POPULATION MONOGRAPH OF BANGLADESH

AGE-SEX COMPOSITION OF BANGLADESH POPULATION

Population Monograph: Volume-9

Bangladesh Bureau of Statistics
Statistics and Informatics Division
Ministry of Planning

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POPULATION MONOGRAPH OF BANGLADESH

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November 2015

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STATISTICS AND INFORMATICS DIVISION (SID)
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Minister
Ministry of Planning
Government of the People's Republic of Bangladesh

Message

I am delighted to know that Population and Housing Census 2011 Project of Bangladesh Bureau of Statistics (BBS), Statistics and Informatics Division (SID) has prepared fourteen Population Monographs using the census data of different years. This is the first time BBS is publishing population monographs with in- depth analysis of the population census data. The present monograph on 'Age-Sex Composition of Bangladesh Population' is one of such monograph series.

Each monograph deals in a particular issue related to population and housing where census data have been used in multidimensional approaches. In addition, cross country comparison and in country comparison have also been made to oversee the representativeness of data with other national sources. It is expected that the monographs will useful in national planning and policy making particularly in the field of population and development.

I would like to thank concerned officials of SID and BBS and also authors of the monographs for their relentless effort in preparing these monographs and publication thereof. Special thanks to European Union (EU) and United Nations Population Fund (UNFPA) for their generous support in conducting 5th decennial census of Bangladesh and preparing the population monographs.

AHM Mustafa Kamal, FCA, MP

Dhaka
November, 2015

State Minister
Ministry of Finance
and
Ministry of Planning
Government of the People's Republic of Bangladesh

Message

I have come to learn that Population and Housing Census 2011 Project of Bangladesh Bureau of Statistics, Statistics and Informatics Division has prepared fourteen Population Monographs using census data of different years. Population is the main ingredient for national planning and policy making. Therefore, Population Monographs are of vital importance in the field of population planning of the country.

Each monograph has been prepared with a particular issue related to population and housing. To prepare these Monographs census data have been used widely in multidimensional way where secondary data from other sources have also been used. The monographs are a new dimension in the wide use of data generated through national censuses of the country.

My sincere thanks and gratitude to the honorable Minister, Ministry of Planning for his dynamic leadership and active guidance in implementing all our activities including census undertaking. I would like to thank Secretary, Statistics and Informatics Division, Director General, BBS for their relentless effort in preparing these monographs and publication thereof. Special thanks to European Union (EU) and United Nations Population Fund (UNFPA) for their generous support in conducting 5th decennial census of Bangladesh and preparing the population monographs.

M.A. Mannan, MP

Dhaka
November, 2015

Secretary
Statistics and Informatics Division (SID)
Ministry of Planning
Government of the People's Republic
of Bangladesh

Foreword

Population Census is the single most important statistical undertaking in any country. Bangladesh Bureau of Statistics of the Statistics and Informatics Division has conducted the 5th decennial census of the country during 15-19 March, 2011. In order to supplement the main census a large scale sample survey was conducted in October 2011 which covered detailed information on Population & Housing. The Monograph on 'Age-Sex Composition of Bangladesh Population' is mainly based on the findings of main census and sample census conducted during 2011. Data from other secondary sources have also been used to prepare the Monographs.

It may be mentioned that Bangladesh Bureau of Statistics (BBS) has been publishing a number of Population Monograph series and Population Monograph on 'Age-Sex Composition of Bangladesh Population' which is one of the fourteen monographs being published by BBS using Population Census Data. Monographs are the in depth analysis of a particular topic of interest. It is worth mentioning that Bangladesh is now in demographic transition where population growth has been reduced substantially and working age population particularly youth are increasing gradually.

In light of that, population monograph on 'Age-Sex Composition of Bangladesh Population' will be useful for proper population planning of the country with respect to age distribution. This monograph has covered detailed information on age sex composition obtained from different censuses and surveys conducted by the BBS.

I like to express my sincere thanks to Director General, Deputy Director General of BBS, Project Director of Population and Housings Census 2011 Project and his team for preparing this Monograph. I acknowledge with gratitude the support of European Union (EU) and United Nations Population Fund (UNFPA) for successful completion of the Population and Housing Census 2011 and preparing the Monographs.

Kaniz Fatema ndc

Dhaka
November, 2015

Director General
Bangladesh Bureau of Statistics (BBS)
Statistics and Informatics Division (SID)
Ministry of Planning
Government of the People's Republic of Bangladesh

Preface

The fifth population and housing census of Bangladesh was conducted during 15th March to 19th March, 2011. The main objective of the census was to collect information on the basic characteristics related to housing, households and population for developing a comprehensive database for development planning and human resource development programmes as well as economic management.

Population and Housing Census 2011 were conducted in three phases. In the First Phase, basic data about all households and individual members of the households were collected through ICR formatted questionnaire during 15th March to 19th March, 2011. In the Second Phase, quality and coverage of the main count were verified through a Post Enumeration Check (PEC) survey during 10th April to 14th April, 2011. For the first time in the census history of Bangladesh, PEC was conducted by an independent organization, namely Bangladesh Institute of Development Studies (BIDS). In the Third Phase, detailed socio-economic information was collected by administering a long machine readable questionnaire in a sample survey held during 15th October to 25th October, 2011.

One of the objectives of the Population and Housing Census 2011 Project was in-depth analysis of census data and preparation of Population Monograph series. Monographs are useful to the users to know the detailed information about the related area for taking appropriate policy measures and further research.

The Population Monograph on 'Age-Sex Composition of Bangladesh Population' is one of the 14 monograph series which discussed about the age-sex composition of Bangladesh population obtained from different censuses.

I express my heartfelt gratitude to the Honorable Minister for Planning for his effective guidance and significant cooperation in making the census a success. I express my deepest gratitude to Secretary, Statistics and Informatics Division (SID) for her whole-hearted support and cooperation to the census. Moreover, members of 'Steering Committee', 'Standing Technical Committee', Consultants and the participants of the Seminar-cum-Expert Consultation deserve special thanks for their valuable contributions for finalizing the questionnaire and the census programme. I am thankful to Mr. Md. Shamsul Alam, Consultant and other officials of the project for preparing this monograph. Thanks to European Union (EU) and United Nations Population Fund (UNFPA) for their technical and financial support to the Population and Housing Census 2011 Project.

Finally, I like to thank Deputy Director General, BBS, Project Director, Population and Housing Census 2011 Project, members of the Technical Committee and other officers & staff members of BBS for bringing out this monograph.

Mohammad Abdul Wazed

Dhaka
November, 2015

Representative
UNFPA Bangladesh

Message

This report is part of a series of 14 monographs developed by the Bangladesh Bureau of Statistics (BBS) with support from the United Nations Population Fund (UNFPA). UNFPA has supported the BBS since the very first census in 1974, a cooperation that has grown stronger with each census. Through the "Support to 2011 Bangladesh Population and Housing Census" project UNFPA has been working closely with the BBS to ensure that best use is made out of the resources invested in the census. The project has put a major emphasis on in-depth analysis of census data and the production of thematic reports in the form of these monographs. This series will provide its readers a better and clearer understanding of the trends, the current country scenarios and the gaps indicating where targeted interventions are necessary.

The availability of quality, reliable and timely data, as well as a thorough, methodologically sound and user-friendly analysis of data is more important than ever before. The information generated by population and housing census, the numbers of people, their distribution, their living conditions, are all critical for development. Without accurate data, policymakers do not know where to invest in schools, hospitals or roads and the most in need remain invisible. The implementation and monitoring of the Sustainable Development Goals, the guiding framework for the development agenda 2030, will require the production and analysis of a large amount of data, big data, requiring strong and independent National Statistics Offices, which UNFPA will continue to support.

I would like to take this opportunity to congratulate and thank the Statistics and Informatics Division and the Bangladesh Bureau of Statistics' authority and the project team for their efforts to produce this series, as well as the experts who contributed to the development of the monographs. My special gratitude goes to the Delegation of European Union in Bangladesh for their generous support and co-operation in implementing the "Support to Bangladesh Population and Housing Census 2011" project and in the preparation of these monographs.

Dhaka
November, 2015

Argentina Matavel Piccin
Representative
UNFPA Bangladesh

Project Director
Population and Housing Census 2011 Project
Bangladesh Bureau of Statistics
Statistics and Informatics Division
Ministry of Planning

Acknowledgements

It is my great pleasure to acknowledge the contributors who were engaged in preparing the fourteen Population Monographs of Bangladesh under Population and Housing Census 2011 Project of Bangladesh Bureau of Statistics (BBS). This initiative of BBS is a new dimension with regard to the wide use of census data in the country and the abroad.

Monographs have been prepared by the BBS in collaboration with public universities, research organizations and a local consultant of this project. A series of review meetings were organized to finalize the draft monographs.

I would like to express my profound regards and deep sense of gratitude to the Secretary, Statistics and Informatics Division (SID) and Director General, Bangladesh Bureau of Statistics for their valuable suggestions, continuous guidance and all out support in smooth completion of all the activities of this project and bringing out the population monographs.

It is worth mentioning that European Union (EU) has provided generous support in the implementation of the Population and Housing Census 2011 Project. I take the opportunity to express my indebtedness to United Nations Population Fund (UNFPA) for the partnership of this project of BBS.

I am extremely grateful to the institutions and the authors who were engaged in preparing the monographs. My sincere thanks to Mr. Nicholas Jhon Mcturk, Technical Expert on Population Development, Asia and the Pacific Regional Office, Dr. Chrisophe Lefrance, Technical Advisor, Population and Development, UNFPA Regional Office and the local consultant of this project Mr. Md. Shamsul Alam for their whole hearted co-operation in the preparation of monographs.

Thanks are also due to Mr. Iori Kato, Deputy Representative, Dr. Shantana R. Halder, Chief PPR and Mr. Mahboob-E-Alam, NPO, UNFPA for their kind support and help. I am grateful to Mr. Md. Mostafa Ashrafuzzaman, Deputy Director, Mr. Md. Khorshed Alam, Assistant Statistical Officer, Mr. Mohammad Abdullah, Assistant Statistical Officer and all other officials of Population and Housing Census 2011 project of BBS who worked hard to conduct the census and to prepare the monographs.

Md. Mashud Alam

Dhaka
November, 2015

Executive Summary

The age sex composition and sex-ratio of Bangladesh population in the last three decades have been discussed in this monograph.

It may be noted that, age-sex structure of the Sample Vital Registration System (SVRS) and Bangladesh Demographic and Health Survey (BDHS) and Census-2011 show some differences in the 0-4 age group with low proportion in SVRS compared to census and BDHS. Minor differences in other age groups were also observed. It is mentionable that age-sex composition of neighboring countries India and Nepal compares well with census-2011 which is commendable. The quality of census data has improved over the years which is seen from the Whipple's Index, Myer's Index and UN age –sex accuracy index.

The age sex distribution of population at the aggregate level shows that the population in the lowest age group (0-4) is decreasing over the years. For the male population the percentage of population was 16.1% in 1991, 13.0% in 2001 and 10.6% in 2011. For females the corresponding percentages were 16.8%, 12.7% and 10.3% respectively. Similar reduction was observed in age group 5-9, 10-14. However, some increase was observed in the youth age group 15-24 and 25-29. This is the outcome of low fertility in the recent years. On the other hand, increase in the age group 70 years and over was observed in the year 2011. It was 2.7% in 1981 which increased to 3.5% in 2011. Similar trend was observed for the females.

The urban-rural variation in the age-sex distribution is well pronounced. In the rural areas the percentage of population in the lowest age group is significantly higher than the urban area of the country. In the rural area of the percentage of male population in the age group (0-4) was 17.3% in 1981 as against 13.0% in the urban area. For the females, such percentages were 13.0% in 1981 and 8.8% in 2011. In the 70 years and over age group, for male population, the percentage was 2.7% in the rural area in 1981 which increased to 3.8% in 2011. Similarly, for the females, the percentage for such age group increased from 2.1% to 3.3% during the period. In the urban area, for the male population, the percentage of population in the age group 70 years and above was 2.2% in 1981 which increased to 2.3% in 2011. For females it increased from 1.9% in 1981 to 2.3% in 2011.

It is worth mentioning that, Demographic Dependency ratio shed light on the demographic burden of the population. Demographic Dependency Ratio (DDR) can be defend in two ways: the ratio between population 0-14 and 60 years and above to population 15-59 expressed in percentage has been termed as Demographic Dependency Ratio1 (DDR_1). On the other hand, the ratio between population 0-14 and 65 years and above to the population 15-64 expressed in percentage has been defined as Demographic Dependency Ratio2 (DDR_2).

It is notable that DDR_1 for male has been reduced from 111.0 in 1981 to 76.7 in 2011 at the national level. For the females DDR_1 reduced from 107.9 to 68.9 during the period. On the other hand, DDR_2 for male reduced from 101.1 for female 101.2 to 61.8 during the same period.

In the rural area, for male DDR_1 reduced from 118.8 in 1981 to 84.8 in2011 and for females DDR_1 reduced from 108.8 to 72.7 during the same period. According to DDR_2 for male

population it reduced from 108.0 to 75.1 during 1981 to 2011 and for female it reduced from 99.6 in 1981 to 65.0 in 2011.

In the urban are, the Demographic Dependency Ratio (DDR_1) for male reduced from 77.3 in 1981 to 55.5 in 2011 and for the female it reduced from 101.2 to 56.3. On the other hand, DDR_2 for male reduced from 70.9 in 1981 to 49.9 in 2011 and for female it reduced from 93.8 to 51.7 during the same period.

The age-composition of the population among the districts shows variation across districts. The proportion of population in the lower age groups (0-4 & 5-9) in the districts of Chittagong and Sylhet Division is comparatively high than other divisions of the country indicate high fertility of these districts. On the other hand, lower proportion of population in these age groups in Rajshahi and Khulna division indicate lower fertility in the districts of these Divisions.

The religious composition of Bangladesh population shows an increase of Muslim population since independence and decrease of Hindu population which partly can be explained by the high fertility of Muslim population and low fertility of Hindu population and partly due to out migration of Hindu population. The compositions of population of other religion remain almost same over the years. The religious composition of population in the divisions of the country shows comparatively higher proportion of Hindu population in Khulna, Sylhet and Rangpur divisions of the country.

Sex ratio is an important demographic measure to oversee the sex composition of the population group. The historical trend of sex ratio has been presented in the report shows that sex ratio of the country varies from a low 104.5 in 1911 to a high 111.3 in 1901. The lowest sex ratio of the country was observed in the latest census 2011 which was only 100.3. The out migration of Bangladesh male population to other countries can be cause behind this lower sex ratio in 2011. The sex ratio of population by divisions of the country in 2011 shows the highest sex ratio for Dhaka Division and lowest for Chittagong Division. The sex ratio of the districts shows higher sex ratio for Dhaka and adjoining districts. The age specific sex-ratio of Bangladesh in broad age groups shows that the sex ratio in the age group 15-19, 20-29, 30-39 are historically lower than other groups and reduced over the years which may be due to international migration of youths. The age-specific sex ratio of the country shows that the sex ratio in age group 0-4 are increasing over the years which was 98.3 in 1961 and increased to the highest 108.5 in 2001 and reduced to 102.9 in 2011. The sex ratio of population 60 years and above was above 120 in all previous censuses and reduced to 113.5 in 2011.

Similar trend was also observed in 5 years age group and age specific sex ratio by religious groups. Interestingly, sex ratio at birth are increasing over the years which may be explained by better coverage of children with proper identification of sex in the recent years.

The age specific sex-ratio of population of Bangladesh, India and Nepal shows that the sex ratio in the age group 20-24, 25-29, 30-34 & 35-39 in case of Bangladesh and Nepal are lower than 100,but, it is higher than 100 for India. This indicate higher male out migration from these countries compared to India.

1. INTRODUCTION

Bangladesh is the densely populated country of the world. Though the population growth of the country is now gradually declining, yet around 2.0 million population are being added to our population every year which is larger than the total population of many countries of the world.

Age-sex composition of population is important as it has direct bearing on many socio-economic factors of the country. The large population in the younger age group particularly 0-14 leads to higher demographic dependency or burden to the working age population which is also true for the population of higher ages 65 years and over.

It may be mentioned here that, Bangladesh population is in demographic transition now. Earlier due to high fertility and high mortality, the demographic dependency ratio was much higher. Currently due to low fertility and low mortality, the proportion of working age population are increasing. This phenomenon occurs in many countries of the world experiencing lower fertility and mortality which is termed as demographic dividend or demographic bonus.

The first stage of the demographic transition is the pre-industrial stage. During this stage, the population is stable, with both high birth rates and high death rates. The death rates are high because there is increased diseases, minimal medical care, poor sanitation, and limited food supplies. As a result of the high death rate, people tend to produce more offspring to try to compensate for the mortality. Although the birth rate and death rate can fluctuate slightly, overall, they remain equal which results in zero population growth.

Following the pre-industrial stage is the transitional stage. During this stage, the human population begins to increase, due to high birth rates and declining death rates. The death rates are decreasing because as the country transitions into an industrial country, there are improvements in the economy and social conditions. These changes lead to the control of diseases, the production of more food, better jobs, and improved medical care and sanitation. As the death rates decrease, the birth rates remain high because people are still accustomed to producing more children, and during this stage they have more food and resources to support larger families. As a result of the declining death rates and high birth rates, the human population will increase at a rapid pace.

The third stage of the demographic transition is the industrial stage, which is characterized by an increasing population with declining birth rates and low death rates. The death rates remain stable and low during this stage due to the continuation of the economic and social changes that improved the standard of living during the previous stage. During this stage, the birth rates begin to decline for many reasons. For the most part, people realize that they no longer have to produce large numbers of offspring because the offspring they do produce have a higher chance of surviving to adulthood. Many people also start to prefer smaller families, where they can concentrate more resources on less people and increase overall

livelihood. The decline in birth rates also correlates with an increase in employment opportunities for women and the increased access to contraception. Although the birth rates are declining, the population continues to increase due to the low death rates and the momentum of the population from the previous stage. The high birth rates in the previous stage produced more overall people that will reach reproductive age, and even if they produce fewer offspring then previous generations, they are still adding to the population.

The present report highlighted the age-sex structure of population during the last three decade starting from 1981.Data have been taken from four consecutive censuses of the country.

Objectives of the study

The objectives of the study on age-sex composition of Bangladesh Population are as follows:

i) To study the age-sex composition of Bangladesh population over the years;

ii) To study the age sex composition of Bangladesh in the urban and rural areas of the country;

iii) To study the dependency ratio of population over the years by sex and residence;

iv) To study the sex-ratio of population by residence;

v) To study the impact of the change in age structure and demographic dividend for the country

2. CONCEPTS AND DEFINITIONS

The concepts and definitions adopted in the census and those presented in this report are as follows:

Census Moment: It is the precise time hour fixed for starting up census enumeration nationwide. In the census the zero hour of 15 March 2011 was treated as the census moment.

Census Night: The time span from census moment zero hour to 6:00 a.m. of 15 March 2011 was the census night.

Census Period: It denotes the days ascertained to complete the census enumeration activities. In this census 15-19 March 2011 was considered as the census period.

Reference Period: It is reference time cut off to which particular sets of census date items relate. In this census two reference periods were used. These are:

i) Field of Economic Activity: One week preceding census moment (8 to 14 March 2011)

ii) For other variables: Census night.

Modified De-facto Method: It means the system of enumerating people at places of their stay in the census night. Adhering to this method the counting of floating population across the country was completed during census night by interviewing them just at places of their night stay except the people on duty or on board. The remaining vast number of people found in usual residences were counted (including people on duty or on board) during 5 (five) days census period by fixing places of their stay during census night. As this is the slight deviation of de-facto method, so it is termed as modified de-facto.

Floating Population: People detected passing the census night at railway stations, launch ghats, bus terminals, boats, temples, pagodas, mosques, hotels (boarders), footpaths, under building-stairs, overpass/underpass and some other unusual places. Also the people who were fishing at deep sea and hiving in the forest especially in the Sundarbans were treated as floating population.

Household: Persons, either related or unrelated, living together and taking food from the same cooking pot constitute a household. A single person living and eating alone forms one-person household. Households are classified into three groups as defined below:

i) **General (Dwelling) Household:** Includes all households having usual dwelling places. In 2001 census it was used as dwelling household.

ii) **Institutional Household:** Hospitals, clinics, jails, barracks, orphanages, hostels/halls of educational institutions etc. were treated as Institutional Households.

iii) **Other Household:** Includes those households other than general and institutional found in census night such as messes, shops, offices etc.

Ownership and Tenancy of Dwelling Unit: Tenancy status of dwelling units distinguishes the following three classes:

i) **Owned:** Dwelling unit found occupied and used by household owning it.

ii) **Rented:** Dwelling unit found occupied and used under arrangement of contractually rented.

iii) **Rent free:** Dwelling unit found occupied and used without rent.

Literacy: It denotes ability to write a letter in any language. Literacy status assessment is made for population 7 years and above, 15 years and above and also for population of all ages.

Sex Ratio: It is the number of males per 100 females.

Community: It refers to the following administrative, geographic or revenue units:

i) **Zila:** Zila (Bengali word of District) is a mid-level administrative unit comprising of several upazilas/thanas and having Zila Parishad institution.

ii) **Upazila :** Upazila (Bengali word of Sub-district) is a rural administrative unit comprising of several unions and having Upazila Parishad institution.

iii) **Union:** Smallest administrative rural unit comprising of mauzas and villages and having Union Parishad institution.

iv) **Mauza:** Lowest administrative unit having a separate jurisdiction list number (J.L No) in revenue records. Every mauza has its well-demarcated cadastral map. Mauza should be distinguished from local village since a mauza may consist of one or more villages.

v) **Village:** Lowest rural geographic unit either equivalent to a mauza or part of a mauza.

vi) **Ward:** Smallest administrative urban unit comprising of mahallas and having Ward Council institution.

vii) **Mahalla:** Lowest urban geographic unit.

Urban Area: It corresponds with area developed around a central place having 5000 population with such amenities as metaled roads, improved communication, electricity, gas, water supply, sewerage, sanitation and also having comparatively higher density of population with majority population in non-agriculture occupations. City, Town, Paurasava and Cantonment are the examples of urban area.

i) **Mega City:** It is metropolitan area having population 5 millions or more.

ii) **City Corporation:** It includes city corporations/incorporated and administered by the Ministry of local government under City Corporation Act, 2009.

iii) **Paurashava/Municipality Area (PSA):** It includes paurashavas incorporated and administered by local government under Paurashava Act, 2009.

iv) **City:** It is an urban area having population 1,00,000 and above.

v) **Other Urban Area (OUA):** It includes those Upazila headquarters which are not paurashavas. The only exception relates to 17 unions adjacent to Dhaka City Corporation under Dhaka Metropolitan Area. These unions are treated as other urban areas on the basis of their urban characteristics.

vi) **Town:** It is an urban area having population less than 1,00,000.

Dependency Ratio

Demographic Dependency Ratio has been defined in two ways:

Demographic Dependency Ratio-1(DDR_1)

It is the ratio of population in the age groups 0-14 and 60 years and above to the total working population in age group 15-59. The child dependency ratio measures the ratio of population of age group 0-14 to the total working population in age group 15-59 and the elderly dependency ratio is the ratio of population in age group 60 years and above to the same total working population.

Demographic Dependency Ratio-2(DDR_2)

It is the ratio of population in the age groups 0-14 and 65 and above to the total working population in age group 15-64. The child dependency ratio measures the ratio of population of age group 0-14 to the total working population in age group 15-64 and the elderly dependency ratio is the ratio of population in age group 65 years and above to the same total working population

3. LITERATURE REVIEW ON AGE-SEX STRUCTURE

This chapter discusses the age-sex structure of Bangladesh population obtained from different national survey systems and also some neighboring countries of Bangladesh. These findings have been presented along with the findings from the national population census, 2011. At the national level two very recognized data source, namely Sample Vital Registration System (SVRS) and Bangladesh Demographic and Health Survey (BDHS) have been discussed in this chapter. On the other hand, the age-sex structure of Nepal and India have been discussed for the cross country comparison.

3.1 Age Sex Structure of Census, SVRS and BDHS

The age-sex structure of census 2011, SVRS 2011 and BDHS - 2011 have been presented in the Table – 3.1. It is notable that percentage of population in the age group 0-14 obtained from Census 2011 and BDHS 2011 compares well, particularly for the female population. For the male population the difference between census and BDHS is 1.6 percentage points, whereas for females such difference is only 0.2 percentage points. The comparison of population proportion between census and SVRS for 0-14 population shows that the difference for male is 2.9 percentage point which is much higher than the difference between census and BDHS. On the other hand, the difference of the population proportion for the female is 1.1 percentage point which is also higher than the difference between Census and BDHS. It is noted that the proportion of population reported in the census for the age group 70 years and over is comparatively less than BDHS. Such percentage for male in case of census is 3.5% compared to 4.3% for BDHS. For the female, the percentage of in 3.3% from the BDHS. The percentage of population for such age group from SVRS was 2.9% for male and 3.1% for female.

Table-3.1: Age - Sex Composition of Bangladesh Population 2011 from Different Sources

Age group	Census 2011		SVRS 2011		BDHS 2011	
	Male	Female	Male	Female	Male	Female
0-4	10.6	10.3	9.5	9.6	11.7	10.6
5-9	12.9	12.3	11.2	11.5	12.9	11.9
10-14	11.9	11.2	11.8	11.8	12.4	11.5
15-19	9.0	8.8	10.5	10.1	8.8	10.9
20-24	8.0	10.5	8.8	9.4	7.3	10.3
25-29	8.6	10.1	8.0	8.2	7.1	8.9
30-34	7.0	7.5	6.9	7.0	6.4	6.8
35-39	6.5	6.8	6.3	6.4	5.9	5.7
40-44	6.0	5.5	6.3	6.0	5.3	5.5
45-49	4.7	4.2	5.5	4.9	5.0	4.7
50-54	4.1	3.6	4.5	4.4	4.5	3.3
55-59	2.7	2.2	3.4	3.3	3.2	3.0
60-64	2.9	2.6	2.6	2.5	2.9	2.5
65-69	1.6	1.3	1.7	1.8	2.2	1.5
70+	3.5	3.1	2.9	3.1	4.3	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Figure 1: Age-sex distribution of Population Census and Other National Surveys

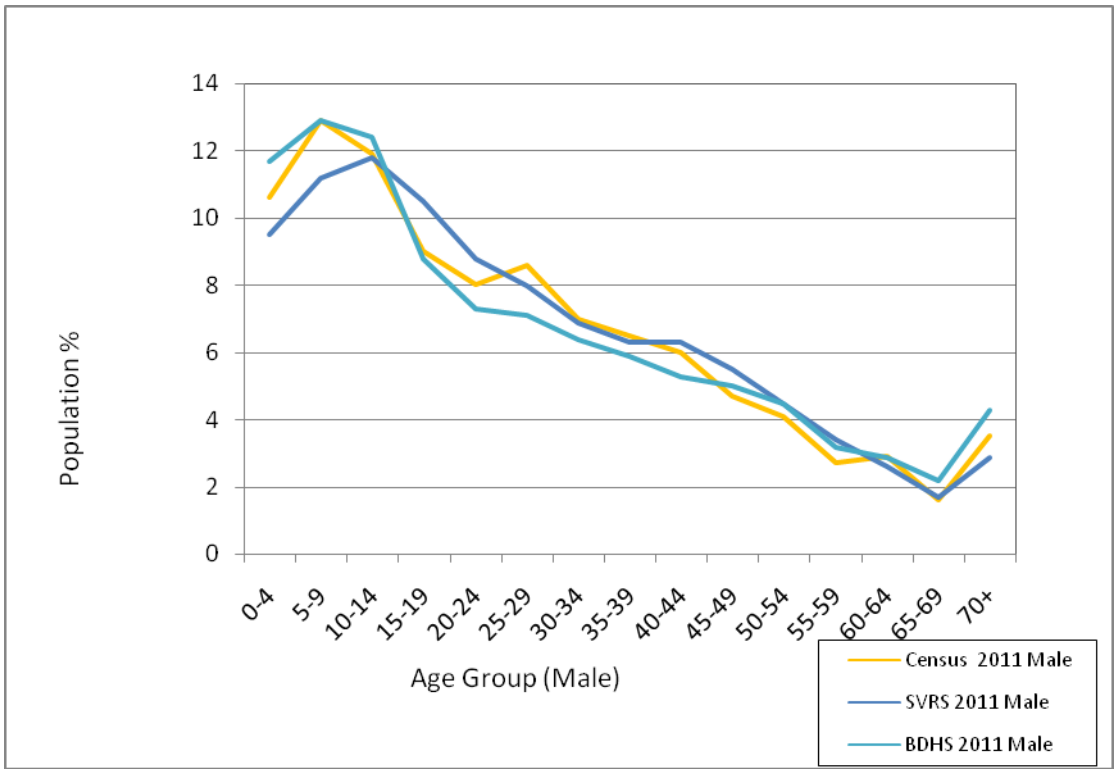
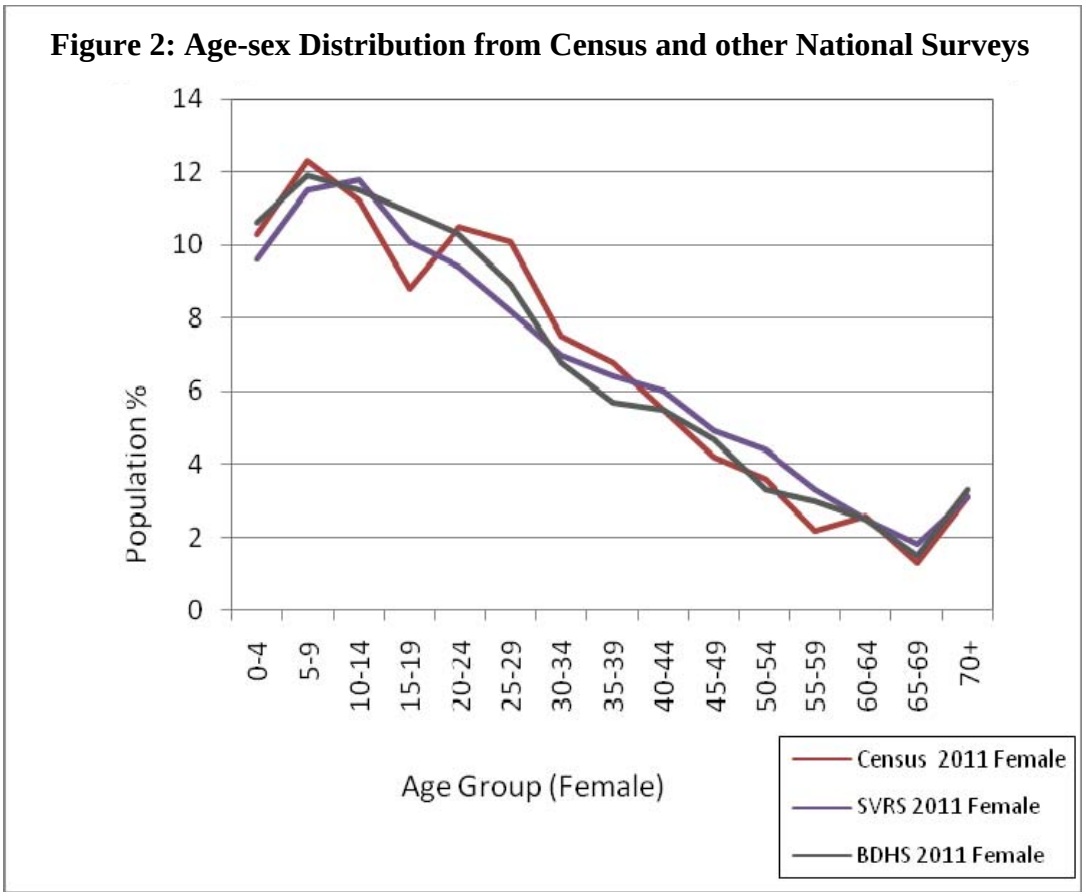


Figure 2: Age-sex Distribution from Census and other National Surveys



3.2 Age- Sex Structure Across Neighboring Countries

Age-sex structure of Bangladesh, Nepal and India has been presented in Table -3.2. It is notable that the population in the age group 0-14 among the three neighboring countries compares well though the percentage of population in this age-range is smaller in India compared to than that of Bangladesh and Nepal. This may be explained by the fact that the fertility reduction in India has started a bit earlier than Bangladesh and Nepal. The percentage of population in the age group 0-14 for male and female in case of Bangladesh is 35.4% and 33.8%, for Nepal such percentages are 36.6% and 33.2% and for India 32.1% and 30.9% respectively. The percentage distribution of male and female population among these three countries compares well with few exceptions. One such exception is female population in the age group 55-59 where the percentage of Bangladesh is 2.2%, Nepal is 3.0% and India is 4.3%. It is notable that in census 2011 of Bangladesh the percentage of population in the age group 65 years and over for male & female were 5.1% and 4.4% respectively. Such percentage for Nepal was 5.4% and 5.1% & for India 4.6% & 5.1%. Therefore, it can be concluded that proportion of old age people (65 years and over) are almost same in the three countries.

Table-3.2: Age - Sex Composition of the population of Bangladesh, India and Nepal

Age group	Bangladesh 2011 (Census)		Nepal 2011 (Census)		India 2009 (Estimate)	
	Male	Female	Male	Female	Male	Female
0-4	10.6	10.3	10.2	9.2	10.4	10.0
5-9	12.9	12.3	12.7	11.5	10.6	10.3
10-14	11.9	11.2	13.7	12.5	11.1	10.6
15-19	9.0	8.8	11.2	10.9	10.8	10.0
20-24	8.0	10.5	8.1	9.6	9.5	9.9
25-29	8.6	10.1	7.1	8.5	8.4	8.5
30-34	7.0	7.5	6.0	7.1	7.4	7.6
35-39	6.5	6.8	5.8	6.3	6.5	6.7
40-44	6.0	5.5	5.1	5.3	6.1	6.1
45-49	4.7	4.2	4.5	4.4	5.0	4.7
50-54	4.1	3.6	3.9	3.7	4.2	3.5
55-59	2.7	2.2	3.2	3.0	3.2	4.3
60-64	2.9	2.6	2.9	2.8	2.6	2.7
65+	5.1	4.4	5.4	5.1	4.6	5.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Figure 3: Age -sex distribution of Population of Bangladesh, Nepal and India

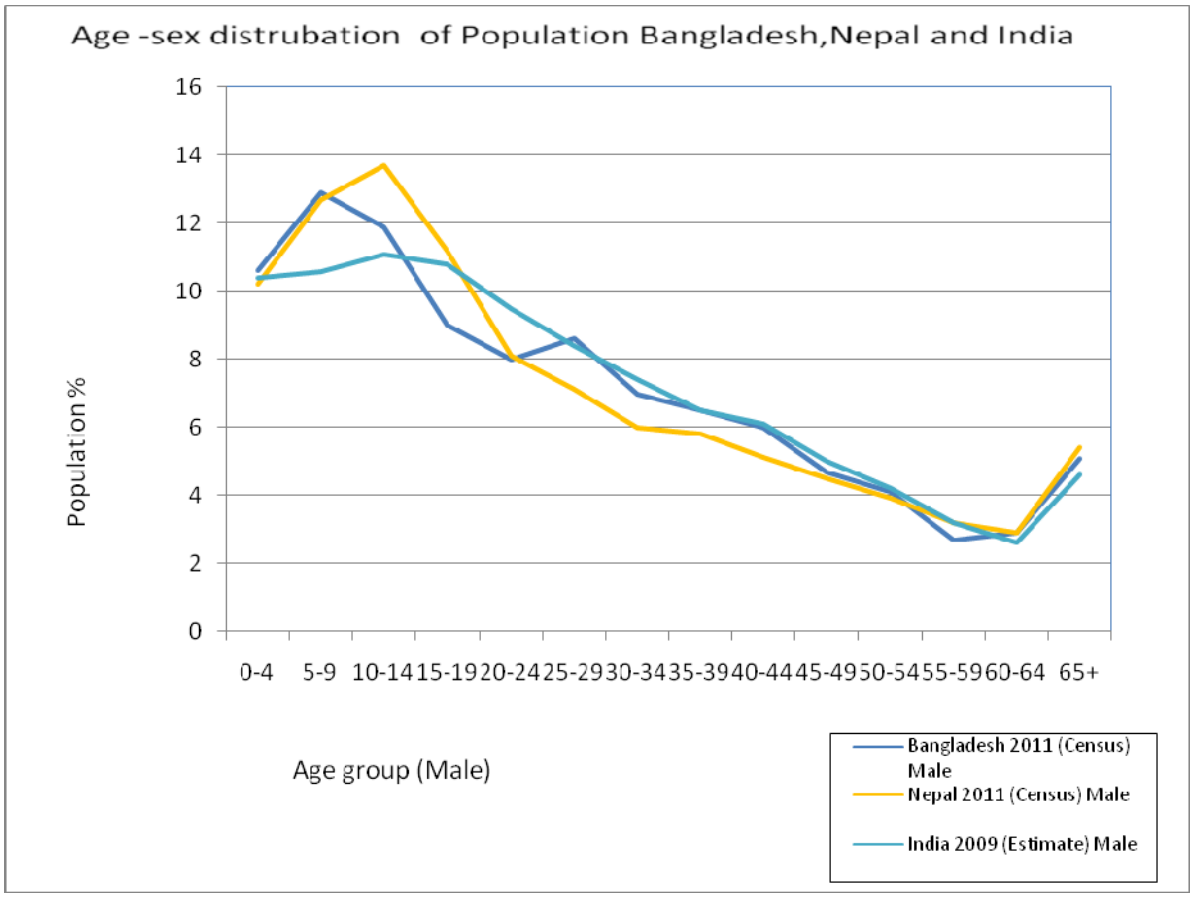
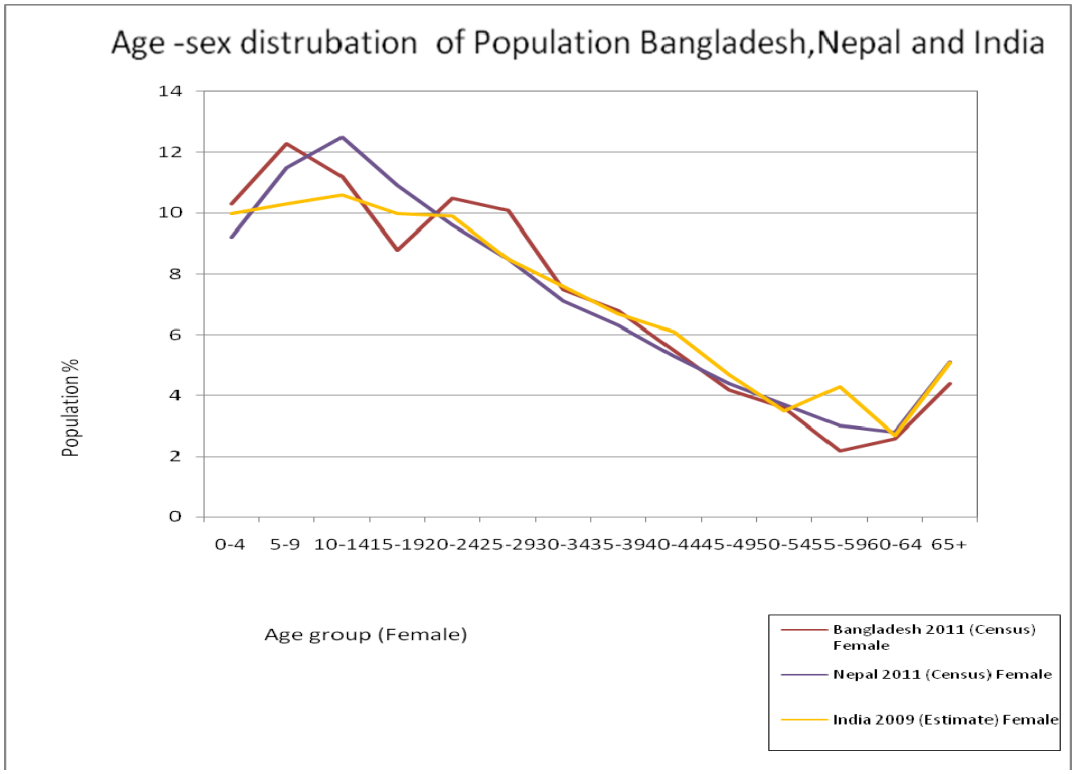


Figure 4: Age-Sex Distribution of Population of Bangladesh, Nepal and India



4. Quality of Census Data over the Years

This chapter deals with the quality of census data using same common indicators. These indicators have been calculated for three census of Bangladesh namely 1991, 2001 & 2011. The indices that have been discussed are Wipple's Index, Myer's Index and UN Age-sex Accuracy Index.

4.1 Whipple's Index

To evaluate the quality of census data pertaining to age reporting several method are used. Wipple's Index (W1) measures the extent of preference for or avoidance of terminal digit 0 and 5. The range of W1 are as follows.

Highly accurate data ≤ 105

Fairly accurate data 105-109.9

Approximate data 110.0-124.9

Rough data 125.0-174.9

Very rough data ≥ 175

The value of Whipple's Index, for three census of Bangladesh has been presented in Table-4.1 . It is revealed from the data that the quality of age-reporting in Bangladesh, particularly the digit preference of 0 & 5 improved over the years though still it represents very rough data. It is observed that in 1991 the value of Whipple's index was 318 which reduced to 299 in 2001 and further reduced to 262 in 2011. For male Whipple's Index is 311 at the national level which reduced to 296 in 2001 and further reduced to 257 in 2011. Considerable reduction in the value of Whipple's index was also observed in case of females age reporting. It was 326 in 1991, 303 in 2001 and 268 in 2011. There exists variation by residence in case of rural, municipal and other urban areas with respect to the value of Whipple's index.

4.2 Myer's Blended Index

Myer's blended index measures the preference or avoidance of age ending 0 to 9 in deriving overall age accuracy score. The theoretical range of Myer's index is from 0 to 90 where 0 indicates no age heaping and 90 indicate the extreme case where all recorded age end in the same digit. Myer's index calculated for different census years have been presented in Table-4.1. It is seen from the table that Myers index for both sexes was 37 in 1991 which reduced to 33 in 2001 and further reduced to 31 in 2011. The Myers index for male and female population also decreased. For male it reduced from 36 to 27 between 1991 to 2011 and from 37 to 28 for female between 1991 to 2011.

4.3 UN Age-Sex Accuracy Index

UN age-sex accuracy index comprises of the sum of (a) the mean deviation of the age ratios for males from 100 (b) the mean deviation of age ratios for females from 100 and (c) three times the mean of age to age difference in reported sex ratios. Age sex data may be termed as accurate inaccurate or highly inaccurate depending on whether the UN index is under 20, 20-40 or over 40 respectively.

The UN age-sex accuracy index for three consecutive censuses has been presented in Table-4.1. It is revealed from the table that though the index for Bangladesh indicates high inaccurate data, yet it is improved over the years. For Bangladesh it was 70 in the year 1991 which reduced to 60 in 2011 and further reduced to 44 in 2011. Considerable reduction also occurred in different geographical areas such as rural, municipal and other urban areas of the country.

Table-4.1: Whipple's Index, Myer's Index and UN Age-Sex Accuracy Index, Bangladesh 1981-2011

Residence	Whipple's Index			Myer's Index			UN Age-Sex Accuracy Index
	Both Sex	Male	Female	Both Sex	Male	Female	
1991							
Bangladesh	318	311	326	37	36	37	70
Rural	320	314	326	37	37	38	72
Municipal	303	293	318	33	33	33	72
Other Urban	320	311	331	36	36	37	72
2001							
Bangladesh	299	296	303	33	33	33	60
Rural	305	303	307	34	34	34	63
Municipal	276	271	283	29	29	30	54
Other Urban	297	292	302	32	32	33	62
2011							
Bangladesh	262	257	268	27	27	28	44
Rural	265	260	267	28	27	28	47
Urban	253	246	261	26	25	27	37
Other Urban	265	261	270	27	27	28	45

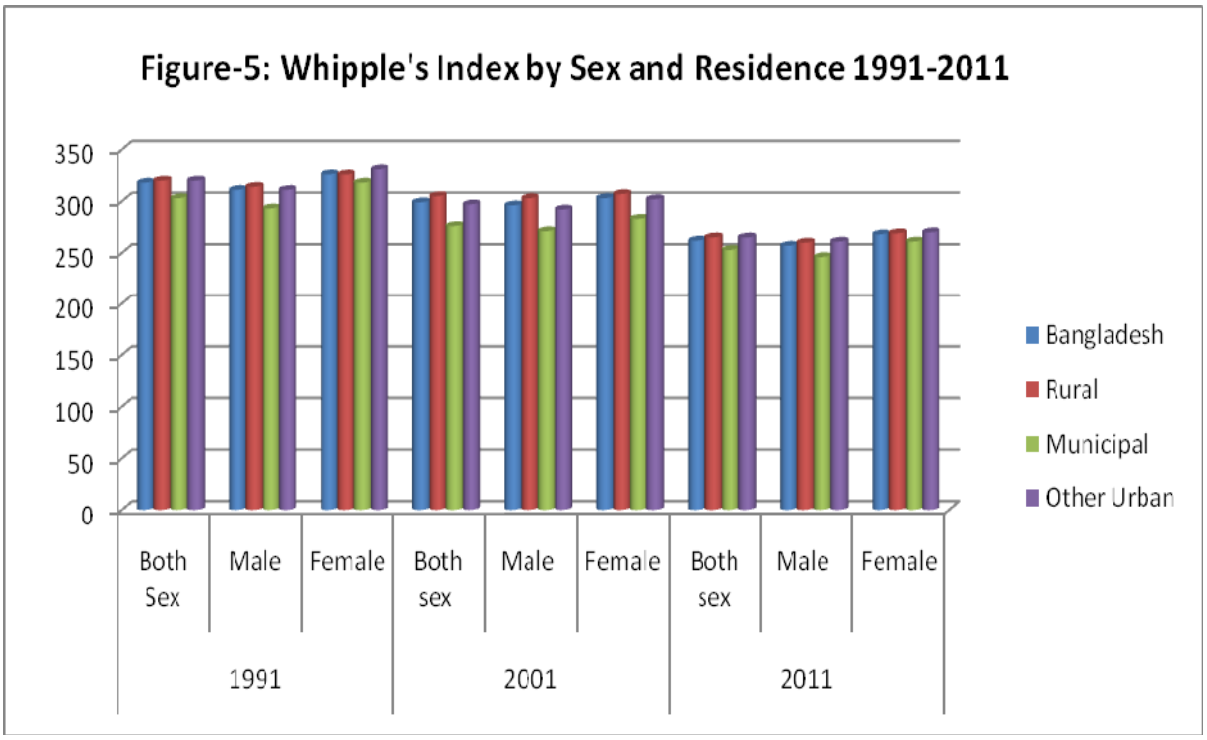


Figure-5: Whipple's Index by Sex and Residence 1991-2011
350
300
250
200
150
100
50
0
Both Sex
Male
Female
Both sex
Male
Female
Both sex
Male
Female
1991
2001
2011
Bangladesh
Rural
Municipal
Other Urban

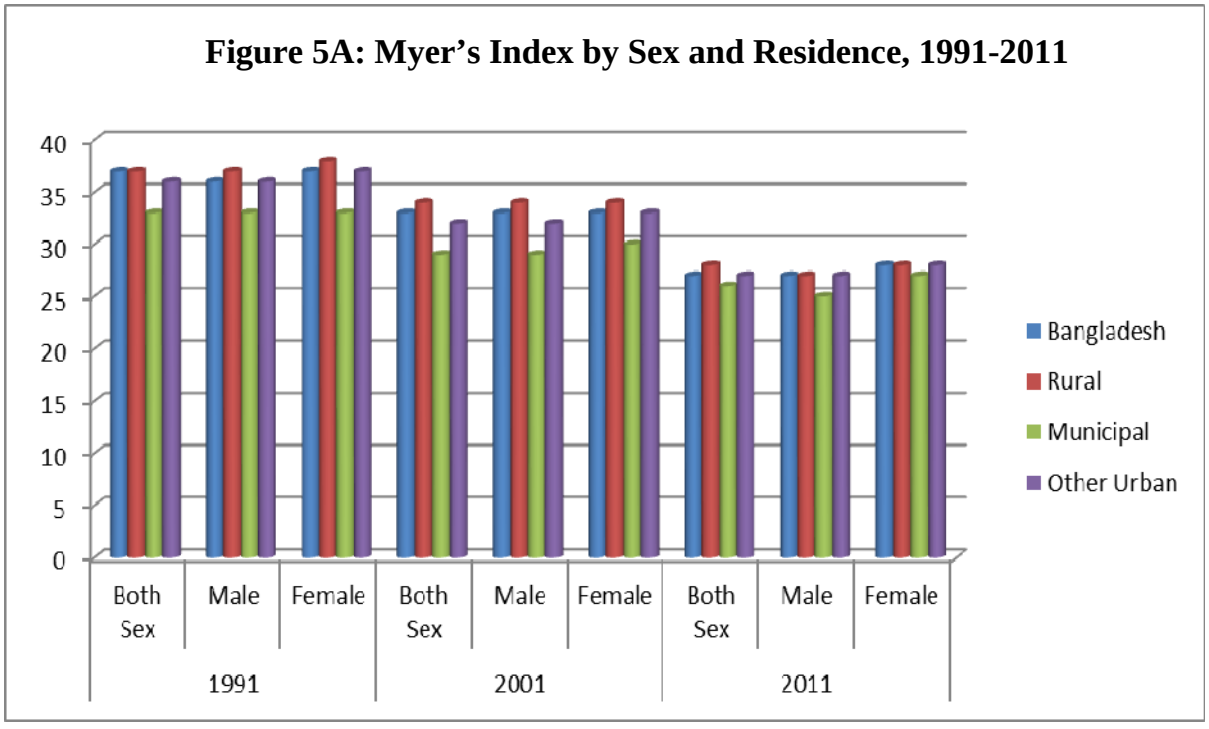


Figure 5A: Myer's Index by Sex and Residence, 1991-2011
40
35
30
25
20
15
10
5
0
Both Sex
Male
Female
Both Sex
Male
Female
Both Sex
Male
Female
1991
2001
2011
Bangladesh
Rural
Municipal
Other Urban

5. POPULATION DISTRIBUTION BY AGE & SEX

This chapter deals in population distribution by age and sex. Age sex distribution of population in any country is of vital importance as it results in the demographic behavior of the population. The reduction in fertility leads to reduction in the population of lower age group while reduction in mortality generally show increasing trend in population in the higher age group. This chapter presents the population distribution of Bangladesh in last three censuses of the country.

5.1 Age-sex Distribution of Population at the National Level

Population by age group and sex has been presented in Table-5.1. Population by age and sex for from consecutive censuses of the country has been presented in the table.

It is observed from that in 1981 the male population in the age group 0-4 was 7449 thousand which increased to 8837 thousand in 1991 and reduces to 7639 thousand in 2011. This indicates that the fertility of the country reduced in last decade at a higher rate. The reduction in earlier decades were also observed which can be seen from the percentage distribution of the 0-4 year's age group. In 1981 the percentage of male population in the 0-4 years age group was 16.6% which reduced to 16.1% in 1991 and distinctly reduced to 13.0% in 2001 and 10.7% in 2011. The reduction was 0.5 percentage point between 1981-91 2.9 percentage points in between 1991-2001 and 2.3 percentage points in 2011.

An increase in the male population size and population was observed in the age group 5-9 during 1981-1991 where the proportion of population in the age group 5-9 was 16.0% in 1981 which rose to 16.65 in 1991 but decreased to 13.2% in 2001 and farther reduced to 12.9% in 2011.

The proportion of population in the higher age group 60 year and above for male population show stable position through the volume increased over the year. Population 60 years and over in the year 1981 was 6.1% in 1981, 5.9% in 1991, 5.7% in 2001 and 7.9% in 2011. Similarly the female populations in those four censuses for the age group 60 year and over were 5.1%, 4.8%, 6.4% and 7.0% in the year 1981, 1991, 2001 & 2011 respectively.

Table-5.1: Population by Age Group and Sex in Census Years 1981-2011

Age group	Male("000")				Female("000")			
	National							
	1981	1991	2001	2011	1981	1991	2001	2011
0-4	7449	8837	8327	7639	7344	8656	7675	7423
5-9	7183	9065	8749	9323	6975	8525	7947	8851
10-14	6226	6902	8989	8615	5424	6012	7483	8032

Contd.

Age group	Male(“000”)				Female(“000”)			
National								
15-19	4129	4546	6331	6510	4018	4387	5745	6352
20-24	3244	4093	4918	5777	3535	4724	6217	7522
25-29	3241	4324	4958	6225	3179	4730	6024	7254
30-34	2492	3367	4342	5079	2471	3226	4300	5421
35-39	2358	3269	4235	4697	2081	2717	3656	4859
40-44	1920	2454	3443	4281	1774	2159	2818	3981
45-49	1585	1938	2618	3363	1277	1625	2058	3017
50-54	1417	1636	2189	2953	1273	1470	1816	2600
55-59	924	1089	1323	1923	697	861	1065	1577
60-64	1046	1226	1546	2081	903	1044	1303	1853
65-69	522	632	818	1150	380	461	643	964
70+	1183	1350	1904	2493	870	990	1515	2227
Total	**44919**	**54728**	**64090**	**72109**	**42201**	**51587**	**60265**	**71933**
0-4	16.6	16.1	13.0	10.6	17.4	16.8	12.7	10.3
5-9	16.0	16.6	13.2	12.9	16.5	16.5	13.2	12.3
10--14	13.9	12.6	12.4	11.9	12.9	11.7	12.4	11.2
15-19	9.2	8.3	9.5	9.0	9.5	8.5	9.5	8.8
20-24	7.2	7.5	10.3	8.0	8.4	9.2	10.3	10.5
25--29	7.2	7.9	10.0	8.6	7.5	9.1	10.0	10.1
30-34	5.5	6.2	7.1	7.0	5.9	6.2	7.1	7.5
35--39	5.2	6.0	6.1	6.5	4.9	5.3	6.1	6.8
40-44	4.3	4.5	4.6	6.0	4.2	4.2	4.7	5.5
45-49	3.5	3.5	3.4	4.7	3.0	3.2	3.4	4.2
50-54	3.2	3.0	3.0	4.1	3.0	2.8	3.0	3.6
55-59	2.1	2.0	1.7	2.7	1.7	1.7	1.8	2.2
60--64	2.3	2.2	2.1	2.9	2.1	2.0	2.2	2.6
65--69	1.2	1.1	1.1	1.6	0.9	0.9	1.1	1.3
70+	2.7	2.5	2.5	3.5	2.1	1.9	2.5	3.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Figure 6: Population by Age Group and Sex in Census Years 1981-2011 (National) Male

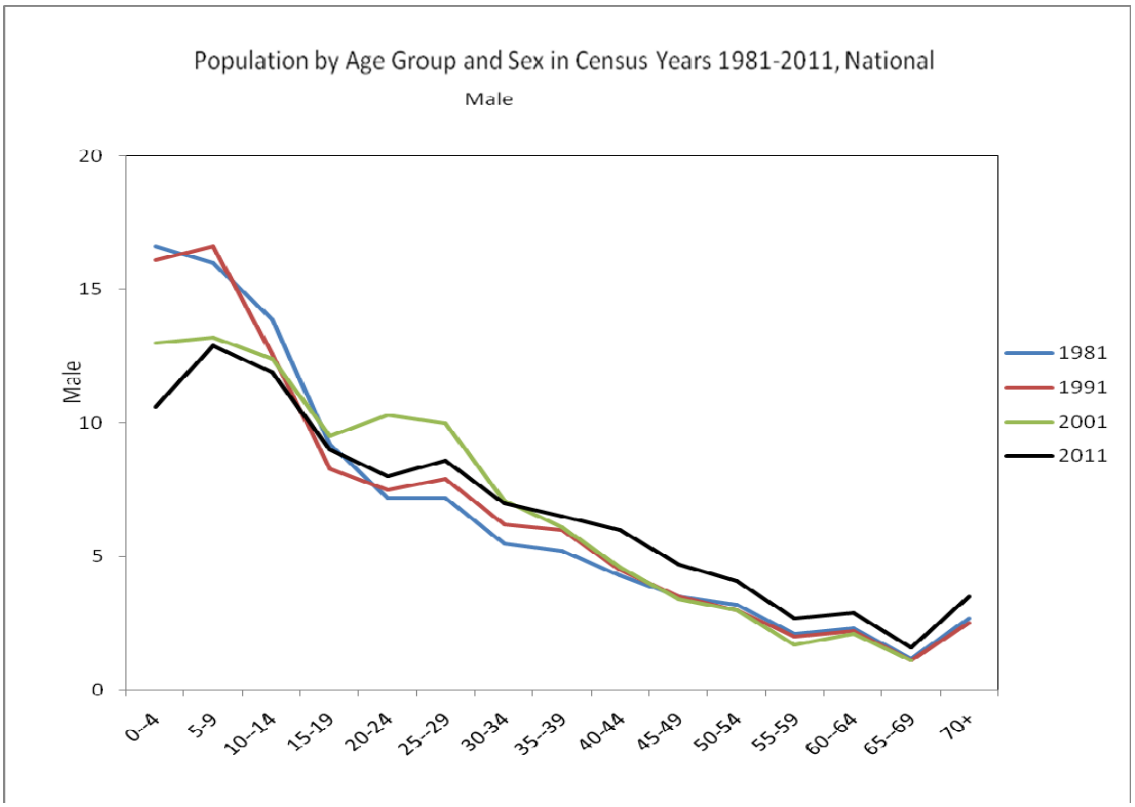
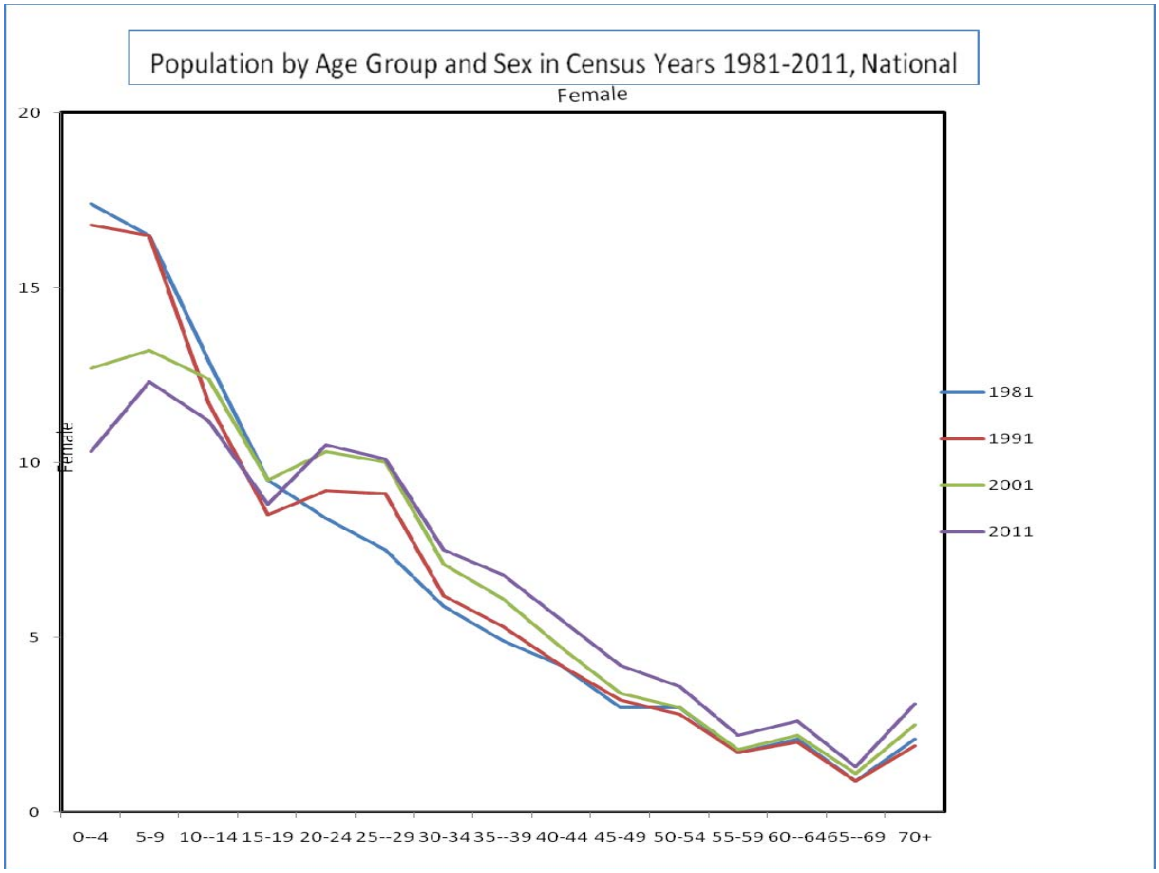


Figure 7: Population by Age Group and Sex in Census Years 1981-2011, National (Female)



5.2 Age sex Distribution of Population in the Rural Area

The population distribution of male & female population in the rural areas by age & sex in four consecutive censuses (1981-2011) in Table-5.2 show almost the same pattern as in the national level.

It is seen from the table that the volume of male population in the age group 0-4 was 6494 thousand in 1981 which increased to 7399 thousand in 1991, 6705 thousand in 2001 & 6104 thousand in 2011. Though the population increased in 1991 the percentage was lower than 1981. In 1981 the percentage of population in the age group 0-4 was 17.3 which reduced to 17.0 in 1991 and 11.2% in 2011. Almost similar pattern was observed for the female population in their lower age group. The percentage of female population in the age group 0-4 was 17.6% in 1981, reduced to 17.3% in 1991 and further reduced to 13.3% in 2001 & 10.6% in 2011. The gradual reduction of population in this age group indicates the fertility reduction of population over the years.

The population distribution of the rural areas in 0-14 age group for the male population in the four censuses show substantial fall in the population distribution with 48.0% in 1981, 47.2% in 1991, 41.6% in 2001 and 37.4% in 2011. Similar trend was observed for the female population of age 0-14. It was 46.9% in 1981 which reduced to 45.5% in 1991, 39.3% in 2001 and 34.7% in 2011.

The population distribution for 65 years and over show some irregular pattern for both male and female. The male population in the age group 60 years and over was 6.3% in 1981 and reduced to 6.1% in 1991 which increased in the later period with 7.2% in 2001 and 8.5% in 2011. Similar pattern was observed for female population 60 years and over. It was 5.2% in 1981 reduced to 5.0% in 1991 and then increased to 6.0% and 7.4% respectively in 2001 and 2011.

Table-5.2: Population by Age Group and Sex in Census Years 1981-2011

Age group	Male("000")				Female("000")			
	Rural							
	1981	1991	2001	2011	1981	1991	2001	2011
0-4	6494	7399	6705	6104	6405	7268	6206	5942
5-9	6248	7541	7063	7512	6076	7088	6412	7141
10-14	5279	5542	6490	6746	4576	4756	5731	6290
15-19	3385	3508	4624	4774	3397	3421	4196	4671
20-24	2503	2978	3312	3974	2972	3693	4566	5575
25-29	2532	3220	3439	4379	2707	3765	4533	5462
30-34	1964	2508	3067	3619	2127	2582	3259	4123
35-39	1908	2463	3079	3406	1814	2213	2809	3726
40-44	1560	1857	2507	3157	1547	1789	2203	3090
45-49	1326	1520	1943	2514	1121	1366	1627	2362
50-54	1184	1307	1659	2249	1099	1235	1464	2078

Contd.

Age group	Male(“000”)				Female(“000”)			
Rural								
55-59	794	894	1030	1475	618	732	872	1267
60-64	893	1014	1236	1655	791	880	1069	1520
65-69	457	530	662	932	337	391	527	795
70+	1022	1146	1567	2084	756	837	1242	1858
Total	37549	43427	48382	54580	36343	42016	46716	55900
0--4	17.3	17.0	13.9	11.2	17.6	17.3	13.3	10.6
5-9	16.6	17.4	14.4	13.8	16.7	16.9	13.7	12.8
10--14	14.1	12.8	13.3	12.4	12.6	11.3	12.3	11.3
15-19	9.0	8.1	9.5	8.8	9.4	8.1	9.0	8.4
20-24	6.7	6.9	6.9	7.3	8.2	8.8	9.8	10.0
25--29	6.7	7.4	7.2	8.0	7.4	9.0	9.7	9.8
30-34	5.2	5.7	6.4	6.6	5.8	6.1	7.0	7.4
35--39	5.1	5.7	6.4	6.2	5.0	5.3	6.0	6.6
40-44	4.2	4.3	5.2	5.8	4.3	4.3	4.7	5.5
45-49	3.5	3.5	4.1	4.6	3.1	3.3	3.5	4.2
50-54	3.2	3.0	3.4	4.1	3.0	2.9	3.1	3.7
55-59	2.1	2.1	2.1	2.7	1.7	1.7	1.9	2.3
60--64	2.4	2.3	2.6	3.0	2.2	2.1	2.3	2.7
65--69	1.2	1.2	1.4	1.7	0.9	0.9	1.1	1.4
70+	2.7	2.6	3.2	3.8	2.1	2.0	2.6	3.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Figure 8: Population by Age Group and sex in Census 1981-2011, Rural (Male)

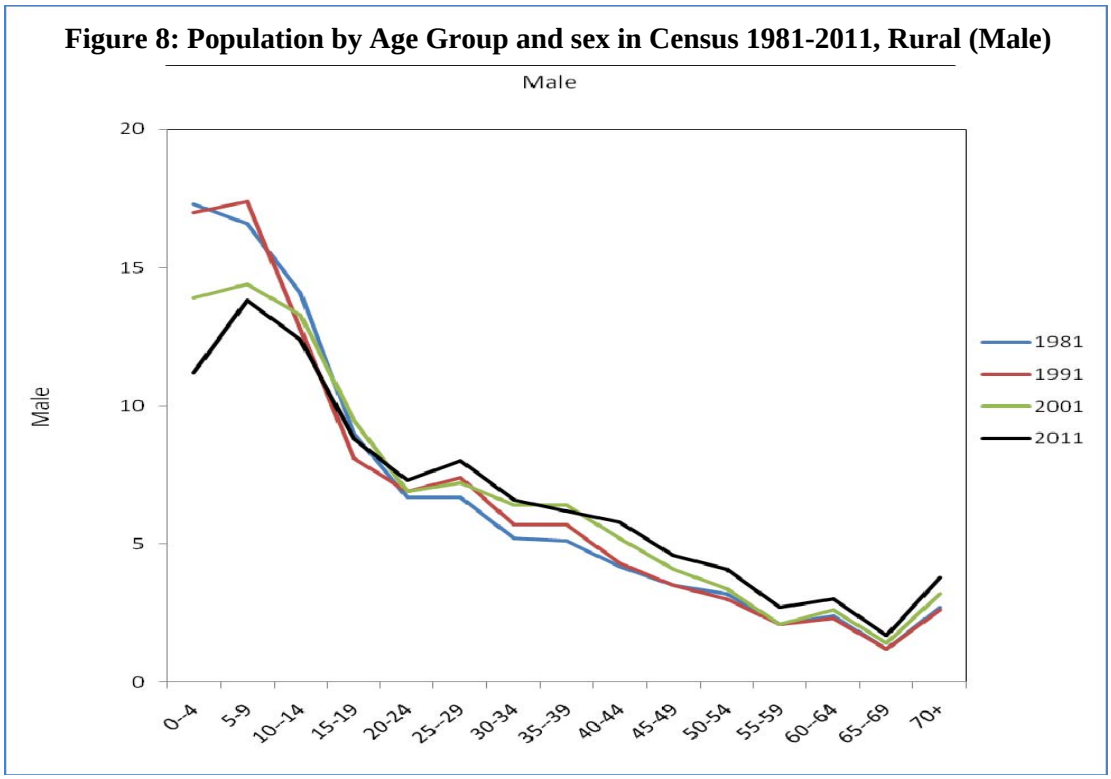
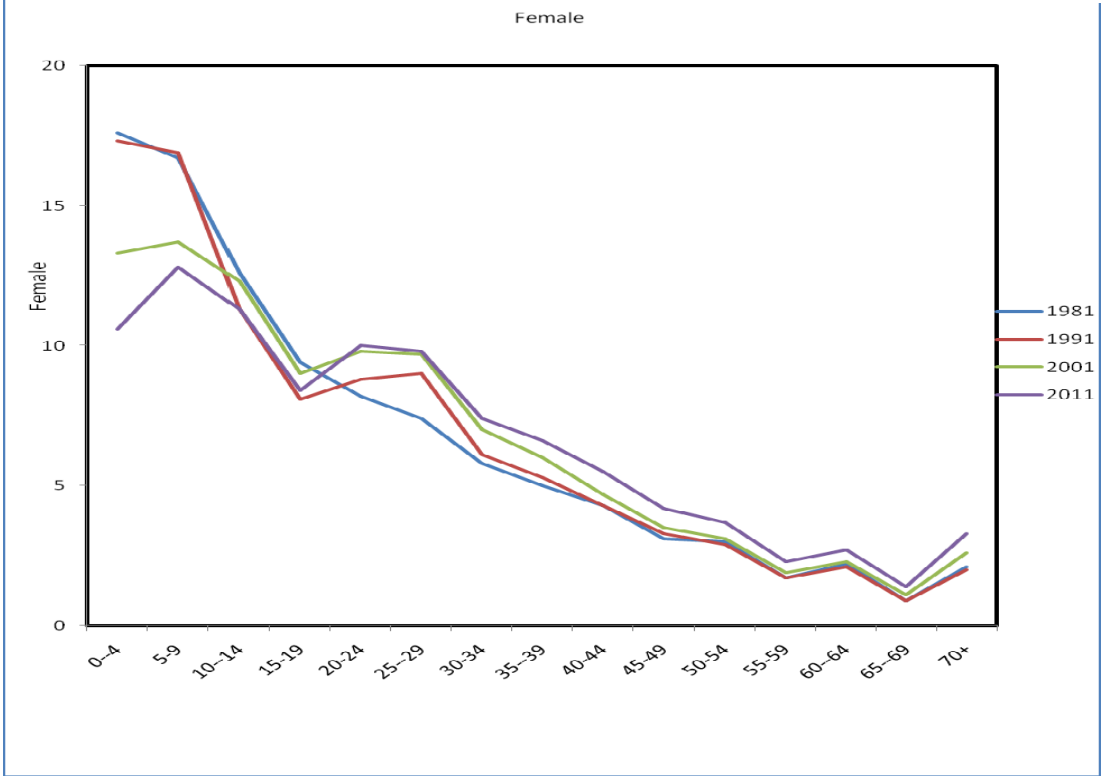


Figure 9: Population by Age Group and sex in Census 1981-2011, Rural (Female)



5.3 Age Sex Distribution of Population in the Urban Area

The age sex distribution of population in the urban area for the 1981-2011 show that for the male population in 0-4 year age group, increased from 1981-2001 than decreased though the percentage reduced gradually in all the censuses during the period 1981-2011. The similar pattern was observed for the female population where the volume increased in all censuses 1981-2011 but the percentage reduced over the years. In 1981, the male population in the age group was 13.0% which reduced to 12.7% in 1991, then reduced to 10.3% in 2001 and 8.8% in 2011. Similar pattern was observed in the female population. The percentage was 16.0% in 1981 reduced to 14.5% in 1991 then further reduced to 10.9% in 2001 & 9.2% in 2011.

As regards the broad age distribution by sex it observed that the male population in the age group 0-14 was 38.5% in 1981, and then reduced to 38.2% in 1991, 33.1% in 2001 & 29.8% in 2011. For the female population in the same age group, it was 45.8% in 1981, 42.6% in 1991, 35.1% in 2001 and 30.7% in 2011.

The population distribution in the higher age group 60 year and over, it is observed that, for the population 60 years and over it was 5.1% in 1981, 4.6% in 1991, 5.1% in 2001 & 5.9% in 2011. Similar pattern was found for the female population where it was 4.5% in 1981, 4.0% in 1991, 4.6% in 2001 and 5.5% in 2011.

Table-5.3: Population by Age Group and Sex in Census Years, 1981-2011

Age group	Male(“000”)				Female(“000”)			
Urban								
	1981	1991	2001	2011	1981	1991	2001	2011
0-4	955	1438	1622	1535	939	1388	1469	1480
5-9	935	1524	1687	1811	899	1437	1534	1709
10-14	947	1360	1899	1868	847	1256	1753	1741
15-19	744	1038	1708	1736	621	966	1548	1681
20-24	741	1115	1606	1803	563	1031	1651	1948
25-29	709	1104	1519	1846	472	965	1491	1792
30-34	528	859	1275	1461	345	644	1040	1297
35-39	450	806	1156	1291	267	504	846	1133
40-44	360	597	937	1124	227	370	614	891
45-49	259	418	675	850	156	259	431	655
50-54	233	329	531	703	174	235	351	522
55-59	130	195	292	449	79	129	193	310
60-64	153	212	310	426	112	164	234	333
65-69	65	102	156	218	43	70	116	169
70+	161	204	337	410	114	153	273	371
Total	7370	11301	15710	17531	5858	9571	13544	16032
0--4	13.0	12.7	10.3	8.8	16.0	14.5	10.9	9.2
5-9	12.7	13.5	10.7	10.3	15.3	15.0	11.3	10.7
10--14	12.8	12.0	12.1	10.7	14.5	13.1	12.9	10.8
15-19	10.1	9.2	10.9	9.9	10.6	10.1	11.4	10.5
20-24	10.1	9.9	10.2	10.3	9.6	10.8	12.2	12.2
25--29	9.6	9.8	9.7	10.5	8.1	10.1	11.0	11.2
30-34	7.2	7.6	8.1	8.3	5.9	6.7	7.7	8.1
35--39	6.1	7.1	7.3	7.4	4.6	5.3	6.2	7.1
40-44	4.9	5.3	6.0	6.4	3.9	3.9	4.6	5.5
45-49	3.5	3.7	4.3	4.9	2.7	2.7	3.2	4.1
50-54	3.2	2.9	3.4	4.0	3.0	2.5	2.6	3.3
55-59	1.7	1.7	1.9	2.6	1.3	1.3	1.4	1.8
60--64	2.1	1.9	2.0	2.4	1.9	1.7	1.7	2.1
65--69	0.8	0.9	1.0	1.2	0.7	0.7	0.9	1.1
70+	2.2	1.8	2.1	2.3	1.9	1.6	2.0	2.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Figure 10: Population by Age Group and Sex in Census 1981-2011, Urban (Male)

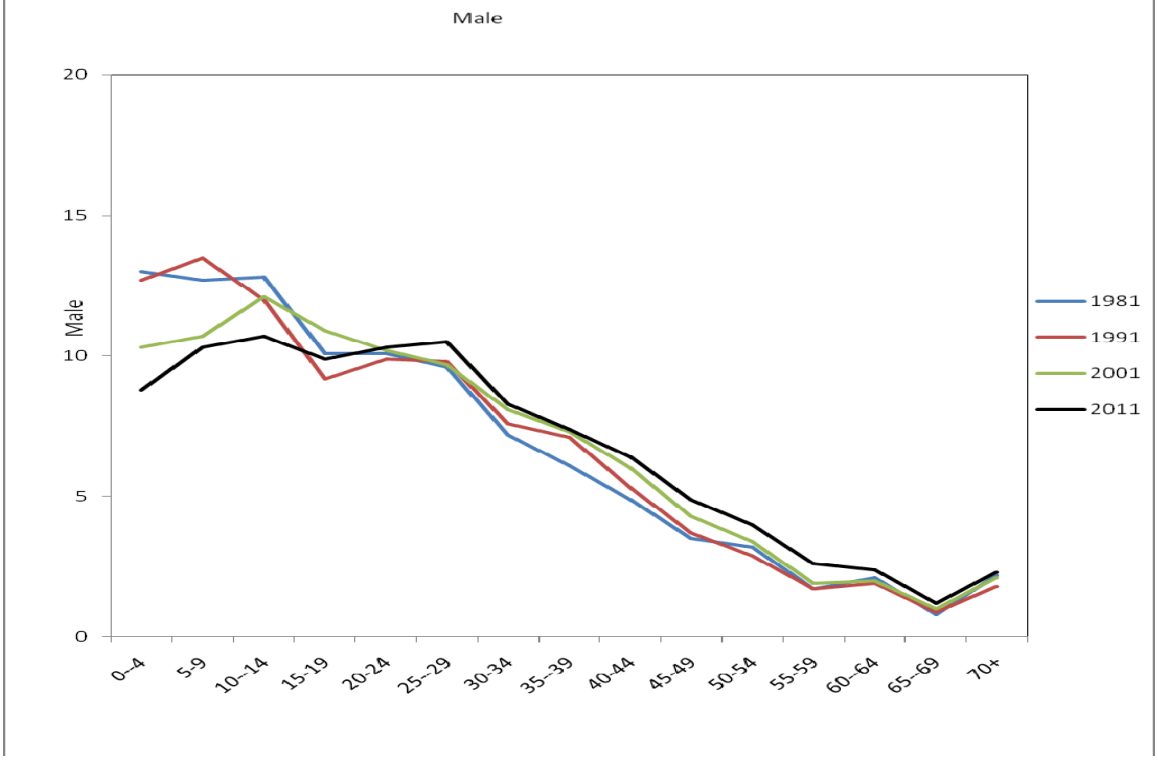
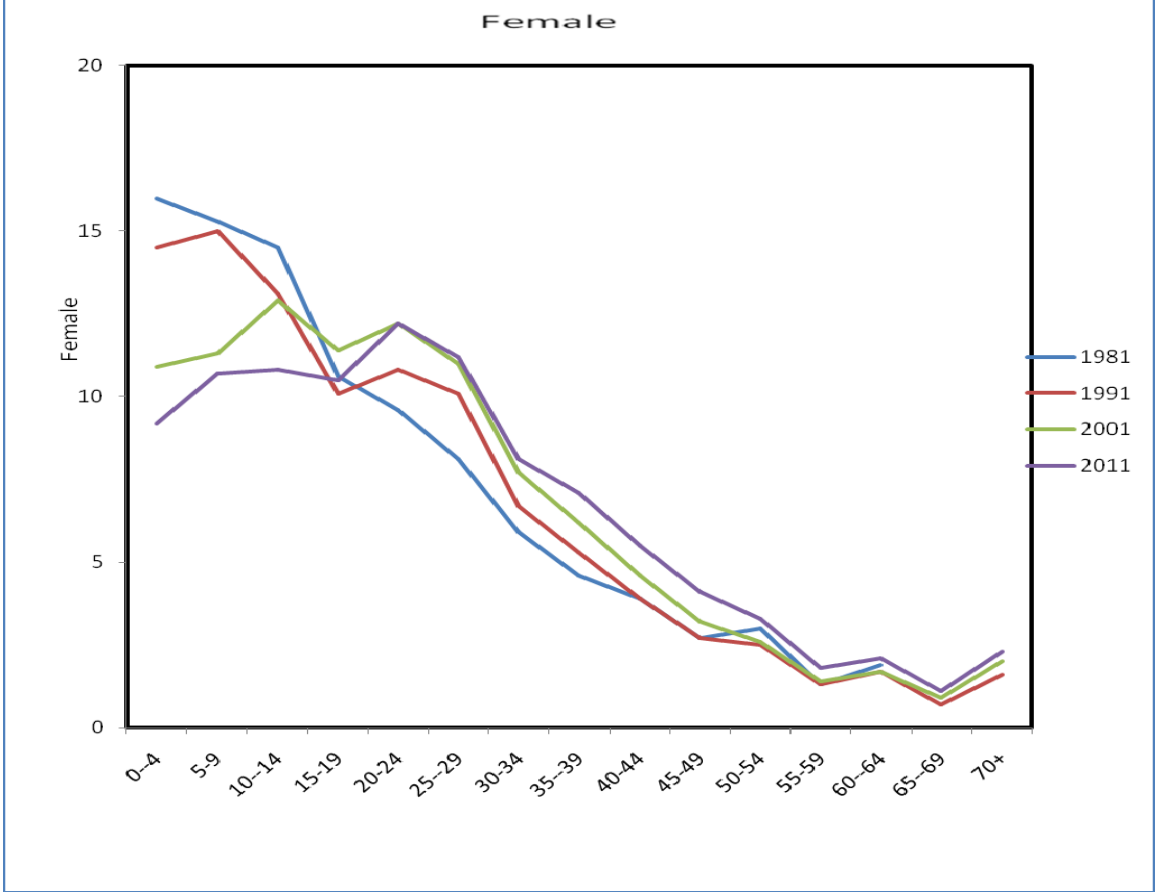


Figure 11: Population by Age Group and Sex in Census 1981-2011, Urban (Female)



5.4 Population Distribution by Broad Age Group and Dependency Ratio by Sex at the National Level

Population distribution by broad age group and dependency ratio by sex at the national level has been presented in Table 5.4.

It is observed from the table that the dependency ratio for both male and female has been reduced over the year. It may be mentioned that dependency ratio by sex has been derived in two ways. Demographic dependency ratio (DDR_1) defined as the ratio of population 0-14 year and 60 year and over to the population 15-59 year multiplied by 100. On the other hand, Demographic Dependency Ratio (DDR_2) has been defined as the ratio of population 0-14 years and 65 years and over to 15-64 years multiplied by 100.

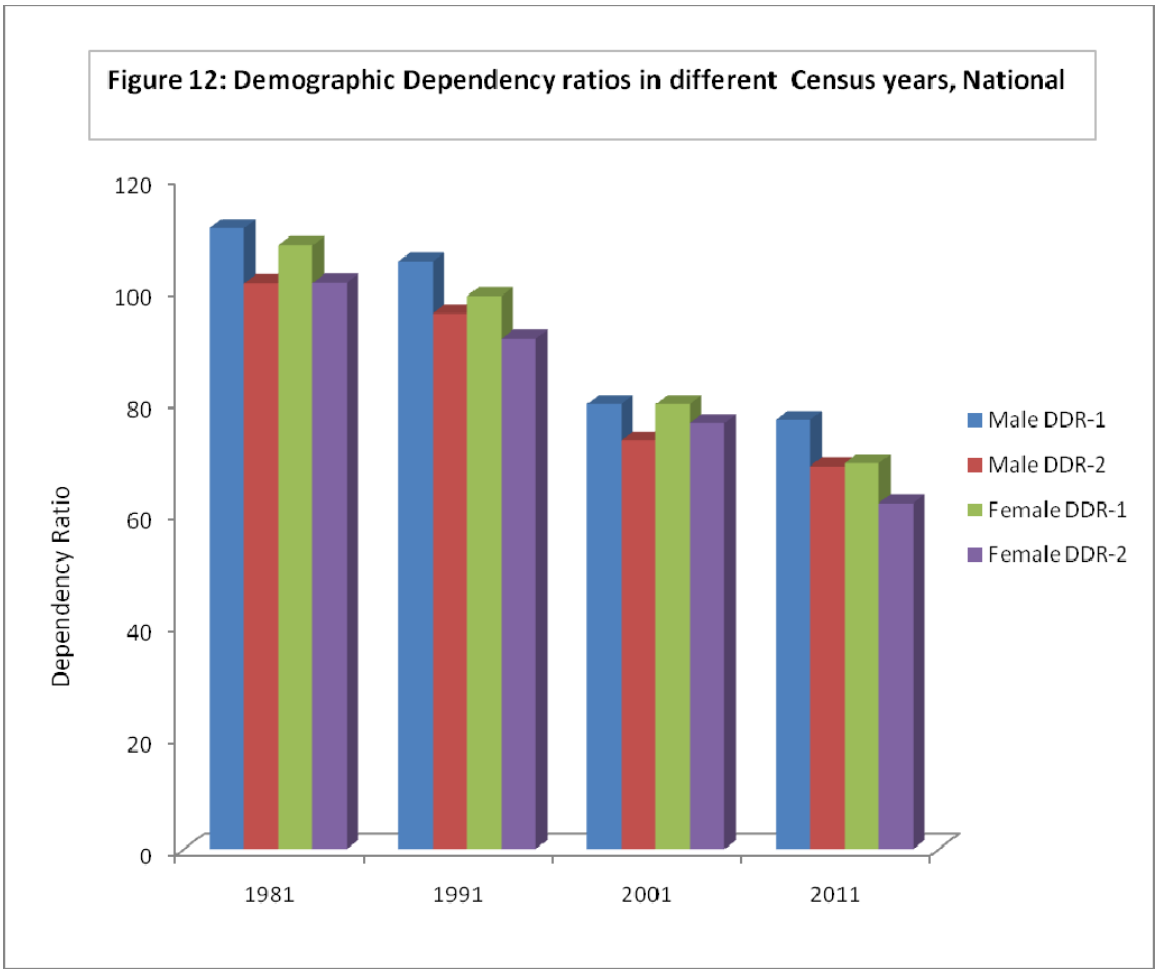
The male dependency ratio as per DDR_1 was 111.0 in 1981 which reduced to 105.0 in 1991 and Sherpur reduced to 79.5 in 2001 and 76.7 in 2011. It is notable that the reduction in DDR_1 during the period 1991 to 2001 was very high which indicate sharp decline of facility in this period which is also visible from the population distribution by broad age group. The population in the group 0-14 was 45.3% in 1991 which reduced to 38.6% in 2001, a decline of 6.7 percentage point during the period. The reduction in the population of age group 0-14 in the later intercensal period was 3.1 percentage points which is less than one half of the reduction occurred during the earlier period of 1991-2001. Similar reduction trend was observed if we use the DDR_2. It is interesting to mention that female Demographic Dependency Ratio at the national level follow almost the same pattern with a difference in 1981 which may be due to under enumeration of female in the age group 0-14 in 1981 Census. However, the situation improved in the later censuses as revealed from DDR_1 and DDR_2.

Table-5.4: Population Distribution in the Broad Age groups and Dependency Ratio by Sex

Sex of Head	Age group and dependency Ratio	Population Proportion in Census year			
		National			
		1981	1991	2001	2011
Male	0-14	46.5	45.3	38.6	35.5
	15-59	47.4	48.8	55.7	56.6
	15-64	49.7	51.1	57.8	59.4
	60+	6.1	5.9	5.7	7.9
	65+	3.8	3.6	3.6	5.1
	DDR-1	111.0	105.0	79.5	76.7
	DDR-2	101.1	95.7	73.0	68.4
Female	0-14	46.8	44.9	38.4	33.8
	15-59	48.1	50.3	55.2	59.2
	15-64	50.2	52.3	58.0	61.8
	60+	5.1	4.8	6.4	7.0
	65+	3.0	2.8	3.6	4.4
	DDR-1	107.9	98.8	79.5	68.9
	DDR-2	101.2	91.2	76.1	61.8

Demographic Dependency Ratio$_1$= $\frac{Pop\ 0-14+Pop60+}{pop\ 15-59}$ X100

Demographic Dependency Ratio$_2$= $\frac{Pop\ 0-14+Pop65+}{pop\ 15-64}$ X100



5.5 Population Distribution by Broad Age Group and Dependency Ratio by Sex at the Rural Area

Population distribution by broad age group are demographic dependency ratio by sex in rural area of the country has been presented in Table-5.5. The Demographic Dependency Ratio in the rural area shows higher value than the national level. The male demographic dependency ratio (DDR_1) of rural population was 118.8 in 1981 which reduced to 114.1 in 1991, 94.9 in 2001 and 84.8 in 2011. As we have noticed sharp decline of DDR_1 between 1991 to 2001, it is also true for the rural area. The reduction of DDR_1 in the latest Census 2011 compared to the reduction between 1991 to 2001, though low yet it in higher than the national decline. The DDR_2 also follow the same pattern as DDR_1 for male rural population.

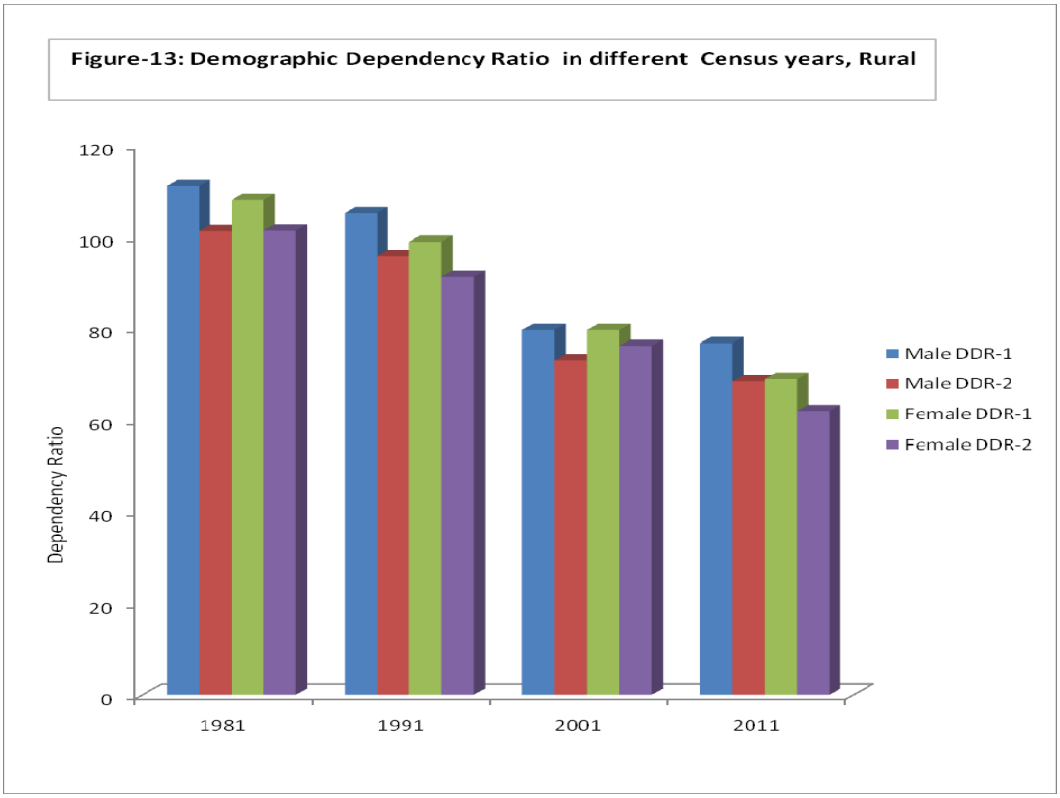
For the female population the DDR_1 at the initial year 1981 was lower than their male counterpart and for the later year the reduction almost follow the male pattern and this is also true for DDR_2

Table-5.5: Population Distribution in the Broad Age group and Dependency ratio by Sex

Sex of Head	Age group and dependency Ratio	Population Proportion in Census year			
		Rural			
		1981	1991	2001	2011
Male	0-14	48.0	47.2	41.6	37.4
	15-59	45.7	46.7	51.4	54.1
	15-64	48.1	49.0	54.0	57.1
	60+	6.3	6.1	7.2	8.5
	65+	3.9	3.8	4.6	5.5
	DDR-1	118.8	114.1	94.9	84.8
	DDR-2	108.0	104.1	85.6	75.1
Female	0-14	46.9	45.5	39.3	34.7
	15-59	47.9	49.5	54.7	57.9
	15-64	50.1	51.6	57.8	60.6
	60+	5.2	5.0	6.0	7.4
	65+	3.0	2.9	3.7	4.7
	DDR-1	108.8	102.0	82.8	72.7
	DDR-2	99.6	93.8	74.4	65.0

$$\text{Demographic Dependency Ratio}_1 = \frac{Pop\ 0-14 + pop\ 60+}{Pop\ 15-59} \text{ X100}$$

$$\text{Demographic Dependency Ratio}_1 = \frac{Pop\ 0-14 + pop\ 65+}{Pop\ 15-64} \text{ X100}$$



5.6 Population Distribution by Broad Age Group and Dependency Ratio by Sex at the Urban Area

Demographic Dependency Ratio in the urban area by sex has been presented in Table-5.6. It is seen from the table that DDR_1 for urban area is much lower than DDR_1 in rural area. It is indicate the lower fertility of the urban population compared to their rural counterpart. DDR_1 of the male population in the urban area in 1981 was 77.3 which reduced to 74.8 in 1991 and 61.8 in 2001. As seen in case of rural population the reduction of DDR_1 in the intercensal period 1991-2001 is commendable. The DDR_1 for the year 2011 was 55.5 almost similar trends was observed in case of DDR_2

For the female population, the dependency ratio in the urban area is much higher than their male counterpart which can be explained by the proportion of population in the age group 0-14. This trend continues in all censuses through reduction of DDR_1 was much higher in the intercensal period 1991-2001 as revealed in case of all the areas. The DDR_2 also shows the similar pattern for the urban female.

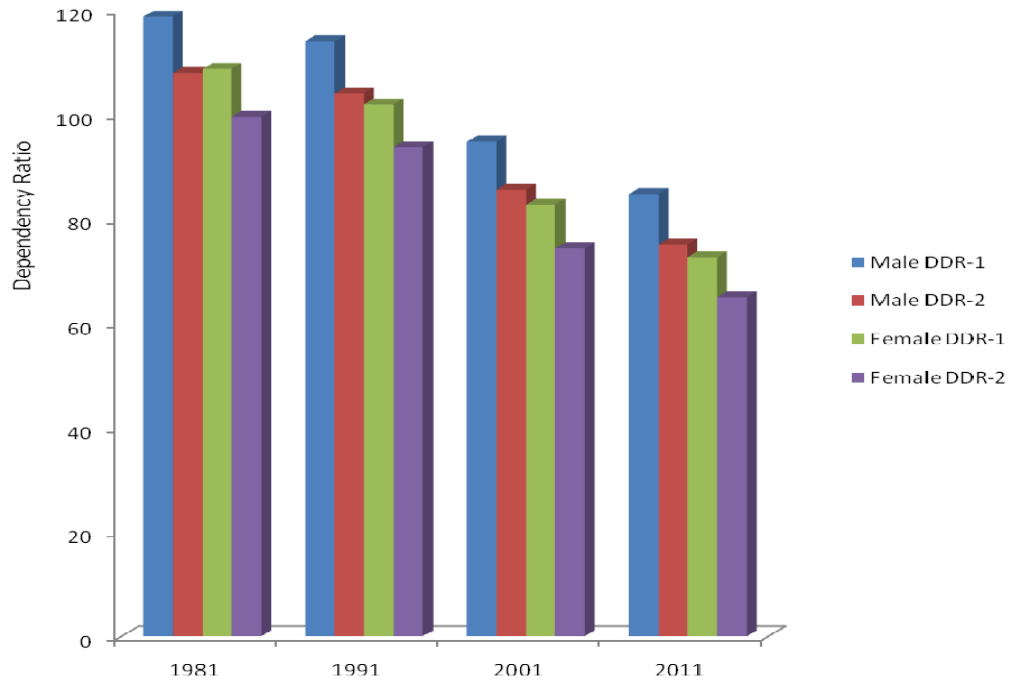
Table-5.6: Population Distribution in the Broad Age group and Dependency ratio by Sex

Sex of Head	Age group and dependency Ratio	Population Proportion in Census year			
		National			
		1981	1991	2001	2011
Male	0-14	38.5	38.2	33.1	29.8
	15-59	56.4	57.2	61.8	64.3
	15-64	58.5	59.1	63.8	66.7
	60+	5.1	4.6	5.1	5.9
	65+	3.0	2.73.1	3.1	3.5
	DDR-1	77.3	74.8	61.8	55.5
	DDR-2	70.9	69.2	59.8	49.9
Female	0-14	45.8	42.6	35.1	30.7
	15-59	49.7	53.4	60.3	63.8
	15-64	51.6	55.1	62.0	65.9
	60+	4.5	4.0	4.6	5.5
	65+	2.6	2.3	2.9	3.4
	DDR-1	101.2	87.3	65.8	56.3
	DDR-2	93.8	81.5	61.3	51.7

$$\text{Demographic Dependency Ratio}_1 = \frac{Pop\ 0-14 + Pop\ 60+}{Pop\ 15-59} \text{X100}$$

$$\text{Demographic Dependency Ratio}_2 = \frac{Pop\ 0-14 + Pop\ 60+}{Pop\ 15-59} \text{X100}$$

Figure-14:Demographic Dependency Ratio in different Census years, Urban



5.7 Age Distribution by Zila

Distribution of population in the 05 years age group among the 64 districts of the country have been presented in the Table-5.7. It is observed from the table that the population distribution varies across the districts. It may be mentioned that the percentage of population in the lower age group 0-4 and 5-9 is important as it speaks about the current level of fertility and immediate past trends in fertility.

It is observed from the table that in the age group 0-4 the highest percentage of population was observed in in Brahmanbaria zila (13.74%) followed by Cox's Bazar zila (13.31%) and Bandarban zila (13.20%).On the other hand, the lowest percentage of population in the age group 0-4 was found in Dhaka zila (8.29%) preceded by Rajshahi zila (8.38%) and Joypurhat zila (8.45%) closely preceded by Khulna zila (8.46%).

In case of the age group 5-9, the highest percentage of population was again found in Brahmanbaria zila (15.98%) followed by Sunamgonj zila (15.85%) and Cox's Bazar zila (15.79%).The lowest percentage of population in the age group 5-9 was found in Dhaka zila (9.20%) preceded by Meherpur zila (10.13%) and Joypurhat zila (10.20%).

The percentage of population in the eldest age group 70 years and over was found in the Jhalakati zila (4.59%) followed by Pirojpur zila (4.44%) and Manikganj zila (4.43%). The lowest percentage of population in such age group was found in Dhaka zila (1.75%) preceded by Bandarban zila (2.12%) and Cox,s Bazar zila (2.16%).

Table-5.7: Zila-wise Percentage Distribution of Population by Age Group-2011

Zila by Division	Age group															
	Total	00 - 04	05 - 09	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Bangladesh	100.00	10.46	12.62	11.56	8.93	9.23	9.36	7.29	6.63	5.74	4.43	3.85	2.43	2.73	1.47	3.28
Barisal Division	100.00	10.36	13.31	12.70	8.38	7.83	8.31	6.92	6.38	5.53	4.49	4.09	2.70	3.26	1.77	3.96
Barguna Zila	100.00	9.88	12.38	11.53	7.13	7.74	9.09	7.68	7.10	5.90	4.87	4.42	2.94	3.37	1.80	4.16
Barisal Zila	100.00	9.85	12.92	13.03	9.01	7.96	7.98	6.66	6.31	5.63	4.62	4.22	2.65	3.34	1.73	4.09
Bhola Zila	100.00	12.08	15.18	13.42	8.49	7.96	8.50	6.70	5.84	4.80	3.65	3.41	2.32	2.89	1.54	3.21
Jhalokati Zila	100.00	9.27	12.55	13.09	8.76	7.33	7.51	6.64	6.42	6.01	4.96	4.42	2.94	3.49	2.03	4.59
Patuakhali Zila	100.00	10.43	13.43	12.30	7.75	7.68	8.62	7.26	6.57	5.55	4.49	4.20	2.74	3.32	1.75	3.88
Pirojpur Zila	100.00	9.63	12.20	12.12	8.51	7.92	8.15	6.93	6.56	5.90	4.97	4.29	3.02	3.33	2.04	4.44
Chittagong Division	100.00	11.47	13.79	12.79	10.07	9.26	8.66	6.44	5.84	4.96	3.88	3.47	2.18	2.60	1.35	3.24
Bandarban Zila	100.00	13.20	14.91	11.75	8.60	8.94	9.24	7.01	6.28	5.05	3.99	3.49	2.19	2.22	1.01	2.12
Brahmanbaria Zila	100.00	13.74	15.98	12.82	8.83	8.05	7.62	5.87	5.29	4.86	3.68	3.56	2.08	2.73	1.36	3.53
Chandpur Zila	100.00	10.86	13.22	12.98	9.89	8.55	7.99	6.12	5.82	5.14	4.21	3.82	2.43	3.08	1.68	4.20
Chittagong Zila	100.00	10.00	11.87	12.04	10.92	10.77	9.72	7.18	6.41	5.25	4.03	3.45	2.19	2.38	1.18	2.60
Comilla Zila	100.00	11.51	14.13	13.04	9.83	8.83	8.29	6.06	5.58	4.96	3.93	3.58	2.25	2.79	1.50	3.73
Cox's Bazar Zila	100.00	13.31	15.79	13.90	10.19	9.37	8.77	6.25	5.35	4.17	3.19	2.89	1.72	1.98	0.96	2.16
Feni Zila	100.00	10.56	12.39	12.67	11.06	9.52	8.61	6.29	5.67	4.91	3.95	3.66	2.31	2.97	1.56	3.87
Khagrachhari Zila	100.00	11.36	14.00	12.59	8.72	8.19	9.04	7.05	6.74	5.32	4.41	3.43	2.37	2.33	1.43	3.00
Lakshmipur Zila	100.00	11.89	14.62	13.00	9.69	8.38	8.16	6.12	5.71	4.89	3.83	3.54	2.18	2.82	1.49	3.68
Noakhali Zila	100.00	12.28	14.95	13.46	10.10	8.55	8.04	5.97	5.46	4.65	3.60	3.27	2.08	2.67	1.42	3.49
Rangamati Zila	100.00	10.47	13.31	11.87	8.75	9.09	9.73	7.63	6.87	5.40	4.55	3.58	2.56	2.29	1.40	2.51
Dhaka Division	100.00	10.15	12.19	11.02	8.83	9.96	10.04	7.62	6.76	5.80	4.36	3.84	2.31	2.65	1.37	3.08
Dhaka Zila	100.00	8.29	9.20	9.59	10.24	12.99	12.72	9.12	7.53	5.97	4.25	3.43	2.02	1.98	0.94	1.75
Faridpur Zila	100.00	10.42	13.03	12.28	8.60	8.41	8.55	6.81	6.35	5.77	4.67	4.11	2.67	3.05	1.83	3.44
Gazipur Zila	100.00	8.80	10.14	9.23	9.49	13.45	13.06	8.63	7.02	5.60	4.03	3.33	1.88	2.06	1.02	2.26
Gopalganj Zila	100.00	10.73	13.66	12.84	8.67	8.15	8.25	6.66	6.16	5.40	4.45	3.83	2.70	3.01	1.96	3.54
Jamalpur Zila	100.00	11.05	13.88	11.37	7.14	7.56	8.69	7.28	6.94	6.12	4.77	4.36	2.66	3.08	1.58	3.52
Kishoregonj Zila	100.00	12.80	15.46	12.28	7.92	7.70	8.02	6.34	5.88	5.28	4.13	3.82	2.34	2.85	1.53	3.67
Madaripur Zila	100.00	10.40	13.88	12.97	8.71	7.87	7.93	6.53	6.12	5.62	4.38	4.30	2.50	3.34	1.63	3.80
Manikganj Zila	100.00	9.52	11.75	10.79	7.59	8.27	8.72	7.35	7.12	6.37	5.05	4.75	2.91	3.55	1.85	4.43
Munshiganj Zila	100.00	9.83	11.66	11.53	9.44	9.24	9.26	7.31	6.63	5.86	4.39	4.00	2.39	3.02	1.55	3.90
Mymensingh Zila	100.00	11.90	14.58	11.80	7.84	8.14	8.31	6.65	6.14	5.59	4.28	3.99	2.38	2.93	1.55	3.90
Narayanganj Zila	100.00	9.79	11.35	10.65	9.98	11.24	11.13	8.03	6.98	5.71	4.12	3.47	2.01	2.26	1.07	2.19
Narsingdi Zila	100.00	11.25	14.05	12.24	8.99	8.85	8.60	6.71	6.14	5.45	4.25	3.88	2.34	2.77	1.40	3.08
Netrakona Zila	100.00	12.70	15.41	12.10	7.53	7.43	7.90	6.56	5.86	5.64	4.01	4.01	2.24	3.03	1.53	4.05
Rajbari Zila	100.00	10.02	12.14	11.51	8.41	8.56	9.03	7.22	6.66	6.00	4.76	4.13	2.73	3.00	1.80	4.04

Contd.

Zila by Division	Age group															
	Total	00 - 04	05 - 09	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Shariatpur Zila	100.00	11.26	14.28	13.40	8.84	7.63	7.66	6.22	5.89	5.30	4.08	3.95	2.40	3.16	1.64	4.29
Sherpur Zila	100.00	11.39	14.19	11.73	7.22	7.89	8.73	7.03	6.58	5.89	4.37	4.28	2.41	3.05	1.48	3.76
Tangail Zila	100.00	9.67	12.01	10.87	7.66	8.59	8.99	7.35	7.09	6.38	5.05	4.40	2.84	3.14	1.77	4.20
Khulna Division	100.00	8.95	11.00	11.14	8.50	8.90	9.41	7.85	7.29	6.44	5.14	4.22	2.80	2.92	1.75	3.70
Bagerhat Zila	100.00	9.02	11.48	11.75	8.13	7.97	8.60	7.48	7.11	6.39	5.21	4.28	2.98	3.26	2.01	4.30
Chuadanga Zila	100.00	8.88	10.67	11.07	8.34	8.77	9.92	8.33	7.68	6.71	5.06	4.20	2.61	2.77	1.55	3.45
Jessore Zila	100.00	8.90	10.65	11.01	8.75	9.19	9.62	7.80	7.48	6.42	5.23	4.16	2.75	2.79	1.68	3.57
Jhenaidah Zila	100.00	8.99	11.05	11.09	8.30	8.85	9.68	8.02	7.32	6.46	5.03	4.24	2.67	2.93	1.69	3.70
Khulna Zila	100.00	8.46	10.37	10.94	8.95	9.66	9.55	7.94	7.30	6.42	5.27	4.11	2.91	2.80	1.79	3.54
Kushtia Zila	100.00	9.11	11.13	10.83	8.20	8.88	9.71	8.09	7.23	6.56	4.98	4.40	2.70	3.06	1.58	3.55
Magura Zila	100.00	9.84	12.34	11.89	8.12	8.10	8.84	7.39	6.81	6.18	4.96	4.22	2.78	2.94	1.80	3.77
Meherpur Zila	100.00	8.57	10.13	10.66	8.11	8.67	9.66	8.33	7.93	7.08	5.47	4.40	2.82	2.87	1.65	3.66
Narail Zila	100.00	10.30	12.84	11.93	8.13	8.01	8.45	7.07	6.48	5.89	4.86	4.15	2.87	3.13	1.91	3.98
Satkhira Zila	100.00	8.60	10.88	10.98	8.95	9.23	9.27	7.73	7.25	6.33	5.19	4.14	2.90	2.87	1.91	3.76
Rajshahi Division	100.00	9.59	11.56	10.71	8.36	9.24	9.76	7.82	7.28	6.36	4.91	4.10	2.66	2.80	1.58	3.27
Bogra Zila	100.00	9.33	11.11	10.31	8.14	9.21	10.08	7.83	7.55	6.34	5.25	4.15	2.93	2.83	1.68	3.26
Joypurhat Zila	100.00	8.45	10.20	9.94	7.81	8.68	10.07	8.44	8.06	6.97	5.53	4.46	3.07	3.11	1.77	3.42
Naogaon Zila	100.00	8.69	10.56	10.02	8.11	9.30	10.09	8.22	7.68	6.82	5.32	4.30	2.86	2.94	1.72	3.39
Natore Zila	100.00	9.13	11.01	10.33	8.21	9.06	10.05	8.08	7.59	6.57	5.15	4.17	2.68	2.78	1.61	3.59
Chapai Nawabganj Zila	100.00	10.54	12.55	12.07	9.27	9.22	8.71	7.29	6.63	6.18	4.41	3.87	2.41	2.58	1.47	2.78
Pabna Zila	100.00	10.42	12.23	11.02	8.25	9.13	9.65	7.60	6.83	6.05	4.48	4.04	2.45	2.85	1.47	3.52
Rajshahi Zila	100.00	8.38	10.29	10.73	9.14	9.90	10.11	8.25	7.68	6.65	5.08	3.98	2.59	2.62	1.51	3.09
Sirajganj Zila	100.00	11.04	13.62	11.18	8.00	9.05	9.24	7.21	6.65	5.83	4.35	3.98	2.43	2.80	1.46	3.16
Rangpur Division	100.00	10.63	12.91	11.22	8.08	8.49	9.33	7.45	6.93	5.99	4.74	4.03	2.73	2.74	1.54	3.20
Dinajpur Zila	100.00	9.92	11.74	10.85	8.47	8.69	9.55	7.66	7.16	6.28	5.04	4.08	2.88	2.73	1.67	3.25
Gaibandha Zila	100.00	11.02	13.42	10.98	7.17	8.23	9.41	7.47	6.92	5.93	4.65	4.17	2.76	2.96	1.58	3.33
Kurigram Zila	100.00	11.17	13.30	11.41	7.44	8.26	9.18	7.34	6.63	5.91	4.57	4.11	2.66	2.82	1.52	3.68
Lalmonirhat Zila	100.00	10.90	13.79	11.66	8.10	8.27	9.13	7.17	6.68	5.67	4.63	3.93	2.68	2.64	1.52	3.21
Nilphamari Zila	100.00	11.30	13.84	11.65	8.50	8.38	8.98	7.24	6.74	5.74	4.50	3.85	2.53	2.65	1.38	2.72
Panchagarh Zila	100.00	11.00	13.03	11.28	8.92	8.74	9.41	7.38	6.94	5.84	4.61	3.78	2.55	2.44	1.35	2.74
Rangpur Zila	100.00	9.97	12.42	11.04	8.07	8.77	9.40	7.49	7.05	6.13	4.95	4.15	2.85	2.81	1.57	3.34
Thakurgaon Zila	100.00	10.61	12.86	11.53	8.63	8.43	9.40	7.63	7.11	6.00	4.61	3.76	2.59	2.52	1.50	2.84
Sylhet Division	100.00	12.82	14.79	12.39	9.66	8.56	8.16	6.33	5.82	5.13	3.76	3.51	2.00	2.60	1.22	3.24
Habiganj Zila	100.00	13.35	15.37	11.90	9.02	8.21	7.98	6.23	5.81	5.11	3.80	3.68	2.03	2.75	1.29	3.49
Maulvibazar Zila	100.00	11.38	13.78	12.37	10.08	8.57	8.34	6.53	6.22	5.45	4.19	3.63	2.27	2.62	1.35	3.22
Sunamganj Zila	100.00	14.38	15.85	12.42	8.47	7.90	7.81	6.18	5.63	5.01	3.57	3.49	1.89	2.72	1.22	3.45
Sylhet Zila	100.00	12.17	14.23	12.69	10.68	9.25	8.43	6.38	5.74	5.05	3.63	3.36	1.91	2.42	1.11	2.95

5.8 Religious Composition of Bangladesh Population 1974-2011

Religious composition of Bangladesh Population for the year 1974-2011 has been presented in Table-5.8. It is observed from the table that percentage of Muslim population are increasing over the years while Hindu population are decreasing. In 1974 the percentage of Muslim population was 84.5% while the Hindu population was 13.5%. In 2011 the Muslim population increased to 90.4% and Hindu population decreased to 8.5 percent. The reduction of Hindu population may be due to the lower fertility of Hindu population and partly due to out migration. On the other hand , the increase of Muslim population may be for the higher fertility of the Muslim population compared to Hindu population . Interestingly the ratio of Buddhist and Christian population remain the same over the years.

Table-5.8: Religious Composition of Bangladesh Population 1974-2011 (no. in thousand)

Census Year	Total population (000)	Religious Composition									
		Muslim		Hindu		Buddhist		Christian		Others	
		No.	%	No.	%	No.	%	No.	%	No	%
1974	71478	61039	85.4	9673	13.5	439	0.6	216	0.3	111	0.2
1981	87120	75487	86.7	10570	12.1	538	0.6	275	0.3	250	0.3
1991	106315	93881	88.3	11179	10.5	623	0.6	346	0.3	286	0.3
2001	124355	111393	89.6	11608	9.3	774	0.6	389	0.3	191	0.2
2011	144044	130205	90.4	12300	8.5	890	0.6	447	0.3	202	0.2

5.9 Division wise Variations in Religious Composition

Percentage and numerical distribution of population by religious communities and by administrative divisions are presented in Table -5.9. It is found that Dhaka division has recorded the highest proportion of Muslim population during 1974-2011 censuses. Such proportion of population has been closely followed by Rajshahi, Barisal and Chittagong divisions in 2011. It is seen that in 1974, 1981, 1991 censuses, the proportions of Hindus, Christians and Buddhists are seen to be the highest in the divisions of Khulna, Dhaka and Chittagong respectively. But in 2001 and 2011 Censuses the highest Proportion of Hindu population is seen in Sylhet Division and the highest proportion of Christian population for 2011 is seen both in Rajshahi and Rangpur division.

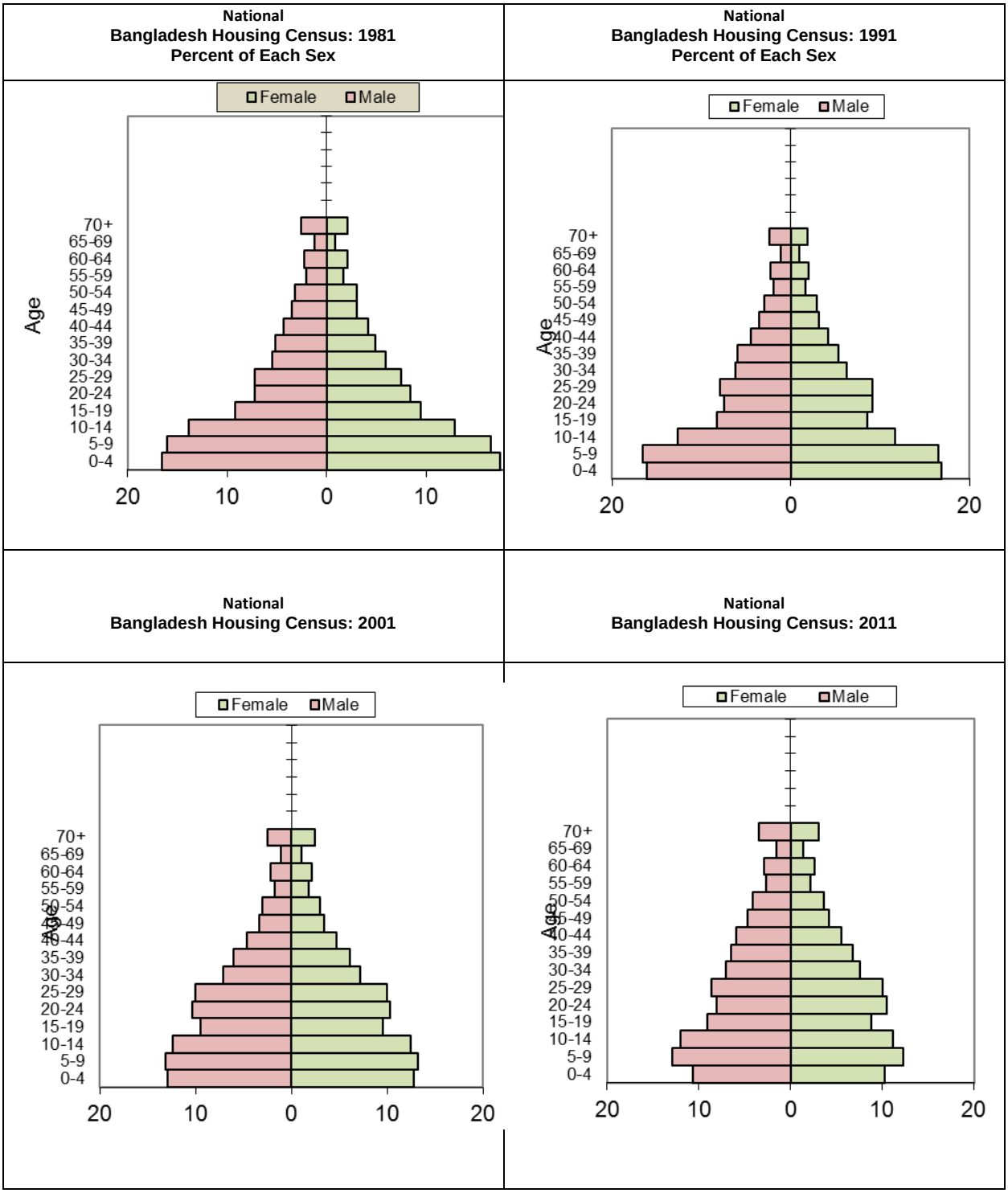
Table-5.9: Division wise Distribution of Population by Religious Communities, 1974-2011

Division	Number						Percentage					
	Total	Muslim	Hindu	Buddhist	Christian	Others	Total	Muslim	Hindu	Buddhist	Christian	Others
2011												
Bangladesh	144043697	130204860	12299940	889721	447009	202167	100.00	90.39	8.54	0.62	0.31	0.14
Barisal	8325666	7546483	762479	3117	13247	340	100.00	90.64	7.16	0.04	0.16	0.00
Chittagong	28423019	25460202	2005004	866638	63531	27644	100.00	89.58	7.05	3.05	0.22	0.10
Dhaka	47424418	44267008	2950142	15018	175493	16757	100.00	93.34	6.22	0.03	0.37	0.04

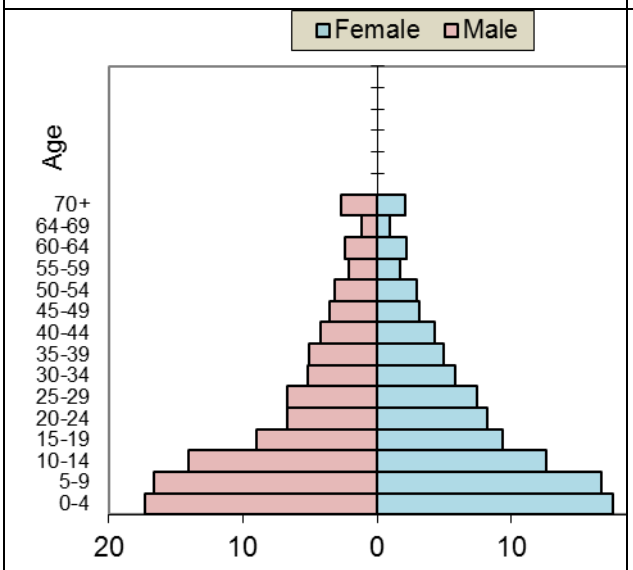
Contd.

Division	Number						Percentage					
Khulna	15687759	13617984	2016564	417	43159	9635	100.00	86.81	12.85	0.00	0.28	0.06
Rajshahi	18484858	17248861	1087692	559	69338	78408	100.00	93.31	5.88	0.00	0.38	0.42
Rangpur	15787758	13582067	2086148	2776	59245	57522	100.00	86.03	13.21	0.02	0.38	0.36
Sylhet	9910219	8482255	1391911	1196	22996	11861	100.00	85.59	14.05	0.01	0.23	1.12
2001												
Bangladesh	124355263	111393250	11608268	773949	388855	190941	100.00	89.58	9.33	0.62	0.31	0.15
Barisal	8173718	7338089	816051	3492	14348	1738	100.00	89.78	9.98	0.04	0.18	0.02
Chittagong	24290384	21571338	1891912	754575	53086	19473	100.00	88.80	7.79	3.11	0.22	0.08
Dhaka	39044716	36146378	2723070	8264	151077	15927	100.00	92.58	6.97	0.02	0.39	0.04
Khulna	14705229	12593919	2059036	993	44315	6966	100.00	85.64	14.00	0.01	0.30	0.05
Rajshahi	30201873	27060825	2888941	5702	105666	140739	100.00	89.60	9.57	0.02	0.35	0.46
Sylhet	7939343	6682701	1229258	923	20363	6098	100.00	84.17	15.48	0.01	0.26	0.08
1991												
Bangladesh	106314992	93881029	11178866	623410	346062	285625	100.00	88.30	10.51	0.59	0.33	0.27
Barisal	7462643	6574525	866039	4657	14996	2426	100.00	88.10	11.60	0.06	0.20	0.03
Chittagong	27287947	23736002	2877745	574528	55350	44322	100.00	86.98	10.55	2.11	0.20	0.16
Dhaka	32665975	29786106	2656708	20430	154514	48217	100.00	91.19	8.13	0.06	0.47	0.15
Khulna	12688383	10608358	2029857	2492	38262	9414	100.00	83.61	16.00	0.02	0.30	0.07
Rajshahi	26210044	23176038	2748517	21303	82940	181246	100.00	88.42	10.49	0.08	0.32	0.69
1981												
Bangladesh	87119965	75486980	10570245	538331	274481	249928	100.00	86.65	12.13	0.62	0.31	0.29
Barisal	6509581	5608657	878503	4158	15824	2439	100.00	86.16	13.50	0.06	0.24	0.04
Chittagong	22595588	19352848	2631041	524610	40699	46390	100.00	85.65	11.64	2.32	0.18	0.21
Dhaka	26231742	23523894	2554426	4743	120923	27756	100.00	89.68	9.74	0.02	0.46	0.10
Khulna	10643523	8520107	2067516	1204	46346	8350	100.00	80.05	19.42	0.01	0.44	0.08
Rajshahi	21139531	18481474	2438759	3616	50689	164993	100.00	87.42	11.54	0.02	0.24	0.78
1974												
Bangladesh	71477748	61038929	9673048	438917	215919	110935	100.00	85.40	13.53	0.61	0.30	0.16
Barisal	5427132	4585977	828778	4471	5326	2580	100.00	84.50	15.27	0.08	0.10	0.05
Chittagong	18635902	15894223	2262207	627042	28898	23532	100.00	85.29	12.14	2.29	0.15	0.13
Dhaka	21315630	18666035	2517135	3227	113568	15665	100.00	87.57	11.81	0.02	0.53	0.07
Khulna	8767816	6920825	1823189	542	17639	5621	100.00	78.94	20.79	0.01	0.20	0.06
Rajshahi	17331268	14971870	2241738	3635	50488	63537	100.00	86.39	12.93	0.02	0.29	0.37

Figure 15: Population Pyramid of Different Census Years



Rural
Bangladesh Housing Census: 1981



Rural
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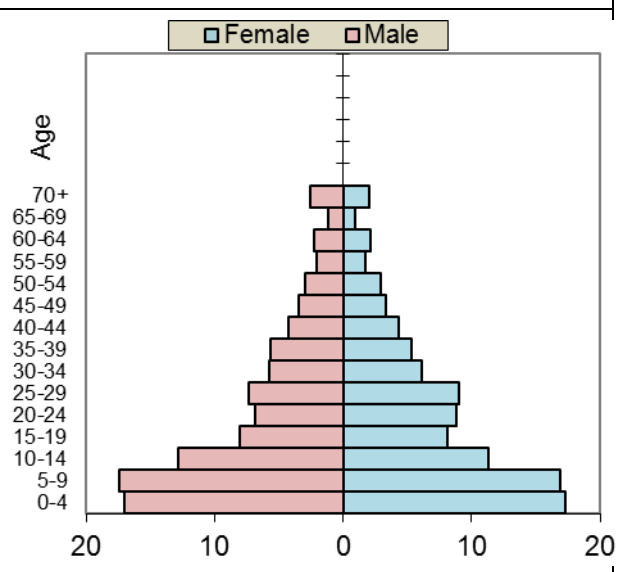

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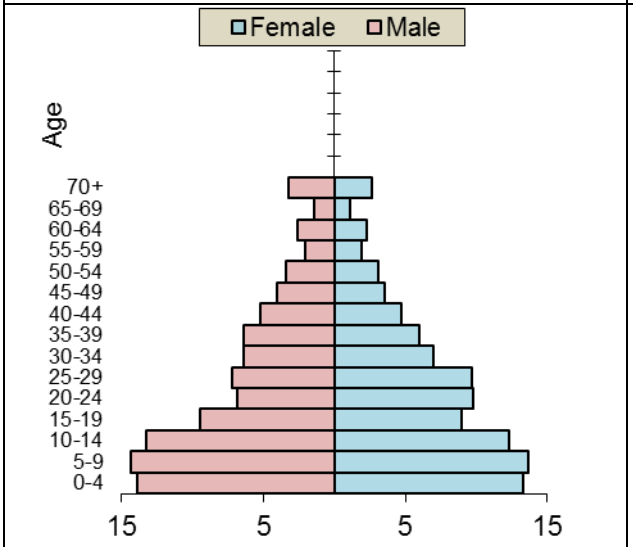

Rural
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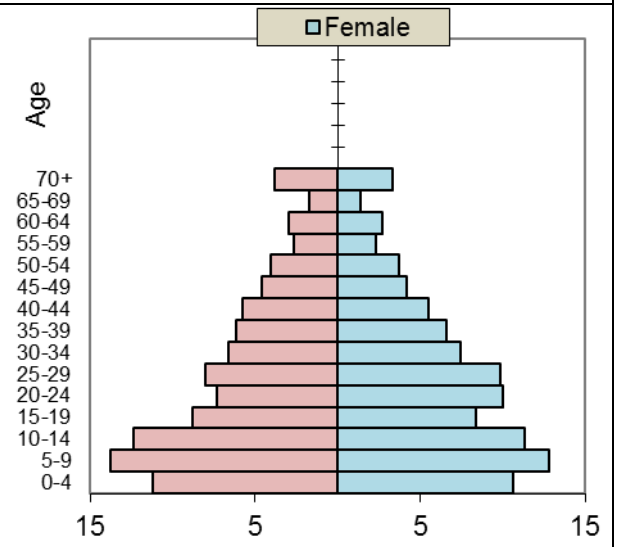
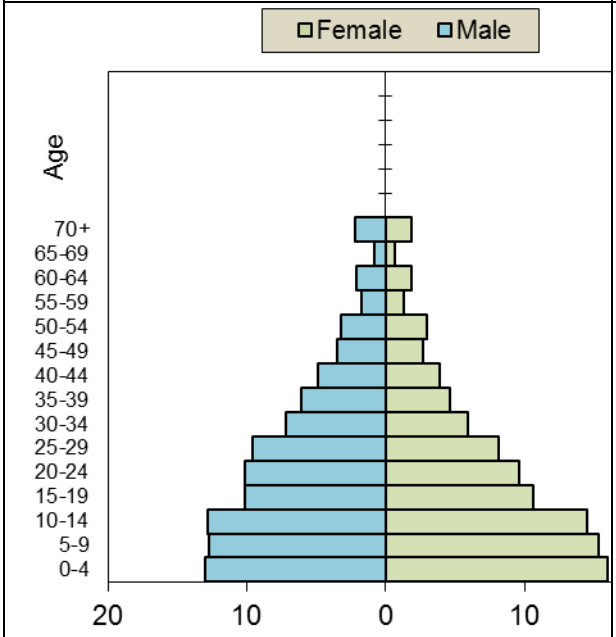


Urban
Bangladesh Housing Census: 1981



Urban
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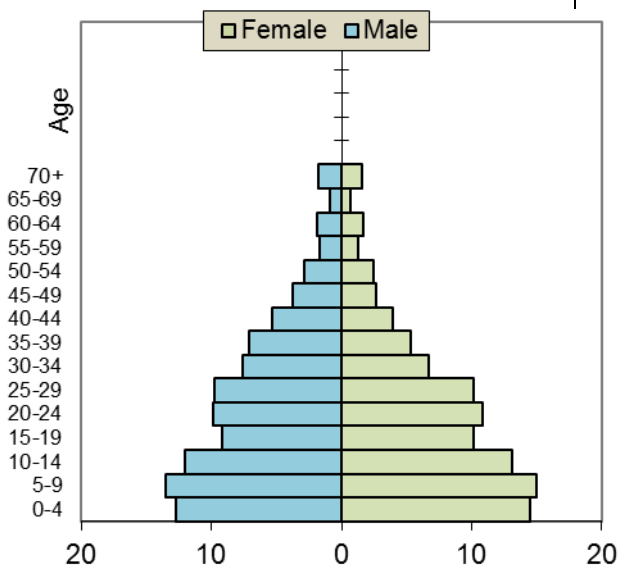
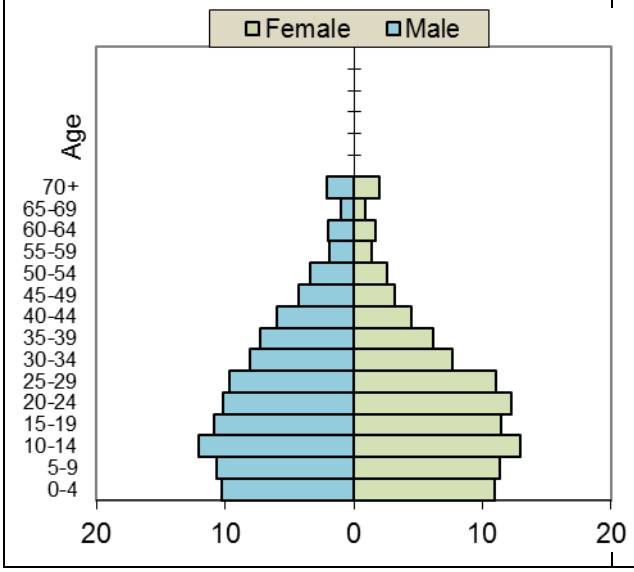


Urban
Bangladesh Housing Census: 2001



Urban
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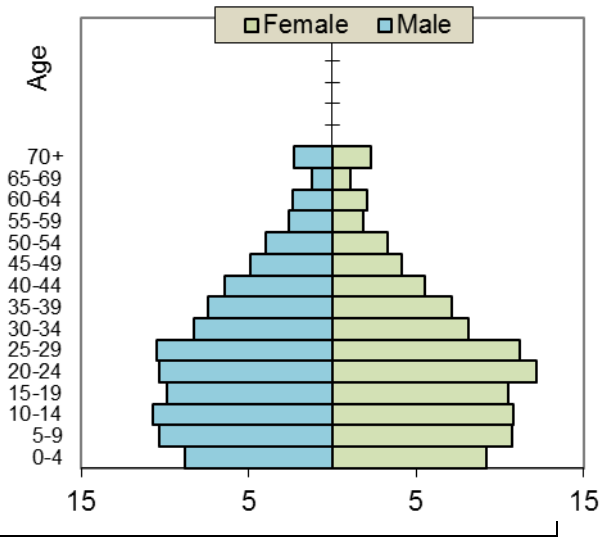


6. SEX RATIO

This chapter deals in sex ratio of population. Sex ratio is defined by the ratio of male and female expressed in percentage. It is the simplest measure by which the male and female composition of a population group can be visualized. In this chapter the historical trend in sex ratio of Bangladesh, sex ratio by divisions ,districts and religion has been analyzed to see the trends over time and also by residence.

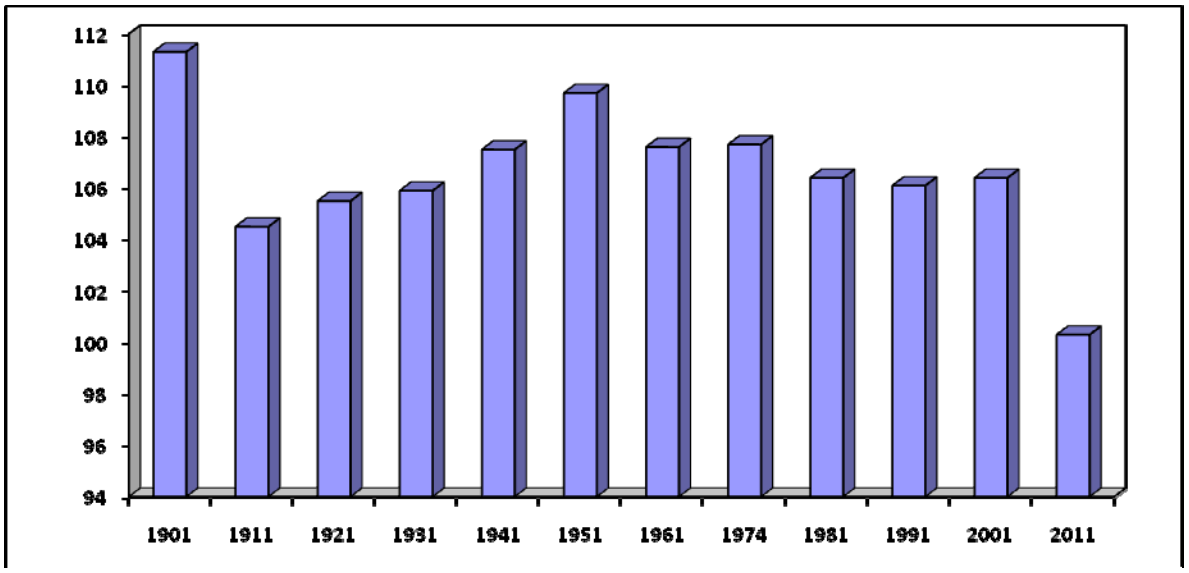
6.1 Historical Trends in Sex Ratio of Bangladesh

The trend of the sex-ratio during 1901-2011 can be seen from Table-6.1.From the table it is found that sex-ratio in 1901 was 111.3 which is the ever highest. In 1911 it has come down to 104.5 which is the ever lowest up to 2001 Census. The reason of high sex-ratio in 1901 may be due to under reporting of females and high female mortality. Since 1911 an increasing trend in the sex-ratio is observed till 1951. Then the sex-ratios are seen fluctuating till 2001. In the last three decades beginning 1981 the sex ratios fluctuate within the range 106.1-106.4. But in 2011 Census it has declaimed significantly as compared to the prior censuses due to migration of considerable number of male population outside the country for seeking jobs, higher education, business and other purposes.

Table 6.1: Sex-Ratio for Population of Bangladesh, 1911-2011

Year	Sex-Ratio
1901	111.3
1911	104.5
1921	105.5
1931	105.9
1941	107.5
1951	109.7
1961	107.6
1974	107.7
1981	106.4
1991	106.1
2001	106.4
2011	100.3

Figure 16: Sex Ratio in Different Census Years



6.2 Sex Ratio by Residence

Sex-ratios by urban and rural areas for different censuses are presented in Table-6.2. From the table it observed that the sex-ratio for the urban population is much higher than that of rural population. This can be explained by the fact that for higher employment opportunities and other facilities available in the cities such as education, business and civic facilities urban areas attract greater number of males to migrate to urban areas leaving their female counterparts in rural area. Hence, there exists greater disparity in sex-ratios between urban and rural areas. In other words, there is a consistent pattern of rural to urban migration of males.

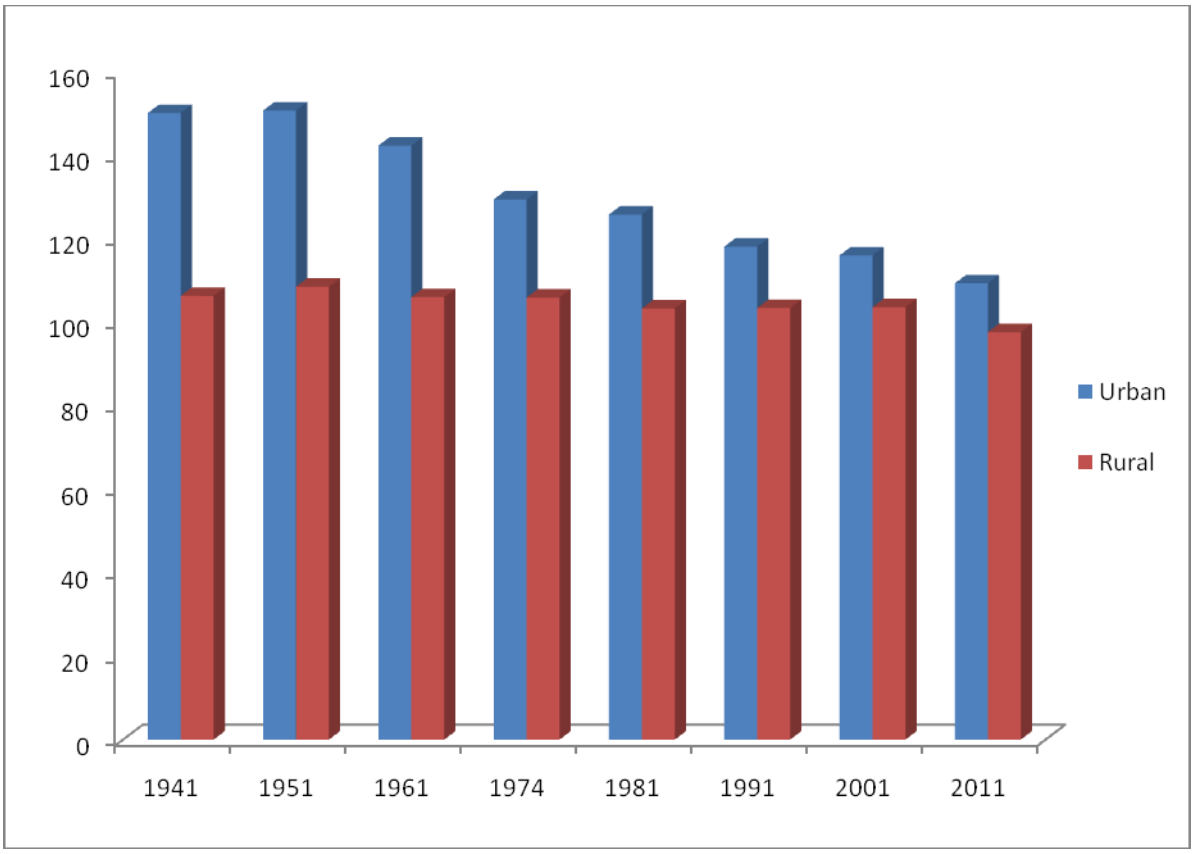
Analyzing figures of the census years 1941 and 1951, it is found that the urban sex-ratio was 43.8 percent points and 42.2 percent points higher than the rural sex-ratio. However, with the passage of time this gap is steadily narrowing. In other words, the urban sex-ratio is showing a progressive decline. This would seem to indicate that, more and more females are accompanying the males and migrating from rural areas to urban areas.

Table-6.2: Sex-Ratios for Rural and Urban Population, 1941-2001

Year	Urban	Rural
1941	150.1	106.3
1951	150.7	108.5
1961	142.3	106.0
1974	129.4	105.9
1981	125.8	103.3
1991	118.1	103.4
2001	116.0	103.6
2011	109.3	97.6

From the table it is found that the sex-ratio for the urban population is much higher than that of rural population. This can be explained by the fact that greater employment opportunities and other facilities available in the cities and other urban areas attract greater number of males to migrate to urban areas leaving their female counterparts in rural area. Hence, there exists greater disparity in sex-ratios between urban and rural areas. In other words, there is a consistent pattern of rural to urban migration of males.

Figure 17: Sex Ratio in Urban-Rural Breakdown



6.3 Sex Ratio by Divisions and Residence

Sex ratio by administrative divisions and residence is presented in Table-6.3. It is observed that the sex-ratio is higher in the urban area as compared to the rural area. This is true for all divisions of the country with variations among divisions of the country.

From the table it is seen that, Dhaka division has the highest sex-ratio and Barisal division has the lowest sex-ratio in the last three censuses. In urban area, however, Chittagong division has the highest sex-ratio, in 1991. On the other hand, Dhaka division urban area has the highest sex-ratio in 2001 and 2011 followed by Chittagong and Sylhet divisions.

The very high sex-ratio of urban population of Dhaka division may be explained by the fact that many commercial and industrial enterprises are located in Dhaka for which employment opportunities and many other facilities are available in this division. This in turns have

resulted in a higher concentration of male population in this area due to rural to urban migration. For similar reasons the urban areas of Chittagong, Sylhet and Khulna divisions have higher sex-ratio than those of Barisal, Rajshahi and Rangpur divisions.

Table-6.3: Sex-Ratio by Administrative Division and Locality, 1991-2011

Divisions	1991			2001			2011		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Bangladesh	106.1	118.1	103.4	106.4	116.0	103.7	100.2	110.2	97.6
Barisal Division	103.5	111.8	102.3	103.6	110.2	102.5	96.5	104.2	95.5
Chittagong Division	105.3	122.0	101.9	104.4	115.5	100.9	96.2	106.6	93.4
Dhaka Division	108.3	121.5	103.5	109.0	120.5	103.5	104.0	116.1	98.8
Khulna Division	106.2	113.7	104.6	106.6	111.4	105.3	100.0	104.8	99.1
Rajshahi Division	105.0	109.1	104.4	105.6	108.9	105.0	100.3	103.8	99.6
Rangpur Division	-	-	-	-	-	-	99.7	103.9	99.2
Sylhet Division	-	-	-	104.9	114.8	103.6	99.1	108.9	97.8

* Sylhet Division was under Chittagong and Rangpur Division was Under Rajshai

6.4 Sex Ratio by Zilas

Sex-ratio by districts of the country have been presented in the Table-6.4. It is seen from the table that the sex-ratios in different districts show irregular pattern during the period 1951-2001, the sex-ratios for most of the zilas have decreased in recent years. Over all, sex-ratios may be attributed to better coverage of women in the recent censuses as well as a decline in female mortality. Still Dhaka zila has the highest sex-ratio and it has decreased sharply from 128 males per 100 females in 1981 to 120 males per 100 females 2011 over the last 30 years.

It is remarkable that in 2011 Census more females than males are observed in 37 districts out of 64 districts of the country, the reason may be due to migration of male population to urban areas and also outside the country for better employment, education, business and on the search of work. It is also noticed that sex-ratios of twenty two zilas are higher than that of national average (100).

Table-6.4: Sex-Ratio by Districts, 1961-2011

Zila	1961	1974	1981	1991	2001	2011
Bangladesh	**108**	**108**	**106**	**106**	**106**	100
Barisal Division	**106**	**105**	**105**	**104**	**104**	97
Barguna	104	103	103	102	103	96
Barisal	108	106	106	105	103	96
Bhola	109	109	108	106	108	99
Jhalokati	102	104	103	101	99	93
Patuakhali	105	104	104	102	102	96

Contd.

Zila	1961	1974	1981	1991	2001	2011
Pirojpur	102	103	101	101	102	97
Chittagong Division	**107**	**109**	**106**	**105**	**104**	96
Bandarban	113	112	121	120	119	110
Brahmanbaria	105	107	104	104	101	93
Chandpur	106	109	100	100	98	93
Chittagong	114	117	115	114	110	102
Comilla	104	106	102	102	101	92
Cox's Bazar	107	109	108	110	109	104
Feni	102	106	101	101	99	93
Khagrachhari	114	109	114	111	112	105
Lakshmipur	106	107	101	101	100	92
Noakhali	103	105	98	98	99	92
Rangam ati	134	123	127	122	118	111
Dhaka Division	**108**	**109**	**108**	**108**	**109**	104
Dhaka	125	127	128	124	124	120
Faridpur	105	106	104	104	104	97
Gazipur	107	110	110	109	111	109
Gopalganj	104	106	103	102	104	97
Jamalpur	107	106	105	105	104	97
Kishoreganj	107	107	104	104	104	97
Madaripur	104	105	102	104	104	97
Manikganj	102	104	100	101	102	94
Munshiganj	100	107	104	105	103	100
Mymensingh	110	107	111	105	105	99
Narayanganj	113	113	117	116	115	107
Narsingdi	108	109	108	107	106	98
Netrokona	112	108	106	104	105	99
Rajbari	109	107	106	107	106	98
Shariatpur	102	104	99	102	101	94
Sherpur	106	105	103	104	106	99
Tangail	105	106	103	104	103	95
Khulna Division	**109**	**107**	**107**	**106**	**107**	100
Bagerhat	109	106	106	105	108	101
Chuadanga	109	105	106	106	106	100
Jessore	110	107	107	107	107	101
Jhenaidah	110	107	107	106	107	100

Contd.

Zila	1961	1974	1981	1991	2001	2011
Khulna	116	114	115	110	110	103
Kushtia	109	108	107	107	106	100
Magura	107	105	105	104	104	98
Meherpur	107	104	104	105	105	98
Narail	104	104	103	102	102	96
Satkhira	106	105	102	103	105	98
Rajshahi Division	**107**	**106**	**105**	**105**	**106**	**100**
Bogra	105	104	104	105	106	101
Joypurhat	106	105	105	107	105	101
Naogaon	106	104	104	104	106	100
Natore	106	105	106	105	106	100
Chapai Nawabganj	101	103	100	103	104	97
Pabna	107	107	106	107	107	100
Rajshahi	106	104	109	105	107	102
Sirajganj	105	106	105	106	108	100
Rangpur Division	**110**	**107**	**106**	**105**	**106**	**100**
Dinajpur	110	107	106	107	107	102
Gaibandha	106	105	103	102	103	97
Kurigram	108	106	103	101	100	95
Lalmonirhat	110	108	107	106	104	100
Nilphamari	109	108	106	106	106	101
Panchagarh	114	110	106	105	106	101
Rangpur	108	107	106	106	106	101
Thakurgaon	115	109	107	106	107	102
Sylhet Division	**NA**	**NA**	**NA**	**NA**	**105**	**99**
Sunamganj	110	108	107	105	106	100
Sylhet	111	109	106	105	106	101
Moulvibazar	106	106	106	104	104	97
Habiganj	103	103	102	103	103	96

6.5 Age Specific Sex Ratio

Sex-ratio by age group is furnished in Table- 6.5. The sex-ratio obtained in various censuses may further be analyzed and differentiated.

From the table it is found that the sex-ratio pattern of the country was slightly different for the age group 0-4 years in the earlier two censuses. In these decades females exceeded males. A similar preponderance of females over males is also found in the ages of 20-29 years and it continues up to 2001 beginning 1961. In the first case it may be due to bias of age reporting

of females in the censuses or high rate of infant mortality, especially female mortality more than males. But the later one is particularly significant for the youths as the ratio has continued at a stretch for long forty years. Probably, the migration out of the male youths is responsible for this abnormally of lower sex ratio in the age group.

Table-6.5: Sex-Ratios by Different Age-Groups, 1961-2011

Age Group	1961	1974	1981	1991	2001	20011
Total	**107.6**	**107.6**	**106.4**	**106.1**	**106.4**	**100.2**
0 – 4	98.3	99.3	101.4	102.1	108.5	102.9
5 – 9	104.5	101.2	103.0	106.3	110.1	105.3
10 – 14	128.2	118.9	114.8	114.8	112.1	107.3
15 – 19	97.0	114.1	102.8	103.6	110.2	102.5
20 – 29	96.0	95.2	96.6	89.0	80.7	81.2
30 – 39	116.3	106.9	106.6	111.7	107.8	95.1
40 – 49	118.5	119.6	114.9	116.1	124.3	109.2
50 – 59	126.1	122.5	118.9	116.9	121.9	116.8
60 +	123.0	129.9	129.3	128.6	123.3	113.5

6.6 Religious Variations in Sex Ratio by Age

In Table-6.6 sex-ratios for population of different religious communities are presented. The sex-ratios for all religious community children of ages 0-4 years in 2001 reveals the dissimilarities among their sex patterns except the children of Muslim and Hindu communities. In 1991 the sex ratios for both communities were almost the same. The sex ratios for the youths of different religious communities in the ages of 20-29 years show similar preponderance of females over males. The sex ratios both the communities of Muslim and Hindu have decreased remarkably from 85.6 and 96.4 percents in 1991 to 78.0 and 89.8 percents respectively in 2001 in the age group 20-24 years, and similarly in the age group 25-29 years it comes down from 91.1 and 94.1 percents in 1991 to 82.3 and 82.6 percents in 2001. During 1991-2001 the Buddhists' sex ratio remains almost same for the age group 20-24 years and decline by about 2 percent point from 89.8 percent to 87.5 percent in the ages of 25-29 years. The sex ratio of the Christian community in the age groups 20-24 and 25-29 years diminishes much more than any other religious community over the period.

Table-6.6: Sex-Ratios of Different Religious Communities by Age Groups, 2001 and 2011

Age Group	2001					2011				
	Muslim	Hindu	Buddhist	Christian	Others	Muslim	Hindu	Buddhist	Christian	Others
00- 04	108.5	108.5	112.3	108.0	107.5	100.1	102.1	98.1	102.1	100.2
05- 09	110.2	109.3	111.1	110.2	108.1	105.4	104.3	105.6	108.5	103.3
10-14	112.4	109.0	110.5	108.9	113.2	107.5	104.2	103.5	108.5	106.8
15-19	110.0	113.1	104.1	100.8	104.4	102.3	104.3	99.7	98.6	108.6
20-24	78.0	89.8	84.3	78.5	70.3	75.9	87.3	80.8	79.4	75.7
25-29	82.3	82.6	87.5	79.5	80.5	85.6	88.4	83.2	85.4	86.5

Contd.

Age Group	2001					2011				
	Muslim	Hindu	Buddhist	Christian	Others	Muslim	Hindu	Buddhist	Christian	Others
30-34	101.2	99.9	96.4	93.1	93.4	93.7	93.9	88.5	97.5	91.4
35-39	115.8	116.9	114.9	107.8	110.1	96.6	96.6	89.4	107.7	96.3
40-44	121.7	127.3	119.6	120.5	121.4	107.3	110.5	100.4	105.8	108.8
45-49	126.6	132.1	123.2	126.2	130.4	110.7	118.3	108.2	108.7	106.1
50-54	120.3	122.6	126.8	122.3	117.7	112.7	121.5	114.5	114.9	115.4
55-59	124.2	124.8	120.8	112.1	113.8	121.2	129.0	112.4	117.2	117.8
60-64	119.2	114.0	126.8	121.7	108.2	112.3	112.6	108.9	121.7	111.2
65-69	128.4	119.0	118.3	121.3	106.6	120.4	111.1	103.8	116.3	106.9
70 +	128.4	107.3	127.1	118.3	113.8	113.7	97.9	107.7	117.2	114.0

The highest sex ratio in age group 55.59 is observed for each of the four community's population except Christian. Similarly, the high sex-ratios are also found for Muslim, Hindu, Buddhist, and Christian population in age groups 50-54, 55-59 and 60-64. This high sex-ratio in old age groups indicates the high rate of mortality and misreporting of females.

6.7 Age Specific Sex-Ratio by Residence

Age-specific sex ratio by urban-rural residence has been presented in Table 6.7. The table shows that sex-ratio in the age group 20-24 is the lowest and that in the age group 65-69 is the highest in 1991, 2001 and 2011 censuses. The low sex ratio in the age group 20-24 may be explained by the misreporting of age by the females in this group. The urban area sex-ratio is the highest in the age group 40-44 to 55-59 in 1991, 2001 and 2011 census respectively. This may be explained as greater extent of male migrants to urban area for business, employment and other reasons.

Table-6.7: Sex Ratio by Age Group and Locality for Population of Bangladesh, 1991-2011

Age-Group	2011			2001			1991		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Total	**100.2**	**109.3**	**97.6**	**106.4**	**115.1**	**103.6**	**106.1**	**118.1**	**103.4**
0-4	102.9	103.6	102.7	108.5	110.4	108.0	102.1	103.6	101.8
5-9	105.3	105.9	105.2	110.1	109.9	110.15	106.3	106.0	106.4
10-14	107.3	107.3	107.3	112.1	108.4	113.3	114.8	108.3	116.5
15-19	102.5	103.3	102.2	110.2	110.3	110.2	103.6	107.5	102.6
20-24	76.8	92.6	71.3	79.1	97.3	72.5	86.6	108.1	80.7
25-29	85.8	103.0	80.2	82.3	101.9	75.9	91.4	114.3	85.5
30-34	93.7	112.6	87.8	101.0	122.6	94.1	104.4	133.5	97.1
35-39	96.7	113.9	91.4	115.8	136.5	109.6	120.3	159.8	111.3
40-44	107.5	126.2	102.2	122.2	152.5	113.76	113.7	161.6	103.8
45-49	111.5	129.7	106.4	127.2	156.6	119.4	119.3	161.2	111.3
50-54	113.6	134.8	108.3	120.6	151.1	113.3	111.3	139.9	105.9
55-59	121.9	144.7	116.4	124.1	151.0	118.2	126.5	151.3	122.2
60-64	112.3	127.9	108.9	118.7	132.8	115.6	117.5	129.9	115.2
65-69	119.3	129.0	117.2	127.1	134.9	125.4	137.0	145.3	135.5
70 +	111.9	110.7	112.2	125.7	123.44	126.2	136.3	133.3	136.9

The table shows that sex-ratio in the age group 20-24 is the lowest and that in the age group 65-69 is the highest in 1991, 2001 and 2011 censuses. The urban area sex-ratio is the highest in the age group 40-44 to 55-59 in 1991, 2001 and 2011 census respectively. This may be explained as greater extent of male migrants to urban area for business, employment and other reasons.

6.8 Religious Variations in Sex Ratio by Residence

Sex-ratios for different religious communities have been presented in Table 6.8. The table shows that at national level the sex-ratio of the Muslim community is very close to the national average, whereas the sex-ratios of Hindu and Buddhist communities are higher than the national average in 2001 census. In rural area Muslim population depicts a lower sex-ratio than Hindu and Buddhist population. For Christian and other communities it notices comparatively a lower sex ratio in 2001. In urban area Muslim population have the highest sex ratio (116.1) followed by Hindu (115.2) and Buddhist (109.3) communities. A significant urban-rural variation in the sex-ratio is noticeable. The reason for higher sex ratio in urban area is mainly due to higher rural-urban male migration.

Table-6.8 : Sex-Ratios of Religious Communities of Bangladesh by Residence, 1991 and 2001

Religious communities	2011			2001		
	Total	Urban	Rural	Total	Urban	Rural
All Religion	100.2	109.3	97.6	106.4	116.0	103.6
Muslim	100.1	109.5	97.3	106.2	116.1	103.4
Hindu	102.1	108.4	100.4	107.5	115.2	105.5
Buddhist	102.8	102.8	101.9	107.0	109.3	106.3
Christian	98.1	99.3	97.6	103.3	105.7	102.5
Others	100.2	103.9	99.8	102.8	108.4	102.2

6.9 Sex Ratio at Birth

Sex ratio at birth obtained from post census sample survey has presented in Table-6.9. It is observed from the table that sex ratio at birth is increasing over the years. At the national level sex ratio sex birth was 104.44 in 1991 which increased to 107.70 in 2004 and further increased to 111.36 in 2011. Similar trend was also observed in rural and urban areas. This may be due to underreporting of female birth in the earlier censuses.

Table-6.9: Sex Ratio at Birth, 1991-2011

Census Year	Sex Ratio at Birth		
	National	Rural	Urban
1991	104.44	104.59	104.55
2004	107.70	107.20	108.10
2011	116.36	116.87	114.18

6.10 Comparison with Other Countries

An inter country comparison in the sex composition of the population of Bangladesh with that of other countries can be seen in Table 6.10. From the table it is found that India and Pakistan have high sex ratios compared to other neighboring countries. On the other hand Japan, Srilanka and Thailand have low sex ratios. Still Bangladesh has the high sex ratio (106) and Pakistan has the highest (108). India stands in between Pakistan and Bangladesh taking the sex ratio with 107. Japan (96) and Srilanka (98) are the females leading countries in terms of sex ratio where males are lower than females. Nepal is in marginal point of sex ratio where males and females are equal. On the other hand, Indonesia and Philippines just cross the marginal point having the sex ratio (101).

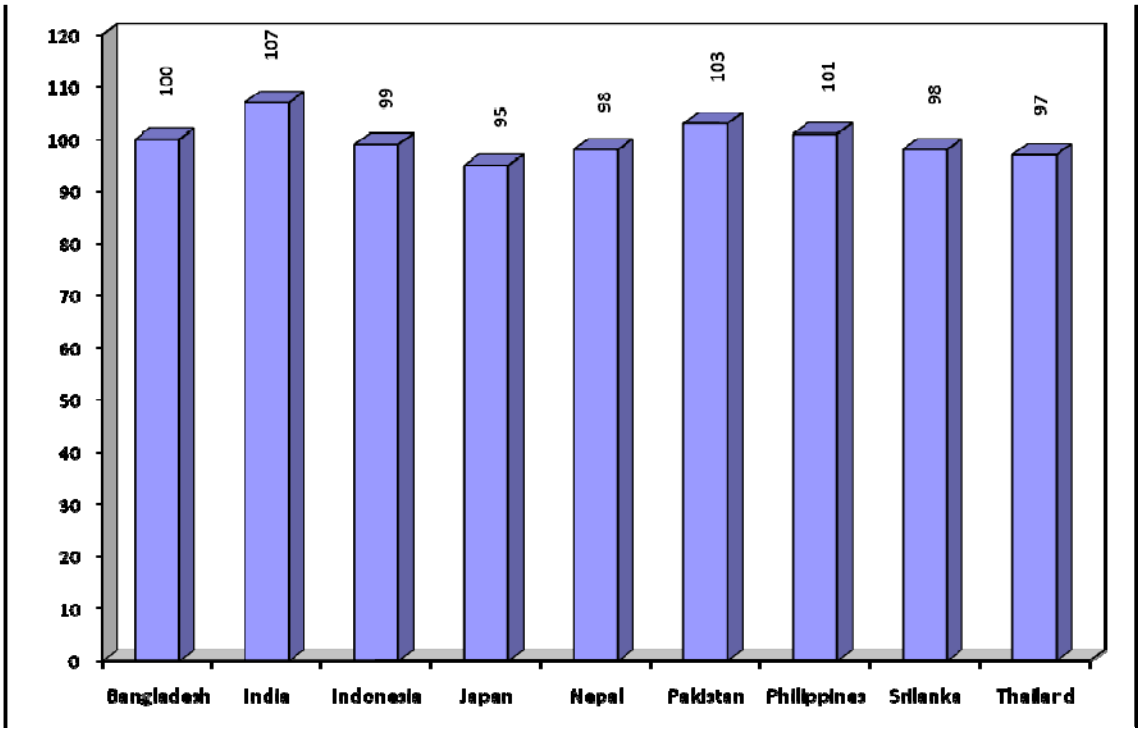
Table-6.10: Sex Ratio (Mid-July) of Some Asian Countries, 2011

Country	Year	Sex-Ratio
Bangladesh	2011	100
India	2011	107
Indonesia	2011	99
Japan	2011	95
Nepal	2011	98
Pakistan	2011	103
Philippines	2011	101
Srilanka	2011	98
Thailand	2011	97

Source : Statistical Year Book of Asia and Pacific 2011

Note: Data refers to 2010 rounds of census.

Figure 18: Sex Ratio in different countries in 2011



6.11 Sex Ratio of Tribal Population

Sex ratio of tribal population has been presented in Table-6.11. It is seen that the sex ratio of tribal population in 1991 and 2001 was lower than national average while the sex ratio of 2011 was slightly higher in 2011.

Table-6.11: Sex-Ratio of Total Population and Tribal Population of Bangladesh, 1991-2011

Population	1991	2001	2011
Total	106.1	106.4	100.2
Tribal	104.7	105.7	101.1

6.12 Age Specific Sex Ratio in Bangladesh, India and Nepal

Age-specific sex ratio in Bangladesh, India and Nepal have been presented in Table-6.12. It is observed that age specific sex ratio in three countries differs widely. In case of India the sex ratio in all age groups except the four higher age groups 55-59, 60-64, 65-69 & 70 years and above are above 100. On the other hand, the sex ratio of the younger age groups of Bangladesh and Nepal are below 100 which indicate the higher male out migration for working abroad in these two countries. The lowest sex ratio in case of Bangladesh was observed in the age group 20-24 (77 males per 100 females). on the other hand, in case of India the lowest sex ratio was found in the highest two age groups 65-69 and 70 years and above (96 females per 100 males). This indicates that male migration of India is not as high as in the case of Bangladesh & Nepal.

Table-6.12: Age Specific Sex-ratio in Bangladesh, India & Nepal in 2011

Age Group	Sex ratio		
	Bangladesh	India	Nepal
0-4	103	108	105
5-9	105	109	104
10-14	107	110	103
15-19	103	113	97
20-24	77	107	79
25-29	86	103	79
30-34	94	102	80
35-39	97	102	86
40-44	108	108	91
45-49	112	106	96
50-54	114	111	101
55-59	122	99	102
60-64	112	99	95
65-69	119	96	100
70+	112	96	99

7. Conclusion and Recommendation

Bangladesh is in demographic transition. The population growth in the country is going down due to reduction in fertility. On the other hand, the mortality is also reducing over the years due to control of contagious diseases and other communicable diseases. As a result the age structure of the population is changing over the time.

The demographic transition results in an increase in working age population which enhances growth termed as demographic dividend. A higher proportion of working age population leads o relatively higher per capita income, higher growth and higher employment.

Due to demographic transition, Bangladesh is in a advantageous position with respect to huge working age population particularly youth population which should be engaged in productive employment in home and abroad. Skill development will be great challenge for the youths of Bangladesh. Without proper education and skill the unemployment rate of the youth may increase will be detrimental to the growth of the country.

The increasing volume of aged population will also need to be addressed for the welfare of these worthy citizens of the country. The relevant ministries should be aware about this crucial issue.

On the basis of the age-sex distribution of Bangladesh population the following recommendation can be made.

1) Skill training for the youth need to be ensured for engaging them into productive employment;

2) As teenage number of labour force are entering into the labour market every year, employment opportunity need to be created in both urban and rural areas for the enhanced labopur force;

3) Rural non-farm activities need to be strengthening to absorb increased labor force due to demographic dividend. The financial institution should take initiative to provide financial support to the youth entrepreneurs in the rural area;

4) In order to reduce fertility, particularly among the poorest segment of population, family planning system need to strengthen among these groups;

5) Early marriage and child marriage need to be stopped through rigorous campaign;

6) Quality of education for the youth needs to be ensured and the education should meet the growing demand of relevant skill manpower at home and abroad.

Abbreviations

BBS - Bangladesh Bureau of Statistics

BDHS - Bangladesh Demographic and Health Survey

BIDS - Bangladesh Institute of Development Studies

DDR - Demographic Dependency Ratio

EU - European Union

OUA - Other Urban Area

PSA - Pourashava

SVRS - Sample Vital Registration System

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Expert Panel for Population Monographs

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No: 52.01.0000.401.29.315.15- 347 Date: 12-05-2015

Subject: Selection of Expert Panel to Review Population Monographs

The following distinguished persons have been nominated as experts to review the Population Monographs being prepared under Population and housing census-2011 Project of Bangladesh Bureau of Statistics:

Expert Panel for Population Monographs

No	Broad Area	Monographs	Expert Pannel
01	Reproductive Behavior of Population	1. Population Composition: age and sex. 2. Fertility 3.Marriage& Family	Prof.M. Nurul Islam Ex. Professor ,DU Syeda Shahanara Huq, Prof.JNU Dr. Ahmed-Al-Sabbir,USAID Dr.Obidur Rob, Country Director, Population Council, Bangladesh
02	Special Protection Groups	1.Elderly Population 2.Disabled Population 3. Children and Youth 4. Population Density and Vulnerability	Dr.Nazma Ahmed Social Protection Specialist Dr.Sharifa Begum, SRF BIDS Prof. Mahmuda, Khatoon,DU Dr. A.J Faisal Country Representative Engender Health Dr.Eshani Ruwan Pura Programme Specialist UNFPA
03	Household and Housing Characteristics, Education& Literacy	1.Housing Condition 2.Household Facilities 3.Education & Literacy	Prof. Kazi Saleh Ahmed Ex.VC JNU Mr. Abdur Rashid Sikder Former DDG ,BBS Dr. Anwara Begum SRF BIDS
04	Economic and Social Aspects of Population	1.Urbanization 2.Labour Force Participation 3.Characteristics of International Migrant Households 4. Population Distribution and Internal Migration	Mr.Nichole MALPAS, Programme Manager Human and Social Development, Delegation to the European Union to Bangladesh. Prof. Kazi Saleh Ahmed Ex.VC JNU Dr.Sarwar Jahan Prof. Department of URP,BUET Prof. Nurul Islam Najem Dept. of Geography, DU

Terms of Reference:

i) The members of the panel will remain present in the presentation of the monographs and will act as a co-opt member of the Technical Committee;
ii) They will review the draft of the Monographs;
iii) They will provide guidance in improving the draft;
iv) They will get financial benefit as per provision in the AWP of the Population and Housing Census -2011 Project.

12/5/15

Mohammad Abdul Wazed
(Additional Secretary)
Director General

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