States, are possibly the ways in which inter-state disparity in development could be brought down. If such a goal is achieved, it should be possible to arrest the flows of inter-state migration to a great extent.

Finally, it may be concluded that balanced development of the country both in terms of 'backward region like the Northeastern region and developed States' and 'rural and urban India' should be the important goals of state policies. Movement of population for economic reasons in the modern times is very common. It is argued by many studies that migration could be a tool for economic development of a state. Similarly, investment in the backward States by Governments in the form of public sector investment towards creation of both social and physical infrastructure and industries at par with those in the developed States is a must. The look 'East Policy' of the Government of Northeastern states and the trade links with ASEAN countries should be strengthened for creating a better investment friendly environment. If the state utilised its resources potential and develop infrastructure in the social, and industrial sectors, there is a chance of creating more employment opportunities for the youth in the places of their origin themselves.

7.5 Limitation of the study

Overall, the census data are good but have some severe limitations too (Zacharia, Rajan and Mathew, 2003). They provide detailed information up to the district level, but not of household units. Chandrashekar and Ghosh (2007) pointed out that our statistical system was not really designed to capture short-term duration migration by Indian census. However, there still remains the problem of the way in which the sample is structured; it was household-based.

This study focus tried to explain the education and migration in eight states of the Northeastern region of India. For better understanding of the trend we used the data from Indian Censuses related to 1981, 1991 and 2001. The census provides information on reasons for migration from 1981 onwards.

7.6 Recommendations for further study

In the case of Northeastern region, people who migrate for economic opportunities and education purposes to urban areas like Mumbai, Delhi, Kolkata, Chennai and Bangalore have to bear higher cost. Their propensity to migrate depends on the financial capability to bear both direct and indirect costs. Such direct costs of investment for migration include transportation costs, opportunity costs and rental cost which they have to pay in money terms. Indirect cost includes expenditure on food, clothing and miscellaneous items. Migration to the metropolitan cities for seeking employment and getting better education requires some kind of social networking and basic knowledge about how to access the available information.

This study aims at investigating into the relationship between education, migration and employment purposes. Owing to non-availability of secondary data and time constraint, we found it very difficult to capture this particular aspect. Therefore, there is further scope for in depth enquiry into the process for controlling the process of migration and assessing the economic implication of migration on the sending and receiving regions.

A large number of studies on migration have been carried out in India in recent years. They have discussed various aspects of the subject and analysed the impact of population movement across regions. Though migration is a complex phenomenon, economic factors as the main motivation of migration have been well established. This study provides the theoretical background to the present study on internal migration in India.

Appendices

Appendix A

Concepts and definitions

Internal migration: When migration takes place across the various regions of a country, it is normally known as internal migration. Migrants by place of birth are those who are enumerated at a village/town at the time of census other than their place of birth. A person is considered a migrant by place of last residence, if the place in which he is enumerated during the census is other than his place of immediate last residence. By capturing the latest of the migrations, in cases in which persons have migrated more than once, this concept would give a reliable picture of current migration scenario.

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 enumeration is the same, the person is a non-migrant.

Lifetime Migrants: 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 'last residence' concept.

In-migrant: A person, who crosses the boundaries of a village/town for the purpose of residing at the place of enumeration, is an in-migrant.

Out-migrant: If a person moves out from the place of enumeration (village/town) to another politically defined area (village/town) for usual residence, he or she is termed as an out-migrant.

Net-migration: Total in-migrants to an area minus total out-migrants from that area during a fixed period are known as net-migration. If net-migration is positive it shows net in-migration and a negative value of net-migration will show net out-migration.

Intra-district Migrant: When a person moves out from his place of usual residence or birth to another politically defined area (village/town), which is within the district of enumeration, he/she is termed as an intra-district migrant.

Inter-district Migrant: A person who in the course of migration crosses the boundary of the district of enumeration but remains within the State of enumeration, is termed as an inter-district migrant

Intra-state Migrant: When a person crosses the boundary of his/her village/town for usual residence elsewhere within the State of enumeration, the person concerned is treated as an intra-State migrant. Thus intra-district and inter-district migrants together constitute intra-State migrants.

Inter-State migrant: If the place of enumeration of an individual differs from the place of birth or last residence and these lie in two different States, the person is treated accordingly as an inter-State migrant with regard to birth place or last residence concept.

Life-time In-Migration: It denotes the total number of persons enumerated in a given area at a particular Census who were born outside the area of enumeration but within the national boundaries.

Life-time Out-Migration: It gives the total number of persons born in a given area but now enumerated outside the area within the national boundaries at the time of a particular Census.

Life-time Net-Migration: The difference between life-time in-migration and life-time out-migration is termed as life-time net-migration.

Migration rate: It is taken as the ratio of total migrants counted in the Census to total population multiplied by 1000. While discussing the migration result, the term population mobility is taken as a synonym to migration rate.

Educational 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.

Appendix B

Table B.1
Distribution of population, Sex ratio, Density of population, Scheduled caste, Schedule tribe, Infant mortality rate, Crude birth rate and Crude death rate in the Northeastern States, 2001

States	Population (million)	Sex Ratio (F/M ratio)	Population Density (per sqkm)	%age SC Population to Total population	%age ST Population to Total population	IMR (Per 1000 Live births)	CBR (per 1000 Population)	CDR (Per 1000 Population)
Sikkim	0.54	875	76	5.0	20.6	P-33 M-35 F-16	T-19.2 R-19.5 U-17.7	T-5.6 R-5.7 U-4.7
Arunachal Pradesh	1.09	893	13	0.6	64.2	P-40 M-44 F-19	T-22.5 R-23.8 U-17.4	T-5.0 R-5.5 U-2.8
Nagaland	1.99	900	120	0.0	89.1	P-20 M-18 F-27	T-17.3 R-16.8 U-19.2	T-4.8 R-4.9 U-4.1
Manipur	2.29	978	104	2.8	34.2	P-11 M-11 F-11	T-13.4 R-13.5 U-13.1	T-4.5 R-4.4 U-4.6
Mizoram	0.89	935	42	0.0	94.5	P-25 M-32 F-13	T-17.8 R-21.6 U-14.0	T-5.5 R-6.2 U-4.8
Tripura	3.19	948	305	17.4	31.1	P-36 M-37 F-30	T-16.6 R-17.3 U-13.4	T-6.3 R-6.2 U-6.8
Meghalaya	2.31	972	103	0.5	85.9	P-53 M-54 F-43	T-24.7 R-26.4 U-17.1	T-8.0 R-8.5 U-5.8
Assam	26.65	935	340	6.9	12.4	P-67 M-70 F-42	T-24.6 R-26.1 U-15.4	T-8.7 R-9.2 U-5.8
Total NER	38.98	929	149	4.15	54.0	P-35.6 M-37.6 F-25.1	T-19.5 R-20.6 U-15.9	T-6.1 R-6.3 U-4.9
All India	1028.61	933	313	16.33	8.01	P-58 M-56 F-61	T-24.8 R-26.4 U-19.8	T-8.0 R-8.7 U-6.0

Sources: for SC/ST: Primary Census Abstract: Census of India 2001, Sample Registration System; Registrar General of India.

Table B.2
State-wise distribution of education, health, population served per doctor, literacy rate, and population below poverty line.

States	Education	Health	Pop served per Doctor	Literacy rate	Percentage of Below Poverty Line families
Sikkim	1039	178	3108	69.68	36.55
Arunachal Pradesh	2098	520	2352	54.74	33.47
Nagaland	2418	529	5422	67.11	32.67
Manipur	4154	520	2427	68.87	28.54
Mizoram	2961	428	10360	88.49	19.47
Tripura	3447	638	3720	73.66	34.44
Meghalaya	8378	526	5411	63.11	33.87
Assam	43959	5819	11980	64.28	36.09
Total NE	68454	9158	44780	68.5	31.88
All India	1208378	172793		64.84	26.10

Source: 2001 Census of India for Literacy Rate; Planning Commission (1999- 2000) for Below Poverty line; Abstract of Selected Educational Statistics 2004-05 for Education and Infrastructure Division , MOHF/GOI for Health.

Notes:

1. Total number of recognized educational institutions in the Northeast 2003-04 (Provisional): (includes all levels of education i.e., Primary/Junior Basic School, Middle/Senior Basic Schools, High School/Higher Secondary school/Intermediate/Junior College, Colleges for General Education Universities/ Deemed Universities/ Professional Institution of National Education Importance/Research Institution)
2. Health: Centre functioning as on September 2004 (including Government Allopathic Hospitals, Primary Health Care Centre, Sub Centre and Community Health Centre)

Table B.3
Net State Domestic Product at Constant (1993-94) Prices (in crore) and Per Capita NSDP (State Income) at Constant (1993-94) Prices (in rupees) NSDP of North East States

States	NSDP (In Crore)	PCI (In Rs.)
Sikkim	575	10415
Arunachal Pradesh	1036	9399
Nagaland	2385	11674
Manipur	1730	7445
Mizoram	-	10505
Tripura	3091	9664
Meghalaya	2317	9905
Assam	16441	6122
Total NER	27575	9391
All India NNP	1125480	10754

Source: RBI, (2002)

Note: NSDP Data for Mizoram are not available at constant prices.

Appendix C

Table C.1

NUEPA's Educational Development Index (EDI) ranking for states

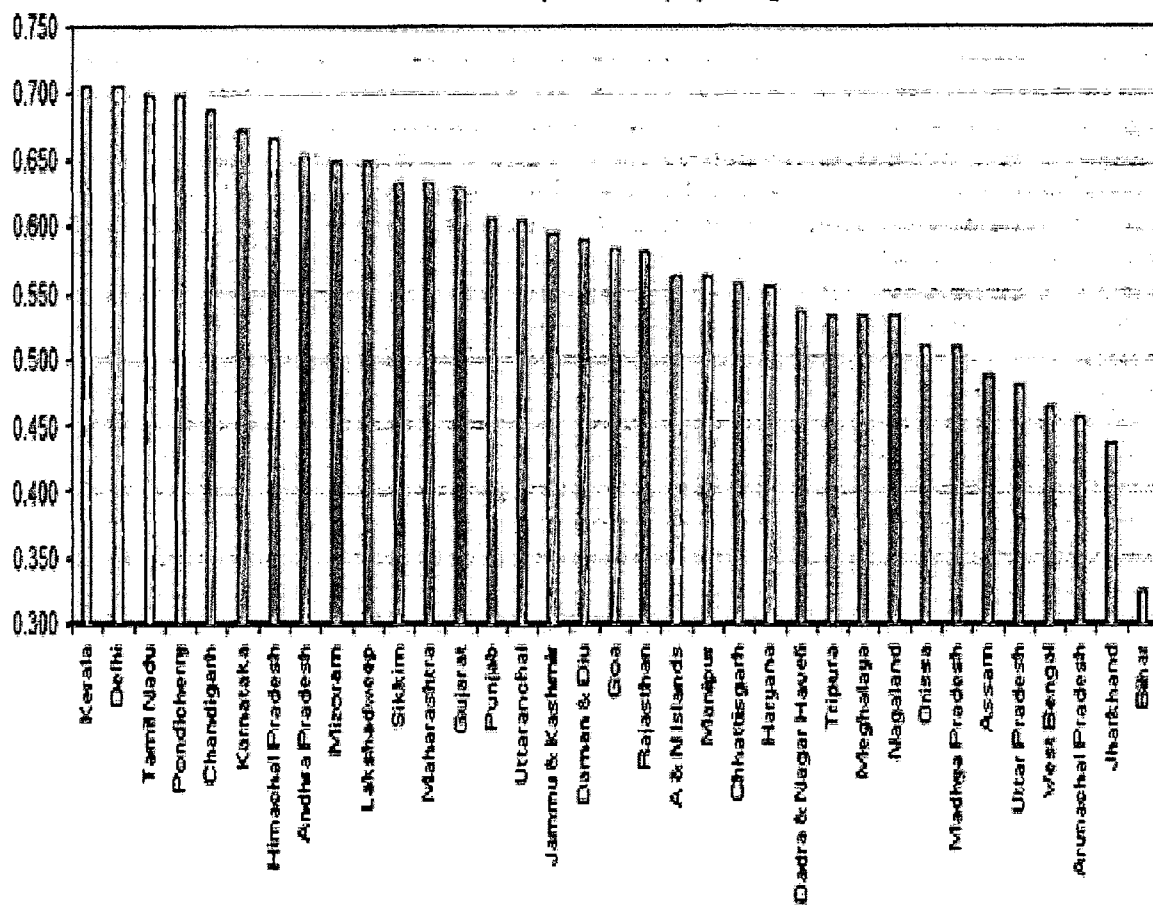


Table C.2
Expenditure on Education in India (In crore)

Years	Total expr. on Education & trg. (Revised Estimates)	Total expr. on all sectors (Revised Estimates)	GDP at current Prices (at factor cost) base year 1993-94	% of Edu. Exp. to all Sectors Exp.	% of Edu. Exp. to GDP
1951-52	64.46	814.13	10080	7.92	0.64
1952-53	72.26	857.67	9941	8.43	0.73
1953-54	80.06	908.2	10824	8.82	0.74
1954-55	95.82	973.74	10168	9.84	0.94
1955-56	118.39	1111.26	10332	10.65	1.15
1956-57	132.88	1158.01	12334	11.47	1.08
1957-58	150.26	1416.62	12610	10.61	1.19
1958-59	173.78	1594.36	14106	10.9	1.23
1959-60	207.59	1770.06	14816	11.73	1.4
1960-61	239.56	1997.93	16220	11.99	1.48
1961-62	260.3	2225.4	17116	11.7	1.52
1962-63	278.76	2942.67	18302	9.47	1.52
1963-64	313.93	3488.97	20916	9	1.5
1964-65	369.29	3844.91	24436	9.6	1.51
1965-66	432.61	4404.82	25586	9.82	1.69
1966-67	487.83	5100.24	29123	9.56	1.68
1967-68	593.14	5619.77	34225	10.55	1.73
1968-69	649.13	6922.07	36092	9.38	1.8
1969-70	760.23	7908.07	39691	9.61	1.92
1970-71	892.36	8787.12	42222	10.16	2.11
1971-72	1011.07	10610.89	44923	9.53	2.25
1972-73	1150.43	11863.56	49415	9.7	2.33
1973-74	1300.72	12884.48	60560	10.1	2.15
1974-75	1570.67	14625.03	71283	10.74	2.2
1975-76	1849.47	17958.99	75709	10.3	2.44
1976-77	2039.09	20482.83	81381	9.96	2.51
1977-78	2630.6	22666.31	92881	11.61	2.83
1978-79	2994.69	26134.84	99823	11.46	3
1979-80	3347.57	30915.39	108927	10.83	3.07
1980-81	3884.2	36398.39	130178	10.67	2.98
1981-82	4435.29	33667.31	152056	13.17	2.92
1982-83	5509.17	43996.18	169525	12.52	3.25
1983-84	6229.53	61889.25	198630	10.07	3.14
1984-85	7455.88	69025.45	222705	10.8	3.35
1985-86	8713.02	67091.41	249547	12.99	3.49
1986-87	9479.13	80454.66	278258	11.78	3.41
1987-88	11798.35	92518.38	315993	12.75	3.73
1988-89	14069.82	107543.75	378491	13.08	3.72
1989-90	17192.5	126045.97	438020	13.64	3.93
1990-91	19615.85	146711.53	510954	13.37	3.84
1991-92	22393.69	170370.38	589086	13.14	3.8
1992-93	25030.3	190327.45	673221	13.15	3.72
1993-94	28279.69	218535.15	781345	12.94	3.62
1994-95	32606.22	251691.92	917058	12.95	3.56
1995-96	38178.09	286194.55	1073271	13.34	3.56
1996-97	43896.48	329389.92	1243546	13.33	3.53
1997-98	48552.14	380728.45	1390042	12.75	3.49
1998-99	61578.91	439768.11	1616033	14	3.81
1999-00	77056.3(RE)	527303.29	1786459	14.61	4.31
2000-01	77847.66(BE)	574436.07	1895843Q	13.55	4.11

Source: Selected Educational Statistics 2000-2001 and National Accounts statistics published by C.S.O.

Note: Expenditure on education is taken from budgeted expenditure on education published by Directorate of Secondary and Higher Education.

Appendix D

Table D.1
Out-migrants from the Northeastern region to different
States in India, 2001

States	Sikkim	Arunachal Pradesh	Nagaland	Manipur	Mizoram	Tripura	Meghalaya	Assam	Total
Jammu & Kashmir	55	34	54	164	26	94	88	1,391	1,906
Himachal Pradesh	177	197	88	117	53	59	168	958	1,817
Punjab	158	168	157	365	69	223	337	7,677	9,154
Uttaranchal	253	528	5,783	704	541	322	937	6,761	15,829
Haryana	179	129	199	365	67	272	361	7,356	8,928
Delhi	1,390	1,727	17,429	5,526	1,702	1,999	5,589	26,850	62,212
Rajasthan	230	171	223	1,006	77	622	506	7,447	10,282
Utter Pradesh	226	607	7,942	4,406	311	1,545	694	94,783	110,514
Bihar	668	2,472	101,267	531	308	653	329	133,758	239,986
West Bengal	4,778	917	1,413	1,914	419	15,555	5,216	135,980	166,192
Jharkhan	69	140	122	329	80	387	195	3,359	4,681
Orissa	64	199	122	235	60	359	137	2,598	3,774
Chhatisgarh	50	60	75	149	15	252	83	4,946	5,630
Madhya Pradesh	108	132	102	351	69	297	264	3,681	5,004
Gujarat	149	92	92	540	25	427	158	4,706	6,189
Maharashtra	509	561	575	2,165	558	1,093	1,326	14,532	21,319
Andhra Pradesh	101	580	115	440	43	172	462	2,954	4,867
Karnataka	953	1,190	435	1,454	270	510	577	4,182	9,571
Goa	11	21	24	86	7	23	44	433	649
Kerala	74	207	293	231	90	85	157	1,179	2,316
Tamil Nadu	140	564	172	585	153	113	146	2,083	3,956
Total NER	10,342	10,696	136,682	21,663	4,943	25,062	17,774	467,614	694,776

Source: D1, Census 2001

Table D.2
Age distribution of the migrants from the Northeastern region, 2001

Age groups	Total			Rural			Urban		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
All ages	1096951	427993	668,958	639,339	195,497	443,842	457,612	232,496	225,116
0-4 yrs	23498	11960	11,538	12,710	6,394	6,316	10,788	5,566	5,222
5-9 yrs	40923	21327	19,596	23,125	11,970	11,155	17,798	9,357	8,441
10-14 yrs	55874	29236	26,638	30,643	15,967	14,676	25,231	13,269	11,962
15-24 yrs	214,806	89,532	125,274	118,680	36,854	81,826	96,126	52,678	43,448
25-34 yrs	273,991	94,455	179,536	161,735	40,913	120,822	112,256	53,542	58,714
35-59 yrs	397,380	152,408	244,972	233,944	69,367	164,577	163,436	83,041	80,395
60+	88,948	28,288	60,660	57,692	13,685	44,007	31,256	14,603	16,653
Age not stated	1,531	787	744	810	347	463	721	440	281

Source: D1, Census 2001

Table D.3
Out-migrants for education from the Northeastern region to other Indian states

States	Sikkim	Arunachal Pradesh	Nagaland	Manipur	Mizoram	Tripura	Meghalaya	Assam	Total
Jammu & Kashmir	-	-	-	1	-	2	-	23	26
Himachal Pradesh	9	63	13	10	3	1	30	43	172
Punjab	5	3	4	17	1	9	6	120	165
Uttaranchal	32	32	132	101	13	10	26	200	546
Haryana	21	19	42	162	12	11	31	192	490
Delhi	101	131	441	1548	180	86	186	1298	3971
Rajasthan	21	20	21	140	9	30	31	218	490
Utter Pradesh	33	50	58	298	14	64	33	1344	1894
Bihar	5	21	439	23	14	15	23	405	945
West Bengal	162	63	76	213	60	719	201	1916	3410
Jharkhan	6	2	9	48	5	14	9	101	194
Orissa	3	14	15	38	1	44	43	111	269
Chhatisgarh	6	7	7	11	0	4	6	67	108
Madhya Pradesh	12	27	21	172	21	25	40	152	470
Gujarat	4	7	8	262	5	60	5	178	529
Maharashtra	75	107	285	810	353	103	295	1452	3480
Andhra Pradesh	15	12	44	133	15	3	17	97	336
Karnataka	316	566	228	784	117	193	200	851	3255
Goa	-	1	8	2	1	-	7	1	20
Kerala	4	38	38	55	32	21	5	82	275
Tamil Nadu	11	73	32	145	56	13	17	133	480
Total	841	1256	1921	4973	912	1427	1211	8984	21525

Source: D1, Census 2001

Appendix E

Table E.1
Migrants from the Northeastern Region by last residence, to different states
in India: Decadal variation (in %) during 1981-2001

States	1981 Census			1991 Census		
	Persons	Males	Females	Persons	Males	Females
Sikkim	12118	5957	6161	36778	15042	21736
Arunachal Pradesh	5345	3134	2211	36910	16093	20817
Nagaland	9354	5351	4003	24213	11325	12888
Manipur	20399	12043	8356	36834	16319	20515
Mizoram	8281	4338	3943	28332	13316	15016
Tripura	25506	13848	11658	79240	35511	43729
Meghalaya	18527	9367	9160	54848	24445	30403
Assam	332837	179495	153342	353334	175691	177643
Total Migrants	432367	233533	198834	650489	307742	342747
	1991 Census			2001 Census		
Sikkim	36778	15042	21736	14,819	7,012	7,807
Arunachal Pradesh	36910	16093	20817	22,803	10,981	11,822
Nagaland	24213	11325	12888	159,281	37,418	121,863
Manipur	36834	16319	20515	51,903	27,339	24,564
Mizoram	28332	13316	15016	37,993	19,595	18,398
Tripura	79240	35511	43729	65,655	33,165	32,490
Meghalaya	54848	24445	30403	50,852	23,639	27,213
Assam	353334	175691	177643	708,374	276,597	431,777
Total Migrants	650489	307742	342747	1,111,680	435,746	675,934

Source: Table D3, 1991 and 2001 Census

Table E.2
Migrants for Education from the Northeastern region by last residence, to
different states in India: Decadal variation (in %) during 1981-2001

States	1981 Census			1991 Census		
	Persons	Males	Females	Persons	Males	Females
Sikkim	671	497	174	3527	2445	1082
Arunachal Pradesh	498	386	112	3181	2226	955
Nagaland	835	604	231	1514	1071	443
Manipur	2594	2072	522	3092	2048	1044
Mizoram	806	498	308	1467	1062	405
Tripura	1310	954	356	2333	1759	574
Meghalaya	1033	591	442	2360	1515	845
Assam	10655	7205	3450	8853	6340	2513
Total Migrants	18402	12807	5595	26327	18466	7861
	1991 Census			2001 Census		
Sikkim	3527	2445	1082	881	625	256
Arunachal Pradesh	3181	2226	955	2,048	1,450	598
Nagaland	1514	1071	443	3,049	2,065	984
Manipur	3092	2048	1044	7,718	5,042	2,676
Mizoram	1467	1062	405	1,524	978	546
Tripura	2333	1759	574	2,312	1,776	536
Meghalaya	2360	1515	845	1,817	1,138	679
Assam	8853	6340	2513	10,824	7,980	2,844
Total Migrants	26327	18466	7861	30,173	21,054	9,119

Source: Table D3, 1991 and 2001 Census

Table E.3
Decadal growth rates of Migration for Education, 1981-2001

States	1981			1991		
	Persons	Males	Females	Persons	Males	Females
Sikkim	671	497	174	3527	2445	1082
Arunachal Pradesh	498	386	112	3181	2226	955
Nagaland	835	604	231	1514	1071	443
Manipur	2594	2072	522	3092	2048	1044
Mizoram	806	498	308	1467	1062	405
Tripura	1310	954	356	2333	1759	574
Meghalaya	1033	591	442	2360	1515	845
Assam	10655	7205	3450	8853	6340	2513
Total migrants	18402	12807	5595	26327	18466	7861
	1991			2001		
Sikkim	3527	2445	1082	881	625	256
Arunachal Pradesh	3181	2226	955	2,048	1,450	598
Nagaland	1514	1071	443	3,049	2,065	984
Manipur	3092	2048	1044	7,718	5,042	2,676
Mizoram	1467	1062	405	1,524	978	546
Tripura	2333	1759	574	2,312	1,776	536
Meghalaya	2360	1515	845	1,817	1,138	679
Assam	8853	6340	2513	10,824	7,980	2,844
Total migrants	26327	18466	7861	30,173	21,054	9,119

Source: Table D3, 1981, 1991 and 2001 Census

Table E.4
Decadal growth rate of Migration for employment, 1981-2001

States	1981			1991		
	Persons	Males	Females	Persons	Males	Females
Sikkim	1701	1525	176	3765	3139	626
Arunachal Pradesh	1164	1030	134	5186	4490	696
Nagaland	1983	1765	218	2787	2445	342
Manipur	3803	3461	342	5612	4495	1117
Mizoram	1058	889	169	3696	3071	625
Tripura	4079	3720	359	9921	8384	1537
Meghalaya	4064	3460	604	8187	6821	1366
Assam	58787	52987	5800	57766	50899	6867
Total migrants	76639	68837	7802	96920	83744	13176
States	1991			2001		
	Persons	Males	Females	Persons	Males	Females
Sikkim	3765	3139	626	2379	2129	250
Arunachal Pradesh	5186	4490	696	3155	2836	319
Nagaland	2787	2445	342	12904	11585	1319
Manipur	5612	4495	1117	9663	8093	1570
Mizoram	3696	3071	625	2109	1769	340
Tripura	9921	8384	1537	10384	9546	838
Meghalaya	8187	6821	1366	8722	7367	1355
Assam	57766	50899	6867	114744	100271	14473
Total migrants	96920	83744	13176	164060	143596	20464

Source: Table D3, 1981, 1991 and 2001 Census

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