# FACTORS AFFECTING THE INTERNAL MIGRATION TO DHAKA CITY

**By**

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## CANDIDATE'S DECLARATION

I hereby declare that this Thesis has been prepared in partial fulfillment of the requirements for the degree of Master of Urban and Regional Planning at the Bangladesh University of Engineering and Technology, Dhaka and has not been submitted anywhere else for any other degree.

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## ABSTRACT

Population of the country is increasing over the years. Rural-urban migration plays a key role in the rapid urbanization process of Bangladesh. Increasing urbanization is not caused by the natural population growth in the urban areas in Bangladesh; rather it is an outcome of the push - pull factors of migration.

The objective of this study was to estimate the internal migration rate and to find the factors of migration to Dhaka City. The study was based upon the analysis of secondary information as well as the findings of the fieldwork.

Census survival ratio method estimated that net intercensal migration rate in Dhaka City were 13.8 per thousand and 18.8 per thousand during 1981-1991 and 1991-2001 respectively. It was estimated from the survey that there was 17.5% urban migrants and 13.5% rural migrants in Dhaka City in 2003. Most of the migrants had come from Comilla, Faridpur, Noakhali and Jessore districts of Bangladesh. It was found that migrants were young, male, married and moderately educated. Majority of the migrants had got information from their friends, taken their own decision and moved to Dhaka City individually.

This study revealed that job searching, river erosion and poor housing condition were the main push factors while better job opportunity and buy own land or housing were the main pull factors of migration in Dhaka City. It was found that married male members aged between 25-35 years belonging to middle income group with large family size were more likely to migrate than those belonging to lower and upper income groups.

Logistic regression method was used to find the factors of migration and it was found that any members living outside the family, education, job satisfaction, income satisfaction, family type, family size, income groups, age and house ownership status of household heads were significant predictors of migration in Dhaka City.

Priority Ranking Matrix suggested that job problem was the most important problem in both rural and urban areas of Bangladesh. Lack of good housing was second in importance in rural areas as a factor of migration while in urban areas it was lack of education. It was evident from the migrant's satisfaction index that maximum migrants expressed a higher degree of satisfaction at improvement in nature of work, income, public transport, healthcare, and education and expressed lower degree of satisfaction in physical environment, recreation and communication.

These findings imply that rural urban migration in Dhaka City is likely to increase in future. By decentralizing infrastructure, industrial activities, public services, and administrative functions, as well as diverting investment from Dhaka City towards small towns and villages, rural urban migration in Dhaka City can be reduced. It is hoped that the results of this survey will assist national and local-level planners to take into account demographic and social changes in preparing plans for social services and urban infrastructure in Dhaka City as well as implementing and extending the rural development programs of Bangladesh.

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## GLOSSARY AND ACRONYMS

| | |
|---|---|
| BBS | Bangladesh Bureau of Statistics |
| BIDS | Bangladesh Institute of Development Studies |
| BUET | Bangladesh University of Engineering and Technology |
| CDA | Chittagong Development Authority |
| CSMA | Chittagong Statistical Metropolitan Area |
| CUS | Centre for Urban Studies |
| DIT | Dhaka Improvement Trust |
| DMDP | Dhaka Metropolitan Development Plan |
| DSMA | Dhaka Statistical Metropolitan Area |
| DU | University of Dhaka |
| HH | Household Head |
| HSD | Housing Settlement Directorate |
| ICDDR,B | International Centre for Diarrhoeal Disease Research, Bangladesh |
| ISRT | Institute of Statistical Research & Training |
| ILO | International Liberation Organization |
| LGED | Local Government Engineering Department |
| NIPORT | National Institute of Population Research and Training |
| NGO | Non-Government Organizations |
| OUA | Other Urban Area |
| RSMA | Rajsjhai Statistical Metropolitan Area |
| RAJUK | Rajdhani Unnayan Kartipakhya |
| SMA | Statistical Metropolitan Area |
| UNFPA | United Nations Population Fund |

# Chapter I
# Introduction

## 1.1 Background of the Study

Migration plays a central role in the urbanization process, and can lead to unmanageable growth as witnessed in developing countries. It has profound impact on demographic changes as well as socio-economic structure of the city. Migration implies the movement of people from one place to another for a specific period of time. There are two types of migration-international migration and internal migration. International migration is the movement from one political boundary to another political boundary. Internal migration is the movement from one place to another within the same country.

Internal migration is often the main cause of changes in the size and composition of community and regional population. Internal migration data thus provide essential background to planning for the redistribution of population, and to developing policies to restrain or divert movement where urban growth is excessive or depopulation is a concern (Findley, 1982).

Internal migration of Bangladesh population has been a feature of great importance in the nation's population redistribution for well over four decades. Although its causes have been complex, they have generally been related to the socio-economics system, urbanization, distribution of manufacturing improvements in transportation system and impact of political activities of the country. Slow economic developments and growth of per capita income are the phenomena related to internal migration and have come about with a historical relationship.

Migration studies in different regions of developing countries have generally dealt with the economic aspects of migration. However, majority of these studies have dealt with the differentials and determinants of migration focusing mainly causes and

consequences of migration (Hossain, 1996a; Asfar, 1995; Wintle, 1992; Hugo, 1991; Yadava, 1988)

Internal migration occurs in the way of urban to rural, rural to urban, rural to rural and urban to urban migration process. But it is remarkable that in Bangladesh the main Bangladesh Population Census 1991, the total urban immigration rate was 56.16% where rural-urban migration rate was 51.80% and urban to urban migration rate was 4.36%.

Both rural push and urban pull factors have contributed to the large scale rural-urban migration in Bangladesh in the last decade. There is a wide spread unemployment and under employment in the rural area as agricultural sector is unable to absorb the increasing members of the labour force. Besides there are many natural hazards and various social factors which act as rural push factors in Bangladesh. So, the rural push factors become stronger in Bangladesh (BBS,1994).

Various studies of Dhaka City mostly investigate the characteristics of migrants at destination places (CUS, 1988, 1990 and 1996). Majumder et al. (1989) and Amin (1986) studied the economic consequences of migration based on sample surveys conducted in Dhaka City. Afsar (1995a) argued that migrants often benefited more than non-migrants because of their innovative, risk taking and desperate nature. The benefits included higher or regular income, gain in wealth, greater access to public services and education.

Internal migration, particularly, migration of people from other areas to Dhaka City has been playing a vital role in the rapid growth of Dhaka City since the late 1960's. The proportion of migrant population was higher (70 to 75 percent) in the early 1970s when a large number of people migrated to the new capital due to natural disasters (cyclone and tidal wave in 1970), the War of Independence (in 1971) and a major famine (during 1974-75). Various studies have indicated that due to limited resource/opportunities in rural areas, a large number of people migrated to the capital

city for their livelihood. Dhaka gets people from outside through various processes of migration or circulation such as permanent relocation, seasonal migration, commuting and non-periodic occasional movements (Mahbub and Nazrul, 1989).

Unfortunately migration has been a neglected area of research in Bangladesh. Compared with the two other demographic processes (fertility and mortality), migration had a very little coverage in the past census survey. In fact, our census schedules have had no appropriate questions as one's migration behavior. As a result most knowledge of migration is based on small sample survey carried out mostly in the places of destination of migrants. Rapid growth of Dhaka has been accentuated through rural-urban migration. Although rural 'push' and urban 'pull' factors have been the main factor behind Dhaka's population growth, lack of adequate research in this area is mainly responsible for the lack of information on factors and patterns of migration to Dhaka City. The present study was a modest attempt to fill some of the gaps in this respect.

### 1.2 Present State of the Problem

A study of migration is of key importance in social science, particularly in population studies. The importance of internal migration and urbanization in the process of socioeconomic development can hardly be exaggerated, as both are inherent elements of development itself. It would seem that scholars and governments in developing countries are more keenly aware of this than those in developed countries, since they consistently report that they consider issues of internal migration and population distribution to be even more important than, for example, reducing fertility and population growth; yet it is the latter which receives essentially all of the attention and funding of the international community.

Dhaka is one of the fast growing metropolitan areas in the developing countries. The population of Dhaka City was approximately 6 million within 360 Sq. km of the city proper, and 9.9 million in the SMA covering 1,528 Sq. km in 2001. Urban population ratio in Bangladesh is still 23% (or 28 million people) of the total population, and

expected to be more than twice (62 million) the present urban population in the years between 2016 and 2020 (World Bank, 1999).

Population census, registration and sample surveys are the main sources of information on internal migration in most countries of the World. Where there is no system of population registration, sample survey provides a means of obtaining current information during the post-censal period. Besides, survey data on rural-urban migration obtained through direct questions have some definite advantages over migration data from other sources. This study is based on a small scale survey of Dhaka City due to limited time and resources. To identify the migrants and non migrants in Dhaka City, 400 household heads had been surveyed in 2003.

This study estimated the intercensal migration rate of Dhaka City. Besides, this study also examined the socio economic status of migrants and non migrants, pull and push reasons for migration and different factors of migration into Dhaka City. In addition to this, this study used satisfaction index to compare migrant's different aspects of life in Dhaka City with the previous place of residence.

**1.3 Objectives with Specific Aims**

The broad objective was to estimate and identify the factors of internal migration into Dhaka City. The specific objects were as follows:

1. To estimate the net migration rates of Dhaka City both by direct and indirect methods from Bangladesh Population Census data.
2. To examine the differentials in demographic and socio-economic characteristics of migrants and non-migrants in Dhaka City.
3. To study the migration behavior and related experience of the migrants in Dhaka City.
4. To determine the factors which cause people to move in Dhaka City through a Statistical Model.
5. To suggest some recommendations about migration in Dhaka City.

**1.4 Definition of Migrants of this Study**

In this research, a migrant was a household head whose previous place of residence in June, 1996 was different from current place of residence (Dhaka City) in 2003. There were four categories of respondents in this survey. These were

1) Those living in same house as they were seven years earlier,
2) Those living in a different house, but in the same city i.e. Dhaka City
3) Those living in rural areas in seven years ago and now in Dhaka City,
4) Those living in urban areas in seven years ago and now in Dhaka City.

In this study, the respondents in categories 1 and 2 were non-migrants, and categories 3 and 4 were migrants. Here, the time June, 1996 was selected because national election occurred in this year and respondents could easily memorize this year. Hence it reduced the recall errors among the respondents.

### 1.5 Outline of the Methodology

The following methodology has been followed to fulfill the mentioned objectives (Figure 1.1)

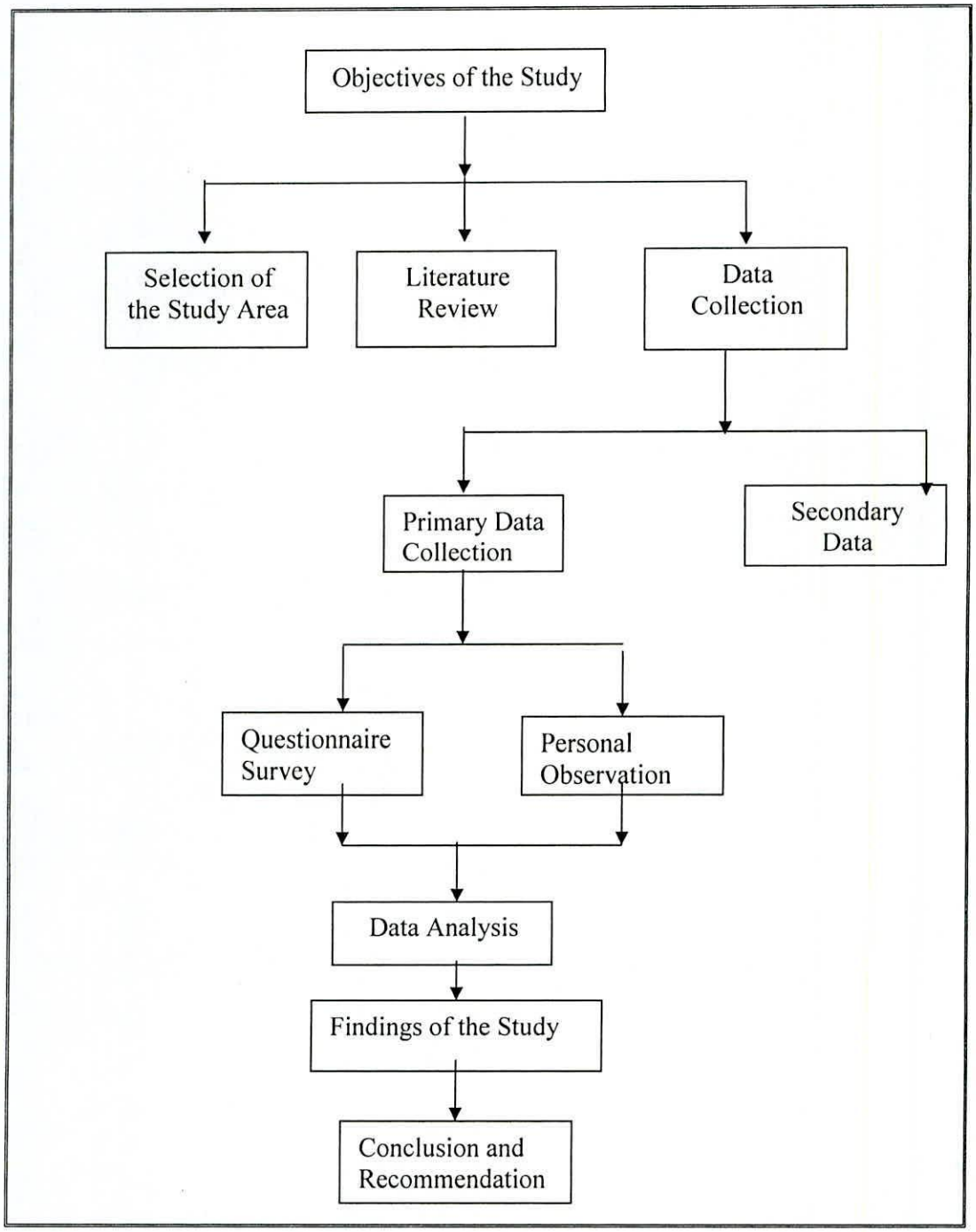


Figure. 1.1: Flow Chart of Different Steps of the Study

### 1.5.1 Selection of the Study Area

The selected area is Dhaka City which is the capital of Bangladesh. Now the area of Dhaka City Corporation is about 360 sq. Km and population within the corporation area is about 6 million (BBS, 2001). At present Dhaka City Corporation has 21 Thanas each having 3 to 11 wards (Figure 1.2). Due to limitation of time and resources, all the households of Dhaka City could not be studied or investigated for the purpose of the research work. To fulfill the objectives of this research, a small portion of households of Dhaka City had been surveyed in 2003. For this study, four Thanas of Dhaka City had been selected randomly using random number table from the list of 21 thanas of Dhaka City. The selected areas were Khilgaon Thana, Badda Thana, Sabujbagh Thana and Mirpur Thana (Figure 1.3). Different informations on these Thana is given in Table 1.1.

Table 1.1 : Different informations on four Thanas of Dhaka City

| **Study Area** | **Badda Thana** | **Khilgaon Thana** | **Sabujbagh Thana** | **Mirpur Thana** |
|---|---|---|---|---|
| Area (square kim) | 49.85 | 20.26 | 6.74 | 14.22 |
| Ward | 9 | 7 | 7 | 13 |
| Mahalla | 33 | 25 | 20 | 57 |
| Village | 49 | 0 | 17 | 0 |
| Total Household | 79140 | 67920 | 64980 | 118460 |
| Total Population | 359380 | 341800 | 299820 | 577440 |
| Male Population | 196100 | 18800 | 162340 | 322460 |
| Female Population | 163280 | 153200 | 137480 | 254980 |
| Literacy (7 +) (%) | 60.46% | 71.71% | 64.09% | 71.29% |
| Population 18+ | 219600 | 219720 | 184020 | 360840 |

Source : Bangladesh Population Census, 2001.

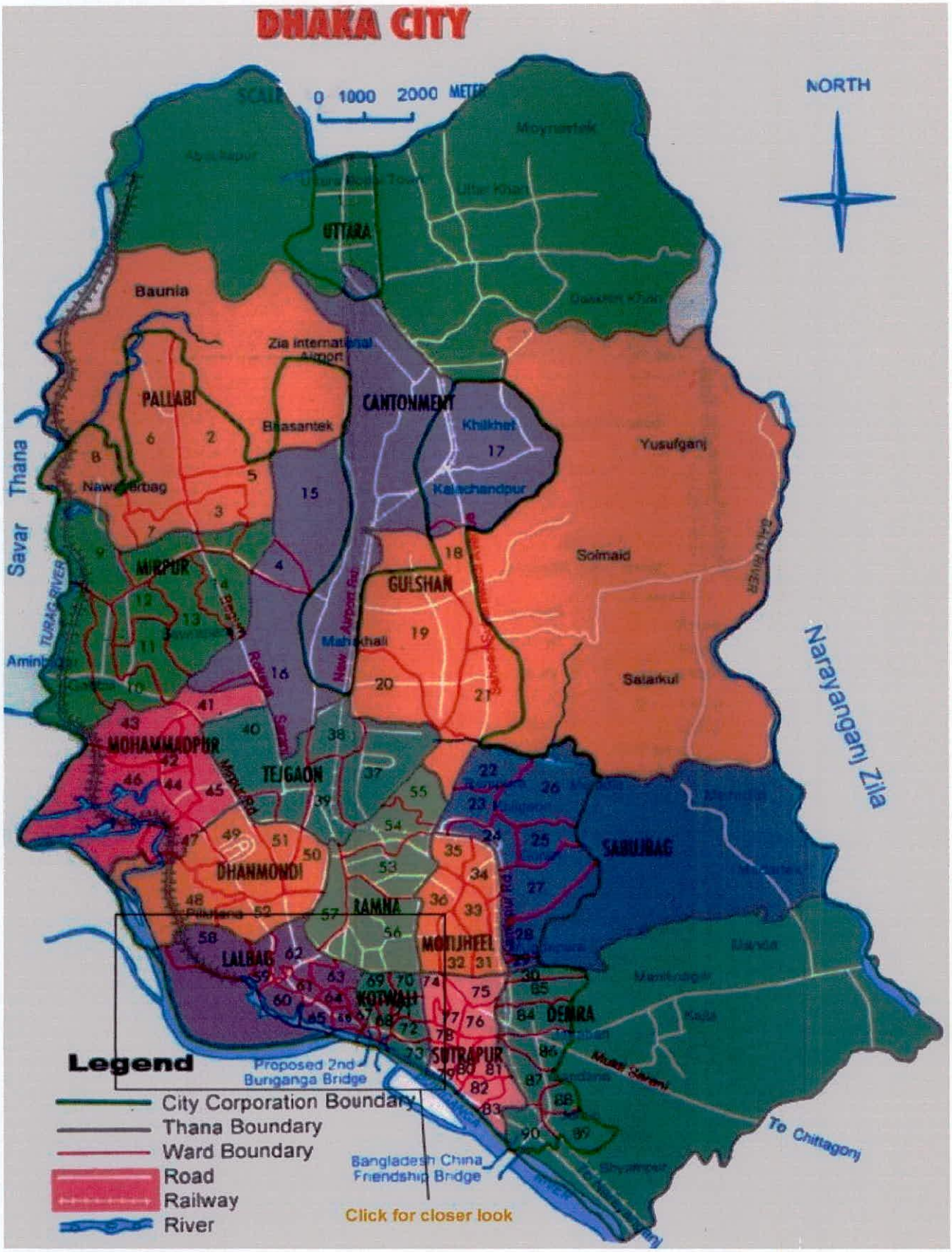


Figure 1.2 : Thana and Ward Boundary of Dhaka City, 2003

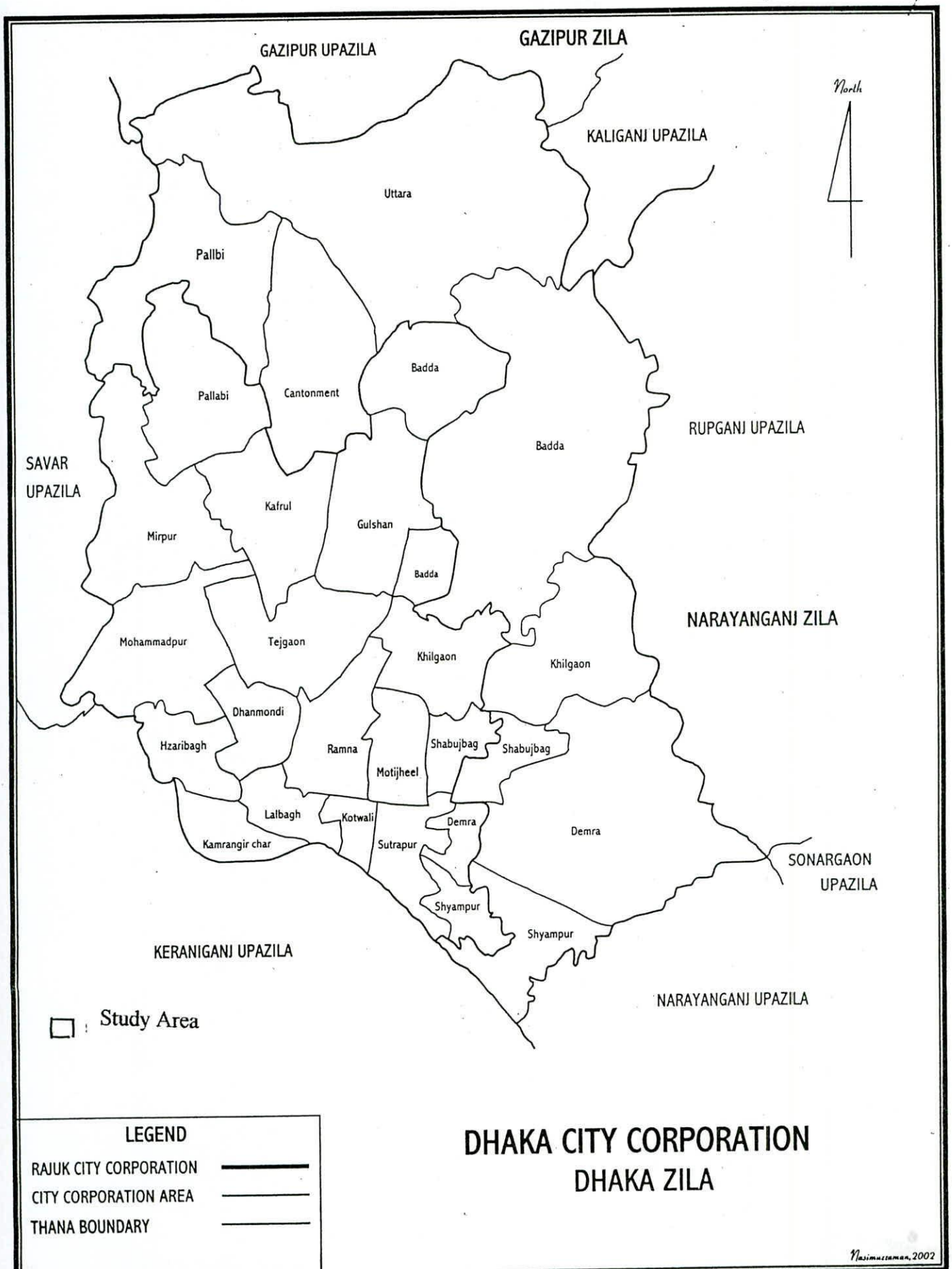


Figure 1.3 : Study Area of Dhaka City, 2003

### 1.5.2 Sample Design

The present study is depending upon both the primary and secondary sources of information. Data of Bangladesh Population Census 1981, 1991 and 2001 were used for measuring intercensal net migration rate. Total 400 household heads age $15^{+}$ had been surveyed at random from four Thanas of Dhaka City with a questionnaire prepared on the basis of selected migratory variables. The sample size of each Thana was proportional to household head size of each Thana (Appendix A). Figure 1.4 shows the Flow Chart of selecting required samples from Dhaka City

### 1.5.3 Sampling Unit

The sampling unit of this study was the household head. A household is a group of persons living together who has marital, blood or adopted relationships and who shares a common budget and facilities. In each household, there was a head who was recognized as the representative of the household by its members. In this study, household heads were divided by two groups: a) migrant household in which the head is migrant and b) non migrants household in which the head is not migrant.

### 1.5.4 Questionnaire Survey

There were two sections of questionnaire and each section includes the following information.

***Section 1: Background and Characteristics of all Members in the House (all ages)***

This part includes the information on household's socio- economic characteristics, including a life history of all household members i.e. it collected the information on age, sex, place of birth, place of residence etc. This also included the information on household heads movement status, marital status, education, income, occupation etc.

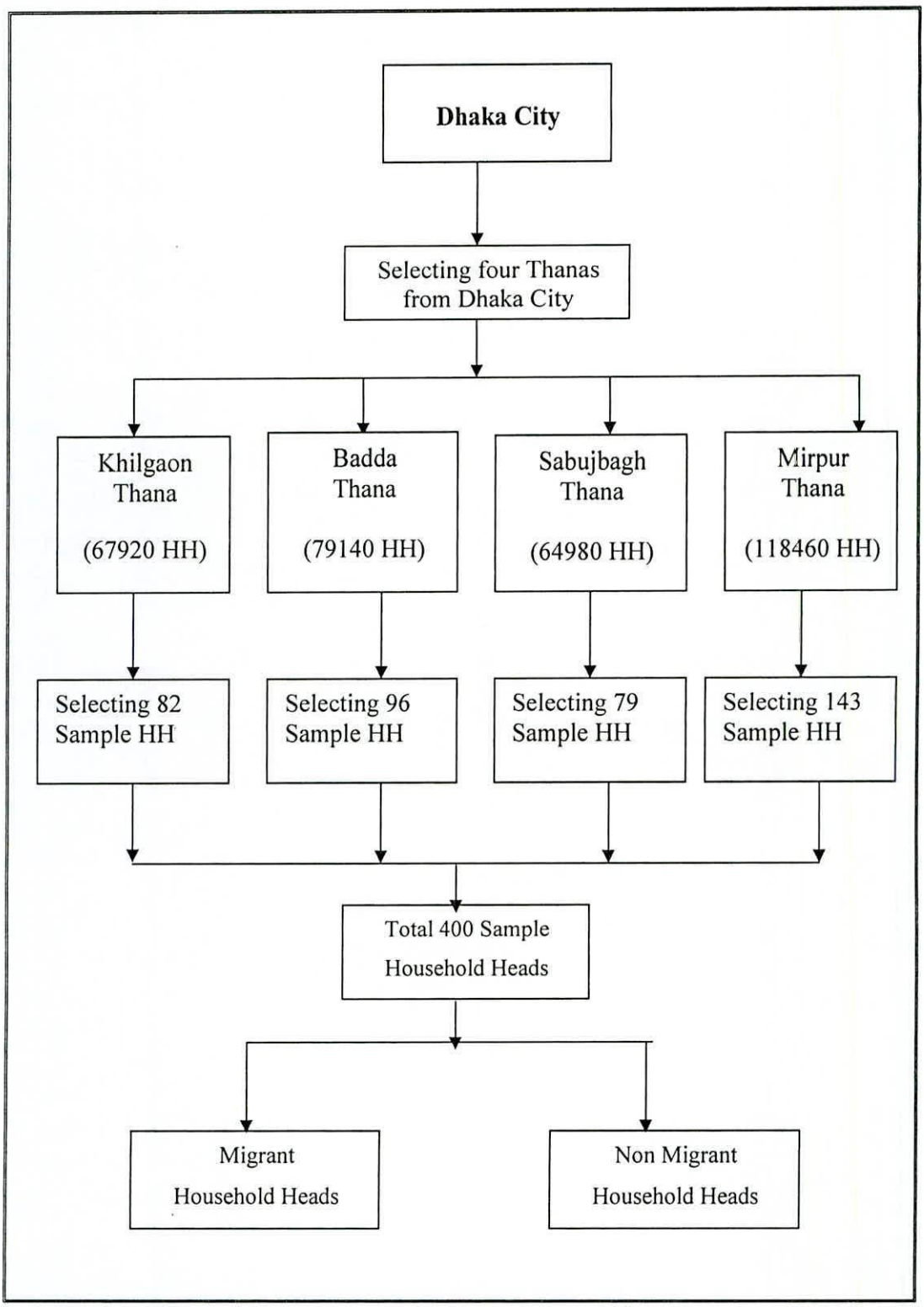


Figure 1.4 : Methodology of Selecting Samples from Dhaka City

*Section 2 : Migrant's Experience (migrant household head age 15 and over only)*
This part included the question on the last place of residence before moving here, decision to move, reasons for leaving the previous place and choosing the current place of residence, source of information of the current place of residence and different problems of origin. This section also included the questions on how the migrants compared various aspects of life at the previous and current place of residence. The sample questionnaire of this study is given in Appendix-B.

### 1.5.5 Survey Period

A pre test of the questionnaire was carried out in January, 2003. After modification of the questionnaire, the final survey was done in June, 2003. An individual household had selected randomly from study area during day time. The whole survey was done by the researcher along with other four students who had previous research experience.

### 1.5.6 Different terms of this Study

*Area of Origin (Departure)*
The area of origin is the place from which the migrant leaves and the place in which he is counted as an out-migrant. In this study, any division or any district or any place in Bangladesh but out of Dhaka City is considered as area of origin.

*Area of destination (Arrival)*
The area at which the migrants establishes his new residence, is referred to as an area of destination and in that new area, he is counted as an in-migrant. In this study, Dhaka City is the area of destination of migrants.

*Time Interval*
In order to study migrant's incidence, data have to be compiled with reference to specified period of time. The migration interval may be definite, such as one, five, seven or ten years, the intercensal period or may be indefinite, such as the life time of a population alive at a given date. It is suggested that an interval of five years is

perhaps the most appropriate. The exact cut-off point may some times be determined by some significant date in the past, such as the last census or national election, so as to reduce recall errors among respondents (Richard E. Bilsborrow, 1996). This study estimates migration rate in Dhaka City between 1996 to 2003 i.e seven years time interval

***Urban Area***

An urban area may be defined by the number of residents, the population density, the percent of people not dependent upon agriculture, or the provision of such public utilities and services as electricity and education.

According to United Nations (1999) "Some countries define any place with a population of 2,500 or more as urban; others set a minimum of 2,000. There are no universal standards, and generally each country develops its own set of criteria for distinguishing urban areas. The United States defines urban as a city, town, or village with a minimum population of 2,500 people".

According to Bangladesh Population Census 2001, an urban area is defined as "developed area around (i) an identifiable central place where (ii) amenities like metallic roads, communication facilities, electricity, gas, water supply, sewerage, sanitation etc, usually exist, (iii) which are densely populated and a majority of the population are non-agricultural and (iv) where community sense is well developed".

The definition of urban area was not uniform in all the censuses of Bangladesh. In the censuses of the country, conducted between 1901 to 1974, the areas with Paurashava or town committee or cantonment area were treated as urban areas. But this definition was relaxed in 1981, 1991 and 2001 censuses. In these later censuses the Paurashava areas included town committee areas, cantonment areas, Thana headquarters and peripheral urbanized areas, adjacent to demarcated Paurashava areas specially around the metropolitan city corporation areas have been defined as urban areas. Urban areas of the country have been classified into four distinct classes

on the basis of population size in Bangladesh Population Census 2001. These are (i) Megacity (ii) Statistical Metropolitan area (SMA), Paurashava Area (MA), and Other Urban Area. This study used the definition of urban area as Bangladesh Population Census, 2001 defined.

***Rural Areas***

People living in rural areas depend on agriculture or other means natural resource harvesting for their survival. Rural populations can sometimes organize themselves into villages. A village is a small number of rural households linked together because of culture, customs, family ties, and an association with farming land or harvesting resources. This study used the definition of rural area as Bangladesh Population Census, 2001 defined.

### 1.5.7 Selection of Variables

Before a statistical analysis is done, the data have to be examined carefully for its quality. In this study, migration status of the respondents was considered as dependent variable which may be rural migrants, urban migrants and non migrants. This study dealt with a large number of explanatory (independent) variables and among them some were demographic, some were socio-economic and some were community variables. The independent variables, which was used in the analysis of this study is given in Table 1.2 with their categories.

Table 1.2 : Independent Variables with Categories

| Variables | Categories with Codes |
|---|---|
| • Sex of the respondents | 1.Male<br>2.Female |
| • Marital status of the respondents | 1. Never married<br>2. Married<br>3. Widow/widower<br>4. Divorce/separated |
| • Education of the respondents | 1. No education<br>2. Upto class Eight<br>3. S.S.C& H.S.C<br>4. Degree<br>5. Masters and above Masters |
| • Place of birth (Division) | 1. Dhaka<br>2. Chittagong<br>3. Khulna<br>4. Rajshahi<br>5. Barishal<br>6. Sylhet |
| • Type of place (Area) | 1.Urban Area<br>2. Rural Area |
| • Ownership status of housing | 1. Owned<br>2. Rented<br>3. Others (Specify) |
| • Occupation | 1. Unemployed<br>2. Agricultural work<br>3. Construction<br>4. Industrial work/ Transport related work<br>5. Professional work (Dr./engg/lawer)<br>6. Private work<br>7. Education/ Bank<br>8. Different Business<br>9. Others |
| • Satisfaction of current job | 1. Satisfied<br>2. Not Satisfied |
| • Satisfaction of current income | 1. Satisfied<br>2. Not Satisfied |

| Variables | Categories with Codes |
|---|---|
| • Family type of household head<br>• Age of the respondents (years)<br>• Number of adult male members of the household (age 15+)<br>• Family size of the household head (Number)<br>• Number of members outside the family<br>• Monthly income of the household head (Taka) | 1. Nuclear<br>2. Joint/Extended |

### 1.5.8 Data Processing and Analysis

The data obtained through the household questionnaire survey was coded and transferred to the coding sheets and finally entered into the computer. SPSS, Excel and GIS Programming Packages were used for the analysis. Besides, graphs and maps were also used where relevant. In general following five types of analysis had been performed:

- Frequency distribution to describe the general nature of the background characteristics of the respondents.
- Bivariate analysis to describe the relationships between migration status of the respondents and other characteristics such as age, sex, education, occupation, marital status etc.
- A Priority Ranking Techniques to identify different problems in rural and urban areas of Bangladesh.
- Satisfaction Index to compare the present place of residence with previous place of residence of migrants.
- Logistic Regression Method to identify the factors which affect the migrants to move into Dhaka City.

A conceptual framework for studying Rural-Urban migration into Dhaka City is given in Figure 1.5 and described in more detail in Chapter 5 and Chapter 6.

### 1.6 Structure of the Study

The Thesis is setup as follows. Chapter 1 is an introductory one, which throw light on the background, objects and methodology of the present research work. Chapter 2 provides the definitions, types, process and consequences of migration.

Chapter 3 is concerned with the study of level and trends of urbanization and migration in Bangladesh. Chapter 4 describes different indirect and direct methods to estimate rural urban migration in Dhaka City.

In Chapter 5, an attempt has been made to compare demographic, socio-economic and household characteristics of migrants and non-migrants. It also fits the *Logistic Regression Model* to find the factors of migration into Dhaka City.

In Chapter 6, reasons for migration into Dhaka City is briefly described. It also deals with *Satisfaction Index* to compare the different aspects of life of migrants in Dhaka City with previous place of residence. This Chapter also shows the impact of migrants characteristics among different income groups.

The major findings of the study is summarized and some policy recommendations for migration, urbanization and other related developments is briefly discussed in Chapter 7

### 1.7 Limitations of the Study

Like fertility or mortality, it is difficult to measure the internal migration of Dhaka City because it is a continuous process, often repeated process rather than a single event. There are some problems in studying this research work. These are

1. Due to limited of time and resources, a small portion of household heads were surveyed which might not be representative part of the whole Dhaka City.
2. Some times head of the households were not found in the time of the survey and some informations were collected from other persons of the house which might not be accurate.
3. Some respondent did not want to give the accurate result intentionally as they had no proper educational knowledge.
4. It was difficult to choose the definition of migration since there was no standard definition and data sources in Bangladesh.

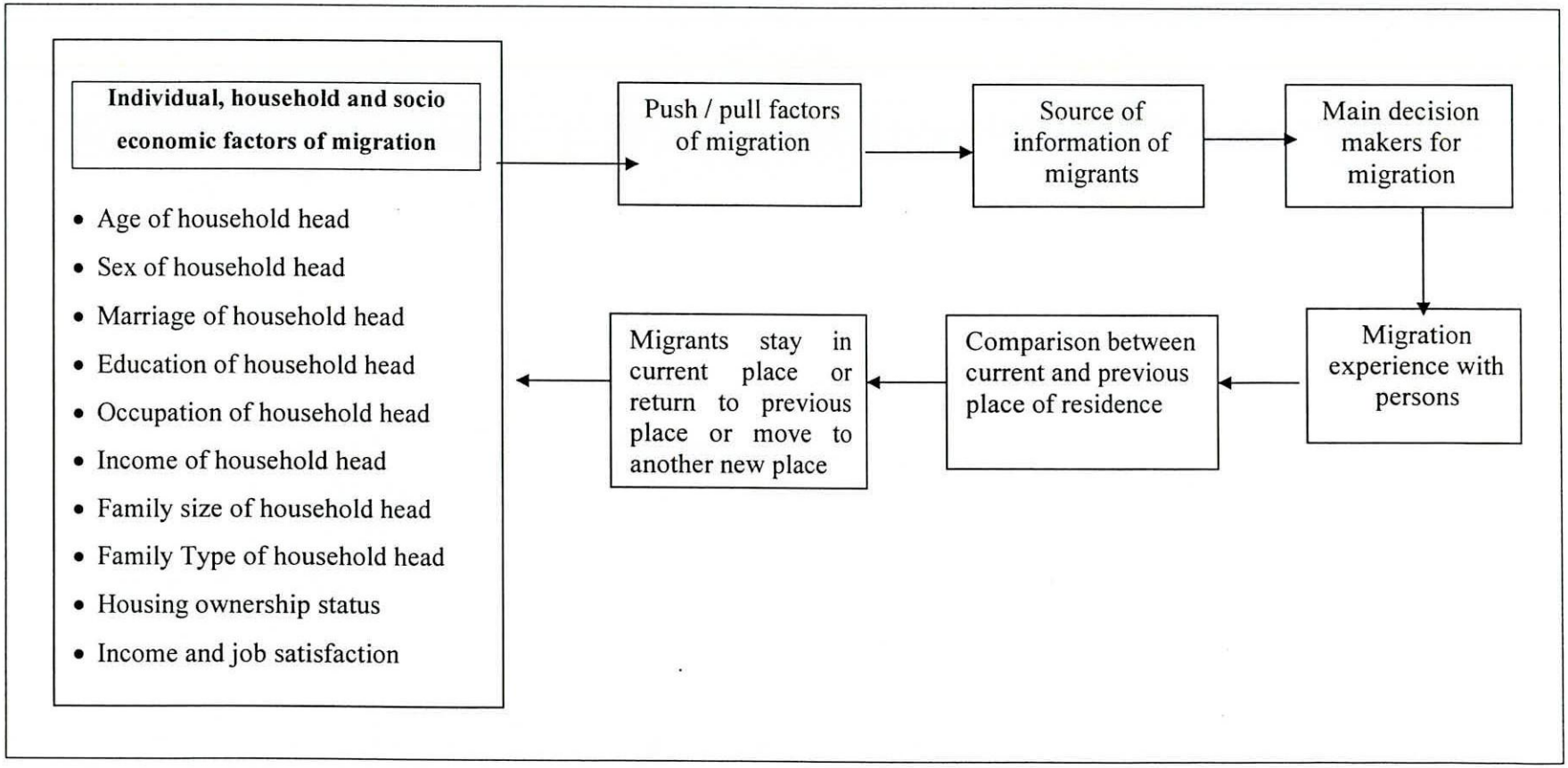


Figure 1.5 : Schematic Framework for Analyzing Internal Migration into Dhaka City

# Chapter II

# Different Concepts about Migration

## 2.1 Introduction

Migration within developing countries often involves a significant proportion of the entire population of a given nation. Research on the impacts of migration is essential if it was wish to understand the process of migration and provide useful information to policymaker. But to identify precisely the balance of outcome associated with migration requires better conceptual frameworks, improved research designs, more comprehensive data, and more sophisticated analytical techniques. This chapter describes definition, types, process, frame work and consequence of migration in detail.

## 2.2 Definition of Migration

There are some problems in the definitions and measurement of migration and urbanization from one country to another. Migration is difficult to define and measure for several reasons. First, migration involves movement with a spatial and a time dimension. Its definition requires establishing criteria pertaining to each dimension, to some degree subjective and arbitrary. For a movement to be considered a migration, it must a) be across a political or administrative boundary, and b) involve a change of "usual residence". This very specific, limited definition of migration was developed to make it measurable from standard data sources-basically from population censuses. Evidently there are many types of population mobility not considered migration movements, including some that satisfy one but not both of the requirements above. Thus, a change of residence within the smallest administrative unit used in a country, and movements across administrative borders which do not involve an official or declared "change of residence", are not considered migration (Bilsborrow, 1988)

A migrant is a person who makes a permanent change in his regular place of residence. Migration is the movement of individuals or groups from one place of residence to another who have the intention of remaining in the new place for some substantial period of time.

According to Van de Walle (1982) migration is a form of geographical or spatial mobility between one geographical unit and another, generally involving a change in usual residence from the place of origin or place of departure to the place of destination or place of arrival.

The United Nations (1970) defines migration as a change of residence from one civil division to another for a period of one year or more. Those movements for less than one year are regarded as non- migratory.

Many empirical studies, on the other hand, define a migrant as a person who changes his residence for a period of time such as six months or one year or more.

**2.3 Types of Migration**

A migrant is defined as a person who changes his usual place of residence, and if his change of residence involves crossing a national boundary then this type of movement is referred to as international migration. Emigration and immigration therefore referred to migration away from and into a given country respectively.

International migration is a term usually employed to referee to changes of residence within a nation and defined in term of residential moves across boundaries which are often taken as the boundary or minor division of districts or region of the country.

***(i) Types of migration according to the boundary***

There are two types of migration

1. International migration and
2. Internal migration

*(1) International migration*

International migration is migration from one political boundary to another political boundary. It depends on the laws regarding migration of the two countries.

*(2) Internal migration*

Internal migration is migration from one place to another within the same country. Internal migration may be divided into the following four types:

a) Migration from rural to urban
b) Migration from rural to rural
c) Migration from urban to rural and
d) Migration from urban to urban

According to Kingsley Davis, internal migration is more important than international migration from the point of view of demography. In the case of internal migration, there are fewer restrictions on individuals, resources and capital. Therefore, internal migration is more frequent than international migration. International migration is based on some legal control and regulations, but in the case of internal migration, there is no such control on the movement of population. Therefore, internal migration is practically more important.

***(ii) Petersen's type migration (according to the pre eminent forces)***

A much more elaborate classification system was developed by Petersen, in which the basic distinction was between conservative migration and innovative migration. Conservative migration occurs when a person moves from one place to another in order to retain his existing way of life. The move is necessitated by some changes that have occurred, or are occurring, in his current place of residence. In this case, if the person were to stay he would have to change his mode of living, so migration is an effort to conservative important parts of the existing way of life. Innovative migration, on the other hand, is the movement of a person in order to obtain a new way of life. Petersen's typology of migration has the following classes and each of the four types of migration is associated with a particular set of forces:

Table 2.1: Types of Migration with Previous-eminent Forces

| Type of Migration | Previous-eminent forces |
|---|---|
| (a) Primitive migration | Ecological, geographic or natural factors |
| (b) Forced or impelled migration | Political, economic or physical factors |
| (c) Free migration | Personal or psychological factors |
| (d) Mass migration | Social factors |

***(a) Primitive Migration***

This type of migration occurs when people are unable to cope with natural or ecological forces and moves in order to survive. Primitive migration may be either conservative, as when people try to find a new place that is like their home under earlier conditions, or innovative, as when people seek out a new way of life. For example, people who move to the city after their agricultural land fails to provide an adequate livelihood are engaged in innovative primitive migration. In primitive migration the emphasis is on survival in a physical sense. If the people do not move, they will not survive.

***(b) Forced or Impelled migration***

This type of migration is characterized by population movement which is forced by the state, or some other political or economic power. Slave trade, flight from the government, oppression and expulsion by government are all variants of forced or impelled, migration.

***(c) Free Migration***

This type is distinguished by individual choice: the will of the migrant is the crucial factor causing the migration. While primitive migration occurs because people cannot meet their needs in their old place of residence, and forced migration occurs in response to some political (or other) power, free migration occurs when individuals on their own initiative actively seek out new homes. The people who best characterize free migration are the pioneers, the trail-blazers, and the

adventures, but free migration is a useful concept for describing the movement of many individuals in an open society.

*(d) Mass Migration*

These are the migrants who move because of social forces or social patterns. In discussing mass migration, Peterson says, "Migration becomes a style, an established pattern, an example of collective behavior." In mass migration the movement is more a group pattern than a matter of individual choice. When mass migration occurs, the individual almost has to make the conscious decisions not to move, instead of the decision to move. In any actual migration there may be some elements or traces of all four types.

**2.4 A Framework for the Study of Migration**

There is a great need for a better understanding of the relative influence of economic and family factors on the migration of individuals and families. There are at least three different levels at which the influence of the economy and family on migration can be conceptualized and hypotheses of relationships can be formulated:

1. The social level,
2. The personal-structural level, and
3. The personal-psychological level.

The following outline summarizes some of what is known about the influences on migration, and speculates on other possible relationships between migration and family-economic factors.

**1. The Social level**

**(a) *Economic factors***

The directions and volume of migration will be influence by changing economic conditions, such as economic growth or decline, expanding or contracting economies, recessions and depressions. If the economic structure of a society is

characterized by bureaucratic and large-scale organizations, instead of being organized around the family group, there is likely to be more migration. In a society where the basic economic unit is the extended family, a person's economic livelihood is particularly dependent upon is based on ability and skill rather than family ties, the more it is possible, and perhaps even imperative, to move.

**(b)** ***Familial Factors***

Migration may be influenced by structural or technological changes in the society which influence the relationships between the nuclear family and the parental families of the husband and wife. For example, new laws may be produce changes in the social- security or medical-care systems and thus affect the responsibilities of the grown child toward his aged systems and thus affect the responsibilities of the grown child toward his aged parents. The overall results of an increase in such services would be to allow greater freedom of movement for the children, because the obligations and responsibilities towards their parents would be reduced. Technological changes, such as improved methods of communication and transportation, would allow families to retain close family ties even though they may be living far apart geographically.

**2. The Personal-Structural Level**

**(a)** ***Economic Factors***

Migration is related to career contingencies, such as promotions, transfers, and dismissals. Migration occurs when individuals seek new jobs or changes or change professions. Other personal economic considerations that may be related to migration include the liquidity of economic assets, the stage and nature of home ownership, the cost of moving, and the relative costs of living at the new place as compared to the old. In short, there may economic constrains that may keep a family from moving, as well as economic motivations that impel them to move. Measuring and sorting the effects of these economic factors at the personal level is a task that remains to be done.

**(b) *Familial Factors***

Migration is known to be related to stages of the individual and family life cycles. Young adulthood is a time of decision whether to stay at or near one's parental home or to move away. The decision to move from the parental home may be contingent upon the ages and needs of an individual's parents. For a woman, whether or not she migrates will often be determined by whether or not she marries, or, if she does, where her husband's occupation or career take him. In the procreating family, migration may be greatly influenced by the number and needs of the children in the family.

**3. The Personal-Psychological level**

***(a) Economic Factors***

Migration may be determined by the attitudes that individuals have about their economic circumstances and opportunities. Especially important at this level are the aspirations that people have toward economic success and upward social mobility. In general, positive attitudes about upward mobility should lead to increased mobility.

**(b) *Familial Factors***

Migration may be related to attitudes and values about family life and kinship groups. The most salient attitudes of this realm include obligations and responsibilities towards parental families and other kin (for example, siblings, grandparents, and the like), and respect for the needs and wishes of the children in the procreating family.

**2.5 Consequences of Migration**

Migration will have its impact on the fertility, mortality, age-structure and sex ratios of population. It will also change the economic and religious composition of the population. Migration is supposed to change the dynamics of population- like density, occupations, openings and so on. It may also create ecological imbalance,

pollution, housing problems and many other socio-economic problems. Some of important sequences of migration are listed bellow:

- Migration to a new place requires social and personal adjustments which may be difficult to a new environment because of differences of cultural patterns. Due to maladjustments, there may be instability in conduct leading to crime, lawlessness and mutual antagonism.

- The new kind of life may be disturb the family relationship and office relationship of the migrant. The traditional pattern of living may be also hampered. It may lead to a high degree of undisciplined individualism. A large proportion of the migrants may experience change in their modes of living.

- The migrants may feel some social and economic freedom as well. They may improve the economic aspect of their lives. From the economic standpoint, the individuals are generally benefited by migration.

- Migration will reduce the pressure of population of the area from which the migration takes places; and it will increase the pressure of population on the new area where people have migrated.

Oberai (1983) addressed both the positive and the negative aspects of migration in his study on the consequences and impacts of migration. On the negative side, migration is seen as a main cause of rising unemployment and underemployment rates, overcrowded housing and relative shortage of public services and therefore depresses living standards in urban areas. Rural areas are also affected not only because migration tend to draw away their more dynamic members but also because it may divert national investment resources towards the towns. However, migration may yield substantial benefits to individual migrants and their families and at the same time have a positive impact on economic.

# Chapter III

# Urbanization in Bangladesh

## 3.1 Introduction

The rate of urbanization is increasing faster in the developing world than in the more developed nations, placing a growing burden on cities and metropolitan areas that are already stressed. As the population increases, more people will live in large cities. The movement of populations from rural to urban environments includes migration flows of both national and international composition. In many locations, large number of people may leave their rural environments and move to cities within their own national boundaries. This chapter describes the level and trend of urbanization in Bangladesh.

## 3.2 Different Terms in Urbanization

### Urbanization

Urbanization involves a shift in the distribution of the population from rural to urban. The process of urbanization is a dominant feature of the demographic transition of most countries. The proportion of urban population increases with the socio economic development of a country.

### Megacity

Any metropolitan area having population more than 5 million is termed as megacity. According to Bangladesh Population Census 2001, the adjusted population of Dhaka Statistical Metropolitan Area was 10712206. Dhaka become the only megacity of Bangladesh.

**SMA**

The City Corporation of Bangladesh and the adjacent areas having urban characteristics has been termed as Statistical Metropolitan Area (SMA) in the Population Census of 2001. Dhaka, Chittagong, Khulna and Rajshahi are the SMA's of Bangladesh.

**City**

A city is a complex human settlement with built areas that specialize in particular types of industry, commerce, and residential living

**Paurashavas**

The incorporated areas declared by the Ministry of Local Government Rural Development and Cooperatives as Paurashava have been considered as Paurashava in the Population Census of 2001. It was found 223 Paurashavas in Bangladesh in 2001.

**Towns**

Towns are defined as human settlements that are larger than a village but smaller than a city. Towns generally have centralized areas within them where commerce and business are the primary activities of the residing citizens.

**Other Urban Areas**

The Thana headquarters of the country which are not declared a Paurashava during census operation and other non Paurashava towns which conform more of less urban characteristics are considered as other urban area.

**Urban Agglomeration**

Urban agglomerations are areas of 1 million populations or more.

### 3.3 Level and Trend of Urbanization

Level and trend of urbanization in the world and in Bangladesh are given in detail in section 3.3.1 and 3.3.2.

#### 3.3.1 Level and Trend of Urbanization in the World

The world is steadily becoming more urban, as people move to cities and towns in search of employment, educational opportunities and higher standards of living. Some are driven away from land that, for whatever reason, can no longer support them.

UNFPA (1999) had indicated that in 1970, the urban population in the developed and developing world was approximately equal. By 1995, the balance had shifted so that approximately twice as many city dwellers were found in the developing world as compared to the developed world. It is estimated that the ratio will further increase to three to one, by 2025. In 2000, 2.9 billion people lived in urban areas, comprising 47 percent of the world population. By 2030, 4.9 billion are expected to live in urban areas, or 60 per cent of the world. Already 74 percent of Latin America and Caribbean populations live in urban areas, as do 73 percent of people in Europe, and more than 75 percent of people in Australia, Canada, New Zealand and the United States. In both Africa and Asia, urban dwellers represent about a third of the total populations. However, there are significant variations between individual countries. In Africa, for example, more than 50 percent of the populations of Algeria, South Africa, and Tunisia reside in urban areas.

Asia and Africa are considerably less urbanized today, but due to rural-urban migration, Asia and Africa is the fastest urbanizing region in the world. United Nations estimated that in Asia, 37 percent of the population lived in urban areas in 2000 and numbers are expected to rise 55 percent by 2030. Likewise, urban dwellers in Africa will increase from 38 percent of the population in 2000 to 53 percent in 2030.

Table 3.1 shows that South and Central Asia will contribute 70 percent of Asia's population growth between 2000 and 2050, Southeast Asia will contribute 18 percent, and East Asia will contribute 12 percent. The contribution of East Asia minus China (Japan, North and South Korea, and Mongolia) is -0.2 percent, indicating that the total population in these countries is projected to decline slightly during the 50-year period.

Table 3.1 : Countries that will Contribute Most to Asia's Population Growth between 2000 and 2050 and Contribution of other Countries by Sub Region.

| Country, sub region or region | Population increment (1000s) | Percent contribution to Asia's growth | Cumulative percentage |
|---|---|---|---|
| India | 563,117 | 37.0 | 37.0 |
| Pakistan | 202,914 | 13.3 | 50.4 |
| China | 186,925 | 12.3 | 62.7 |
| Bangladesh | 127,993 | 8.4 | 71.1 |
| Indonesia | 99,243 | 6.5 | 77.6 |
| Philippines | 52,730 | 3.5 | 81.1 |
| Other East Asia | -2,803 | -0.2 | 80.9 |
| Other Southeast Asia | 126,208 | 8.3 | 89.2 |
| Other South and Central Asia | 163,889 | 10.8 | 100.0 |
| All Asia | 1,520216 | 100.0 | |

Source: United Nations (2001a)

Six countries- India, Pakistan, China, Bangladesh, Indonesia and the Philippines- are projected to contribute 81 percent of Asia's population growth between 2000 and 2050. India alone will contribute 37 percent, and India and Pakistan together will contribute 50 percent. China will contribute another 12 percent, which stems entirely from population momentum. Bangladesh and Indonesia will contribute 8 and 7 percent respectively, and Philippines will contribute 4 percent.

The proportion of people living in very large urban agglomerations of 10 million or more inhabitants is still small, and expected to increase from 4.3 percent of the world population in 2000 to 5.2 percent in 2030.

Table 3.2: World Mega Cities in 1975, 2000 and Projected 2015

| Name of Cities | Population in 1975 (Millions) | Name of Cities | Population in 2000 (Millions) | Name of Cities | Population in 2015 (Millions) |
|---|---|---|---|---|---|
| Tokyo | 19.8 | Tokyo | 26.4 | Tokyo | 26.4 |
| New York | 15.9 | Mexico City | 18.1 | Mumbai | 26.1 |
| Shanghai | 11.4 | Mumbai | 18.1 | Lagos | 23.2 |
| Mexico City | 11.2 | Sao Paulo | 17.8 | **Dhaka** | **21.1** |
| Sao Paulo | 10.0 | New York | 16.6 | Sao Paulo | 20.4 |
| | | Lagos | 13.4 | Karachi | 19.2 |
| | | Los Angeles | 13.1 | Mexico City | 19.2 |
| | | Calcutta | 12.9 | New York | 17.4 |
| | | Shanghai | 12.9 | Jakarta | 17.3 |
| | | Buenos Aires | 12.6 | Calcutta | 17.3 |
| | | **Dhaka** | **12.3** | Delhi | 16.4 |
| | | Karachi | 11.8 | Metro Manila | 14.8 |
| | | Delhi | 11.7 | Shanghai | 14.6 |
| | | Jakarta | 11.0 | Los Angeles | 14.1 |
| | | Osaka | 11.0 | Buenos Aires | 14.1 |
| | | Metro Manila | 10.9 | Cairo | 13.8 |
| | | Beijing | 10.8 | Istanbul | 12.5 |
| | | Rio de Janeiro | 10.6 | Beijing | 12.3 |
| | | Cairo | 10.6 | Rio de Janeiro | 11.9 |
| | | | | Osaka | 11.0 |
| | | | | Tianjin | 10.7 |
| | | | | Hyderabad | 10.5 |
| | | | | Bangkok | 10.1 |

Source: United Nations (2001b)

United Nations (2001) estimated that the urban population of Asia will be larger than the urban population of all other regions of the world combined. In 1975, there were only five mega cities (with populations of more than 10 million) in the world, and only two of them were in Asia (Table 3.2). Tokyo was the largest urban agglomeration in the world, with 26.4 million people in 2000 and is expected to remain the largest in 2015, although its population will not grow. In 2015, 15 out of

23 mega cities of the world will be in Asia and Dhaka will be 4th position among these 23 mega cities (United Nations, 2001b).

### 3.3.2 Level and Trend of Urbanization in Bangladesh

It is generally hypothesized that the countries that have low levels of urbanization are the ones experiencing most rapid urban growth (Skeldon, 1990: 4). Bangladesh is such a country. Figure 3.1 shows the trend of urbanization of Bangladesh from 1901 to 2001 and indicates that urban population is increasing day by day. In 1901, it was 2.43% and rose slowly up to 1961 and then it was15.5% in 1981. The level of urbanization of Bangladesh in 2001 was still low, only 23.1% but its total urban population was very large, nearly 29 million. Urbanization pattern of different divisions, districts, megacity, Statistical Metropolitan Areas (SMA) and different cities are given bellow :

***Divisions***

Figure 3.2 shows the level of urbanization of different division in Bangladesh in 2001 and indicates that Dhaka division was the highest urbanized division (34.3%), then Chittagong division (23.7%) was the second and Sylhet division (12.4%) was the least urbanized division of the country. Figure 3.3 shows the level of urbanization of Dhaka division from 1961 to 2001 and indicates that 7.02% population of Dhaka division lived in urban area in 1961 and it increases day by day. It reaches to 20.51% in 1981 and 34.3 % in 2001.

***Districts***

Among different districts of Bangladesh it is found that Dhaka (91.7%) is the most urbanized district and Satkhira (7.2%) is the least urbanized district of the country. The low urban population of Satkhira district may be explained by the existence of the Sundarban forest area in the district and the remoteness of the district. Other than Dhaka, the three most urbanized districts are Narayangong (55.6%), Khulna (53.3%) and Chittagong (50.3%).

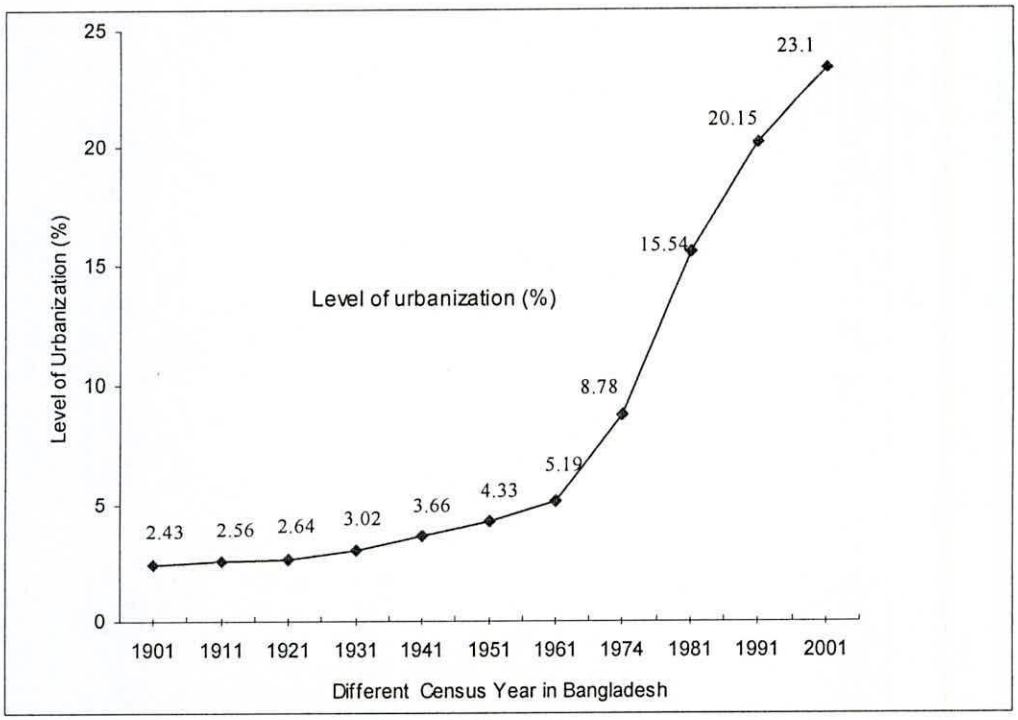


Figure 3.1: Trend of Urbanization of Bangladesh from 1901 to 2001

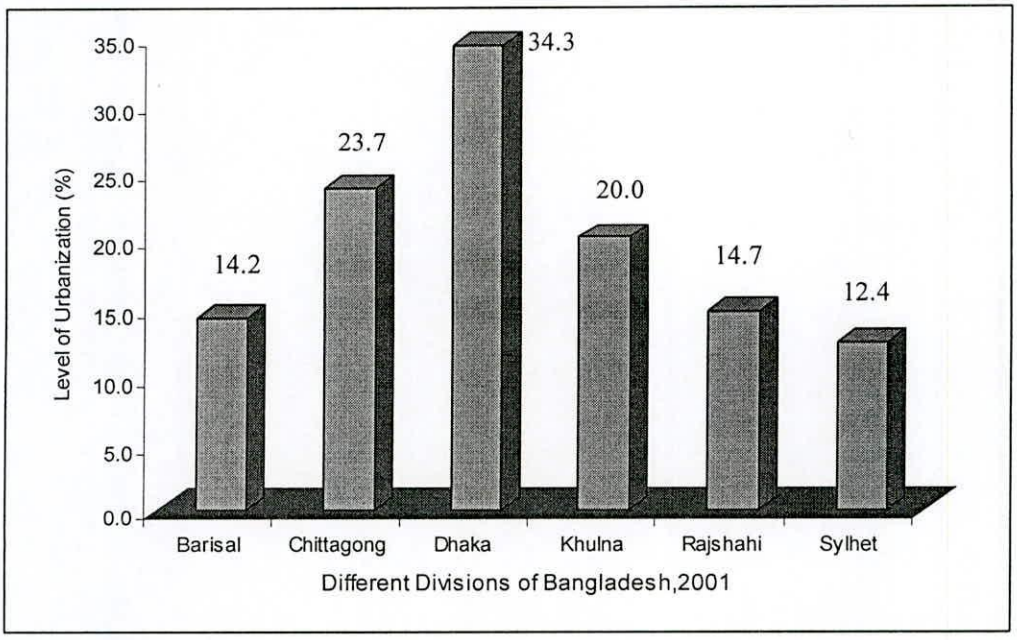


Figure 3.2: Level of Urbanization of Different Divisions in Bangladesh, 2001

***Megacity***

Cities having population 5 million or over have been termed as megacity. In the urbanization process of Bangladesh, Dhaka plays the most important role. It alone contains one-third of the urban population in the country. It is the oldest, largest and the only mega city of Bangladesh. Dhaka was the 11th populous city of the world in 2000 but in 2015 it will be the 4th populous city of the world (United Nations 2001b). According to Bangladesh Population Census 2001, population of Dhaka megacity was 10712206.

***Statistical Metropolitan Area (SMA)***

Figure 3.4 provides the decadal growth rate of four Statistical Metropolitan Area (SMA) of Bangladesh during 1991 and 2001. It is seen that Dhaka SMA overwhelming holds the highest growth (56.5%). The decadal growth rate of Chittagong, Khulna and Rajshai SMA's are 44.2%, 33.8% and 28.3% respectively during the last decade.

***Cities with More than 100,000 Populations***

Bangladesh Population Census 20012001 there were 17 Paurashavas where the size of population was more than 100 thousand. These Paurashavas exclude the four Statistical Metropolitan Area (SMA) and the Paurashava that were included under the preview of the SMA. Figure 3.5 shows decadal growth rate of cities having population over 100,000 during1991 and 2001.

The highest growth rate of the population during the last decade was found in Sylhet Paurashava (172.8%) which may be explained by the high rate of remittance generally received by the people of Sylhet which facilitated them to settle in the urban areas leaving the rural part of the district where the amenities of life is scarce and communication network is weak. Declaration of Sylhet as a separate division of the country may also be one of the reasons for high growth of urban population in the Sylhet region.

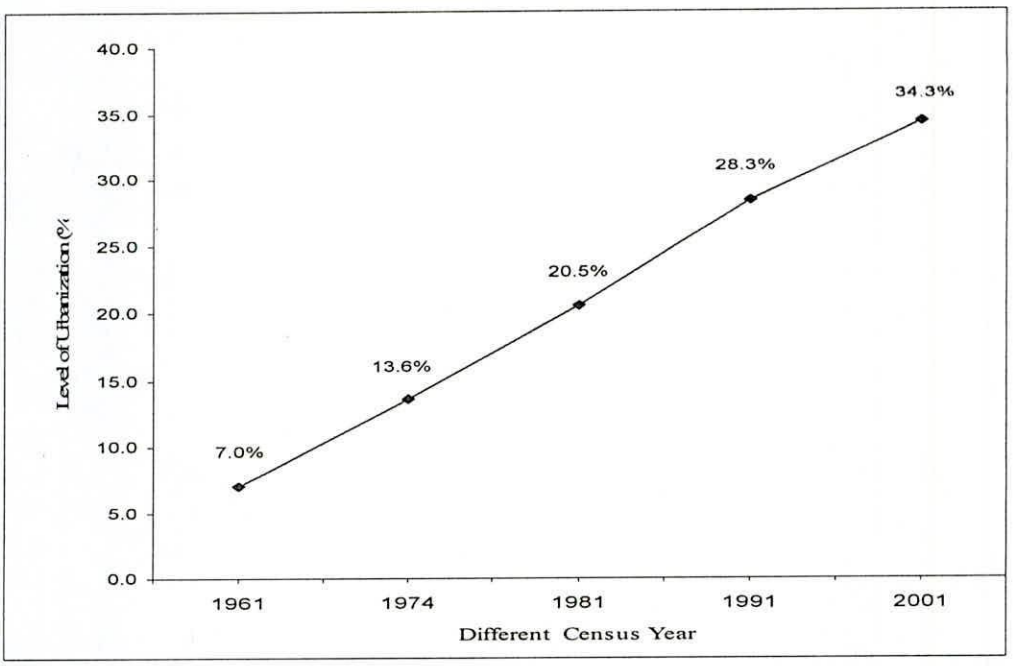


Figure 3.3: Level of Urbanization of Dhaka Division from 1961 to 2001

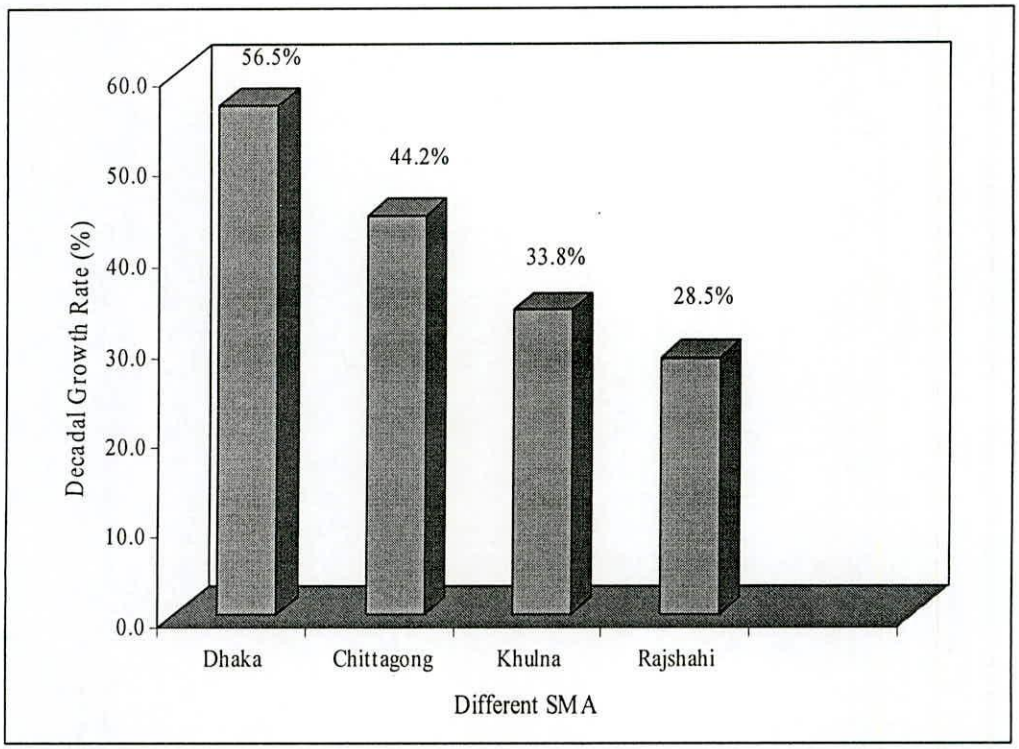


Figure 3.4: Decadal Growth Rate of Four Statistical Metropolitan Area in 2001

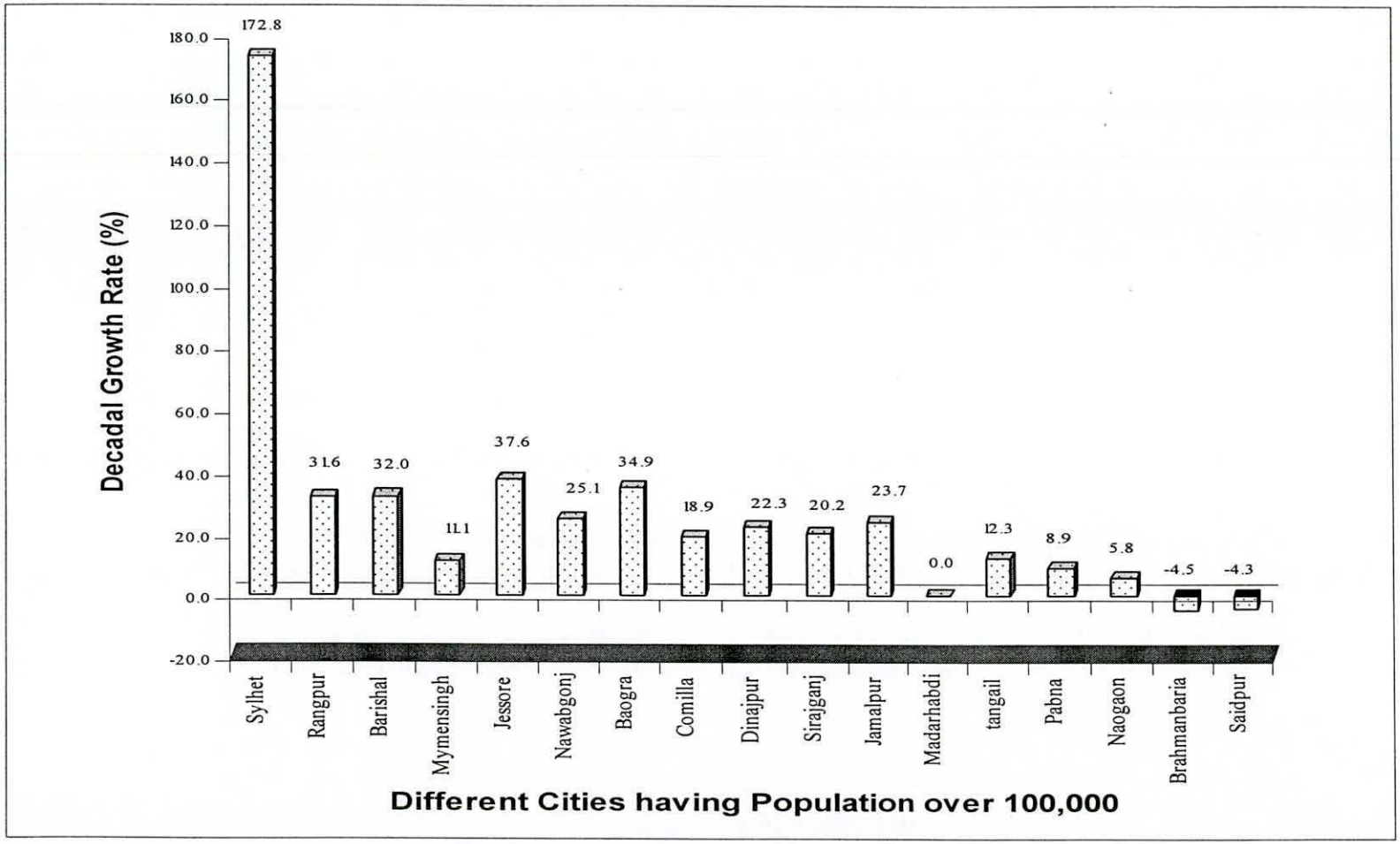


Figure 3.5: Decadal Growth Rate of Cities having Population over 100,000 during1991 and 2001.

The comparatively higher growth rate of Paurashava population of Bogra, Nawabgonj, Rangpur, Jessore and Barisal may be explained by the facilities available for the people in these paurashavas for settlement. The decadal growth rate was found negative at two paurashavas namely Saidpur and Bhramanbaria. This additional people has treated pressure on the utility services such as water, gas, sewerage, electricity, housing, transportation, education and other amenities of life. This resulted in an adverse effect on the urban environment where a large number of people settled in the slums and squatters.

### 3.3.3 Urban Centers in Bangladesh

The number of urban centers is necessarily a factor in the study of urbanization and national development as well. Figure 3.6 shows the total number of urban centre in Bangladesh from 1901 to 1991. Urban Centers of Bangladesh flourished overtime but from 1961 it began to flourish at a faster rate. In 1901 total number of urban centers was 48 and it reached to 108 in 1974. In 1991 the country had 522 urban centers, varying in size from the Mega city Dhaka to very small rural towns.

According to Bangladesh Population Census of 1991, there were 174 urban centers with the population size of 10,000-24,999; 138 centers whose population size is 5000-9999 and 4 centers had 500000 and over. In 2001, there were 25 cities whose population size was over 100, 000 and the number of Municipal Towns (Pourashavas and City Corporation) were 253. Figure 3.8 shows different number of urban centers in Bangladesh in 2001

### 3.3.4 Urban Growth in Bangladesh

Urban growth refers to an increase in total urban population. Figure 3.7 shows the urban growth of Bangladesh from 1901 to 2001 and it is observed that from 1901 to 1961, the urban growth rate was very small i.e. it was 1.39% between 1901 to 1911 and 3.72% between 1951 to 1961.The growth in urban population was steady with some variations in some years. A sharp rise of urban population was noticed after independence of the country. This rise can attributed to the rural to urban migration

of people for search of better job and other opportunities. Thus, the urban population of the country increased at a higher rate between 1961, through 1974. The high urban growth between 1974 through 1981 was accounted due to extended definition of urban area in 1981. After 1981 the urban population has also experienced higher growth due to rural to urban migration for better job, opportunity for education and business etc. The growth of the urban population in a country is attributable to three processes:

*(1) Natural growth rate of urban areas in Bangladesh*

Natural increase can be calculated either through assumptions about urban fertility and mortality, or retrospectively through census survival ratios.

*(2) Extension of urban areas by reclassifying rural areas at the perimeter as urban*

It is extremely difficult to separate the importance of reclassification from net migration, and many studies simply choose to ignore reclassification or assume that it is negligible. However, reclassification can be a significant component indeed.

*(3) Rural -urban migration in Bangladesh*

Internal migration, particularly rural to urban migration plays a vital role in the rapid growth of urban population in Bangladesh. In case of rapid urbanization of Bangladesh both pull and push factor worked simultaneously resulting in an uneven urban growth where a large number of urban people live in the urban slums and squatters where the amenities of life are very scarce.

The Metropolitan Development Plan (DMDP) estimates that the population of Dhaka Metropolitan area will 16 million in 2016. It assumes that 40% of all net rural-urban migration would be continuously attracted to Dhaka and 70% of the overall growth in Dhaka would be caused by migration. The DMDP structure plan recognizes that growth control policy is not feasible option, and unrestricted growth would continue because Dhaka is the capital and on engine of national economy (World Bank,1999).

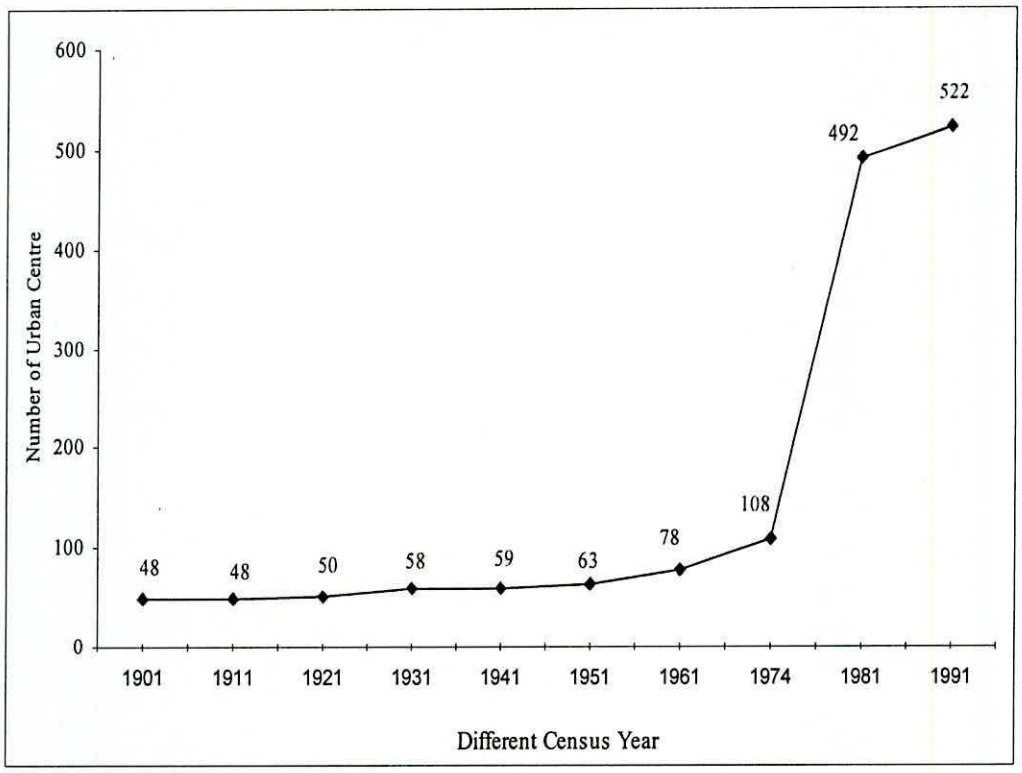


Figure 3.6: Trend of Urban Centers of Bangladesh from 1901 to 1991

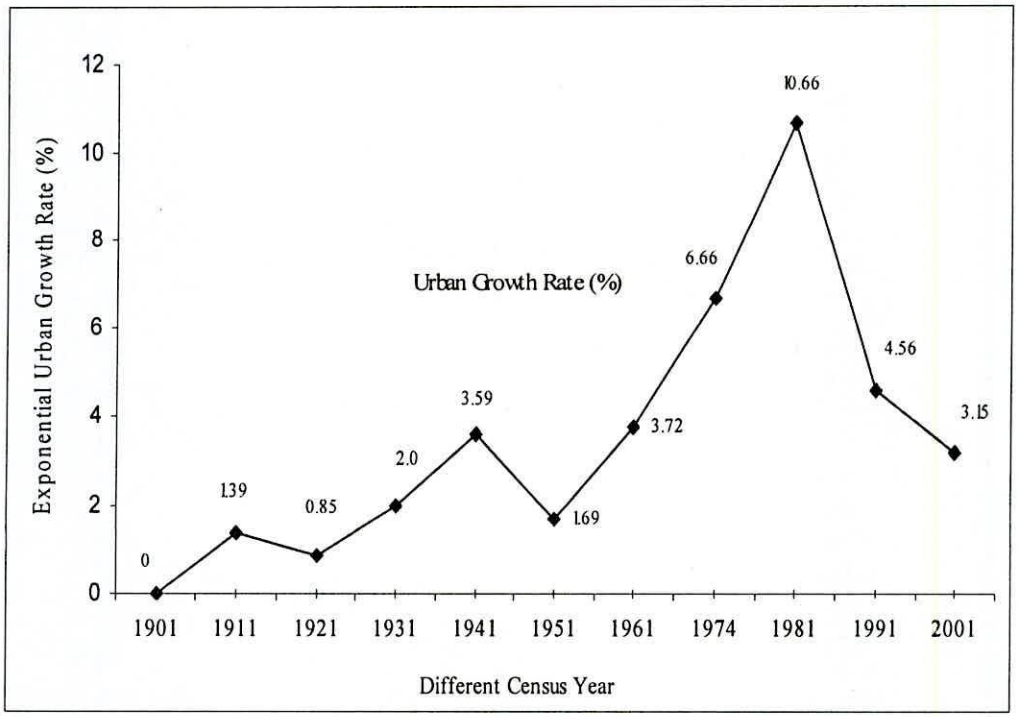


Figure 3.7: Trend of Urban Growth Rate of Bangladesh from 1901 to 2001

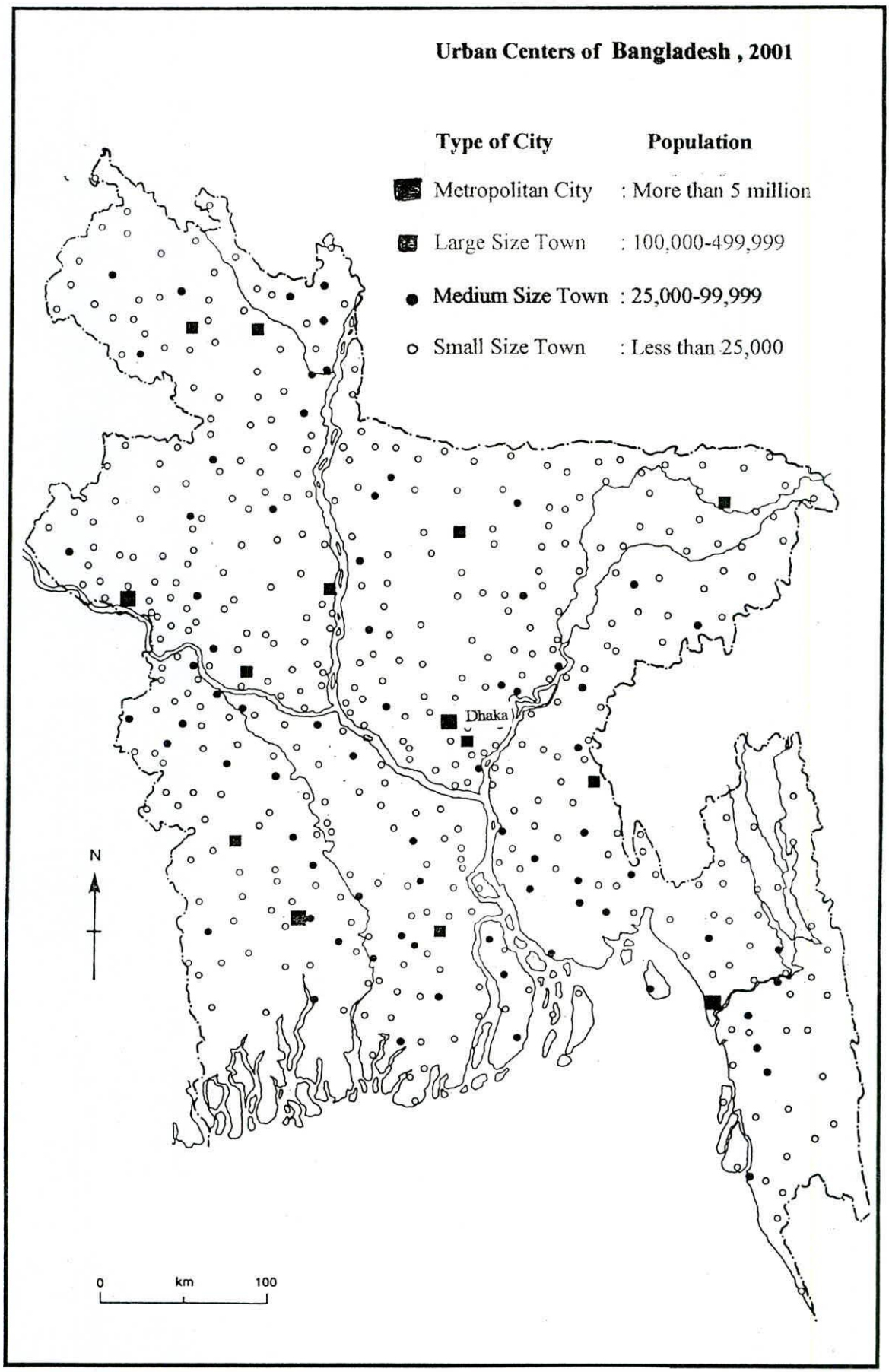


Figure 3.8 : Different Urban Centers of Bangladesh in 2001

### 3.4 Future Urbanization Pattern of Bangladesh

According to the Projection of Word Bank & Bangladesh Centre for Advanced Studies (1996), urban population Bangladesh of is expected to reach about 50 million by 2010 and nearly 80 million in 2020. These projections are based on the assumption of an average annual growth rate of 6.4 percent up to 2000, 5.3 percent between 2000-2010 and 4.3 percent thereafter. Here the estimates of an average population as well as growth rates are roughly mid-points of low and high population scenarios.

Given past and present trends, Dhaka Statistical Metropolitan area (DSMA), a mega city will reach 14-16 million by 2010 and 15-20 million by the year 2020. Chittagong (CSMA) will double in size by the year 2010 reaching an expected population in the range of 9-12 million. Together, and despite the relatively faster growth projected for Rajshahi, Khulna and smaller towns (OUAs), the two urban giants will be the dominant cities of the next 25 years, home to almost half of the total urban population, or approximately 25-33 million in the year 2020

Given the past spatial trends and an analysis of the options, it seems likely that DSMA will expand in a northerly direction, responding to existing as much as to planned infrastructure developments as well as to limitations of the terrain. The growth along the road-rail corridor of Dhaka-Tongi-Joydebpur-Gazipur (i.e. integration of the Dhaka- Gazipur districts) seems almost inevitable. A further expansion northerbound along the road corridor of Sripur-Bhaluka-Gafargaoh-Trisal-Mymensingh (i.e. integration of Dhaka-Gazipur-Mymensingh districts) is a possibility, but depends primarily on infrastructure investment. These expansions are likely because these areas are on relatively high land and because of their close proximity to DSMA (Figure 3.9)

Urban developments outside Dhaka primarily depend on the pattern of investment in physical infrastructure and the nature of future economic development. For example, completion of Jamuna Bridge is certain to increase the importance of Rajsjhai SMA

(RSMA) as a regional centre for the western districts. In addition, the recent water accord with India may also stimulate new irrigation farming in Rajshai region with a split-over impact on non-farm activities. New physical links between India's eastern and northern frontier states as well as the conversation of the single-track railway along the Srirajganj-Iswardi-Rajshhi corrodor to a double - line, broad-gauge railway and the already proposed meter gauge railways along the Sirajganj-Bogra corridor could also greatly enhance both the national and regional importance of RSMA, and the growth of other small and medium towns in the western districts.

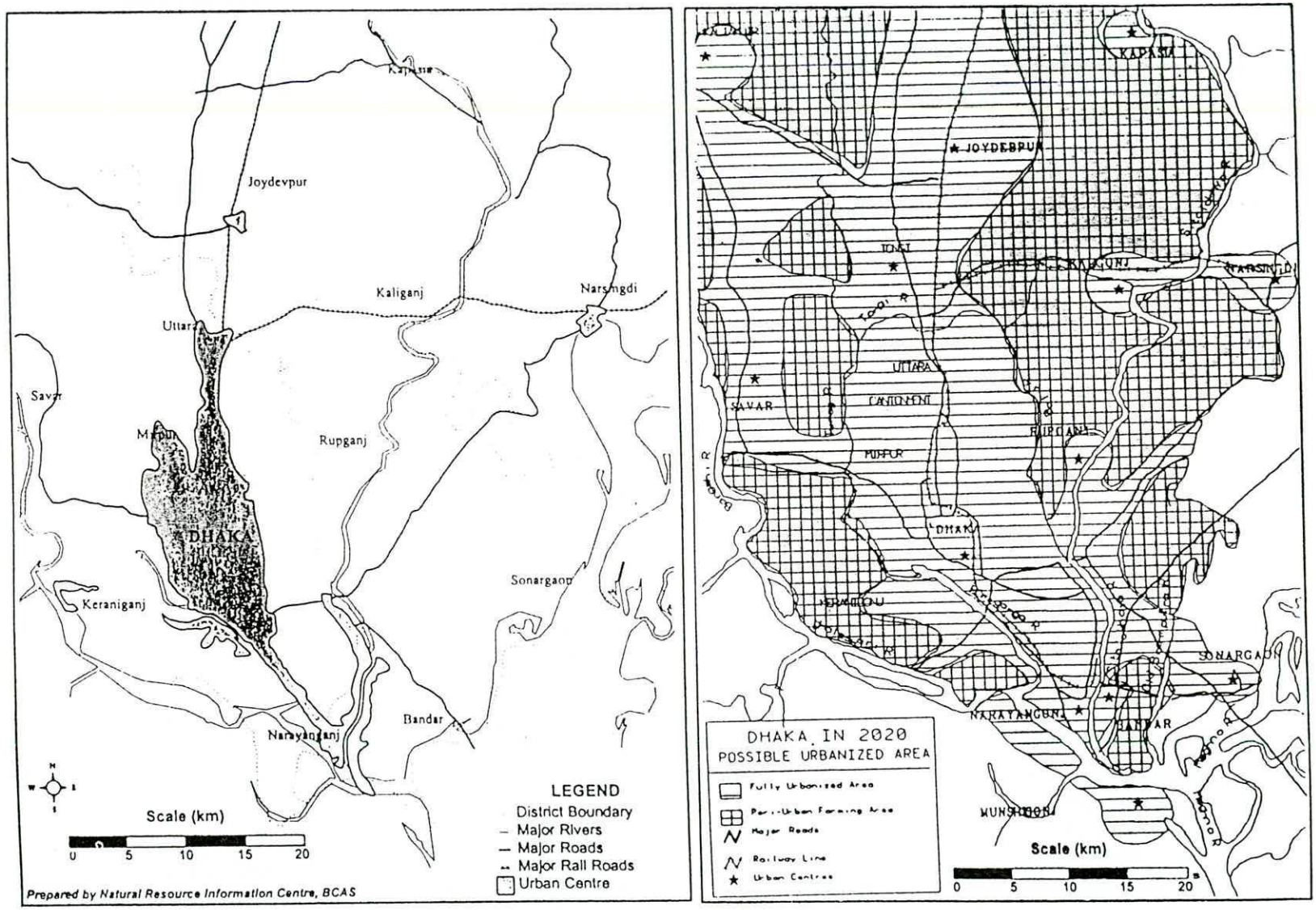


Figure 3.9: Possible Urbanized Area of Dhaka City in 2020

# Chapter IV

# Measurement of Internal Migration in Dhaka City

## 4.1 Introduction

Census, population registers and sample surveys are the main sources of information on internal migration. According to United Nations (1970), there were two methods in population census or sample survey for estimating rural urban migration in different countries. These were indirect and direct method. Census or survey data on internal migration is obtained directly by including a question on migration and indirectly through estimation procedures that use data presumably obtained for other purposes.

Indirect information on internal migration can be obtained by comparison of total population counts for component areas in two censuses. The usual direct questions on place of birth, place of last residence, duration of residence in the place of enumeration and place of residence on a specific date before the census or survey are used to obtain rural urban migration in a country. Where there is no system of population registration, sample surveys provide a means of obtaining current information during the post-censal period. In Bangladesh, there is no system of register migrants at the place of origin or at the place of destination. So, census and sample survey are the main sources of data on internal migration in Dhaka City. This chapter describes and applies different direct and indirect methods for estimating internal migration in Dhaka City.

## 4.2 Indirect Method of Estimating Internal Migration

Useful estimates of internal migration can be derived from the results of consecutive population censuses if data are tabulated separately for urban and rural areas or their components. According to United Nations (1970), there were three indirect methods of estimating internal migration. These were:

(i) Vital Registration Method,

(ii) Survival Ratio Method and

(iii) National Growth Rate Method

### 4.2.1 Vital Registration Method

In countries where a reliable vital registration system exists and where statistics on fertility and mortality are tabulated separately for rural and urban areas, the vital statistics method can be employed to estimate net migration for an intercensal period. For an example, an estimate of the volume of net migration to urban areas can be obtained by using the urban birth statistics and death statistics for an intercensal period to estimate natural change. This estimate then subtracted from the difference in urban population size between two censuses to obtain an estimate of the net migration. In symbols,

Net Migration in an urban area = $(U_2-U_1)-(Bu-Du)$ .....(i)

Where $U_2$ and $U_1$ are the urban population of second and first Census respectively and Bu and Du are the urban birth and death statistics for an intercensal period.

A similar equation can be used to estimate the net intercensal migration for rural areas; and when the data are available for males and females separately, the corresponding net migration for each sex group can be estimated. The vital statistics methods can also be used to estimate net migration by age if the necessary census and vital statistics data are available (Hamilton, 1967 ; Shryock and Siegel, 1971).

***Application of Vital Registration Method in Estimating the Intercensal Migration Rate in Dhaka City***

It was observed that few countries used vital registration method because of lack of reliable vital statistics or lack of sufficient detail vital statistics. This study tried to estimate rural urban migration in Dhaka City through this method but could not estimate as birth and death statistics in urban and rural area of Bangladesh was not completely recorded during 1991 - 2001.

### 4.2.2 Survival Ratio Method

Based on the probability of surviving from one date to another, survival ratio methods are employed to estimate intercensal net migration by age and sex. To apply this methods to urban populations, it is necessary to have data tabulated separately for urban areas by age and sex at two consecutive censuses and a set of survival ratios for each sex which simulates the age specific patterns of mortality in the populations for which the estimates are to be made.

The survival ratios are applied to each age group enumerated in the urban population at the first census to estimate the urban population, which is expected to survive to the date of the second census. The difference between the actual enumerated population at the second census and the expected urban population gives an estimate of the net rural-urban migration during the intercensal period. The same method can be applied to estimate intercensal net migration for individual urban centers, cities, and metropolitan areas as well as individual rural districts, providing that an appropriate set of survival ratios are available (Hamilton and Henderson, 1944).

The survival ratio method also assumes that urban boundaries are fixed over time and that international migration in negligible. The accuracy of the estimates of net rural-urban migration based on survival ratio methods is seriously affected by census errors. A number of correction methods are available to reduce the effects of census errors and urban-rural mortality differentials (United Nations, 1970: 30-34: Rogers,1973).

If $U^1_{(x)}$ and $U^2_{(x)}$ denote the urban population x years of age at the time of the first and second censuses n years apart and S is the survival ratio, then net intercensal migration can be expressed as

(a) $M_{u(x)} = U^2_{(x+n)} - S.U^1_{(x)}$ .....(ii)

(b) $M_{u(x)} = U^2_{(x+n)} / S - U^1_{(x)}$ ..... (iii)

Where $M_{u(x)}$ is the net intercensal migration of survivors among the population x years of age at the first time of the first census. Equation (ii) and (iii) are called Forward and Backward Survival Ratio Method respectively. The two methods give different results and sometimes their arithmetic average is used to obtain a final estimate of rural urban net migration. There are two types of survival ratios:

(i) Life Table Survival Ratio Method and
(ii) Census Survival Ratio Method

**(i) Life Table Survival Ratio**

If a life table describing the average mortality conditions of the intercensal period is available for the particular area, survival ratios may be calculated from it and used to estimate net migration for the area. When an appropriate life table is available and the census age data are free from error, the Life Table Survival Ratio method should give fairly accurate estimates of net migration for persons who were still alive at the time of the second census.

**(ii) Census Survival Ratio**

Where appropriate life tables are lacking, survival ratios can be computed from census age distributions and used instead of life table ratios to estimate the expected population. A census survival ratio is simply the ratio of the population age x+n at second census to the population aged x at the first census.

No matter which methods is used to calculation of survival ratios, the important questions is the extent to which the ratios reflect the pattern of mortality in the population for which migration estimates are being calculated.

***Application of Census Survival Ratio Method in Estimating Intercensal Migration Rate in Dhaka City***

This study uses Forward and Backward Census Survival Ratio Method to estimate net intercensal migration rate for male and female separately since the age specific

patterns of male and female mortality are usually different. Then average of these methods are used to estimate net intercensal migration rate in Dhaka City. Table 4.1 shows that total 12,40,623 migrants had come to Dhaka City during 1981-1991 where male migration rate[1] per thousand was 14.8 and female was 12.7. During 1991-2001, both male and female migration rate had increased to 21.8 and 15.7 per thousand respectively (Table 4.2). It is hypothesized that the migration rate is increased due to social, economical and demographic reasons.

[1] Migration Rate in Dhaka City = (Total Migrants in Dhaka City/Total Population in Bangladesh)*1000

Table 4.1: Intercensal Net Male, Female and Total Migrants in Dhaka City, 1981-1991

| Age group ( in 1991) | Estimated Net Male Migrants in Dhaka City, 1981-1991 | | | Estimated Net Female Migrants in Dhaka City, 1981-1991 | | | Estimated Net Total Migrants in Dhaka City, 1981-1991 |
|---|---|---|---|---|---|---|---|
| | [1]Forward Method ($F_m$) | [2]Backward Method ($B_m$) | Average of both Method $A_m=(F_m+B_m)/2$ | [3]Forward Method ($F_f$) | [4]Backward Method ($B_f$) | Average of both Method $A_f=(F_f+B_f)/2$ | |
| C-1 | C-2 | C-3 | C-4 = (C-2+ C-3)/2 | C-5 | C-6 | C-7=(C-5+C-6)/2 | C-8= C-4+ C-7 |
| 10-14 | 111267 | 124416 | 117842 | 130205 | 164910 | 147558 | 265400 |
| 15-19 | 127325 | 206204 | 166765 | 110271 | 180514 | 145393 | 312158 |
| 20-24 | 186537 | 293572 | 240055 | 92982 | 110123 | 101553 | 341608 |
| 25-29 | 137003 | 135932 | 136468 | 72205 | 64462 | 68334 | 204802 |
| 30-34 | 23626 | 23571 | 23599 | 22581 | 25445 | 24013 | 47612 |
| 35-39 | 779 | 803 | 791 | 12769 | 15326 | 14048 | 14839 |
| 40-44 | 3110 | 3232 | 3171 | 8678 | 10130 | 9404 | 12575 |
| 45-49 | -3676 | -4602 | -4139 | 6178 | 8093 | 7136 | 2997 |
| 50-54 | -2401 | -2910 | -2656 | 8169 | 10065 | 9117 | 6461 |
| 55-59 | -4405 | -6525 | -5465 | 2807 | 4253 | 3530 | -1935 |
| 60-64 | -2656 | -3119 | -2888 | 6326 | 8006 | 7166 | 4278 |
| 65-69 | 467 | 688 | 578 | 3521 | 5505 | 4513 | 5091 |
| 70+ | 7922 | 16493 | 12208 | 7536 | 17522 | 12529 | 24737 |
| **Total Migration Rate (1000)** | | | **686329 (14.8 per thousand)** | | | **554294 (12.7 per thousand)** | **1240623 (13.8 per thousand)** |

Source : Bangladesh Population Census, 1981 and 1991 and computed by the researcher, 2003

Note : [1]for detail calculation : Appendix C, Table 4.1

[2]for detail calculation : Appendix C, Table 4.2

[3]for detail calculation : Appendix C, Table 4.3

[4]for detail calculation : Appendix C, Table 4.4

Table 4.2 : Intercensal Net Male, Female and Total Migrants in Dhaka City, 1991-2001

| Age group ( in 1991) | Estimated Net Male Migrants in Dhaka City, 1991-2001 | | | Estimated Net Female Migrants in Dhaka City, 1991-2001 | | | Estimated Net Total Migrants in Dhaka City, 1991-2001 |
|---|---|---|---|---|---|---|---|
| | [5]Forward Method ($F_m$) | [6]Backward Method ($B_m$) | Average of both Method $A_m=( F_m+ B_m)/2$ | [7]Forward Method ($F_f$) | [8]Backward Method ($B_f$) | Average of both Method $A_f=( F_f+ B_f)/2$ | |
| C-1 | C-2 | C-3 | C-4 = (C-2+ C-3)/2 | C-5 | C-6 | C-7=(C-5+C-6)/2 | C-8= C-4+ C-7 |
| 10-14 | 185182 | 194346 | 189764 | 181902 | 211867 | 196885 | 386649 |
| 15-19 | 260600 | 375470 | 318035 | 231029 | 347273 | 289151 | 607186 |
| 20-24 | 334660 | 475415 | 405038 | 170157 | 168907 | 169532 | 574570 |
| 25-29 | 257303 | 239006 | 248155 | 79238 | 59264 | 69251 | 317406 |
| 30-34 | 68235 | 64763 | 66499 | 27765 | 29570 | 28668 | 95167 |
| 35-39 | 12019 | 12363 | 12191 | 20993 | 26169 | 23581 | 35772 |
| 40-44 | 7955 | 7818 | 7887 | 16420 | 19093 | 17757 | 25644 |
| 45-49 | -3106 | -3889 | -3498 | 12515 | 17081 | 14798 | 11300 |
| 50-54 | -1478 | -1668 | -1573 | 14402 | 17025 | 15714 | 14141 |
| 55-59 | -993 | -1470 | -1232 | 4542 | 7048 | 5795 | 4563 |
| 60-64 | -1637 | -1751 | -1694 | 2978 | 3367 | 3173 | 1479 |
| 65-69 | 2644 | 3537 | 3091 | 3583 | 4903 | 4243 | 7334 |
| 70+ | 5061 | 8705 | 6883 | 6417 | 11016 | 8717 | 15600 |
| **Total Migration Rate (1000)** | | | **129545 (21.8 per thousand)** | | | **847265 (15.7 per thousand)** | **2096810 (18.8 per thousand)** |

Source : Bangladesh Population Census, 1991 and 2001 and computed by the researcher, 2003

Note : [5]for detail calculation : Appendix C, Table 4.5

[6]for detail calculation : Appendix C, Table 4.6

[7]for detail calculation : Appendix C, Table 4.7

[8]for detail calculation : Appendix C, Table 4.8

### 4.2.3 National Growth Rate Method

When census or vital statistics are not adequate for the application of survival ratio method or the vital statistics method, the national growth rate method may be used. The only data necessary to use these techniques are counts of the rural and urban population at two consecutive censuses. An estimate of the net migration rate for urban areas during an intercensal period can be expressed as

$$M^u = [ (U^2 - U^1 )/U^1 - (P^2 - P^1)/P^1]* k \quad \text{.....(iv)}$$

Where $P^1$ and $P^2$ denotes the total population of first and second censuses respectively, $U^1$ and $U^2$ are the urban population of first and second censuses respectively and k is a constant, such as 1000.

This formula interprets the difference between the growth rate of the total population and that of the urban population as the rate of net in and out migration for urban areas. This is a simple method of estimating net migration in an area.

***Application of National Growth Rate Method in Estimating Rural Urban Migration Rate in Dhaka City***

National Growth Rate Method have applied to find the intercensal net migration rate in Dhaka City during 1981-1991 and 1991-2001. Table 4.3 and Table 4.4 show that there was 16.3 migration rate per thousand in Dhaka City during 1981-1991 and migration rate per thousand was 18.7 in 1991-2001. It is found that during 1981-1991, male and female migration rate in Dhaka City was same but after one decade, male migration rate was more than female.

Table 4.3: Net Intercensal Migration Rate in Dhaka City by Sex, 1981-1991

| Sex | Population in Dhaka City,1991 (D91) | Population in Dhaka City,1981 (D81) | National Population, 1991 (N91) | National Population, 1981 (N81) | Migration Rate per Thousand |
|---|---|---|---|---|---|
| Male | 2884750 | 1723155 | 57314000 | 46295000 | 16.2 |
| Female | 2257805 | 1242454 | 54141000 | 43617000 | 16.3 |
| Total | 5142555 | 2965609 | 111455000 | 89912000 | 16.3 |

Source : Bangladesh Population Census, 1981 and 1991 and calculated by the researcher, 2003

Table 4.4: Net Intercensal Migration Rate in Dhaka City by Sex, 1991-2001

| Sex | Population in Dhaka City,2001 (D01) | Population in Dhaka City,1991 (D91) | National Population, 2001 (N01) | National Population, 1991 (N91) | Migration Rate per Thousand |
|---|---|---|---|---|---|
| Male | 4356658 | 2884750 | 63894740 | 57314000 | 19.9 |
| Female | 3437428 | 2257805 | 59956380 | 54141000 | 17.3 |
| Total | 7794086 | 5142555 | 123851120 | 111455000 | 18.7 |

Source : Bangladesh Population Census, 1991 and 2001 and calculated by the researcher, 2003

Among these three indirect methods, the vital statistics method is unique in the sense that it is the only method which measures the balance of all migrations made during the interval. But this method does not give detail information by age. The Forward census survival method measures net migration by age for persons alive at the end of the intercensal period. This measure does not take account of the migration person who died during that period. Census survival estimates obtained by the forward method will generally be smaller than those obtained by the vital statistics method. Census survival method is preferable than life table survival ratio method when survival ratio is not available. National growth Rate method is a simple method of estimating net migration, but of questionable accuracy.

There is no preferable method to estimate net migration for urban or rural areas which yields the best approximation under all circumstances. Availability of required data will determine the selection of the method.

### 4.3 Direct Method of Estimating Internal Migration

The total population in an area may be classified into two groups : migrants and non migrants. Thus, migrants may be those (i) who are enumerated in a place different from their place of birth, or (ii) whose place of last residence is different from the place of enumeration, or (iii) who resided in the place of enumeration for a period that is less than their age, or (iv) those who resided a specific years ago in a place different from their place of residence at the time of the census or surveys.

There are four direct methods of collecting migration data in developed and developing countries. These are

1. place of birth,
2. place of last previous residence,
3. place of residence on a specific date before the census or surveys and
4. duration of residence in the place of enumeration

Table 4.5: Countries Collecting Internal Migration at the Census by Continent and Data Type

| Continent | Place of birth | Previous Place of residence | Duration of residence | Number of moves |
|---|---|---|---|---|
| Africa | 33 | 28 | 25 | 0 |
| Asia | 19 | 30 | 25 | 1 |
| Europe | 19 | 26 | 11 | 0 |
| Latin America | 22 | 23 | 9 | 0 |
| North America | 2 | 2 | 0 | 0 |
| Oceania | 10 | 11 | 5 | 0 |
| Total | 105 | 120 | 75 | 1 |

Source: University of Queensland, 2002

University of Queensland (2002) conducted a survey about the data source of migration among 191 countries and observed that about 158 countries collect migration data through different methods and 33 countries did not collect any information. Table 4.5 shows different direct methods of collecting internal

migration data of different countries of continent and found that 120 countries used previous place of residence, 105 countries used place of birth and 75 countries used duration of residence. Among continent of Asia, about 30 countries used previous place of residence, 25 countries used duration of residence and 19 countries used place of birth for collecting migration data.

### 4.3.1 Place of Birth

Migration that has occurred between birth and the time of the censuses or survey. A lifetime migrant is one whose current area of residence is different from his area of birth, regardless of intervening migrations.

Many censuses and surveys collect data on the place of birth of the population; when cross tabulated by place of current residence, this data provide one of the direct approaches to the measurement of migration. When place of birth statistics are available for urban and rural areas, urban to rural, rural to urban and interurban migration can be estimated.

Life time migration is a covenient general measure of the intensity of mobility in a population alive at the time of a census or survey or it can also be used for making regional comparisons. However, this measure has some theoretical limitations:

- Time reference of migration is unknown and
- Migration does not take into account repeated or return moves between the date of birth and the date of the census or survey.

***Application of Place of Birth Method in the Study***

This study uses above method for collecting rural-urban migration in Dhaka City. Figure 4.1 follows this definition and shows the actual process of migration flow from rural urban to Dhaka City.

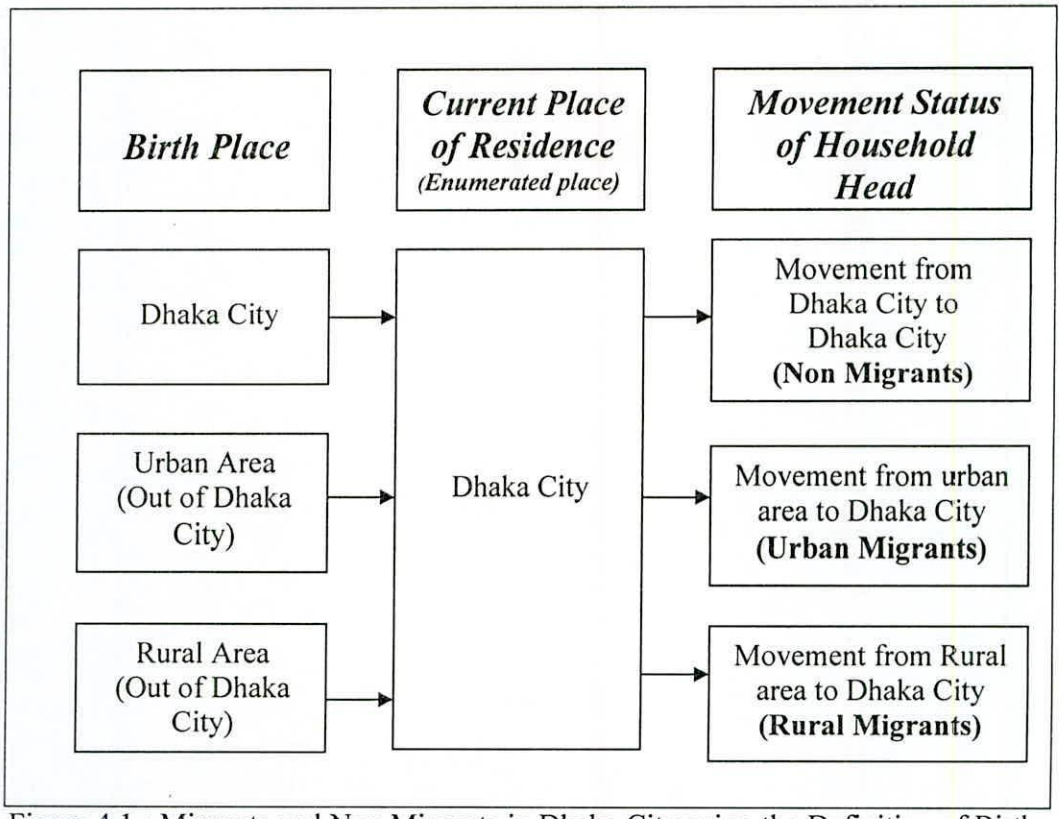


Figure 4.1 : Migrants and Non Migrants in Dhaka City using the Definition of Birth Place

Table 4.6 : Migrants and Non Migrants in Dhaka City according to Figure 4.1

| Type of Migrants (Birth place) | Male Migrants | | Female Migrants | | Total Migrants | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Urban Migrants | 114 | 32.8 | 25 | 48.1 | 139 | 34.8 |
| Rural Migrants | 180 | 51.7 | 21 | 40.4 | 201 | 50.2 |
| Non Migrants | 54 | 15.5 | 6 | 11.5 | 60 | 15.0 |
| Total | 348 | 100 | 52 | 100 | 400 | 100 |

Source : Field Survey, Dhaka City, 2003

A life time migrants were those household heads who are enumerated in Dhaka City and whose place of birth was different at the time of survey. Table 4.6 shows that about 85% household heads were life time migrants in Dhaka City. It was seen that rural male migrants (51.7%) were more than rural female migrants (40.4%) in Dhaka City. It is found that urban female migrants were more than urban male migrants in Dhaka City due to job, education and marriage reasons..

### 4.3.2 Place of Last Previous Residence

One of the limitations of data on place of birth is that, for persons who have migrated more than once the place of birth gives no indication of residence at the time of last move. In order to get information on direct moves, it is necessary to ask for place of last residence rather than for birth place. The data will then permit identification of persons as migrants whenever their place of last residence and place of current residence differ.

This category migrants will thus include all lifetime migrants plus return migrants; that is, all persons who have migrated at any time or all persons who have ever lived outside the area of birth. Non-migrants will be those who have never lived outside the area of birth.

Place of residence is most commonly used measure to determine the migration status of a person. But this data, like those based on birth-place, suffer from the absence of definite time reference. Persons who migrated fifty years ago or earlier and persons who moved only a few days ago will be grouped together as migrants.

Nevertheless, a very important advantage of the place of last residence approach over the place of birth approach is that the former reflects direct movement between places, while the latter ignores intervening moves between departure from the first residence and arrival at the last residence.

***Application of Place of Last Previous Residence in the Study***

This study uses above method for collecting rural-urban migration into Dhaka City. Figure 4.2 follows this definition and shows the actual process of migration flow from rural urban to Dhaka City.

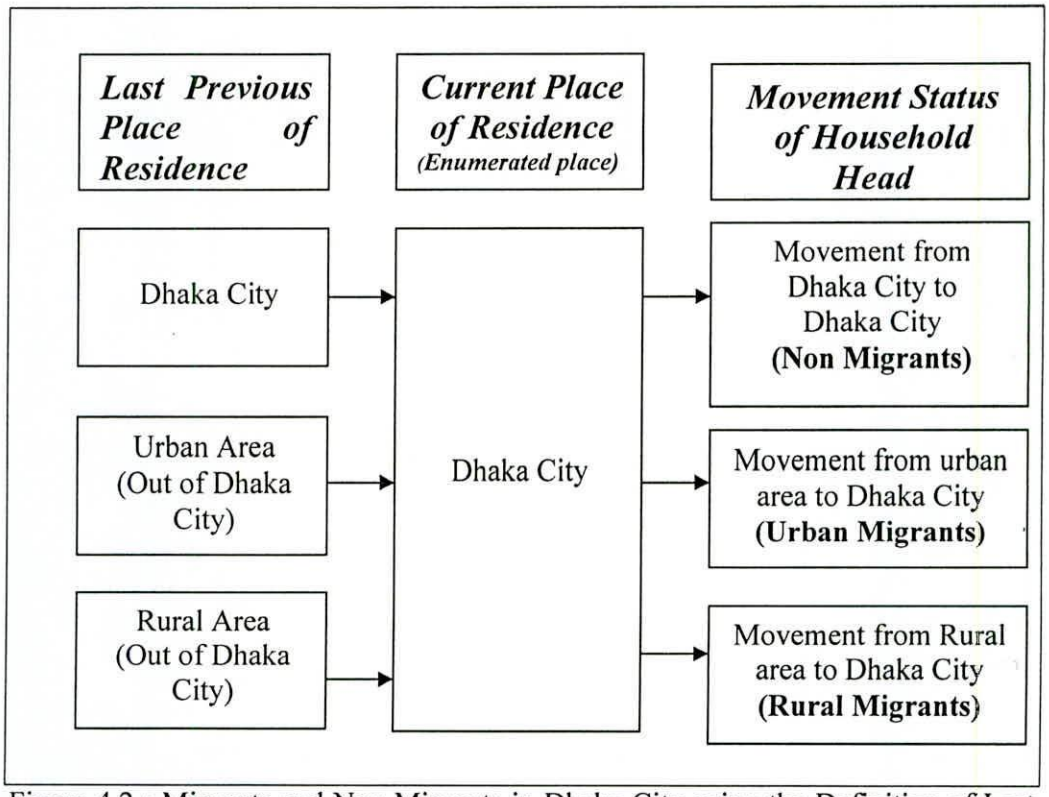


Figure 4.2 : Migrants and Non Migrants in Dhaka City using the Definition of Last Previous Place of Residence

Table 4.7 : Migrants and Non Migrants in Dhaka City according to Figure 4.2

| Type of Migrants (Previous Place of Residence) | Male Migrants | | Female Migrants | | Total Migrants | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Urban Migrants | 75 | 21.6 | 8 | 15.4 | 83 | 20.8 |
| Rural Migrants | 101 | 29.0 | 16 | 30.8 | 117 | 29.3 |
| Non Migrants | 172 | 49.4 | 28 | 53.8 | 200 | 50.0 |
| Total | 348 | 100 | 52 | 100 | 400 | 100 |

Source : Field Survey, Dhaka City, 2003

Migrants are those household heads whose place of last residence was different from Dhaka City at the time of survey. It was seen in Table 4.7 that 30% household heads were rural migrants and 20.8% were urban migrants. Urban male migrants were more than urban female migrants but male and female migrants were same in rural area.

### 4.3.3 Place of Residence on a Specific Date before the Census or Survey

Census or survey data on the place of residence at some fixed date prior to enumeration also yield valuable information on rural urban, urban rural and inter urban migration if they are tabulated by type of residence for both the referent and observation dates.

The migration interval is clear cut. Migration status is determined by a comparison of residence at two definite points in time; and a migrant is define as a person whose residence at the census date differs from his residence at the specified prior date. This approach relates strictly to persons who are alive at the beginning of the interval and survived to the end of it gives a count of surviving migrants for a single period of time.

An important consideration is the length of the interval of this method. It is difficult to designate an optimum length of interval that would be suitable from all points of view. If the migration interval is long, there are more statistical problems associated with such factors as migrant mortality, repeated migration, memory and the timing of moves. If the interval is short such as one year or less tend to be seriously affected by seasonal migration and by larger sampling errors due to the small volume of movement. The time intervals most commonly selected are five or seven years.

Despite these limitations, it is important to note that a question on place of residence at a fixed past (but not too remote) date is relatively simple and specific, and may considerably reduce the influence of response errors on the estimates. In general, working with a fixed migration period makes interpretation easier, and when "fixed date data" are available for consecutive censuses or surveys they can provide time series observations.

**Application of Place of Residence in 1996 in *the Study***

This study uses above method for collecting rural-urban migration into Dhaka City. Figure 4.3 follows this definition and shows the actual process of migration flow from rural urban to Dhaka City.

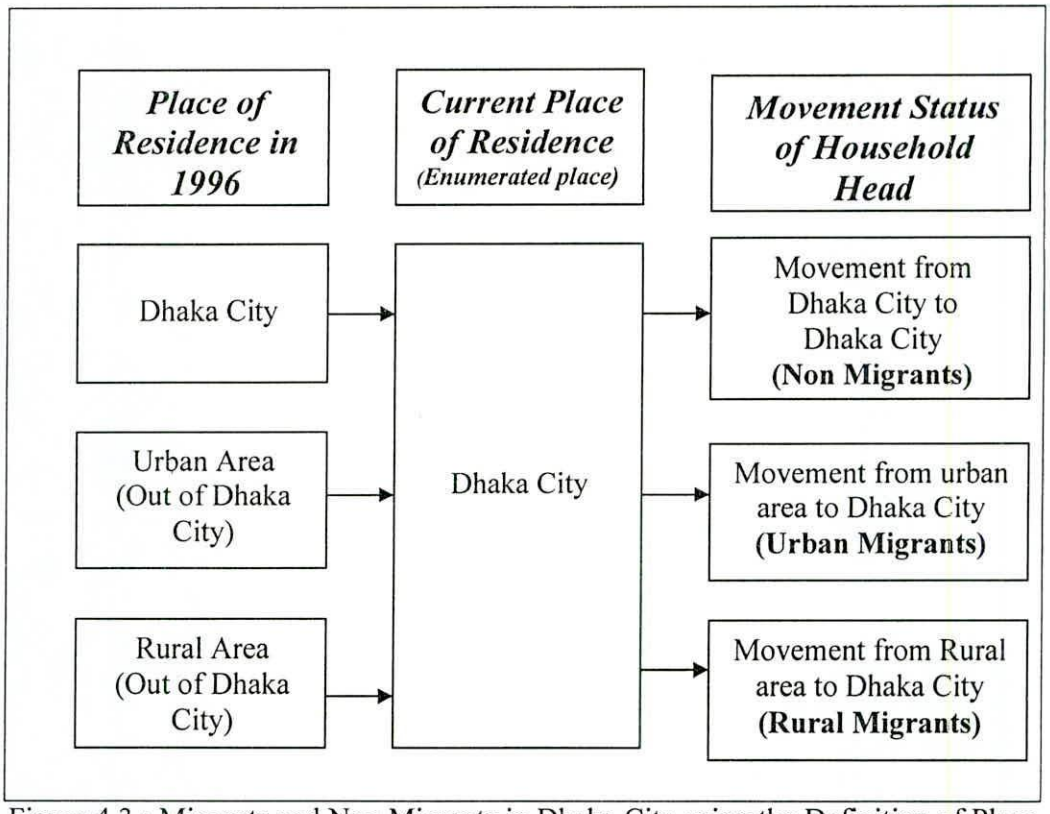


Figure 4.3 : Migrants and Non Migrants in Dhaka City using the Definition of Place of Residence in 1996

Table 4.8 : Migrants and Non Migrants in Dhaka City according to Figure 4.3

| Type of Migrants (place of residence in 1996) | Male Migrants | | Female Migrants | | Total Migrants | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Urban Migrants | 61 | 17.5 | 9 | 17.3 | 70 | 17.5 |
| Rural Migrants | 44 | 12.5 | 10 | 19.2 | 54 | 13.5 |
| Non Migrants | 243 | 69.8 | 33 | 63.5 | 276 | 69.0 |
| Total | 348 | 100 | 52 | 100 | 400 | 100 |

Source : Field Survey, Dhaka City, 2003

A migrant is a household head whose previous place of residence in June, 1996 was different from Dhaka City at the time of survey. Table 4.8 shows that one third household heads of Dhaka City were migrants. This study estimates that urban migrants were more than rural migrants in Dhaka City.

### 4.4.4 Duration of Residence in the Current Place of Residence

A single question on duration of residence does not give any direction of the place of origin of in migration to a given area and consequently no information on out migration or on net migration can be derived from it. It follows, therefore, that the data are not of much use for the study of migration or for the analysis of migration streams, unless the question on duration of residence is accompanied by another on place of origin or place of birth.

Duration of residence refers to continuous staying in an area where the person is enumerated. The duration of residence may be less than 1 year, 1-4 years, 5-9 years etc. Census or survey questions on durations of residence and last previous residence provide another set of data for measuring rural urban migration. With this data migrants are defined as persons who had moved into the area of enumeration at any time in the past and were still residence of the area at the time of the census or survey, or as persons who had moved into the area since a given date such as one, to or five years prior to the census or survey. This definition include people who moved more than once during the migration period, but such persons are only counted where they reside at the time of the census and not at each place to which migrated.

Duration of residence data obviously has only limited use for the study of rural urban migration, when they are not tabulated by the type of previous residence. The value of census or survey data for the analysis of rural urban migration increases considerably when information on duration of residence and place of previous residence is available simultaneously. When places of previous residence data are cross classified with data on duration of residence the important dimension of time can be added to the analysis.

***Application of Duration of Residence in the Study***

This study uses above method for collecting rural-urban migration into Dhaka City. Figure 4.4 follows this definition and shows the actual process of migration flow from rural urban to Dhaka City.

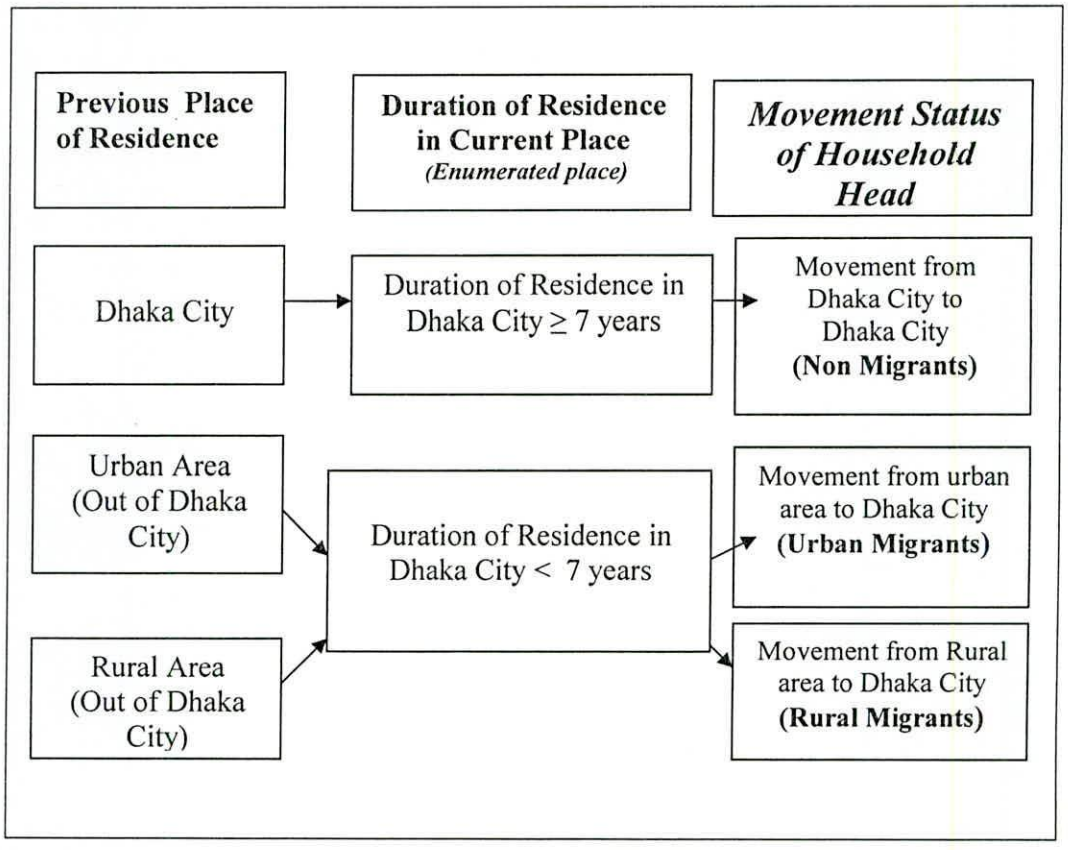


Figure 4.4: Migrants and Non Migrants in Dhaka City using the Definition of Previous Place of Residence and Duration of Residence in Current place (years)

Table 4.9 : Migrants and Non Migrants in Dhaka City according to Figure 4.4

| Type of Migrants (duration of residence in current place) | Male Migrants | | Female Migrants | | Total Migrants | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Urban Migrants | 37 | 10.6 | 5 | 9.6 | 42 | 10.5 |
| Rural Migrants | 53 | 15.2 | 10 | 19.2 | 63 | 15.7 |
| Non Migrants | 258 | 74.1 | 37 | 71.2 | 295 | 72.8 |
| Total | 348 | 100 | 52 | 100 | 400 | 100 |

Source: Field Survey, Dhaka City, 2003

Migrants are those household heads who resided in Dhaka City for less than 7 years and whose previous place of residence was different from Dhaka City at the time of the survey. Table 4.9 shows that both male and female household heads from rural area are more migrated than urban area.

Among these four methods one should use those method which will give (a) the accuracy of the data for migration analysis and (b) the accuracy of the responses. The adequacy of data is evaluated on the basis of a set of standards acceptable from the point of view of migration analysis.

The accuracy of response is likely to vary from one question to another. Place of birth data have no definite time reference, though they do give information on migration streams. The same is true of the question on place of last residence. The question on duration has time reference, but it does not give any information on migration stream, unless the place of last residence is also obtained in the census and the result are cross-tabulated. Consequently, it cannot provide estimates of out-migration and net migration. From all these points of view, place of residence at a specific years ago probably represents the most satisfactory approach as involves both time reference and migration stems..

Despite their varied limitations, these methods were widely used, making available a considerable body of data for studies of migration and its impact on urbanization.

# Chapter V

# Differentials and Determinants of Migration into Dhaka City

## 5.1 Introduction

Survey data on rural urban migration obtained through direct questions have some definite advantages over migration data from indirect sources. Because, they provide more detailed information on migrants, such as data on their demographic characteristics, social and economic conditions, reasons and motives for moving.

To examine the association between some selected demographic, socio-economic and household characteristics with the migration status of the study population, bivariate analysis was used. Logistic regression method was also applied to study the factors of migration into Dhaka City.

## 5.2 Justification for Using this Method of Migration

The standard sources of demographic data in developing countries are population census. Most censuses data obtained on the person's place of birth, which can be compared with the place of current residence to identify lifetime migrants and hence measure lifetime migration from one administration or political jurisdiction to another. But data on lifetime migration are of little programmatic, policy or analytical use since the time reference is unknown and can be any year since birth. It has therefore become the recommendation of researchers and of the United Nations (1999) that census recorded information on the place of previous residence or better still, on the residence at a specific date in the recent past, such as exactly five years or ten years before the census date.

University of Queensland (2002) conducted a survey about the data source of internal migration among 291 countries of the Continent and found that 231 countries had collected informations on migration through different methods. It was found that 138 countries had collected information through direct questions in

censuses and 35 countries in vital registration, 22 countries in sample survey and 36 countries in different multiple sources (Appendix C : Table 5.1).

In 2002, University of Queensland described that there were various direct method for collecting migration data in census or survey. Among 301 countries, it was found that 120 countries had collected migration data through the place of residence on a specific date of respondents and 105 countries from place of birth of respondents. About 75 countries used respondent's duration of time of residence and only one country used number of moves of respondent in a defined interval as a source of migration data (Appendix C : Table 5.2). United Nations and other agencies (1999) had also recommended to use the place of residence at a fixed past date for migration information as it gave reliable and accurate information than others sources.

There was no direct question in Census Schedule of Bangladesh from which migration data can be obtained. For getting more detailed information on migration, a small sample survey was done in Dhaka City and this study used respondents last place of residences in 1996 for collecting different information on migration in Dhaka City.

**5.3 Different Characteristics of Migrants and Non Migrants in Dhaka City**

Migration, particularly rural to urban, in developing countries play an important role in changing the socio-economic and cultural environments of the people involved in the process of migration. Though the incidences of rural - urban migration in any developing countries is higher, a distinct selectivity with respect to age, sex, marital status, education, occupation etc., occurs and the propensity of migration differs significantly among these socio-economic groups (Lee, 1966; Sekhar, 1993; Sivakumar, 1988; Yadava, 1988). This study determines the extent that migrants differ from non migrants on a range of characteristics.

### 5.3.1 Different Household Characteristics of the Survey Population in Dhaka City

Individuals do not act alone in their migration decision making. Household characteristics are also affecting the migration behavior of household heads. In this study, migration was also determined by the following variables:

**Family Size of Household Head**

Total number of household heads interviewed in the survey was 400, of which 124 household heads were migrants and 276 were non migrants. From Table 5.1, it is seen that 62.1% migrant's family size was 5 or more and 37.9% non migrant's family size was 1-4.

Table 5.1: Different Household Characteristics in Survey Population (Before Migration)

| **Characteristics of Household Head** | Migrants Household Head | | Non Migrants Household Head | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| **Family size (Members)** | | | | |
| 1-4 | 47 | 37.9 | 159 | 57.6 |
| 5 or more | 77 | 62.1 | 117 | 42.4 |
| **Mean** | **4.58** | | **4.41** | |
| **Adult Male Member ($15^{+}$ years)** | | | | |
| 1-2 | 61 | 49.6 | 212 | 77.9 |
| 3+ | 63 | 50.4 | 64 | 22.1 |
| **Mean** | **2.38** | | **1.83** | |
| **Family Type** | | | | |
| Nuclear family | 31 | 25 | 86 | 31.2 |
| Joint and extended family | 93 | 75 | 190 | 68.8 |
| **Family Member's Living Status** | | | | |
| All members live with the family | 38 | 30.6 | 59 | 21.4 |
| At least one member live outside the family | 86 | 69.4 | 217 | 78.6 |

Source: Field Survey, Dhaka City, 2003

**Adult Male Member of the family**

It is also observed in Table 5.1 that average adult male member (2.38) among migrants were greater than that of non migrants average adult male member (1.83).

**Family Type of Household Head**

Family type is also influencing the head to migrate in Dhaka City. It was seen that most of the migrant household heads (75%) were from joint and extended family. Only 25% migrant household heads came from nuclear family (Table 5.1).

**Family Member's Living Status**

There is a tendency to move a respondent if any family member lived outside their family. In this study, 69.4% migrant household heads reported that some family members lived out side their family and they influenced to move in Dhaka City (Table 5.1).

This study reveals that large family size, more adult male members, joint and extended family type and any family member's live outside the family were more migrated than small, nuclear, less adult male family size and all family members lived with their family.

### 5.3.2 Different Demographic and Social Characteristics of the Survey Population in Dhaka City

A century of migration research has shown that individual migrants differ from non-migrants on many dimensions, including age, marital status, education, occupation, employment history and income (Findley and Simons 1977). This study shows that in total 1753 population were surveyed in Dhaka City of which 1258 were non migrants and 495 were migrants. Migration was selective of individuals with certain demographic and social characteristics which are given bellow:

**Sex of the Study Population**

Migration is sex selective. There is considerable variation in the sex selectivity of

internal migration. Sex selectivity can lead to unbalance sex ratio, particularly in urban areas. Kerney and Miller (1987), using census data covering 70 years in Sri Lanka, document an association between sex selective patterns of migration and unbalanced sex ratios in rural and urban areas. Chamratrithrong et al. 1995 showed that males were more likely to migrate than females.

Table 5.2 shows that the volume of migration in Dhaka City was slightly dominated by males. Of total migrants in Dhaka City, 54.7% was male population and 45.3% was female population.

Table 5.2: Different Demographic and Social Characteristics of the Survey Population in Dhaka City (Before Migration)

| **Demographic and Social Characteristics of the Survey Population** | **Migrants** | | **Non migrants** | |
|---|---|---|---|---|
| | **Number** | **Percent** | **Number** | **Percent** |
| **Sex of Population** | | | | |
| Male | 271 | 54.7 | 655 | 52.1 |
| Female | 224 | 45.3 | 603 | 47.9 |
| **Age group of population (years)** | | | | |
| <15 | 107 | 21.6 | 285 | 22.7 |
| 15-25 | 127 | 25.7 | 285 | 22.7 |
| 25-35 | 117 | 23.6 | 274 | 21.8 |
| 35-45 | 60 | 12.1 | 174 | 13.8 |
| 45-55 | 47 | 9.5 | 141 | 11.2 |
| 55-65 | 30 | 6.1 | 71 | 5.6 |
| 65+ | 7 | 1.4 | 28 | 2.2 |
| **Marital Status of population (age $15^+$ years)** | | | | |
| Unmarried | 111 | 32.1 | 270 | 31.0 |
| Married | 218 | 63.1 | 586 | 67.4 |
| Widow | 9 | 2.6 | 13 | 1.5 |
| Divorce/Separated | 8 | 2.3 | 1 | 0.1 |
| **Education (age $6^+$ years)** | | | | |
| No Education | 30 | 6.8 | 49 | 4.3 |
| One to Eight | 132 | 29.9 | 327 | 28.4 |
| S.S. C and H.S.C | 126 | 28.5 | 398 | 34.5 |
| Degree | 121 | 27.4 | 280 | 24.3 |
| Masters+ | 33 | 7.5 | 98 | 8.5 |

Source : Field Survey, Dhaka City, 2003

**Age of Study Population**

It may be mentioned that age composition of population is very important because it gives an indication about the present and past demographic behavior of the population.

Age selectivity contributes most to the demographic impacts of migration. Age selectivity patterns are similar in most countries. Migration differential by age had been almost generalized and it is higher for the people aged between 15 and 40 (Yadava, 1988). Different studies in Asia, Africa and Latin America had observed that always the young adult persons migrated to urban center. Guest (1993) studied that migrants were overwhelmingly concentrated at the young adult ages in Thailand.

The age distribution of migrants and non migrants obtained from this study appeared that 21.6% migrants and 22.7% non migrants were children who were dependent on other family members. It was seen that about 77% migrants and 75.1% non migrants were in working age group i.e. 15 years to 65 years. Only 1.4% migrants and 2.2% non migrants were in older age group (above 65 years) in Dhaka City (Table 5.3).

It was found in all countries that economically active population had a higher rate of internal mobility than the non active population. These results indicate that there were more active persons in the origin of migrants and they had moved in Dhaka City for better employment, earnings and live well.

**Marital Status of the Study Population**

Marital status is an important characteristic of the population which has direct and indirect impact on the demographic and socio economic characteristics, normally fertility, migration, headship, family formation etc. It is also important to study the selectivity in their migration behavior with respect to marital status. It is observed that the distance moved by a migrant is found closely associated with the marital status, and depends, to some extent on his/her responsibilities towards the family.

Marriage information of this study was obtained from those migrants who were age of 15 years and above before migration survey. Table 5.2 shows that migration decision of an individual in Dhaka City was also influenced by marital status and found that married household heads were more migrated than unmarried household heads. Widow, divorce and separated migrants were negligible in Dhaka City.

**Education of the Study Population**

Education is one of the most important forms of human capital investment that can improve family welfare and facilitate migration. Information on educational status of the respondents of this study was obtained from those who were of age 6 years and above at the time of move.

Table 5.2 shows that education was also very important factors of respondents migration in Dhaka City and found that about 28.5% migrants and 34.5% non migrants had secondary and higher secondary education This study shows that above SSC respondents were more migrated than illiterate and higher educated respondents.

### 5.3.3 Different Economic Characteristics of the Survey Population in Dhaka City

Economic opportunities in place of origin and destination is also determine the extent to which individuals or families will migrate. Some economic characteristics of the study population is given below:

**Income of Household Head**

It was noted that at the time of move, monthly average household income of migrants was less than the average household income of non migrants. This means that economic factor was an important motivating force of household head to migrate in Dhaka City. The non migrants in Dhaka City had an advantage over the migrants as they had experienced a longer time of residence in Dhaka City and they had already chosen better occupation and earned more money.

Table 5.3: Different Economic Characteristics of Household Head (before migration)

| Different Economic Characteristics of Household Head | Migrants Household Head | | Non Migrants Household Head | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| **Monthly Average Income (Tk.)** | 9137.10 | | 9921.43 | |
| **Occupation of Household Head** | | | | |
| Unemployed | 6 | 4.8 | 16 | 5.8 |
| Agricultural work | 1 | 0.8 | 2 | 0.7 |
| Construction, Industrial work and Transport related work | 13 | 9.6 | 18 | 6.5 |
| Professional work (Dr./engg /lawyer) | 16 | 12.3 | 38 | 13.8 |
| Private job | 21 | 16.9 | 60 | 21.7 |
| Education/ Bank | 25 | 20.2 | 31 | 11.2 |
| Different Business | 34 | 27.4 | 95 | 34.4 |
| Others | 9 | 7.2 | 16 | 5.9 |
| **Job Satisfaction of Household Head** | | | | |
| Satisfied | 54 | 43.5 | 226 | 81.9 |
| Not satisfied | 70 | 56.5 | 50 | 18.1 |
| **Income Satisfaction of Household Head** | | | | |
| Satisfied | 60 | 48.4 | 245 | 88.5 |
| Not satisfied | 64 | 51.6 | 31 | 11.2 |
| **House Ownership status of Household Head** | | | | |
| Own | 31 | 25 | 127 | 46 |
| Rent | 90 | 72.6 | 140 | 50.7 |
| Others | 3 | 2.4 | 9 | 3.3 |

Source : Field Survey, Dhaka City, 2003

**Occupation of the Household Head**

It was found that migrants were worked in different professions at their origin. Most of the migrants were in business (27.4%). Other migrant's professions were in education/ bank (20.2%), private job (16.9%). About 34.4% non migrants were engaged in different business, 21% from private work (Table 5.3). The occupation pattern of household head indicated that white collar profession moved to Dhaka City for better income and better urban life and lower income and middle income groups for survive.

**Job Satisfaction of the Household Head**

Dissatisfaction with previous job stands out as a very important predictor for migration. This study shows that 56.5% migrants and 18.1% non migrants were dissatisfied about their previous job and moved to Dhaka City for better job (Table 5.3).

**Income Satisfaction of Household Head**

People from communities with a less per capita income are more likely to migrate. Table 5.3 shows that 51.6% migrants were not satisfied about their income at their origin and move to Dhaka City for better income.

**House Ownership Status of Household Head**

The housing ownership status of this study shows that 72.6% migrant household heads and 50.7% non migrant household heads lived in rented houses. This study reveals that rented household heads were more likely to move in Dhaka City than permanent household heads.

Internal migration is selective everywhere much like other demographic events. This is so because migration is linked to crucial life-cycle transitions such as leaving school, entering the labour market, getting married or divorced and retiring. This study expresses that demographic, social and economic factors forced household head to migrate from place of origin to Dhaka City.

**5.4 Logistic Regression Method**

Bivarite analysis only provides a preliminary idea of how important each independent variable individually is by itself. Since an empirical association between two variables does not necessarily imply a causal relationship between them, the relative importance of all the variables has to be examined simultaneously by some multivariate methods. In order to single out the net effect of each of the interrelated variables upon the dependent variables, multivariate analysis has been used. There are many multivariate statistical techniques. Two important multivariate techniques are multiple regression and discriminant analysis. Discriminant analysis is also used to predict group membership with only two groups. However, discriminant analysis can only be used with continuous independent variables. Thus, in instances where the independent variables are a categorical, or a mix of continuous and categorical and dependent variables are categorized (dichotomous and polytomous), logistic regression is preferred (Schlesselelman, 1982).

A very interesting method that can be used to predict a binary dependent variable from a set of independent variables and that does not require any distribution assumptions concerning explanatory variables is Cox's linear logistic regression model that had used in this study. The general logistic model expresses a qualitative dependent variable as a function of several independent variables, both qualitative and quantitative (Cox, 1970).

Logistic regression is a technique for analyzing problems in which there are one or more independent variables that determine an outcome. The outcome is measured with a dichotomous variable (in which there are only two possible outcomes). In logistic regression, the dependent variable is binary or dichotomous, i.e. it only contains data coded as 1 (true, success, etc.) or 0 (false, failure, etc.).

The goal of logistic regression is to find the best fitting model to describe the relationship between the dichotomous characteristic of interest (dependent variable=

response or outcome variable) and a set of independent (predictor or explanatory) variables. Logistic regression generates the coefficients (and its standard errors and significance levels) of a formula to predict a *logit transformation* of the probability of presence of the characteristic of interest:

$$\text{logit}(p) = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots + b_k X_k$$

where p is the probability of presence of the characteristic of interest and $b_0$, $b_1$, ... $b_k$ are the regression coefficients. The logit transformation is defined as the logged odds:

$$\text{odds} = \frac{p}{1-p} = \frac{\textit{probability of presence of characteristic}}{\textit{probability of absence of characteristic}}$$

and

$$\text{logit}(p) = \ln\left[\frac{p}{1-p}\right]$$

The logistic regression coefficients can be estimated by using either (a) discriminant analysis or (b) maximum likelihood estimation technique. But in most case, the multivariate normality assumption does not hold and, as a result, the discriminant analysis technique may yield incorrect (b) coefficients. For this reason the maximum likelihood estimation technique is preferred to the discriminant analysis technique. Logistic regression applies maximum likelihood estimation after transforming the dependent variable into a Logit variable. Computer programs are available to obtain the maximum likelihood estimates of the logistic regression parameters.

In logistic regression, just as in linear regression, the codes for the independent variables must be meaningful. Here all independent variables are categories as 0 or 1. This is called dummy variable or indicator variable coding. For variables with more than two categories, new variables are created to represent the categories 0 or 1. The logistic regression procedure will automatically create new variables for categorical variables.

The process by which coefficients are tested for significance for inclusion or elimination from the model involves several different techniques. Each of these are discussed below.

**Wald Test:**

A Wald test is used to test the statistical significance of each coefficient (*B*) in the model. A Wald test calculates a *Z* statistic, which is:

$$z = \frac{\hat{B}}{SE}$$

This z value is then squared, yielding a Wald statistic with a chi-square distribution. However, several authors have identified problems with the use of the Wald statistic. Menard (1995) warns that for large coefficients, standard error is inflated, lowering the Wald statistic (chi-square) value. Agresti (1996) states that the likelihood-ratio test is more reliable for small sample sizes than the Wald test.

**Likelihood-Ratio Test:**

The likelihood-ratio test uses the ratio of the maximized value of the likelihood function for the full model ($L_1$) over the maximized value of the likelihood function for the simpler model ($L_0$). The likelihood-ratio test statistic equals:

$$-2\log(\frac{L_0}{L_1}) = -2[\log(L_0) - \log(L_1)] = -2(L_0 - L_1)$$

This log transformation of the likelihood functions yields a chi-squared statistic. This is the recommended test statistic to use when building a model through backward stepwise elimination.

**Backward Stepwise Regression:**

Backward stepwise regression appears to be the preferred method of exploratory analyses, where the analysis begins with a full or saturated model and variables are eliminated from the model in an iterative process. The fit of the model is tested after

the elimination of each variable to ensure that the model still adequately fits the data. When no more variables can be eliminated from the model, the analysis has been completed.

**P Value:**

The criteria for inclusion and exclusion of different independent variables in the logistic regression model is set to be 0.05 level of significance. The inference regarding statistical significance is based on Chi-square statistics. The P value is used to identify the significance effects to assess the relative importance of the selected variables in the model. An independent variable with a regression coefficient not significantly different from 0 ($P>0.05$) can be removed from the regression model. If $P<0.05$ then the variable contributes significantly to the prediction of the outcome variable.

**Odds Ratio:**

The odds ratio has a clear interpretation and is straight forward. An odds ratio of greater than 1.00 suggests an increased likelihood of the event occurring, while an odds ratio less than 1.00 indicates a decreased likelihood of the event occurring. The category with the relative odds of 1.00 represents the reference category for that variable.

**Partial Correlation:**

A statistic that is used to look at the partial correlation between the dependent variables and each of the independent variables are partial R statistic. The significant variables are arranged in order of their relative importance where relative importance of explanatory variables has been judged by this R value.

To fit a best regression model, a full model is considered with all the independent variables at a time. Then on the basis of odds ratio, it is decided which variables are significant or not.

## 5.5 Application of Logistic Regression Method to Find Different Factors of Migration in Dhaka City

In this section it has been tried to find the variables which are responsible for internal migration into Dhaka City. To identify these variables the linear logistic regression model was applied. Here the dependent variable was the migration status of household head which was dichotomous variable with

$Y_i = 1$, if the ith household head was migrant in Dhaka City.

$Y_i = 0$, if the ith household head was non migrant in Dhaka City.

$P(Y_i = 1) = P_i$, probability that the ith respondent was migrant in Dhaka City

$P(Y_i = 0) = 1 - P_i$, probability that the ith respondent was non migrant in Dhaka City

The fitted model which includes independent variables is given in Table 5.4 with categories. The classification table can be used to evaluate the predictive accuracy of the logistic regression model. In this table the observed values for the dependent outcome and the predicted values (at a cut-off value of p=0.50) are cross-classified. The model of this study correctly predicts 84% of the cases.

Backward Stepwise logistic regression was used and the final results is given in Table 5.5 which included the estimates of the logistic regression coefficients (b) corresponding to the selected independent variables, standard error of these estimates and relative odds calculated for each category of the categorical variables (Appendix D).

Table 5.4: Definition of Independent Variables with Categories

| Independent Variables | Categories / Labels |
|---|---|
| Sex of the household head | Female =0<br>Male=1 |
| Age of the household head (years) | $35^{+}$=0<br>15-35=1 |
| Education of the household head | Degree and above =0<br>One to HSC=1<br>No education =2 |
| Marital status of the household head | Married=0<br>Unmarried=1 |
| Family type of the household head | Joint and extend=0<br>Nuclear=1 |
| Family size of the household head | 1-4 member=0<br>5 and above member=1 |
| Income Group of household head | Upper Income Group (Tk.$12000^{+}$)=0<br>Middle Income Group (Tk.5000-12000)=1<br>Lower Income Group (<Tk. 5000)=2 |
| House ownership status of the household | Own=0<br>Rent or others =1 |
| Any family member live outside the family | All live with the family=0<br>At least one live outside the family =1 |
| Job satisfaction of the household head | Satisfied=0<br>Dissatisfied=1 |
| Income satisfaction of the household head | Satisfied=0<br>Dissatisfied=1 |

Table 5.5: **Linear Logistic Regression Analysis of Migrant Household versus Non Migrant Household Head in Dhaka City

| Variables | Coefficients (b) | S. E (b) | Odds Ratio* |
|---|---|---|---|
| **Constant** | -5.5101 | .7864 | ------ |
| **Any family member lived outside the family** | | | |
| (All members live with the family) | ------- | ------- | 1.0000 |
| At least one member live outside the family | 2.6650 | .3640 | 14.3687 |
| **Education of the household head** | | | |
| (No education) | ------- | ------- | 1.000 |
| One to H.S.C | .9314 | .3393 | 2.5381 |
| Degree and above | 1.8657 | .7133 | 6.404 |
| **Job satisfaction of the household head** | | | |
| (Satisfied) | ------- | ------- | 1.0000 |
| Dissatisfied | 1.4840 | .5232 | 4.4105 |
| **Income satisfaction of the household head** | | | |
| (Satisfied) | ------- | ------- | 1.0000 |
| Dissatisfied | 1.4156 | .5320 | 4.1190 |
| **Family type of the household head** | | | |
| (Nuclear ) | ------- | ------- | 1.0000 |
| (Joint and extend) | .7900 | .3467 | 2.2034 |
| **Family size of the household head** | | | |
| (1-4 member) | ------- | ------- | 1.0000 |
| 5 and above | .6963 | .3117 | 2.0063 |
| **Income group of the household head** | | | |
| (Upper Income Group) | ------- | ------- | 1.0000 |
| Middle Income Group | .9985 | .6680 | 2.7141 |
| Lower Income Group | 1.5151 | .7300 | 4.5498 |
| **Age of the household head (years)** | | | |
| (35 and above) | ------- | ------- | 1.0000 |
| 15-35 | .6555 | .3273 | 1.9263 |
| **House ownership of household head** | | | |
| (Own) | ------- | ------- | 1.0000 |
| Rent and others | .6494 | .3254 | 1.9145 |

Source: Field Survey, Dhaka City, 2003

Note: Reference category is in the parenthesis.

* Significance at 5 per cent level

* *See Appendix D

According to the fitted model, the following nine variables, out of eleven variables has appeared as the significant predictors of migration status of household head in accordance with their importance: Any family member live outside the family, education of the household head, job satisfaction of the household head, income satisfaction of the household head, family type of the household head, family size of the household head, income group of the household head, age of the household head (years) and house ownership status of the household. Explanations of these results are presented in the subsequent sections.

**Any Family Member live outside the Family**

The absence of any family members in places other than the current residential location significantly increases migration and this study shows that the odds for the member out side the family was14 times higher compared to the non migrant family member who were in their family.

**Education of the Household Head**

Education has a significant positive impact on migration decision. It was evident that as education of the household head increased, propensity of migrant household head increased compared to the odds for non migrant household with no education.

**Job and Income Satisfaction of the Household Head**

Dissatisfaction with previous job and income were a very strong motivating factor for migration in Dhaka City. This result indicates that the odds of dissatisfaction with job and income of household heads are 4 times more migrated than the household head of non migrants who were satisfied with their jobs and income.

**Family Type of the Household Head**

Family type of household head exerted a significant positive impact on migration decisions in Dhaka City and found that the odds of joint and extended household heads were double migrated than the household head with single family.

**Family Size of the Household Head**

This study argues that migration was positively related with family size. It was found that larger household head size increased the likelihood of being migrant in Dhaka City.

**Income Group of the Household Head**

Household income plays a significant role in migration decision making. It is likely that families with lower incomes were more likely to migrate in Dhaka City than non migrants. Model shows that as the income of the household head decreased from Tk. 5000-12000 to <Tk. 5000, the likelihood of being migrant significantly increased compared to the non migrant with high income (Tk. $12000^{+}$).

**Age of the Household Head (years)**

Several Studies argued that migration is negatively related with age of household head (Connell et. al., 1976). The logistic regression analysis indicated that age also had a significant effect on migration. Younger age will increase with likelihood of being migration in Dhaka City compared to the age of years 35 and more.

**House Ownership Status of the Household Head**

The result indicates that the household head having rented house or land had increased the odds of internal migration in Dhaka City as compared to non migrants with own house.

The rest of the explanatory variables which were not found statistically significant were sex and marriage of the household head.

# Chapter VI

# Rural Urban Migrants in Dhaka City

## 6.1 Introduction

This chapter describes internal migration process in three sections. Section one is about different experience of migrants i.e. migrant's origin, their source of information prior to move, their movement status, their main decision maker before move, pull and push reasons for migration and migrant's view to identify different problems in rural urban area of Bangladesh. Section two describes relationship between migrant's different characteristics and different income groups. Section three compares the personal assessment of migrant's different aspects of life in Dhaka City with their previous place of residence.

## 6.2 Different Experiences of Migrants

When people migrate from one place to another, they gather different experience and this section describes different experience of migrants. Here migrant refers to migrant household head. This study shows that 31% households are migrated in Dhaka City, of which 17.5% migrants from urban area and 13.5% were from rural area of Bangladesh.

### 6.2.1 Origin of Migrant Households

Migrants of Dhaka City were originated from most of the districts of the country. However, some districts, had contributed more and some had less. According to this survey, highest proportion of migrants in Dhaka City had come from Comilla district (11.3%) followed by Faridpur district (10.4%), Noakhali district (8.0%), Jessore districts (7.2%) and Mymensingh districts (5.6%) in order. It was also seen that Coxbazar (4.8%), Sylhet (4.8%), Jamalpur (4.0 %), Barisal (4.0%), Brammanbaria (4.8%), Chandpur (4.8%), Munshigonj (4.0%), Khulna (4.0%) were also the principal sources of migration in Dhaka City (Table 6.1).

From different studies, it was seen that both economic condition and distance of the origin were the main reasons for increasing the volume of migration into Metropolitan Cities. This is also seen in this study. Besides, Dhaka being the capital and the largest city of the country which posses all kinds of facilities for which people move to Dhaka City from all over the country. Figure 6.1 shows the origin of migration in Dhaka City.

Table 6.1: Percentage Distribution of Rural Urban Migration in Dhaka City

| Serial Number | Origin of Migrant HH (Greater Districts) | Migrant HH in Dhaka City | |
|---|---|---|---|
| | | Frequency (N) | Percent |
| 1 | Chittagong | 3 | 2.4 |
| 2 | Comilla | 14 | 11.3 |
| 3 | Coxbazar | 6 | 4.8 |
| 4 | Noakhali | 10 | 8.0 |
| 5 | Barisal | 5 | 4.0 |
| 6 | Sylhet | 6 | 4.8 |
| 7 | Faridpur | 13 | 10.4 |
| 8 | Jamalpur | 5 | 4.0 |
| 9 | Kisoregonj | 2 | 1.6 |
| 10 | Manikgonj | 4 | 3.2 |
| 11 | Munshigonj | 5 | 4.0 |
| 12 | Mymensingh | 7 | 5.6 |
| 13 | Naranangonj | 4 | 3.2 |
| 14 | Narshandhi | 2 | 1.6 |
| 15 | Tanghail | 3 | 2.4 |
| 16 | Jessore | 9 | 7.2 |
| 17 | Khulna | 5 | 4.0 |
| 18 | Magura | 2 | 1.6 |
| 19 | Rajshahi | 3 | 2.4 |
| 20 | Rangpur | 4 | 3.2 |
| 21 | Brammanbaria | 6 | 4.8 |
| 22 | Chandpur | 6 | 4.8 |
| | Total Migrants | N=124 (31%) | 100 |

Source : Field Survey, Dhaka City, 2003

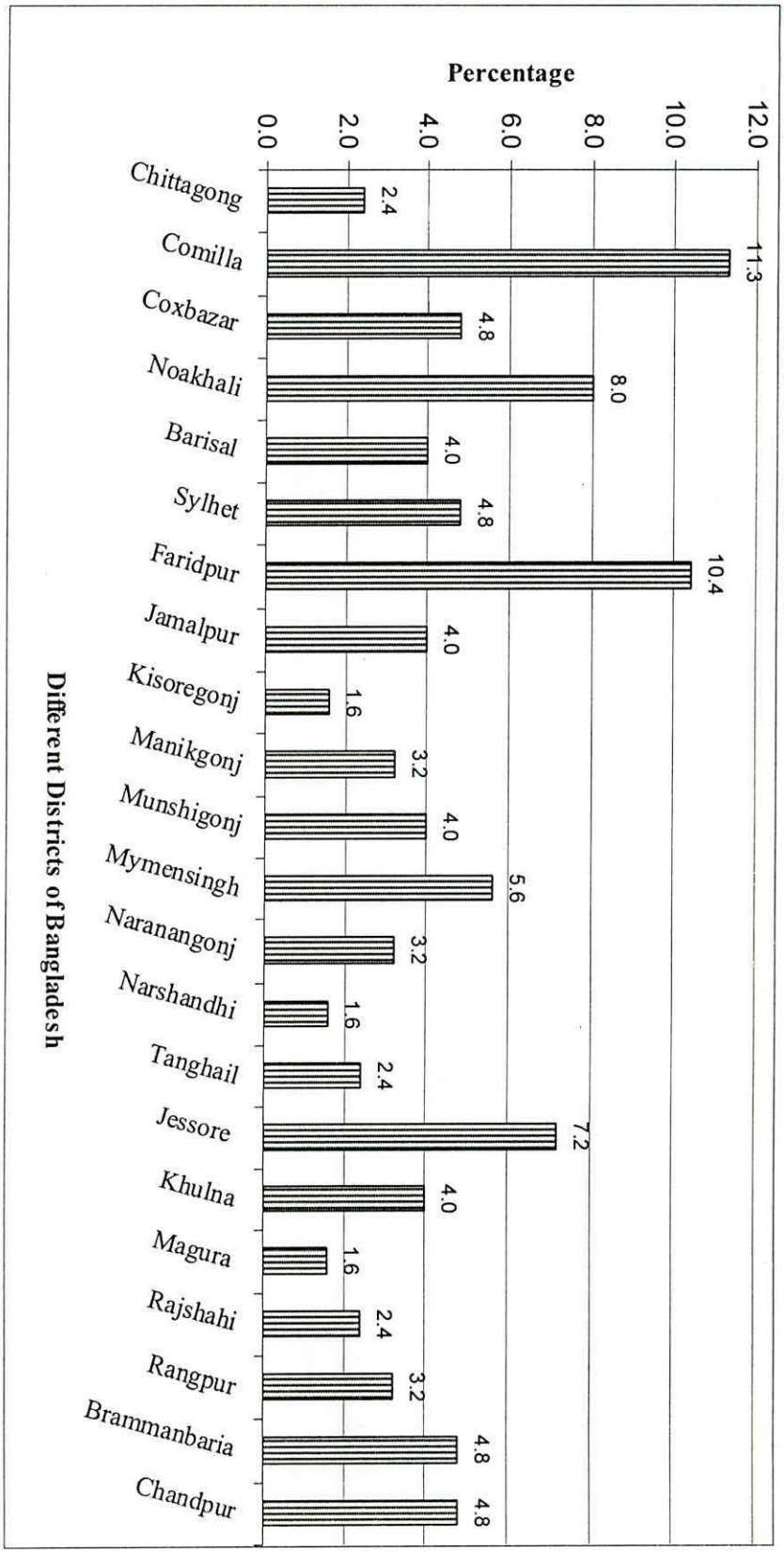


Figure 6.1: Origin of Migrants in Dhaka City

### 6.2.2 Source of Information of Migrant

Source of information and communication play its significant role in the process of migration in any area. Once some people had migrated from a given origin to a specific destination, a greater amount of information will flow between the two places. Visits return visits, letters, and telephone calls are served to inform the members of the home community about the opportunities in the new community or region. This flow of communication may be one of the important roles that the family plays on the migration process.

It is observed that the availability of information concerning alternative localities plays a prominent role in the potential migrant's decision regarding a destination. Those who are more likely to move to places about which they have at least some information, rather than to localities about which they know little or nothing.

Nelson (1959) points out that family and friends who have previously migrated from one place to another may provide persons in their former locality with an important source of information about their present localities. This information may in turn increase the propensity of persons in i to move to j rather than to some other location.

In order to make the final decision to move to any area, migrants often knew of the place in advance through many sources of information. From the present study, it is seen that about 39.5% migrants got information from relatives, 26.6% from friends and 29 % from their work place. About 32.9 % urban migrants and 48.1% rural migrants got required information about Dhaka City through their relatives who had previous idea about Dhaka City. Nearly 35.7% urban migrants and 20.4 % rural got information from their work place. Only 8.6% urban migrants did not get any information before coming to Dhaka City (Table 6.2). This study reveals that personal information is the important factors in rural urban migration into Dhaka City.

Table 6.2: Source of information of Migrant's prior to Move in Dhaka City

| Get information from different source | Migrants in Dhaka City | | | | | |
|---|---|---|---|---|---|---|
| | Urban Migrants | | Rural Migrants | | Total Migrants | |
| | N | % | N | % | N | % |
| From relatives | 23 | 32.9 | 26 | 48.1 | 49 | 39.5 |
| From friends | 16 | 22.9 | 17 | 31.5 | 33 | 26.6 |
| From office of work place | 25 | 35.7 | 11 | 20.4 | 36 | 29 |
| No information | 6 | 8.6 | 0 | 0 | 6 | 4.8 |
| Total | 70 | 100 | 54 | 100 | 124 | 100 |

Source : Field Survey, Dhaka City, 2003

### 6.2.3 Migration Decision-Making Process

Migration studies in developing countries have observed repeatedly that individuals or families move not only for their own ends but also to contribute to the welfare of a wider circle of relatives. The family is significant as a decision-making unit in migration, but the decision makers and the movers need not be the same. The family, rather than the individual, is the basic decision-making unit (DeJong and Gardner, 1981).

Whether to migrate or stay is a function of household characteristics and factors at the community level in destination. In addition, family life stages and characteristics may play different roles in determining whether just some members or the entire family migrate. Root and De Jong et. al (1991) stated that family structure, family migrant network, and family resources are more important in determining individual migration, whereas family and kin ties to the place of origin play a more critical role in family migration.

Connell et al. (1976) cite sociological studies which highlight the prevalence of two decision-making processes: a) the family head makes the decision on his own, the migrant obeys this decision; b) family members arrive at the decision jointly.

Besher's theory (1967) focuses on the individual or families decision- making process that leads to migration. According to him, "It is assume that migration is a result of a decision process within the family and that the decision process is constrained on one hand by characteristics of the family and its constituent individuals, and on the other by labor markets, community patterns and housing markets".

Table 6.3: Percentage Distribution of Migrants by Main Decision Makers for Moving to Dhaka City

| Main decision makers for moving in Dhaka City | Migrants in Dhaka City | | | | | |
|---|---|---|---|---|---|---|
| | Urban Migrants | | Rural Migrants | | Total Migrants | |
| | N | % | N | % | N | % |
| Self | 27 | 38.6 | 23 | 42.6 | 50 | 40.3 |
| Spouse/ Children | 14 | 20.0 | 9 | 16.7 | 23 | 18.5 |
| Parents | 26 | 3.7 | 15 | 27.8 | 41 | 33 |
| Others | 3 | 4.3 | 7 | 13 | 10 | 8 |
| Total | 70 | 100 | 54 | 100 | 124 | 100 |

Source : Field Survey, Dhaka City, 2003

Table 6.3 shows that the main persons responsible for deciding to migrate in Dhaka City were self (40.3%). About 42.6% rural migrants and 38.6% urban migrants reported that their own decisions were chiefly responsible for the move. About 33% migrants reported that parents were mainly made their decision to move. About 20% urban migrants and 16.7% rural migrants stated that their spouse/children were mainly responsible for the decision to move in Dhaka City.

### 6.2.4 Persons Accompanying the Move

Family characteristics have a potential influence on when people migrate, whether they migrate and how they adjust to their new place of residence after they migrate. Many studies on migration in Asia and Africa have also found that in a large number of the family and that often the wife remains in the rural area.

It is important to study the urban-rural family links because the impact on the urban center is much less when migration does not involve the movement of all members of the family.

Table 6.4: Percentage Distributions of Migrants by Persons Accompanying the Move

| Persons accompanying the move | Migrants in Dhaka City | | | | | |
|---|---|---|---|---|---|---|
| | Urban Migrants | | Rural Migrants | | Total Migrants | |
| | N | % | N | % | N | % |
| Moved Individually | 18 | 25.7 | 22 | 40.7 | 40 | 32.3 |
| Moved with Family | 46 | 64.3 | 23 | 42.6 | 68 | 54.8 |
| Moved with Relatives | 7 | 10.0 | 7 | 1.3 | 14 | 11.3 |
| Moved with Others | 0 | 0 | 2 | 5.4 | 2 | 1.6 |
| Total | 70 | 100 | 54 | 100 | 124 | 100 |

Source: Field Survey, Dhaka City, 2003

Table 6.4 demonstrates that 64.3% urban migrants and 42.6% rural migrants moved to Dhaka City with family members because they felt secure to live with them. About 32.3% total migrants moved to Dhaka City alone of which 25.7% came from urban area. Only 11.3% migrants moved with relatives where 10% from urban area and 1.3% from rural area. About 5.4% rural migrants moved with others. This study indicates that rural migrants with family in Dhaka City will increase in future.

### 6.2.5 Reasons for Internal Migration: Push vs. Pull Factors

The net movement out of, or into any area will depend on the nature and strength of the push and pull factors. When people are attracted by the advantages of the new places, the benefits are arranged as the pull factors. These include a chance of a better job, better education, and a better standard of living. But when people want to save themselves from the restrictions and disadvantages of the existing place of living, the factors are called the push factors. This can include drought, famine, lack of jobs, over population and civil War. This two factors influence the rural urban migration into Dhaka City.

#### (i) Push Factors of Migration in Dhaka City

This study identifies nine main push reasons which are presented in Table 6.5 and shows that lack of job opportunity was an important factor among push factors and about 31.5% rural migrant households cited lack of work was the main reasons for moving in Dhaka City. Surprisingly, landlessness reason is more for rural migrants (14.8%) than urban migrants (7.1%). About 10.5% migrants' household head moved to Dhaka City for poor housing condition. Marriage and family related reasons were 10% for urban migrants and 7.4% for rural migrants. River erosion was leading factors for migration to Dhaka City. These findings show that 23.4% household heads have moved to Dhaka City for river erosion. The important of other factor such as communication problems, poor treatment facilities, bad educational facilities were also notable reasons for compelling a considerable number of migrants leave their place of origin (Figure 6.2).

#### (ii) Pull Factors of Migration in Dhaka City

The urban pull factors are the real or perceived opportunities for employment, security, education and other social development in urban centers. Mahbub & Islam (1989) showed that Dhaka had enjoyed all the major pull advantages and largest proportion of migrants moves to Dhaka City due to size and employment opportunities. The pull reasons of migrants in Dhaka City are presented in Table 6.6 and Figure 6.3.

Table 6.5: Main Push Reasons for Leaving the Former Place

| Push Reasons | Migrants in Dhaka City | | | | | |
|---|---|---|---|---|---|---|
| | Urban Migrants | | Rural Migrants | | Total Migrant | |
| | N | % | N | % | N | % |
| Lack of job/lack of business opportunity | 23 | 32.9 | 17 | 31.5 | 40 | 32.3 |
| Communication problem | 0 | 0 | 1 | 1.9 | 1 | 8.0 |
| River erosion | 17 | 24.3 | 12 | 22.2 | 29 | 23.4 |
| Landless | 5 | 7.1 | 8 | 14.8 | 13 | 7.4 |
| Poor housing condition | 1 | 1.4 | 4 | 7.4 | 5 | 10.5 |
| Migration of family for marriage and others | 7 | 10 | 4 | 7.4 | 11 | 8.9 |
| Poor treatment facilities | 0 | 0 | 2 | 3.7 | 2 | 1.6 |
| Lack of good educational facilities | 3 | 4.3 | 3 | 5.6 | 6 | 4.8 |
| Others | 14 | 20 | 3 | 5.6 | 17 | 13.7 |
| Total | 70 | 100 | 54 | 100 | 124 | 100 |

Source : Field Survey, Dhaka City, 2003

Table 6.6: Main Pull Reasons of Migrants for Choosing Dhaka City

| Pull Reasons | Migrants in Dhaka City | | | | | |
|---|---|---|---|---|---|---|
| | Urban Migrants | | Rural Migrants | | Total Migrant | |
| | N | % | N | % | N | % |
| Better job opportunity/ Service transfer | 45 | 64.3 | 35 | 64.8 | 80 | 64.5 |
| Buy own land or house | 12 | 17.1 | 8 | 14.0 | 20 | 16.1 |
| To accompany (union) family / to get married | 6 | 8.6 | 5 | 9.3 | 11 | 8.9 |
| Better educational facilities | 5 | 7.1 | 5 | 9.3 | 10 | 8.1 |
| Better urban facilities | 1 | 1.4 | 1 | 1.9 | 2 | 1.6 |
| Others | 1 | 1.4 | 0 | 0 | 1 | 0.8 |
| Total | 70 | 100 | 54 | 100 | 124 | 100 |

Source : Field Survey, Dhaka City, 2003

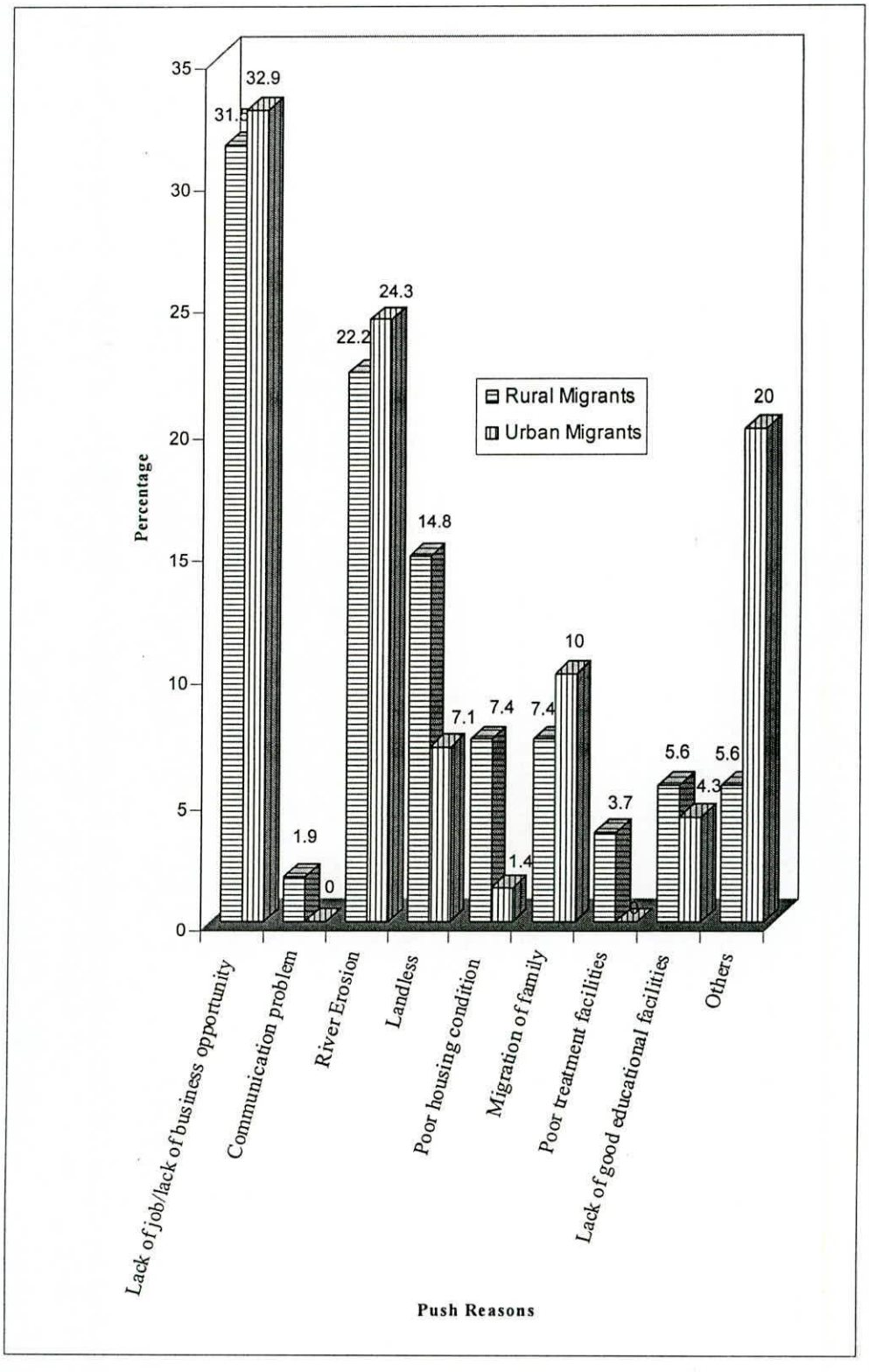


Figure 6.2: Push Reasons of Migration into Dhaka City

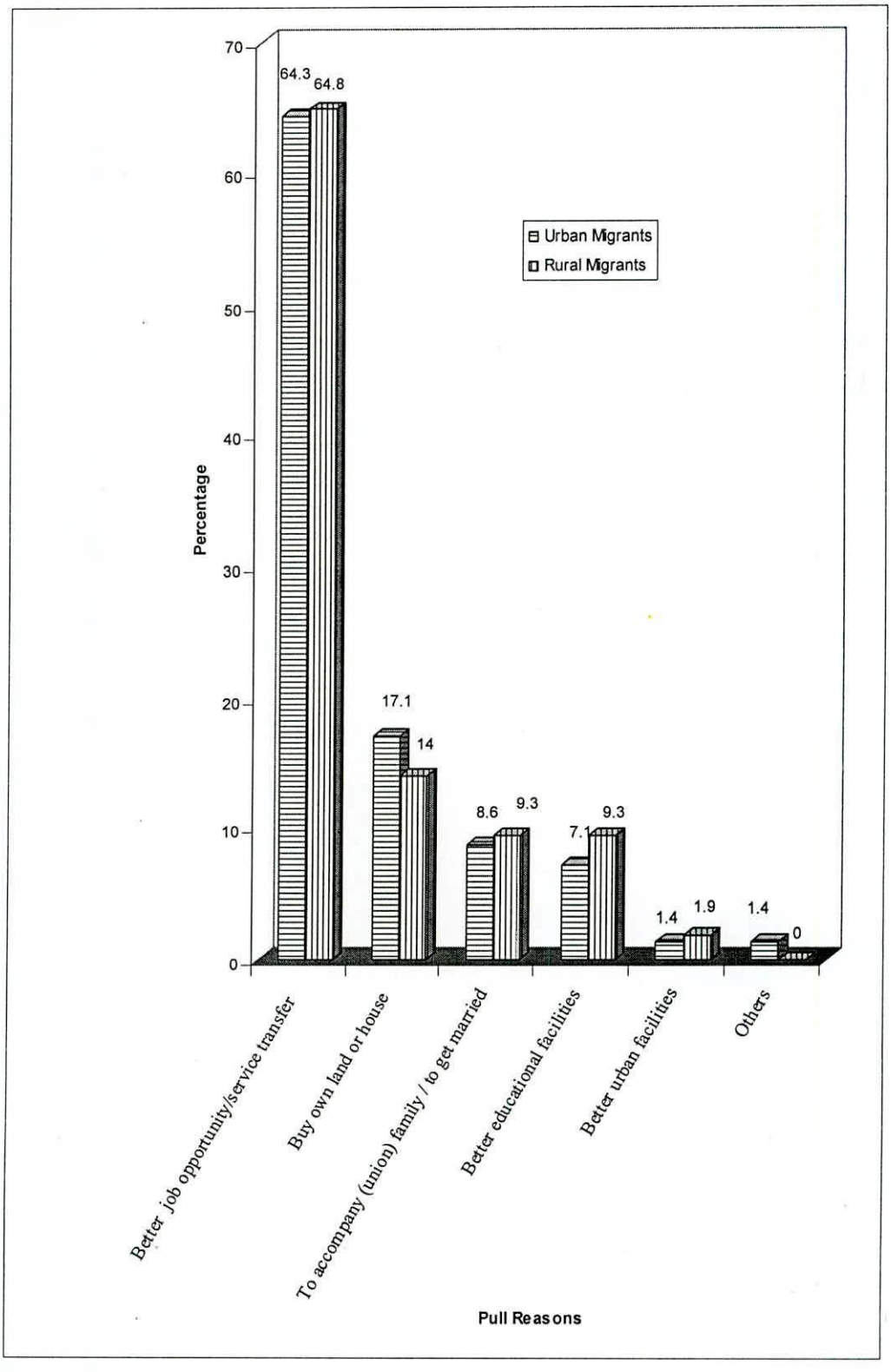


Figure 6.3 : Pull Reasons of Migration into Dhaka City

This study shows that better job opportunity and job transfer are the most important factor for both rural and urban migrants in Dhaka City. About 64.5% migrants moved for better job and 16.1% migrants moved for ownership of house or land. Non economic reasons like marriage/ family reunion, better educational facilities, better urban facilities etc were also influencing household heads to move Dhaka City but these were less than economic reasons.

Both rural push and urban pull factors have contributed to the large scale rural-urban migration in Bangladesh in the last decade. There is a wide spread unemployment and under employment in the rural area as agricultural sector is unable to absorb the increasing members of the labor force. Besides there are many natural hazards and various social factors which act as rural push factors in Bangladesh.

In general, both rural and urban migrants moved to Dhaka City for economic reasons and leads better life. Actually the effect of the push and pull factors in an area may also vary with time, economic development, social conditions and history.

### 6.2.6 Migrants View on Different Problems in Rural and Urban Area of Bangladesh

It is observed in different studies that, there were many problems in rural and urban area of Bangladesh. Priority Ranking Technique was used to identify and rank the different problems in the rural and urban area of Bangladesh. Priority ranking of the problems has been done by getting mini score meaning the lower the ranking value, the higher is the priority (Miah and Weber, 1990).

In this study, eight types of common problems in the rural and urban area of Bangladesh had been identified by pre- testing. These were: lack of job/ work, lack of good housing/land, bad educational institution, bad treatment facilities, bad public transport facilities, lack of urban facilities, lack of shopping facilities and others. Then these problems have been set in the questionnaire for ranking (Appendix B: Question Number 22).

Table 6.7: Rank of Different Problems in Rural and Urban Area of Bangladesh

| Different problems in Rural and Urban Area | Urban Migrants | | Rural Migrants | |
|---|---|---|---|---|
| | [1]Relative Value | Rank | [2]Relative Value | Rank |
| 1. Lack of job/ work | 113 | 1 | 85 | 1 |
| 2. Lack of good housing/land | 281 | 3 | 201 | 2 |
| 3. Bad educational institution | 219 | 2 | 216 | 3 |
| 4. Bad treatment facilities | 341 | 6 | 252 | 5 |
| 5. Bad transport facilities | 332 | 5 | 242 | 4 |
| 6. Lack of urban facilities | 317 | 4 | 253 | 6 |
| 7. Lack of shopping facilities | 416 | 7 | 328 | 7 |
| 8. Others | 502 | 8 | 374 | 8 |

Source : Field Survey, Dhaka City, 2003

Note : See Appendix C, [1]Table 6.1 and [2]Table 6.2

From the pre-coded list of problems, the migrants were asked to answer which was number one problem, which was number two problem and so on. The final rank had been done by summation of total number for each problem. Priority Rank one means number one problem in that area according to migrant's view.

Table 6.7 shows the rank of different problems in urban and rural area of Bangladesh. Among urban migrants, job problem ranked the top most problem in their origin and other problems according to the rank were lack of good educational institute, lack of good housing, bad public transport system, lack of urban facilities, lack of shopping facilities and others.

Among the various problems of rural area, job ranked the number one problem and other priority problems according to the rank were housing problem, good educational institution, bad transport system, poor health facilities, lack of urban facilities, lack of shopping centers and others.

Due to the above mentioned problems arise in rural and urban area; many people migrate from their origin to another place. So government should take proper programs and plans for creating more jobs, better transport facilities, better treatment facilities and better educational institutions in rural and urban area of Bangladesh.

### 6.3 Migrants Characteristics among Different Income Groups

People are expected to move away from relatively low income to relatively high income places. Income level of origin is an important factor which influences household's decision to migrate. This study examined the impact of migration in different income groups. But it was observed that there is no standard definition of income group of Bangladesh. So for the convenient of this study, previous monthly income of migrants in Dhaka City was classified into three groups: i) lower income migrants (less than Tk. 5,000), ii) middle income migrants ( Tk. 5,001-12,000) and iii) upper income migrants ( Tk. 12,000 and more).

Figure 6.4 shows that about 46.4% migrants earned monthly less than Tk. 5000 only, about 26.5% migrants earned Tk. 5001-12000 and 27.1% earned Tk. 12000 and more before migration into Dhaka City. (Appendix C, Table 6.3) This study reveals that due to different social and demographic reasons, lower income groups were more migrated than middle income and upper income groups.

Figure 6.5 shows that lower income male migrants (87.2%) were more migrated than middle income male migrants (83.9%) and upper income male migrants (82.6%). Conversely higher income female migrants were more migrated than lower and middle income female migrants.

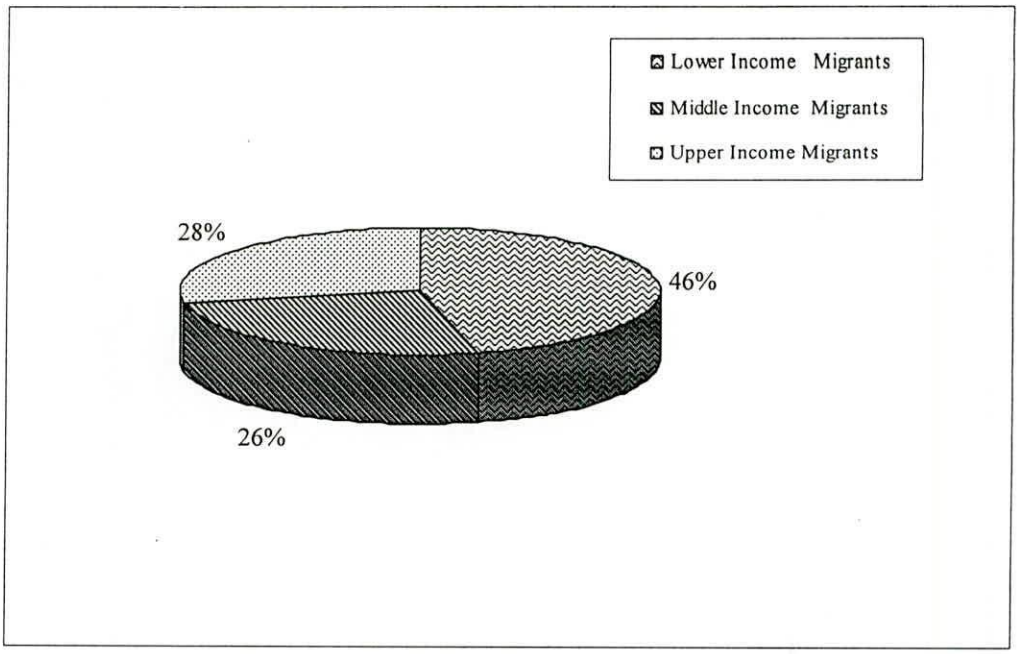


Figure 6.4: Migrant Household Head among Different Income Groups

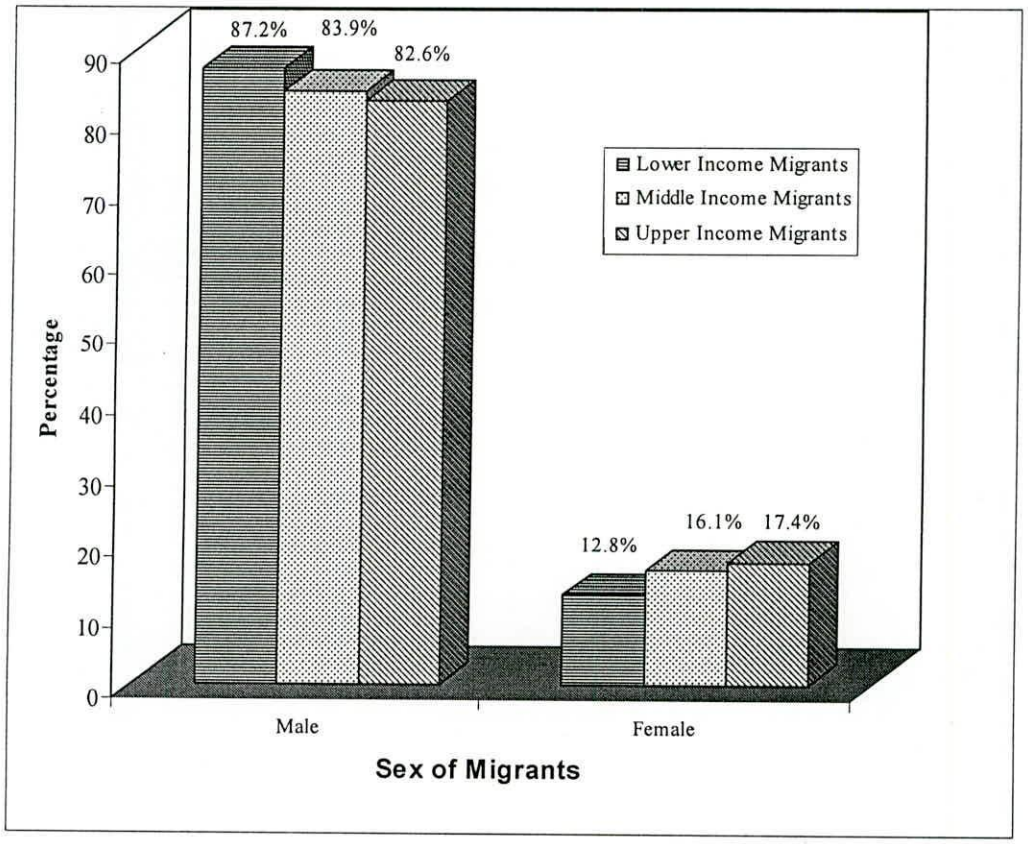


Figure 6.5: Sex of Migrant Household Head among Different Income Groups

In Figure 6.6, it is found that most of the migrants were married in all income groups and about 87% married migrants were from upper class, 80.6% were from middle class and 69.2% were from lower income group. Unmarried migrants were found highest in lower income group (28.2%) as compared to middle class migrants (9.7%) and upper class migrants (4.3%).

It is observed those migrant increases with age, reaching peak 25-44 and decreasing slowly there after. Figure 6.7 shows that there were sharp difference among migrants groups and age. It is seen that middle class migrants (37.1%) were more in age 25-35 years and lower class migrants were found more in age group 15-25 years and 35-45 years. Upper income migrants were found more in age group of 45-55 years, highest migrants were found groups.

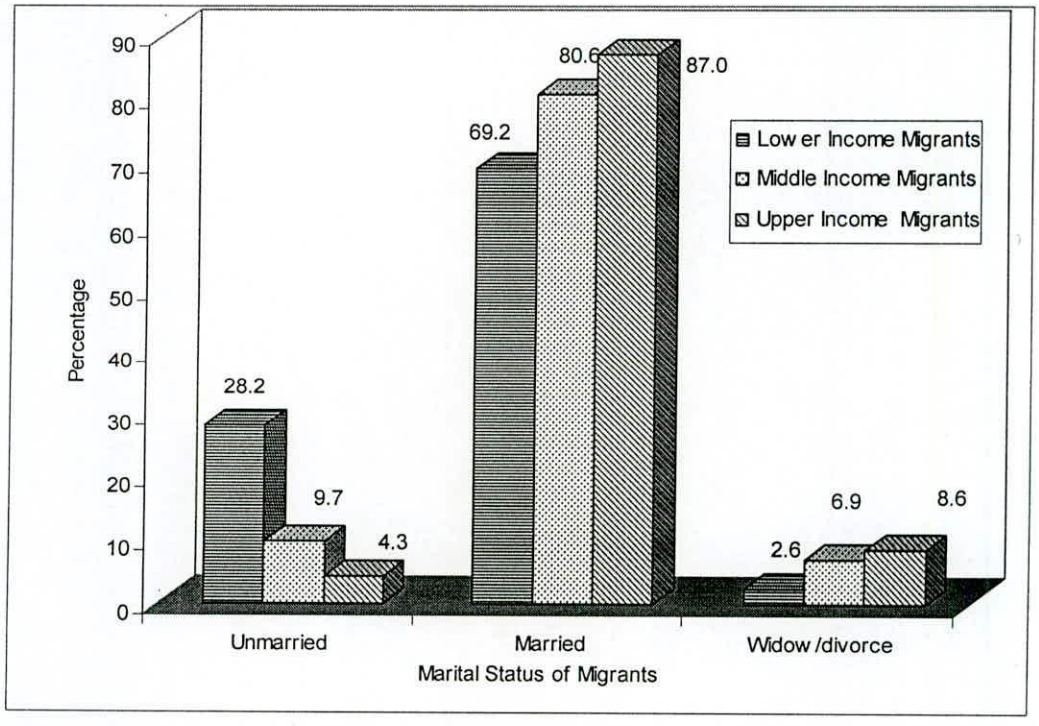


Figure 6.6: Marital Status of Migrant Household Head among Different Income Groups

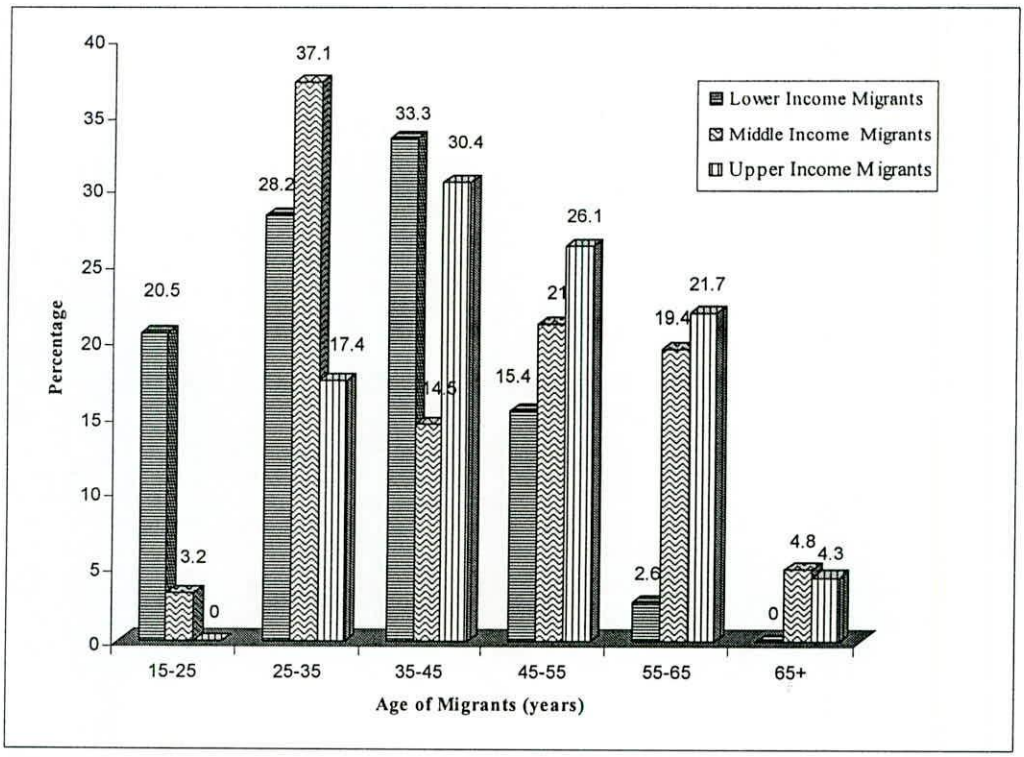


Figure 6.7: Age of Migrant Household Head among Different Income Groups

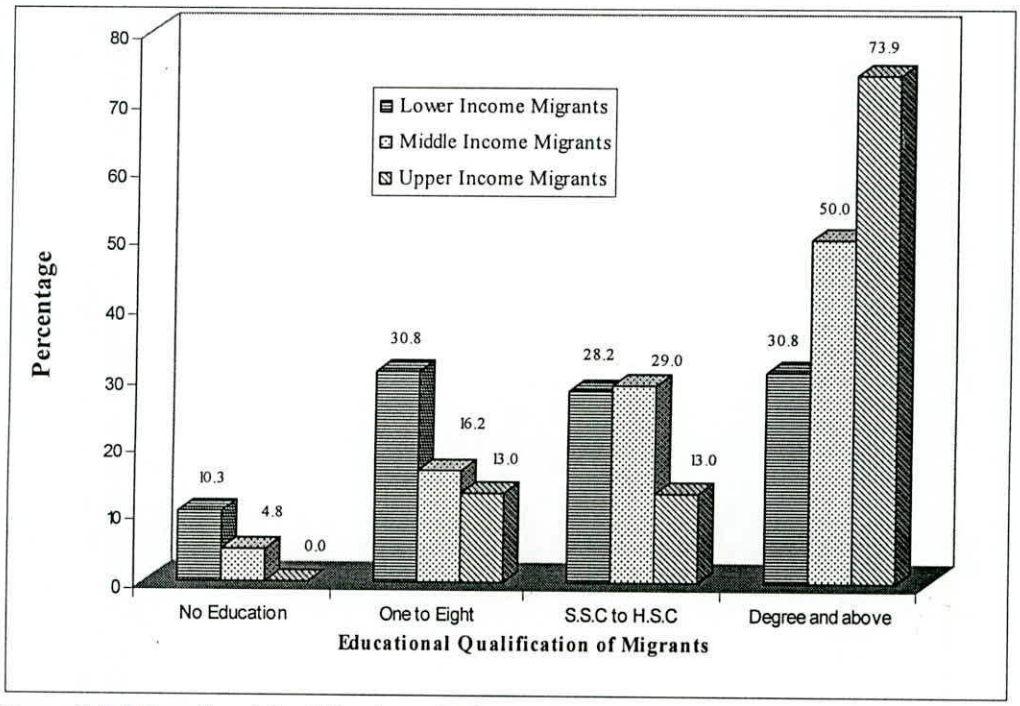


Figure 6.8: Educational Qualification of Migrant Household Head among Different Income Groups

Education is an important factor for migration in Dhaka City. Percentage of illiterate and one to HSC migrants were found more in lower income group than other two income groups. About 60% lower income migrants were less than higher secondary education. Most of the upper migrants (73.9%) and middle migrants (50%) were highly educated. This study showed that less educated lower income groups had expected to leave their origin and come to Dhaka City (Figure 6.8).

There were some difference between family size and different income groups of migrants in Dhaka City. From the Figure 6.9, it is observed that large family size (5 or more) were found more in middle income migrants (71%) and upper income migrants (59%). Small family size (1-4) was found more in upper income migrants.

Factor of house or land ownership status was also varying among different income group of migration in Dhaka City. House or land ownership status on different income groups showed that about 87.2% lower migrants, 74.2% middle migrants and 56.5% upper migrants are lived in rent houses or rent lands. This study shows that migrants of own house holder are less migrated than migrants of rented house holder (Figure 6.10).

It was found that 79% middle income migrants and 51.3% lower migrants were not satisfied about their previous job of their origin (Figure 6.11). Similarly it was seen that 59.7% middle and 56.4% lower migrants were not satisfied about their income before move to Dhaka City (Figure 6.12). It is assumed that most of migrants usually planned to move Dhaka City for getting better job and higher income.

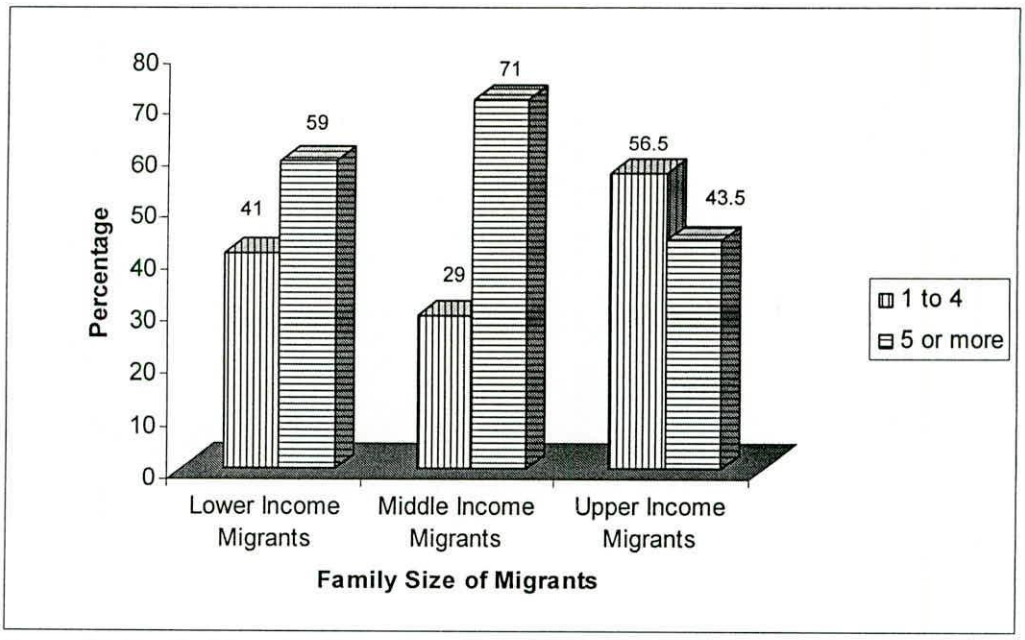


Figure 6.9: Family Size of Migrant Household Head among Different Income Groups

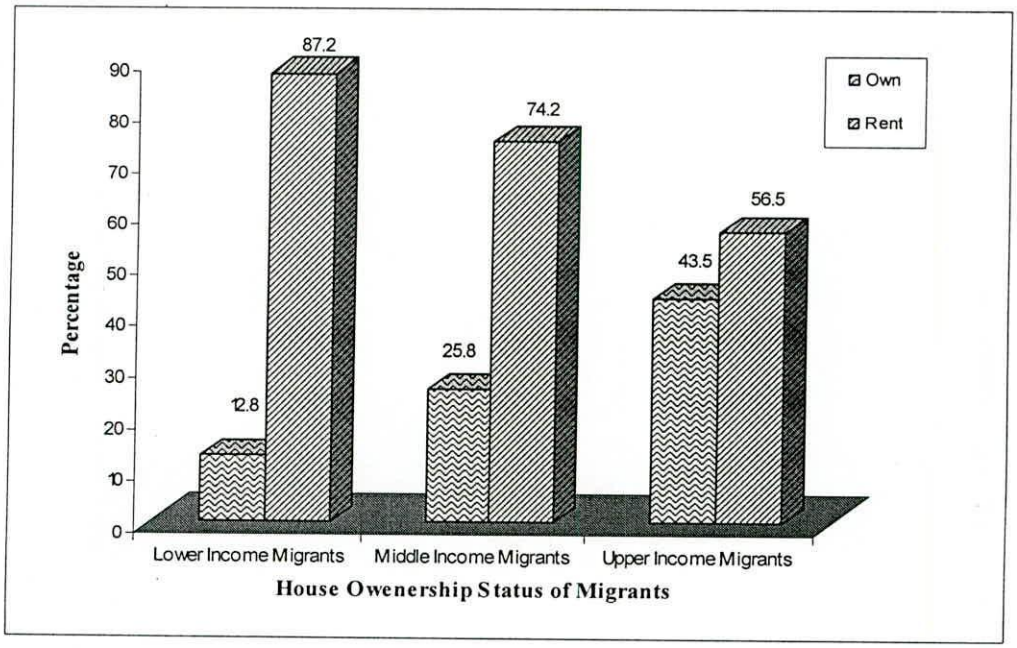


Figure 6.10 : House Ownership Status of Migrant Household Head among Different Income Groups

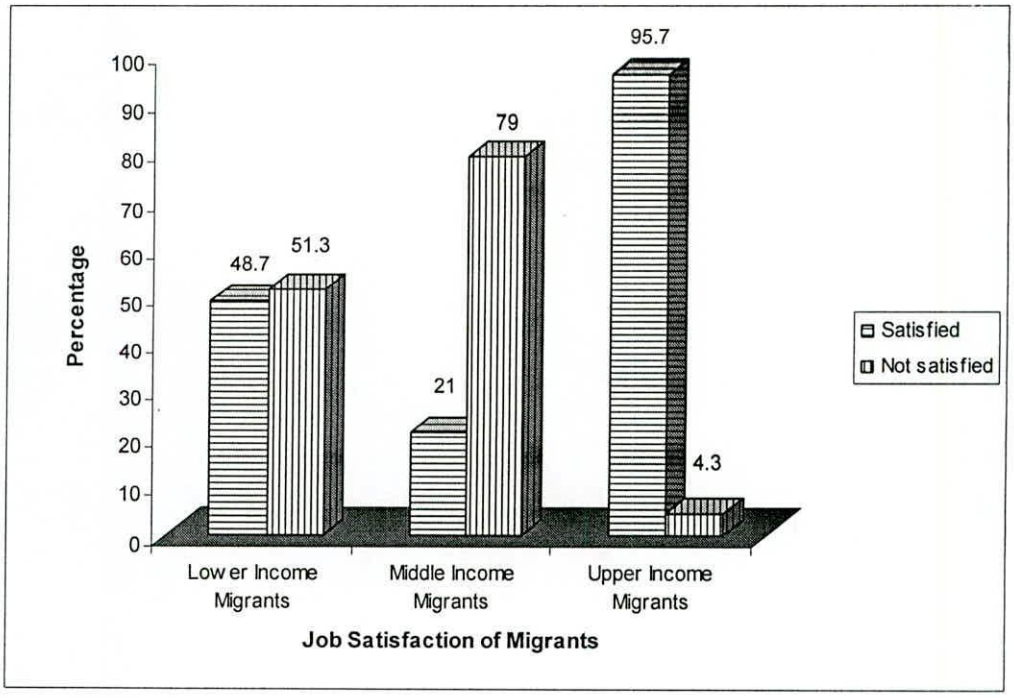


Figure 6.11 : Job Satisfaction of Migrant Household Head among Different Income Groups

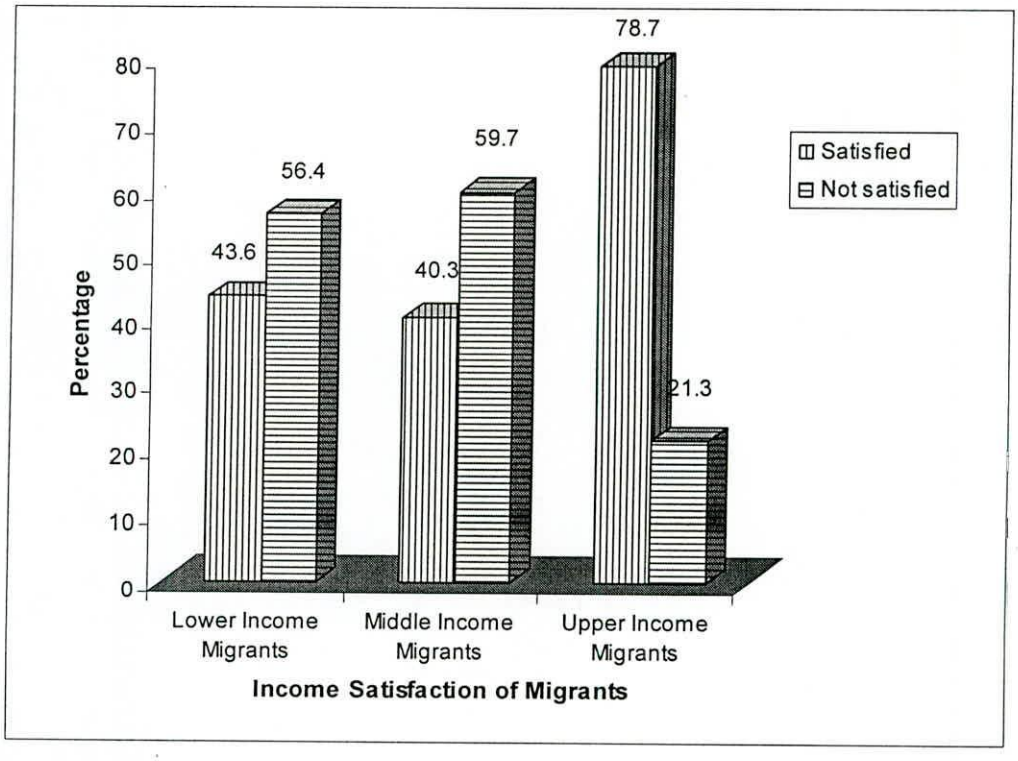


Figure 6.12 : Income Satisfaction of Migrant Household Head among Different Income Groups

### 6.4 Comparison between Migrant's Previous and Current Place of Residence

In this section, migrant's satisfaction about fourteen different aspects of their life at Dhaka City was compared with those in the place of residence before migration. These were nature of jobs/work, income, housing, education, healthcare, public transportation, shopping, physical environment, personal relationship with friends and neighbors, communication and information, security, religious activities, recreational facilities and utility services. Each criterion was divided into three groups: i) better, ii) same and iii) worse (Appendix B: Questionnaire Survey). First the assessment is described in percentage form and then in Satisfaction Index form.

#### 6.4.1 Percentage Method

Table 6.8 shows the current level of satisfaction of migrants about Dhaka City compared to their previous place of residence in 1996. Urban migrants were found satisfactory in the criteria of nature of job (52.9%), income (57.1%), housing (64.3%), children's education (64.3%), health care (87.1%), public transportation (92.9%) and marketing (54.3%). Urban migrants were neither satisfied nor dissatisfied about Dhaka in the field of religious activities (58.6%), security (62.9%), recreational facilities (60.6%) and utility services (55.7%).

Rural migrants got better facilities in the field of transport system (88.9%), health care (81.5%) and income (70.4%) and nature of work (68.5%). Rural migrants were dissatisfied especially in the field of physical environment (42.8%), housing (42.6%) and communication and information (46.3%).

It is also found that about 45.6% urban migrant's were satisfied and about 15.2% urban migrant's were not satisfied in all criteria of life in Dhaka City and 47.1% from rural migrants revealed satisfactory situation and 20.8% rural migrants express dissatisfactory situation in all aspect of life in Dhaka City. This study suggests that rural migrants into Dhaka City seemed more satisfied in different aspect of life than urban migrants.

Table 6.8: Migrants Satisfaction about Dhaka City as Compared to Previous Place of Residence in 1996

| Criteria in Dhaka City | *Urban Migrants (%) | | | **Rural Migrants (%) | | |
|---|---|---|---|---|---|---|
| | Better | Same | Worse | Better | Same | Worse |
| 1. Nature of Job/ work | 52.9 | 45.7 | 1.4 | 68.5 | 25.9 | 5.6 |
| 2. Income | 57.1 | 40.0 | 2.9 | 70.4 | 25.9 | 3.7 |
| 3. Housing | 64.3 | 8.6 | 27.1 | 50.0 | 7.4 | 42.6 |
| 4. Education | 64.3 | 32.9 | 2.9 | 48.2 | 44.4 | 7.4 |
| 5. Healthcare | 87.1 | 10.0 | 2.9 | 81.5 | 11.1 | 7.4 |
| 6.Public transportation | 92.9 | 5.7 | 1.4 | 88.9 | 7.4 | 3.7 |
| 7.Marketing | 54.3 | 22.9 | 22.9 | 53.7 | 16.7 | 29.6 |
| 8.Physical environment | 22.9 | 40.0 | 37.1 | 29.6 | 27.8 | 42.6 |
| 9.Personal relationship with friends, neighbors | 27.1 | 52.9 | 20.0 | 22.2 | 44.4 | 33.3 |
| 10. Communication and information | 21.4 | 44.3 | 34.3 | 16.7 | 37.0 | 46.3 |
| 11. Security | 25.7 | 62.9 | 11.4 | 35.2 | 55.0 | 9.4 |
| 12. Religious activities | 17.1 | 58.6 | 24.3 | 22.2 | 46.3 | 32.1 |
| 13.Recreational facilities | 17.1 | 60.0 | 22.9 | 14.8 | 63.0 | 22.6 |
| 14.Utility services | 34.3 | 55.7 | 10.0 | 46.3 | 46.3 | 7.4 |
| Total | 45.6% | 39.1% | 15.2% | 47.1% | 32.3% | 20.8% |

Source: Field Survey, Dhaka City, 2003

*See Appendix C, Table 6.4* and Table 4.5**

### 6.4.2 Satisfaction Index Method

A satisfaction index is normally used to determine the respondent's satisfaction about different aspects of life. The highest value of satisfaction index is + 1, meaning highly satisfaction, lowest value of satisfaction is – 1 meaning highly dissatisfaction and 0 means neither satisfied and nor dissatisfied. According to Yea and Lee (1975) and Weber (1990), a satisfaction index is defined by

$$I_s = ( f_s - f_d ) / N \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (6.1)$$

where $-1 < I_s < 1$

$I_s$ = A satisfaction index

$f_s$ = Number of satisfied respondents

$f_d$ = Number of dissatisfied respondents and

N= Total number of respondents

Table 6.9 : Satisfaction Index of Migrants about Different Aspects of Life at Dhaka City

| Criteria in Dhaka City | *Urban Migrants (N=70) | | | **Rural Migrants (N=54) | | |
|---|---|---|---|---|---|---|
| | Better ($f_s$) | Worse ($f_d$) | Satisfaction Index Is=(fs-fd)/N | Better ($f_s$) | Worse ($f_d$) | Satisfaction Index Is=(fs-fd)/N |
| 1. Nature of Job/ work | 37 | 1 | .51 | 37 | 3 | .63 |
| 2. Income | 40 | 2 | .54 | 38 | 2 | .67 |
| 3. Housing | 45 | 19 | .37 | 27 | 23 | .07 |
| 4. Education | 45 | 2 | .61 | 26 | 4 | .41 |
| 5. Healthcare | 61 | 2 | .84 | 44 | 4 | .74 |
| 6.Public transport | 65 | 1 | .91 | 48 | 2 | .85 |
| 7.Marketing, | 38 | 16 | .31 | 29 | 16 | .24 |
| 8. Physical environment | 16 | 26 | -.14 | 16 | 23 | -.13 |
| 9. Personal relationship with friends, neighbors etc. | 19 | 14 | .07 | 12 | 18 | -.11 |
| 10. Communication and information | 15 | 24 | -.13 | 9 | 25 | -.30 |
| 11. Security | 18 | 8 | .14 | 19 | 5 | .26 |
| 12. Religious activities | 12 | 17 | -.07 | 12 | 17 | -.09 |
| 13. Recreation | 12 | 16 | -.06 | 8 | 12 | -.07 |
| 14. Urban facilities | 24 | 7 | .24 | 25 | 4 | .39 |
| Total | 447 | 155 | .29 | 350 | 158 | .25 |

Source : Field Survey, Dhaka City, 2003

*See Appendix C, Table 6.4* and Table 4.5**

This study uses the above satisfaction index method (6.1) to compare recent place in Dhaka City with previous place of residence about different aspects of life.

Total satisfaction index for all the variables of urban migrants was somewhat higher (.29) than the index of rural migrants (.25). Table 6.9 shows that among fourteen variables in urban area, ten variables were found positive index of satisfaction and four variables were negative index of satisfaction.

Urban migrants were more satisfied especially in public transport (.91), then healthcare (.84), education (.61) and income (.54). Urban migrants to Dhaka City were considered worse in, physical environment (-.14) and communication and information (-.13), religious facilities (-.07), recreational (-.06) than in the former place of residence.

Among rural migrants nine variables were found positive index and transport had shown the highest value (.85) and other positive variables according to rank were health care (.74), income (.67), nature of work (.63), education (.40), shopping (.24) and last housing (.07).

On the other hand, five variables among rural migrants had shown negative index of satisfaction. Among the negative variables of rural migrants, communication and information (-.30) had shown the lowest and other variables according to least index were physical environment (-.13), religious activities (-.09), recreational facilities (-.07) and personal relationship with neighbors (-.11).

It is found that cities have great attraction for the people of the non-city areas as cities provide better facilities for education, employment, living and others. Therefore, the villages are easily attracted by the way of life in the cities. If an area does not have conductive climate, sufficient drinking water and better transport facilities, the people cannot live there for a long time. Sooner or later, they try to migrate from that place to a better place.

These findings imply that rural urban migration in Dhaka City is likely to increase in future. So, it is suggested that for reducing of rural urban migration in Dhaka City, it is necessary to improve different criteria of origin of migrants especially in nature of work, education, income, housing, transport, place of market and health care.

# Chapter VII

# Summary of the Findings and Recommendations

## 7.1 Summary of the Findings

This chapter has summarized the findings of all chapters of this study and from these findings some general recommendations are made.

- This study used Census Survival Ratio Method and National Growth Rate Methods to estimate net intercensal male and female migration rate in Dhaka City indirectly during 1981-1991 and 1991-2001.
- This study estimated that one third of total household heads of Dhaka City was migrant where 13.5% had come from rural area and 17.5% from urban area. Most of the households had migrated to Dhaka City from Comilla, Faridpur, Noakhali, Jessore and Mymensing.
- This study directly showed that migrants were typically young unmarried men, aged 25-35 years. It was consistently shown that there was a positive association between educational attainment and migration. One third of the total migrant's household was the main earner of their family and about 73% migrants lived in rented houses in Dhaka City.
- This study showed that 30.8% migrants replied that at least one of their family members lived outside their family. Maximum migrants had got information from their friends, taken their own decision and come to Dhaka City individually.
- It was observed in the study that dissatisfaction of migrant's job and income showed a consistently positive impact on migration in Dhaka City. Both rural push and urban pull factors influenced the household head to migrate in Dhaka City. Among push factors, lack of job opportunity, river erosion, poor housing condition and among pull factors, better job opportunity and own land or housing were the most important factors in migration in Dhaka City.

- Logistic regression method was used to find the factors of migration and found that any family member live outside their family, education, job and income satisfaction, family type, family size, income group, age and house ownership status of household heads were significant predictors of migration in Dhaka City.
- Priority Ranking Matrix indicated that job problem was the most important problem in both rural and urban area of Bangladesh. Then good housing problem was the second problem in the rural area and lack of education was the second problem in the urban area of Bangladesh.
- This study showed that lower income group of male and moderate educated persons were moving in Dhaka City than upper and middle income group. It was found that middle income group with large family size; aged 25-35 and married were more migrated than other two groups.
- It was evident from migrant's satisfaction index that migrants from rural areas was more satisfied with the living conditions of Dhaka City than those who moved from urban areas. Maximum migrants expressed a higher degree of satisfaction at improvement in economic aspects, such as nature of work and income and non economic aspects, such as public transport, healthcare, education and lower degree of satisfaction in physical environment, recreation and communication and information.

In general, most migrants both rural and urban migrants had moved to Dhaka City for economic and non economic reasons and leaded better life.

### 7.2 Some Policy Recommendations

A set of policies and strategies based on the findings was recommended so that a balanced migration process could be established in Bangladesh.

- *Urban decentralization* through promotion of new locations in non-metropolitan areas can play a vital role in moulding migration flows and national settlement pattern. To be more specific, this refers to the promotion of locations, mainly rural market centres, to small rural towns. It assumes that small towns within a

self-reliant territorial unit can promote rural development through greater local control over resources complementary urban-rural linkages and decision making at the local level. The approach suggests measures such as rural industrialization, diversification of agriculture, retention of surpluses at the local level, comprehensive land reform, introducing and adopting the key elements of urbanism to specific rural setting (Friedman and Dauglass 1978: Douglass 1992). It was found that such industrial and urban decentralization strategies had been fairly successful in Republic of Korea, Cuba, Poland, India, Malaysia, Tanzania and Japan (Simmon's 1979 and Oberai, 1987).

- Instead of allowing the prevailing urban centers to be bear the burnt of migration it is necessary to develop small urban centers in the form of *Compact Townships* that would not only absorb willing migrants but also encourage other rural households to move to these Compact Towns. Similar concept had been used in other countries like Germany and Srilanka.
- The new industries should be established in middle-sized towns, small towns, or new locations selected on account of the accessibility of raw materials or other considerations.
- In the light of Todaro model (1976) it can be recommended that *imbalances in urban-rural employment opportunities* need to be reduced. The lower the rural-urban wage differential, the lower is the rate of migration. The higher the perceived probability of finding a job in Dhaka City, the greater is the rate of migration. By creating and increasing *wage rate* in different area or less populated area, population can redistribute or rural urban migration can reduce.
- Improvement of the *transport and communication* system tends to facilitate commuting and circular migration.
- When people get jobs in a new area, they settle there. People in government services or even in private service may be transferred to new places where they may settle. The government may be *redistributing population* from thickly populated areas to sparsely populated areas. Internal migration may be government-sponsored, as in china and Russia.

- *The rates charged* for all infrastructural inputs and services should be enhanced in Dhaka City and reduced in other urban rural areas.
- *Subsidies and tax incentives* may be provided only for offices, factories of industries which will be out of Dhaka City.
- *Direct mobility controls* rely on the use of methods such as police registration, travel restrictions, location specific passes, and employment limitations, ration cards and enforced resettlement programmes in order to stop or redirect migratory movements. They have mainly been adopted to limit rural out-migration, to hinder urban in-migration, and to direct migratory movements to less settled areas. Such control requires efficient administration and has mainly been adopted by strong, stable, authoritarian regimes and centrally-planned economies (Oberai, 1983). In China, redistributing population to rural areas may have enabled the government to reduce urban unemployment and poverty, however, this was largely achieved through laws that restricted movement (Saith, 1999)
- Countries have developed '*nativist policies*', designed to discourage migration. In India, every state government is committed to giving employment preference to persons born in the state or who have resided there for a specified length of time. In Malaysia, Malays are considered *bumiputra* or 'sons of the soil' with special rights to education, employment and land, in contrast to ethnic Chinese Malaysians. Government of Bangladesh can take nativist policy in education, employment and other sector to reduce rural urban migration.
- By increasing economic opportunities in rural areas through, e.g. promotion of small labour intensive industries and minor public works. Rural off-farm development also helps to satisfy the basic needs and practical ambitions of rural residents and hence reduce rural urban migration in Dhaka City.
- Many governments of different countries had passed laws to restrict the size of cities and to foster a more dispersed urbanization pattern by shifting resources to the hinterland and secondary cities.

In this study it had seen that, the migration issue is closely related to a number of social and economic issues. Therefore, appropriate migration policies should be integrated with social-economic development policies and plans; otherwise they will be less realistic and effective.

### 7.3 Conclusion

Migration has become an important topic of research and policy development in many third world countries. Internal migration patterns vary greatly from one country to another.

The study of migration is also important for social and economic and environment consequences. This is true of both the developed and developing countries. Rural-urban migration is recognized as a necessary concomitant of industrialization and modernization. On the other hand, it is feared that urbanization may be running ahead of the growth of the economy. Therefore this study estimates the internal migration into Dhaka City for last two decade indirectly. Besides, this study described the social and economic characteristics of the migrants, reasons of migration and factors of migration in Dhaka City. The author believed that this research had provided some interesting and important results which may be useful for researchers, planners and other social scientists for working in the field of migration.

### 7.4 Scope for Further Study

In order to push this study forward, the following suggestions are provided. First, expanding the data set to include more recent data as soon as the data of Bangladesh Population Census of 2001 come out. These data can be used to estimate recent intercensal net migration rate in Dhaka City through different indirect methods. Both circulation and migration remain important in the mobility patterns of Dhaka City. There is a need for better systems of data collection, and the use of common definitions and categories for better policy. Further research is needed to determine

the national influence and socio-economic significance of these two patterns in the overall mobility of the country.

From a policy or socio-economic planning perspective, it would be useful to study migration intensions and to examine their correlates. The results would help not only to predict future migration flows, but also to provide the basis for social and economic planning in cities with large numbers of temporary migrants. Due to limited time and cost, this study had only estimated four Thana's of Dhaka City. So there is a great scope of further study to work in whole Dhaka City about this topic and also, there is a further opportunity to study all cities of Bangladesh for future City planning.

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# APPENDIX A: SAMPLE SELECTION PROCEDURE

It is decided to take total 400 Household Head from Dhaka City for the convenience of this study. Randomly four Thanas of Dhaka City has been selected for the study . Sample household heads of the selected area is given bellow:

| Study Area (Selected Thana of Dhaka City) | Population* (Household Head) | Sample (Household Head) |
|---|---|---|
| Khilgaon | 67920 | 82 |
| Badda | 79140 | 96 |
| Sabujbagh | 64980 | 79 |
| Mirpur | 118460 | 143 |
| **Total** | **330500** | **400** |

*Source: Bangladesh Population Census ,2001

**Selection Procedure :**

N = Total Household Head of four Thanas = 330500

n = Sample Household Head = 400

$N_k$ = Total Household Head of Khilgaon Thana = 67920

$N_B$ = Total Household Head of Badda Thana = 79140

$N_S$ = Total Household Head of Sabujbagh Than = 64980

$N_M$ = Total Household Head of MirpurThana =118460

Formula of selecting Sample household heads of differet Thana is given bellow :

$n_k$ = Total Sample Household Head of Khilgaon Thana = $(N_k / N)*n = 82$

$n_B$ = Total Sample Household Head of Badda Thana= $(N_B / N)*n = 96$

$n_S$ = Total Sample Household Head of Sabujbagh Thana= $(N_S / N)*n = 79$

$n_M$ = Total Sample Household Head of Mirpur Thana= $(N_M / N)*n = 143$

# APPENDIX B : QUESTIONNAIRE SURVEY

**BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA**
Department of Urban and Regional Planning

***"Factors Affecting the Internal Migration to Dhaka City"***
(For Research Only)

---

Date----------

1. Household Number : _____
2. Address of the household: _____
3. Name of the ward and area: _____
4. Name of Household Head : _____

## Section 1 : Background and Characteristics of the Household
**(Before Migration)**

5. Please write the information on household heads and other members:

| Sl | **Relationship of the Household Head** | **Sex** 1.Male 2.Female | **Age** (Years) | **Marital Status** 1. Never married 2. Married 3. Widow/widower 4. Divorce/separated | **Education** 1. No education 2. Up to class Eigh 3. S.S.C/ H.S.C 4. Degree 5. Master and abo |
|---|---|---|---|---|---|
| 1 | Household head : | | | | |
| 2 | Member -1 | | | | |
| 3 | Member -2 | | | | |
| 4 | Member -3 | | | | |
| 5 | Member -4 | | | | |

**(Only for Household Head )**

6. What was the number of Family member of the household head at the time of migration?

7. What was the family type of the household at the time of migration?
   a) Nuclear
   b) Extended/Joint

8. What was the number of adult male members (15+) in the family ?

9. What was the number of members outside the family?

10. What was the total monthly income (Taka) of your family before migration?

11. What was the ownership status of your housing?
    1. Owned
    2. Rented
    3. Others (Specify)

12. What was the previous occupation of the household head?
    1. Farmers (Agricultural, forestry worker, fisherman)
    2. Industrial worker
    3. Construction
    4. Transport
    5. Dr./Engg./ Lawyer /Technical and related worker
    6. NGO/ Private Services
    7. Bank /education/ health services,
    8. Others
    9. No work/unemployed

13. Did you satisfied about your past job?
    1). Yes
    2). No

14. Did you satisfied about your past income?
    1). Yes
    2). No

15. What was your birth place and district?
    a) District (specify):.....
    b) Type of place:
        1.Urban
        2.Rural

16. What was the last place of residence before moving to the current place and when did you come to this place (years)?
    a) District (Specify):.....
    b) Type of Place:
        1.Urban
        2. Rural
    c) Duration of living in current place (years):.....

17. Where did you live in June' 1996 (when national election occurs)? If tick code 1, then stop. If tick code 2 then go to section 2
    1. Within Dhaka City (Non Migrant)
    2. Out of Dhaka City (Migrant). If migrant then specify the districts and type of place
    (a) District (specify):.....
    (b) Type of Place : 1. Urban 2. Rural

## Section 2 : Migration History (Within Country)

**(Only Migrated persons aged 15 and above)**

18. What was the main reasons for leaving the place of origin and choosing this place?

| Main reasons for leaving the place of origin (Push factor) | Main reason for choosing Dhaka City (Pull factor) |
|---|---|
| 1. Lack of job / business opportunity<br>2. Landless<br>3. Poor housing condition<br>4. River Erosion<br>5. Lack of educational facilities<br>6. Poor condition of health service<br>7. Migration of family<br>8. Get married<br>9. Others (political, bad environment, security, communication problem) | 1. Better job opportunity/business<br>2. Job transfer<br>3. Buy own land /house<br>4. To accompany (union) family/ to get married<br>5. Better educational facilities for the children<br>6. Better treatment facilities<br>7. Better urban facilities<br>8. Others (Better cultural life/ social services /better physical environment) |

19. How did you first learn about this place before moving here?
    1. No information
    2. Relatives
    3. Friends
    4. Others

20. Who was the main decision maker for moving to this place from the previous place?
    1. Yourself
    2. Spouses/ Children
    3. Parents/Brothers/ Sisters
    4. Others (specify)

21. What was your movement status?
    1. Moved alone
    2. Moved with family members
    3. Moved with relatives
    4. Moved with others (specify)

22. According to you, what was the main problems of your origin for which people migrate from this place to Dhaka City. Rank these problems according to your priority.

    1. Lack of job/ work
    2. Lack of good housing/land
    3. Bad educational institution
    4. Bad treatment facilities
    5. Bad public transport
    6. Lack of urban facilities
    7. Lack of shopping facilities
    8. Others (Specify)

23. How could you compare your situation in Dhaka City with when you used to live in your place of residence in 1996? Comment whether your situation is better, same or worse.

| SL | Criterion | Better | Same | Worse |
|---|---|---|---|---|
| 1. | Your type of job/work | | | |
| 2. | Your income received | | | |
| 3. | Your housing condition | | | |
| 4. | Your education and skill obtained | | | |
| 5. | Your health care | | | |
| 6. | Public transportation | | | |
| 7. | Marketing, meaning buying and selling | | | |
| 8. | Physical environment | | | |
| 9. | Your personal relationship with friends, neighbors | | | |
| 10. | Communication and information | | | |
| 11. | Religious activities | | | |
| 12. | Recreational facilities | | | |
| 13 | Relationship with local officials | | | |
| 14. | Urban facilities | | | |

Thanks for the cooperation.

Signature of interviewer

_____

Signature of the respondent

_____

# APPENDIX C: DIFFERENT TABLES

Table 4.1: Intercensal Male Migration Rate by Age in Dhaka City, 1981-1991 (Forward Method)

| Age Group (1981) | Male Population in Dhaka City (1981) | Male population in Bangladesh (1981) | Age Group (1991) | Male Population in Dhaka City (1991) | Male population in Bangladesh (1991) | Ten years Survival Ratios in Bangladesh (1981-1991) | Expected Survivors in Dhaka City (1991) | Estimated Net Rural Urban Male Migration in Dhaka City, (1981-1991) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6/3 | 8=7*2 | 9=5-8 |
| 0-4 | 230065 | 7718000 | 10--14 | 317018 | 6902330 | 0.894315885 | 205751 | 111267 |
| 5-9 | 229630 | 7363000 | 15-19 | 269116 | 4546460 | 0.617473856 | 141791 | 127325 |
| 10-14 | 237956 | 6442000 | 20-24 | 337736 | 4093287 | 0.63540624 | 151199 | 186537 |
| 15-19 | 201728 | 4290000 | 25-29 | 340321 | 4323810 | 1.007881119 | 203318 | 137003 |
| 20-24 | 230226 | 3359000 | 30-34 | 254392 | 3366878 | 1.002345341 | 230766 | 23626 |
| 25-29 | 233313 | 3369000 | 35-39 | 227173 | 3269087 | 0.970343425 | 226394 | 779 |
| 30-34 | 165308 | 2551000 | 40-44 | 162166 | 2454523 | 0.962180713 | 159056 | 3110 |
| 35-39 | 136211 | 2426000 | 45-49 | 105126 | 1937831 | 0.798776175 | 108802 | -3676 |
| 40-44 | 101478 | 1982000 | 50-54 | 81349 | 1635758 | 0.825306761 | 83750 | -2401 |
| 45-49 | 70471 | 1613000 | 55-59 | 43174 | 1089031 | 0.67515871 | 47579 | -4405 |
| 50-54 | 58420 | 1440000 | 60-64 | 47098 | 1226396 | 0.851663889 | 49754 | -2656 |
| 55-59 | 29746 | 932000 | 65-69 | 20631 | 631787 | 0.677883047 | 20164 | 467 |
| 60+ | 64936 | 2810000 | 70+ | 39111 | 1349662 | 0.480306762 | 31189 | 7922 |
| Total | | | | | | | | **584898** |

Source : Bangladesh Population Census, 1981 and 1991

Table 4.2 : Intercensal Male Migration Rate by Age in Dhaka City, 1981-1991 (Backward Method)

| Age group (1981) | Male Population in Dhaka City(1981) | Male population in Bangladesh (1981) | Age group (1991) | Male population in Dhaka City(1991) | Male population in Bangladesh (1991) | Ten years Survival Ratios in Bangladesh (1981-1991) | Expected Survivors in Dhaka City (1991) | Estimated Net Rural Urban Male Migration in Dhaka City, (1981-1991) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6/3 | 8=5/7 | 9=8-2 |
| 0-4 | 230065 | 7718000 | 10--14 | 317018 | 6902330 | 0.894315885 | 354481 | 124416 |
| 5-9 | 229630 | 7363000 | 15-19 | 269116 | 4546460 | 0.617473856 | 435834 | 206204 |
| 10-14 | 237956 | 6442000 | 20-24 | 337736 | 4093287 | 0.63540624 | 531528 | 293572 |
| 15-19 | 201728 | 4290000 | 25-29 | 340321 | 4323810 | 1.007881119 | 337660 | 135932 |
| 20-24 | 230226 | 3359000 | 30-34 | 254392 | 3366878 | 1.002345341 | 253797 | 23571 |
| 25-29 | 233313 | 3369000 | 35-39 | 227173 | 3269087 | 0.970343425 | 234116 | 803 |
| 30-34 | 165308 | 2551000 | 40-44 | 162166 | 2454523 | 0.962180713 | 168540 | 3232 |
| 35-39 | 136211 | 2426000 | 45-49 | 105126 | 1937831 | 0.798776175 | 131609 | -4602 |
| 40-44 | 101478 | 1982000 | 50-54 | 81349 | 1635758 | 0.825306761 | 98568 | -2910 |
| 45-49 | 70471 | 1613000 | 55-59 | 43174 | 1089031 | 0.67515871 | 63946 | -6525 |
| 50-54 | 58420 | 1440000 | 60-64 | 47098 | 1226396 | 0.851663889 | 55301 | -3119 |
| 55-59 | 29746 | 932000 | 65-69 | 20631 | 631787 | 0.677883047 | 30434 | 688 |
| 60+ | 64936 | 2810000 | 70+ | 39111 | 1349662 | 0.480306762 | 81429 | 16493 |
| Total | | | | | | | | **787756** |

Source : Bangladesh Population Census, 1981 and 1991

Table 4.3 : Intercensal Female Migration Rate by Age in Dhaka City, 1981-1991 (Forward Method)

| Age group (1981) | Female population in Dhaka City (1981) | Female population in Bangladesh (1981) | Age group (1991) | Female population in Dhaka City (1991) | Female population in Bangladesh (1991) | Ten years survival Ratios in Bangladesh (1981-1991) | expected survivors in Dhaka City (1991) | Estimated Net Rural Urban Female Migration in Dhaka City, (1981-1991) |
|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** | 6 | **7=6/5** | **8=7*2** | **9=5-8** |
| 0-4 | 222575 | 7615000 | 10--14 | 305939 | 6012429 | 0.789550755 | 175734 | 130205 |
| 5-9 | 220954 | 7181000 | 15-19 | 245247 | 4386702 | 0.610876201 | 134976 | 110271 |
| 10-14 | 214393 | 5595000 | 20-24 | 274004 | 4724125 | 0.844347632 | 181022 | 92982 |
| 15-19 | 156183 | 4223000 | 25-29 | 247148 | 4730260 | 1.120118399 | 174943 | 72205 |
| 20-24 | 156994 | 3635000 | 30-34 | 161903 | 3225838 | 0.887438239 | 139322 | 22581 |
| 25-29 | 129133 | 3261000 | 35-39 | 120358 | 2716944 | 0.833162833 | 107589 | 12769 |
| 30-34 | 88277 | 2520000 | 40-44 | 84302 | 2158804 | 0.856668254 | 75624 | 8678 |
| 35-39 | 63766 | 2128000 | 45-49 | 54858 | 1624534 | 0.763408835 | 48680 | 6178 |
| 40-44 | 52697 | 1811000 | 50-54 | 50936 | 1469759 | 0.811573164 | 42767 | 8169 |
| 45-49 | 34674 | 1304000 | 55-59 | 25693 | 860690 | 0.660038344 | 22886 | 2807 |
| 50-54 | 33628 | 1321000 | 60-64 | 32896 | 1043746 | 0.790118092 | 26570 | 6326 |
| 55-59 | 15364 | 721000 | 65-69 | 13347 | 461132 | 0.639572816 | 9826 | 3521 |
| 60+ | 50021 | 2302000 | 70+ | 29049 | 990042 | 0.430079062 | 21513 | 7536 |
| Total | | | | | | | | **484226** |

Source : Bangladesh Population Census, 1981 and 1991

Table 4.4 : Intercensal Female Migration Rate by Age in Dhaka City, 1981-1991 (Backward Method)

| Age group (1981) | Female population in Dhaka City(1981) | Female population in Bangladesh (1981) | Age group (1991) | Female population in Dhaka City(1991) | Female population in Bangladesh (1991) | Ten years survival Ratiosin Bangladesh ( 1981-1991) | expected survivors in Dhaka City (1991) | Estimated Net Rural Urban Female Migration in Dhaka City, (1981-1991) |
|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** | 6 | **7=6/5** | **8=7/2** | **9=5-8** |
| 0-4 | 222575 | 7615000 | 10--14 | 305939 | 6012429 | 0.789550755 | 387485 | 164910 |
| 5-9 | 220954 | 7181000 | 15-19 | 245247 | 4386702 | 0.610876201 | 401468 | 180514 |
| 10-14 | 214393 | 5595000 | 20-24 | 274004 | 4724125 | 0.844347632 | 324516 | 110123 |
| 15-19 | 156183 | 4223000 | 25-29 | 247148 | 4730260 | 1.120118399 | 220645 | 64462 |
| 20-24 | 156994 | 3635000 | 30-34 | 161903 | 3225838 | 0.887438239 | 182439 | 25445 |
| 25-29 | 129133 | 3261000 | 35-39 | 120358 | 2716944 | 0.833162833 | 144459 | 15326 |
| 30-34 | 88277 | 2520000 | 40-44 | 84302 | 2158804 | 0.856668254 | 98407 | 10130 |
| 35-39 | 63766 | 2128000 | 45-49 | 54858 | 1624534 | 0.763408835 | 71859 | 8093 |
| 40-44 | 52697 | 1811000 | 50-54 | 50936 | 1469759 | 0.811573164 | 62762 | 10065 |
| 45-49 | 34674 | 1304000 | 55-59 | 25693 | 860690 | 0.660038344 | 38927 | 4253 |
| 50-54 | 33628 | 1321000 | 60-64 | 32896 | 1043746 | 0.790118092 | 41634 | 8006 |
| 55-59 | 15364 | 721000 | 65-69 | 13347 | 461132 | 0.639572816 | 20869 | 5505 |
| 60+ | 50021 | 2302000 | 70+ | 29049 | 990042 | 0.430079062 | 67543 | 17522 |
| Tota | | | | | | | | **624352** |

Source : Bangladesh Population Census, 1981and 1991

Table 4.5 : Male Migration Rate by Age in Dhaka City, 1991-2001 (Forward Method)

| Age group (91) | Male Population in Dhaka City(1991) | Age group (2001) | Male population in Dhaka City(2001) | Male population in Bangladesh (1991) | Male population in Bangladesh (2001) | Ten years Survival Ratiosin Bangladesh ( 1991-2001) | Expected Survivors in Dhaka City (2001) | Estimated Net Rural Urban Male Migration in Dhaka City, (1991-2001) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6/5 | 8=7*2 | 9=4-8 |
| 0-4 | 308525 | 10--14 | 479160 | 8836631 | 8419980 | 0.952849565 | 293978 | 185182 |
| 5--9 | 331814 | 15-19 | 490900 | 9064879 | 6291600 | 0.694063318 | 230300 | 260600 |
| 10--14 | 317018 | 20-24 | 557820 | 6902330 | 4858780 | 0.703933309 | 223160 | 334660 |
| 15-19 | 269116 | 25-29 | 547020 | 4546460 | 4894500 | 1.076551867 | 289717 | 257303 |
| 20-24 | 337736 | 30-34 | 424080 | 4093287 | 4312760 | 1.053617789 | 355845 | 68235 |
| 25-29 | 340321 | 35-39 | 342880 | 4323810 | 4203620 | 0.972202756 | 330861 | 12019 |
| 30-34 | 254392 | 40-44 | 266800 | 3366878 | 3425820 | 1.017506426 | 258845 | 7955 |
| 35-39 | 227173 | 45-49 | 178300 | 3269087 | 2610480 | 0.798534881 | 181406 | -3106 |
| 40-44 | 162166 | 50-54 | 142240 | 2454523 | 2175300 | 0.886241441 | 143718 | -1478 |
| 45-49 | 105126 | 55-59 | 70040 | 1937831 | 1309380 | 0.675693598 | 71033 | -993 |
| 50-54 | 81349 | 60-64 | 74400 | 1635758 | 1528940 | 0.934698164 | 76037 | -1637 |
| 55-59 | 43174 | 65-69 | 34920 | 1089031 | 814140 | 0.747582025 | 32276 | 2644 |
| 60+ | 106840 | 70+ | 67180 | 3207845 | 1865100 | 0.581418367 | 62119 | 5061 |
| Total | | | | | | | | **1126446** |

Source : Bangladesh Population Census, 1991 and, 2001

Table 4.6 : Male Migration Rate by Age in Dhaka City, 1991-2001 (Backward Method)

| Age Group (1991) | Male population in Dhaka City(1991) | Age group (2001) | Male population in Dhaka City(2001) | Male population in Bangladesh (1991) | Male population in Bangladesh (2001) | Ten years Survival Ratiosin Bangladesh ( 1991-2001) | Expected Survivors in Dhaka City (2001) | Estimated Net Rural Urban Male Migration in Dhaka City, (1991-2001) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6/5 | 8=4/7 | 9=8-2 |
| 0-4 | 308525 | 10--14 | 479160 | 8836631 | 8419980 | 0.952849565 | 502871 | 194346 |
| 5--9 | 331814 | 15-19 | 490900 | 9064879 | 6291600 | 0.694063318 | 707284 | 375470 |
| 10-14 | 317018 | 20-24 | 557820 | 6902330 | 4858780 | 0.703933309 | 792433 | 475415 |
| 15-19 | 269116 | 25-29 | 547020 | 4546460 | 4894500 | 1.076551867 | 508122 | 239006 |
| 20-24 | 337736 | 30-34 | 424080 | 4093287 | 4312760 | 1.053617789 | 402499 | 64763 |
| 25-29 | 340321 | 35-39 | 342880 | 4323810 | 4203620 | 0.972202756 | 352684 | 12363 |
| 30-34 | 254392 | 40-44 | 266800 | 3366878 | 3425820 | 1.017506426 | 262210 | 7818 |
| 35-39 | 227173 | 45-49 | 178300 | 3269087 | 2610480 | 0.798534881 | 223284 | -3889 |
| 40-44 | 162166 | 50-54 | 142240 | 2454523 | 2175300 | 0.886241441 | 160498 | -1668 |
| 45-49 | 105126 | 55-59 | 70040 | 1937831 | 1309380 | 0.675693598 | 103656 | -1470 |
| 50-54 | 81349 | 60-64 | 74400 | 1635758 | 1528940 | 0.934698164 | 79598 | -1751 |
| 55-59 | 43174 | 65-69 | 34920 | 1089031 | 814140 | 0.747582025 | 46711 | 3537 |
| 60+ | 106840 | 70+ | 67180 | 3207845 | 1865100 | 0.581418367 | 115545 | 8705 |
| Total | | | | | | | | **1372644** |

Source : Bangladesh Population Census, 1991 and 2001

Table 4.7 : Intercensal Female Migration Rate by Age in Dhaka City, 1991-2001 (Forward Method)

| Age group (91) | Female population in Dhaka City(1991) | Age group (2001) | Female population in Dhaka City(2001) | Female population in Bangladesh (1991) | Female population in Bangladesh (2001) | Ten years Survival Ratiosin Bangladesh ( 1991-2001) | Expected Survivors in Dhaka City (2001) | Estimated Net Rural Urban Female Migration in Dhaka City, (1991-2001) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6/5 | 8=7*2 | 9=4-8 |
| 0-4 | 295933 | 10--14 | 435980 | 8656223 | 7431940 | 0.858566144 | 254078 | 181902 |
| 5--9 | 316192 | 15-19 | 441380 | 8525414 | 5671660 | 0.665265053 | 210351 | 231029 |
| 10--14 | 305939 | 20-24 | 478360 | 6012429 | 6056920 | 1.007399838 | 308203 | 170157 |
| 15-19 | 245247 | 25-29 | 407140 | 4386702 | 5865140 | 1.337027225 | 327902 | 79238 |
| 20-24 | 274004 | 30-34 | 285040 | 4724125 | 4435700 | 0.938946366 | 257275 | 27765 |
| 25-29 | 247148 | 35-39 | 219260 | 4730260 | 3794700 | 0.80221806 | 198267 | 20993 |
| 30-34 | 161903 | 40-44 | 155660 | 3225838 | 2774280 | 0.860018389 | 139240 | 16420 |
| 35-39 | 120358 | 45-49 | 100700 | 2716944 | 1990680 | 0.732690847 | 88185 | 12515 |
| 40-44 | 84302 | 50-54 | 85720 | 2158804 | 1826300 | 0.84597768 | 71318 | 14402 |
| 45-49 | 54858 | 55-59 | 39900 | 1624534 | 1047060 | 0.644529447 | 35358 | 4542 |
| 50-54 | 50936 | 60-64 | 48020 | 1469759 | 1299700 | 0.884294636 | 45042 | 2978 |
| 55-59 | 25693 | 65-69 | 22360 | 860690 | 629000 | 0.730809002 | 18777 | 3583 |
| 60+ | 75292 | 70+ | 50280 | 2494920 | 1453460 | 0.582567778 | 43863 | 6417 |
| Total | | | | | | | | 771942 |

Source : Bangladesh Population Census, 1991 and 2001

Table 4.8 : Female Migration Rate by Age in Dhaka City, 1991-2001 (Backward Method)

| Age group (91) | Female population in Dhaka City(1991) | Age group (2001) | Female population in Dhaka City(2001) | Female population in Bangladesh (1991) | Female population in Bangladesh (2001) | Ten years Survival Ratios in Bangladesh ( 1991-2001) | Expected Survivors in Dhaka City (2001) | Estimated Net Rural Urban Female Migration in Dhaka City, (1991-2001) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6/5 | 8=4/7 | 9=8-2 |
| 0-4 | 295933 | 10--14 | 435980 | 8656223 | 7431940 | 0.858566144 | 507800 | 211867 |
| 5--9 | 316192 | 15-19 | 441380 | 8525414 | 5671660 | 0.665265053 | 663465 | 347273 |
| 10--14 | 305939 | 20-24 | 478360 | 6012429 | 6056920 | 1.007399838 | 474846 | 168907 |
| 15-19 | 245247 | 25-29 | 407140 | 4386702 | 5865140 | 1.337027225 | 304511 | 59264 |
| 20-24 | 274004 | 30-34 | 285040 | 4724125 | 4435700 | 0.938946366 | 303574 | 29570 |
| 25-29 | 247148 | 35-39 | 219260 | 4730260 | 3794700 | 0.80221806 | 273317 | 26169 |
| 30-34 | 161903 | 40-44 | 155660 | 3225838 | 2774280 | 0.860018389 | 180996 | 19093 |
| 35-39 | 120358 | 45-49 | 100700 | 2716944 | 1990680 | 0.732690847 | 137439 | 17081 |
| 40-44 | 84302 | 50-54 | 85720 | 2158804 | 1826300 | 0.84597768 | 101327 | 17025 |
| 45-49 | 54858 | 55-59 | 39900 | 1624534 | 1047060 | 0.644529447 | 61906 | 7048 |
| 50-54 | 50936 | 60-64 | 48020 | 1469759 | 1299700 | 0.884294636 | 54303 | 3367 |
| 55-59 | 25693 | 65-69 | 22360 | 860690 | 629000 | 0.730809002 | 30596 | 4903 |
| 60+ | 75292 | 70+ | 50280 | 2494920 | 1453460 | 0.582567778 | 86308 | 11016 |
| Total | | | | | | | | 922583 |

Source : Bangladesh Population Census, 1991and 2001

Table 5.1: Countries collecting internal migration data by continent and source

| Continent | Data sources of different countries | | | | |
|---|---|---|---|---|---|
| | Census | Register | Survey | Multiple sources | Total countries |
| Africa | 38 | 0 | 7 | 6 | 51 |
| Asia | 33 | 8 | 7 | 12 | 60 |
| Europe | 26 | 22 | 3 | 12 | 63 |
| America | 28 | 5 | 5 | 6 | 44 |
| Oceania | 13 | 0 | 0 | 0 | 13 |
| Total | 138 | 35 | 22 | 36 | 231 |

Source: University of Queensland Survey, 2002

Table 5.2 : Number of Countries Collecting Internal Migration Data at the Census by Different Methods

| Method of Collecting Migration data | Number of Countries |
|---|---|
| Place of Birth | 105 |
| Last place of residence on a specific date | 120 |
| Duration of residence | 75 |
| Number of moves | 1 |
| Total | 301 |

Source: University of Queensland Survey, 2002

Table 6.1 : : Priority Ranking Matrix for Urban Migrants about Different Problems of their Origin

| | **Urban Migrants Score about Different Problems in the Origin** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Serial Number | 1.Lack of Job/ work | 2. Lack of good housing/Land | 3. Bad Educational Institution | 4. Bad Health facilities | 5. Bad Public transport | 6. Lack of urban facilities | 7. Lack of Shopping facilities | 8. Others |
| 1 | 1 | 7 | 2 | 8 | 3 | 5 | 4 | 6 |
| 2 | 2 | 7 | 3 | 8 | 4 | 1 | 5 | 6 |
| 3 | 1 | 2 | 5 | 4 | 3 | 6 | 8 | 7 |
| 4 | 1 | 3 | 2 | 6 | 5 | 4 | 8 | 7 |
| 5 | 1 | 4 | 3 | 2 | 6 | 5 | 7 | 8 |
| 6 | 1 | 2 | 3 | 8 | 5 | 4 | 7 | 6 |
| 7 | 1 | 5 | 2 | 6 | 4 | 3 | 8 | 7 |
| 8 | 1 | 2 | 7 | 8 | 6 | 5 | 3 | 4 |
| 9 | 1 | 5 | 4 | 2 | 3 | 6 | 7 | 8 |
| 10 | 2 | 1 | 4 | 3 | 6 | 5 | 7 | 8 |
| 11 | 1 | 2 | 6 | 5 | 4 | 3 | 8 | 7 |
| 12 | 1 | 2 | 3 | 5 | 4 | 6 | 7 | 8 |
| 13 | 1 | 7 | 8 | 2 | 6 | 3 | 4 | 5 |
| 14 | 2 | 4 | 3 | 8 | 5 | 1 | 7 | 6 |
| 15 | 2 | 1 | 4 | 5 | 3 | 6 | 8 | 7 |
| 16 | 2 | 6 | 3 | 7 | 8 | 1 | 4 | 5 |
| 17 | 3 | 4 | 5 | 7 | 6 | 1 | 2 | 8 |
| 18 | 1 | 4 | 2 | 5 | 3 | 8 | 7 | 6 |
| 19 | 1 | 4 | 3 | 5 | 2 | 6 | 7 | 8 |
| 20 | 3 | 1 | 3 | 7 | 6 | 4 | 5 | 8 |
| 21 | 1 | 5 | 4 | 6 | 7 | 2 | 3 | 8 |
| 22 | 1 | 8 | 2 | 4 | 3 | 5 | 7 | 6 |
| 23 | 1 | 2 | 5 | 4 | 3 | 6 | 8 | 7 |
| 24 | 1 | 3 | 2 | 8 | 5 | 4 | 7 | 6 |
| 25 | 1 | 2 | 4 | 7 | 5 | 3 | 6 | 8 |
| 26 | 1 | 4 | 3 | 5 | 2 | 6 | 7 | 8 |
| 27 | 1 | 7 | 2 | 3 | 4 | 6 | 5 | 8 |
| 28 | 3 | 1 | 2 | 8 | 7 | 4 | 5 | 6 |
| 29 | 1 | 3 | 2 | 5 | 7 | 6 | 4 | 8 |
| 30 | 1 | 3 | 2 | 4 | 6 | 5 | 7 | 8 |
| 31 | 1 | 7 | 2 | 6 | 3 | 4 | 5 | 8 |
| 32 | 4 | 6 | 5 | 7 | 3 | 1 | 2 | 8 |
| 33 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 34 | 1 | 4 | 5 | 6 | 7 | 2 | 3 | 8 |
| 35 | 1 | 4 | 3 | 5 | 8 | 2 | 7 | 6 |
| 36 | 1 | 6 | 2 | 3 | 4 | 7 | 5 | 8 |
| 37 | 7 | 1 | 2 | 3 | 6 | 4 | 5 | 8 |
| 38 | 1 | 5 | 4 | 3 | 2 | 6 | 7 | 8 |
| 39 | 1 | 3 | 2 | 5 | 4 | 6 | 7 | 8 |

| | Urban Migrants Score about Different Problems in the Origin | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Serial Number | 1.Lack of Job/ work | 2. Lack of good housing/Land | 3. Bad Educational Institution | 4. Bad Health facilities | 5. Bad Public transport | 6. Lack of urban facilities | 7. Lack of Shopping facilities | 8. Others |
| 40 | 2 | 3 | 1 | 4 | 5 | 6 | 7 | 8 |
| 41 | 1 | 3 | 2 | 4 | 5 | 6 | 7 | 8 |
| 42 | 1 | 8 | 6 | 7 | 2 | 3 | 4 | 5 |
| 43 | 1 | 6 | 2 | 7 | 4 | 5 | 3 | 8 |
| 44 | 1 | 2 | 4 | 3 | 5 | 6 | 7 | 8 |
| 45 | 1 | 5 | 2 | 4 | 3 | 6 | 7 | 8 |
| 46 | 1 | 5 | 3 | 7 | 8 | 6 | 2 | 4 |
| 47 | 1 | 3 | 4 | 2 | 5 | 8 | 6 | 7 |
| 48 | 5 | 1 | 2 | 4 | 3 | 6 | 7 | 8 |
| 49 | 5 | 1 | 2 | 4 | 3 | 6 | 7 | 8 |
| 50 | 1 | 3 | 2 | 8 | 6 | 5 | 4 | 7 |
| 51 | 1 | 6 | 2 | 5 | 4 | 3 | 8 | 7 |
| 52 | 3 | 6 | 1 | 5 | 2 | 4 | 7 | 8 |
| 53 | 1 | 7 | 6 | 2 | 8 | 3 | 5 | 4 |
| 54 | 2 | 7 | 3 | 4 | 5 | 6 | 1 | 8 |
| 55 | 1 | 6 | 2 | 4 | 5 | 3 | 7 | 8 |
| 56 | 1 | 8 | 3 | 4 | 2 | 5 | 6 | 7 |
| 57 | 1 | 3 | 2 | 4 | 6 | 5 | 8 | 7 |
| 58 | 1 | 6 | 2 | 3 | 4 | 5 | 8 | 7 |
| 59 | 1 | 7 | 4 | 5 | 6 | 3 | 2 | 8 |
| 60 | 1 | 6 | 5 | 2 | 7 | 3 | 4 | 8 |
| 61 | 3 | 4 | 5 | 6 | 2 | 1 | 8 | 7 |
| 62 | 2 | 3 | 1 | 5 | 4 | 6 | 7 | 8 |
| 63 | 2 | 1 | 3 | 4 | 5 | 6 | 7 | 8 |
| 64 | 2 | 1 | 4 | 3 | 5 | 6 | 7 | 8 |
| 65 | 1 | 3 | 2 | 6 | 5 | 4 | 7 | 8 |
| 66 | 1 | 3 | 2 | 4 | 5 | 6 | 7 | 8 |
| 67 | 1 | 5 | 4 | 3 | 8 | 2 | 7 | 6 |
| 68 | 2 | 1 | 3 | 5 | 4 | 6 | 8 | 7 |
| 69 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 70 | 6 | 7 | 1 | 2 | 8 | 3 | 4 | 5 |
| Relative Value | 113 | 281 | 219 | 341 | 332 | 317 | 416 | 502 |
| Average | 1.61 | 4.01 | 3.12 | 4.87 | 4.74 | 4.53 | 5.94 | 7.17 |
| **Rank** | **1** | **3** | **2** | **6** | **5** | **4** | **7** | **8** |

Table 6.2 : Priority Ranking Matrix for Rural Migrants about different problems of their origin

| Serial Number | **Rural Migrants score about different Problems in the origin** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1.Lack of Job/ work | 2. Lack of good housing/Land | 3. Bad Educational Institution | 4. Bad Health facilities | 5. Bad Public transport | 6. Lack of urban facilities | 7. Lack of Shopping facilities | 8. Others |
| 1 | 1 | 5 | 2 | 4 | 6 | 3 | 8 | 7 |
| 2 | 2 | 1 | 6 | 5 | 3 | 4 | 8 | 7 |
| 3 | 1 | 6 | 5 | 4 | 3 | 2 | 8 | 7 |
| 4 | 1 | 2 | 7 | 3 | 4 | 5 | 8 | 6 |
| 5 | 1 | 6 | 7 | 8 | 2 | 3 | 5 | 4 |
| 6 | 1 | 6 | 2 | 5 | 4 | 3 | 7 | 8 |
| 7 | 7 | 1 | 6 | 2 | 3 | 5 | 4 | 8 |
| 8 | 1 | 6 | 5 | 4 | 3 | 2 | 8 | 7 |
| 9 | 6 | 7 | 4 | 3 | 5 | 2 | 1 | 8 |
| 10 | 6 | 1 | 5 | 8 | 3 | 2 | 7 | 4 |
| 11 | 1 | 7 | 2 | 5 | 4 | 3 | 6 | 8 |
| 12 | 2 | 6 | 1 | 2 | 3 | 5 | 8 | 7 |
| 13 | 1 | 2 | 7 | 3 | 4 | 5 | 8 | 6 |
| 14 | 1 | 3 | 2 | 5 | 6 | 4 | 7 | 8 |
| 15 | 4 | 5 | 3 | 6 | 2 | 1 | 8 | 7 |
| 16 | 1 | 2 | 7 | 6 | 5 | 8 | 3 | 4 |
| 17 | 1 | 8 | 5 | 4 | 3 | 6 | 2 | 7 |
| 18 | 1 | 8 | 6 | 7 | 2 | 3 | 4 | 5 |
| 19 | 2 | 5 | 7 | 6 | 3 | 4 | 1 | 8 |
| 20 | 1 | 6 | 5 | 7 | 8 | 2 | 3 | 7 |
| 21 | 1 | 4 | 2 | 8 | 3 | 6 | 7 | 5 |
| 22 | 1 | 2 | 7 | 5 | 3 | 4 | 6 | 8 |
| 23 | 1 | 3 | 2 | 8 | 5 | 4 | 7 | 6 |
| 24 | 1 | 3 | 2 | 4 | 6 | 5 | 7 | 8 |
| 25 | 1 | 3 | 2 | 4 | 7 | 6 | 5 | 8 |
| 26 | 1 | 4 | 3 | 5 | 7 | 6 | 2 | 8 |
| 27 | 1 | 2 | 6 | 7 | 3 | 8 | 5 | 4 |
| 28 | 1 | 3 | 2 | 8 | 7 | 6 | 4 | 5 |
| 29 | 2 | 3 | 4 | 5 | 1 | 6 | 8 | 7 |
| 30 | 2 | 1 | 6 | 3 | 5 | 4 | 7 | 8 |
| 31 | 1 | 3 | 4 | 2 | 5 | 7 | 6 | 8 |
| 32 | 1 | 2 | 3 | 4 | 6 | 5 | 7 | 8 |
| 33 | 1 | 2 | 3 | 7 | 8 | 4 | 5 | 6 |
| 34 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 7 |
| 35 | 1 | 5 | 4 | 3 | 2 | 6 | 7 | 8 |
| 36 | 1 | 3 | 2 | 5 | 4 | 6 | 7 | 8 |
| 37 | 2 | 1 | 3 | 5 | 4 | 6 | 8 | 7 |
| 38 | 1 | 7 | 8 | 6 | 5 | 2 | 3 | 4 |
| 39 | 2 | 1 | 3 | 4 | 5 | 6 | 7 | 8 |
| 40 | 1 | 3 | 2 | 4 | 5 | 6 | 7 | 8 |

| Serial Number | **Rural Migrants score about different Problems in the origin** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1.Lack of Job/ work | 2. Lack of good housing/Land | 3. Bad Educational Institution | 4. Bad Health facilities | 5. Bad Public transport | 6. Lack of urban facilities | 7. Lack of Shopping facilities | 8. Others |
| 41 | 1 | 2 | 4 | 5 | 6 | 3 | 7 | 8 |
| 42 | 2 | 1 | 3 | 5 | 4 | 6 | 7 | 8 |
| 43 | 1 | 2 | 3 | 5 | 4 | 6 | 7 | 8 |
| 44 | 3 | 8 | 1 | 7 | 2 | 4 | 6 | 5 |
| 45 | 1 | 8 | 2 | 3 | 4 | 5 | 6 | 7 |
| 46 | 1 | 2 | 4 | 3 | 5 | 7 | 6 | 8 |
| 47 | 2 | 1 | 4 | 3 | 5 | 8 | 6 | 7 |
| 48 | 2 | 3 | 4 | 5 | 6 | 1 | 7 | 8 |
| 49 | 1 | 8 | 3 | 4 | 5 | 6 | 7 | 8 |
| 50 | 1 | 2 | 4 | 3 | 6 | 5 | 8 | 7 |
| 51 | 1 | 2 | 4 | 3 | 8 | 7 | 5 | 6 |
| 52 | 1 | 2 | 4 | 3 | 6 | 5 | 7 | 8 |
| 53 | 1 | 2 | 4 | 3 | 6 | 5 | 7 | 8 |
| 54 | 1 | 8 | 7 | 2 | 3 | 4 | 5 | 6 |
| Relative Value | 85 | 201 | 216 | 252 | 242 | 253 | 328 | 374 |
| Average | 1.31 | 3.72 | 4.0 | 4.67 | 4.48 | 4.69 | 6.07 | 6.93 |
| **Rank** | **1** | **2** | **3** | **5** | **4** | **6** | **7** | **8** |

Table 6.3: Different Characteristics of the Migrants among Different Income Groups

| Characteristics of Migrants (Before Move) | Lower Migrants (<Tk. 5000) | | Middle Migrants (Tk. 5000-12000) | | Upper Migrants (Tk. 12000+) | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **(a) Sex** | | | | | | |
| Male | 34 | 87.2 | 52 | 83.9 | 19 | 82.6 |
| Female | 5 | 12.8 | 10 | 16.1 | 4 | 17.4 |
| **(b) Age group** | | | | | | |
| 15-24 | 8 | 20.5 | 2 | 3.2 | 0 | 0 |
| 25-34 | 11 | 28.2 | 23 | 37.1 | 4 | 17.4 |
| 35-44 | 13 | 33.3 | 9 | 14.5 | 7 | 30.4 |
| 45-54 | 6 | 15.4 | 13 | 21.0 | 6 | 26.1 |
| 55-64 | 1 | 2.6 | 12 | 19.4 | 5 | 21.7 |
| 65+ | 0 | 0 | 3 | 4.8 | 1 | 4.3 |
| **(c) Marital Status** | | | | | | |
| Unmarried | 11 | 28.2 | 6 | 9.7 | 1 | 4.3 |
| Married | 27 | 69.2 | 50 | 80.6 | 20 | 87.0 |
| Widow and divorce | 1 | 2.6 | 6 | 6.9 | 2 | 8.6 |
| **(d) Education** | | | | | | |
| No Education | 4 | 10.3 | 3 | 4.8 | 0 | 0 |
| One to Eight | 12 | 30.8 | 10 | 16.1 | 3 | 13 |
| S.S.C to H.S.C | 11 | 28.2 | 18 | 29.0 | 3 | 13 |
| Degree and above | 12 | 30.8 | 31 | 50.0 | 17 | 73.9 |
| **(f) Family Size** | | | | | | |
| 1-4 | 16 | 41 | 18 | 29 | 13 | 56.5 |
| 5 or more | 23 | 59 | 45 | 71 | 10 | 43.5 |
| **(h) House Ownership** | | | | | | |
| Own | 5 | 12.8 | 16 | 25.8 | 10 | 43.5 |
| Rent | 34 | 87.2 | 46 | 74.2 | 13 | 56.5 |
| **(i) Job Satisfaction** | | | | | | |
| Satisfied | 19 | 48.7 | 13 | 21.0 | 22 | 95.7 |
| Not satisfied | 20 | 51.3 | 49 | 79.0 | 1 | 4.3 |
| **(j) Income Satisfaction** | | | | | | |
| Satisfied | 17 | 43.6 | 25 | 40.3 | 18 | 78.7 |
| Not satisfied | 22 | 56.4 | 37 | 59.7 | 51 | 21.3 |
| **Total** | 57 | 46.4 | 33 | 26.5 | 34 | 27.1 |

Source: Field Survey, Dhaka City, 2003

Table 6.4: Migrants Satisfaction about Dhaka City as Compared to Previous Place of Residence in 1996

| Criteria in Dhaka City | Urban Migrants (N=70) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Better ($f_s$) | | Same | | Worse ($f_d$) | | **Satisfaction Index** |
| | Number | % | Number | % | Number | % | **$I_s$ = (fs-fd)/N** |
| 1. Nature of Job/ work | 37 | 52.9 | 32 | 45.7 | 1 | 1.4 | **0.51** |
| 2. Income | 40 | 57.1 | 28 | 40.0 | 2 | 2.9 | **0.54** |
| 3. Housing | 45 | 64.3 | 6 | 8.6 | 19 | 27.1 | **0.37** |
| 4. Education | 45 | 64.3 | 23 | 32.9 | 2 | 2.9 | **0.61** |
| 5. Healthcare | 61 | 87.1 | 7 | 10.0 | 2 | 2.9 | **0.84** |
| 6.Public transport | 65 | 92.9 | 4 | 5.7 | 1 | 1.4 | **0.91** |
| 7.Marketing, | 38 | 54.3 | 16 | 22.9 | 16 | 22.9 | **0.31** |
| 8. Physical environment | 16 | 22.9 | 28 | 40.0 | 26 | 37.1 | **-0.14** |
| 9. Personal relationship with friends, neighbors etc. | 19 | 27.1 | 37 | 52.9 | 14 | 20.0 | **0.07** |
| 10. Communication and information | 15 | 21.4 | 31 | 44.3 | 24 | 34.3 | **-0.13** |
| 11. Security | 18 | 25.7 | 44 | 62.9 | 8 | 11.4 | **0.14** |
| 12. Religious activities | 12 | 17.1 | 41 | 58.6 | 17 | 24.3 | **-0.07** |
| 13. Recreation | 12 | 17.1 | 42 | 60.0 | 16 | 22.9 | **-0.06** |
| 14. Urban facilities | 24 | 34.3 | 39 | 55.7 | 7 | 10.0 | **0.24** |
| Total | 447 | 638.6 | 518 | 740.0 | 155 | 221.4 | |

Source: Field Survey, Dhaka City, 2003

Table 6.5: : Satisfaction Index of Migrants about Different Aspects of Life at Dhaka City

| Criteria in Dhaka City | Rural Migrants (N=54) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Better ($f_s$) | | Same | | Worse ($f_d$) | | **Satisfaction Index** |
| | Number | % | Number | % | Number | % | **$I_s$ = (fs-fd)/N** |
| 1. Nature of Job/ work | 37 | 68.5 | 14 | 25.9 | 3 | 5.6 | **0.63** |
| 2. Income | 38 | 70.4 | 14 | 25.9 | 2 | 3.7 | **0.67** |
| 3. Housing | 27 | 50.0 | 4 | 7.4 | 23 | 42.6 | **0.07** |
| 4. Education | 26 | 48.1 | 24 | 44.4 | 4 | 7.4 | **0.41** |
| 5. Healthcare | 44 | 81.5 | 6 | 11.1 | 4 | 7.4 | **0.74** |
| 6.Public transport | 48 | 88.9 | 4 | 7.4 | 2 | 3.7 | **0.85** |
| 7.Marketing, | 29 | 53.7 | 9 | 16.7 | 16 | 29.6 | **0.24** |
| 8. Physical environment | 16 | 29.6 | 15 | 27.8 | 23 | 42.6 | **-0.13** |
| 9. Personal relationship with friends, neighbors etc. | 12 | 22.2 | 24 | 44.4 | 18 | 33.3 | **-0.11** |
| 10. Communication and information | 9 | 16.7 | 20 | 37.0 | 25 | 46.3 | **-0.30** |
| 11. Security | 19 | 35.2 | 30 | 55.6 | 5 | 9.3 | **0.26** |
| 12. Religious activities | 12 | 22.2 | 25 | 46.3 | 17 | 31.5 | **-0.09** |
| 13. Recreation | 8 | 14.8 | 34 | 63.0 | 12 | 22.2 | **-0.07** |
| 14. Urban facilities | 25 | 46.3 | 25 | 46.3 | 4 | 7.4 | **0.39** |
| Total | 350 | 648.1 | 356 | 659.3 | 158 | 292.6 | |

Source: Field Survey, Dhaka City, 2003

## APPENDIX D: RESULTS OBTAINED FROM SPSS TABLES

**Method : Logistic Regression Analysis- Backward Stepwise**

Number of selected cases: 400
Number rejected because of missing data: 0
Number of cases included in the analysis: 400

**Dependent Variable Encoding:**

| Original Value | Internal Value |
|---|---|
| Non Migrants: 0 | 0 |
| Migrants: 1 | 1 |

| | Value | Freq | Parameter Coding (1) | (2) |
|---|---|---|---|---|
| EDUCAT | | | | |
| degree | 0 | 200 | .000 | .000 |
| ssc/hsc | 1 | 181 | 1.000 | .000 |
| no education | 2 | 19 | .000 | 1.000 |
| INCOME | | | | |
| 12000+ | 0 | 45 | .000 | .000 |
| 5000-12000 | 1 | 266 | 1.000 | .000 |
| <5000 | 2 | 89 | .000 | 1.000 |
| FAMILTY | | | | |
| extended | 0 | 117 | .000 | |
| single | 1 | 283 | 1.000 | |
| HOUSEOW | | | | |
| own | 0 | 158 | .000 | |
| rent or others | 1 | 242 | 1.000 | |
| INCOSAT | | | | |
| yes | 0 | 305 | .000 | |
| no | 1 | 95 | 1.000 | |
| AGE | | | | |
| 35+ | 0 | 261 | .000 | |
| 15-35 | 1 | 139 | 1.000 | |
| MARRAGE | | | | |
| married | 0 | 299 | .000 | |
| unmarried | 1 | 101 | 1.000 | |
| FAMISIZ | | | | |
| 1-4 | 0 | 194 | .000 | |
| 5+ | 1 | 206 | 1.000 | |
| SEX | | | | |
| female | 0 | 52 | .000 | |
| male | 1 | 348 | 1.000 | |
| OUT | | | | |
| no | 1 | 312 | .000 | |
| yes | 2 | 88 | 1.000 | |
| JOBSAT | | | | |
| yes | 0 | 308 | .000 | |
| no | 1 | 92 | 1.000 | |

| | Chi-Square | df | Significance |
|---|---|---|---|
| **Model** | **203.472** | **11** | **.0000** |
| Block | 203.472 | 11 | .0000 |
| Step | -1.598 | 1 | .2062 |

Classification Table for Migration status of Household Head
The Cut Value is .50

| | | Predicted: non migration (n) | Predicted: migration (m) | Percent Correct |
|---|---|---|---|---|
| Observed | | | | |
| non migration | n | 253 | 23 | 91.67% |
| migration | m | 41 | 83 | 66.94% |
| | | | Overall | 84.00% |

---------- Variables in the Equation ----------

| **Variable** | **B** | **S.E.** | **Wald** | **df** | **Sig** | **R** | **Exp(B)** |
|---|---|---|---|---|---|---|---|
| EDUCAT | | | 10.9196 | 2 | .0043 | .1182 | |
| EDUCAT(1) | .9314 | .3393 | 7.5366 | 1 | .0060 | .1057 | 2.5381 |
| EDUCAT(2) | 1.8657 | .7133 | 6.8418 | 1 | .0089 | .0989 | 6.4604 |
| FAMILTY(1) | .7900 | .3467 | 5.1930 | 1 | .0227 | .0803 | 2.2034 |
| HOUSEOW(1) | .6494 | .3254 | 3.9821 | 1 | .0460 | .0633 | 1.9145 |
| NCOME | | | 4.7004 | 2 | .0954 | .0376 | |
| INCOME(1) | .9985 | .6680 | 2.2342 | 1 | .1350 | .0217 | 2.7141 |
| INCOME(2) | 1.5151 | .7300 | 4.3074 | 1 | .0379 | .0683 | 4.5498 |
| INCOSAT(1) | 1.4156 | .5232 | 7.3196 | 1 | .0068 | .1036 | 4.1190 |
| JOBSAAT(1) | 1.4840 | .5320 | 7.7823 | 1 | .0053 | .1080 | 4.4105 |
| OUT(1) | 2.6650 | .3640 | 53.6154 | 1 | .0000 | .3228 | 14.3687 |
| FAMISIZ(1) | .6963 | .3117 | 4.9893 | 1 | .0255 | .0777 | 2.0063 |
| AGE(1) | .6555 | .3273 | 4.0103 | 1 | .0452 | .0637 | 1.9260 |
| **Constant** | **-5.5101** | **.7864** | **49.0949** | **1** | **.0000** | | |

**---------- Variables not in the Equation ----------**

Residual Chi Square 1.824 with 2 df Sig = .4018

| Variable | Score | df | Sig | R |
|---|---|---|---|---|
| MARRAGE(1) | 1.5663 | 1 | .2107 | .0000 |
| SEX(1) | .3592 | 1 | .5489 | .0000 |

No more variables can be deleted or added.