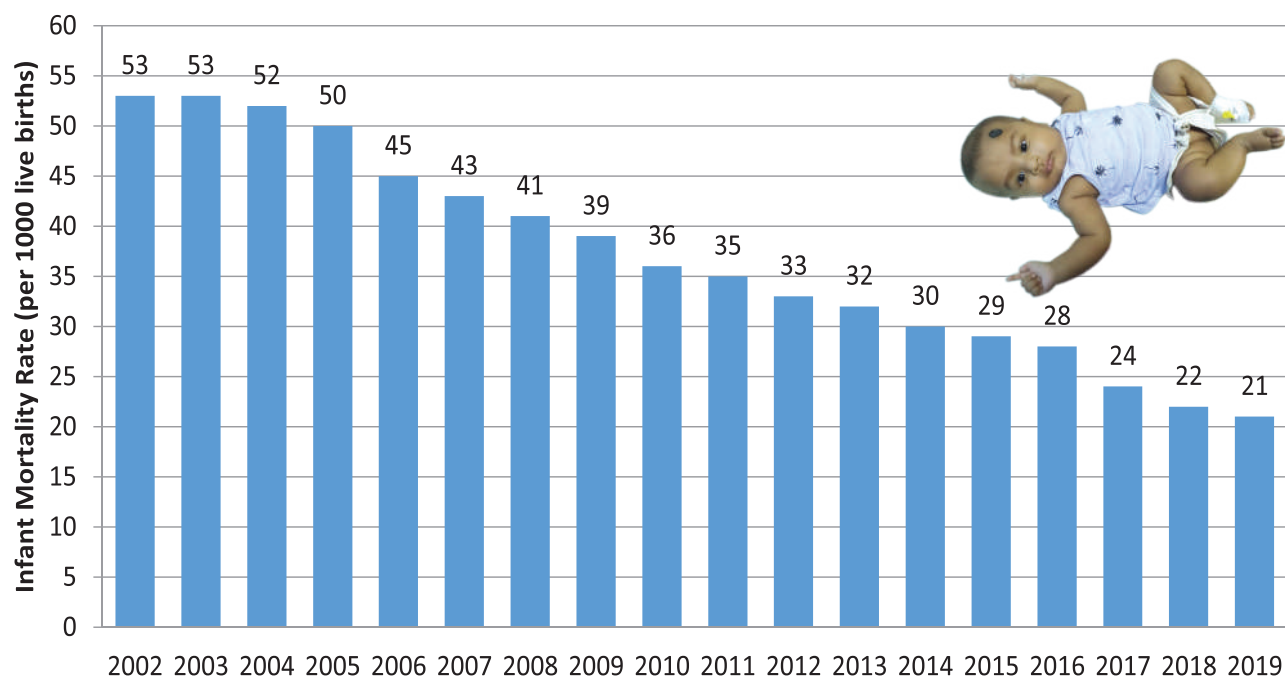




Report on Bangladesh Sample Vital Statistics 2019



BANGLADESH BUREAU OF STATISTICS (BBS)
STATISTICS AND INFORMATICS DIVISION (SID)
MINISTRY OF PLANNING



Report on Bangladesh Sample Vital Statistics 2019

June 2019



বাংলাদেশ পরিসংখ্যান বুরো

BANGLADESH BUREAU OF STATISTICS

STATISTICS AND INFORMATICS DIVISION (SID), MINISTRY OF PLANNING

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

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COMPLEMENTARY

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Minister
Ministry of Planning
Government of the People's Republic of Bangladesh

Message

It is indeed an encouraging event to publish the survey report of Bangladesh Sample Vital Statistics 2019 in the shortest possible time by the Bangladesh Bureau of Statistics (BBS) of the Statistics and Informatics Division (SID) of the Government of Bangladesh by withstanding the constraints of pandemic of COVID-19.

The Sample Vital Registration System (SVRS) is a continuous data collection system by the BBS for generating reliable demographic data to monitor the progress of the indicators of Seven Five Year Plan and Sustainable Development Goals (SDGs), Human Resource Development, Socio-economic development and sectorial plans relating to Population and Health. SVRS collects data on births, deaths, marriages, migration, disability and other key demographic indicators on a regular basis and publish reports annually. The findings of the SVRS-2019 indicate very positive improvement in Demographic and Health condition of the people of the country in the recent years. The SVRS-2019 findings will be helpful in setting up the benchmark indicators for the Sustainable Development Goals (SDGs) and monitoring the progress of the indicators on a regular basis particularly of goal 3, 4, 5 & 6.

I take this opportunity to thank Ex-Senior Secretary, Mr, Saurendra Nath Chakrabhartty and Secretary, Mr. Mohammad Yamin Chowdhury, Statistics and Informatics Division and Director General, Mohammad Tajul Islam, Bangladesh Bureau of Statistics for their hard work in conducting the field operation, data processing and preparation of this report. Thanks are also due to the members of the Steering Committee and Technical Committee of the project for providing administrative and technical support. I personally express my satisfaction to the Project Director, and thankful to the field staffs for their brave work during the COVID-19 pandemic.

Demographic data is a prerequisite for monitoring the progress of health and population sector development indicators of the country and continuous data collection and timely dissemination serves this function well.

I hope this report will be useful to the planners, policy makers, researchers and other stakeholders for proper population planning of the country.

Dhaka, June 2020


M. A. Mahnan MP



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

Foreword

Generation of reliable and timely vital statistics is a fundamental responsibility of a National Statistical Office (NSO) of any country. It is generated through two very recognized methods, one is Civil Registration and Vital Statistics (CRVS) and in absence of effective and complete CRVS system, the Sample Vital Registration System (SVRS). Bangladesh is following the later one. I am happy to know that the final report of the Sample Vital Registration System 2019 is going to be published at the earliest part of 2019. Sample Vital Registration System (SVRS) is a regular survey system of BBS which is being implemented under the project Monitoring the Situation of Vital Statistics of Bangladesh (MSVSB) to meet the intercensal data needs for demographic indicators and vital statistics such as Annual Natural Growth Rate (NGR), Crude Birth Rate (CBR), Crude Death Rate (CDR), Total Fertility Rate (TFR), Infant Mortality Rate (IMR), Under Five Mortality Rate (U₅MR), Maternal Mortality Ratio (MMR) etc for the wide ranges of users.

Bangladesh is committed to achieve Sustainable Development Goals (SDGs) by 2030. The survey findings enable us to monitor the selected indicators of SDGs under Goals 3, 4, 5 & 6 for Bangladesh. Moreover, these indicators will guide policy makers and planners in preparing and implementing pertinent socio-demographic development agenda for Sustainable Development Goals (SDGs).

I take the opportunity to express my heartfelt thanks to Ms. Mahmuda Akther, Additional Secretary (Informatics Wing) of Statistics and Informatics Division, Mr. Mohammad Tajul Islam, Director General of Bangladesh Bureau of Statistics, Mr. Khalil Ahmed, Additional Secretary (Development) of Statistics and Informatics Division, Mr. Ghose Subobrato, Deputy Director General of Bangladesh Bureau of Statistics, Ex-Prof. Dr. M. Nurul Islam of Dhaka University and Consultant of MSVSB project for their intellectual and technical input in preparing this report. All members of the Steering Committee and Technical Committee and the Project Team of MSVSB led by Mr. A K M Ashraful Haque (Joint Director), Project Director deserve special thanks for their relentless efforts in bringing out the report of 2019 in the shortest possible time during a very restricted working environment due to the pandemic of COVID-19.

I hope this report will be useful to planners, policy makers, development partners and researchers to prescribe appropriate policy measures for achieving SDGs. Any constructive suggestions and comments from the users for improvement of the report will be most welcome.

Dhaka, June 2020

Mohammad Yamin Chowdhury



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

Preface

Bangladesh Bureau of Statistics (BBS) is the National Statistical Organisation (NSO) of the country. According to the Statistics Act, 2013, the major responsibilities of BBS are to conduct national censuses and surveys to provide official statistics of Bangladesh. Sample Vital Registrations System (SVRS) is one of the core survey systems which is being conducted regularly by BBS under the programme Sample Vital Registrations System (SVRS) to meet the intercensal data needs on demographic indicators such as annual Natural Growth Rate (NGR), Crude Birth Rate (CBR), Crude Death Rate (CDR), Total Fertility Rate (TFR), Infant Mortality Rate (IMR), Under Five Mortality Rate (U₅MR), Maternal Mortality Ratio (MMR) etc.

Bangladesh is committed to achieve Vision 2021 and Vision 2041 as well as Sustainable Development Goals (SDGs) by 2030 under the visionary leadership of Hon'ble Prime Minister Sheikh Hasina. The survey findings enable us to monitor some selected indicators of the SDGs for Bangladesh on a regular basis which is praiseworthy. Moreover, these indicators will guide policy makers and planners in preparing and implementing pertinent socio-demographic development agenda for achieving the targets of Sustainable Development Goals (SDGs).

I hope that the Report on Bangladesh Sample Vital Statistics 2019 will be useful for policy makers and planners. My heartfelt thanks to the Deputy Director General, BBS for his support in bringing out this report. The project Team Mr. A K M Ashraful Haque (Team leader), Project Director and Joint Director, BBS, Mr. Md. Abul Kashem, Programmer and Mr. S M Anwar Husain, Asstt. Programmer, MSVSB 3rd phase Project, BBS deserves special thanks for bringing out this report in time which bears the testimony of their diligence and dedication.

I would like to express my special thanks and profound gratitude to the Secretary, Statistics and Informatics Division and members of the Technical Committee for their guidance in bringing out this report.

Finally, I hope that this report will be useful to the policy-makers, planners, researchers, development partners and other stakeholders. Suggestions and comments for further improvement of the report will be highly appreciated.

Dhaka, June 2020

Mohammad Tajul Islam



Monitoring the Situation of Vital Statistics of Bangladesh (MSVSB) 3rd Phase Project

A Note from the Project Director

Sample Vital Registration System

Sample Vital Registration System was introduced by Bangladesh Bureau of Statistics in 1980 to determine the annual population change during inter-censal period. Initially its coverage was limited to 103 primary sampling units (PSUs) each comprising of about 250 contiguous households. Out of 103 PSUs, 62 were from rural area and 41 from urban area. To meet the data requirements of planners and policymakers and other users to have reliable estimate, the number of sample PSUs was raised to 210 in 1983. This increase in sample PSUs was expected to provide estimate at the divisional level.. At the same time its scope was raised with inclusion of marriage and migration Schedules. Considering the importance of the project it was transferred to revenue set up of BBS in 1991. At that time district (zila) became the focal point of development. To meet the users demand at the district (zila) level estimate, number of sample PSUs was further raised to 500 in 1995. The scope of the survey was also enhanced with the addition of a new module on contraceptive use. A household card was introduced for updating of household and population information. With the availability of the sampling frame from the latest Population Census 2011 the sample design was revised. An Integrated Multi-purpose Sample Design was introduced with effect from 1st July 2002 and the number of PSU's was increased to 1000 to provide the estimate of vital events at the district level.

Dual Record System

To obtain data from field with extensive verification and to provide a better coverage of vital events Chandra Sekharan and Deming Dual Recording System was introduced from the very beginning of the project. Under System 1 there is a local registrar for each PSU who used to collect data about stipulated vital events as and when it occurs and record it in the pre-designed schedule and then send the filled-in schedules to the headquarters according to the time table set for each schedule. Under System 2 another set of enumerators (called supervisors) from the Upazila Statistical Offices visit the PSUs on a quarterly basis and collect retrospective data on all the events. The filled-in schedules obtained from both the systems are coded and matched at the headquarters and re-investigation is done whenever needed. After the cross verification of data estimates are prepared and published using the Chandra Sekharan and Deming Technique.

Schedule

To systematize collection of data from the field, a list of the schedules used which is provided below:

Schedule 1: House listing	Schedule 7: Out-migration
Schedule 2: Household card	Schedule 8: In-migration
Schedule 3: Birth	Schedule 9: Contraceptive use
Schedule 4: Death	Schedule 10: Disability
Schedule 5: Marriage	Schedule 11: HIV/AIDS
Schedule 6: Divorced/Separated	

Objective of the Project

To strengthen the Sample Vital Registration System in Bangladesh a project was undertaken in 2000 by the BBS. Two new schedules – one on divorce and separation and the other on disability were introduced.

The specific objectives of the project were –

- (i) To develop an IMPS on the basis of Population Census 2001 sampling frame considered with 1000 PSUs so that reliable estimates on vital events such as birth, death, marriage, migration, contraceptive use, disability, divorce and separation can be provided at the zila level with urban- rural break- up;
- (ii) To review and revise the schedules where necessary;
- (iii) To provide extensive training to the local registrars and the upazila supervisors so that reliable data may be collected and sent to the headquarters in time;
- (iv) To identify the causes of migration at the national, zilas, urban and rural level in Bangladesh.
- (v) To prepare the report on the basis of IMPS in time.

The project was completed in June 2007. In continuation of this project another phase of the project was started from July 2007 for further strengthening the system. Under the new project the whole gamut of activities of the project has further been revitalized. A new project entitled Monitoring the Situation of Vital Statistics of Bangladesh (MSVSB) was undertaken with effect from July 2012 in order to provide accurate and reliable estimates of population changes and vital statistics at district level and number of PSUs was increased from 1000 to 1500 under newly formed IMPS design based on Population Census 2011. Data collection from 1500 PSUs was started from July 2013, till 2014. The 2015, 2016, 2017, 2018 and 2019 rounds of data collection have been based on 2012 PSUs.

Statistical Techniques of Data Processing and Analysis

Collection of data from the field was conducted over a period of one month. Local Female Registrars and Supervisors submitted their filled in schedule to the District Statistical Office. The DSOs submitted the schedules to the head office in Dhaka. Then data were edited and coded at the head quarter following a pre-designed editing and coding guidelines. Data processing and tabulation have been done in the computer section of the project.

In presenting and computation various rates and ratios in this report, we have followed standard demographic and statistical procedures. In most instances, an up -dated versions of UN manuals, standard textbooks, journals and other demographic literatures and in some cases online materials have also been used. The operational definitions of various terms and variables employed in the report have been provided in the appendix.

Dhaka, June 2019



A K M Ashraful Haque

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এসভিআরএস'২০১৯ এর প্রধান সূচকসমূহ

সূচকসমূহ	২০১৯	২০১৮	২০১৭	২০১৬	২০১৫
০১. জাতীয় জনসংখ্যা (Estimated)					
জনসংখ্যা (মিলিয়ন): ১ জুলাই					
মোট	১৬৬.৫০	১৬৪.৬	১৬২.৭	১৬০.৮	১৫৮.৯
পুরুষ	৮৩.৩৩	৮২.৪	৮১.৪	৮০.৫	৭৯.৬
মহিলা	৮৩.১৭	৮২.২	৮১.৩	৮০.৩	৭৯.৩
জনসংখ্যা বৃদ্ধির হার (Intercensal Growth Rate)	১.৩৭*	১.৩৭*	১.৩৭*	১.৩৭*	১.৩৭*
০২. নমুনা এলাকার (PSU) সংখ্যা					
জাতীয়	২০১২	২০১২	২০১২	২০১২	২০১২
পল্লী	১০৭৭	১০৭৭	১০৭৭	১০৭৭	১০৭৭
শহর	৯৩৫	৯৩৫	৯৩৫	৯৩৫	৯৩৫
০৩. নমুনা জনসংখ্যা					
মোট	১২,৬৯,৭৪১	১২,৫৯,৭৪৪	১২,৫২,৫৮	৯,৫৭,৯১৩	৯,৩৯,৫৩০
পুরুষ	৬৩৫,৫৪৩	৬,৩০,৬০৫	৬২,৭০৬৮	৪,৭৯,৫৯৭	৪,৭০,৪৮৮
মহিলা	৬৩৪,১৯৮	৬,২৯,১৩৯	৬২,৫৫১৩	৪,৭৮,৩১৬	৪,৬৯,০৪২
বয়সভিত্তিক জনসংখ্যা (শতাংশ)					
মোট					
০০-১৪	২৮.৫	২৮.৮	২৯.৩	৩০.৮	৩০.৮
১৫-৪৯	৫৪.৬	৫৪.৬	৫৪.৪	৫৩.৬	৫৩.৭
৫০-৫৯	৮.৭	৮.৭	৮.৩	৮.১	৭.৮
৬০+	৮.২	৭.৯	৮.০	৭.৫	৭.৭
পুরুষ					
০০-১৪	২৮.৮	২৯.২	২৯.৫	৩০.৯	৩১.৩
১৫-৪৯	৫৩.৭	৫৪.১	৫৪.১	৫২.৮	৫২.৫
৫০-৫৯	৮.৮	৮.৫	৮.২	৮.২	৮.০
৬০+	৮.৭	৮.২	৮.২	৮.১	৮.২
মহিলা					
০০-১৪	২৮.৩	২৮.৪	২৯.২	৩০.৭	৩০.২
১৫-৪৯	৫৫.৪	৫৫.১	৫৪.৮	৫৪.৫	৫৫.০
৫০-৫৯	৮.৬	৮.৮	৮.৩	৭.৯	৭.৬
৬০+	৭.৭	৭.৭	৭.৭	৬.৯	৭.২
০৪. জনসংখ্যার বৈশিষ্ট					
জনসংখ্যার স্বাভাবিক বৃদ্ধির হার (RNI)	১.৩২	১.৩৩	১.৩৪	১.৩৬	১.৩৭
লিংগ অনুপাত (পুরুষ/মহিলা)×১০০	১০০.২	১০০.২	১০০.২	১০০.৩	১০০.৩
নির্ভরশীলতার অনুপাত (Dependency Ratio) (শতকরা)					
জাতীয়	৫১	৫১	৫৩	৫৪	৫৫
পল্লী	৫৫	৫৫	৫৭	৫৮	৫৯
শহর	৪৬	৪৬	৪৭	৪৯	৪৯
শিশু-নারী অনুপাত (প্রতি হাজার জনসংখ্যা)					
জাতীয়	৩০২	৩০৪	৩১০	৩২০	৩২৫
পল্লী	৩৩১	৩৩২	৩৩৬	৩৪৭	৩৫০
শহর	২৭০	২৭৩	২৭৯	২৮৯	২৯০
জনসংখ্যার ঘনত্ব (বর্গ কি:মি)	১১২৫	১১১৬	১১০৩	১০৯০	১০৭৭

*Based on the population census of 2001 and 2011

Note: SDG indicators have been shown in Supplementary Tables "Table 2A"

সূচকসমূহ	২০১৯	২০১৮	২০১৭	২০১৬	২০১৫
০৫. প্রজনন (Fertility)					
স্থূল জন্মহার (Crude Birth Rate) (প্রতি হাজার জনসংখ্যা)					
জাতীয়	১৮.১	১৮.৩	১৮.৫	১৮.৭	১৮.৮
পল্লী	২০.০	২০.১	২০.৮	২০.৯	২০.৩
শহর	১৫.৯	১৬.১	১৬.১	১৬.১	১৬.৫
বয়ঃনির্দিষ্ট প্রজনন হার (প্রতি হাজার মহিলা)					
১৫-১৯	৭৪	৭৪	৭৫	৭৮	৭৫
২০-২৪	১২৬	১৩২	১৩৪	১৩২	১৩৭
২৫-২৯	১১০	১০৬	১০৫	১০৭	১০৫
৩০-৩৪	৬৪	৬২	৫৯	৫৮	৫৬
৩৫-৩৯	২৫	২৬	২৬	২৬	২৫
৪০-৪৪	৭	৭	৭	৭	৯
৪৫-৪৯	২	৩	৩	৩	৩
মোট প্রজনন হার (১৫-৪৯) Total Fertility Rate (প্রতি ১৫-৪৯ বৎসর বয়সী মহিলা)					
জাতীয়	২.০৪	২.০৫	২.০৫	২.১	২.১
পল্লী	২.৩৭	২.৩৮	২.৩৭	২.৩৮	২.৩
শহর	১.৬৭	১.৬৮	১.৬৮	১.৬৮	১.৭২
সাধারণ প্রজনন হার (General Fertility Rate) (প্রতি হাজার ১৫-৪৯ বৎসর বয়সী মহিলা)					
জাতীয়	৬৬	৬৭	৬৮	৬৯	৬৯
পল্লী	৭৬	৭৭	৭৮	৭৯	৭৭
শহর	৫৫	৫৬	৫৬	৫৭	৫৭
স্থূল সংযোজন হার (Gross Reproduction Rate) (প্রতি ১৫-৪৯ বৎসর বয়সী মহিলা)					
জাতীয়	১.০১	১.০১	১.০২	১.০২	১.০৫
পল্লী	১.১৬	১.১৬	১.১৪	১.১৫	১.১৬
শহর	০.৮৩	০.৮৩	০.৮৪	০.৮৪	০.৮৮
নেট সংযোজন হার (Net Reproduction Rate) (প্রতি ১৫-৪৯ বৎসর বয়সী মহিলা)					
জাতীয়	১.০০	১.০০	১.০০	১.০	১.০
পল্লী	১.১৫	১.১৫	১.০৯	১.১	১.১
শহর	০.৮২	০.৮২	০.৮০	০.৮	০.৮৪
০৬. মরণশীলতা (Mortality)					
স্থূল মৃত্যুহার (Crude Death Rate) (প্রতি হাজার জনসংখ্যা)					
জাতীয়	৪.৯	৫.০	৫.১	৫.১	৫.১
পল্লী	৫.৪	৫.৪	৫.৭	৫.৭	৫.৫
শহর	৪.৪	৪.৪	৪.২	৪.২	৪.৬
১ (এক) বৎসরের নীচে শিশু মৃত্যুহার (Infant Mortality Rate) (প্রতি হাজার জীবিত জন্ম শিশু)					
জাতীয়					
মোট	২১	২২	২৪	২৮	২৯
পুরুষ	২২	২৩	২৫	২৭	৩০
মহিলা	২১	২১	২৩	২৮	২৮
পল্লী					
মোট	২২	২২	২৫	২৮	২৯
পুরুষ	২৩	২৩	২৭	২৬	৩১
মহিলা	২১	২১	২৩	২৮	২৮
শহর					
মোট	২০	২১	২২	২৮	২৮
পুরুষ	২০	২১	২২	২৮	২৯
মহিলা	২০	২১	২৩	২৮	২৮

সূচকসমূহ	২০১৯	২০১৮	২০১৭	২০১৬	২০১৫
১ (এক) মাসের কম বয়সের শিশু মৃত্যুহার (Neonatal Mortality Rate) (প্রতি হাজার জীবিত জন্ম শিশু)					
জাতীয়					
মোট	১৫	১৬	১৭	১৯	২০
পুরুষ	১৬	১৭	১৮	১৮	২০
মহিলা	১৫	১৫	১৭	২০	২০
পল্লী					
মোট	১৬	১৬	১৭	১৯	২০
পুরুষ	১৭	১৭	১৮	১৭	২১
মহিলা	১৫	১৫	১৬	১৯	১৯
শহর					
মোট	১৫	১৬	১৭	২০	২০
পুরুষ	১৫	১৬	১৭	২০	১৯
মহিলা	১৫	১৫	১৮	২০	২২
১ (এক) মাস থেকে ১১ (এগার) মাস বয়সের শিশু মৃত্যুহার (Post-neonatal Mortality Rate) (প্রতি হাজার জীবিত জন্ম শিশু)					
জাতীয়					
মোট	৬	৬	৭	৯	৯
পুরুষ	৬	৬	৭	৯	১০
মহিলা	৬	৬	৬	৮	৮
পল্লী					
মোট	৬	৬	৮	৯	৯
পুরুষ	৬	৬	৯	৯	১০
মহিলা	৬	৬	৭	৯	৯
শহর					
মোট	৫	৫	৫	৮	৮
পুরুষ	৫	৫	৫	৮	১০
মহিলা	৫	৬	৫	৮	৬
শিশু মৃত্যুহার (১-৪ বৎসর বয়সের শিশু) (Child Mortality Rate) (প্রতি হাজার ১-৪ বৎসর বয়সের শিশু)					
মোট	১.৭	১.৭	১.৮	১.৮	২.০
পুরুষ	১.৯	১.৯	২.১	২.১	২.৩
মহিলা	১.৫	১.৪	১.৬	১.৬	১.৭
৫ (পাঁচ) বৎসরের নিচে শিশু মৃত্যুহার (Under 5 Mortality Rate) (প্রতি হাজার জীবিত জন্ম শিশু)					
জাতীয়					
মোট	২৮	২৯	৩১	৩৫	৩৬
পুরুষ	৩০	৩১	৩২	৩৫	৩৯
মহিলা	২৬	২৭	২৯	৩৪	৩৪
পল্লী					
মোট	২৯	৩১	৩৩	৩৬	৩৯
পুরুষ	৩১	৩৪	৩৬	৩৬	৪২
মহিলা	২৭	২৮	৩১	৩৫	৩৫
শহর					
মোট	২৬	২৭	২৭	৩২	৩৩
পুরুষ	২৭	২৮	২৭	৩২	৩২
মহিলা	২৫	২৫	২৭	৩৩	৩১
মাতৃ মৃত্যু অনুপাত (Maternal Mortality Ratio) (প্রতি হাজার জীবিত জন্ম শিশু)					
জাতীয়	১.৬৫	১.৬৯	১.৭২	১.৭৮	১.৮১
পল্লী	১.৯১	১.৯৩	১.৮২	১.৯	১.৯১
শহর	১.২৩	১.৩২	১.৫৭	১.৬	১.৬২

সূচকসমূহ	২০১৯	২০১৮	২০১৭	২০১৬	২০১৫
০৭. আয়ুষ্কাল (Life Expectancy at Birth)					
প্রত্যাশিত আয়ুষ্কাল					
মোট	৭২.৬	৭২.৩	৭২.০	৭১.৬	৭০.৯
পুরুষ	৭১.১	৭০.৮	৭০.৬	৭০.৩	৬৯.৪
মহিলা	৭৪.২	৭৩.৮	৭৩.৫	৭২.৯	৭২.০
০৮. বিবাহ, ভালাক ও পৃথক বসবাস (Nuptiality)					
শুল বিবাহের হার (প্রতি হাজার জনসংখ্যা)					
জাতীয়	১৪.৯	১৪.৭	১৪.৬	১৪.৩	১৩.০
পল্লী	১৭.৩	১৭.২	১৮.১	১৭.৭	১৪.৯
শহর	১১.৯	১১.৫	১০.২	১০.১	১০.২
জনসংখ্যার বৈবাহিক অবস্থা (১০ + বছর বয়স) (শতাংশ)					
পুরুষ					
অবিবাহিত	৩৮.৯	৩৯.১	৩৮.৬	৩৯.৪	৩৮.৬
বর্তমানে বিবাহিত	৫৯.৩	৫৯.৪	৫৯.৯	৫৯.২	৫৯.৭
বিপন্ন / ভালাক প্রাপ্ত/ বিচ্ছিন্ন	১.৮	১.৫	১.৫	১.৪	১.৭
মহিলা					
অবিবাহিত	২৫.১	২৫.৬	২৬.২	২৬.৯	২৬.১
বর্তমানে বিবাহিত	৬৩.৯	৬৩.৬	৬৩.৩	৬৩.১	৬৪.১
বিপন্ন / ভালাক প্রাপ্ত/ বিচ্ছিন্ন	১১.০	১০.৮	১০.৫	১০.০	৯.৮
১ম বিবাহের গড় বয়স (Mean Age at First Marriage)					
পুরুষ					
জাতীয়	২৪.২	২৪.৪	২৫.১	২৫.২	২৫.৩
পল্লী	২৩.৬	২৩.৯	২৪.৫	২৪.৭	২৪.৮
শহর	২৫.৩	২৫.২	২৬.২	২৬.৩	২৬.৪
মহিলা					
জাতীয়	১৮.৫	১৮.৬	১৮.৪	১৮.৪	১৮.৪
পল্লী	১৭.৯	১৮.০	১৭.৯	১৭.৯	১৮.০
শহর	১৯.৭	১৯.৭	১৯.৭	১৯.৬	১৯.৪
বিবাহের গড় বয়স (Mean Age at Marriage)					
পুরুষ					
জাতীয়	২৫.৩	২৫.৫	২৬.২	২৬.৩	২৬.৪
পল্লী	২৪.৭	২৫.০	২৫.৭	২৫.৮	২৫.৯
শহর	২৬.৪	২৬.৩	২৭.৩	২৭.৪	২৭.২
মহিলা					
জাতীয়	১৮.৯	১৮.৯	১৮.৮	১৮.৮	১৮.৭
পল্লী	১৮.৩	১৮.৩	১৮.৩	১৮.৩	১৮.৩
শহর	২০.০	২০.১	১৯.৯	১৯.৯	১৯.৮
বিবাহের গড় বয়স (Singulate Mean Age at Marriage)					
পুরুষ					
জাতীয়	২৬.৩	২৬.০	২৫.৬	২৫.৭	২৫.৮
পল্লী	২৫.৬	২৫.৩	২৫.০	২৫.১	২৫.৩
শহর	২৭.১	২৬.৭	২৬.৪	২৬.৫	২৬.৫
মহিলা					
জাতীয়	২০.৫	২০.৭	২০.৩	২০.৩	২০.৩
পল্লী	১৯.৭	২০.০	১৯.৭	১৯.৭	১৯.৮
শহর	২১.৪	২১.৪	২১.২	২১.১	২১.০

সূচকসমূহ	২০১৯	২০১৮	২০১৭	২০১৬	২০১৫
বিবাহের মধ্যমা বয়স (Median Age at Marriage)					
পুরুষ					
জাতীয়	২৪	২৪	২৫	২৫	২৫
পল্লী	২৩	২৪	২৫	২৫	২৫
শহর	২৫	২৫	২৬	২৬	২৭
মহিলা					
জাতীয়	১৮	১৮	১৮	১৮	১৮
পল্লী	১৭	১৮	১৮	১৮	১৮
শহর	১৯	১৯	১৯	১৮	১৯
০৯. স্থানান্তরন (আভ্যন্তরীণ স্থানান্তরন) (Internal Migration)					
স্থানান্তর হার (প্রতি হাজার জনসংখ্যা)					
আগমন হার (In-Migration Rate)	৭২.৪	৭২.৮	৭৩.৮	৭৬.৭	৫৪.২
পল্লী এলাকার স্থানান্তর (Rural In-migration)	৩৬.৫	৩৮.৬	৩৭.৮	৩৯.৫	৩০.৭
পল্লী হতে পল্লীতে স্থানান্তর	৩২.২	৩৩.৭	৩২.৭	৩৪.৫	২৫.৬
শহর হতে পল্লীতে স্থানান্তর	৪.৩	৪.৯	৫.০	৫.০	৫.১
শহর এলাকার স্থানান্তর (Urban In-migration)	১১৭.১	১১৫.২	১১৯.৪	১২৩.০	৯০.০
পল্লী হতে শহরে স্থানান্তর	২৯.৭	৩০.৬	৩০.৩	৩০.৩	২৯.৫
শহর হতে শহরে স্থানান্তর	৮৭.৪	৮৪.৬	৯০.২	৯২.৬	৬০.৫
বহির্গমন হার (Out-Migration Rate)	৭২.৭	৭২.৪	৭৪.৩	৭৮.৫	৫৪.৪
পল্লী হতে বহির্গমন	৩৯.১	৩৯.৫	৪৩.৫	৪৭.৫	৩৫.১
শহর হতে বহির্গমন	১১৪.৫	১১৩.১	১১৩.৩	১১৭.২	৮৩.৮
১০. জন্মনিয়ন্ত্রণ					
জন্মনিয়ন্ত্রণ পদ্ধতি ব্যবহারের হার (Contraceptive Prevalence Rate)					
জাতীয়	৬৩.৪	৬৩.১	৬২.৫	৬২.৩	৬২.১
পল্লী	৬২.৭	৬২.৪	৫৯.৪	৫৯.৩	৬০.৪
শহর	৬৪.৪	৬৪.০	৬৬.৩	৬৫.৯	৬৪.৫
পদ্ধতি অনুযায়ী জন্মনিয়ন্ত্রণ পদ্ধতি ব্যবহারের হার (Contraceptive Prevalence Rate by Method)					
যেকোন পদ্ধতি	৬৩.৪	৬৩.১	৬২.৫	৬২.৩	৬২.১
আধুনিক পদ্ধতি	৬২.১	৬১.৬	৫৯.২	৫৮.৪	৫৮.৪
১১. প্রতিবন্ধী (Disability)					
স্থূল প্রতিবন্ধীতার হার (Crude Disability Rate) (প্রতি হাজার জনসংখ্যা)					
মোট	৮.৪	৮.৫	৮.৯	৯.০	৮.৮
পুরুষ	৯.২	৯.৩	৯.৮	৯.৮	৯.৬
মহিলা	৭.৬	৭.৭	৮.০	৮.৩	৮.০
১২. এইচআইভি/এইডস					
মা থেকে সন্তানের এইচআইভি/এইডস সংক্রমিত হয় তার শতকরা হার (অনুত: ১টি মোড সম্পর্কে জানে)	৭০.১	৬৮.৯	৬৮.৮	৬৬.৯	৬৬.১
মা থেকে সন্তানের এইচআইভি/এইডস সংক্রমিত হয় তার শতকরা হার (সকল মোড সম্পর্কে জানে)	৩৫.৫	৩৪.৬	৩৫.৫	২৯.১	২৫.৮
১৩. খানার বৈশিষ্ট্য					
খানার আকার	৪.২	৪.২	৪.২	৪.৩	৪.৪
খানা প্রধানের শতকরা হার					
পুরুষ	৮৫.৪	৮৫.৮	৮৫.৮	৮৭.২	৮৭.৩
মহিলা	১৪.৬	১৪.২	১৪.২	১২.৮	১২.৭
পানির ব্যবহার (শতাংশ) (Access to Water)					
খাবার পানি (ট্যাপ এবং নলকূপ)	৯৮.১	৯৮.০	৯৮.০	৯৮.০	৯৭.৯

সূচকসমূহ	২০১৯	২০১৮	২০১৭	২০১৬	২০১৫
আলোর উৎস (শতাংশ)					
বিদ্যুৎ	৯৩.৫	৯০.১	৮৫.৩	৮১.২	৭৭.৯
সোলার	৩.৩	৪.৮	৫.৮	৫.৬	৫.৪
কেরোসিন	২.৯	৫.০	৮.৮	১৩.০	১৬.৩
অন্যান্য	০.৩	০.১	০.১	০.২	০.৪
টয়লেট সুবিধা (শতাংশ)					
স্যানিটারি	৮১.৫	৭৮.১	৭৬.৮	৭৫.	৭৩.৫
অন্যান্য	১৭.০	১৯.৯	২০.৬	২২.৩	২৩.২
উন্মুক্ত	১.৫	২.০	২.৬	২.৭	৩.৩
১৪. স্বাক্ষরতা					
৭ বছর ও তদুর্ধ্ব জনসংখ্যার শিক্ষার হার (শতকরা)					
জাতীয়					
মোট	৭৪.৪	৭৩.২	৭২.৩	৭১.০	৬৩.৬
পুরুষ	৭৬.৫	৭৫.২	৭৪.৩	৭৩.০	৬৫.৬
মহিলা	৭২.৩	৭১.২	৭০.২	৬৮.৯	৬১.৬
পল্লী					
মোট	৬৯.১	৬৭.৬	৬৬.৫	৬৫.৫	৫৭.২
পুরুষ	৭১.৫	৬৯.৭	৬৮.৬	৬৭.৭	৫৯.২
মহিলা	৬৬.৭	৬৫.৫	৬৪.৪	৬৩.৩	৫৫.১
শহর					
মোট	৮১.০	৮০.১	৭৯.৫	৭৭.৭	৭৩.৩
পুরুষ	৮২.৮	৮২.০	৮১.৫	৭৯.৬	৭৫.৩
মহিলা	৭৯.২	৭৮.২	৭৭.৫	৭৫.৮	৭১.২
১৫ বছর ও তদুর্ধ্ব জনসংখ্যার শিক্ষার হার (শতকরা)					
জাতীয়					
মোট	৭৪.৭	৭৩.৯	৭২.৯	৭২.৩	৬৪.৬
পুরুষ	৭৭.৪	৭৬.৭	৭৫.৭	৭৫.২	৬৭.৬
মহিলা	৭১.৯	৭১.২	৭০.১	৬৯.৫	৬১.৬
পল্লী					
মোট	৬৮.৪	৬৭.৩	৬৬.১	৬৫.৪	৫৭.৬
পুরুষ	৭১.৪	৭০.৩	৬৯.০	৬৮.৪	৬০.৬
মহিলা	৬৫.৫	৬৪.৪	৬৩.২	৬২.৪	৫৪.৬
শহর					
মোট	৮২.২	৮১.৭	৮১.১	৮০.৭	৭৪.৭
পুরুষ	৮৪.৭	৮৪.৩	৮৩.৮	৮৩.৩	৭৭.৭
মহিলা	৭৯.৭	৭৯.২	৭৮.৪	৭৭.৯	৭১.৮
১৫. জনসংখ্যার ধর্মভিত্তিক বিভাজন (Religious Composition) (শতকরা)					
মুসলিম	৮৮.৪	৮৮.৪	৮৮.৪	৮৮.৪	৮৮.২
অন্যান্য	১১.৬	১১.৬	১১.৬	১১.৬	১১.৮

১৬. জাতীয় জনসংখ্যা (প্রাক্কলিত): ১ জানুয়ারি ২০২০ (মিলিয়ন)

মোট	১৬৭.৪৩
পুরুষ	৮৩.৮০
মহিলা	৮৩.৬৩

Key Findings of Sample Vital Registration System, 2019

Indicators	2019	2018	2017	2016	2015
1. National Population (Estimated)					
Population(in million) : 1 st July					
Both Sexes	166.50	164.6	162.7	160.8	158.9
Male	83.33	82.4	81.4	80.5	79.6
Female	83.17	82.2	81.3	80.3	79.3
Intercensal Growth Rate	1.37*	1.37*	1.37*	1.37*	1.37*
2. Number of PSUs					
Total	2012	2012	2012	2012	2012
Rural	1077	1077	1077	1077	1077
Urban	935	935	935	935	935
3. Sample Population					
Total	12,69,741	12,59,744	12,52,581	9,57,913	9,39,530
Male	635,543	6,30,605	6,27,068	4,79,446	4,70,488
Female	634,198	6,29,139	6,25,513	4,78,467	4,69,042
Population by Broad Age-groups (percent)					
Both Sexes					
00-14	28.5	28.8	29.3	30.8	30.8
15-49	54.6	54.6	54.4	53.6	53.7
50-59	8.7	8.7	8.3	8.1	7.8
60+	8.2	7.9	8.0	7.5	7.7
Male					
00-14	28.8	29.2	29.5	30.9	31.3
15-49	53.7	54.1	54.1	52.8	52.5
50-59	8.8	8.5	8.2	8.2	8.0
60+	8.7	8.2	8.2	8.1	8.2
Female					
00-14	28.3	28.4	29.2	30.7	30.2
15-49	55.4	55.1	54.8	54.5	55.0
50-59	8.6	8.8	8.3	7.9	7.6
60+	7.7	7.7	7.7	6.9	7.2
4. Sample Population Characteristics					
Rate of Natural Increase	1.32	1.33	1.34	1.4	1.37
Sex Ratio (M/F*100)	100.2	100.2	100.2	100.3	100.3
Dependency Ratio (percent)					
Total	51	51	53	54	55
Rural	55	55	57	58	59
Urban	46	46	47	49	49
Child Woman Ratio (per 1000 women aged 15-49)					
Total	302	304	310	320	325
Rural	331	332	336	347	350
Urban	270	273	279	289	290
Population Density (per sq. km)	1125	1116	1103	1090	1077

*Based on the population census of 2001 and 2011

Note: SDG indicators have been shown in Supplementary Tables "Table 2A"

Indicators	2019	2018	2017	2016	2015
5. Fertility					
Crude Birth Rate (per 1000 population)					
Total	18.1	18.3	18.5	18.7	18.8
Rural	20.0	20.1	20.4	20.9	20.3
Urban	15.9	16.1	16.1	16.1	16.5
Age Specific Fertility Rates (per 1000 women in the age group)					
15-19	74	74	75	78	75
20-24	126	132	134	132	137
25-29	110	106	105	107	105
30-34	64	62	59	58	56
35-39	25	26	26	26	25
40-44	7	7	7	7	9
45-49	2	3	3	3	3
Total Fertility Rate (per woman aged 15-49)					
Total	2.04	2.05	2.05	2.10	2.1
Rural	2.37	2.38	2.37	2.38	2.3
Urban	1.67	1.68	1.68	1.68	1.72
General Fertility Rate (per 1000 women aged 15-49)					
Total	66	67	68	69	69
Rural	76	77	78	79	77
Urban	55	56	56	57	57
Gross Reproduction Rate (per woman aged 15-49)					
Total	1.01	1.01	1.02	1.02	1.05
Rural	1.16	1.16	1.14	1.15	1.16
Urban	0.83	0.83	0.84	0.84	0.88
Net Reproduction Rate (per woman aged 15-49)					
Total	1.00	1.00	1.00	1.00	1.00
Rural	1.15	1.15	1.09	1.10	1.10
Urban	0.82	0.82	0.80	0.80	0.84
6. Mortality					
Crude Death Rate (per 1000 population)					
Total	4.9	5.0	5.1	5.1	5.1
Rural	5.4	5.4	5.7	5.7	5.5
Urban	4.4	4.4	4.2	4.2	4.6
Infant Mortality Rate (per 1000 live births)					
Total					
Both sexes	21	22	24	28	29
Male	22	23	25	27	30
Female	21	21	23	28	28
Rural					
Both Sexes	22	22	25	28	29
Male	23	23	27	26	31
Female	21	21	23	28	28
Urban					
Both Sexes	20	21	22	28	28
Male	20	21	22	28	29
Female	20	21	23	28	28

Indicators	2019	2018	2017	2016	2015
Neo-natal Mortality Rate (per 1000 live births)					
Total					
Both Sexes	15	16	17	19	20
Male	16	17	18	18	20
Female	15	15	17	20	20
Rural					
Both Sexes	16	16	17	19	20
Male	17	17	18	17	21
Female	15	15	16	19	19
Urban					
Both Sexes	15	16	17	20	20
Male	15	16	17	20	19
Female	15	15	18	20	22
Post-Neo-natal Mortality Rate (per 1000 live births)					
Total					
Both Sexes	6	6	7	9	9
Male	6	6	7	9	10
Female	6	6	6	8	8
Rural					
Both Sexes	6	6	8	9	9
Male	6	6	9	9	10
Female	6	6	7	9	9
Urban					
Both Sexes	5	5	5	8	8
Male	5	5	5	8	10
Female	5	6	5	8	6
Child Death Rate (per 1000 children aged 1-4 years)					
Both Sexes	1.7	1.7	1.8	1.8	2.0
Male	1.9	1.9	2.1	2.1	2.3
Female	1.5	1.4	1.6	1.6	1.7
Under 5 Mortality Rate (per 1000 live births)					
Total					
Both Sexes	28	29	31	35	36
Male	30	31	32	35	39
Female	26	27	29	34	34
Rural					
Both Sexes	29	31	33	36	39
Male	31	34	36	36	42
Female	27	28	31	35	35
Urban					
Both Sexes	26	27	27	32	32
Male	27	28	27	32	33
Female	25	25	27	33	31
Maternal Mortality Ratio (per 1000 live births)					
Total	1.65	1.69	1.72	1.78	1.81
Rural	1.91	1.93	1.82	1.90	1.91
Urban	1.23	1.32	1.57	1.60	1.62

Indicators	2019	2018	2017	2016	2015
7. Life Expectancy at Birth					
Expectation of Life at Birth (Years)					
Both Sexes	72.6	72.3	72.0	71.6	70.9
Male	71.1	70.8	70.6	70.3	69.4
Female	74.2	73.8	73.5	72.9	72.0
8. Nuptiality					
Crude Marriage Rate (per 1000 population)					
Total	14.9	14.7	14.6	14.3	13.0
Rural	17.3	17.2	18.1	17.7	14.9
Urban	11.9	11.5	10.2	10.1	10.2
Marital Status of Population Aged 10+ (percent)					
Male					
Never Married	38.9	39.1	38.6	39.0	38.6
Currently Married	59.3	59.4	59.9	59.4	59.7
Widowed/ Divorced/ Separated	1.8	1.5	1.5	1.5	1.7
Female					
Never Married	25.1	25.6	26.2	26.3	26.1
Currently Married	63.9	63.6	63.3	63.5	64.1
Widowed/Divorced/Separated	11.0	10.8	10.5	10.1	9.8
Mean Age at First Marriage					
Male					
Total	24.2	24.4	25.1	25.2	25.3
Rural	23.6	23.9	24.5	24.7	24.8
Urban	25.3	25.2	26.2	26.3	26.4
Female					
Total	18.5	18.6	18.4	18.4	18.4
Rural	17.9	18.0	17.9	17.9	18.0
Urban	19.7	19.7	19.7	19.6	19.4
Mean Age at Marriage					
Male					
Total	25.3	25.5	26.2	26.3	26.4
Rural	24.7	25.0	25.7	25.8	25.9
Urban	26.4	26.3	27.3	27.4	27.2
Female					
Total	18.9	18.9	18.8	18.8	18.7
Rural	18.3	18.3	18.3	18.3	18.3
Urban	20.0	20.1	19.9	19.9	19.8
Singulate Mean Age at Marriage					
Male					
Total	26.3	26.0	25.6	25.7	25.8
Rural	25.6	25.3	25.0	25.1	25.3
Urban	27.1	26.7	26.4	26.5	26.5
Female					
Total	20.5	20.7	20.3	20.3	20.3
Rural	19.7	20.0	19.7	19.7	19.8
Urban	21.4	21.4	21.2	21.1	21.0

Indicators	2019	2018	2017	2016	2015
Median Age at Marriage					
Male					
Total	24	24	25	25	25
Rural	23	24	25	24	25
Urban	25	25	26	27	27
Female					
Total	18	18	18	18	18
Rural	17	18	18	18	18
Urban	19	19	19	19	19
9. Internal Migration					
Migration Rate (Per 1000 population)					
In-migration Rate	72.4	72.8	73.8	76.7	54.2
Rural In-migration	36.5	38.6	37.8	39.5	30.7
Rural to Rural	32.2	33.7	32.8	34.5	25.6
Urban to Rural	4.3	4.9	5.0	5.0	5.1
Urban In-migration	117.1	115.2	119.3	123.0	90.0
Rural to Urban	29.7	30.6	30.3	30.3	29.5
Urban to Urban	87.4	84.6	90.2	92.7	60.5
Out-migration Rate	72.7	72.4	74.3	78.5	54.4
Rural out-migration	39.1	39.5	43.5	47.5	35.1
Urban out-migration	114.5	113.1	113.3	117.2	83.8
10. Contraceptive Usage					
Contraceptive Prevalence Rate (percent)					
Total	63.4	63.1	62.5	62.3	62.1
Rural	62.7	62.4	59.4	59.3	60.4
Urban	64.4	64.0	66.3	65.9	64.5
Contraceptive Prevalence Rate by Method					
Any Method	63.4	63.1	62.5	62.3	62.1
Modern Method	62.1	61.6	59.2	58.4	58.4
11. Disability					
Crude Disability Rate (per 1000 population)					
Both Sexes	8.4	8.5	8.9	9.0	8.8
Male	9.2	9.3	9.8	9.8	9.6
Female	7.6	7.7	8.0	8.3	8.0
12. HIV/AIDS					
Percent who know at least one mode of transmission of HIV/AIDS from mother to child	70.1	68.9	68.8	66.9	66.1
Percent who know all modes of transmission of HIV/AIDS from mother to child	35.5	34.6	33.5	29.1	25.8
13. Household Characteristics					
Household Size	4.2	4.2	4.2	4.3	4.4
Headship (Percent)					
Male Headed HH	85.4	85.8	85.8	87.2	87.3
Female Headed HH	14.6	14.2	14.2	12.8	12.7
Access to Water (percent)					
Drinking (Tap & Tube well)	98.1	98.0	98.0	98.0	97.9

Indicators	2019	2018	2017	2016	2015
Source of Light (percent)					
Electricity	93.5	90.1	85.3	81.2	77.9
Solar	3.3	4.8	5.8	5.6	5.4
Kerosene	2.9	5.0	8.8	13.0	16.3
Others	0.3	0.1	0.1	0.2	0.4
Toilet Facility (percent)					
Sanitary	81.5	78.1	76.8	75.0	73.5
Others	17.0	19.9	20.6	22.3	23.2
None	1.5	2.0	2.6	2.7	3.3
14. Literacy					
Literacy Rate of Population 7+ yrs (percent)					
Total					
Both Sexes	74.4	73.2	72.3	71.0	63.6
Male	76.5	75.2	74.3	73.0	65.6
Female	72.3	71.2	70.2	68.9	61.6
Rural					
Both Sexes	69.1	67.6	66.5	65.5	57.2
Male	71.5	69.7	68.6	67.7	59.2
Female	66.7	65.5	64.4	63.3	55.1
Urban					
Both Sexes	81.0	80.1	79.5	77.7	73.3
Male	82.8	82.0	81.5	79.6	75.3
Female	79.2	78.2	77.5	75.8	71.2
Adult Literacy Rate of Population 15+ yrs (percent)					
Total					
Both Sexes	74.7	73.9	72.9	72.3	64.6
Male	77.4	76.7	75.7	75.2	67.6
Female	71.9	71.2	70.1	69.5	61.6
Rural					
Both Sexes	68.4	67.3	66.1	65.4	57.6
Male	71.4	70.3	69.0	68.4	60.6
Female	65.5	64.4	63.2	62.4	54.6
Urban					
Both Sexes	82.2	81.7	81.1	80.7	74.7
Male	84.7	84.3	83.8	83.3	77.7
Female	79.7	79.2	78.4	77.9	71.8
15. Religious Composition (percent)					
Muslim	88.4	88.4	88.4	88.4	88.2
Others	11.6	11.6	11.6	11.6	11.8

16. National Population (Estimated): 1st January 2020 (in million)

Both sexes	167.43
Male	83.80
Female	83.63

সংক্ষিপ্তসার

বাংলাদেশ পরিসংখ্যান ব্যুরো ১৯৮০ সাল হতে দ্বৈত পদ্ধতিতে জন্ম, মৃত্যু, বিবাহ ও স্থানান্তর সংক্রান্ত তথ্য সংগ্রহ করে আসছে। ১৯৮০ সালে মাত্র ১০৩টি (৬২টি পল্লী + ৪১টি শহর) নমুনা এলাকায় (Primary Sampling Unit) এ তথ্য সংগ্রহ পদ্ধতি একটি উন্নয়ন প্রকল্পের আওতায় শুরু হয়। ১৯৮৩ সালে জরিপের নমুনা এলাকার সংখ্যা ১০৩টি হতে ২১০ এ উন্নীত করা হয়। যার মধ্যে পল্লী এলাকায় ছিল ১৫০টি এবং শহর এলাকায় ছিল ৬০টি। কিন্তু নমুনা এলাকার সংখ্যা যথেষ্ট না হওয়ায় এ কার্যক্রমের আওতায় সংগৃহীত তথ্য জেলা পর্যায়ে নিরূপন করা সম্ভব হতো না। তাই ১৯৯৫ সালে নমুনা এলাকার (Sample Area) সংখ্যা ২১০ হতে ৫০০ তে উন্নীত করা হয়। দ্বৈত পদ্ধতিতে জন্ম, মৃত্যু, বিবাহ, আগমন-বহির্গমন, জন্ম নিয়ন্ত্রণ পদ্ধতি এবং প্রতিবন্ধী সংক্রান্ত তথ্য সংগ্রহ কার্যক্রম জোরদারকরণ ও জেলা পর্যায়ে তথ্য উপস্থাপনের জন্য ২০০০ সালে একটি উন্নয়ন প্রকল্প গ্রহণ করা হয় এবং ২০০২ সালে নমুনা এলাকার সংখ্যা ৫০০ হতে ১০০০ এ উন্নীত করা হয়। বর্তমানে নতুন Integrated Multi-Purpose Sample Design (IMPS) অনুযায়ী নমুনা এলাকার সংখ্যা ২০১২-তে উন্নীত করা হয়েছে।

চন্দ্রসেকরন ও ডেমিং এর দ্বৈত পদ্ধতি অনুসরণ করে নমুনা এলাকাটি থেকে ভাইটাল ইভেন্ট সমূহের তথ্য সংগ্রহ করা হয়েছে। দ্বৈত পদ্ধতিতে দু'টি পৃথক তথ্য সংগ্রহ পদ্ধতি অনুসরণ করা হয় যার একটি (System 1) পদ্ধতি হল স্থানীয়ভাবে নির্বাচিত ও এলাকার স্থায়ী বাসিন্দা একজন স্থানীয় রেজিষ্ট্রার, নমুনা এলাকায় সংঘটিত জন্ম, মৃত্যু, বিবাহ ও স্থানান্তর সংক্রান্ত তথ্য ১১টি তফসিলের মাধ্যমে তাৎক্ষণিকভাবে সংগ্রহ করে পরিসংখ্যান ব্যুরোর সদর দপ্তরে প্রেরণ করে। অপর পদ্ধতি (System 2) হল ব্যুরোর মাঠ পর্যায়ে কর্মরত কর্মকর্তা/কর্মচারীগণ কর্তৃক প্রতি তিন মাস অন্তর অন্তর একই তথ্য গণনা ও তদারকির ভিত্তিতে একই নমুনা এলাকার তথ্য সংগ্রহ করা হয়। সংগৃহীত তথ্য পরে ম্যাচিং করে সঠিকতা যাচাই করা হয় এবং প্রকৃত ঘটন সংখ্যা (events) নির্ণয় করে বিভিন্ন জনমিতিক সূচক নিরূপন করে রিপোর্ট আকারে প্রকাশ করা হয়। ২০১৯ সালে জন্ম ও মৃত্যু বিষয়ক তথ্য বিশ্লেষণে পরিলক্ষিত হয় যে জন্ম ও মৃত্যুর ক্ষেত্রে missing events যথাক্রমে ১.৩৩% ও ১.৩৭%।

SVRS তথ্যের গুণগত মান

৩টি জনপ্রিয় Indices এর মান নির্ণয় করে SVRS তথ্যের গুণগত মান সম্পর্কে মূল্যায়ন করা হয়েছে। Index গুলি হচ্ছে Myer's Index, Whipple's Index এবং UN Age-Sex Accuracy Index । ফলাফল বিশ্লেষণে পরিলক্ষিত হয় যে, SVRS তথ্যের গুণগত মান ক্রমাগত উন্নত হচ্ছে। বিস্তারিত ফলাফল অধ্যায় ২ এ উপস্থাপন করা হয়েছে।

খানার আর্থসামাজিক বৈশিষ্ট

বর্তমান রিপোর্টটি ২০১৯ সালে মোট ২০১২টি নমুনা এলাকা থেকে সংগৃহীত তথ্যের উপর ভিত্তি করে প্রস্তুত করা হয়েছে। ২০১২টি নমুনা এলাকায় ২০১৯ সালে মোট ২৯৮৮১০টি খানা। নারী পুরুষের লিঙ্গানুপাত ১০০.২ (মোট পুরুষ ৬৩৫৫৪৩ এবং মোট মহিলা ৬৩৩৯২৮)। গত পাচ বছর যাবৎ লিঙ্গানুপাত হ্রাস পেয়েছে। ২০১৫ সালে লিঙ্গানুপাত ছিল ১০০.৩ যা ২০১৯ সালে হয়েছে ১০০.২। জনসংখ্যার ২৮.৫% জনসংখ্যার বয়স ১৫ বছরের নীচে। উচ্চ প্রজনন হারের এটা একটা অন্যতম কারণ। নির্ভরতার অনুপাত (Dependency Ratio) উল্লেখযোগ্য পরিমাণে হ্রাস পেয়েছে যা ২০০২ সালে ছিল ৮০ এবং ২০১৯ সালে হয়েছে ৫১।

খানার গড় সদস্য সংখ্যা ২০১৫ সালে ছিল ৪.৪ যা ২০১৯ সালে হয়েছে ৪.২। বাংলাদেশের মহিলারা এখনও পুরুষ দ্বারা উচ্চমাত্রায় নিয়ন্ত্রিত। SVRS Report 2019 অনুযায়ী বাংলাদেশে শতকরা ৮৫.৪ ভাগ পরিবারের খানা প্রধান হচ্ছে পুরুষ। সময়ের সংগে বয়স্ক শিক্ষার (১৫+ বছর বয়স্ক জনসংখ্যা) হার উন্নতি লাভ করছে। ২০১৫ সালে যা ছিল ৬৪.৬% এবং এ হার ২০১৯ সালে বেড়ে দাড়িয়েছে শতকরা ৭৪.৭।

SVRS Report 2019 অনুযায়ী বয়স্ক শিক্ষার ক্ষেত্রে (১৫ বছর ও তদূর্ধ্ব) শহর এলাকায় বয়স্ক শিক্ষার হার পল্লী এলাকার চেয়ে প্রায় ২০.২% বেশী। ৭ বছর বা তার বেশী বয়স্ক শিক্ষার ক্ষেত্রে এই হার প্রায় ১৭.২%। যাই হোক ২০১৩ সাল থেকে শহর

এলাকার চেয়ে পল্লী এলাকায় শিক্ষার হার দ্রুত গতিতে বাড়ছে। ৭ বছর বা তার বেশী অথবা ১৫ বছর বা তার বেশী বয়স্ক উভয় ক্ষেত্রেই এটি প্রযোজ্য।

প্রজনন

প্রজনন পরিমাপের সবচেয়ে সহজ পদ্ধতি হলো স্থূল জন্মহার। SVRS 2019 অনুযায়ী বাংলাদেশের স্থূল জন্মহার ১৮.১ প্রতি হাজার জনসংখ্যার জন্য, ২০১৫ সালে ছিল ১৮.৮। অর্থাৎ গত অর্ধ দশকে স্থূল জন্মহার কমেছে ০.৭% এর চেয়েও কিছুটা বেশী। প্রত্যাশা অনুযায়ী গ্রাম এলাকার স্থূল জন্মহার শহর এলাকার জন্মহারের চেয়ে বেশী: প্রতি হাজারে যা যথাক্রমে ২০.০ ও ১৫.৯। ২০১৯ সালে প্রতি হাজার মহিলার ক্ষেত্রে সাধারণ প্রজনন হার (General Fertility Rate) পাওয়া গিয়েছে ৬৬। পল্লী এলাকায় এই হার হচ্ছে ৭৬ এবং শহর এলাকায় তা ৫৫। মোট প্রজনন হার (Total Fertility Rate) ২০১৯ সালে পাওয়া গিয়েছে ২.০৪ যা ২০১৫ সালে ছিল ২.১০। প্রজননের সবগুলো পরিমাপ তুলনা করলে পরিলক্ষিত হয় যে সাম্প্রতিক বছরগুলোতে বাংলাদেশে জন্মের হার অনেকটা স্থির অবস্থায় আছে।

মরণশীলতা

SVRS বার্ষিক রিপোর্ট, ২০১৯ অনুযায়ী বাংলাদেশে মরণশীলতা প্রতি হাজার জনসংখ্যায় ৪.৯ জন যা পল্লী এলাকায় ৫.৪ জন এবং শহর এলাকায় ৪.৪ জন। ২০১৫ সালে এই হার ছিল ৫.১। শিশু মৃত্যুর হারের ক্ষেত্রে (১ বৎসরের নীচে) একই প্রবণতা লক্ষ্য করা যায়। শিশু মৃত্যু হার ২০১৫ সালে প্রতি হাজার জীবিত জন্মের ক্ষেত্রে ছিল ২৯ এবং এই হার ২০১৯ সালে কমে দাঁড়িয়েছে ২১-এ।

মরণশীলতার অন্যান্য সূচকের ক্ষেত্রেও মৃত্যু হার কমানোর একই রকম প্রবণতা লক্ষণীয়। প্রতি হাজার জীবিত জন্মের ক্ষেত্রে Neonatal mortality rate ২০১৫ সালে ছিল ২০, যা ২০১৯ সালে পাওয়া গিয়েছে ১৫। Post-neonatal mortality rate (PNMR) গত ০৫ (পাঁচ) বছরে প্রতি হাজারে ৯ থেকে হ্রাস পেয়ে বর্তমানে ৬ এ দাঁড়িয়েছে।

২০১৯ সালে শিশু মৃত্যুর হার (১-৪ বছর) পাওয়া গিয়েছে ১.৭ প্রতি হাজার শিশুর ক্ষেত্রে যা ২০১৫ সালে ছিল ২.০। শিশু মৃত্যুর হার (১-৪ বছর) গত ৫ (পাঁচ) বছরে শতকরা ১৫ ভাগ কমেছে। পাঁচ বছরের নীচে (Under five mortality) শিশু মৃত্যুর হারের ক্ষেত্রেও একই প্রবণতা লক্ষ্য করা যায়। ২০১৫ সালে প্রতি হাজার জীবিত শিশু জন্মের ক্ষেত্রে পাঁচ বছরের নীচে শিশু মৃত্যুর হার ছিল ৩৬ যা ২০১৯ সালে হয়েছে ২৮, যার হ্রাসের পরিমাণ ২২.২%।

মরণশীলতার প্রতিটি সূচক (Indicator) বিশ্লেষণ করলে প্রতীয়মান হয় যে, মৃত্যুর হারের ক্ষেত্রে পুরুষ ও নারীদের ব্যবধান তাৎপর্যপূর্ণভাবে হ্রাস পেয়েছে। মরণশীলতার এই অবস্থা শহর ও পল্লী এলাকা উভয় ক্ষেত্রেই প্রযোজ্য।

মাতৃ মৃত্যুর অনুপাত (MMR) গত পাঁচ বছরে সমহারে ক্রমাগত হ্রাস পেয়েছে। ২০১৫ সালে মাতৃ মৃত্যুর অনুপাত ছিল ১.৮১ যা ২০১৯ সালে হ্রাস পেয়ে দাঁড়িয়েছে ১.৬৫।

গত পাঁচ বছরে প্রত্যাশিত আয়ুষ্কাল (Life Expectancy at Birth) গড়ে প্রতি বছরে ০.৩৪ বছর হারে বেড়েছে অর্থাৎ গত পাঁচ বছরে প্রত্যাশিত আয়ুষ্কাল ১.৭ বছর বেড়েছে। পুরুষের তুলনায় মহিলাদের গড় আয়ু বেশী বেড়েছে।

বিবাহের গড় বয়স

বিবাহের বয়স সংক্রান্ত তথ্য বিশ্লেষণ করে দেখা যায় যে, সাম্প্রতিককালে বিশেষ করে পুরুষদের ক্ষেত্রে প্রথম বিবাহের গড় বয়স কিছুটা নিম্নমুখী। উদাহরণ স্বরূপ পুরুষদের বিবাহের বয়স ২০১৫ সালে ছিল ২৫.৩ বছর যা ২০১৯ সালে কমে যথাক্রমে ২৪.২ বছরে দাঁড়ায়। পক্ষান্তরে মহিলাদের এই বয়স ২০১৫ সালে ছিল ১৮.৪ বছর যা ২০১৯ সালে বেড়ে ১৮.৫ বছরে দাঁড়ায়।

আগমন ও বহির্গমন

২০১৪-২০১৯ সময়ে In-migration rate এবং Out-migration rate উভয়ই এসভিআরএস নমুনা এলাকায় অস্বাভাবিকভাবে বেড়ে গেছে। ২০১৯ সালের জন্য প্রাপ্ত ফলাফল বিশ্লেষণে দেখা যায় নমুনা এলাকায় প্রতি হাজার জনসংখ্যার জন্য In-migration rate ৭২.৪ জন এবং এই হার ২০১৫ সালের জন্য ছিল মাত্র ৫৪.২ জন। Out-migration rate এর ক্ষেত্রে একই প্রবণতা বিরাজমান: ২০১৯ সালে প্রতি হাজার জনসংখ্যার জন্য Out-migration rate ৭২.৭ জন এবং এই হার

২০১৫ সালের জন্য ছিল মাত্র ৫৪.৪ জন। শহর এলাকায় ২০১৫ সালের তুলনায় ২০১৯ সালে in ও out migration উভয়ই উল্লেখযোগ্যভাবে বেড়েছে।

জন্মনিয়ন্ত্রণ পদ্ধতির ব্যবহার

২০১৫ থেকে ২০১৯ এই ৫ (পাঁচ) বছরে জন্মনিয়ন্ত্রণ পদ্ধতি ব্যবহারের হার বাড়েনি, প্রায় একই রকম রয়েছে। নমুনা এলাকায় এই হার শতকরা ৬৩.৪। SVRS Report 2019 থেকে দেখা যায় যে, প্রত্যাশা অনুযায়ী শহর অঞ্চলের (৬৪.৪%) মহিলারা গ্রামাঞ্চলের (৬২.৭%) মহিলাদের চেয়ে বেশী হারে জন্ম নিয়ন্ত্রণ পদ্ধতি ব্যবহার করেছে।

প্রতিবন্ধী

এসভিআরএস নমুনা এলাকা থেকে সংগৃহীত তথ্য থেকে ২০১৯ সালের জন্য প্রাপ্ত ফলাফল অনুযায়ী বাংলাদেশে প্রতি হাজারে ৮ জনের চেয়ে কিছু বেশী মানুষ কোনো না কোনোভাবে প্রতিবন্ধী। মহিলাদের চেয়ে পুরুষদের মধ্যে প্রতিবন্ধীর হার বেশী অর্থাৎ মহিলাদের চেয়ে পুরুষরাই বেশী হারে প্রতিবন্ধিতার কুিকিতে রয়েছে। ২০১৯ সালে পুরুষ প্রতিবন্ধীর হার প্রতি হাজারে ৯.২ জন এবং মহিলা প্রতিবন্ধীর হার ৭.৬ জন প্রতি হাজারে যা ২০১৮ সালের চেয়ে কিছুটা কম।

এইচআইভি/এইডস

বাংলাদেশ পরিসংখ্যান ব্যুরো ২০১৩ সাল থেকে প্রথমবারের মতো এইচআইভি/এইডস সংক্রমণের ক্ষেত্রে ১৫-৪৯ বছরের মহিলাদের জ্ঞান সম্পর্কে তথ্য সংগ্রহ করেছে। ২০১৯ সালের জন্য প্রাপ্ত ফলাফল থেকে পরিলক্ষিত হয় যে মাত্র ৩৫.৫% মহিলা এইচআইভি/এইডস সংক্রমণের সকল পদ্ধতি সম্পর্কে অবগত আছে ২০১৫ সালে এই হার ছিল মাত্র ২৫.৮%। ২০১৯ সালে এইচআইভি/এইডস সংক্রমণের যে কোনো একটি পদ্ধতি সম্পর্কে শতকরা ৭০.১ জন মহিলা জানে যা ২০১৫ সালে ছিল শতকরা ৬৬.১ জন।

Executive Summary

Bangladesh Bureau of Statistics (BBS) introduced Sample Vital Registration System (SVRS) in 1980 to study the changes in the demographic scenarios of Bangladesh during the intercensal periods. Initially, the coverage was limited to 103 primary sampling units (PSU) each consisting of 250 households. Subsequently, the number of sample PSUs was raised to 210 in 1983 and further to 1000 in 2002. To meet the data requirements of the planners and policymakers, the number of PSUs was increased to 1500 in 2013. An Integrated Multi-Purpose Sample (IMPS) Design, introduced in 2012, is being followed since 2013 SVRS, which is also applicable to the last four rounds of SVRS since 2014. As many as 11 data recording schedules are currently being used to collect data on household and household population characteristics, birth, death, migration, marriage, disability, HIV/AIDS and contraceptive use.

The recording of vital events in the sample area is made possible through a dual recording system proposed by Chandrasekaran and Deming. Under this system, vital events are collected as and when they occur by a locally recruited female registrar called Local Registrar (System 1). On the other hand, under a second system (System 2) another group of officials from the District/Upazila Statistical Office of BBS also collect the data independently from the same area on a quarterly basis. Having gathered the filled-in questionnaires from the two systems, data are matched in the headquarters by a pre-designed matching criteria by a group of trained officials and the demographic rates and ratios are estimated using the adjusted number of events. In order to find denominators for the estimation of demographic parameters, a detailed household survey is conducted at the beginning of every year covering basic household and population characteristics. The matching of the vital events suggested that about 1.33 percent of the births and another 1.37 percent of the deaths were missed by both the systems in 2019.

Quality of Age Data

The data collected in SVRS have been evaluated to shed light on the quality of data. Particular attention has been given to assess the quality of age data, which are of primary importance in estimating most of the vital rates and ratios. Three popular indices viz. Myer's index, Whipple's index and UN Age-Sex Accuracy Index also called UN Joint Score have been computed from reported age distributions for this purpose. These indices have pointed out the fact that the quality of age reporting in SVRS has improved over the last five years. The detailed results of this assessment have been presented in Chapter II of this report.

Household and Demographic Characteristics

The enumerated population in the registration area shows a sex ratio of 100.2 resulting from a total 635543 males and 634198 females. The overall sex ratio has shown only one percentage point decline over the last five years, from 100.3 in 2015 to 100.2 in 2019. The age structure of the population is still conducive to high fertility with 28.5 percent of its total population being under age 15. The dependency ratio fell from 55 percent in 2015 to 51 percent in 2019.

The average household size dropped from 4.4 in 2015 to 4.2 in 2019. Household headship is disproportionately shared by males and females. Less than 15 percent of the females as opposed to more than 85 percent of the males share the responsibility of the households as heads. These were to the extent of 12.7 percent in 2015.

Adult literacy rate for population aged 15+ has shown an increase from 64.6 percent in 2015 to 74.7 in 2019. A similar increase was noted in literacy rate for population aged 7 years and above: from 63.6 percent in 2015 to 74.4 percent in 2019. In both the cases, males are more in proportions to dominate over the females in literacy rates, the difference being 6.5 percentage points in the case of

literacy rate of populations 15+ years and 4.2 percentage points in the case of population aged 7 years and above.

The survey findings on adult literacy (15+) further reveal that the urban residents are at least 20 percent more likely than their rural counterparts to be literate. This amounts to about 17 percent in the case of population aged 7 years and over. However, the rural population as opposed to the urban population experienced a more accelerated increase (of about two times) in adult literacy since 2015. This is true for both the populations with respect to the defined age limits of 7 years and above and 15 years and above.

Fertility

Crude birth rate, the simplest measure of fertility has been estimated at 18.1 per thousand population in 2019 as compared to 18.3 in 2018. The CBR fell from 18.8 in 2015 to 18.1 in 2019, demonstrating an average annual decrease of less than 0.84 percent over the last five years since 2015. The rural CBR, as expected, is higher than the urban CBR by a margin of 4.1 births per thousand population: 20.0 versus 15.9. The general fertility rate (GFR) worked out to 66 per thousand women with a much higher rate of 76 in the rural areas as compared to a rate of 55 in the urban areas. This rate remained nearly constant over the last five years. The total fertility rate (TFR) remains in the neighborhood of 2.0 since 2015.

Mortality

The crude death rate (CDR) worked out to 4.9 per 1000 population in 2019. This rate has declined from 5.1 in 2015 to 4.9 in 2019. In the rural area, the CDR is higher (5.4) than in the urban area (4.4) maintaining the same level in the rate observed in 2018. The infant mortality rate (IMR) recorded a moderate fall from 29 per thousand live births in 2015 to 21 per thousand live births in 2019, a reduction of 1.6 infant deaths per 1000 live births per year since 2015. Keeping consistency with the previous years, the IMR for males remained slightly higher than their female counterparts. Male infants experienced a somewhat steeper decline (27%) than female infants (25%). Following the previous year's rate, urban infants were less in proportion (21 per thousand live births) to experience death than the rural infants (22 per thousand live births).

The neo-natal mortality rate fell from 20 deaths per 1000 live births in 2015 to 16 deaths per 1000 live births in 2019. Area of residence failed to record any notable difference in the neo-natal mortality rate (15 in the urban area and 16 in the rural area).

Post-neo-natal mortality rate (PNMR) in 2019 recorded a minor decline over the last one year: from 9 per 1000 live births in 2015 to 6 per 1000 live births in 2019. Child (1-4 years) mortality has been estimated to be 1.7 deaths per 1000 children in 2019 suggesting no change since its previous year's rate. Under-five mortality has demonstrated a moderate decline from 36 deaths per 1000 live births in 2015 to 28 deaths in 2019, implying a 22.2 percent decline in five years vis-à-vis a 4.44 percent decline annually. In line with our previous findings on child and infant mortality, male children undergo more health hazards leading to their deaths than their female counterparts. This is evident from the differential death rates by sex.

Maternal mortality ratio has shown a consistent fall over the last five years, from 1.81 maternal deaths per 1000 live births in 2015 to 1.65 in 2019, a 1.76% decline annually over a period of 5 years. Urban women are in an advantageous position with a lower risk of dying (1.23) than their rural counterparts (1.91).

The overall life expectancy at birth has increased by a narrow margin of 0.3 years over the last one year: from 72.3 years in 2018 to 72.6 in 2019 with a higher longevity of 74.2 years for females against a longevity of 71.1 years for males. As our records say, the gain in life expectancy is somewhat

pronounced among the females since 2001 resulting from a higher survival advantage in favor of females during the last 20 years.

Age at marriage

Analysis of age at first marriage data reveals that in recent time mean, age at first marriage specially of males by and large has gone down marginally. For example, the age at first marriage for males computed in 2015 was 25.3 years, which decreased to 25.1 years in 2017 and further to 24.2 year in 2019. On the contrary, the female age at first marriage remained almost static (in the neighborhood of 18.4 years since 2014). The overall impression from the survey findings is that the age at marriage neither for males nor for females has not changed over the last six years.

Contraceptive usage

The overall contraceptive prevalence rate is 63.4 percent in 2019, which demonstrates a moderate increase of 0.3 percentage points over its rate in 2018. The rate reported in 2015 was about of the same magnitude, 62.1 percent, implying constancy in the rate during the last 5 years. As expected, the urban women as compared to their rural counterparts are more likely (64.4%) to adopt contraceptives than their rural counterparts (62.7%).

Migration

Both in-migration and out-migration rates have exhibited an abrupt increase in recent times. For example, while the overall in-migration rate was 54.2 percent in 2015, it increased to 73.8 percent in 2017. The current rate of in-migration in 2019 is 72.4. The same feature is observed in the case of the out-migration rate: from 54.4 percent in 2015 to 74.3 percent in 2017, which thereafter decreased to 72.7 percent in 2019.

Disability

The overall disability rate as estimated from the 2019 round of survey is 8.4 per thousand populations displaying significantly higher risk (9.2) among the males than among the females with a risk of 7.6 per thousand population. The reported data further showed that the prevalence of disability remained stable over the last five years irrespective of sex.

Knowledge on HIV/AIDS

It is for the sixth time that SVRS went on to gather data on the knowledge of the females of reproductive age on the modes of transmission of HIV/AIDS. The investigation showed that 70.1 percent of the respondents knew at least one mode of transmission of HIV/AIDS from mother to child in 2019. This is 1.2 percentage points higher than its previous year's level. On the other hand, while 35.8 percent of women knew about all modes of transmission of HIV/AIDS in 2015, this increased to 35.5 percent in 2019. Correct knowledge of at least one mode of transmission of HIV/AIDS is prevalent among 79.7 percent women as observed in the survey of 2019. The increases in the knowledge of at least one mode of transmission and all modes of transmission have been 6.1 percent and 37.6 percent respectively in a span of 5 years.

CHAPTER I

Sample Design and Survey Implementation

1.1 Background

Bangladesh Bureau of Statistics (BBS) introduced the Sample Vital Registration System (SVRS) for the first time in 1980 to determine the population change during the intercensal periods. Initially, its coverage was 103 primary sampling units (PSU) each consisting of 250 households. Subsequently, the number of sample PSUs was raised to 210 in 1983, 500 PSUs in 1995 and further to 1000 in 2002. To meet the data need of the planners and policymakers, the number of PSUs was further increased to 1500 in 2013. An Integrated Multi-Purpose Sample (IMPS) Design, introduced in 2012 has also been followed since 2013 SVRS. As many as 11 data recording schedules are currently being used to collect data on household and population characteristics, birth, death, migration, marriage, disability, HIV/AIDS and contraceptive use.

The vital events in the sample area are collected through a dual recording system known as **Chandra–Deming technique** proposed by Chandrasekaran and Deming. Under this system, vital events are collected as and when they occur by a locally recruited female registrar termed as Local Registrar (System 1). On the other hand, under a second system (System 2), another group of officials from District/Upazila Statistical Office of BBS also collect the data independently from the same area on quarterly basis employing four schedules bearing numbers 3 (Birth), 4 (Death), 5 (Marriage), and 6 (Divorce/Separation) and half-yearly basis employing schedules 7 (Out-Migration) and schedules 8 (In-Migration). Having the filled-in questionnaires from the two systems, data are matched in the headquarters by a pre-designed matching criteria and the demographic rates and ratios are estimated following Chandrasekaran and Deming procedure. In order to find denominators for the demographic parameters, a detailed household survey is conducted at the beginning of every year covering basic household and population characteristics. The following and the subsequent sections of the present chapter are designed to provide an overview of such issues as coverage, schedules used, data collection procedure, estimation of missing events, data management and some other issues pertinent to the SVRS.

1.2 Coverage of the Sample

The IMPS frame developed from the 2011 census served as the sampling frame for the collection of data in the SVRS survey 2019. The master sample PSUs were used as the PSUs in the SVRS. A single-stage stratified cluster sampling methodology was adopted for the SVRS sample EAs. Prior to the selection, each of all EAs containing less than 40 households were combined with an adjacent EA to be comparable with the remaining EAs. Selection of EAs within the strata was performed with probability proportionate to the estimated number of households from a computerized list ordered alphabetically within the 64 districts. Once an EA was selected, all households within the EAs were brought under the purview of data collection for SVRS area. Each of the seven administrative divisions of the country was regarded as a domain of the study. These domains were divided into three residential categories, viz. rural, urban and City Corporation. Altogether, 21 domains were thus resulted in the design.

In determining the sample size for each domain, standard formulas were adopted resulting in 2012 PSUs. In both 2017 and 2018 round of surveys, a total of 935 urban EAs and 1077 rural EAs were selected from the entire sample area comprising of 2012 PSUs. The allocations of the PSUs along

with the associated number of households by strata in each domain of study are shown in Table 1.1 below

The 2019 round of survey also included the same number of EAs. In 2012 PSUs, a total of 298810 households were listed. The number of PSUs and the number of households thereof have been displayed in Table 1.1. An examination of the tabular data shows that there has been an increase of 1577 ((0.53%) households over a period of one year in the sample area, there being no change in the number of PSUs. This increase is more pronounced in the rural area than in the urban area, the increase being in the ratio: 2.14:1.00.

Table 1.1: Allocation of SVRS PSUs and households by domains of study, SVRS 2019

Divisions	Rural		Urban		Total	
	PSU	Household	PSU	Household	PSU	Household
Barishal	87	13059	122	18083	209	31142
Chattogram	182	27022	134	19272	316	46294
Dhaka	205	31290	168	23433	373	54723
Khulna	131	20413	124	17726	255	38139
Rajshahi	156	23852	127	18707	283	42559
Rangpur	138	20952	122	18568	260	39520
Sylhet	91	13655	122	17219	213	30874
Mymensingh	87	12953	16	2606	103	15559
Total	1077	163196	935	135614	2012	298810

1.3 Survey Schedule

Sample Vital Registration System (SVRS) is a continuous surveillance system and has been in operation since 1980. Over time its scope and coverage have substantially increased. As a component of strengthening SVRS, two new modules, one on disability and another on divorce/separation have been added to the data collection system in 2002. In 2013 a new schedule on HIV and AIDS has also been added. Now there are altogether 11 independent schedules on different topics. A brief description of each of these schedules is provided below.

Schedule 1 (Household Listing): It contains the area identification of each PSU along with holding number and household number of all the households of the PSU. There is a line for each household where some information of head of the household and quarterly updates of population is recorded. It also contains map of the PSU and classification codes of variables.

Schedule 2 (Household Card): This schedule has two modules. In module 1, household related data and in module 2 population related data are collected. In all, there are 21 questions. It is generally canvassed in the month of January of each year.

Schedule 3 (Birth): The birth schedule has 9 questions on live births and 4 questions about the mother of the children. The schedule is filled-in by the local registrar as and when a birth occurs in the PSU. Filled-in schedule is returned back to the headquarters in the first week of the following month.

Schedule 4 (Death): The death schedule contains 8 questions related to the particulars of the deceased persons who died during the index calendar year. It is filled-in as and when a death occurs and is sent to the headquarters in the first week of the following month.

Schedule 5 (Marriage): The marriage schedule contains 9 questions about the occurrence of marriage among the population of the PSU during a quarter of the calendar year and is sent to the headquarters on quarterly basis in the first week of every fourth month.

Schedule 6 (Divorce/Separation): This schedule has 9 questions about divorce and separation. It is also sent to the headquarters on quarterly basis.

Schedule 7 (Out-Migration): This schedule is used to collect 7 different types of data about out-migration. It is sent to the headquarters on half -yearly basis in the first week of July and January of each year.

Schedule 8 (In-Migration): This schedule contains 7 questions related to in-migration. This is also sent to the headquarters on six- monthly basis.

Schedule 9 (Contraceptive use): This schedule is used to collect data about contraceptive use and methods of contraceptives. It is canvassed in January of each year.

Schedule 10 (Disability): This schedule has 6 questions and is used to collect data about the disabled persons by age and sex, type of disability and reasons behind becoming disabled. It is also canvassed in January of each year.

Schedule 11(HIV and AIDS): This schedule is used to collect data on the knowledge of the respondents on HIV and AIDS. This schedule includes four questions and the respondents are asked about their name, age, knowledge on reasons of HIV/AIDS disease and its infection. The old schedules and new draft schedule-11(HIV and AIDS) were recast in the technical committee and were revised where necessary. To economize the survey costing all the schedules were printed in black and white with shed for the schedule names only.

1.4 Data Collection

In the SVR system, data on vital events, such as, births, deaths, marriages, divorce/separation, in-migration and out-migration, contraceptive use and disability are collected through two independent systems. Under System 1, a local female registrar is engaged in each PSU to collect in prescribed schedules the occurrences of vital events as and when those occur. Under System 2 the officers (supervisors) collect retrospective data on birth, death, marriage, divorce and separation on quarterly basis, migration data on half yearly basis and contraceptive use, disability on the yearly basis and submit the filled-in schedules to Deputy Directors of District Statistical Office who in turn send those to the headquarters.

The local registrars collect particulars of events on continuous basis and send those to the headquarters in the first week of the following month for birth and deaths, in the first week of the fourth month for marriage and in the first week of the seventh month for migration. Previously, the headquarters staff used to collect particulars of the events occurring during the preceding three months in the same (PSU) area independently on a quarterly basis. Now the responsibility of collecting data through System 2 has been transferred to the Deputy Directors of District Statistical Office who perform it with the assistance of the staff members of the district statistical offices and upazila offices. Staff members of SVRS Project and Demography and Health Wing of BBS at head office match and evaluate the work of these two systems and re-visit, wherever necessary.

Updating of the sample population and household and matching of the vital events collected under the two systems are done according to predetermined criteria such as household number, mother's name, mother's relationship with the head of household, baby's name, date of birth, sex of the baby, age of mother, place of birth, name of the deceased, age of the deceased, date of death and sex of the deceased. The events are ultimately classified into matched, partially matched, non-matched and out of scope events. Partially matched and non-matched events are subject to further verification through field visits to ascertain the actual status of the events. These important tasks are done by the trained

and experienced senior officers and staff members of the SVRS project and Demography and Health Wing through field visit. This helps to catch the events missed by both the systems.

The process of matching greatly reduces the possibility of erroneous inclusion of out of scope events or exclusion of genuine events. After completion of the matching procedure, events are classified as follows:

Supervisor (System 2)	Registrar (System 1)		Total
	Recorded by Registrar	Missed by Registrar	
Recorded by supervisor	M	n_2	N_2
Missed by Supervisor	n_1	z	V_2
Total	N_1	v_1	N

An estimate of z is then

$$\hat{z} = \frac{n_1 \times n_2}{M}$$

An estimate of the total number of events is then arrived at as follows:

$$\hat{N} = M + n_1 + n_2 + \hat{z}$$

The completeness of enumeration for System 1 is $C_1 = \frac{N_1}{N}$ and for the System 2, it is $C_2 = \frac{N_2}{N}$.

The following formula was used to estimate the standard error of the total events:

$$S_e = \hat{N} \left(\frac{q_1 \times q_2}{p_1 \times p_2} \right)$$

where

$$p_1 = \frac{M}{N_1} \text{ and } p_2 = \frac{M}{N_2}$$

where $p+q=1$.

Hence the 95% confidence interval is

$$\hat{N} - 1.96S_e \leq N \leq \hat{N} + 1.96S_e$$

1.5 Estiamtes of the Missed Events in SVRS in 2019

The vital events as recorfed by the Local Registrars and Supervisors were matched for consistency in their enumeration. This exercise shows that in the case of births, 1.33 percent of the events were missed by both the registrar and the supervisor, while the deaths were missed in 1.37 percent of the cases by them. The extents of this fault were 1.57% and 1.60% respectively in 2018. The registrars were successful in recording the births in more than 89 percent of the cases. This was to the extent of 87.9 percent in the case of supervisors. The results presented in Table 1.2 further tend to show that the performances of both the local registrars and supervisors have been nearly the same. Comparison of the results of 2018 and 2019 reflects that completeness of enumeration is being improved with the passage of time as a result of the dedication of the field workers and monitoring of the system.

Table 1.2: Completeness of registration of births and deaths (in percent), SVRS 2019

Events	% Events recorded by			% Events missed by		% Completeness of recording	
	Both Registrar and Supervisor	Registrar but missed by Supervisor	Supervisor but missed by Registrar	Both Registrar and Supervisor	Achieved through Registrar	Achieved through Supervisor	
	2019						
Births	78.27	10.80	9.60	1.33	89.07	87.87	
Deaths	77.91	10.68	10.04	1.37	88.59	87.95	
2018							
Births	76.49	11.23	10.17	1.57	87.72	87.20	
Deaths	76.26	11.25	10.89	1.60	87.51	87.14	

The total number of events as adjusted by the application of C–D technique and the standard error of the estimates along with the 95% confidence interval appear in Table 1.3 for 2019 along with results as obtained in 2018.

Table 1.3: Estimates of births and deaths as recorded through dual record system, standard error of the estimates and 95 percent confidence interval, SVRS 2019

Year	Events	Estimated number	Standard error of the estimate	95% confidence interval		Length of the interval
				Lower limit	Upper limit	
2019	Births	23090	389	22327	23852	1525
	Deaths	6275	106	6067	6482	415
2018	Births	23094	471	22171	24017	1846
	Deaths	6238	127	5989	6487	498

The confidence intervals are designed to assess the precision and reliability of the sample estimate. For a specific variable, a narrower confidence interval and smaller standard errors suggest a more precise estimate of the population parameter than a wider confidence interval and larger standard error. Comparing both the standard errors and the length of the intervals of 2018 and 2019 surveys shown in the table above, we can assert that the reliability of the estimates in question has greatly improved since its 2018 round of the survey.

1.6 Consistency Check

Household and population information along with the events such as births, deaths, marriages, in-migration, out-migration, disability and contraceptive usage collected through different schedules by the dual recording systems, underwent systematic and rigorous consistency checks. Documents of the two systems were matched and accepted or rejected as per the tolerance limit specified in advance. The officers from the headquarters visit the field to verify the non-matched cases and also to verify the quality of data collected by the local registrars and also the supervisors. Coding and thorough editing were done before the data were entered into the computer. The entered data were further scrutinized through the process of computer editing.

1.7 Quality Control

Supervision and quality control of SVRS data are done in two stages. At stage-1 supervisors and Deputy Directors of the District Statistical Office regularly check the quality of work obtained by the local registrars. At stage-2 data obtained under System 1 and System 2 are matched at the headquarters and then the unmatched cases are verified in the field. At this stage, PSU-wise summary of births, deaths, marriages and migration are made for the current year and also for the previous year. Serious discrepancies (if any) are then verified in the field as internal validation. The coverage of events and quality for collected data are compiled and recorded in the report by division for future improvement. For major events such as birth and death completion rates were computed by division to determine the coverage error. Standard error and confidence limits were calculated to test the quality of the indices produced in SVRS.

1.8 Quality of Age Data

The data collected in SVRS have been evaluated to shed light on the quality of data. Particular attention was given to assess the quality of age data, which are of primary importance in estimating most of the vital rates and ratios. Three popular indices viz. Myer's index, Whipple's index and UN Age-Sex Accuracy Index also called UN Joint Score were computed from reported age distributions by sex for this purpose. These indices pointed out the fact that the quality of age reporting in SVRS has improved over the last three years. The detailed results have been provided in Chapter II.

1.9 Confidence Interval

Confidence intervals serve as good estimates of the population parameter because the procedure tends to produce intervals that contain the parameter. Confidence intervals are comprised of the point estimate (the most likely value) and a margin of error around that point estimate. The margin of error indicates the amount of uncertainty that surrounds the sample estimate of the population parameter.

In this vein, you can use confidence intervals to assess the precision of the sample estimate. For a specific variable, a narrower confidence interval (90 110) suggests a more precise estimate of the population parameter than a wider confidence interval (50 150).

The reliability of the indicators has been assessed by computing the standard error of the estimates and hence the confidence intervals of the population parameters (here the indicators). Table 1.4 below shows these standard errors and the 95 percent confidence intervals of some of the selected indicators.

Table 1.4: Confidence intervals for some major indicators, SVRS 2019

Indicators	Rate	Standard Error	95% Confidence interval	
			Lower limit	Upper limit
Crude Birth Rate (CBR)	18.1	0.17	17.77	18.43
Total Fertility Rate (TFR)	2.04	0.06	1.93	2.15
Crude Date Rate (CDR)	4.9	0.09	4.73	5.07
Infant Mortality Rate (IMR)	21	0.18	20.65	21.35
Neo-natal Mortality Rate	15	0.15	14.71	15.29
Post- neonatal Mortality Rate	6	0.10	5.81	6.19
Child Death Rate	1.7	0.05	1.60	1.80
Under 5 Mortality Rate	28	0.21	27.59	28.41
Maternal Mortality Ratio (MMR)	1.65	0.05	1.58	1.78
Life Expectancy in years (Both sexes)	72.6	0.33	71.95	73.25
Life Expectancy in years(Male)	71.1	0.47	70.18	72.02
Life Expectancy in years (Female)	74.2	0.48	73.26	75.14
Contraceptive Prevalence Rate (CPR)	63.4	0.31	62.79	64.01
Crude Disability Rate	8.4	0.12	8.16	8.64

In most cases, the lengths of the intervals are smaller in 2019 than in 2018. By and large the standard errors of the estimates in 2019 are also smaller compared to the previous year indicating an appreciable reliability of the estimates in 2019. We compare below the standard errors and the length of the confidence intervals in Table 1.5 below of two consecutive years, 2018 and 2019. .

Table 1.5: Comparison of the standard errors and confidence intervals: 2018–2019

Indicators	Standard error of the estimate		Length of the confidence interval	
	2018	2019	2018	2019
Crude Birth Rate (CBR)	0.17	0.17	0.66	0.66
Total Fertility Rate (TFR)	0.06	0.06	0.24	0.22
Crude Date Rate CDR	0.09	0.09	0.36	0.34
Infant Mortality Rate (IMR)	0.19	0.18	0.74	0.70
Neo-natal Mortality Rate	0.16	0.15	0.62	0.58
Post- neonatal Mortality Rate	0.10	0.10	0.40	0.38
Child Death Rate (CDR)	0.05	0.05	0.20	0.20
Under 5 Mortality Rate	0.21	0.21	0.82	0.82
Maternal Mortality Ratio (MMR)	0.07	0.05	0.28	0.20
Life Expectancy (Both sexes)	0.33	0.33	1.30	1.30
Life Expectancy (Male)	0.47	0.47	1.84	1.84
Life Expectancy (Female)	0.48	0.48	1.88	1.88
Contraceptive Prevalence Rate (CPR)	0.31	0.31	1.22	1.22
Crude Disability Rate	0.12	0.12	0.48	0.48

CHAPTER II

Household Characteristics and Population Composition

This chapter presents an overview of the household characteristics in the SVRS area in 2019 pertaining to household size, household headship, housing structure and living space, sources of water in the households, lighting facilities, sources of fuels and toilet facilities. These data are of immense importance in an understanding of the basic human needs and household facilities that determine the quality of human life. The results have been presented for the overall sample and whenever possible, by several such background characteristics as residence, administrative division, education and religion. Characteristics of the household populations in terms of age-sex composition, quality of age reporting and some age-sex based demographic characteristics that include, among others, dependency ratio; marital status and child–woman ratio have also been discussed. The chapter also presents an overview of religious composition, and literacy rates.

2.1 Household Composition

Household composition is an important determinant in an understanding of the general health status of the population and overall well-being of the families including the empowerment of women in family decision making. Information on household composition also serves as a basis for planning population-based policy and programs (BDHS, 2011). Table 2.1 shows the household size in the sample area by current residence and religion. As the table shows, the modal size of the household is 4 irrespective of the background characteristics listed in Table 2.1 and Table 2.2. The overall proportion of households with 4 members is 28.5 percent.

The overall average household size is 4.2 in 2019, which is of the same magnitude as recorded in 2017 and 2018 rounds of SVRS. Nearly 14 percent of the households consist of 1–2 members and another about two-thirds consist of 3–5 members. More than 37 percent of the households are still burdened with 5 or more persons. This feature prevails across the residential status and religious composition of the population. These proportions are by and large of the same magnitude across the religious groups.

The distribution of household size is consistent with the 2011 sample census results, which also documented a modal household size at 4. The 2014 Education Household Survey also reported an average household size of 4 members (EHS, 2014, Preliminary results). The household distribution pattern as obtained in 2019 survey, by and large, appears to be similar to the one depicted in 2017 and 2018 rounds of SVRS Survey.

The average household size in the rural area marginally exceeds the average of urban area: 4.3 versus 4.2. Buddhists appeared to have the highest household size (4.4) followed by Hindus and Muslims with 4.3 and 4.2 members.

Table 2.1: Percent distribution of sample households by household size, residence and religion, SVRS 2019

Household size	Residence		Religion					Total
	Rural	Urban	Muslim	Hindu	Buddhist	Christian	Others	
1	3.7	2.6	3.5	0.0	3.3	3.1	10.1	3.2
2	10.4	10.8	10.7	9.6	10.5	13.0	11.2	10.6
3	19.1	22.1	20.2	22.3	20.5	21.0	22.5	20.5
4	26.9	30.4	28.2	31.2	29.5	29.9	21.3	28.5
5	19.4	17.7	18.6	18.8	18.5	17.9	23.6	18.6
6	10.4	8.4	9.5	9.0	9.5	9.1	4.5	9.5
7	4.9	3.8	4.4	3.9	4.7	3.2	3.4	4.4
8	2.8	2.3	2.5	2.4	2.2	1.6	3.4	2.5
9	1.1	0.9	1.0	1.1	0.9	0.8	0.0	1.0
10+	1.4	1.2	1.3	1.6	0.5	0.4	0.0	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of HH	163196	135614	264369	31431	2182	739	89	298810
Population	704085	565656	1122709	133935	9692	3054	351	1269741
Average HH size	4.3	4.2	4.2	4.3	4.4	4.1	3.9	4.2

Table 2.2 presents the distribution of household size by administrative divisions. Among the eight divisions, Rangpur has the highest proportion (31.0%) of households with 4 members, while Sylhet the lowest (23.2%). The average household size is the highest (5.0) in Sylhet division followed by Chattogram division (4.6). Rajshahi division was found to have the lowest household size with 3.9 members. A close examination of the data presented Table 2.2 depicts that average household sizes by all background characteristics have shown no change in the household size since its last enumeration in 2018 in the registration area.

Table 2.2: Percent distribution of sample households by size and division, SVRS 2019

Household size	Administrative division								Total
	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	
1	2.6	2.0	3.0	3.3	5.0	4.3	4.1	2.0	3.2
2	9.3	8.6	13.2	11.5	10.4	12.6	10.3	6.9	10.6
3	20.0	17.4	21.7	23.8	17.9	24.1	20.8	15.0	20.5
4	30.5	26.5	28.2	30.2	26.3	30.5	31.0	23.2	28.5
5	19.7	20.8	17.7	17.3	20.2	16.1	18.5	20.2	18.6
6	9.9	11.7	8.7	8.0	10.8	6.9	8.3	13.4	9.5
7	4.2	5.9	3.7	3.1	4.8	2.7	3.5	8.1	4.4
8	2.3	3.6	2.1	1.6	2.7	1.5	1.9	5.3	2.5
9	0.7	1.4	0.8	0.6	1.0	0.6	0.8	2.2	1.0
10+	0.8	2.1	0.9	0.6	1.1	0.7	0.9	3.8	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of HH	31142	46294	54723	38139	15559	42559	39520	30874	298810
Population	132142	212395	223791	152494	66418	166311	162014	154176	1269741
Average	4.2	4.6	4.1	4.0	4.3	3.9	4.1	5.0	4.2

2.2 Household Headship

According to the National Association of Home Builders, headship rates are the number of people who are counted as heads of households. Headship rates are important because they help home builders and city planners to determine how many households are forming that will need housing.

It is well-documented that women almost everywhere are disadvantaged relative to men in their access to asset, credit, employment, and education. Consequently, it is often suspected that female-

headed households are poorer than male-headed households, and are less able to invest in the health and education of their children (Folbre, 1991; UNDP, 1995; United Nations, 1996; World Bank, 2001). Though numerous case studies confirm these claims, the empirical evidence is far from conclusive. Many studies have concluded that the relationship between female headship and poverty is strong in only two out of ten countries in their sample (Ghana and Bangladesh).

Bangladesh society is primarily a male dominant society and as a consequence of this, most families are headed by males. However, this feature is changing over time. The present study obtained data on the headship status of the families. Table 2.3 below presents an overview of the headship status of the sample households by some background characteristics of the population. As we can see from the table under reference, overall, 85.4 percent of the households are headed by males and the remaining 14.6 percent by their counterparts women, there being virtually no change in the headship type since its last survey in 2018 when a share of 85.8 percent was reported for the males. By all background characteristics, males are significantly more dominating in the family so far as the household headship is concerned.

Single females in 2019 as head of the households are more than 5 times as likely as their counterparts in 2018 to share the household responsibilities as heads. The sharing of responsibilities among the widowed females compared to their male counterparts as household heads in 2019 remained of the same magnitude (85%) as noted in 2018.

In 2019 survey, as opposed to 2018 survey, a major shift in household headship among those who are under 15 years of age has been noted so far as the sex of the household headship is concerned. While a large proportion (35.4%) of females under 15 years of age was seen to shoulder the responsibility as household heads in 2018, this came down to as low as 11 percent only in 2019. Household headship is more prevalent among the Hindu males (91.3%) than among the males of other religions.

Divisional variations in headship are minimal. In conformity with the results of 2018, males in Rangpur division in 2019 are marginally more likely (89.1%) to take the burden of household headship among the seven divisions of the country, while males of Chattogram division are lagging behind (77.6%) in this respect. By and large, education appears to be positively related to the headship status among the males with the highest proportion (90.9%) for those who have secondary and above level of education, resulting in a negative association of headship status and education among the females.

Table 2.3: Percent distribution of household headship by sex, administrative division and religion, SVRS 2019

Background Characteristics	2019			2018		
	Male headed household	Female headed household	Total	Male headed household	Female headed household	Total
Current age:						
Below 15	89.0	11.0	100.0	64.6	35.4	100.0
15–60	86.0	14.0	100.0	86.4	13.6	100.0
60+	82.5	17.5	100.0	82.6	17.4	100.0
Marital status:						
Single	85.2	14.9	100.0	97.3	2.8	100.0
Married	92.8	7.2	100.0	92.6	7.4	100.0
Widowed/divorced	15.1	84.9	100.0	14.9	85.1	100.0

Background Characteristics	2019			2018		
	Male headed household	Female headed household	Total	Male headed household	Female headed household	Total
Residence:			-			
Urban	85.9	14.1	100.0	86.2	13.8	100.0
Rural	84.9	15.1	100.0	85.4	14.6	100.0
Division:						
Barishal	87.7	12.3	100.0	88.2	11.8	100.0
Chattogram	77.6	22.4	100.0	78.2	21.8	100.0
Dhaka	84.5	15.5	100.0	84.9	15.1	100.0
Khulna	88.1	12.0	100.0	88.3	11.7	100.0
Mymensingh	87.5	12.5	100.0	87.9	12.1	100.0
Rajshahi	88.7	11.3	100.0	89.1	11.0	100.0
Rangpur	89.1	10.9	100.0	89.2	10.8	100.0
Sylhet	82.3	17.7	100.0	82.9	17.1	100.0
Religion:						
Muslim	84.6	15.4	100.0	85.2	14.8	100.0
Hindu	91.3	8.7	100.0	90.0	10.0	100.0
Others	88.0	12.0	100.0	88.1	11.8	100.0
Education:						
None	80.53	19.47	100.0	81.3	18.7	100.0
Primary incomplete	87.09	12.91	100.0	87.4	12.6	100.0
Primary complete	86.9	13.1	100.0	87.1	12.9	100.0
Secondary incomplete	83.85	16.15	100.0	84.5	15.5	100.0
Secondary	90.89	9.11	100.0	91.1	8.9	100.0
Total	85.36	14.64	100.0	85.8	14.2	100.0
N	255064	43746	100.0	254920	42313	297233

The results on headship status are highly consistent with the recently conducted Household Education Survey of 2014 conducted by BBS. The survey under reference documented that 88.8 percent of the households in the country are headed by males, with 89.1 percent in the rural area and 87.5 percent in the urban area.

2.3 Household Facilities

This section presents an overview of a few physical characteristics of the households in the SVRS area. These characteristics reflect the general well-being and socio-economic status of the members of the households. The information provided in this section includes such facilities as sources of drinking water, sources of fuels, and sources of electricity, toilet facility, economic structure and type of living structure. The findings are presented in Table 2.4.

Table 2.4: Percentage distribution of household characteristics by residence and administrative division, SVRS 2019

Household Characteristics	Residence				Division						
	Total	Rural	Urban	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
Sources of drinking water:											
Tap	12.5	3.1	23.7	5.1	13.2	32.7	4.0	1.6	8.5	2.0	17.5
Tube-well	85.7	94.2	75.5	91.7	85.0	67.1	89.6	98.2	91.3	97.9	79.0
Well	0.4	0.7	0.0	0.1	0.9	0.1	0.0	0.1	0.1	0.0	1.7
Pond/ditch	0.8	1.4	0.2	2.4	0.0	0.0	3.2	0.0	0.1	0.0	1.5
River/canal	0.1	0.1	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Rain water	0.2	0.3	0.1	0.5	0.1	0.0	3.0	0.0	0.0	0.0	0.0
Others	0.3	0.3	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Sources of light:											
Electricity	93.5	91.0	96.6	91.4	89.5	96.3	95.7	87.0	95.2	93.6	93.2
Kerosene	2.9	3.8	1.8	2.3	3.8	1.9	2.7	6.4	2.5	3.6	4.0
Solar	3.3	5.0	1.3	5.9	6.5	1.5	1.3	6.4	2.1	2.7	2.6
Others	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.3
Source of fuel:											
Straw/Leaf/husk	22.6	34.9	7.8	14.9	18.9	19.2	16.8	30.1	43.0	28.9	9.4
Wood / Chalk / Wood	45.8	52.1	38.2	62.6	48.5	30.5	57.7	57.5	30.1	48.8	49.0
Wood coal / Charcoal	0.3	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.6	0.3
Coal / Lignite	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
dung	3.3	5.2	1.1	0.8	0.4	2.6	6.8	2.6	6.9	3.2	2.8
Kerosene/Paraffin	0.2	0.2	0.3	0.1	0.1	0.5	0.1	0.1	0.2	0.1	0.3
Petrol / Diesel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	1.0	0.2	1.9	0.1	0.4	0.2	0.9	0.2	1.0	3.8	0.8
Supply gas	15.6	3.5	30.2	0.2	23.5	41.0	0.1	4.4	6.2	0.1	31.7
LPG gas	11.0	3.5	19.9	20.8	7.6	5.7	17.1	4.4	12.3	14.3	5.1
Biogas	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.6
Others	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.3	0.1	0.0	0.0
Type of oven											
Electric oven	1.0	0.3	1.9	0.4	0.4	0.5	0.6	0.3	1.0	3.8	0.8
LPG gas oven	11.4	3.5	20.8	20.5	7.8	6.4	17.3	4.4	13.2	14.3	6.2
Natural gas oven	15.1	3.4	29.3	0.4	22.9	39.9	0.2	4.4	5.2	0.1	31.1
Bio gas oven	0.3	0.3	0.3	0.1	0.6	0.3	0.2	0.2	0.1	0.2	0.2
Liquid fuel oven	0.1	0.0	0.2	0.0	0.1	0.3	0.0	0.0	0.1	0.0	0.2
Lakri oven	58.9	75.0	39.5	61.7	55.4	46.4	66.2	73.4	56.1	70.2	56.2
Open oven	12.8	17.3	7.3	16.6	12.7	5.2	15.1	17.0	23.6	11.3	4.3
Others	0.5	0.3	0.7	0.3	0.2	1.0	0.4	0.4	0.5	0.1	1.0
Oven Chimney facility											
Only chimney	7.7	8.5	6.8	9.7	6.5	2.5	9.3	1.8	4.3	1.4	30.4
Only fan	6.4	2.7	10.7	4.2	7.3	10.9	2.7	3.2	3.5	3.1	13.2
Both	2.2	1.3	3.3	1.6	2.5	2.5	1.4	.6	2.0	1.0	5.6
None	83.7	87.5	79.2	84.5	83.7	84.1	86.6	94.4	90.2	94.5	50.8
Toilet facility:											
Sanitary with water seal	18.1	9.5	28.4	17.3	15.8	17.4	17.9	9.4	18.5	17.6	28.5
Pucca with water seal	63.4	62.9	64.1	70.8	67.4	71.2	64.5	55.9	61.1	55.5	51.9
Pucca no water seal	2.3	4.2	0.0	6.5	2.7	2.8	1.3	5.0	1.6	0.9	2.1
Kutch/Hanging latrin	14.7	21.1	7.0	5.2	12.8	7.9	15.8	28.4	16.8	21.1	16.2
Open space/No latrine	1.4	2.2	0.5	0.2	1.1	0.4	0.3	1.1	1.9	4.8	1.3
Other	0.2	0.2	0.1	0.0	0.3	0.2	0.1	0.2	0.1	0.2	0.1

Household Characteristics	Residence				Division							
	Total	Rural	Urban	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	
Soap and water facility with latrine												
Just hand with soap	7.4	10.9	3.2	6.8	7.2	8.1	8.0	11.4	6.7	5.9	7.6	
Just water	10.7	16.5	3.7	12.0	12.0	10.8	7.5	23.3	9.0	6.0	12.9	
Both hand with soap and water	70.7	59.5	84.2	72.6	68.1	71.5	76.1	49.5	72.6	72.8	70.0	
Other	11.2	13.2	8.9	8.6	12.7	9.7	8.3	15.8	11.7	15.3	9.6	
Level of economic solvency												
Permanent insolvency	8.8	5.9	7.5	4.6	7.6	3.7	6.7	8.0	9.3	11.7	9.5	
Temporary insolvency	17.7	11.4	14.9	11.7	16.5	10.1	14.4	20.8	14.5	17.8	18.2	
Balanced income expenditure	32.6	35.0	33.7	36.6	35.6	35.7	33.1	34.6	27.4	33.2	33.6	
Economic Solvency	40.9	47.8	44.0	47.0	40.3	50.5	45.8	36.5	48.8	37.3	38.7	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

2.3.1 Sources of Drinking Water

Access to safe water is a pre-condition for ensuring better hygiene and health to the household members in any community as it is positively associated with a number of diseases that include, among others, skin disease, ARI and other waterborne diseases. Our study results show that in rural area, the use of tube-well as a source of drinking water is almost universal (94.2%) with an overall average use of 85.7 percent. In contrast, 75.5 percent of the urban households have access to this source. Our investigation reveals that overall tube well water use has shown an increase of a little more than 2 percent over a period of one year since 2018.

At the divisional level, tube-well use varies from as low as 67.1 percent in Dhaka division to as high as 98.2 percent in Mymensingh division. A close view of these rates over the last three years reveal that there has been virtually no change in the levels and patterns in tube well use rate.

The use of tap water varies widely between urban and rural area. With an overall use of 12.2 percent, the tap water users account for more than 23.7 percent in the urban area and only 3.1 percent in the rural area. The corresponding use rates in 2018 were almost of the same magnitude: 27.5 percent and 3.1 percent in urban and rural area respectively.

Other sources of drinking water are well, pond or ditch, river, canal and rain-water which together comprise 1.8 percent of the total use. The Education Household Survey, 2014 reports an overall use of 83 percent with 91.5 percent in rural area and 56.3 percent in urban area. The level of use of tap water in EHS, 2014 agrees quite well with the SVRS 2016 findings.

2.3.2 Sources of Light

The study documented an overall electricity use by 93.5 percent households in 2019 as against 90.1 percent in 2018. The remaining households in SVRS area are solely dependent on the kerosene and other indigenous sources. As expected, urban people are 11 percent more likely to use electricity than their rural counterparts. Among the seven administrative divisions, Dhaka (96.3%) followed by Khulna (95.7%) dominate in the use of electricity, while Mymensingh lags behind in this respect with a use rate of 87.0 percent. Kerosene is the second choice to the users as a fuel with an overall use rate of 2.9 percent.

2.3.3 Sources of Fuel

Straw, leaf, husk, wood or charcoal are some of the most frequently used fuels as found in 2019 SVRS survey. These ingredients are used by about 69.0 percent of the total fuel users as against a rate of 73.8 in 2018. The use of these materials was reported by 46.4 percent of the residents of the urban area and 87.2 percent residents of the rural area. Uses of these materials in 2018 were respectively 50.7 and 93.2 percent in urban and rural households. Division-wise distribution shows that Dhaka division has the least (49.9%) use of these fuels, while the highest use (87.8%) was reported in Mymensingh division.

The overall use of supply gas is only 15.6 percent in 2019 as against a rate of 24.3 percent in 2018 showing a decline of 35.8 over a period of one year. In urban area, a little more than 30 percent of the households have access to supply gas as against 3.5 percent in rural households. Supply gas, biogas and LPG together constitute 26.8 percent of the total fuel use.

Data reveal that supply gas use in urban area has been reduced by more than 34 percent over a period of only one year since 2018. Among the divisions, Dhaka has the highest use rate (41.0%) of gas followed by Sylhet (31.7%) and Rangpur and Khulna the lowest (0.1% in each division). In most of the divisions, the supply gas use has drastically been reduced over the last two years. This may largely be attributed to the use of LP gas at divisional level. The overall use of this gas is 11.0 percent. In Khulna and Rangpur, it has been reported that in 17.1 percent and 14.3 percent of the households, these gas is being used as reported in 2019 survey, while the supply gas users of these two divisions are as low as 0.1 percent.

2.3.4 Type of Oven

A vast majority of the households uses (58.9%) lakri oven followed by natural gas (15.1%) and open oven (12.8%). LPG gas oven users constitute 11.4 percent of the total. Except for LPG gas, the remaining three categories of the households in the rural areas are more in proportion to make use of the sources mentioned than the urban households. More than 73 percent of the lakri oven users come from Mymensingh division, Rangpur being the second highest users with a use rate of 70.2 percent. Natural gas is used in about 40 percent of the households in Dhaka division followed by 31.1 percent of the household in Sylhet division.

2.3.5 Oven Chimney Facility

Chimney facilities are available only for 7.7 percent households. This is somewhat more prevalent (8.5%) in the rural areas compared to an use rate of 6.8 percent in the urban area. Both of these facilities are available only 2.2 percent of the households. A large majority of the household (83.7%) are deprived of this facility.

2.3.6 Toilet Facility

Pucca water-sealed toilets clearly dominate over the other toilet systems with an overall use of 63.4 percent without much variations by urban-rural residence and divisions. Urban households are slightly more likely (64.1%) to use this facility compared to the rural households (62.9%). The use of this facility is most frequent in Dhaka division where more than 71 percent households are in use of this facility with the lowest use (51.9%) in Sylhet division. Barishal division ranks second with a use rate of 70.8 percent of this facility. The overall water-sealed sanitary latrine use is 18.1 percent. Urban households are 3 times as likely as the rural households to have access to this facility. Sylhet division makes highest use (28.5%) of this facility followed by Rajshahi division (18.5%). The least use (9.4%) of this facility is reported in Mymensingh division. Kutcha/hanging latrine occupies the next

position with an average rate of 14.7, the highest (28.4%) being reported in Mymensingh division and the lowest (5.2%) in Barishal division.

The use of open toilet in 2019 was also reported in some cases: 2.2 percent in the rural area and 0.5 percent in urban area with an overall use of 1.4 percent. These rates were 2.9 percent, 0.7 percent and 1.9 percent respectively.

2.3.7: Soap and Water Facility with Latrine

The practice of washing both hands with soap and water in defecation is prevalent among 70.7 percent of the household members. This is more practiced by the urban people (84.2%) than their urban counterparts (59.5%). Use of just water in washing hands in defecation is seen to be prevalent among 10.7 percent of the members, 16.5 in rural area and only 3.7 percent in urban area. People of Mymensingh division are more in proportion (23.3%) followed by Sylhet (12.9%) to make use of water for hand washing after defecation.

2.3.8 Economic Solvency

In total, 40.9 percent of the households were reported to be economically solvent with 47.8 percent in the rural area and 44.0 percent in the urban area. Rural area has shown an abrupt rise in 2019 from 2018: 38.6 percent to 47.8, a rise of about 24 percent over a period of one year.

Nearly one-third (32.6%) of the households have been able to maintain a balanced livelihood. This was of about the same magnitude (34.3%) in 2018. Most of the divisions maintain a balanced income-expenditure level in the range between 33 percent and 37 percent. Urban-rural differential is also minimal; 33.5 percent versus 35.0 percent.

Permanent insolvency prevails among 8.8 percent of the surveyed population in 2019 as against a rate of 7.9 percent in 2018. In contrast to the findings in 2018, it is more prevalent (7.5%) among the urban households than among the rural households (5.9%) in 2019. As before, Rangpur division records the highest permanent insolvency with a rate of 11.7 percent, while Dhaka the lowest (3.7%). Temporary insolvency exists in about 18 households: 11.4 percent in rural area and 14.9 percent in urban area. It is the highest (20.8%) in Mymensingh division and lowest (10.1%) in Dhaka division without showing any remarkable shift in levels and patterns from its previous year.

2.3.9 Structure of Living House and Living Space

Table 2.5 displays the distribution of households by type of structure of living houses. The structure of house or housing in Bangladesh, as revealed by the SVRS 2019 survey results was predominantly corrugated iron sheet (CIS) or wood made. Our survey findings suggest that, 43 percent of the households are made up of either CIS or wood. Urban households are about half (26.6%) as likely as the rural households (56.2%) to make use of CIS or wood there being no structural changes in the use of these materials in the recent past. The use of CIS/wood structures are pronounced in Mymensingh division with 73.1 percent living structures being made up of CIS or wood, followed by Barishal (62.2%), Chattogram (48.7%) and Dhaka (46.2%).

Households in pucca buildings constitute 22.7 percent of the total. Nearly 39 percent of the households in the urban area and only 9.5 percent of the households in the rural have pucca buildings. Semi-pucca living structures are also found in about a quarter (26.3%) of the households, of which about 22 percent were found in the rural area and 31.6 percent in urban area. Use of tin/wood in the living structures is the least (15.4%) in Barishal division. Semi-pucca structures are more common in Sylhet division (37.3%) followed by Khulna division (35.1%). Mud, bamboo and other ingredients are also used which account for a little more than 8 percent of the households.

Table 2.5: Distribution of households by type of structure of living house and by locality, SVRS 2019

Structure of living house	Residence				Division							
	Total	Rural	Urban	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	
Building (Pucca)	22.7	9.5	38.6	22.1	23.0	29.5	28.8	5.5	23.5	11.6	24.9	
Semi-Pucca	26.3	22.0	31.6	15.4	18.1	21.9	35.1	16.7	29.5	34.1	37.3	
CIS/Wooden	42.7	56.2	26.6	62.2	48.7	46.2	24.9	73.1	29.1	47.3	27.8	
Mud	7.0	10.9	2.3	0.2	6.8	2.3	9.7	4.1	16.5	5.6	9.1	
Bamboo	1.3	1.4	1.0	0.2	3.4	0.1	1.5	0.6	1.3	1.4	0.8	
Others	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

2.3.10 Floor Space

The average floor space per household was measured to be 416 square feet with 405 square feet in rural area and 430 square feet in urban area. When compared with the previous year's floor space, it appears that the average floor space has been decreased by 3.3 percent in one year. This decrease is about 9.5 percent in the urban area. The rural area, on the other hand, has shown an increase of 3 percent.

Keeping consistency with the floor space, the per capita bedroom space was 94 square feet in rural area and 103 square feet in the urban area, the overall space being 98 square feet. In 2018, these spaces were reported to be 91, 114, and 101 respectively. The relative changes in the average household space and bedroom space are consistent with each other. The results of this investigation have been shown in Table 2.6.

Table 2.6: Per capita floor space and bedroom space: 2018–2019

	Floor space		% Change	Bedroom Space		% Change
	2019	2018	2018–2019	2019	2018	2018–2019
Rural	405	392	3.3	94	91	3.3
Urban	430	475	–9.5	103	114	–9.6
Total	416	430	–3.3	98	101	–3.0

2.4 Age-sex Composition of the Household Population

The age composition of a population is a very important factor in determining its socio-economic well-being of a country. Table 2.6 below shows the household population of the SVRS area by age and sex in percentages as enumerated in 2019. The sample in the vital registration area enumerated 635543 males and 634198 females resulting in a sex ratio 100.2 males per 100 females, a ratio exactly tallying with the one obtained in 2018 and 2017. The current year's sex also agrees exactly with the one obtained in 2011 census. The 2011 BDHS reported even a smaller ratio (93.1%) than both of the above mentioned sources. The Maternal Mortality and Health Care Survey, 2016 obtained a sex ratio of 93.1.

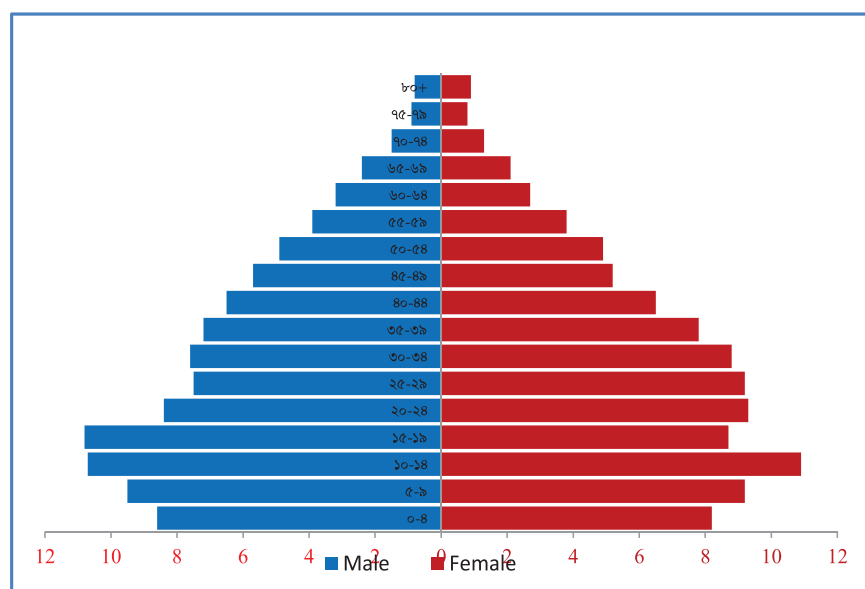
The age distribution presented in Table 2.7 in SVRS area for 2019 shows that 28.5 percent of the population is under-15 years of age. This was 28.8 percent in 2018 and 29.4 percent in 2017 in the same setting. People aged 65 years and over in current survey constitute 5.3 percent of the total population as against 5.0 percent in 2018 survey. The corresponding proportions are 33.4 percent and 5.6 percent in the 2014 BDHS and 35.5 percent and 5.1 percent in 2011 census. The most recent BMMHCS 2016 finds these proportions to be 32.5 percent and 6.1 percent respectively.

The age-sex structure of the population by 5 year age groups is displayed by the population pyramid in Figure 2.1

Table 2.7: Percent distribution of sample population by age and sex, SVRS 2019

Age group	2019			2018		
	Male	Female	Both sexes	Male	Female	Both sexes
0-4	8.6	8.2	8.4	8.5	8.2	8.4
5-9	9.5	9.2	9.3	9.7	9.4	9.5
10-14	10.7	10.9	10.8	11.0	10.8	10.9
15-19	10.8	8.7	9.7	10.9	8.9	9.9
20-24	8.4	9.3	8.9	8.6	9.2	8.9
25-29	7.5	9.2	8.3	7.5	9.4	8.4
30-34	7.6	8.8	8.2	7.8	9.0	8.4
35-39	7.2	7.8	7.5	7.1	7.6	7.4
40-44	6.5	6.5	6.5	6.5	6.4	6.5
45-49	5.7	5.2	5.4	5.6	4.6	5.1
50-54	4.9	4.9	4.9	4.8	5.3	5.1
55-59	3.9	3.8	3.8	3.7	3.5	3.6
60-64	3.2	2.7	2.9	3.0	2.8	2.9
65-69	2.4	2.1	2.2	2.1	1.9	2.0
70-74	1.5	1.3	1.4	1.4	1.3	1.4
75-79	0.9	0.8	0.8	0.8	0.7	0.7
80+	0.8	0.9	0.8	0.7	0.9	0.8
<15	28.8	28.3	28.5	29.2	28.4	28.8
15-64	65.7	66.7	66.2	65.7	66.7	66.2
65+	5.5	5.0	5.3	5.1	4.9	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	635543	634198	1269741	630591	629153	1259744

Figure 2.1: Age –sex pyramid of SVRS population, SVRS 2019



The pyramid shown in Figure 2.1 is a typical one for a developing country (that has recently started to stabilize) with its base wider at the bottom than at the top and goes narrower towards the older age groups.

2.4.1 Quality of Age-Sex Reporting

The data collected in SVRS have been evaluated to shed light on the quality of age reporting. Particular attention has been given to assess the quality of age data, which are of primary importance in estimating most of the demographic rates and ratios. Three popular indices viz. Myer’s index, Whipple’s index and UN Age-Sex Accuracy Index, also called UN Joint Score have been computed from reported age distributions by sex for this purpose (see Table 2.8). Apart from the use of those indices in assessing the quality of age reporting, graphs may also be used to do the same

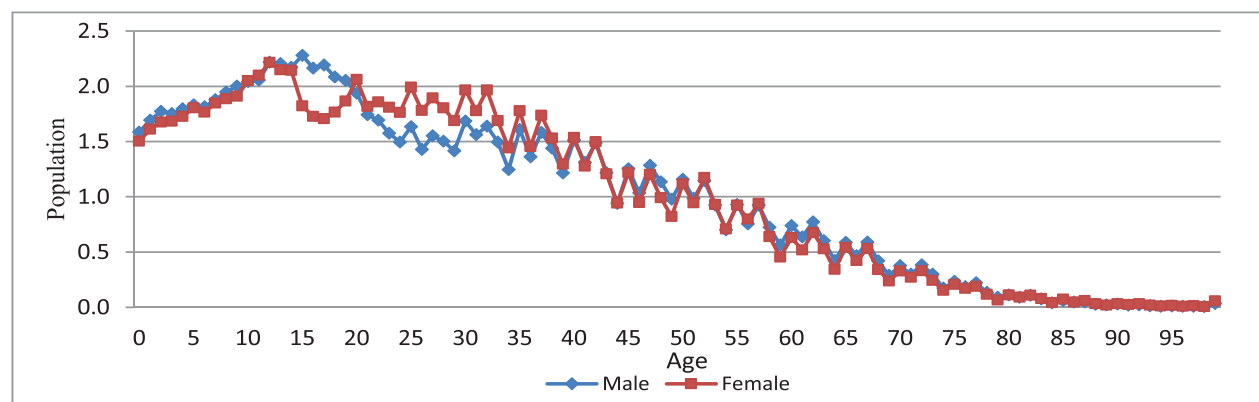
Table 2.8: Myer’s, Whipple’s and UN Joint Score, SVRS 2019

Year	Whipple’s Index		Myer’s Index		UN Joint Score
	Male	Female	Male	Female	Both sexes
2014	91.0	88.4	8.4	10.0	62.3
2015	92.1	90.5	5.6	6.4	56.4
2016	92.7	91.0	3.2	3.7	56.3
2017	91.7	89.0	3.4	3.9	50.6
2018	96.6	98.4	3.1	3.2	57.7
2019	108.4	108.5	3.4	3.7	48.3

Figure 2.2 displays the single year age distribution by sex. The figure shows a common feature of conspicuous age heaping with digits ending in 0 and 5 with subsidiary heaping at ages 2 and 8.

The Myers’ index and Whipple’s index are based on single year age distribution by sex. The five year age distribution was further assessed by what is known as the age-sex accuracy index developed by United Nations. This index is computed from the age ratios and sex ratios

Figure 2.2: Graph showing the age-sex distribution of SVRS population in single years, SVRS 2019



Whipple’s index is a summary measure of the degree of heaping on the ages ending in digits 0 and 5. It is calculated by summing the population recorded with ages 0 and 5 between an arbitrary age-range 23 to 62 years and dividing the result by one-fifth of the total population between 23 and 62 expressed as percentage. Thus if there is no heaping whatever on the 0’s and 5’s, Whipple’s index would be approximately 100; if the heaping were such that the entire population was reported at these ages, the index would be 500. The Whipple’s indices calculated from the age distribution for 2019 SVRS are 108.4 for males and 108.5 for females, showing virtually little sex differentials in age heaping. The

2018 SVRS data recorded these indices to be 96.6 for males and 98.4 for females. All these indices indicate extremely poor age reporting. The corresponding indices for the 2011 census were 256.7 for males and 267.6 for females. Based on the UN evaluation criteria, the age reporting in the 2011 census was very rough and thus unusable without adjustment. The SVRS age reporting based on the same criteria shows some improved age reporting but nevertheless falls under the ‘rough’ category.

Myers’ index reflects the preferences or dislikes for each of ten digits, from 0 to 9. To determine such preferences, the first step in Myers’ method consists in the computation of a ‘blended’ population in which ordinarily almost equal sums are to be expected for each digit. This being the case, the ‘blended’ totals for each of the ten digits should be very nearly 10 percent of the grand total. The deviations of each sum from 10 percent of the grand total are added together disregarding the sign, and their sum is the Myers’ index. The index was calculated for the SVRS 2019 also with the single year data. The indices were 3.4 for males and 3.7 for females. The indices also tell the story of deteriorating age reporting compared to all previous years. The 2011 sample census data revealed a Myer’s index of 26.7 for males and 28.0 for females. When compared with the census-based Myer’s index, the SVRS age reporting appears to be better than the census age reporting.

The use of UN formula (also called UN Joint score) resulted in a value of 48.3 for the index in 2019 as opposed to an index of 57.7 in 2018. This index was 50.6 in 2017. This reflects that the quality of age reporting has improved over the last two years.

It may be mentioned that both Myer’s and Whipple’s indices have serious limitations due to its sole dependence on single year age distribution. Single year reporting is highly vulnerable to incorrect reporting particularly in developing countries.

The urban-rural age structure by sex is displayed in Table 2.9. The age structure of the rural area depicts a younger population than the one in urban area with respectively 29.7 percent and 27.0 of its population being under age 15. In addition, population at age 65 and over constitute 5.9 percent and 4.6 percent respectively in rural and urban area with an implication of higher dependency ratio in rural area. Three possible factors may be in interplay to result in these variations: fertility, mortality and migration.

The age-sex distributions of the population by administrative divisions are shown in Table 2.10.

Table 2.9: Percent distribution of sample population by age, sex and residence, SVRS 2019

Age group	Rural			Urban		
	Male	Female	Both sexes	Male	Female	Both sexes
0-4	9.0	8.6	8.8	8.1	7.7	7.9
5-9	9.6	9.6	9.6	9.3	8.7	9.0
10-14	11.3	11.3	11.3	9.9	10.3	10.1
15-19	11.3	8.8	10.1	10.1	8.5	9.3
20-24	8.5	8.6	8.6	8.4	10.1	9.3
25-29	7.2	8.5	7.9	7.9	9.9	8.9
30-34	7.1	8.4	7.7	8.3	9.4	8.8
35-39	6.7	7.4	7.1	7.8	8.2	8.0
40-44	6.0	6.3	6.2	7.0	6.7	6.8
45-49	5.4	5.1	5.2	6.1	5.3	5.7
50-54	4.7	4.9	4.8	5.2	4.9	5.0
55-59	3.8	3.9	3.9	4.0	3.5	3.7
60-64	3.2	2.9	3.0	3.2	2.5	2.8

Age group	Rural			Urban		
	Male	Female	Both sexes	Male	Female	Both sexes
65+	6.1	5.6	5.9	4.9	4.2	4.6
<15	30.0	29.5	29.7	27.3	26.7	27.0
15–64	64.0	64.8	64.4	67.9	69.0	68.4
65+	6.1	5.6	5.9	4.9	4.2	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	352,644	351,441	704,085	282,899	282,757	565,656

As shown by the data in Table 2.10, Chattogram followed by Sylhet division compared to other divisions appear to be most conducive to high fertility as they have the most young age structures with 31.9 percent and 31.2 percent respectively of their populations falling under 15 years of age. The implication of these high proportions of population below 15 years is that Sylhet and Chattogram divisions will have high dependency burden with more inactive populations. It is also an indication of relatively high fertility in these two divisions compared to other administrative divisions. The lowest proportion was computed to be 25.3 percent for Khulna division.

Table 2.10: Percent distribution of sample population by age, sex and division, SVRS 2019

Age group	Administrative division							
	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
0-4	8.5	9.5	8.6	7.7	8.5	7.6	8.1	8.5
5-9	9.1	10.5	9.4	8.2	10.0	8.3	8.8	10.5
10-14	10.5	11.9	10.5	9.4	12.3	9.7	10.5	12.2
15-19	9.6	10.4	9.5	9.1	9.7	9.0	9.6	10.7
20-24	8.7	9.2	9.0	8.5	8.3	8.5	8.7	9.6
25-29	8.1	8.3	8.7	8.3	7.3	8.4	8.2	8.7
30-34	7.9	7.8	8.7	8.4	7.8	8.7	8.4	7.9
35-39	7.5	6.8	7.7	8.0	6.9	8.2	7.8	6.7
40-44	6.5	5.8	6.5	7.1	6.0	7.2	6.7	5.8
45-49	5.6	4.7	5.3	6.2	5.1	6.2	5.7	4.7
50-54	5.0	4.3	4.7	5.5	5.0	5.4	5.1	4.4
55-59	3.9	3.4	3.6	4.3	4.0	4.3	4.1	3.3
60-64	3.1	2.6	2.8	3.3	3.1	3.1	3.1	2.6
65+	6.0	4.9	4.9	6.0	5.8	5.5	5.1	4.6
<15	28.1	31.9	28.5	25.3	30.8	25.6	27.4	31.2
15–64	65.6	63.2	66.6	68.7	63.4	68.9	67.5	64.2
65.+	6.0	4.9	4.9	6.0	5.8	5.5	5.1	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	132142	212395	223791	152494	66418	166311	162014	154176

2.5 A Few More Population Compositions and Household Characteristics

Table 2.11 summarizes a number of background characteristics of the population that include, among others, the sex composition, sex ratio, dependency ratio, religion, literacy rate, and marital status according to the present residence and administrative divisions.

2.5.1 Sex Composition

The sex composition of a population refers to the proportional share of the males and females in the total population. It also shows the excess or deficit of one sex over the other. Table 2.10 shows the sex

composition of the population in the SVRS area. Overall, the males outnumbered the females by 0.2 percentage points or 0.4 percent resulting from a male-female ratio of 50.1 to 49.9. This feature is prevalent across the regions of residence and the administrative divisions without any exception. Surprisingly, the ratio of males to females exactly agrees with the 2011 sample census results.

2.5.2 Sex Ratio

Human sex ratio varies not only from one country to another, but also from one population sub-group to another within the same country. religion, region of residence, age, race, marital status, ethnicity, nativity are some of the population characteristics that might show considerable variations in sex ratios. Although religious variation in the sex ratio is minimal in most cultures, urban-rural variation is sometimes considerable. As shown in Table 2.11, the 2019 SVRS recorded an overall sex ratio of 100.2 males per 100 females showing no change since its 2018 level. The rural area was reported to have a sex ratio of 100.1 as against a rate of 100.2 percent in the urban area. Among the 8 administrative divisions, Barishal showed the highest sex ratio (102.7%), while Chattogram division the lowest (97.1%). The 2011 census of Bangladesh recorded a sex ratio of 97.9% in the rural area while in the urban area it was as high as 109.3. The sex ratios by urban-rural residence and administrative divisions are shown in Table 2.11.

Table 2.11: Sex ratios (percent) by residence and divisions, SVRS 2019

Background Characteristics	Sex ratio	
	2019	2018
Residence:		
Rural	100.1	100.8
Urban	100.2	99.6
Division:		
Barishal	102.7	101.4
Chattogram	97.1	97.4
Dhaka	99.7	99.7
Khulna	100.6	100.8
Mymensingh	102.4	103.0
Rajshahi	101.9	102.1
Rangpur	102.1	102.2
Sylhet	98.1	98.3
Total	100.2	100.2

2.5.3 Dependency Ratio

The most widely used summary measure of age-sex composition is the dependency ratio. The ratio measures the fraction of dependents in a population. In other words, the dependency ratio measures the number of inactive people whom each economically active person has to support. Dependents refer to people who are not in the workforce, such as those who are either too young or too old to work. This measure is defined in this report as the ratio of population aged 0–14 years and 65 years and over to the population aged 15–64 years old multiplied by 100, although other variants of this definition are used to compute dependency ratio. The overall (Total) dependency ratio is 51 percent, meaning that 51 inactive persons are dependent on 100 economically active persons. The child dependency ratio defined as a ratio of the children under-15 years of age to the population aged 15–64 was estimated to be 43.0 percent. Aged dependency ratio defined as a ratio of the population aged 65

and over to the population aged 15–64 was found to be 8.0 percent. These two together make up the overall dependency ratio: $43.0+8.0=51.0$.

More people (55%) in the rural area than in urban area (46%) are dependent on the work force. The dependency ratio varies from as low as 45 percent in Rajshahi division to as high as 58 percent in Mymensingh and Chattogram divisions. The results are summarized in Table 2.12. The dependency ratio as obtained in 2011 sample census was 68.4 percent, while the Education Household Survey of 2014 reported this ratio to be 61.1 percent.

2.5.4 Religious Composition

As reported in 2019 round of SVRS survey, 88.4 percent of the population in Bangladesh are Muslims and the remaining 11.6 percent are the believers of other religions, showing no change in religious composition since last year. Rural-urban variation in religious composition is of little significance. This constancy also prevails by sex composition.

Muslims dominate Mymensingh division with about 94 percent of the population of this division being of this religion. Compared to other divisions, the proportion of Muslim population is the lowest in Sylhet division (80.2%).

2.5.5 Literacy Rate

The SVRS collects information on the literacy of both men and women on a regular basis. Literacy is an important element in shaping the lifestyle of individuals and societies at large. Women's education is of particular importance since it is closely associated with their status in the family. Women's education empowers women in the decision-making process, and educates them with better knowledge of health and hygiene for a healthy family.

In the SVRS, a person has been defined as literate if he/she is able to write a simple letter. The crude literacy rates obtained thus are presented in Table 2.12 for the population under study. The overall crude rate comes out to 65.8 percent. Males are marginally more likely (67.4%) to be literate than their female counterparts (64.1%). The literacy rate is significantly higher (72.0%) among the urban population than among the rural population (60.8%). Barishal division has the highest rate of literacy (73.6%), followed by Khulna division with a literacy rate of 67.2 percent. The lowest literacy rate (58.1.7%) prevails among the people of Mymensingh division. At the divisional levels, males have, on the average have 3.3 percentage points higher literacy rate than their female counterparts. It is worth to note that the crude literacy rates as obtained in 2019, by and large, remain almost of the same magnitude as was noted in 2018.

The data on adult literacy were utilized to compute two variants of literacy rate: one for those who are age 7 and over and the other for those who are 15 years and over. In both the cases, the ability to write a letter was regarded as the qualification of a person to be reckoned as literate. In computing either of these rates, the total populations in the denominator were populations aged 7 and over or 15 and over. The literacy rate for the population aged 7 years and over is 74.4 percent. The corresponding rate for those who are 15 years and over is 74.7 percent. The reported rates as obtained in the Education Household Survey for 2014 are respectively 59.1 percent and 58.6 percent.

As the results in Table 2.12 show, in both the cases (7+ or 15+), the urban literacy rates are substantially higher than the rural rates irrespective of sex. In all cases, literacy rates derived for those who are aged 7 years or more are lower than those calculated for those who are 15 years or more. Keeping consistency with the overall literacy rates under these two categories, the divisional level of estimates are seen to speak in favor of females so far as the literacy rate is concerned.

2.5.6 Possession of Mobile Phone

Mobile phones, also called cell phones have become a necessity for many people throughout the world. The ability to keep in touch with family, business associates, and access to email are only a few of the reasons for the increasing importance of cell phones. Today's technically advanced mobile phones are capable of not only receiving and placing phone calls, but storing data, taking pictures, and can even be used as walkie talkies, to name just a few of the available options. Mobile phones are the perfect way to stay connected with others and provide the user with a sense of security. In the event of emergency, having a mobile phone can allow help to reach you quickly and could possibly save lives. However, the importance of mobile phones goes way beyond personal safety.

As much as 74 percent of people in survey area were reported to be owners of mobile phone. Urban people are at least 18 percent more likely to have a set than their rural counterparts. No significant differences were noted in possessing a mobile set among the residents of 8 administrative divisions.

Table 2.12: A few more characteristics of the Household population, SVRS 2019

Background Characteristics	Residence				Administrative division						
	Total	Rural	Urban	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
Sex composition:											
Male	50.1	50.1	50.0	50.7	49.3	49.9	50.2	50.6	50.5	50.5	49.5
Female	50.0	49.9	50.0	49.3	50.8	50.1	49.9	49.4	49.5	49.5	50.5
Dependency ratio	51	55	46	51	58	50	46	58	45	48	56
Religious composition:											
Muslim	88.4	89.2	87.5	88.8	86.3	91.8	87.4	93.9	92.7	88.2	80.2
Hindu & others	11.6	10.8	12.5	11.2	13.7	8.2	12.6	6.1	7.3	11.8	19.8
Crude literacy rate:											
Both literate	65.8	60.8	72.0	73.6	65.2	65.4	67.2	58.1	64.3	64.3	65.3
Male literate	67.4	62.6	73.4	74.5	66.1	67.1	69.0	59.8	66.2	66.9	67.0
Female literate	64.1	58.9	70.6	72.8	64.2	63.7	65.3	56.4	62.4	61.7	63.6
Literacy rate 7+:											
Both sexes	74.4	69.1	81.0	83.2	75.0	74.3	75.2	66.0	71.8	72.5	74.1
Male literate	76.5	71.5	82.8	84.4	76.8	76.4	77.5	67.9	74.0	75.5	76.4
Female literate	72.3	66.7	79.2	82.0	73.4	72.2	72.8	64.0	69.6	69.4	71.9
Adult Literacy 15+:											
Both sexes literate	74.7	68.4	82.2	84.2	75.5	74.8	75.9	63.9	71.8	71.9	74.4
Male literate	77.4	71.4	84.7	85.8	78.1	77.6	78.9	66.4	74.6	75.6	77.5
Female literate	71.9	65.5	79.7	82.6	73.1	72.0	72.9	61.3	69.0	68.0	71.4
Proportion of individuals who own a mobile telephone											
Yes	73.7	68.1	80.5	77.3	76.6	78.2	72.3	66.5	72.2	70.0	70.3
No	26.3	32.0	19.5	22.8	23.4	21.9	27.7	33.5	27.9	30.0	29.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

2.6 Marital Status Composition

Marital status is a demographic characteristic involving biological social, economical, legal and in many cases religious aspects. Marital status and its differentials play a vital role in the composition and structure of a population. As the age at first marriage and the dissolution of marriage due to widowhood, divorce and separation affect the reproductive life of women, the marital status composition by age, sex and its differentials is vital for fertility analysis. It has a direct and indirect impact on the other demographic and socio-economic characteristics, namely migration, headship, family formation etc. It also has an impact on social and economic characteristics such as school attendance and labor force participation in the late adolescent and young adult age groups.

The marital status composition of SVRS area by residence and administrative divisions for 2019 are presented in Table 2.13 for each sex separately. A close view of the results on marital status presented in the table under reference shows that 59.3 percent of the males and 63.8 percent of the females are currently married without any notable variations between urban and rural areas. Overall, single population accounts for 39.0 percent in the case of males and 25.3 percent in the case of females. In Sylhet division, the proportion of males remaining single is higher (48.3%) compared to other divisions. The incidence of singleness among the males is the least (34.2%) in Rajshahi division. The incidence of widowhood is more prevalent among the women (9.5%) than among the men (1.3%) for the overall sample. Women are at higher risk (1.3%) than their male counterparts (0.5) to end their marriage in divorce.

Table 2.13: Marital status by residence and administrative division, SVRS 2019

Background Characteristics	Residence					Division					
	Total	Rural	Urban	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
Male:											
Single	39.0	39.1	38.8	37.8	44.1	37.8	34.7	38.5	34.2	36.0	48.3
Currently married	59.3	59.0	59.5	60.0	54.3	60.6	63.4	59.7	63.9	62.3	50.1
Widowed	1.3	1.3	1.2	1.6	1.2	1.2	1.3	1.3	1.2	1.3	1.3
Divorced/separated	0.5	0.5	0.5	0.5	0.3	0.5	0.7	0.5	0.7	0.5	0.3
Female:											
Single	25.3	24.1	26.7	23.7	28.1	24.3	21.3	25.9	21.3	23.6	34.1
Currently married	63.8	64.7	62.7	65.8	62.2	65.6	67.0	63.3	67.3	64.6	54.2
Widowed	9.5	9.9	9.1	9.3	8.7	8.7	10.0	10.0	9.7	10.3	10.5
Divorced/separated	1.3	1.3	1.4	1.2	1.0	1.4	1.7	0.8	1.7	1.4	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The marital status distribution is also shown by age and sex in Table 2.14 below. A very common feature of marital status distribution is apparent from the table: the drop in the proportions single is steeper among females than among males as age advances. For example, while nearly 100 percent of the males are single in age group 10–14, this drops to 97.7 percent when they are aged 15–19, and further to about 75 percent when they reach to 20–24. The corresponding proportions among the females are 99.1, 75.0 and 25.7 percent. The drop for 10–14 age group to 20–24 age group is precipitous for females: 74 percent, while it is only to the extent of 25 percent for males. The data also show that child marriage is still prevalent among both males and females in Bangladesh.

Table 2.14: Marital status by age and sex, SVRS 2019

Age group	Male					Female				
	Single	Married	Widowed	Divorced/separated	Total	Single	Married	Widowed	Divorced/separated	Total
10-14	100.0	0.0	0.0	0.0	100.0	99.1	1.0	0.0	0.0	100.0
15-19	97.7	2.3	0.0	0.1	100.0	75.0	25.0	0.0	0.0	100.0
20-24	75.2	24.2	0.2	0.5	100.0	25.7	72.5	0.4	1.4	100.0
25-29	38.5	60.3	0.2	0.9	100.0	8.5	89.2	0.7	1.6	100.0
30-34	12.6	86.1	0.3	0.9	100.0	2.4	94.6	1.3	1.6	100.0
35-39	3.4	95.5	0.4	0.8	100.0	1.1	94.1	3.1	1.8	100.0
40-44	1.6	97.2	0.5	0.6	100.0	0.7	91.4	6.0	1.9	100.0
45-49	1.0	97.6	0.8	0.5	100.0	0.6	86.8	10.4	2.2	100.0
50-54	0.7	97.2	1.5	0.5	100.0	0.5	78.2	19.1	2.3	100.0

Age group	Male					Female				
	Single	Married	Widowed	Divorced/ separated	Total	Single	Married	Widowed	Divorced/ separated	Total
55-59	0.5	96.6	2.5	0.4	100.0	0.4	69.8	27.8	2.0	100.0
60-64	0.6	94.7	4.3	0.4	100.0	0.5	55.3	42.4	1.7	100.0
65+	0.5	88.6	10.4	0.5	100.0	0.5	30.4	67.5	1.6	100.0
Total	39.0	59.3	1.3	0.5	100.0	25.3	63.8	9.5	1.3	100.0

The marital status composition of the sample population by age sex and urban-rural residence are shown in Table 2.15 and Table 2.16. The age patterns of marital status presented in the tables under reference are in close agreement with the overall pattern presented in two previous tables (Table 2.12 and Table 2.13)

Table 2.15: Marital status by age and residence, SVRS 2019: Males

Age group	Rural					Urban				
	Single	Married	Widowed	Divorced/ separated	Total	Single	Married	Widowed	Divorced/ separated	Total
10-14	100.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	100.0
15-19	97.2	2.7	0.0	0.1	100.0	98.3	1.7	0.0	0.0	100.0
20-24	71.1	28.2	0.2	0.5	100.0	80.4	19.1	0.1	0.4	100.0
25-29	33.6	65.2	0.2	1.0	100.0	44.1	54.8	0.3	0.8	100.0
30-34	10.0	88.6	0.3	1.1	100.0	15.5	83.4	0.3	0.8	100.0
35-39	2.5	96.2	0.4	0.9	100.0	4.3	94.6	0.4	0.7	100.0
40-44	1.3	97.6	0.5	0.6	100.0	2.0	96.8	0.6	0.7	100.0
45-49	0.8	97.9	0.8	0.5	100.0	1.3	97.3	0.9	0.5	100.0
50-54	0.6	97.5	1.5	0.5	100.0	0.9	97.0	1.6	0.5	100.0
55-59	0.4	96.7	2.5	0.4	100.0	0.6	96.6	2.5	0.4	100.0
60-64	0.6	94.9	4.1	0.4	100.0	0.6	94.3	4.7	0.4	100.0
65+	0.5	88.7	10.4	0.5	100.0	0.6	88.6	10.4	0.5	100.0
Total	39.1	59.0	1.3	0.5	100.0	38.8	59.5	1.2	0.5	100.0

Table 2.16: Marital status by age and residence, SVRS 2019: Females

Age group	Rural					Urban				
	Single	Married	Widowed	Div/sep	Total	Single	Married	Widowed	Div/sep	Total
10-14	99.0	1.1	0.0	0.0	100.0	99.2	0.8	0.0	0.0	100.0
15-19	71.5	28.5	0.0	0.0	100.0	79.4	20.6	0.0	0.0	100.0
20-24	17.0	81.0	0.4	1.6	100.0	35.0	63.5	0.3	1.2	100.0
25-29	5.4	92.4	0.7	1.6	100.0	12.0	85.8	0.7	1.5	100.0
30-34	1.3	95.8	1.3	1.6	100.0	3.6	93.4	1.4	1.7	100.0
35-39	0.6	94.8	2.9	1.7	100.0	1.6	93.2	3.3	2.0	100.0
40-44	0.5	92.1	5.7	1.7	100.0	1.0	90.6	6.3	2.1	100.0
45-49	0.4	87.7	9.9	2.0	100.0	0.9	85.6	11.0	2.5	100.0
50-54	0.3	79.6	18.1	2.1	100.0	0.8	76.4	20.3	2.5	100.0
55-59	0.2	71.3	26.8	1.7	100.0	0.6	67.6	29.3	2.5	100.0
60-64	0.5	57.8	40.2	1.5	100.0	0.6	51.7	45.6	2.0	100.0
65+	0.4	32.0	66.2	1.4	100.0	0.7	27.8	69.8	1.8	100.0
Total	24.1	64.7	9.9	1.3	100.0	26.8	62.7	9.1	1.4	100.0

2.7 Educational Attainment

Among the socio-economic differentials in influencing the demographic parameters of a population, literacy and educational attainment of the individuals are considered as the most important characteristics. They influence of individual's knowledge, attitudes and codes of ethical behavior that guide moral choices about our relationship with others. Education enhances the ability of an individual to achieve the desired demographic and health goals. Table 2.16 and Table 2.17 present a complete scenario of the literacy rates of the household population by age, sex and some selected background characteristics.

As we note in Table 2.17, males aged 5 years and above, more than are nearly 6 percent more likely to be literate than their female counterparts: 73.7% versus 69.8%. This implies that illiteracy is more prevalent (30.2%) among the females than among the males (26.3%). The overall literacy rate is 71.8 for population aged 5 years and over resulting in an illiteracy rate of 28.2 percent.

A marked variation of the literacy rate was noted between the rural area and urban area: 66.7 percent in rural area and 78.2 percent in urban area. Sex differentials are also pronounced in literacy rate between the urban and rural areas. For example, while about 80 percent of males in the urban area are literate, the extent of this rate remains prevalent in about 69 percent of the cases among the rural males. This difference in literacy also prevails among the females: 79.2 percent in urban area and 66.7 percent in rural area. The scenario is almost identical when literacy is measured for those who are age 7 years and over (see Table 2.18).

Educational attainment of the population surveyed by a few selected background characteristics, viz. age, place of residence, administrative division, and religion has been presented in Table 2.19 and Table 2.20 by sex. As the data in tables under reference reveal, proportionately more females (22.2%) than the males (18.1%) were completely deprived of attending school in their lifetime. About 18 percent of the male children and 17 percent of the female children failed to complete the primary level of education. A little over 15 percent of the male children and another 14.4 percent of the female children were fortunate to complete the primary level of education. Nearly 26 percent of the males and 20 percent of the females could complete secondary and higher level of schooling.

Illiteracy is more prevalent among the females across all the background characteristics than their male counterparts males. Rural residents are more in proportion to remain illiterate than the residents in the urban area. Illiteracy is more prevalent in Mymensingh division where at least 27 percent of the males and 30 percent of the females had never gone to school. For both males and females, Barishal division tops the other divisions in literacy where about 90 percent of the males and at least 88 percent of the females had attended school. When religious affiliation is taken into consideration Buddhists appear to be more in proportion to remain illiterate.

Table 2.17: Literacy rate of population 5+ years by broad age group sex and residence, SVRS 2019

Age group	Total			Rural			Urban		
	Male	Female	Both sex	Male	Female	Both sex	Male	Female	Both sex
5	5.9	9.0	7.4	5.7	10.7	8.2	6.1	6.7	6.4
6	6.6	8.0	7.3	6.0	9.2	7.6	7.2	6.4	6.8
7	17.9	17.5	17.7	15.9	14.3	15.1	20.5	21.8	21.1
8	34.3	31.6	32.9	30.7	26.7	28.7	39.0	38.3	38.7
9	54.2	57.5	55.8	50.6	54.5	52.5	59.1	61.8	60.4
5-9	24.5	25.2	24.8	22.6	23.5	23.1	26.9	27.4	27.1
10-14	92.7	95.7	94.2	92.5	95.7	94.1	93.1	95.8	94.5
15-24	93.7	96.1	94.8	93.0	96.1	94.4	94.6	96.1	95.4

25-59	74.9	69.7	72.2	67.0	62.0	64.4	83.6	78.5	81.0
60+	54.4	28.6	42.3	44.6	20.0	32.9	68.5	42.1	56.5
Total	73.7	69.8	71.8	68.8	64.4	66.6	79.8	76.5	78.2

Table 2.18: Literacy rate of population 7+ years by broad age group sex and residence, SVRS 2019

Age group	Total			Rural			Urban		
	Male	Female	Both sex	Male	Female	Both sex	Male	Female	Both sex
7	17.9	17.5	17.7	15.9	14.3	15.1	20.5	21.8	21.1
8	34.3	31.6	32.9	30.7	26.7	28.7	39.0	38.3	38.7
9	54.2	57.5	55.8	50.6	54.5	52.5	59.1	61.8	60.4
7-9	35.9	35.7	35.8	32.9	32.0	32.5	39.7	40.8	40.3
10-14	92.7	95.7	94.2	92.5	95.7	94.1	93.1	95.8	94.5
15-24	93.7	96.1	94.8	93.0	96.1	94.4	94.6	96.1	95.4
25-59	74.9	69.7	72.2	67.0	62.0	64.4	83.6	78.5	81.0
60+	54.4	28.6	42.3	44.6	20.0	32.9	68.5	42.1	56.5
Total	76.5	72.3	74.4	71.5	66.7	69.1	82.8	79.2	81.0

Table 2.19: Educational attainment of the household population, SVRS 2019: Males

Background Characteristics	Level of education					Total
	None	Primary Incomplete	Primary complete	Secondary incomplete	Secondary complete or higher	
Age group:						
5-9	25.9	72.6	1.5	0.0	0.0	100.0
10-14	2.8	35.8	22.9	38.2	0.3	100.0
15-19	3.9	7.7	10.0	47.0	31.5	100.0
20-24	6.4	9.1	14.3	17.6	52.5	100.0
25-29	9.0	9.6	18.7	22.3	40.5	100.0
30-34	13.5	9.5	19.7	24.6	32.7	100.0
35-39	19.0	10.2	18.2	22.1	30.5	100.0
40-44	25.3	10.3	16.8	18.1	29.5	100.0
45-49	29.6	10.5	15.6	16.9	27.5	100.0
50-54	33.0	10.4	15.0	15.6	26.1	100.0
55-59	35.9	10.2	14.8	15.5	23.6	100.0
60-64	38.2	9.9	14.0	14.7	23.1	100.0
65+	43.1	10.3	13.7	12.4	20.4	100.0
Residence:						
Rural	22.1	20.2	16.3	23.3	18.2	100.0
Urban	13.2	15.6	13.8	22.2	35.3	100.0
Division:						
Barishal	10.5	18.9	16.8	23.3	30.5	100.0
Chattogram	17.5	20.4	15.5	24.6	22.0	100.0
Dhaka	18.3	17.6	15.2	22.7	26.3	100.0
Khulna	16.9	17.8	13.4	24.5	27.4	100.0
Mymensingh	26.6	17.6	15.2	20.9	19.7	100.0
Rajshahi	21.1	16.0	13.7	21.6	27.7	100.0
Rangpur	19.9	16.8	14.0	21.9	27.5	100.0
Sylhet	17.7	19.4	17.6	21.7	23.5	100.0
Religion:						
Muslim	18.7	18.5	15.3	22.4	25.1	100.0

Background Characteristics	Level of education					Total
	None	Primary Incomplete	Primary complete	Secondary incomplete	Secondary complete or higher	
Hindu	13.0	15.3	14.0	25.9	31.8	100.0
Buddhist	22.7	16.6	11.7	22.8	26.2	100.0
Christian	15.2	14.5	9.1	25.2	36.1	100.0
Others	33.6	21.7	23.0	16.5	5.3	100.0
Total	18.1	18.1	15.1	22.8	25.8	100.0

Table 2.20: Educational attainment of the household population, SVRS 2019: Females

Background Characteristics	Level of education					Total
	None	Primary Incomplete	Primary complete	Secondary incomplete	Secondary complete or higher	
Age group:						
5-9	23.6	74.7	1.5	0.2	0.0	100.0
10-14	1.7	29.1	21.2	45.6	2.6	100.0
15-19	2.3	3.5	7.3	53.2	33.7	100.0
20-24	4.3	4.8	12.5	30.3	48.1	100.0
25-29	8.1	7.1	16.4	32.9	35.5	100.0
30-34	13.8	9.1	18.5	32.3	26.3	100.0
35-39	22.3	11.1	18.3	25.4	22.9	100.0
40-44	32.7	11.8	17.5	18.9	19.2	100.0
45-49	40.7	12.4	16.5	15.5	15.0	100.0
50-54	48.4	11.9	15.4	12.8	11.6	100.0
55-59	54.0	11.6	14.5	11.3	8.8	100.0
60-64	59.3	11.3	13.5	8.7	7.2	100.0
65+	70.5	9.6	10.6	5.7	3.6	100.0
Residence:						
Rural	26.6	18.3	15.2	27.3	12.6	100.0
Urban	16.7	14.6	13.4	25.4	29.9	100.0
Division:						
Barishal	12.1	18.7	17.7	26.2	25.4	100.0
Chattogram	21.0	17.6	14.1	28.9	18.4	100.0
Dhaka	22.4	16.3	14.3	26.4	20.6	100.0
Khulna	21.3	16.6	12.4	29.4	20.4	100.0
Rajshahi	25.3	14.9	13.2	26.6	19.9	100.0
Rangpur	25.8	15.4	12.1	25.1	21.7	100.0
Sylhet	22.3	17.3	17.1	23.3	20.1	100.0
Mymensingh	30.3	16.7	16.1	22.8	14.1	100.0
Religion:						
Muslim	22.4	16.8	14.6	26.5	19.7	100.0
Hindu	19.6	15.3	13.1	26.5	25.6	100.0
Buddhist	35.6	15.5	9.2	19.5	20.2	100.0
Christian	21.4	14.9	8.3	24.0	31.4	100.0
Others	40.0	20.0	16.4	17.6	6.1	100.0
Total	22.2	16.6	14.4	26.5	20.3	100.0

2.8 Trends in Population Composition and Household Characteristics: 2004–2019

Table 2.19 presents an overview of the trends in some selected characteristics of the population and households in the SVRS area for the available years. These include, among others, age structure, dependency ratio, child-woman ratio, religious composition, literacy, household size, marital status and the like.

2.8.1 Age Structure

As reported in the SVRS, the population composition has shown a modest change since the initiation of the registration of vital events in the sample area in 2002. For example, while the population size under 15 years of age was reported to be 37.6 percent in 2005, the proportion reduced to 28.8 percent in 2018 and further to 28.5 percent in 2019. By the time, an increase was noted in the age structure at 65 years and over, from 4.2 percent in 2005 to 5.3 percent in 2019. A similar feature of change may also be noted in the census record, from 4.0 in 2001 to 4.7 in 2011.

2.8.2 Sex Ratio

As evidenced in the sample area, the overall sex ratios remained almost static from 2005 to 2012, remaining in the neighborhood 105 males against 100 females. It is only 2013 when the sex ratio began to fall from 102.6 to 100.2 in 2019. This ratio is being maintained since 2017. This trend in sex ratios is in line with the one reported in the census reports also. Over the last four censuses, the sex ratio fell from 106.4 percent in 1981 to 100.3 percent in 2011. The trends in sex ratios as obtained in SVRS are shown in Figure 2.3.

2.8.3 Dependency Ratio

Dependency ratio as recorded in the SVRS, demonstrated a precipitous and continuous fall from 78 percent in 2005 to 51 percent in 2019, about 35 percent decline during 2005–2019. The 2018 survey found a ratio of the same magnitude. The census population however records this fall in the neighborhood of 7 percent, from 73 percent in 2001 to 68.4 percent in 2011. The trends in dependency ratio are shown in Figure 2.4.

2.8.4 Religious Composition

For many years in the past, the Bangladeshi people are predominantly Muslims. Since the initiation of the SVRS program in 2003, 89.6 percent of the populations were Muslims and this proportion remained almost unchanged (89.5%) till 2010. For the last four years (2016–2019), the proportion remains constant at 88.4 percent. The Non-Muslims constitute the remaining 11.6 percent of the total.

2.8.5 Literacy Rate

The literacy rate for population aged 7 years and over increased from 52.1 percent in 2005 to 74.4 percent in 2019, amounting to an increase of about 43 percent in 15 years. The increase in female literacy compared to male literacy was more pronounced: 48 percent for females and 38 percent for males.

The overall adult literacy rate for population aged 15 years and over increased by 40 percent over the period 2005–2019 from 53.5 percent in 2005 to 74.7 percent in 2019. The increase in literacy rate among the females was much higher (48%) than that of the increase among the males (33%) during the same period. The literacy rates of the population are shown in Map 2.1 and 2.2.

2.8.6 Household Size

In line with the trends in fertility in Bangladesh, the average household size is also depicting a moderate decline over the last 15 years since 2005. As the statistics presented in Table 2.19 show, the average size of the household in 2005 was 4.7 persons, which decreased to 4.2 in 2019: about an 11 percent decrease in the last 15 years.

2.8.7 Headship Status

The household headship rates virtually remained constant over the period 2005–2009 centering around a male-female ratio of 90 percent to 10 percent, which thereafter demonstrated a modest increase in favor of females: from 12.9 percent in 2009 to 14.6 percent in 2019.

2.8.8 Household Structure

The structural changes in the households over the last 14 years have been rather erratic. While 11 percent of the households in 2005 were pucca buildings, this decreased to 8.7 percent in 2010 and thereafter began to increase reaching to 22.7 percent in 2019. The corresponding increase in the semi-pucca households was from 11.1 percent in 2005 to 26.3 percent in 2019. As a result of this increase in pucca and semi-pucca households, the proportions of CIS/wooden structures decreased from 53.3 percent in 2005 to 42.7 percent in 2019.

2.8.9 Sources of Water

For drinking purposes, the extent of the use of tap or tube-well water has not shown any notable change over the last 15 years, as shown in Table 2.21, while for other purposes, the proportion of households using these sources increased from 53.9 percent in 2005 to 69.3 percent in 2019.

2.8.10 Sources of Light

The use of kerosene has decreased considerably over the period 2005–2019, from 56.5 percent in 2005 to 2.9 percent in 2019, a decrease of about 95 percent in 15 years. Correspondingly, the use of electricity has shown a more than two-fold increase during this time interval: from 43.5 percent in 2005 to 93.5 percent in 2019.

2.8.11 Use of Fuel

A close examination of the data presented in Table 2.21 shows that there has been virtually no changes in any kind of fuel in the extent of use of fuels during the period under study

2.8.12 Economic Solvency

Economic solvency made a remarkable progress over the last 15 years. For example, while 19.2 percent of the households were reported to be economically solvent in 2005, the proportion increased to 40.9 percent in 2019, a more than a two-fold increase over the period under reference.

2.8.13 Toilet facilities

Use of sanitary toilet facilities has shown an increase of over 46 percent during 2005–2019 from 53.3 percent to 81.5 percent, an increase of 52 percent in 15 years. Correspondingly, the use of open and facilities has decreased considerably.

Table 2.21: Trends in some selected household and population characteristics, SVRS 2005–2019

Background Characteristics	Year														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Age structure:															
Under15	37.6	36.6	34.9	37.4	33.3	33.1	31.9	31.1	32.3	31.7	30.8	30.8	29.3	28.8	28.5
15–64	58.2	59.3	61.0	57.9	62.3	62.4	63.5	64.2	63.2	63.5	64.6	64.6	65.6	66.2	66.2
65 & over	4.2	4.2	4.1	4.7	4.4	4.5	4.6	4.7	4.5	4.7	4.6	4.6	5.1	5.0	5.3
Sex ratio	105.0	105.0	105.2	105.0	104.9	105.0	104.9	104.9	102.6	100.5	100.3	100.3	100.2	100.2	100.2
Dependency ratio	78	76	70	67	66	65	57	56	58	57	55	54	53	51	51
Child-woman ratio	439	424	398	380	375	369	341	327	356	355	325	320	310	304	303
Religion:															
Muslim	89.3	89.3	89.4	89.4	89.4	89.5	88.8	88.8	89.1	89.2	88.2	88.4	88.4	88.4	88.4
Non-Muslim	10.7	10.7	10.6	10.6	10.6	10.5	11.2	11.2	10.9	10.8	11.8	11.6	11.6	11.6	11.6
Literacy 7+:															
Both sexes	52.1	52.5	56.1	55.8	56.7	56.8	55.8	56.3	57.2	58.6	63.6	71.0	72.3	73.2	74.4
Male	55.4	55.8	59.4	60.8	59.6	59.8	58.4	59.2	59.3	60.7	65.6	73.0	74.3	75.2	76.5
Female	48.8	49.1	52.7	52.7	53.8	53.9	53.2	53.3	55.1	56.6	61.6	68.9	70.2	71.2	72.3
Literacy15+:															
Both sexes	53.5	53.7	56.3	56.9	58.4	58.6	58.8	60.7	61.0	61.4	64.6	72.3	72.9	73.9	74.7
Male	58.3	58.5	63.1	61.3	62.6	62.9	62.5	64.8	64.2	64.7	67.6	75.2	75.7	76.7	77.4
Female	48.6	48.8	53.5	52.6	54.3	55.4	55.1	56.6	51.8	58.2	61.6	69.5	70.1	71.2	71.9
Household size	4.7	4.8	4.7	4.7	4.7	4.6	4.5	4.5	4.4	4.3	4.4	4.3	4.2	4.2	4.2
Headship status:															
Male headed	89.6	89.6	88.7	89.3	87.1	87.1	86.7	85.5	88.4	87.8	87.3	87.2	85.8	85.8	85.4
Female headed	10.4	10.4	10.3	10.3	12.9	12.9	13.3	14.5	11.6	12.2	12.7	12.8	14.2	14.2	14.6
Household structure:															
Pucca	11.0	11.1	8.1	8.9	8.7	8.7	9.6	10.2	13.2	9.3	18.3	18.7	20.9	22.0	22.7
Semi-pucca	11.1	11.2	13.7	13.1	16.6	16.6	19.3	18.5	19.5	22.3	22.7	24.1	24.3	24.3	26.3
CIS/Wooden	53.3	53.3	55.1	57.1	57.0	57.0	53.9	53.9	50.7	51.1	45.0	44.8	44.5	44.0	42.7
Mud	15.5	15.4	15.4	14.3	13.1	13.1	12.2	11.7	12.4	13.5	9.7	8.7	8.1	7.9	7.0
Bamboo	8.2	8.1	7.2	6.0	3.8	3.8	4.6	5.5	4.0	3.7	3.8	3.3	2.1	1.6	1.3
Others	0.9	0.9	0.6	0.9	0.8	0.8	0.4	0.3	0.2	0.2	0.5	0.5	0.1	0.1	0.0
Sources of water:															
Tap / tube-well (for drinking purposes)	97.7	97.7	98.9	98.3	98.1	98.1	98.2	98.3	97.5	97.8	97.9	98.0	98.0	98.0	98.2
Sources of light:															
Electricity	43.5	44.3	50.7	53.4	54.4	54.6	63.6	65.6	66.9	67.8	77.9	81.2	85.3	90.1	93.5
Solar	-	-	-	-	-	-	-	-	-	-	5.4	5.6	5.8	4.8	3.3
Kerosene	56.5	55.7	49.3	46.7	45.6	43.1	35.4	33.1	32.3	31.4	16.3	13.0	8.8	5.0	2.9
Others	-	-	-	-	-	2.3	1.9	1.3	0.8	0.8	0.4	0.2	0.1	0.1	0.3
Sources of fuel:															
Straw/Leaf	41.4	41.5	42.3	38.88	37.5	42.6	39.3	40.2	36.3	36.3	30.7	31.1	30.2	28.6	22.6
Bran	4.8	4.8	4.0	4.15	5.8	5.3	4.0	-	2.8	3.7	3.0	3.8	3.5	4.0	-
Wood/bamboo/Khari	42.0	42.0	41.0	43.34	42.7	42.5	43.1	42.4	44.4	42.8	44.2	42.5	41.3	41.2	25.2
Kerosene	0.3	0.3	0.3	0.37	0.4	0.4	0.2	0.3	0.3	0.2	0.4	0.4	0.3	0.3	0.3
Electricity	0.4	0.4	0.4	0.47	0.6	0.9	0.4	0.6	0.9	0.7	1.1	1.0	1.0	1.0	1.0
Gas	10.3	10.3	10.5	12.05	9.8	6.7	11.0	10.4	13.9	15.1	19.7	20.5	23.1	24.3	27.1
Others	0.8	0.7	1.6	0.72	3.2	1.6	2.0	1.9	1.3	1.1	0.9	0.8	0.6	0.5	0.1

Background Characteristics	Year																
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Toilet facilities:																	
Sanitary	53.3	55.0	54.2	62.2	62.7	63.5	62.6	63.8	64.3	63.5	73.5	75.0	76.8	78.1	81.5		
Others	37.6	36.2	38.6	31.1	30.1	34.3	33.7	33.6	34.5	34.4	23.2	22.3	20.6	19.9	17.0		
Open	9.1	8.9	7.2	6.6	7.2	2.2	2.7	2.6	2.2	2.1	3.3	2.7	2.6	2.0	1.5		
Economic solvency	19.2	19.3	19.4	19.5	21.1	22.0	21.4	21.5	21.6	22.1	36.2	38.7	39.4	41.8	40.9		

Figure 2.3: Trends in sex ratios, SVRS 2003-19

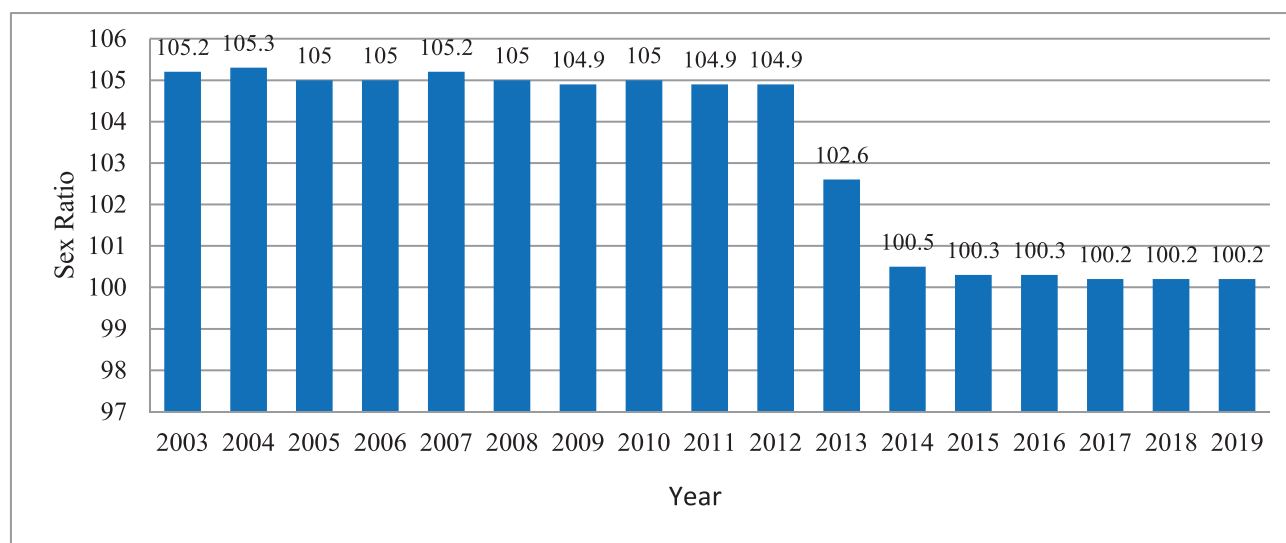


Figure 2.4: Trends in dependency ratios, SVRS 2003-19

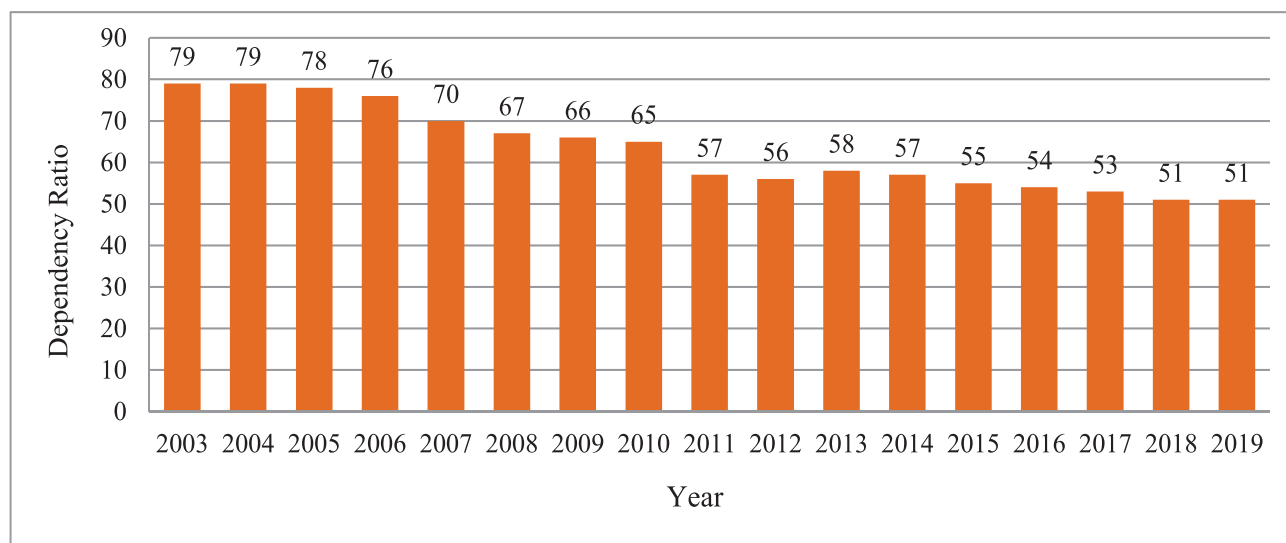


Figure 2.5: Trends in child-women ratios, SVRS 2003-19

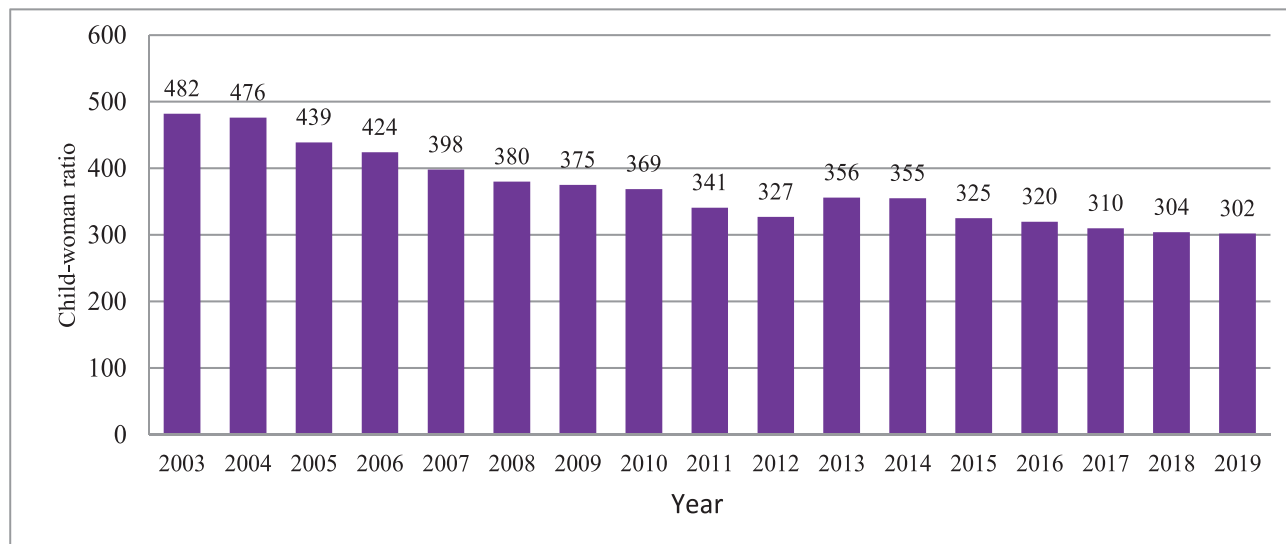
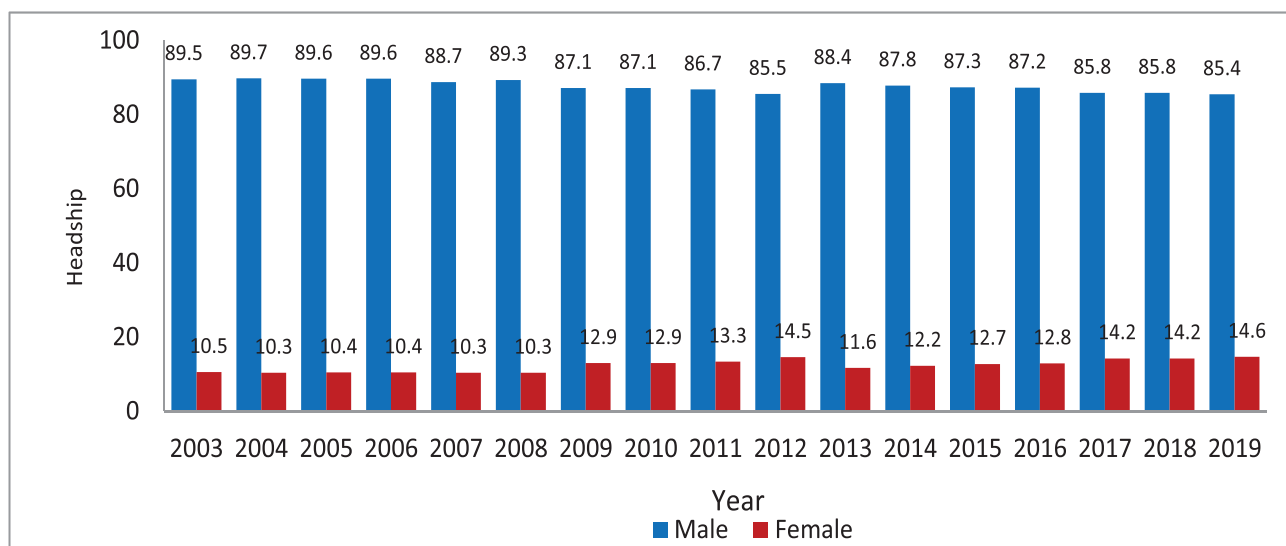
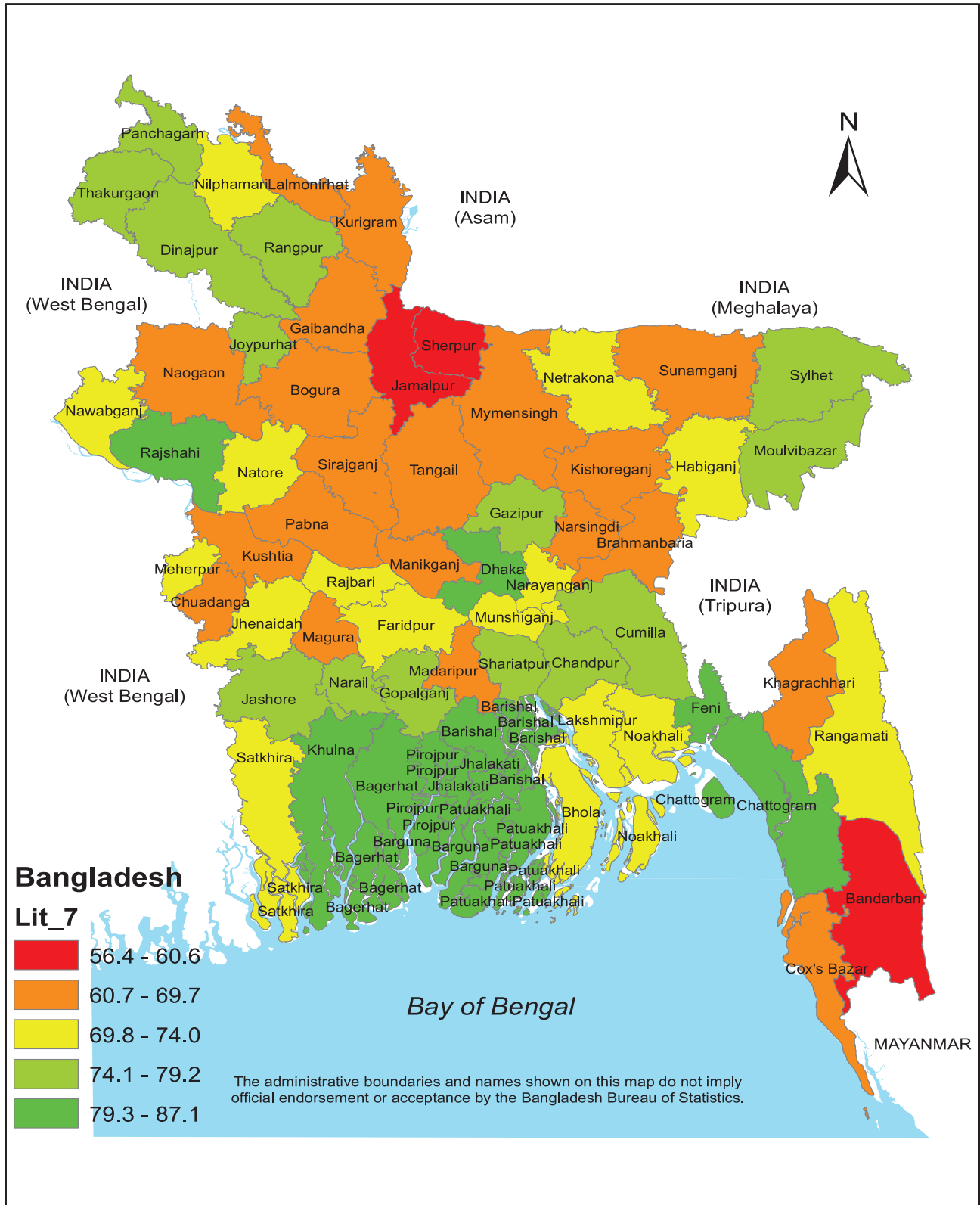


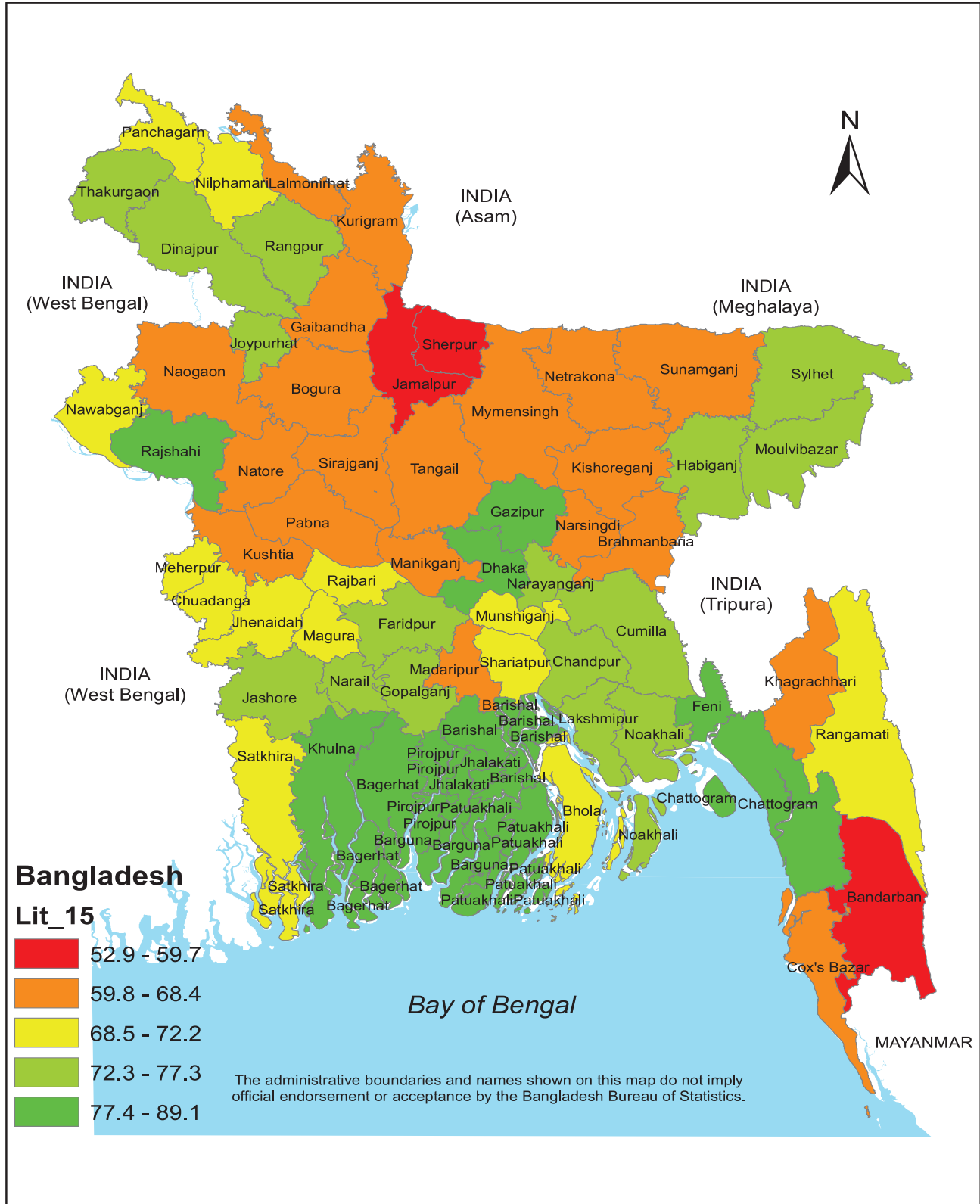
Figure 2.6: Trends in headship status, SVRS 2003-19



Map 2.1: Literacy rate of population 7+ years by Zila, SVRS 2019



Map 2.2: Literacy rate of population 15+ years by Zila, SVRS 2019



CHAPTER III

Fertility

3.1 Measures of Fertility

The term fertility refers to the state of being fertile, or in other words, it is the capability of producing offspring. For a human population, it is the state of being capable to produce offspring by a woman of reproductive period. Our discussion on fertility is thus the frequency of childbearing among the human population. The importance of fertility measurement stems from the fact that it is one of the three principal components of population dynamics that determine the size, structure, and composition of the population in any country. The present chapter is designed to describe the estimates of current fertility level based on the data gathered in SVRS area in 2019.

The fertility measures presented in this chapter are primarily based on the birth history data collected from the sample households for all ever-married women aged 15–49 asking each woman a series of questions that resulted in a reproductive history of all births to the women interviewed.

We have a wide variety of conventional fertility rates and ratios in current use, each of which has advantages and limitations in particular analytic systems. In this chapter, we will discuss a few of these measures that include, among others, the following:

- a) Crude birth rate (CBR);
- b) General fertility rate (GFR);
- c) Age-specific fertility rate (ASFR);
- d) Total fertility rate (TFR);
- e) Marital fertility rate (MFR)
- f) Child-women ratio (CWR);
- g) Gross reproduction rate (GRR); and
- h) Net reproduction rate (NRR).

It is important to note that the last two measures viz. GRR and NRR are regarded as measures of reproduction but they have a close association with fertility measures listed above.

In addition to the presentation of the fertility indicators as mentioned above, an attempt has also been made to study the fertility differentials by some selected background characteristics, such as residence, religion, and administrative divisions. The chapter also presents an overview of the trends in fertility over the period 1982-2018.

3.1.1 Crude Birth Rate

The **crude birth rate** (CBR) is the frequency of birth in a general population and is formally defined as the number of live births during a specified period (usually a calendar year) in a delineated area per 1000 mid-year population.

Table 3.1 shows the crude birth rates (CBR) by residence, administrative division and religion as derived from the recorded number of births and enumerated population in SVRS area in 2019. The overall CBR was estimated to be 18.1 in 2019 compared to an estimate of 18.3 in 2018 resulting in a decrease of well below one percent (0.55%) in one year. This is comparable with the BDHS 2014 estimate of CBR of 22.2 per 1000 population. The rural CBR in the SVRS area, as expected, is higher (20.0) compared to the urban CBR (15.9) by a little more than four births per 1000 population. The reported rate varies from as high as 20.8 in Chattogram to as low as 16.3 in Dhaka division. A marked variation in CBR is also noted among the religious groups: 18.6 among the Muslims and 14.8 among

the Hindus. Residents of other religions achieved the lowest CBR (13.9). Since CBR is greatly influenced by the age structure of the population, it is too early to offer any firm comment on the differences in the rates presented by population compositions. The variations in the level of crude birth rate by districts are shown in Map 3.1 at the end of the chapter.

3.1.2 General Fertility Rate

Fertility is highly variable within sub-groups of a population. It is thus common to calculate age-specific, age-marital status specific, and other specific fertility rates. It is rare for a child to be borne to a woman before she reaches 15 years or at ages beyond 50 years. For this reason, one may partly refine measurement of fertility by using the women of ages between 15 years and 49 years in the denominator of the rates instead of the total population in the mid-year. The rate so computed is referred to as the **general fertility rate** (GFR). The GFR is defined as the number of live births per year per 1000 women of child-bearing age 15–49. If married women are employed in the denominator to calculate this rate, it will result in a rate what we call **general marital fertility rate** (GMFR). These rates have been presented in a later section of this chapter and presented in table under reference. By definition, GMFR will be higher than the GFR because denominator used in calculating these rates are smaller than the one used in calculating GFR because of the effect of marriage.

As shown in Table 3.1, the GFR for the sample population in the SVRS area for the year 2019 is 66 per 1000 women of reproductive age, 15–49 as against a slightly higher rate of 67 in 2018. This rate is much lower than the one (90 per 1000 women) obtained in 2014 BDHS but closed to icddr,b estimate of 77 for the year 2013. The rate in rural area as obtained in SVRS 2019 is widely different from the rate in urban area: 76 versus 55 showing virtually no change since its 2018 level, when these rates were 77 and 57 respectively. Chattogram division recorded the highest GFR (75), while Dhaka division the lowest (57). The level of GFR, as expected, is highly consistent with the level of CBR by religion. Muslims are significantly more likely to attain the highest GFR (67) compared Hindus (54) and people of other religions (48). The level of GFR by and large is consistent with the GFR of previous year by the background characteristics of the sampled population.

The variations in the level of general fertility rate by districts are displayed in Map 3.2 at the end of the chapter.

3.1.3 Child-Woman Ratio

The child-woman ratio (CWR) is a relative measure of fertility. It is defined as the ratio of the number of children of both sexes under-five years of age to the number of females of the reproductive ages 15–49 years (or sometimes 15–44 years). Because the computation of this ratio only requires census-type data on the population by age and sex, it provides an index of fertility when reliable birth statistics are not available. The CWRs calculated for the sample area are presented in Table 3.1 by residence, administrative division and religion. For the total sample, the child-woman ratio was found to be 304 per 1000 women of reproductive age in the survey year 2019 without indicating any variation since its 2018 level. In line with the other estimates of fertility by residence, the CWR for the rural area was higher (332) than for the urban area (271). The 2011 sample census estimate of CWR is 392, while the icddr,b reported a rate of 395 for 2012. In this instance too, the SVRS rate is lower than the rates reported in the two sources mentioned above, although this comparison is seriously constrained by the wide gap in reference time. The highest CWR (343) was recorded in Chattogram division while the lowest (269) in Rajshahi, there being wide variations in the ratio by divisions. Religion also appears to have bearing on the CWR with the highest rate (311) among the Muslims followed by Hindus (247). Followers of other religions had the lowest (256) CWR.

Table 3.1: Crude Birth Rate, General Fertility Rates and Child-Woman Ratios, SVRS 2019

Background Characteristics	CBR	GFR	CWR
Residence:			
Rural	20.0	76	332
Urban	15.9	55	271
Division:			
Barishal	18.4	68	313
Chattogram	20.8	75	343
Dhaka	16.3	57	301
Khulna	17.6	62	272
Mymensingh	18.7	74	337
Rajshahi	16.8	60	269
Rangpur	19.1	69	296
Sylhet	18.1	66	308
Religion:			
Muslim	18.6	67	311
Hindu	14.8	54	247
Others	13.9	48	246
Total	18.1	66	304

3.1.4 Age-Specific Fertility Rates

The frequency of child-bearing varies markedly within the reproductive age range of 15–49 (such as 15–19, 20–24 etc.). In fact, there is a characteristic age pattern to fertility which is very similar to many populations all over the world. This age pattern is best understood by computing, what we refer to as the **age-specific fertility rates**. The age-specific fertility rates are defined as the number of live births during a specified period to women of reproductive period divided by the number of women lived in that age group during the specified period. The age-specific fertility rates (ASFRs) are considered as valuable measures of fertility to assess the current age pattern of child-bearing. In the present instance, these rates have been derived from birth history data. Table 3.2 presents the age-specific fertility rates of the SVRS area by urban-rural residence for the year 2019.

According to the 2019 fertility schedule, on average, women will have a little more than 18 percent of their births before reaching age 20, 57.8 per cent during their twenties, and 21.8 per cent during their thirties. These proportions are about of the same magnitude in both rural and urban areas. The youngest (15–19 years) and the oldest (45–49 years) women of rural areas were significantly more likely to achieve higher fertility compared to their counterparts in urban areas.

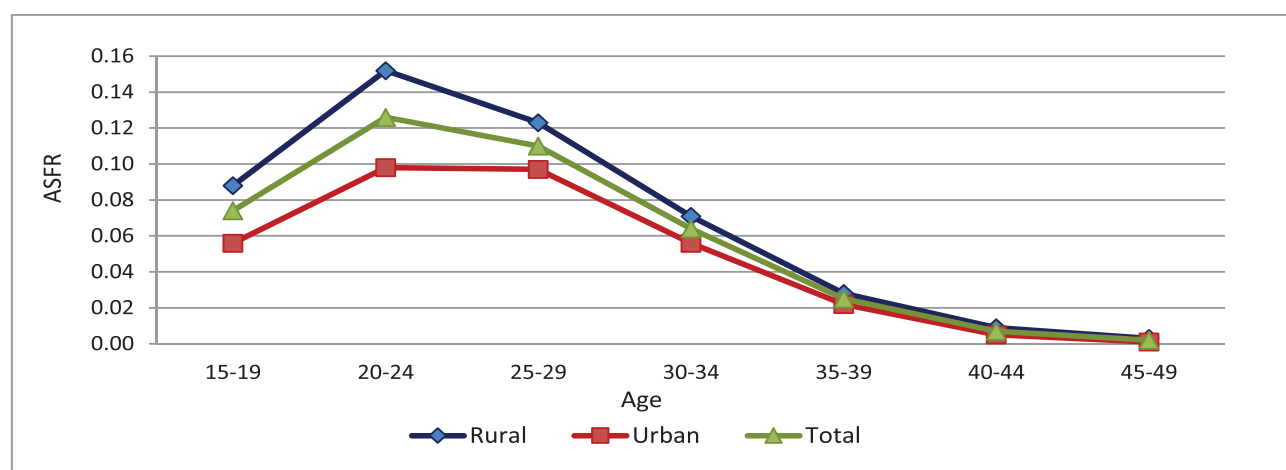
The achievement of births within the specified age range by the women in the SVRS area in 2018 is consistent with the 2014 BDHS findings (BDHS 2014 Final Report). The age-specific fertility rates are also shown for the seven administrative regions of the country in Table 3.3. The age-patterns of these rates demonstrate the same characteristic features as of the overall pattern. The age pattern of fertility discerned by the age-specific rates is compared in Figure 3.1 by residence with the overall rates.

Table 3.2: ASFRs derived from births during last 12-month period by residence, SVRS 2019

Age group	ASFR			Percent of births achieved		
	Rural	Urban	Total	Rural	Urban	Total
15-19	0.088	0.056	0.074	18.56	16.73	18.11
20-24	0.152	0.098	0.126	32.05	29.27	30.84
25-29	0.123	0.097	0.110	25.94	28.97	26.92
30-34	0.071	0.056	0.064	14.97	16.73	15.70
35-39	0.028	0.022	0.025	5.90	6.57	6.12
40-44	0.009	0.005	0.007	1.90	1.49	1.71
45-49	0.003	0.001	0.002	0.63	0.30	0.50
Total	2.371*	1.674*	2.043*	100.0	100.0	100.0

* Total fertility rate

Figure 3.1: Age-specific fertility rates by urban rural residence, SVRS 2019



As the graphs of the ASFRs show, the women in the sample population have an early child-bearing pattern. The age pattern of fertility discerned by the 2019 birth statistics is being observed since long in the history of SVRS. It is worth to note that fertility is consistently higher in the age group 20–24 irrespective of urban-rural residence. This is almost a typical pattern of all fertility schedules among the women in Bangladesh including the recent BDHS, BMMHC survey, and icddr,b surveillance system.

Compared to the nation as a whole, early child bearing is more prevalent among the women in Rajshahi division, where nearly 24 percent of all births occur before they reach 20. This is followed by Rangpur division accounting for about 22 percent births in this age group. This is to the extent of 18 percent for the overall sample (see Table 3.2). Women in the Sylhet division achieved the lowest (9%) fertility in this age range before reaching the age 20. Table 3.3 presents this feature.

Table 3.3: Age-specific fertility rates by administrative division, SVRS 2019

Age group	Division								Total
	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	
15-19	0.067	0.079	0.063	0.094	0.061	0.095	0.097	0.036	0.074
20-24	0.134	0.150	0.109	0.120	0.137	0.109	0.129	0.128	0.126
25-29	0.117	0.116	0.096	0.113	0.126	0.098	0.110	0.122	0.110

Age group	Division								
	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	Total
30-34	0.074	0.068	0.054	0.053	0.076	0.057	0.071	0.069	0.064
35-39	0.025	0.027	0.023	0.018	0.027	0.025	0.027	0.031	0.025
40-44	0.006	0.010	0.006	0.005	0.017	0.005	0.006	0.009	0.007
45-49	0.003	0.001	0.003	0.002	0.003	0.002	0.002	0.003	0.002
TFR	2.135	2.253	1.771	2.027	2.238	1.954	2.200	1.998	2.043

3.1.5 Total Fertility Rate

Total fertility rate (TFR) is a summary measure of fertility obtained by summing the age specific fertility rates for each single year or each age group (usually of five year age groups) of women in the child-bearing age. It states the number of children a woman would bear throughout her lifetime at the rates specified by the schedule of age specific fertility rates for a particular year. The TFRs derived from the 2019 SVRS data are presented in Table 3.4 by urban-rural residence, administrative division and religion. The overall TFR for the SVRS area was computed to be 2.04 per woman for 2019, showing a reduction of one birth per 100 women in a span of one year. The corresponding estimate for the BDHS of both 2011 and 2014 is 2.30. MICS recorded a rate of 2.3 in 2019 as against a rate of 2.7 in icddr,b surveillance area in Matlab in 2016. As expected, the TFR for rural women in SVRS is higher (2.37) than among their urban counterparts (1.67) demonstrating a minor change over the last two years. The result is in slight variation with the BDHS 2014 estimate of 2014 (2.4). Unlike the previous year's SVRS, Chattogram division recorded the highest TFR (2.25) followed by Mymensingh (2.24), the lowest being recorded in Dhaka division (1.77). The estimate of TFR by religion shows that Muslim women are more fertile than their counterparts of other religions with a TFR of 2.08 per woman demonstrating no change since its last survey in 2018. The current level of TFR by districts is shown in Map 3.3 at the end of the chapter.

3.1.6 Measures of Reproduction

Gross Reproduction Rate (GRR)

While the rates discussed so far involve the births of both sexes to females, there are some conventional rates that measure the replacement of the female population through female births only. Two such measures are:

- (a) Gross reproduction rate (GRR), and
- (b) Net reproduction rate (NRR).

The 2019 SVRS collected data that permitted the computation of gross reproduction rate (GRR) and net reproduction rate (NRR). The gross reproduction rate (GRR) is similar to the total fertility rate except that it is the sum of age-specific fertility rates that include only female live births in the numerator. It states the number of girls a woman would bear throughout her lifetime at the rates specified by the schedule of age specific fertility rates computed from the female births only for a particular year. The gross reproduction rates computed from the data are also presented in Table 3.4 by residence, division and religion. The overall GRR for the study area is 1.0. The same GRR was reported to be achieved by the women of the survey area in 2018 also. As expected, the GRR is higher among the rural women (1.16) than among the urban women (0.83), the highest being reported in Mymensingh division (1.11) and the lowest in Dhaka division (0.87), the highest among the Muslim women (1.02) and least among the Hindu women (0.85). No discernible change in TFR in 2019 has been observed since 2017.

Net Reproduction Rate (NRR):

Another measure of reproduction is the net reproduction rate (NRR). Essentially, the net reproduction rate (NRR) is a GRR adjusted for mortality. The NRR tells us: how many daughters on the average, will be born to a hypothetical cohort of newborn girl babies during their child-bearing period, if we take into account the mortality of the girls from the time of their birth? The net reproduction rate is a measure of the extent to which a cohort of newly born girls will replace themselves under the given schedules of age-specific fertility and mortality. The current year estimate of NRR is 1.0 as compared to an estimate of 0.99 in 2018. The NRR in urban area has been estimated to be 0.82 in 2019, maintaining the same level in 2018. The estimates of NRR for the last five years 2015–2019 tend to indicate that Bangladesh has reached to the replacement level of fertility since long. The implication of this trends in NRR tends to indicate that population of Bangladesh will cease to increase in near future resulting in zero rate of population growth.

3.1.7 Marital Fertility

A major criticism of the basic fertility measures discussed so far is that they are not truly based on the population exposed to the risk of child-bearing. They include women who have never married or who are widowed or divorced; such women are not exposed to legitimate births or socially normal child-bearing. A refinement that is proposed, is therefore, is to compute nuptial fertility rates, in which the numerators refer to legitimate births and the denominators to currently married women. These rates are called marital fertility or nuptial fertility rates. The first of this kind of rate is the general marital fertility rate (GMFR) defined as a ratio of the number of live births among the married women to the number of married women. The age specific fertility rates for married women will yield age-specific marital fertility rates. Where all births are legitimate, the marital fertility rates are simply ordinary or regular fertility rates weighted by the proportion of women who are married. When these age-specific rates are summed over all ages, the resulting estimate is known as the total marital fertility rate. The general marital fertility rates (GMFR) and total marital fertility rates (TMFR) have been provided in the last two rows of Table 3.4. These rates have been compared with GFR and TFR in the table under reference.

Table 3.4: TFR and GRR by residence, division and religion, SVRS 2019

Background Characteristics	GFR	GMFR	TFR	GRR	TMFR
Residence:					
Rural	76	90	2.37	1.16	3.67
Urban	55	69	1.67	0.83	3.10
Division:					
Barishal	68	81	2.13	1.08	3.27
Chattogram	75	94	2.25	1.08	4.10
Dhaka	57	70	1.77	0.87	2.76
Khulna	62	73	2.03	1.05	3.28
Mymensingh	74	93	2.24	1.11	3.52
Rajshahi	60	86	1.95	0.93	3.04
Rangpur	69	70	2.20	1.08	3.62
Sylhet	66	83	2.00	0.98	4.69
Religion:					
Muslim	67	82	2.08	1.02	3.41
Hindu	54	63	1.76	0.85	3.78
Others	48	70	1.68	0.84	4.40
Total	66	80	2.04	1.0	3.43

The age specific marital fertility rates (ASMFR) have been shown in Table 3.5 by some background characteristics of the population surveyed.

As we note in table under reference, the overall total marital fertility rate is 3.43, which is logically greater than the total fertility rate (2.04). It is higher (3.67) in rural area than in urban area (3.10). It is the highest (4.69) in Sylhet division and the lowest (2.76) in Dhaka division. The lowest marital fertility (3.41) is prevalent among the Muslim women (3.43), while the highest (4.40) is prevalent among the followers of other religions.

Table 3.5: Age-specific marital fertility rates, SVRS 2019

Age Group	Residence			Division							Religion			
	Rural	Urban	Total	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	Muslim	Hindu	Others
15-19	0.31	0.27	0.30	0.25	0.38	0.22	0.30	0.27	0.27	0.33	0.44	0.29	0.38	0.50
20-24	0.18	0.15	0.17	0.17	0.20	0.14	0.15	0.17	0.14	0.17	0.23	0.17	0.19	0.15
25-29	0.13	0.11	0.12	0.13	0.13	0.10	0.12	0.13	0.11	0.12	0.15	0.12	0.11	0.13
30-34	0.07	0.06	0.07	0.08	0.07	0.06	0.05	0.08	0.06	0.07	0.07	0.07	0.06	0.07
35-39	0.03	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.02	0.03
40-44	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.01	0.00	0.00
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
TMFR	3.67	3.10	3.43	3.27	4.10	2.76	3.28	3.52	3.04	3.62	4.69	3.41	3.78	4.40
GMFR	90	69	80	81	94	70	73	93	86	70	83	82	68	70

3.1.8: Delivery related indicators in the SVRS area, 2019

A few more indicators related to the management of the newborns and the adolescent mothers are provided in Table from 3.6 through Table 3.10 in this section. These indices are closely related to the recommended SDG indicators.

Place of birth

Table 3.6 presents the place of births by administrative divisions of Bangladesh. Of the total births 23090, closed to 35 percent took place at home within the sample area. This was to the extent of 37 percent in 2018. About 7 percent of the births in 2019 were found to take place outside the sample area. It could not however be ascertained whether these births were attended by traditional birth attendants or trained attendants or both. A little more than 28 percent of the deliveries took place in the hospitals and about 25 percent in clinics. In 2018, these proportions were of the same magnitude in 2018 with a somewhat lower proportion (26.8%) for clinics. Sylhet division appears to have the highest proportion (49.9%) of births delivered within the sample area followed by Mymensingh division (48.2%). Mothers of Dhaka division were more in proportion (38.8%) to receive delivery facilities in the hospital. A large proportion of births ranging from as low as 7.4 percent in Chattogram division to as high as 45.2 percent in Khulna division took place in private clinics. The use of maternity clinics remains at 2.4 percent in delivery of births.

Birth attendant

Table 3.7 shows the distribution of birth attendants by their level of expertise vis-à-vis efficiency, labeled skilled and unskilled. The table under reference shows that about 49 percent of the deliveries were attended by doctors, while about 35 percent births were attended by other skilled birth attendants (nurse, midwife, medical assistants, paramedics, etc.) and the remaining (17%) by unskilled attendants. Skilled attendants in urban area (90.9%) surpassed their rural counterparts (78.6%) by about 12.3 percentage points. Unskilled attendants in rural area are about 2.4 times as likely as the urban attendants in urban area to attend a delivery.

Births in adolescence

Distribution of births to adolescents in urban and rural areas is shown in Table 3.8. 2019 SVRS data reveal that adolescent women in the age range 15–19 have the highest fertility rate: 73.5 per 1000 adolescents as opposed to a rate of 83 found in MICS–2019. Of the total births, 17.5 percent occur to this group of women. A significant number of births also occur to the women under age 15 resulting in a birth rate of 0.5 per 1000 women. Beyond adolescence (i.e. at age 20 and above), the rate is lower with 47.6 per 1000 women than those of the adolescents' rate mentioned above. Rangpur followed by Rajshahi division have the highest fertility rates among the adolescents: 95.7 versus 93.3. The lowest rate (36.1) is reported to be prevailing among the adolescents of Sylhet division being consistent with the 2018 survey findings with a rate of 35.4. The detailed rates have been shown in Table 3.9 by division.

Still birth

SVRS follows the WHO recommended definition of still birth for international comparison. As per the WHO definition, a birth is considered to be still birth if a birth baby born with no signs of life at or after 28 weeks' gestation.

The overall still birth rate in the study area in 2019 round of survey is 8.4 per 1000 live births showing a decline of over 15 percent in a span of one year. As shown in Table 3.10, still births occur with the highest frequency (10.4 per 1000 live births) in Rajshahi division followed by Mymensingh division (9.2 per 1000 live births). The prevalence of still births is the lowest (5.2 per 1000 live births) in Khulna division.

In 2019, the women in rural area are 1.3 times as likely as the women in urban are to have still births: 9.2 versus 7.0. These findings are in sharp contrast with the 2018 survey findings when the urban women were more likely to have still birth.

Table 3.6: Place of birth by division, SVRS 2019

Place of birth	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	Total
Within sample area at sample household	40.1	45.9	25.6	17.0	48.2	21.1	33.6	49.9	34.7
Within sample area at other household	2.4	3.2	3.5	2.2	4.8	4.0	2.2	2.8	3.1
Outside sample area	5.6	4.2	8.7	6.9	11.8	12.6	4.7	3.6	6.8
Hospital	18.4	37.1	38.8	27.0	16.3	26.8	18.2	29.4	28.4
Clinics	30.9	7.4	21.2	45.2	16.6	33.4	39.2	12.3	24.9
Maternity clinic	2.4	1.9	1.4	1.0	2.3	2.0	1.9	1.6	1.8
Others	0.2	0.3	0.8	0.7	0.0	0.1	0.3	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3.7: Birth attendant by residence, SVRS 2019

Attendant	Rural	Urban	Total
Doctors	41.2	60.8	48.8
Nurse / Midwife	14.0	16.1	14.9
Trained Midwife / Mid	9.9	6.7	8.7
Paramedic / Family Welfare	1.9	1.6	1.8
Medical assistant (Ma)	10.8	5.3	8.6
Health assistant (ha)	0.8	0.4	0.7
Traditional midwife /	16.4	6.9	12.7
Blind doctor / quack	0.9	0.2	0.7
Neighbors / Relatives	3.9	2.0	3.2
Others	0.0	0.0	0.0
Total	100.0	100.0	100.0

Table 3.8: Births per 1000 adolescent women by residence and current age, SVRS 2019

Age	Rural	Urban	Total	Percent of births
10-14	0.8	0.1	0.5	0.16
15-19	86.9	56.2	73.5	17.50
20+	52.6	41.6	47.6	82.4
Total	49.1	38.0	44.1	100.0

Table 3.9: Births per 1000 to adolescent women by division and current age, SVRS 2019

Age	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	Total
10-14	0.4	0.5	0.4	0.1	0.2	1.6	0.8	0.0	0.5
15-19	66.3	78.5	62.5	94.1	60.9	93.3	95.7	36.1	73.5
20+	49.7	56.2	43.5	41.5	51.6	39.3	47.4	54.7	47.6
Total	45.0	50.7	39.9	41.8	44.8	40.1	46.4	44.2	44.1

Table 3.10: Still birth rate (per 1000 live births) by residence and division, SVRS 2019

Indicator	Residence			Division							
	Total	Rural	Urban	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
Still birth rate	8.4	9.2	7.0	8.7	8.6	9	5.2	9.2	10.4	8.1	7.8

3.2 Trends in Fertility and Reproduction: 1982-2019

The trends in fertility over time have been examined in this section by comparing the CBR, GFR, TFR, GRR and NRR for the overall sample since 1982. Table 3.11 presents these estimates. The crude birth rate remained in the neighborhood of 35 till 1986, which thereafter began to decline and reached to 19 in 2001, implying almost a 50 per cent fall in about 15 years. The rate then recorded a slow rise for a short period of about 2 to 3 years and then started again to decline reaching to its lowest level (18.2) as recorded in the last SVRS undertaken in 2019. The GFR also displays the same characteristic features. Beginning with a value of as high as 164 in 1982, the rate reached to 66 in 2019 implying about 60 percent decline in 37 years. The TFR declined sharply from 5.21 births per woman in 1982 to 2.04 in 2019. As the data show, the TFR has possibly reached a plateau in recent time with a value in the neighborhood of 2.1. The GRR and NRR demonstrate the same feature of trends as discerned by the remaining measures of fertility. Available measures of fertility and reproduction tend to suggest that Bangladesh has possibly reached nearly to scenario of replacement level of fertility.

A diagrammatic view of each of the rates is shown in Figure 3.2 through Figure 3.6 to understand the fertility trends more vividly over time.

Table 3.11 Trends in fertility as observed in the SVRS area, 1982–2019

Year	Fertility measures				
	CBR	GFR	TFR	GRR	NRR
1982	34.8	164	5.21	2.54	1.98
1983	35.0	162	5.07	2.45	1.92
1984	34.8	173	4.83	2.34	1.81
1985	34.6	156	4.71	2.20	1.79
1986	34.4	152	4.70	2.29	1.80
1987	33.3	150	4.42	2.14	1.69
1988	33.2	145	4.45	2.21	1.74
1989	33.0	144	4.35	2.10	1.72
1990	32.8	144	4.33	2.10	1.71
1991	31.6	145	4.24	2.06	1.70

Year	Fertility measures				
	CBR	GFR	TFR	GRR	NRR
1992	30.8	143	4.18	2.03	1.68
1993	28.8	138	3.84	2.01	1.57
1994	27.0	137	3.58	1.81	1.48
1995	26.5	130	3.45	1.68	1.48
1996	25.6	115	3.41	1.66	1.46
1997	21.0	110	3.10	1.52	1.37
1998	19.9	102	2.98	1.45	1.31
1999	19.2	84	2.64	1.29	1.25
2000	19.0	81	2.59	1.27	1.24
2001	18.9	80	2.56	1.26	1.23
2002	20.1	86	2.55	1.26	1.22
2003	20.9	84	2.57	1.24	1.20
2004	20.8	83	2.51	1.21	1.18
2005	20.7	82	2.46	1.19	1.17
2006	20.6	80	2.41	1.17	1.15
2007	20.9	79	2.39	1.17	1.14
2008	20.5	77	2.30	1.11	1.09
2009	19.4	72	2.15	1.07	1.06
2010	19.2	71	2.12	1.05	1.04
2011	19.2	70	2.11	1.04	1.03
2012	18.9	70	2.12	1.05	1.04
2013	19.0	71	2.11	1.02	1.01
2014	18.9	71	2.11	1.05	1.04
2015	18.8	69	2.10	1.05	1.00
2016	18.7	69	2.10	1.02	1.00
2017	18.5	68	2.05	1.02	1.00
2018	18.3	67	2.05	1.00	0.99
2019	18.1	66	2.04	1.00	1.00

Birth data are also available for SVRS 2017 zila-wise, from which CBR, GFR and TFR have been computed. Mapping of such rates has been shown separately in Maps 3.1, 3.2 and 3.3 respectively.

Figure 3.2 Crude birth rate (CBR) per 1000 population by locality, SVRS 2002-2019

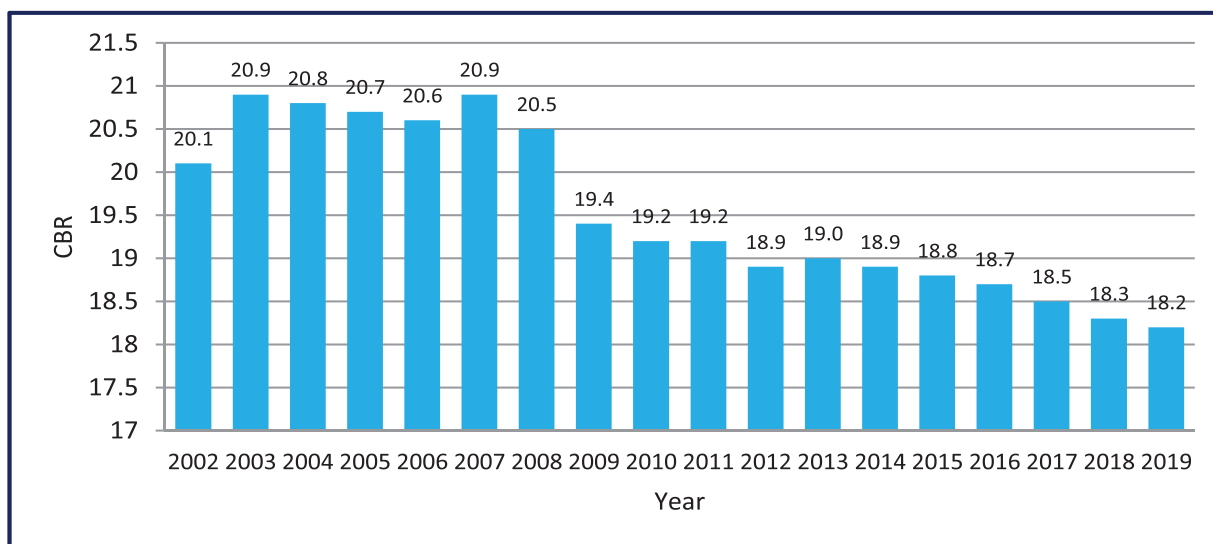


Figure 3.3 Trends in GFR, SVRS 2002–2019

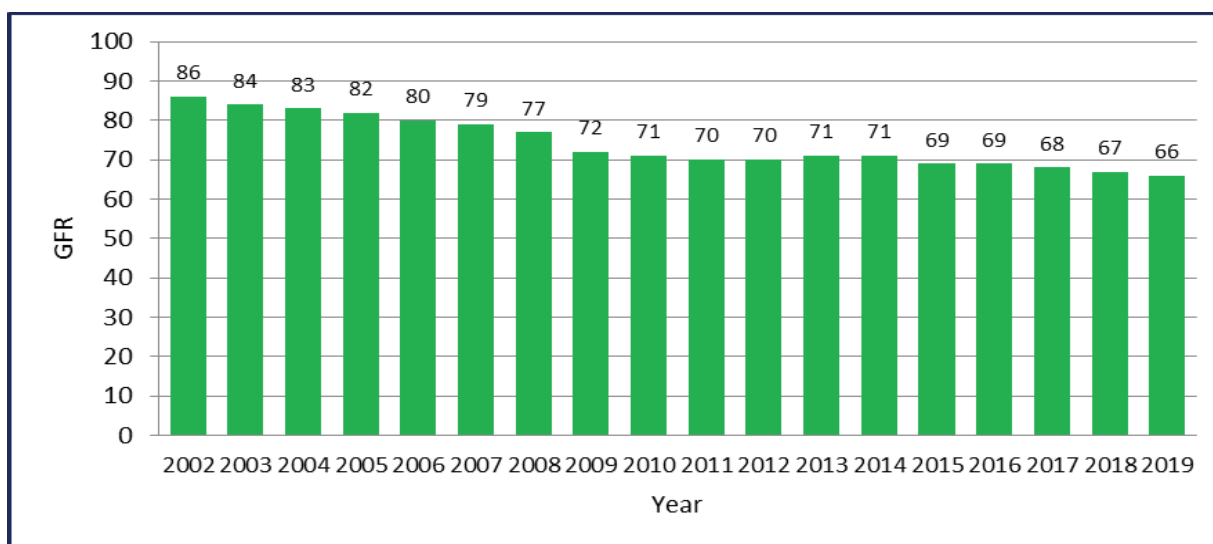


Figure 3.4 Trends in TFR, SVRS 2002–2019

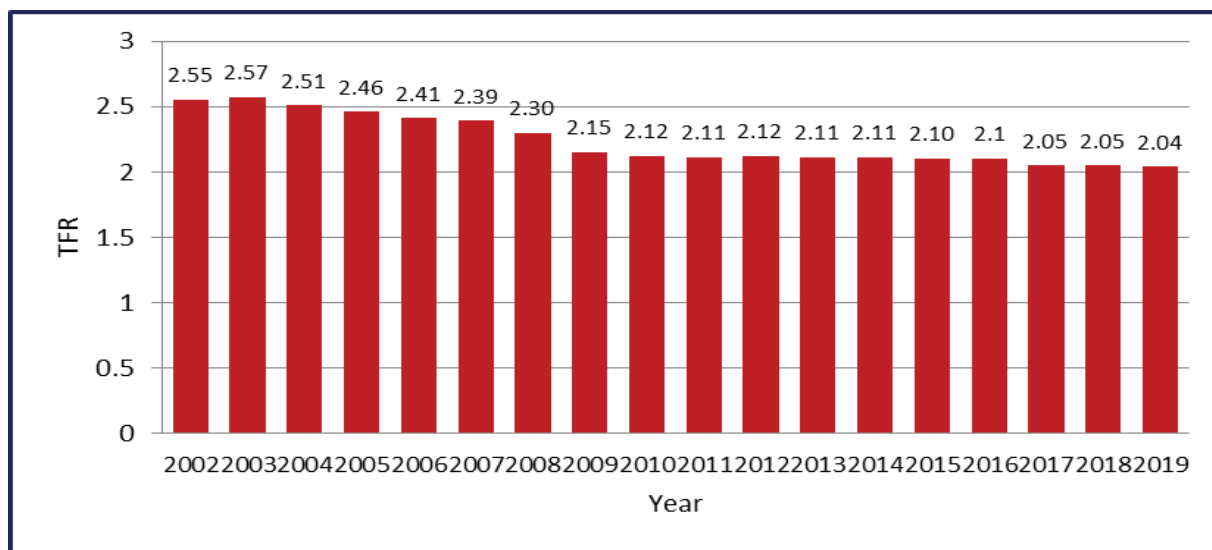


Figure 3.5 Trends in GRR, SVRS 2002–2019

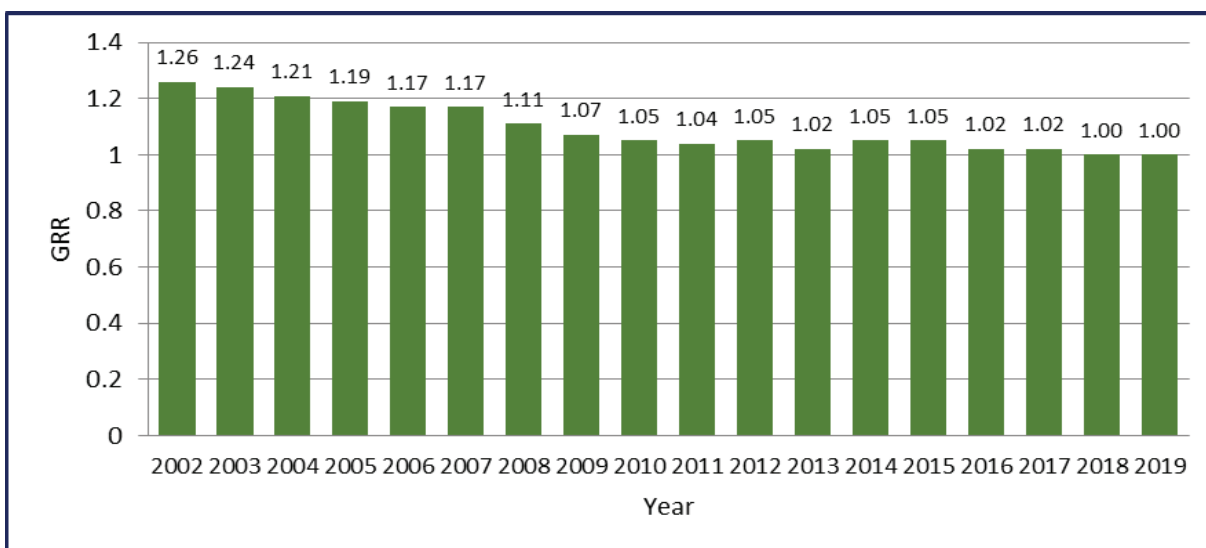
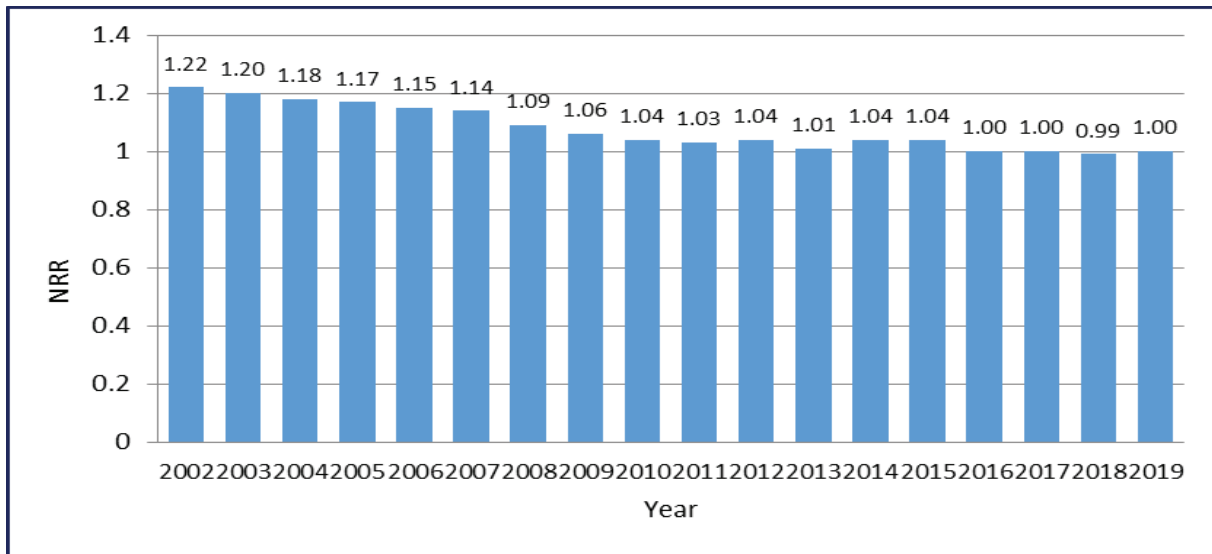
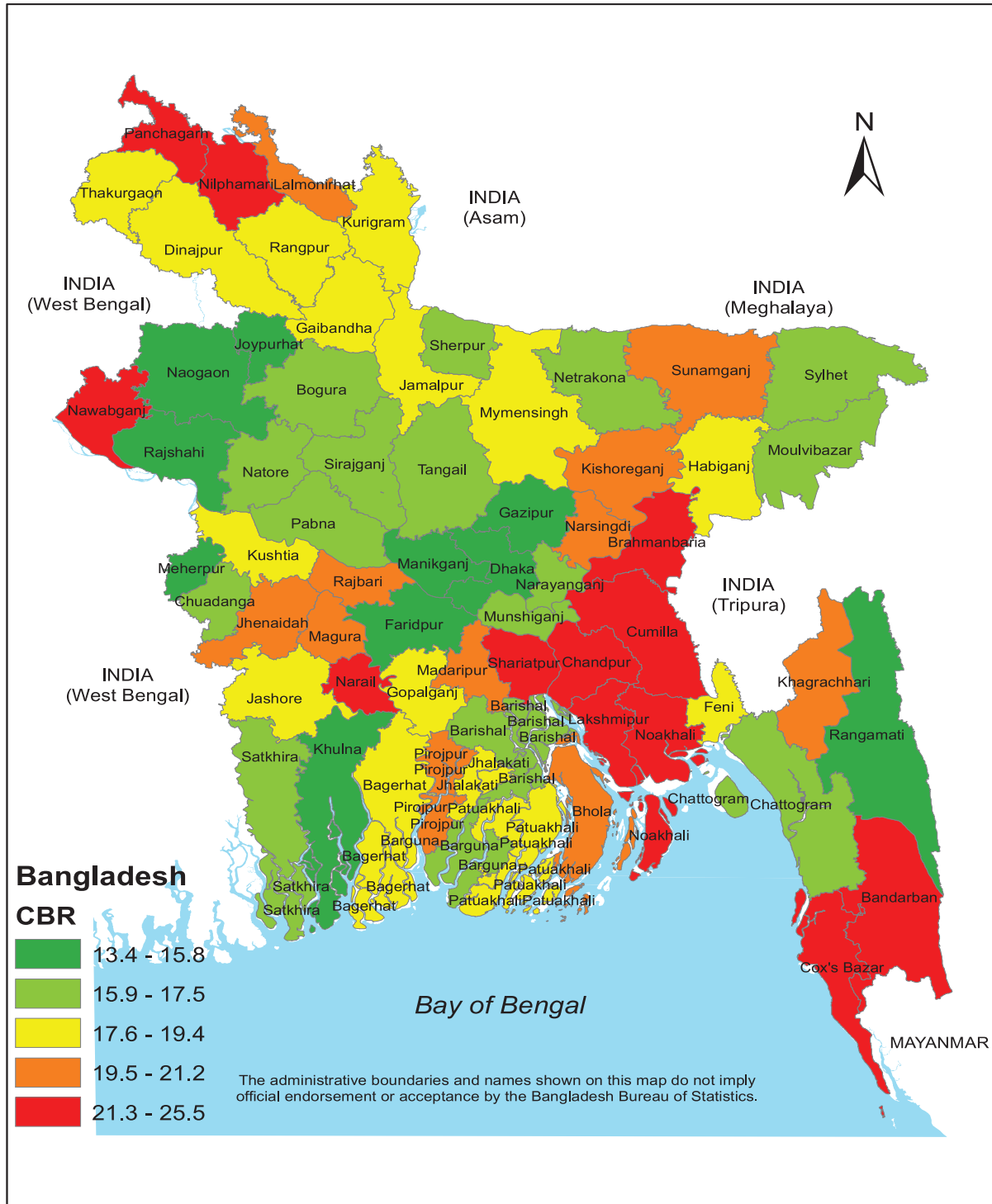


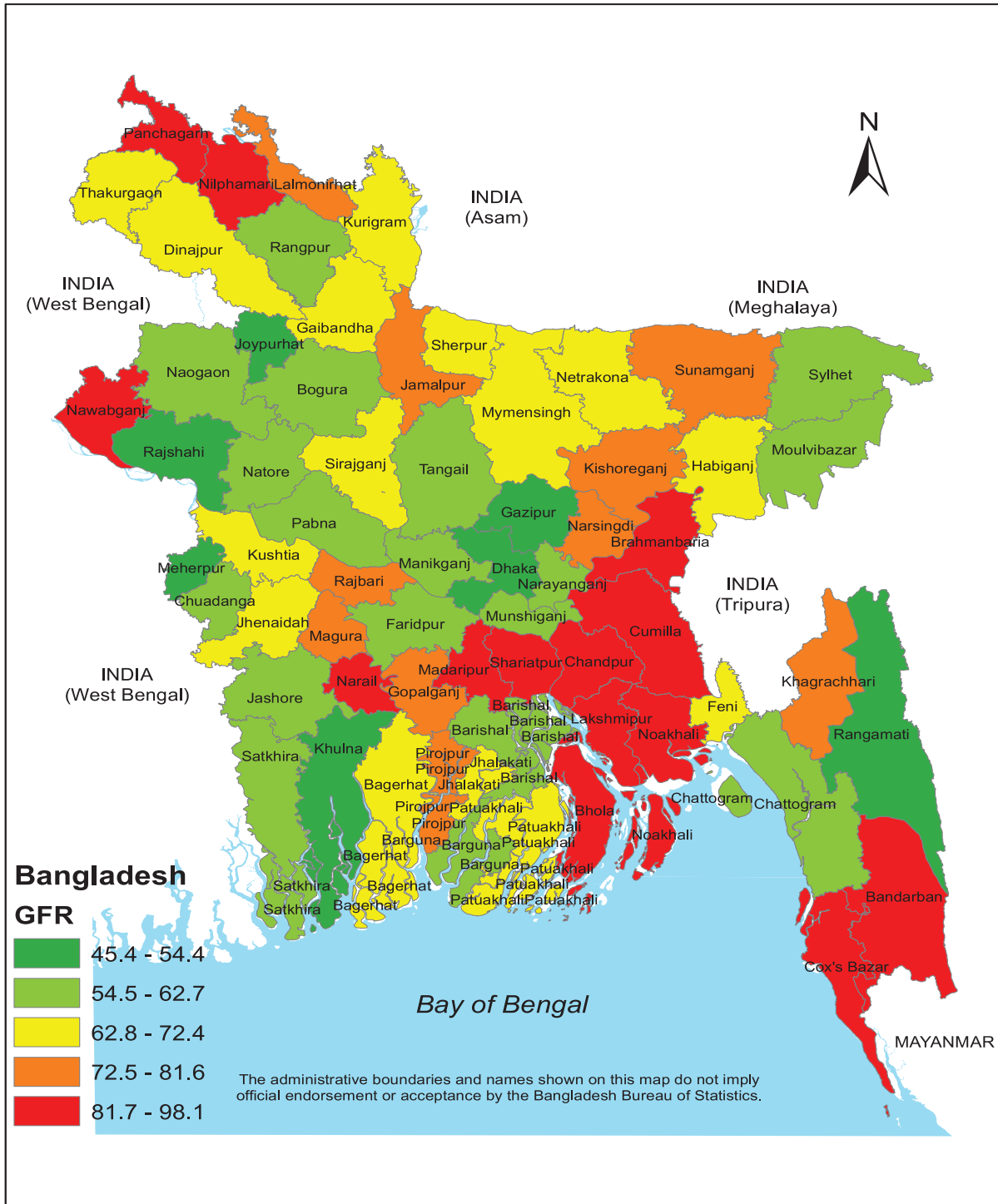
Figure 3.6 Trends in NRR, SVRS 2002–2019



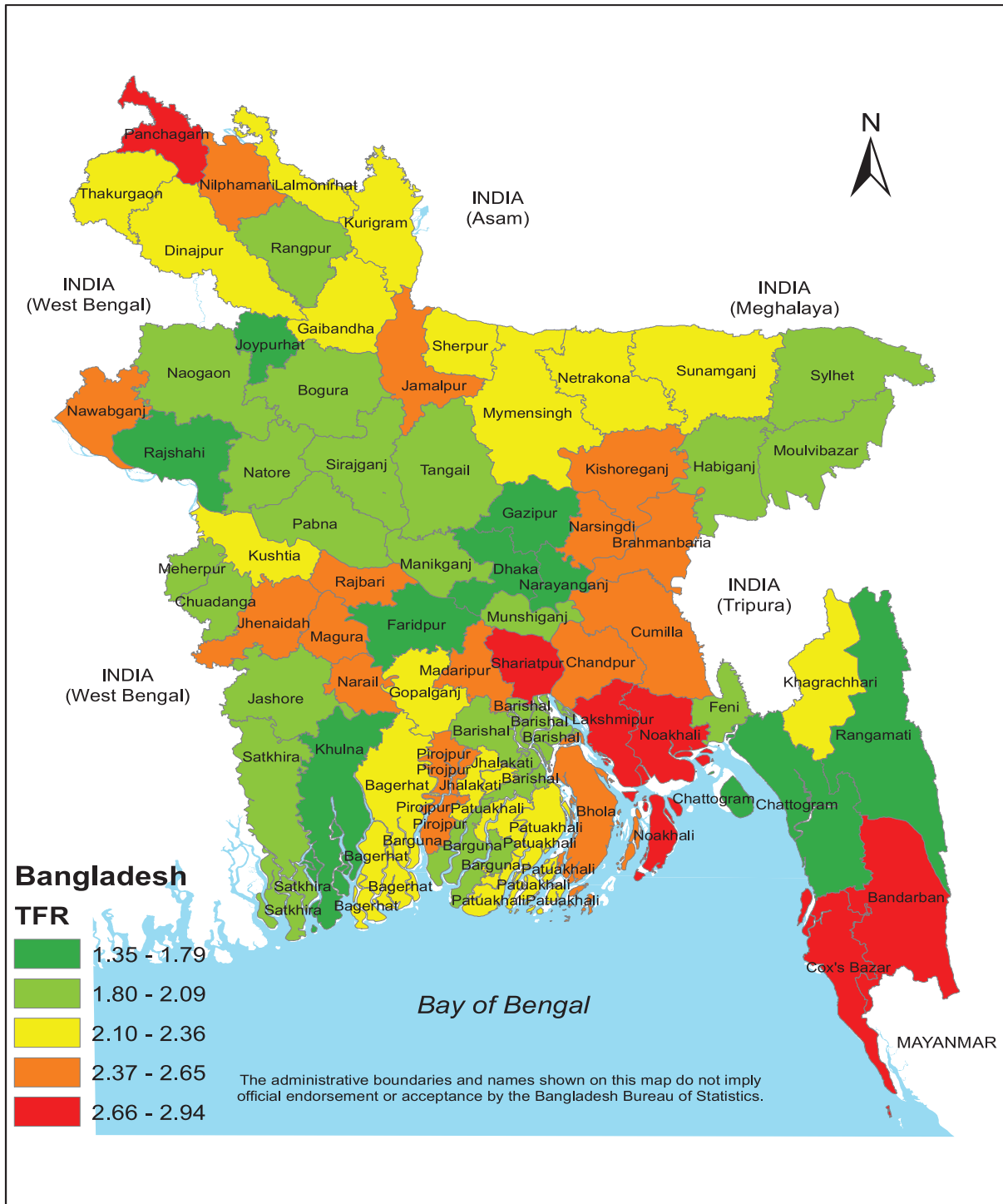
Map 3.1: Crude Birth Rate (CBR) by Zila, SVRS 2019



Map 3.2: General Fertility Rate (GFR) by Zila, SVRS 2019



Map 3.3: Total Fertility Rate (TFR) by Zila, SVRS 2019



CHAPTER IV

Mortality

4.1 Measures of Mortality

Mortality refers to the state of being mortal (destined to die). In medicine, a term also used for death rate, or the number of deaths in a certain group of people in a certain period of time. Mortality rates and ratios are important demographic indicators reflecting the health situation of the population of a country. Levels, patterns and trends in mortality indicate the mortality scenarios, characteristic features and extent of variation over time. Therefore, evaluation of the patterns and determination of the levels and trends in mortality are needed for the formulation of plans and implementation of programs especially in health and poverty alleviation related sectors. Based on the death statistics registered in the SVRS area, in 2017, this chapter is designed to provide the following measures of mortality:

- (a) Crude Death Rate;
- (b) Age-Specific Death Rate;
- (c) Childhood Mortality Rate;
- (d) Maternal Mortality Ratio and
- (e) Cause-Specific Death Rate.

4.1.1 Crude Death Rate

The simplest measure of mortality is the Crude Death Rate (CDR), which is defined as the ratio of the number of deaths in an area during a specified period of time to the mid-year population of that area. The Crude Death Rate (CDR) for the sample area was computed to be 4.9 per 1000 population in 2019, as opposed to a slightly higher rate of 5.0 in the year prior to this year. In rural areas, the CDR was 5.4 as against a rate of 4.4 in the urban area. The rates were of the same magnitude in 2018 also. The rate varied by divisions with the highest in Barishal division at 5.4 followed by Mymensingh with a rate of 5.2 and the lowest in Dhaka division at 4.4. In contrast to the findings of 2018, the rate is the lowest (4.9) among the Muslims, and 5.5 among the Hindus in 2019. The followers of other religions experienced the highest rate: 5.8. The 2018 survey findings recorded these rates in the order 5.0, 4.3 and 4.1 respectively, a complete differential scenario in crude death rates by religion. The results are summarized in Table 4.1.

Table 4.1: Crude death rate per 1000 population by background characteristics, SVRS 2019

Background Characteristics	No of deaths	Population	Crude death rate
Residence:			
Rural	3,766	7,04,085	5.4
Urban	2,509	5,65,656	4.4
Division:			
Barishal	698	1,32,142	5.3
Chattogram	1,077	2,12,395	5.1
Dhaka	983	2,23,791	4.4
Khulna	760	1,52,494	5.0
Mymensingh	346	66,418	5.2
Rajshahi	863	1,66,311	5.2
Rangpur	798	1,62,014	4.9
Sylhet	750	1,54,176	4.9
Religion:			
Muslim	5,458	11,22,709	4.9
Hindu	741	1,33,935	5.5
Others	76	13,097	5.8
Total	6,275	12,69,741	4.9

The crude death rates by districts have been shown in Map 4.1 at the end of this chapter.

4.1.2 Age-Specific Death Rates

The age-specific death rate for persons of a given age x (or for a given age interval) is the number of persons who died at age x in a specified year divided by the population age x in the middle of the year. The rate is usually expressed per 1000 population per year and can be calculated for males and females separately. The rates calculated for the sample area by age and sex based on the SVRS 2019 death statistics are shown in Table 4.2. The usual pattern of mortality by age is reflected in the rates presented in the table under reference: it is the highest during infancy, thereafter it tends to decrease as the risk of dying decreases as age advances and this pattern continues roughly till age 25-29 when it shows an upward trend due to higher risk of mortality at advanced ages. It is particularly true for those who are over age 50. A person aged 80+ is more than two times as likely as a person aged 75–79 years to die.

The age patterns of mortality calculated for the rural, urban area and for the overall sample are compared in Figures 4.1 & 4.2.

Table 4.2: Age specific death rates (ASDR) per 1000 population by residence, SVRS 2019

Age group	Rural			Urban			Total		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
<1	27.2	25.4	26.3	23.7	24.1	23.9	25.8	24.9	25.4
1-4	2.3	1.8	2.1	1.4	1.0	1.2	1.9	1.5	1.7
5-9	0.8	0.5	0.7	0.7	0.4	0.6	0.8	0.5	0.6
10-14	0.5	0.6	0.6	0.5	0.3	0.4	0.5	0.5	0.5
15-19	1.4	1.6	1.5	1.2	1.5	1.3	1.3	1.5	1.4
20-24	1.2	0.9	1.1	0.8	0.7	0.8	1.0	0.8	0.9
25-29	1.4	0.9	1.1	1.2	0.5	0.8	1.3	0.7	1.0
30-34	1.5	0.9	1.2	1.2	0.5	0.8	1.4	0.7	1.0
35-39	1.7	1.0	1.3	1.5	1.0	1.2	1.6	1.0	1.3
40-44	2.7	1.5	2.1	2.5	2.0	2.2	2.6	1.7	2.2
45-49	4.6	3.5	4.1	3.7	3.2	3.5	4.2	3.3	3.8
50-54	8.2	4.4	6.3	7.2	6.2	6.7	7.8	5.2	6.5
55-59	11.5	9.7	10.6	10.7	9.2	10.0	11.1	9.5	10.3
60-64	18.0	9.0	13.7	17.6	11.2	14.8	17.8	9.9	14.2
65-69	23.0	18.8	21.0	24.7	19.4	22.3	23.7	19.0	21.5
70-74	48.2	29.5	39.5	43.0	33.3	38.6	46.1	31.0	39.1
75-79	49.0	42.9	46.3	61.2	51.3	56.4	53.3	46.1	50.0
80+	122.6	102.4	112.0	119.9	102.3	110.6	121.6	102.4	111.5
CDR	6.2	4.5	5.4	5.1	3.8	4.4	5.7	4.2	4.9

The overall death rate under one year of age is 25.4 per 1000 population, showing a more than 6 percent decline in death rate in this age group. Rural infants have nearly 10 percent higher risk of dying than the infants in urban areas. The overall pattern of the age-specific rates is also reflected in rates presented in the same table by urban-rural residence and by sex. In general, males are more susceptible to death than their female counterparts: 25.8 versus 24.9.

Figure 4.1: Age specific death rates (ASDR) by residence, SVRS 2019

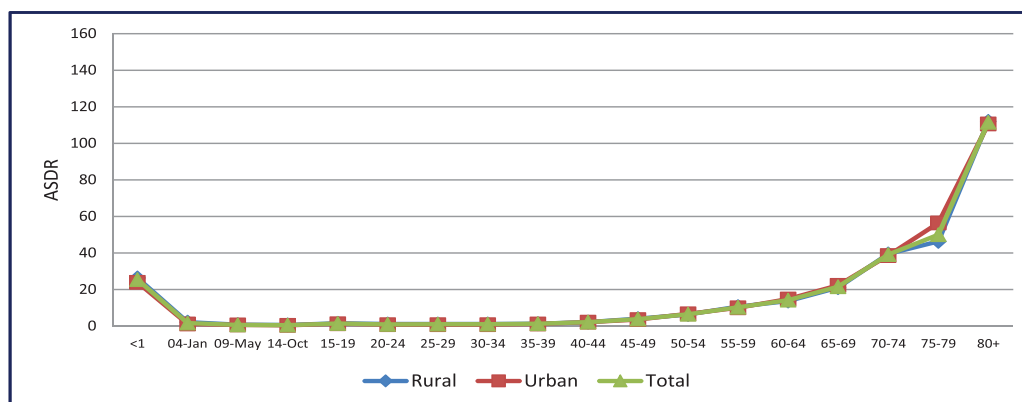
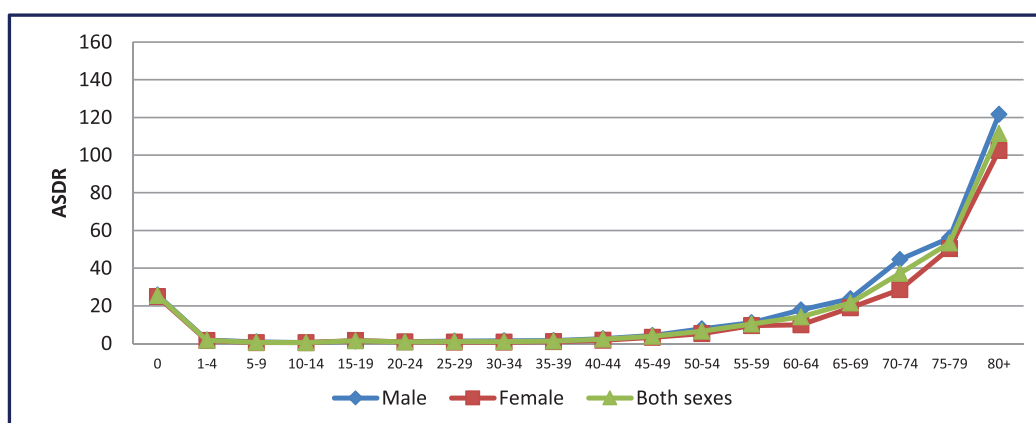


Figure 4.2: Age specific death rates (ASDR) by sex, SVRS 2019



The rates by age groups are computed also for the eight administrative divisions of the country. The resulting rates are shown in Table 4.3. As the tabular values show, Barishal division experienced the highest death rate (29.7 per thousand) amongst those who are under age 1 followed by Rangpur (28.3 per thousand), and the lowest (21.9 per thousand) being reported in Dhaka division. In contrast, this rate was highest (35.6) in Chattogram division and the lowest (17.7) in Khulna division in 2018.

The old -age mortality (at age 80+) is the highest (136.9) in Rangpur division followed by Chattogram division (119.8). It is the lowest (86.0) in Mymensingh division. While the highest (126.6) and the lowest (84.0) rates in this age range were prevalent in Rajshahi and Dhaka division in 2018.

The age-specific death rates appear to rise sharply after the age of 50 years. This pattern is prevalent for all the divisions without any exception.

Table 4.3: Age-specific death rate (ASDR) per 1000 population by division, SVRS 2019

Age	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
<1	29.7	24.3	21.9	22.2	24.8	26.3	28.3	27.8
1-4	2.0	2.7	1.2	1.1	2.1	1.4	1.0	2.0
5-9	0.7	0.4	0.6	0.6	0.8	0.9	0.5	0.8
10-14	0.1	0.8	0.6	0.7	0.6	0.5	0.2	0.3
15-19	1.3	1.4	1.3	1.2	1.7	1.7	0.9	1.8
20-24	0.8	0.7	0.9	1.3	0.5	0.8	0.9	1.4

Age	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet
25-29	0.9	1.2	0.7	1.0	1.4	1.3	0.5	1.0
30-34	1.1	1.0	0.6	0.9	1.2	1.2	0.9	1.6
35-39	1.2	1.4	1.3	0.7	0.9	2.1	1.4	1.0
40-44	2.6	1.9	1.5	2.0	2.7	2.3	2.2	2.8
45-49	2.7	4.8	2.7	3.2	4.7	5.1	3.4	4.4
50-54	6.9	8.3	6.5	6.2	4.2	5.9	5.7	7.0
55-59	11.7	10.7	8.8	11.8	12.4	8.7	9.8	10.8
60-64	14.7	14.9	13.6	13.2	16.1	12.4	14.0	16.4
65-69	20.7	22.2	23.0	19.8	16.7	21.0	18.5	28.5
70-74	29.6	39.1	32.3	33.0	43.3	38.2	44.8	42.5
75-79	53.3	59.3	59.6	48.0	45.2	47.2	56.8	51.1
80+	115.4	119.8	101.7	103.6	86.0	119.4	136.9	100.2
CDR	5.3	5.1	4.4	5.0	5.1	5.2	4.9	4.9

4.2 Early Childhood Mortality

In the human population, newborns and the elderly experience the highest mortality compared to the population of middle-aged groups. Mortality among infants and children is dependent upon, among others, the medical and health care facilities provided to the mothers and their children in the community. Infant and child mortality rates are the basic indicators of a country's socio-economic situation and quality of life. They are used to monitor and evaluate population and health programs and policies. The rates of infant and childhood mortality are also useful in identifying promising directions for health and nutrition programs.

Rates of childhood mortality vary over time in relation to changes in the epidemiological risks (exposure to disease), nutritional deficits (susceptibility to disease and death), and the extent to which a country's health and social service sectors prevent and mitigate these threats to health and survival.

The SVRS obtained information on early childhood mortality that permits the computation of the following rates:

- (a) Infant mortality rate;
- (b) Neo-natal mortality rate;
- (c) Post neo-natal mortality rate;
- (d) Child mortality rate; and
- (e) Under-five mortality rate.

Since different causes affect mortality between the time of conception and the end of the first year after birth, these periods have been divided into several sub-intervals under different measurable indicators. The accompanying table shows some accepted sub-divisions of these periods. The table also sub-divides the deaths beyond these periods. Note that these rates are in truest sense of the term, are the central death rates, not the mortality rates. The chief drawback of these rates is that they do not describe precisely the risk of dying for any actual cohort, or in other words, they are not truly probabilities. It is however possible to convert these rates into rates that represent the rates on probability basis, in which we can call them mortality rates. Some demographers prefer to use the term conventional mortality rates in place of central death rates.

Table 4.4: Sub-divisions of death by intervals

Interval	Types of death	Conventional rate
(a) Deaths under 4 weeks of life	Neo-natal death	Neo-natal mortality rate
(b) Deaths between 4 weeks and under one year	Post-Neo-natal deaths	Post-Neo-natal mortality rate
(c) Deaths under one year of age	Infant deaths	Infant mortality rate
(d) Deaths between first and the fifth birth day	Child deaths	Child mortality rate
(e) Deaths between birth and fifth birth day	Under 5 deaths	Under 5 mortality rate

4.2.1 Infant Mortality Rate

The best-known and most widely available measure of mortality in early life is the Infant Mortality Rate (IMR). Infant mortality has a great impact on the age distribution of the population.

As we can see in Table 4.4 above, infants are defined as those who are yet to celebrate their first birthday. All those who are under age 1 are infants and their ages are recorded as 0. The infant mortality rate is calculated from the deaths of those who died before reaching age 1. The overall infant mortality rate is estimated to be 21 per 1000 live births in the SVRS area in 2019 (see Table 4.5) as opposed to a rate of 22.0 in 2018 showing a decline of one death per 1000 live births in one year. MICS reported a rate on probability basis at 34 in 2019 which refers to probability of dying in infancy. The SVRS rate, when expressed on a probability basis stands at 25. The conventional infant mortality rate in icddr,b Surveillance area in 2016 is 22.1. The BDHS 2014 however reported a much higher rate (38 per 1000 live births).

The urban-rural differential is marginal: 20 versus 22. Keeping consistency with the previous years rate, females are at a lower risk of dying in infancy having a rate of 21 for females as against a rate of 23 for males.

The infant mortality rate in 2019 shows substantial variations by administrative divisions, varying from as low as 18 in Khulna division to as high as 25 in Barishal. This is in sharp contrast with the results of 2018 when Khulna division experienced the lowest (13.0) infant mortality rate and Sylhet and Chattogram divisions the highest (27 each). Muslim babies are slightly at higher risk of dying in infancy compared their Hindu counterparts (22 versus 21). The overall male-female difference in the IMR is only but marginal: 1.0 per 1000 live births: 22.0 among the males and 21.0 among those who are females. Male–female variation is the highest in Sylhet division: 28 versus 17. In five of the eight divisions (Barishal, Dhaka, Khulna, Mymensingh and Rajshahi) male infants are seen to experience higher mortality compared to the remaining three divisions.

Among the Hindus, sex has an important bearing on the infant mortality rate, where male infants are significantly more susceptible to death (23.0) during infancy than their female counterparts (20.0). Our findings further reveal that the Muslim male infants are marginally at a higher risk to die than their female counterparts: 22.0 versus 21.

Table 4.5: Infant mortality rates per 1000 live births by sex and background characteristics, SVRS 2019

Background Characteristics	Sex		
	Male	Female	Both sexes
Residence:			
Rural	23	21	22
Urban	20	20	20
Division:			
Barishal	28	21	25
Chattogram	20	21	20
Dhaka	23	19	21
Khulna	23	14	18
Mymensingh	23	19	21
Rajshahi	23	21	22
Rangpur	23	24	23
Sylhet	17	28	22
Religion:			
Muslim	22	21	22
Hindu	23	20	21
Total	22	21	21

4.2.2 Neo-natal Mortality Rate

The Neo-natal mortality rate (NMR) is defined as the number of infants less than one month of age during a year per 1000 live births in the same year. Levels of NMR for the year 2019 by background characteristics have been presented in Table 4.6. The overall NMR is estimated to be 15.0 deaths per 1000 live births in 2019 without showing any change since its 2018 level. The data revealed a higher rate in neo-natal mortality rate in the rural area by 1 live birth per 1000 live births than the rate in urban area: 16 versus 15. Religion revealed the same scenario with a prevalence of 16 per 1000 live births as against a rate of 15 among the non-Muslim infants. Overall, male neonates suffer more (16.0) than their female counterparts (15.0).

The Neo-natal mortality rate varies from as low as 13 deaths per 1000 live births in Chattogram division to as high as 19.0 deaths per 1000 live births in Rangpur division. Among the seven divisions, males in Barishal, Dhaka, Sylhet and Mymensingh divisions were seen to have higher NMR. Majority of the divisions have higher mortality among their male neonates, which include Barishal, Dhaka, Khulna, Mymensingh and Rajshahi. The Muslim male neonates experience marginally higher mortality than their female counterparts, there being no difference in the rate among the Hindus by sex.

Table 4.6: Neo-natal mortality rates (NMR) per 1000 live births by background characteristics, SVRS 2019

Background Characteristics	Sex of the neonates		
	Male	Female	Both sexes
Residence:			
Rural	17	15	16
Urban	15	15	15
Division:			
Barishal	19	15	17
Chattogram	13	14	13
Dhaka	17	13	15
Khulna	17	11	14
Mymensingh	16	15	16
Rajshahi	18	17	17
Rangpur	18	20	19
Sylhet	13	18	15
Religion:			
Muslim	16	15	16
Hindu	15	15	15
Total	16	15	15

The Neo-natal mortality rate in BDHS 2014 was reported at 28, while this rate as observed in HDSS (icddr,b) in 2016 was 16.7. The rates calculated on probability basis in MICS for 2019 is 26. Following MICS indirect approach, the SVRS rate of neonatal mortality stands at 19 in 2019.

4.2.3 Post Neo-natal Mortality Rate

Post Neo-natal Mortality Rate (PNMR) is also a mortality index of infants but limited to children of age 1 month to 11 months old. The rates obtained from the SVRS 2019 data have been presented in Table 4.7 by a few selected background characteristics of the population under study.

The overall post neo-natal mortality rate for 2019 was estimated to be 6.0 deaths per 1000 live births as against a rate of the same magnitude in 2018. The comparable rate as obtained in 2014 BDHS and 2016 Matlab Surveillance area of icddr,b are respectively 10 and 5.2, while MICS 2019 indirect estimate is 8. The rates by sex have also been compared in the same table by urban-rural residence, administrative divisions and religion.

As can be noted, the post neo-natal mortality rates for male and female births are of the same magnitude: 6 per 1000 live births without recording any change since last year. The highest rate (8.0) was reported in Barishal, the lowest (4.0) in Rangpur division. The rate is marginally higher (6) in rural area than the one in urban area (5). Hindu neonates suffer with a higher (7.0) rate compared to their Muslim counterparts (6.0). No discernible change is found to occur in the post-neonatal rate over the last one year.

The rate is significantly higher among the female neonates than among the males in Sylhet division: 10 versus 3. The risk is more pronounced among the male neonates of Mymensingh division: 7 among the males and 3 among the females.

Table 4.7: Post Neo-natal mortality rates per 1000 live births by background characteristics, SVRS 2019

Background Characteristics	Sex of the neonates		
	Male	Female	Both sexes
Residence:			
Rural	6	6	6
Urban	5	5	5
Division:			
Barishal	9	6	8
Chattogram	7	8	7
Dhaka	6	6	6
Khulna	6	3	4
Mymensingh	7	3	5
Rajshahi	5	5	5
Rangpur	4	4	4
Sylhet	3	10	7
Religion:			
Muslim	6	6	6
Hindu	8	5	7
Total	6	6	6

4.2.4 Child Mortality Rate

Child Mortality Rate (CMR) is defined as the probability of dying of the children between their first and fifth birthday per 1000 children surviving to their fifth birthday. The computed rates for the SVRS area for the year 2019 are shown in Table 4.8 by residence, division and religion according to the sex of the children. The overall child mortality rate is 1.7, the male children being in some advantageous state in terms of mortality with a rate of 1.9 than their female counterparts with a rate of 1.5. This scenario of sex differentials were also in effect in 2018. Children in the rural area are slightly more likely to die experiencing a rate of 2.1 than their urban counterparts with a rate of 1.2 per 1000 children. In both the areas male children encounter greater risk of dying than their female counterparts in experiencing mortality in their childhood. So far as the regional variations are concerned, the child death rates vary from 1.0 death per 1000 children in Rangpur division to 2.7 deaths per 1000 children in Chattogram division. Except for Chattogram, Mymensingh and Sylhet divisions, the male children are more vulnerable to die in childhood than their female counterparts in other divisions. In contrast to the findings of 2018 Hindu children are 1.5 times more likely to die as the children of Hindu religion.

Table 4.8: Child Death Rates (1-4 years) by background characteristics, SVRS 2019

Background Characteristics	Sex		
	Male	Female	Both sexes
Residence:			
Rural	2.3	1.8	2.1
Urban	1.4	1.0	1.2
Division:			
Barishal	2.5	1.4	2.0
Chattogram	2.6	2.8	2.7
Dhaka	1.6	0.8	1.2
Khulna	1.2	0.9	1.1
Mymensingh	2.1	2.2	2.1
Rajshahi	1.5	1.2	1.4
Rangpur	1.7	0.4	1.0
Sylhet	2.0	2.1	2.0
Religion:			
Muslim	1.9	1.4	1.6
Hindu	2.7	2.2	2.4
Total	1.9	1.5	1.7

4.2.5 Under-5 Mortality Rate

Under-5 Mortality Rate (U₅MR) is the proportion of children dying between birth and the fifth birthday of children expressed per 1000 live births in a given year. Table 4.9 presents these rates for both sexes of the children by some selected background characteristics of the population under study. Based on the registered deaths of 2019 round of SVRS, the overall under-5 mortality rate was computed to be 28 as opposed to a rate of 29 deaths per 1000 live births in 2018. It is worth to mention that the overall under-5 mortality as reported in 2014 BDHS is 46, a much higher rate than the 2019 SVRS. MICS indirect estimate is 40 for 2019. Following MICS methodology, we arrived at a rate of 32 for the same period.

The male children experienced a higher under-5 mortality rate (30) compared to their female counterparts (26). The magnitude of sex differentials in under-5 mortality in 2018 and 2019 remains the same: 4 deaths per 1000 live births. Khulna division was reported to have the lowest (22) under-5 mortality, while Barishal the highest (32). A review of the rates reveals that except for Barishal, the under-5 mortality rates have shown an improvement since its 2018 level. Muslims have somewhat lower under-5 mortality than their non-Muslim counterparts. The mortality rate in rural area exceeds the rate for the urban area by a margin of 3 deaths (29 versus 26).

Table 4.9: Under-5 Mortality rate per 1000 live births by background characteristics, SVRS 2019

Background Characteristics	Sex of the children		
	Male	Female	Both sexes
Residence:			
Rural	31	27	29
Urban	27	25	26
Division:			
Barishal	38	26	32
Chattogram	29	32	30
Dhaka	30	22	26
Khulna	28	17	22
Mymensingh	31	27	29
Rajshahi	29	26	27
Rangpur	29	25	27
Sylhet	24	36	30
Religion:			
Muslim	29	26	28
Hindu	32	28	30
Total	30	26	28

4.3 Maternal Mortality

A maternal death is a death that occurs to a woman due to complications during pregnancy, child birth and the puerperium (period after delivery). The “Tenth Revision of the International Classification of Diseases” defines a maternal death as any “death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” (WHO, 2004). While not strictly a measure of risk, the maternal mortality ratio indicates the ‘price’ (in terms of mother’s life) that a human population pays for each infant brought into the world.

Maternal Mortality can be measured using a number of indicators. The most commonly used indicator is the Maternal Mortality Ratio (MMR), which is calculated as the ratio of maternal deaths in a specified period to the number of live births during the same period:

The Maternal Mortality ratio is the most widely used and known indicator of maternal death. This indicator relates maternal deaths to a measure of risky events, namely births; ideally, the indicator should relate maternal deaths to the number of pregnancies, since pregnancies are the likely events, but good counts of pregnancies are rarely available.

The Maternal Mortality Ratio obtained from the reported maternal deaths and numbers of live births are presented in Table 4.10 by maternal age, urban-rural residence and for the administrative divisions of the country. The overall Maternal Mortality Ratio was estimated to be 1.65 maternal deaths per 1000 live births. The 2016 BMMHC survey reported a rate of 1.94 which compares reasonably well with our estimate (BMMHCS, 2016).

A view of the rate by maternal age depicts that the rate in adolescence has dramatically gone down from 1.68 in 2018 to 0.74 in 2019: a reduction of 56 percent over a period of one year. The risk has

also shown a decline in 40–44 age group women from 18.59 in 2018 to 10.20 in 2019. The ratio is higher (1.91) in rural area than in urban area (1.23). The lowest maternal mortality ratio was observed in Khulna division (0.75) while the highest (2.87) in Rajshahi division.

Table 4.10: Age-specific maternal mortality ratio by background characteristics, SVRS 2019

Background characteristics	Age-specific maternal mortality ratio
Maternal age	
15–19	0.74
20–24	1.34
25–29	1.41
30–34	2.24
35–39	2.42
40–44	10.20
45–49	27.03
Residence:	
Rural	1.91
Urban	1.23
Division:	
Barishal	2.06
Chattogram	1.13
Dhaka	1.36
Khulna	0.75
Mymensingh	2.51
Rajshahi	2.87
Rangpur	1.94
Sylhet	1.43
Total	1.65

4.4 The Life Table

The life table is a life history of a hypothetical group of people which originates from some standard number of births and diminishes as age advances according to a predetermined schedule of mortality. It is a very useful device for studying the levels and trends in mortality and projecting population, labor force and school-age population at some future dates. Insurance companies make extensive use of life table in the determination of their insurance premium. The government may also find a life table very useful in determining age at retirement for the employees. There are usually two types of life table: complete and abridged. The complete life table is presented in single years while the abridged life table is presented in five-year age groups. The SVRS data on the deaths by age groups of the population permit us to construct such life tables for males and females separately. It is also possible to construct life table for both. Tables 4.11, 4.12 and 4.13 are such three life tables for males, females and both sexes respectively.

The definitions and interpretations of the various columns of a life table are beyond the scope of this report. The only column that we are frequently concerned with is the expectation of life denoted by e_x . These values represent the average longevities of individuals beyond a specified age (say x) and thus reflect the general level of mortality in a population. The most useful indicator of a life table is its e_0 value, which measures the average life expectancy of a population (also called expectation of life at birth) and hence a useful index of the level of mortality. Based on the life table values, constructed from the death statistics as obtained in 2018 SVRS, we find that females, on average, have higher

longevity (74.2 years) than their male counterparts (71.1 years). An examination of the life tables compiled for both sexes together shows that there has been a gradual increase in life expectancies over the last five years: from 70.9 years in 2015 to 72.6 in 2019, an average increase of 0.34 years per year. The increase is more pronounced among the females (0.44 years per year) than among the males (0.34 years).

The sex differential has clearly been clearly reflected in their life expectancies at all other ages (see Figure 4.3). The number of survivors by exact age denoted by l_x also speaks in favor of the higher survival status of the females compared to their male counterparts. The l_x values are shown in Figure 4.4. The overall expectation of life at birth for males and females as obtained in icddr,b in 2013 are respectively 70.0 years and 74 years as against 70.6 years and 73.5 years in SVRS area in 2017.

Table 4.11: Abridged life table for males, SVRS 2019

Age	${}_nq_x$	l_x	${}_nL_x$	T_x	e_x
0 - 1	0.0258	100000	97768	7111526	71.1
1 - 5	0.0019	97478	388124	7013758	72.0
5 - 10	0.0008	96740	482735	6625634	68.5
10 - 15	0.0005	96354	481168	6142899	63.8
15 - 20	0.0013	96113	479098	5661731	58.9
20 - 25	0.0010	95491	476261	5182633	54.3
25 - 30	0.0013	95014	473574	4706371	49.5
30 - 35	0.0014	94399	470374	4232798	44.8
35 - 40	0.0016	93740	466927	3762424	40.1
40 - 45	0.0026	92993	462196	3295497	35.4
45 - 50	0.0042	91791	454604	2833301	30.9
50 - 55	0.0078	89882	441443	2378698	26.5
55 - 60	0.0111	86439	421201	1937254	22.4
60 - 65	0.0178	81763	392208	1516054	18.5
65 - 70	0.0237	74782	354175	1123845	15.0
70 - 75	0.0461	66388	298536	769670	11.6
75 - 80	0.0533	52626	233187	471134	9.0
80 - 85	0.1689	40197	237946	237946	5.9

Table 4.12: Abridged life table for females, SVRS 2019

Age	nq_x	l_x	nL_x	T_x	e_x
0 - 1	0.0249	100000	97863	7424913	74.2
1 - 5	0.0015	97563	388786	7327050	75.1
5 - 10	0.0005	96980	484295	6938264	71.5
10 - 15	0.0005	96738	483086	6453970	66.7
15 - 20	0.0015	96496	480747	5970884	61.9
20 - 25	0.0008	95775	477859	5490137	57.3
25 - 30	0.0007	95393	476122	5012278	52.5
30 - 35	0.0007	95060	474492	4536156	47.7
35 - 40	0.0010	94728	472543	4061664	42.9
40 - 45	0.0017	94255	469475	3589121	38.1
45 - 50	0.0033	93457	463804	3119646	33.4
50 - 55	0.0052	91926	454221	2655842	28.9
55 - 60	0.0095	89564	437897	2201621	24.6
60 - 65	0.0099	85404	417207	1763724	20.7
65 - 70	0.0190	81274	389342	1346517	16.6
70 - 75	0.0310	73876	344003	957174	13.0
75 - 80	0.0461	63212	285203	613172	9.7
80-84	0.1527	50065	327969	327969	6.6

Table 4.13: Abridged life table for both sexes combined, SVRS 2019

Age	nq_x	l_x	nL_x	T_x	e_x
0 - 1	0.0254	100000	97799	7258196	72.6
1 - 5	0.0017	97516	388464	7160397	73.4
5 - 10	0.0006	96856	483552	6771933	69.9
10 - 15	0.0005	96565	482224	6288380	65.1
15 - 20	0.0014	96324	480022	5806156	60.3
20 - 25	0.0009	95652	477157	5326134	55.7
25 - 30	0.0010	95223	474936	4848978	50.9
30 - 35	0.0010	94748	472583	4374042	46.2
35 - 40	0.0013	94275	469948	3901459	41.4
40 - 45	0.0022	93664	465983	3431511	36.6
45 - 50	0.0038	92639	459213	2965528	32.0
50 - 55	0.0065	90894	447760	2506314	27.6
55 - 60	0.0103	87984	429485	2058554	23.4
60 - 65	0.0142	83560	404163	1629070	19.5
65 - 70	0.0215	77821	370514	1224907	15.7
70 - 75	0.0391	69855	319246	854393	12.2
75 - 80	0.0500	57372	256289	535147	9.3
80 - 85	0.1598	44558	278859	278859	6.3

Figure 4.3: Expectation of life by age and sex, SVRS 2019

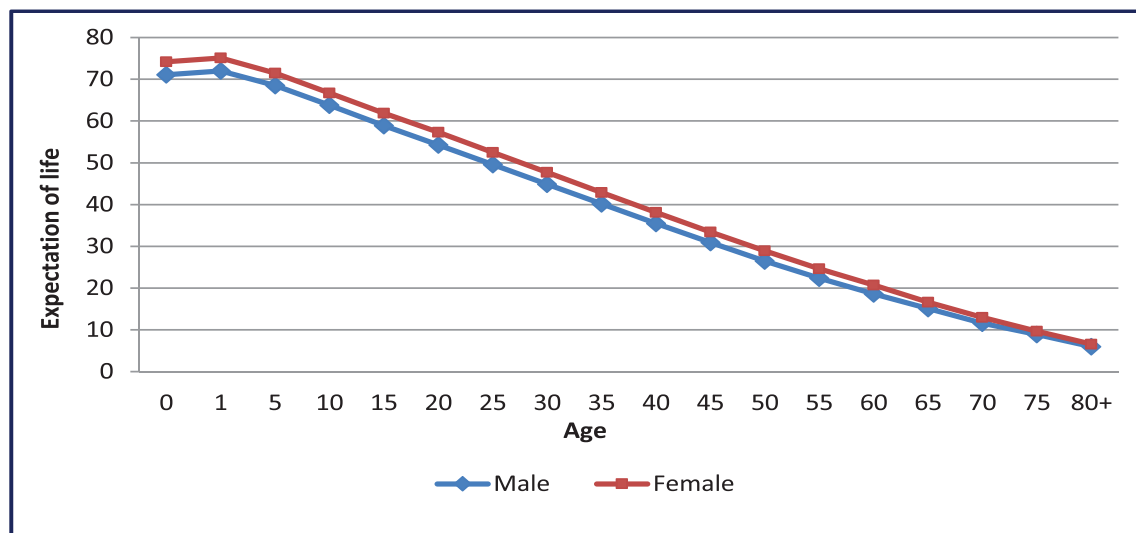
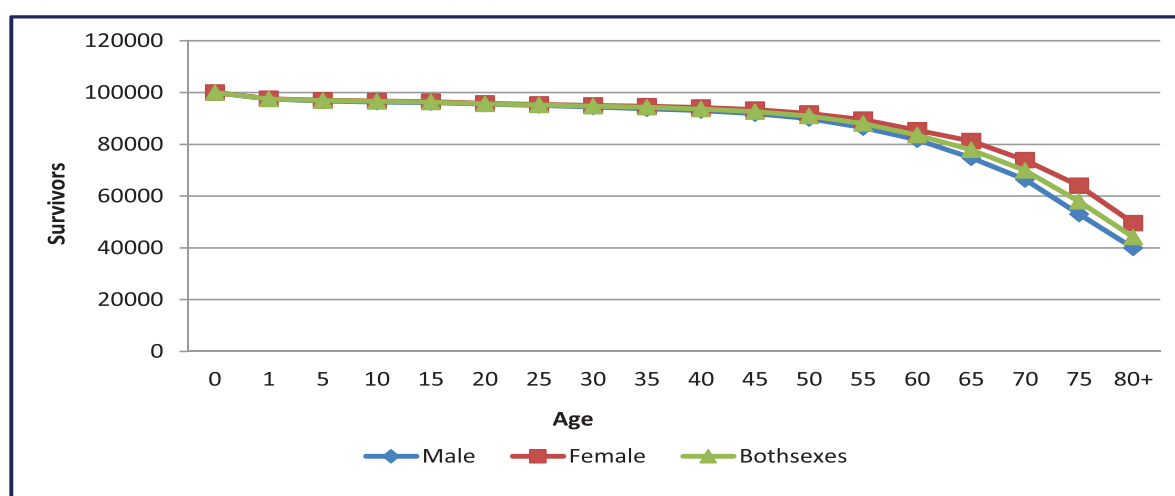


Figure 4.4: Life table survivors by age and sex, SVRS 2019



4.5 Causes of Death

The survey lists 15 major causes of death. The overall death rate from all causes works out to 4.9, which is essentially the Crude Death Rate. Partitioning this rate by the causes of death shows that the heart attack and heart related disease claims the most of the total deaths accounting for 1.3 deaths per thousand populations. This is followed by death due to respiratory illness (0.33). Brain stroke (0.28), pneumonia (0.25) asthma (0.23) and high blood pressure (0.18) are some of the other diseases that claim about 10.4 deaths per 10, 000 populations. Table 4.14 shows the results of this investigation.

Table 4.14: Death rates per 1000 population from top 15 causes by residence, SVRS 2019

Causes of death	Rural	Urban	Total
Heart attack	0.88	0.88	0.88
Heart disease	0.39	0.47	0.42

Causes of death	Rural	Urban	Total
Respiratory disease	0.37	0.26	0.33
Brain stroke	0.30	0.27	0.28
Pneumonia	0.30	0.18	0.25
Asthma	0.29	0.16	0.23
High blood pressure	0.17	0.19	0.18
Other fever	0.16	0.10	0.14
Diabetes	0.12	0.15	0.13
Liver cancer	0.14	0.11	0.13
Blood cancer	0.12	0.10	0.11
Malnutrition	0.13	0.08	0.10
Road traffic accident	0.08	0.06	0.07
Kidney disease	0.05	0.08	0.06
Paralysis	0.08	0.04	0.06
Others	1.77	1.32	1.57
Total	5.35	4.44	4.94

A close view of the rates reveals that rural people are more vulnerable (1.2: 1) to die compared to their urban counterparts. This is true for all causes of death listed in the table under reference.

4.5.1 Major Causes of Death

Table 4.15 presents the percentage distribution of deaths by 15 major causes of deaths. Of all reported deaths in the survey, about 9 percent were due to heart disease and 17.8 percent due to heart attack. Cancer alone claims about 8 percent of all reported deaths. Respiratory disease claims 6.6 people: 7 percent in the rural area and 6 percent in the urban area. Undefined causes claim a substantial proportion (31.7%) of all deaths with somewhat a higher proportion (33.1%) in rural area than in urban area (29.6%). The levels and patterns of deaths due to various causes appear to be in conformity with the previous year's results.

Table 4.15: Percentage of causes of death from top15 causes by residence, SVRS 2019

Causes of death	Rural	Urban	Total
Heart attack	16.5	19.8	17.8
Heart disease	7.2	10.6	8.6
Respiratory disease	7.0	5.9	6.6
Brain stroke	5.6	6.0	5.7
Pneumonia	5.5	4.1	5.0
Asthma	5.4	3.5	4.7
High blood pressure	3.2	4.3	3.6
Other fever	3.0	2.3	2.7
Diabetes	2.2	3.4	2.7
Liver cancer	2.7	2.5	2.6
Blood cancer	2.3	2.2	2.3
Malnutrition	2.4	1.7	2.1
Road traffic accident	1.5	1.4	1.5
Kidney disease	1.0	1.7	1.3
Paralysis	1.4	0.8	1.2
Others	33.1	29.6	31.7
Total	100.0	100.0	100.0

4.5.2 Causes of Deaths among Infants

Table 4.16 presents the percentage distribution of the infant deaths due to 10 major causes by urban-rural residence. The table shows that infants are more vulnerable to pneumonia, claiming as many as 41 percent of the total infant deaths. Respiratory diseases alone claim 9.7 percent of the total infant deaths. Death resulting from malnutrition ranks next claiming 3.2 percent of the total deaths followed by asthma (3.0%). Surprisingly, 6 percent of the children fall ill of heart attack and ultimately die.

Table 4.16: Percentage distribution of infant deaths due to 10 top causes by residence, SVRS 2019

Causes of death	Rural	Urban	Total
Pneumonia	42.9	38.0	41.0
Respiratory disease	9.7	9.6	9.7
Heart attack	5.8	6.4	6.0
Measles	2.9	7.0	4.4
Other fever	4.2	3.2	3.8
Malnutrition	3.5	2.7	3.2
Asthma	3.5	2.1	3.0
Complex diarrhea	2.9	2.1	2.6
Jaundice	1.6	2.7	2.0
Typhoid/ Paratyphoid	1.0	2.7	1.6
Others	21.9	23.5	22.5
Total	100.0	100.0	100.0

4.5.3 Causes of Deaths among Under-5 Children

Keeping consistency with the causes of death among the infants, the highest under-five mortality rate may be attributed to pneumonia claiming close to 39 percent of all deaths. Other prominent causes are reparatory (8.4%), heart attack (5.1%), and measles (4.2 %). As expected, drowning is highly prevalent in rural area claiming about 5 percent of deaths in rural area. This is only to the extent of 2.6 in urban settings. Fever and respiratory illness also are two major causes of death among the under-5 children. Unidentified causes account for more than half of the total deaths (24.3%). This is much higher (27.2%) in urban area, a result in contradiction to our common belief.

Table 4.17: Percentage distribution of under-5 mortality by causes and residence, SVRS 2019

Causes of death	Rural	Urban	Total
Pneumonia	40.9	35.3	38.9
Respiratory disease	8.7	7.8	8.4
Heart attack	5.1	5.2	5.1
Measles	2.4	7.3	4.2
Other fever	4.1	3.9	4.0
Drowning	4.8	2.6	4.0
Malnutrition	3.4	3.0	3.3
Asthma	3.1	2.2	2.8
Complex diarrhea	3.1	2.2	2.8
Jaundice	1.5	3.4	2.2
Others	22.8	27.2	24.3
Total	100.0	100.0	100.0

4.5.4 Causes of Deaths at Old Ages

Table 4.18 shows the percentage distribution of the causes of deaths of old aged people by residence. Heart -related diseases are responsible for about 30 percent of the total deaths. Other causes of deaths at old ages are respiratory disease (7.8%), asthma (6.0%), brain stroke (5.6%) and high blood pressure (3.9%). At old ages, as expected, unidentified diseases are responsible for over 31 percent of the total deaths.

Table 4.18: Major 15 causes of deaths of elderly persons (60 years and over) by residence, SVRS 2019

Causes of death	Rural	Urban	Total
Heart attack	18.7	22.0	20.0
Heart disease	7.7	11.2	9.1
Respiratory diseases	8.1	7.2	7.8
Asthma	7.1	4.4	6.0
Brain stroke	5.4	5.8	5.6
High blood pressure	3.5	4.6	3.9
Diabetes	2.5	4.0	3.1
Other fever	2.8	2.0	2.5
Liver cancer	2.3	2.0	2.2
Blood cancer	1.7	2.2	1.9
Paralysis	2.3	1.0	1.8
Malnutrition	1.9	1.1	1.6
Tuberculosis	1.8	0.6	1.3
Kidney disease	0.8	1.6	1.1
Hopping cough	1.0	0.9	1.0
Others	32.4	29.4	31.2
Total	100.0	100.0	100.0

4.5.5 Causes of Maternal Deaths

The most conspicuous reason for maternal mortality is the complex delivery (36.8%), followed by complex pregnancy claiming more than 18 percent of the maternal deaths. Post partum hemorrhage (PPH) causes a substantial proportion of maternal deaths accounting for about 24 percent of the maternal deaths.

The decomposition of the maternal mortality ratio by major causes of death is presented in the last column of the table under reference. As can be seen from these rates, complex pregnancy (0.30), complex delivery ((0.61) and PPH (0.39) contribute significantly to the overall maternal mortality ratio.

Table 4.19: Distribution of causes of maternal mortality, SVRS 2019

Causes of death	Total	MMR
Complex pregnancy	18.4	0.30
Complex delivery	36.8	0.61
Bleeding after delivery	23.7	0.39
Complex abortion	10.5	0.17
Bleeding at pregnancy period	10.5	0.17
Total	100.0	1.65

4.6 Trends in Mortality: 1982-2019

4.6.1 Trends in Crude Death Rate

The crude death rates estimated by BBS through their SVRS program are presented in Table 4.21 since 1982. The rate was in the neighborhood of 12 per thousand population during 1982–95, which thereafter declined to 10 per thousand in 1993. However, the onset of a fast decline in the level of crude death rate was observed in 1994 which recorded a further decline to 5.1 in 2002. A temporary rise in the CDR was noted after this period. The current CDR is estimated to be 4.9 per thousand population. Table 4.20 below shows the level of crude death rate obtained from different sources. The rates from 2002 are the ones derived from the registered deaths in the SVRS area of BBS.

Table 4.20: Trends in crude death rates for Bangladesh, SVRS 1982-2019

Year	Crude death rate	Period	Crude death rate
1982	12.2	2001	4.8
1983	12.3	2002	5.1
1984	12.3	2003	5.9
1985	12.0	2004	5.8
1986	12.1	2005	5.8
1987	11.5	2006	5.6
1988	11.3	2007	6.2
1989	11.3	2008	6.0
1990	11.4	2009	5.8
1991	11.2	2010	5.6
1992	11.0	2011	5.5
1993	10.0	2012	5.3
1994	9.3	2013	5.3
1995	8.7	2014	5.2
1996	8.2	2015	5.1
1997	5.5	2016	5.1
1998	5.1	2017	5.1
1999	5.1	2018	5.0
2000	4.9	2019	4.9

Source: For 1982-2019, BBS (2013, 2019)

4.6.2 Trends in Childhood Mortality

As the data in Table 4.21 display, Neo-natal mortality, under-five mortality and childhood mortality rates all have declined consistently from 2001 to 2019. Even more impressive is the decline in under-five mortality and post-neonatal mortality, which showed 65.8 percent and 64.7 percent decline over the period under study. Infant mortality, neo-natal mortality and child mortality showed a decline of 62.5 percent, 61.5 percent and 58.5 percent respectively, each over the same period.

Table 4.21: Trends in childhood mortality rates, SVRS 2001-2019

Year	Infant mortality	Neonatal mortality	Post-neonatal mortality	Under-five mortality	Child mortality
2001	56	39	17	82	4.1
2002	53	36	17	76	4.6
2003	53	36	17	78	4.6
2004	52	36	17	74	4.5
2005	50	33	16	68	4.1
2006	45	31	14	62	3.9
2007	43	29	13	60	3.6
2008	41	31	10	54	3.1
2009	39	28	11	50	2.7
2010	36	26	10	47	2.6
2011	35	23	11	44	2.4
2012	33	22	12	42	2.3
2013	32	22	11	41	2.2
2014	30	21	09	38	2.0
2015	29	20	09	36	2.0
2016	28	19	09	35	1.8
2017	24	17	07	31	1.8
2018	22	16	06	29	1.7
2019	21	15	06	28	1.7
% change (2001–2019)	62.5	61.5	64.7	65.8	58.5

Sources: BBS (2014),. SVRS–2013 Key Indicators (BBS, 2015), na: Not available

4.6.3 Trends in Maternal Mortality Ratio

The trends in MMR during the period 1986–2017 are shown in the accompanying table (Table 4.22). As the estimates presented in the table dictate, the MMR declined from 6.48 per 1000 live births in 1986 to 3.15 in 2001, a more than 51 percent decline in 15 years. The vital registration system initiated in 2002 records a somewhat higher rate (3.93) compared to the previous years obtained from other sources. This ratio falls consistently to 1.65 in 2019, from its 1986 level, a decline of 55.3 percent over a period of 34 years. Figure 4.4 shows the trends in maternal mortality ratios over the period 1986–2019.

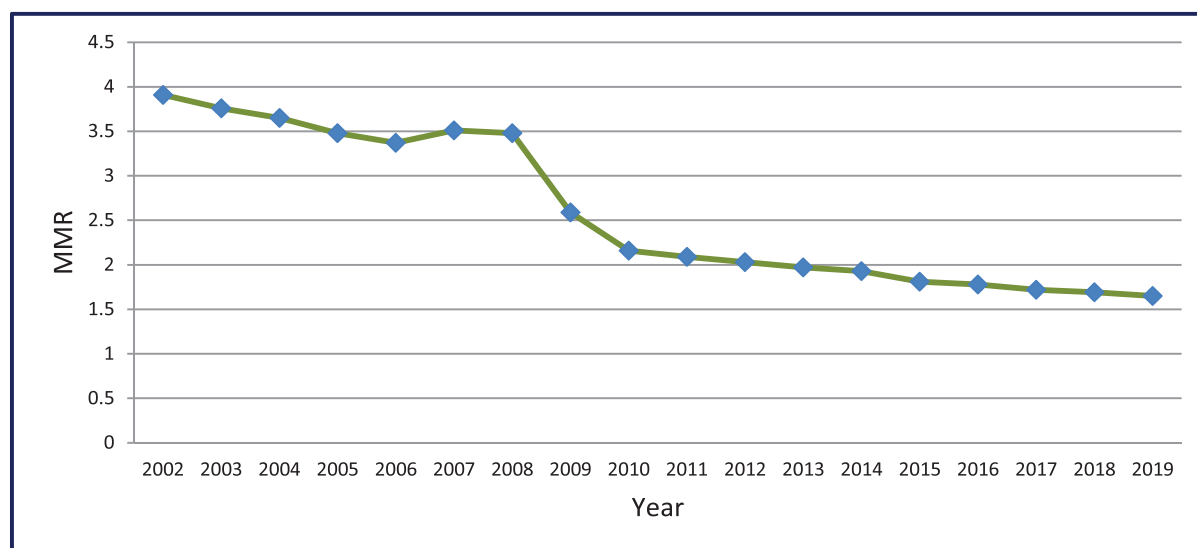
Table 4.22: Trends in maternal mortality ratio per 1000 live births, SVRS 1986–2019

Year	MMR	Year	MMR
1986	6.48	2003	3.76
1987	5.96	2004	3.65
1988	5.72	2005	3.48
1989	5.08	2006	3.37
1990	4.78	2007	3.51
1991	4.72	2008	3.48
1992	4.68	2009	2.59
1993	4.52	2010	2.16
1994	4.49	2011	2.09
1995	4.47	2012	2.03

Year	MMR	Year	MMR
1996	4.44	2013	1.97
1997	3.50	2014	1.93
1998	3.20	2015	1.81
1999	3.18	2016	1.78
2000	3.15	2017	1.72
2001	3.91	2018	1.69
2002	3.91	2019	1.65
% change in MMR (1986-2019):		56.1	

Source: BBS (2013, 2014), *SVRS–2013 Key Indicators (BBS, 2019)

Figure 4.5: Trend in Maternal mortality ratio, SVRS 2002-2019



4.6.4 Trends in Expectation of Life at Birth

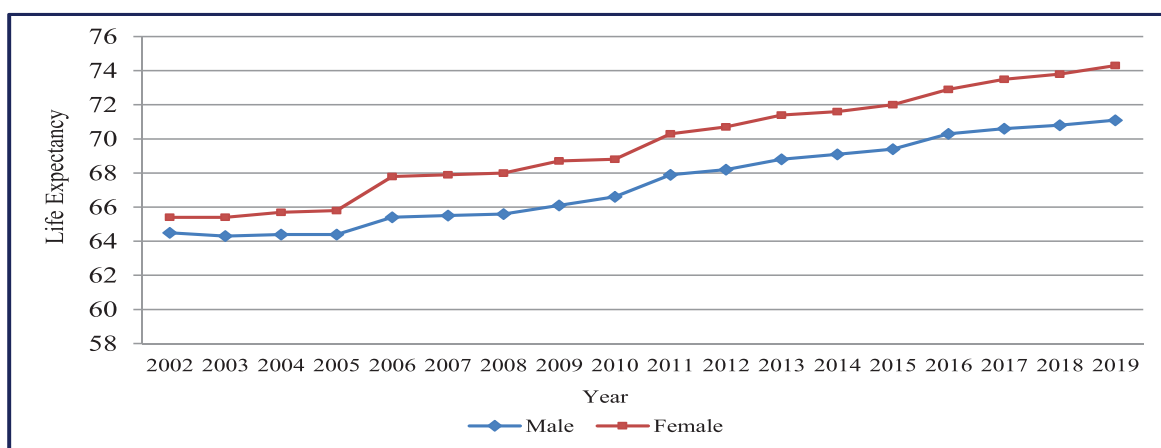
Expectation of life at birth is a summary measure of mortality that portrays the average longevity of life of an individual. The vital registration system in Bangladesh maintained and monitored by the Bangladesh Bureau of Statistics provides the estimates of life expectancy over the last 30 years. These estimates are shown in Table 4.23. The trends in the expectation of life at birth are displayed in figure 4.6 for the period 1981–2019. Note that the expectations of life at birth for males and females were 55.3 and 54.5 in 1981. These increased to 71.1 and 74.2 years in 2019 over a period of 39 years, implying an average annual increase of 0.40 years for males and 0.48 years for females.

Table 4.23: Trends in expectation of life at birth by sex, SVRS 1981–2019

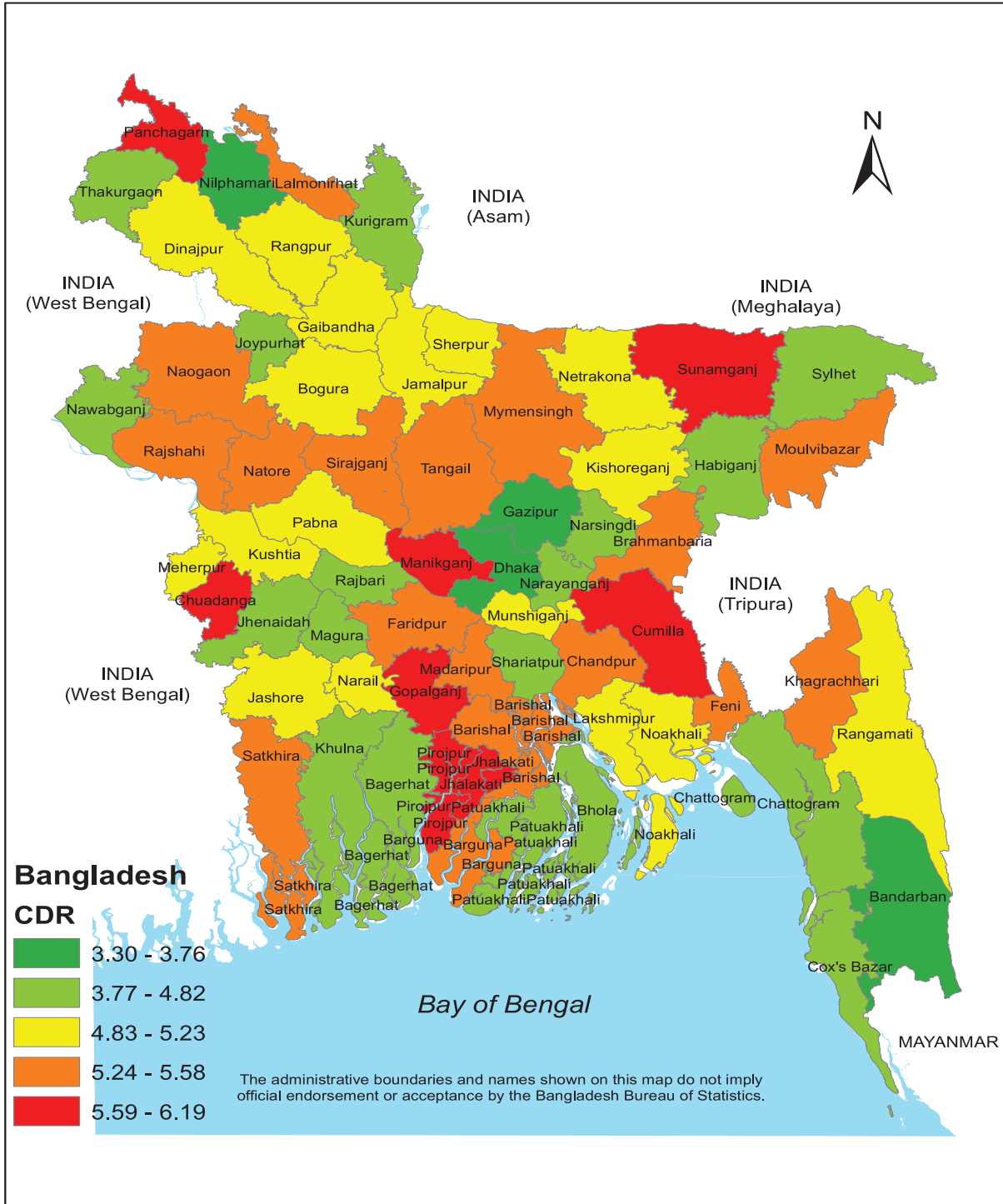
Year	Male	Female	Year	Male	Female
1981	55.3	54.5	2001	64.0	64.5
1982	54.5	54.8	2002	64.5	65.4
1983	54.2	53.6	2003	64.3	65.4
1984	54.9	54.7	2004	64.4	65.7
1985	55.7	54.6	2005	64.4	65.8
1986	55.2	55.3	2006	65.4	67.8
1987	56.9	56.0	2007	65.5	67.9
1988	56.5	55.6	2008	65.6	68.0
1989	56.0	55.6	2009	66.1	68.7
1990	56.6	55.6	2010	66.6	68.8
1991	56.5	55.7	2011	67.9	70.3
1992	56.8	55.9	2012	68.2	70.7
1993	58.2	57.7	2013	68.8	71.2
1994	58.2	57.9	2014	69.1	71.6
1995	58.4	58.1	2015	69.4	72.0
1996	59.1	58.6	2016	70.3	72.9
1997	60.3	59.7	2017	70.6	73.5
1998	61.7	61.2	2018	70.8	73.8
1999	63.0	62.4	2019	71.1	74.2
2000	63.7	63.5			

Source: BBS (2014),*SVRS–2013 Key Indicators (BBS, 2015)

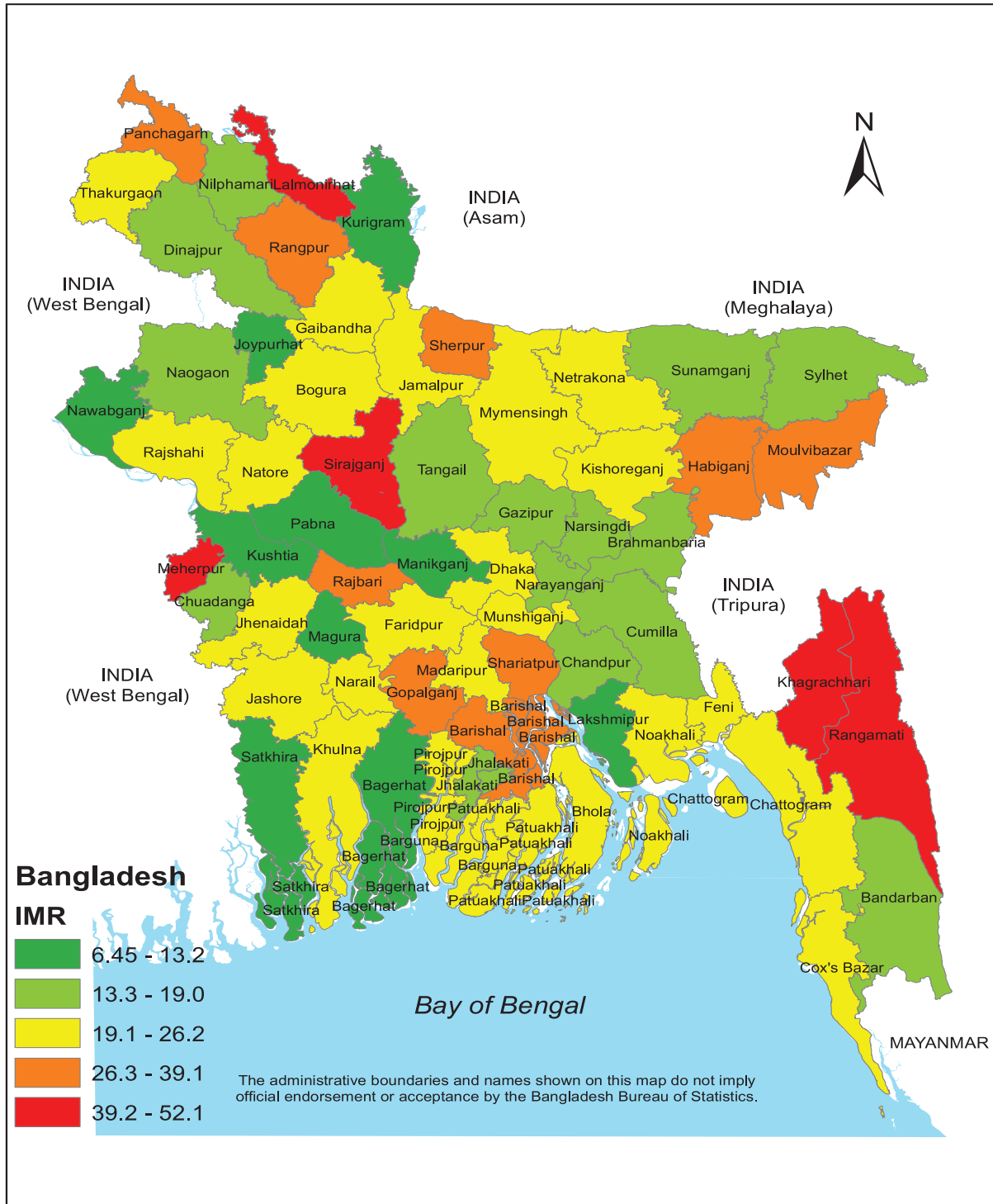
Figure 4.6: Trends in expectation of life at birth by sex, SVRS 2002–2019



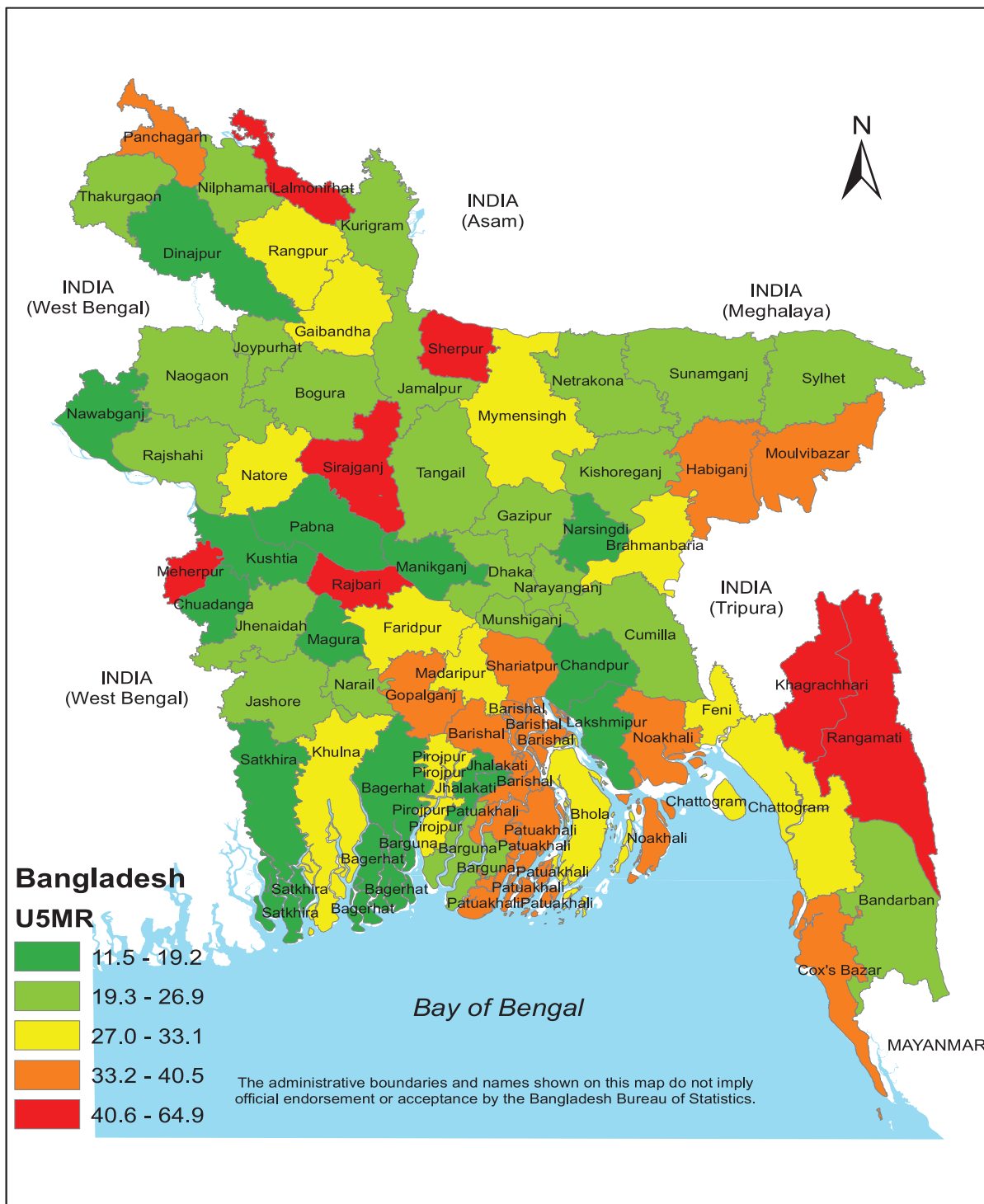
Map 4.1: Crude Death Rate (CDR) by Zila, SVRS 2019



Map 4.2: Infant Mortality Rate (IMR) by Zila, SVRS 2019



Map 4.3: Under 5 Mortality Rate (U₅MR) by Zila, SVRS 2019



CHAPTER V

Marriage and Marriage Dissolution

5.1 Introduction

Marriage, separation, divorce and widowhood are demographic events that influence the course of population growth. These events together constitute what is called nuptiality. They influence the fertility and migration directly and mortality indirectly. Marriage, from the demographic point of view, should be looked upon as a continuous force of attrition, exerting its effect on the population of persons who are not currently married. As a result of its operation, the population of non-married persons is progressively reduced. Marriage is an important institution for both individuals and society as a whole.

Bangladesh has adopted the UN definition of marriage. It is the legal union of two persons of opposite sex. Registration of marriage in Bangladesh is obligatory for Muslims and Christians. In the case of other religions, it is optional and in that event, contractual marriage is performed in a traditional way.

Marriages are mostly arranged either by the parents or other near relatives. At the time of marriage, consent of both the bride and groom is sought in presence of witnesses. There is a provision for registration of marriage on a form known as *Nikanamah*. An amount known as *Mohar* (bride price) is required to be committed by the husband to the bride with certain amount paid in cash or kind and the rest to be paid on demand. The bride price is determined in accordance with the social and economic position of both parties. Divorce is permitted among the Muslims and Christians under certain conditions. Marriage of widows is permissible among all religions. Hindu marriage is a pre-ordained union and there is little scope for dissolution by divorce.

Bangladesh society is predominantly monogamous with marginal polygamy. Marriage in Bangladesh is virtually universal for both males and females and is considered an important process of social institution. Religious practices attach great importance to the family bonding established through marriage ties. The socio-cultural milieu of Bangladesh has long favored early and universal marriage. Early marriage is gradually changing as an impact of enactment of laws, uplifting of female education, and participation of women in gainful employment and the technological innovation and changes in the society. It is a fact that an upward shift in age at marriage would help curtailing the most fecund period, reduction in early child bearing, lower fertility level and thus reduce the rate of growth of population. Like other countries, Bangladesh is also trying to slow down population growth through raising the age at marriage of its population.

This chapter deals with frequency of marriages, with the characteristics of persons and their union through marriage and dissolution of such marriages. Data on some important indicators of marriage viz. crude marriage rate, general marriage rate, age specific marriage rate, mean age at marriage by sex and some marital dissolution indicators like crude divorce rate, general divorce rate, age specific divorce and separation rate by sex have been incorporated in this chapter.

5.2 Crude Marriage Rate

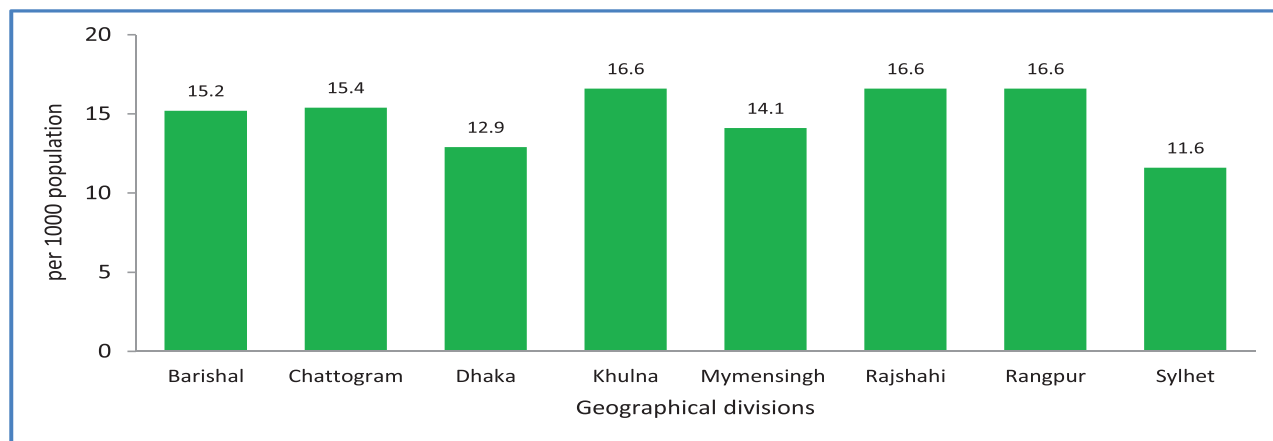
Crude Marriage Rate (CMR) is defined as number of marriages solemnized per 1000 population. It measures the frequency of marriages in total population. The CMR and its differentials, as obtained in MSVSB 2019 are shown in Table 5.1 by some background characteristics of the population surveyed.

Table 5.1: Crude and general marriage rates per 1000 population by background characteristics, SVRS 2019

Background Characteristics	Crude marriage rate	General marriage rate		
		Both sexes	Male	Female
Residence:				
Rural	17.3	24.6	49.2	49.1
Urban	11.9	16.2	32.6	32.4
Division:				
Barishal	15.2	21.1	41.7	42.8
Chattogram	15.4	22.6	46.5	43.9
Dhaka	12.9	18.0	36.2	35.8
Khulna	16.6	22.2	44.4	44.5
Mymensingh	14.1	20.5	40.4	41.4
Rajshahi	16.6	22.2	44.0	44.8
Rangpur	16.6	22.9	45.3	46.3
Sylhet	11.6	16.8	34.2	33.2
Religion:				
Muslim	15.2	21.4	43.0	42.5
Hindu	12.5	16.5	32.0	33.8
Others	13.4	18.2	35.6	37.0
Education:				
No education	4.0	4.6	10.5	8.1
Primary	10.2	16.8	32.6	34.7
Secondary	24.6	29.0	60.6	55.8
Secondary+	30.0	30.1	50.6	74.1
Total	14.9	20.8	41.7	41.5

The overall CMR is 14.9 per 1000 population with significantly higher rate (17.3) in rural area than in urban area (11.9). A slight increase in the overall crude rate is noted over the last 4 years: from 14.3 in 2016 to 14.9 in 2019. At the divisional level the CMR was reported to be the highest (16.6) in three divisions: Khulna, Rajshahi and Rangpur. The rate is the lowest in Sylhet division (11.6). The CMR for the Muslims exceeds the rate reported for Hindus by 2.7 percentage points: 15.2 versus 12.5. The followers of other religions were reported to have somewhat intermediate CMR: 13.4. A diagrammatic view of crude marriage rates by administrative regions may be seen in Figure 5.1.

Figure 5.1: Crude marriage rates by administrative divisions, SVRS 2019



5.3 General Marriage Rate

General marriage rate (GMR) is the refinement of CMR consisting of restricting the population to persons of marriageable age (15+ years). Thus, general marriage rate is the ratio of number of marriages in a year to the population of age 15+ years expressed in thousand.

The general marriage rate is often calculated separately for males and females. The rates will differ from each other in accordance with the level of sex ratio in marriageable ages. When it is calculated for males (for example), the numerator becomes the number of males marrying in a given year and the denominator becomes total mid-year population of males aged 15 years and over.

If there is no multiple-marriage in a society, the number of marriages among the males will be equal to the number of marriages among the females and in absence of any sex imbalance, GMR computed for both sexes will be half as likely as either the rate for male or for female. The general marriage rate computed in this fashion has been displayed in Table 5.1 for males and females separately and for both sexes together.

It is evident from Table 5.1 that the overall GMR in 2019 is 20.8. These rates were 20.6 in 2018 and 20.7 in 2017 per 1000 population. The rate in the rural area is much higher (24.6) than in urban area (16.2) by about 52 percent without showing any change over the two years. The rates at the divisional level vary from as low as 16.8 in Sylhet division to as high as 22.9 in Rangpur division. In 2018, the highest and the lowest rates were prevalent in Rangpur (23.0) and Dhaka and Sylhet divisions (17.1 in each) respectively.

The sex differentials in GMR are only but marginal: 41.7 for males and 41.5 for females showing virtually no change in the rate from its previous year. Muslims experience higher GMR (21.4) than their Hindu counterparts (16.5), although followers of other religions have relatively a higher rate (18.2) than Muslims and Hindus. In line with the findings of 2018, education remains highly positively correlated with general marriage rates with the lowest marriage rate for those who are illiterate (4.6) and the highest amongst those who have secondary and above level of education (30.1). It is however important to note that the rates so far presented are all unstandardized and hence may be affected by population compositions (e.g. religious, educational etc.) of population. Hence no firm conclusion can be drawn on the differences with respect to the background characteristics of the population.

5.4 Age-Specific Marriage Rate

Because marriage is highly age-specific and demographers are primarily interested in age patterns of marriage, it is commonplace to construct age-specific marriage rates. Age-specific marriage rate is defined as the number of marriages to persons of a given age group per 1000 persons in the same age group. There is an additional complication in computing age-specific marriage rate, however, since marriage involves two persons who may not be of the same age. In view of this, age-specific marriage rates are defined in terms of persons marrying, rather than marriages. The resulting age-sex-specific marriage rates are shown in Table 5.2 by urban-rural residence and sex. Figure 5.2 graphically displays marriage rates for males and females. As we can note, for both males and females, the graph succinctly displays high concentration of marriages in the neighborhood of 18 years for females and 23 years for males. These rates are in close agreement with the legal age at marriage, which has been fixed at 18. Logically, the mean age at marriage will be closed to these levels.

Table 5.2: Age-specific marriage rates per 1000 population by sex and residence, SVRS 2019

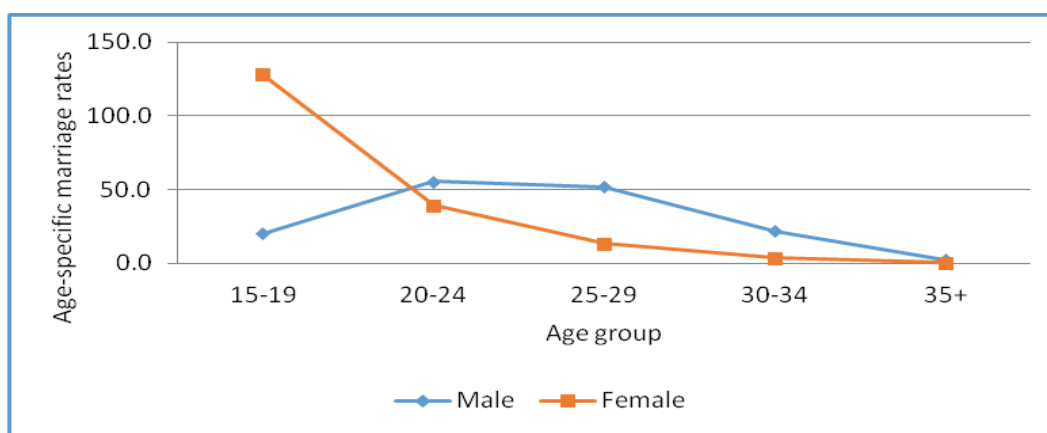
Age group	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
15-19	25.1	161.8	13.2	84.1	20.1	127.9
20-24	67.6	42.1	40.3	36.1	55.5	39.2
25-29	58.5	11.5	44.4	15.4	51.9	13.4
30-34	22.8	2.7	20.6	4.1	21.7	3.4
35+	2.4	0.4	2.5	0.4	2.4	0.4
Total	21.8	27.3	14.9	17.5	18.7	22.9
TMR	881.5	1092.7	604.9	700.8	758.5	921.2

The penultimate row, entitled ‘**Total**’ in Table 5.2 shows the number of marriages per 1000 persons within the given age range 15 and over. As our data reveal, overall, 2.29 percent of females as opposed to 1.87 percent of males went on to get married in 2019. Rural females are 1.57 times as likely as the urban females to get married. The corresponding likelihood is 1.46 times for males in urban area.

If marriage can be thought of (and in fact can be) like fertility, rather than mortality, then age-specific marriage rates can be calculated which include all men/women, both married and unmarried, in the denominator. When the age-specific rates are added and multiplied by 5, we arrive at what is known as the total marriage rates (TMR). The last row of Table 5.2 presents these rates.

The implication of the computed TMR is that a male in the study area is expected to experience less than one marriage (0.7585) on average if he experiences the current marriage rate and no mortality during marriageable ages, while a female does so with 0.9212 marriages. In rural area this is 1.0927, while in urban area, it is much less with a prevalence of 0.7008 marriages, a woman experiences on the average throughout her life. The corresponding prevalences for males are 0.8815 and 0.6049 respectively for rural and urban areas.

Figure 5.2: Age specific marriage rates by sex, SVRS 2019



5.5 Average Age at Marriage

Mean age at marriage (MAM) is one of the most important indicators of nuptiality. It has a direct impact on fertility and duration of marriage. The SVRS Marriage Schedule–5 allows us to compute mean and median age at marriage including age at first marriage for the current year for all persons according to their previous marital status. The proportions single by current age were used to calculate

what is known as Singulate Mean Age at Marriage (SMAM), an indirect measure of age at first marriage. The levels of mean and median age at marriage and SMAM by sex and some selected background characteristics are presented in Table 5.3.

5.5.1 Mean Age at First Marriage

The mean and median age at first marriage computed from previous marital status data specifically from those who were 'single' prior to their marriage in the reference year are presented in Table 5.3 by some selected background variables. The mean age at first marriage for males is 24.2 years, while it is 18.5 years for the females resulting in a spousal age difference of 5.7 years, showing virtually no change in mean age marriage in the last one-year period. The comparable mean ages as obtained in icddr,b surveillance area for 2013 for males and females were respectively 27.3 years and 19.3 years.

Both urban males and females marry at a later age (25.3 vs 19.7) than their rural counterparts (23.6 vs 17.9), with a spousal age difference of 5.6 years in the urban area and 5.7 years in the rural area. The median age at first marriage presented in the same table reflect the same scenarios as observed in the case of mean ages. It is higher for males (24 years) than their female counterparts with a median age of 18 years.

At the divisional level, Sylhet recorded the highest (25.9 years) mean age at marriage for males while Mymensingh the lowest (22.6 years). Females of Mymensingh division were reported to marry much earlier than the females of other divisions, the age at marriage of this division being 17.8 years for both. The highest age at marriage was reported in Sylhet division (20.6 years).

For both males and females, Muslims have the lowest mean age at marriage (24.0 years for males and 18.4 years for females) compared to the followers of other religions. The level of education appears to have a favorable effect on raising age at marriage for males but not to that extent for females. For example, when males are illiterate, they tend to marry at a very early age of 22.9 years. This age increases consistently as level of education rises reaching at 26.2 years when they have secondary and above level of education. On the other hand, females mean ages at marriage appear to be somewhat erratic. It decreases for the first three levels of education, which thereafter shows a rising trend.

5.5.2 Singulate Mean Age at Marriage (SMAM)

Singulate mean age at marriage (SMAM) is defined as an estimate of the mean number of years lived by a cohort of men or women before their first marriage takes place. This is an indirect method of estimation of mean age at first marriage. SMAM was calculated from MSVSB 2019 data and presented in Table 5.3 for males and females separately. The SMAM was 26.3 years for males and 20.5 years for the females, showing a spousal age difference of 5.8 years. This result shows that mean age at marriage has not changed over the last two years.

It is important to note that the mean age at marriage does not deviate much from the mean and median age at marriage. This is primarily because of the distribution of age at marriage is symmetrical about these averages. The SMAM is an indirect measure of age at first marriage and hence it is likely to be different from the mean and median ages. If direct data on age marriage are available, the computation of SMAM is considered to be redundant.

Table 5.3: Singulate mean age at marriage (SMAM), mean age at first marriage (MAM) and median age at first marriage and by sex and background characteristics, SVRS 2019

Back ground Characteristics	Singulate mean age at marriage		Mean age at first marriage		Median age at first marriage	
	Male	Female	Male	Female	Male	Female
Residence:						
Rural	25.6	19.7	23.6	17.9	23	17
Urban	27.1	21.4	25.3	19.7	25	19
Division:						
Barishal	26.1	20.1	24.5	18.0	24	18
Chattogram	27.0	20.7	24.7	18.8	25	18
Dhaka	26.1	20.1	24.5	18.3	24	18
Khulna	26.0	20.0	24.2	18.2	24	18
Mymensingh	25.0	20.2	22.6	17.8	22	18
Rajshahi	25.5	19.7	23.5	18.1	23	17
Rangpur	25.3	20.1	23.4	18.2	23	18
Sylhet	28.4	22.9	25.9	20.6	25	20
Religion:						
Muslim	26.0	20.4	24.0	18.4	23	18
Hindu	28.4	21.7	26.5	19.9	27	19
Others	27.1	22.9	23.6	20.3	23	20
Education:						
No education	23.7	19.8	22.9	19.1	22	18
Primary	24.2	18.6	22.9	17.6	22	17
Secondary	25.9	19.6	23.9	17.3	23	17
Secondary+	28.9	23.3	26.2	22.2	26	22
Total	26.3	20.5	24.2	18.5	24	18

5.5.3 Mean and Median Age at Marriage (MAM)

The mean and median ages for those who were single, and ever married (currently married, widowed and divorced), and went on for the subsequent marriages in 2019 are also presented in Tables 5.4 and 5.5 by sex. Clearly, age at marriage calculated from those who were reported to be single (never married) at the time of the survey, will be identical to the mean age at first marriage. Naturally, this mean will be always smaller than all other means presented in tables under reference. Among the males, as we see in Table 5.4, widowed (43.6 years) followed by the currently married persons have the highest mean age (31.6 years) at marriage. Divorced males have the lowest (30 years) mean age at marriage.

Table 5.4: Percent distribution of the age at marriage by previous marital status, SVRS 2019: Males

Age at marriage	Single	Married	Widowed	Divorced	Separated	Total
10-14	0.4	0.0	0.0	0.0	0.0	0.3
15-19	17.3	8.4	0.7	5.7	7.7	15.9
20-24	37.4	21.7	6.8	22.6	7.7	35.2
25-29	30.2	25.5	12.2	26.2	23.1	29.4
30-34	11.8	14.9	13.5	20.7	30.8	12.4
35-39	2.4	8.3	7.4	13.4	15.4	3.4
40-44	0.4	6.1	11.5	5.2	7.7	1.2

Age at marriage	Single	Married	Widowed	Divorced	Separated	Total
45+	0.2	15.2	48.0	6.3	7.7	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean age at first marriage	24.2	31.6	43.6	30.0	31.9	25.3
Median age	24	29	42	28	31	24

The distribution of females by age at marriage shows that widowed women have the highest (43.6 years) mean age at marriage followed by separated women (31.9 years).

Table 5.5: Percent distribution of the age at marriage by previous marital status, SVRS 2019: Females

Age at marriage	Single	Married	Widowed	Divorced	Separated	Total
10-14	9.7	5.8	0.0	1.7	0.0	9.2
15-19	60.3	40.6	5.9	32.6	0.0	58.4
20-24	22.0	27.0	13.2	27.1	0.0	22.2
25-29	6.5	14.6	25.0	23.5	33.3	7.5
30-34	1.2	7.9	17.7	8.8	66.7	1.8
35-39	0.2	2.1	13.2	3.3	0.0	0.5
40-44	0.1	0.6	10.3	1.4	0.0	0.2
45+	0.0	1.5	14.7	1.7	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean age first marriage	18.5	21.8	32.9	23.4	29.7	18.9
Median age	18.0	20.0	31.5	22.0	31.0	18.0

5.6 Marriage Dissolution: Divorce and Separation

Data on divorce and separation were collected employing Schedule-6. The data collected using this schedule include name and code of divorce/separated persons, sex, age, religion, level of education, reason for divorce/separation, marital status, age at marriage and duration of marriage. The following indicators were generated from the divorce/separation schedule (Schedule 6):

- (1) Crude divorce rate;
- (2) Crude separation rate;
- (3) Divorce-marriage separation rate;
- (4) Age-specific divorce rate;
- (5) Age-specific separation rate;
- (6) General divorce rate; and
- (7) General separation rate;

5.6.1 Crude Divorce Rate

In all previous SVRSs, the crude divorce rate has been calculated as the number of divorces per 1000 population. In the same way crude separation rate calculated as the number of separations per 1000 population. Crude divorce rates and separation rates as obtained from SVRS 2019 are shown in Table 5.6. As can be seen from the table, one in every 1000 population in 2019, experienced divorce as against a rate of 0.9 in 2018. The rural people are about 38 percent more likely than their urban counterparts to end their marriage in divorce. Comparison with previous year's rate reveals that risk of divorce among the rural population has been reduced by 33 percent in one year.

Rajshahi division, as previous year, is seen to experience the highest rate of divorce (1.6 per thousand population) followed by Khulna (1.4). The rate is the lowest in Sylhet division with a prevalence of 0.3 per thousand population.

In line with other demographic measures, Muslims are more prone to end their marriage in divorce with a rate of 1.1 per 1000 population. The corresponding rate among the Hindus is 0.2. It is largely due to the fact that Hindu marriage is a pre-ordained union and there is little scope for dissolution by divorce. Christians and others however have an intermediate rate of divorce (0.3) falling between the Muslims and the Hindus. The educational level of women by and large appears to have a positive association with crude divorce rate: the higher the level of education, the higher is the rate of divorce.

5.6.2 Divorce–Marriage Ratio

Another measure of divorce is the divorce to marriage ratio, which is the number of divorces to the number of marriages in a given year (the ratio of the crude divorce rate to the crude marriage rate). For example, if there are 500 divorces and 1000 marriages in a given year in a given area, the ratio would be one divorce for every two marriages, e.g. a ratio of 0.5 (50%). The ratios calculated in this fashion are also presented in Table 5.6 by the background characteristics of the population. The overall divorce to marriage ratio for the 2019 sample is 0.07, meaning that 7 percent of the marriages in the area ended in divorce. This result shows that risk of divorce among the general population has increased by about 17 percent in one year since 2018. This ratio does not vary by urban-rural residence, while substantial variations were noted among the administrative divisions, the risk being the highest (0.10) in Rajshahi division followed by Khulna division (0.08)). The lowest rate (0.03) was recorded in Sylhet division. The risk significantly varies by religious affiliation being highly prevalent among the Muslims (0.07). Hindus appear to experience the least risk of divorce. Followers of other religions had a rate of 0.05. The education has a negative relationship with the risk factor in question: 0.13 among those who have no education and 0.03 among those who have secondary and above level of education. The results of 2019 are highly consistent with results of 2018.

5.6.3 General Divorce Rate (GDR)

The General Divorce Rate (GDR) has been calculated as relative number of divorces of age 15+ per 1000 population of the same age. General Divorce Rate by sex and division are presented in Table 5.6. The overall GDR is 1.4 for both sexes, there being no sex differential (2.7 for each sex). This was 2.6 in 2018.

The GDR is much higher in rural area (1.6) compared to urban area (1.1) without recording any variation by sex. The rate appears to have wide regional variations for both males and females. An examination of the results presented in Table 5.6 reveals that Rajshahi division experiences the highest GDR, 4.3 for males and 4.4 for females followed by Khulna division (3.7 for both males and females) while the lowest rate (0.9 for both males females) was reported in Sylhet divisions.

Muslims have the highest GDR (1.5) with no male-female differential. The Hindus are 80 percent less likely to experience GDR compared to their Muslim counterparts but 3 times more likely to experience this rate than the followers of other religions.. Education of the women seems to have a very weak but positive association with the divorce rate.

Table 5.6: Crude divorce rate, divorce-marriage ratio and general divorce rate by background characteristics, SVRS 2019

Background Characteristics	Crude divorce rate	Crude marriage rate	Divorce-marriage ratio	General divorce rate		
				Both sexes	Male	Female
Residence:						
Rural	1.1	17.3	0.07	1.6	3.2	3.2
Urban	0.8	11.9	0.07	1.1	2.2	2.1
Division:						
Barishal	1.1	15.2	0.07	1.5	3.0	3.1
Chattogram	0.7	15.4	0.05	1.1	2.2	2.1
Dhaka	0.9	12.9	0.07	1.3	2.7	2.6
Khulna	1.4	16.6	0.08	1.9	3.7	3.7
Mymensingh	0.8	14.1	0.05	1.1	2.2	2.2
Rajshahi	1.6	16.6	0.10	2.2	4.3	4.4
Rangpur	0.9	16.6	0.05	1.2	2.5	2.5
Sylhet	0.3	11.6	0.03	0.5	0.9	0.9
Religion:						
Muslim	1.1	15.2	0.07	1.5	3.0	3.0
Hindu	0.2	12.5	0.02	0.3	0.6	0.6
Others	0.7	13.4	0.05	0.9	1.8	1.9
Education:						
No education	0.5	4.0	0.13	0.6	1.4	1.1
Primary	0.9	10.2	0.09	1.5	2.9	3.1
Secondary	1.5	24.6	0.06	1.8	3.7	3.4
Secondary+	1.3	30.0	0.04	1.3	2.3	3.3
Total	1.0	14.9	0.07	1.4	2.7	2.7

5.6.4 Age-Specific Divorce Rate

Age-Specific Divorce Rate for a specified age group has been calculated as the relative number of divorces of defined age groups per 1000 population of the same age group. Age Specific Divorce Rates as obtained in 2019, are shown in Table 5.7. The results of this investigation reveal that the rates in question for males follow a curvilinear pattern by age. It is true for both urban and rural population. During the early years of life the rates are lower, which tend to increase as age advances and begin to fall at advanced ages. The scenario demonstrates a clear negative relationship with age. Starting with a higher rate, it sharply declines as the age increases.

The table further reveals that the overall divorce rate is higher in rural area (1.6) than in the urban area (1.1). In addition to that, in both the areas, females are more likely to experience divorce than their male counterparts.

Table 5.7 Age-Specific Divorce Rates by sex and residence, SVRS 2019

Age group	Rural			Urban		
	Male	Female	Both sexes	Male	Female	Both sexes
15 - 19	0.7	6.8	3.4	0.5	3.4	1.8
20 - 24	2.6	4.2	3.4	1.8	2.9	2.4
25 - 29	3.8	2.4	3.0	2.3	1.7	2.0
30 - 34	2.2	1.0	1.6	1.3	1.0	1.1
35+	0.5	0.2	0.4	0.4	0.2	0.3
Total	1.3	1.9	1.6	0.9	1.2	1.1

5.6.5 Crude Separation Rate

Crude separation rate may be defined as the number of separations per 1000 population. The rate so calculated is presented in Table 5.8 by some selected background characteristics of the population. In terms of the crude separation rate, the surveyed population is one-third as likely to experience separation as those who run the risk of divorce. It may be noted that the urban and rural areas do not differ at all in crude separation rates both remaining at 0.3 per 1000 population. Of the 8 divisions, 5 divisions have identical separation rates completely matching with the overall rate of 0.3. Mymensingh and Sylhet have the lowest rate (0.1 each). Among the religious groups, Hindus are less likely to go for separation (0.2) than the Muslims (0.3) and followers of other religions (0.4).

5.6.6 General Separation Rate

The general separation rate (GSR) is the number of separations per 1000 persons exposed to the risk of separation restricted generally to the mid-year population aged 15 and over with the same number of separations in the numerator. GSR can be computed for males and females separately provided the data are available. The overall general separation rate is estimated to be 0.4 with no sex differential in the rate (0.7 in each case). The GSR is the highest in Khulna division (0.5). All other divisions have a rate ranging between 0.2 and 0.4.

General separation rate (GSR) by and large goes up as the level of education increases: from 0.2 for those who are illiterate to 0.5 for those who have secondary and higher level of education. Sex differential in GSR is of little significance when checked background characteristics of the households as well as of the respondents.

Table 5.8 Crude separation rates and general separation rates (aged 15+) by sex and residence, SVRS 2019

Background Characteristics	Crude separation rate	Crude marriage rate	separation-marriage ratio	General separation rate		
				Both sexes	Male	Female
Residence:						
Rural	0.3	17.3	0.02	0.4	0.8	0.8
Urban	0.3	11.9	0.02	0.3	0.7	0.7
Division:						
Barishal	0.3	15.2	0.02	0.4	0.9	0.9
Chattogram	0.3	15.4	0.02	0.4	0.8	0.7
Dhaka	0.3	12.9	0.03	0.4	0.9	0.9
Khulna	0.3	16.6	0.02	0.5	0.9	0.9
Mymensingh	0.1	14.1	0.01	0.2	0.4	0.4
Rajshahi	0.3	16.6	0.02	0.4	0.8	0.8
Rangpur	0.2	16.6	0.01	0.3	0.5	0.6
Sylhet	0.1	11.6	0.01	0.2	0.4	0.4
Religion:						
Muslim	0.3	15.2	0.02	0.4	0.8	0.7
Hindu	0.2	12.5	0.02	0.3	0.5	0.5
Others	0.4	13.4	0.03	0.5	1.0	1.1
Education:						
No education	0.2	4.0	0.05	0.2	0.5	0.4
Primary	0.2	10.2	0.02	0.4	0.7	0.7
Secondary	0.4	24.6	0.02	0.5	1.0	0.9
Above secondary	0.3	30.0	0.01	0.3	0.5	0.8
Total	0.3	14.9	0.02	0.4	0.7	0.7

5.6.7 Age-specific Separation Rate

Age-specific Separation Rates have been calculated as the relative number of separation at a defined age group per 1000 population of that age group. Age-specific Separation Rates as obtained in 2019 are shown in Table 5.9. The highest age-specific separation rates remain concentrated in the age group 20-29. It is by and large true for both rural and urban areas. The age pattern of separation rates follows a curvilinear pattern: it is low at the younger ages, rises with age and finally drops as age increases.

Table 5.9: Age-specific separation rate by sex, SVRS 2019

Age group	Rural			Urban		
	Male	Female	Both sexes	Male	Female	Both sexes
15 - 19	0.2	1.2	0.6	0.1	0.6	0.3
20 - 24	0.3	1.2	0.8	0.1	1.1	0.7
25 - 29	0.5	1.1	0.8	0.3	0.8	0.6
30 - 34	0.3	0.4	0.3	0.7	0.6	0.6
35+	0.0	0.2	0.1	0.1	0.2	0.2
Total	0.2	0.6	0.4	0.2	0.5	0.3

5.7 Trends in Marriage, Divorce and Separation: 2005-2019

The trends in some marriage and marriage related indicators are summarized in Table 5.10. The crude marriage rate shows a substantial increase over the last 15 years, from 13.0 per thousand population in 2005 to 14.9 per thousand population in 2019, an increase of about 15 percent over the stated period. The increase in general marriage rates for both males and females have been pronounced during 2005-2019: from 19 in 2005 to 41.7 in 2019 for males. The corresponding rates for females are 21.5 and 41.5.

There has been virtually no change in crude separation rate over the period under investigation. The Singulate mean age at marriage (SMAM) for both males and females has marked a negligible and irregular increase during this period. There is a tendency for crude divorce rate to increase over time: from 0.7 in 2005 to 1.0 in 2019, although the pattern of increase is somewhat erratic. Mean age at marriage (irrespective of marital status) for males has shown virtually no trend over this period. The corresponding increase for females is from 17.9 years to 18.9 years. The mean age at first marriage remains static over the last nine years or so.

Before we conclude, it may be worth to mention that the measures of marriage and marital dissolution presented in this chapter tend to reflect that there have been virtually very little changes in these measures during the last 15 years or so. In some cases, levels and patterns of these measures are erratic and irregular. It may thus be very difficult to bring favorable changes unless concerted efforts from all walks of life are strengthened.

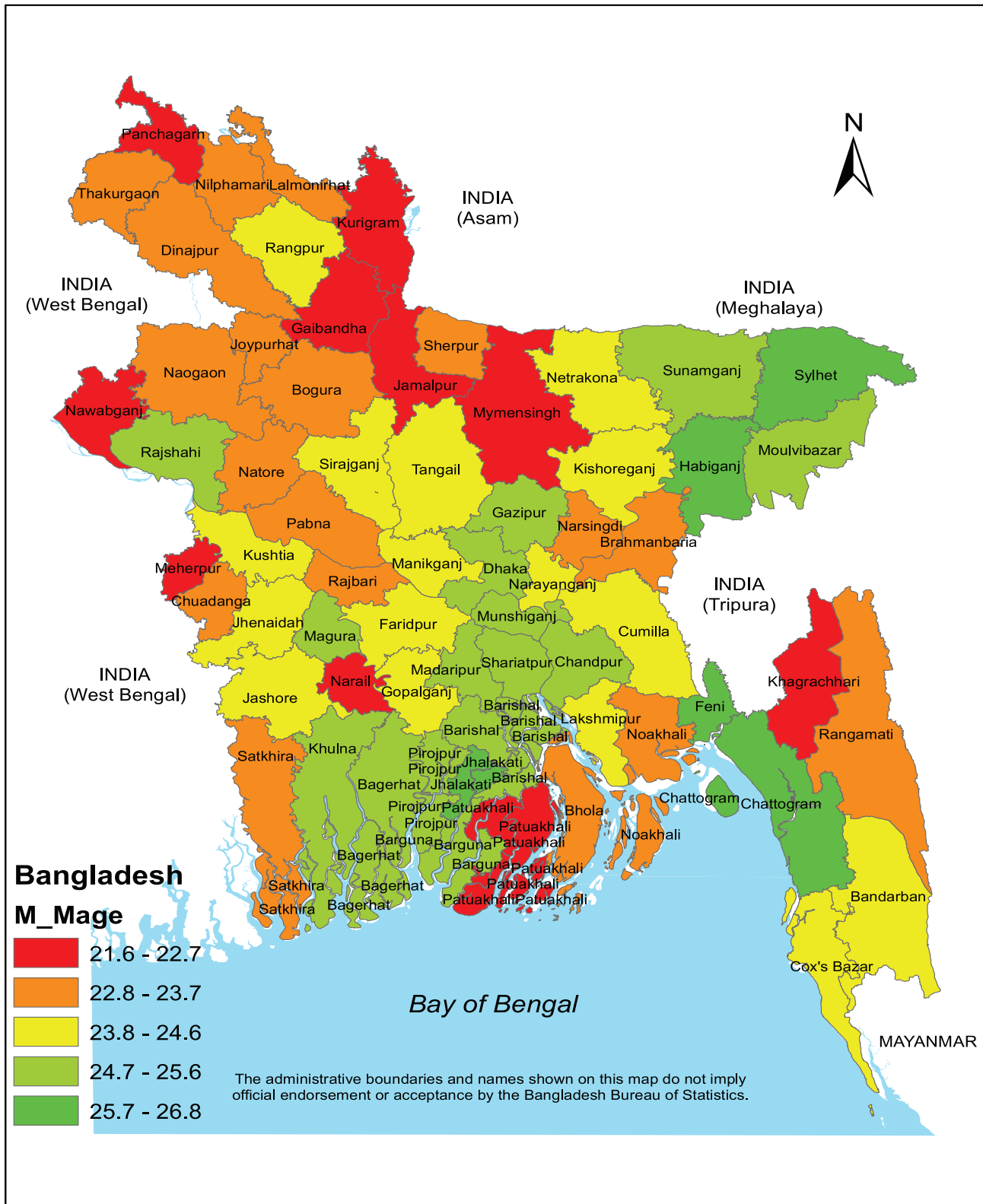
Table 5.10: Trends in indicators of marriage, divorce and separation, SVRS 2005-2019

Background Characteristics	Year														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Crude marriage rate:	13.0	12.4	12.5	11.6	13.2	12.7	13.4	13.3	13.0	12.9	13.0	14.3	14.6	14.7	14.9
General marriage rate:	20.5	19.6	19.2	17.4	19.6	18.4	19.7	19.3	19.1	19.0	18.8	20.6	20.7	20.6	20.8
Male	19.0	18.3	18.2	16.1	18.1	17.4	18.1	38.1	38.1	38.1	37.9	41.3	41.4	41.4	41.7
Female	21.5	21.0	20.1	18.8	21.1	20.3	21.2	39.1	38.4	37.7	37.4	41.2	41.3	41.0	41.5
Crude divorce rate:	0.7	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.6	.09	0.9	1.1	1.0	0.9	1.0
General divorce rate:															
Male	–	0.5	–	–	–	–	–	0.7	1.8	2.8	2.6	3.1	2.8	2.6	2.7

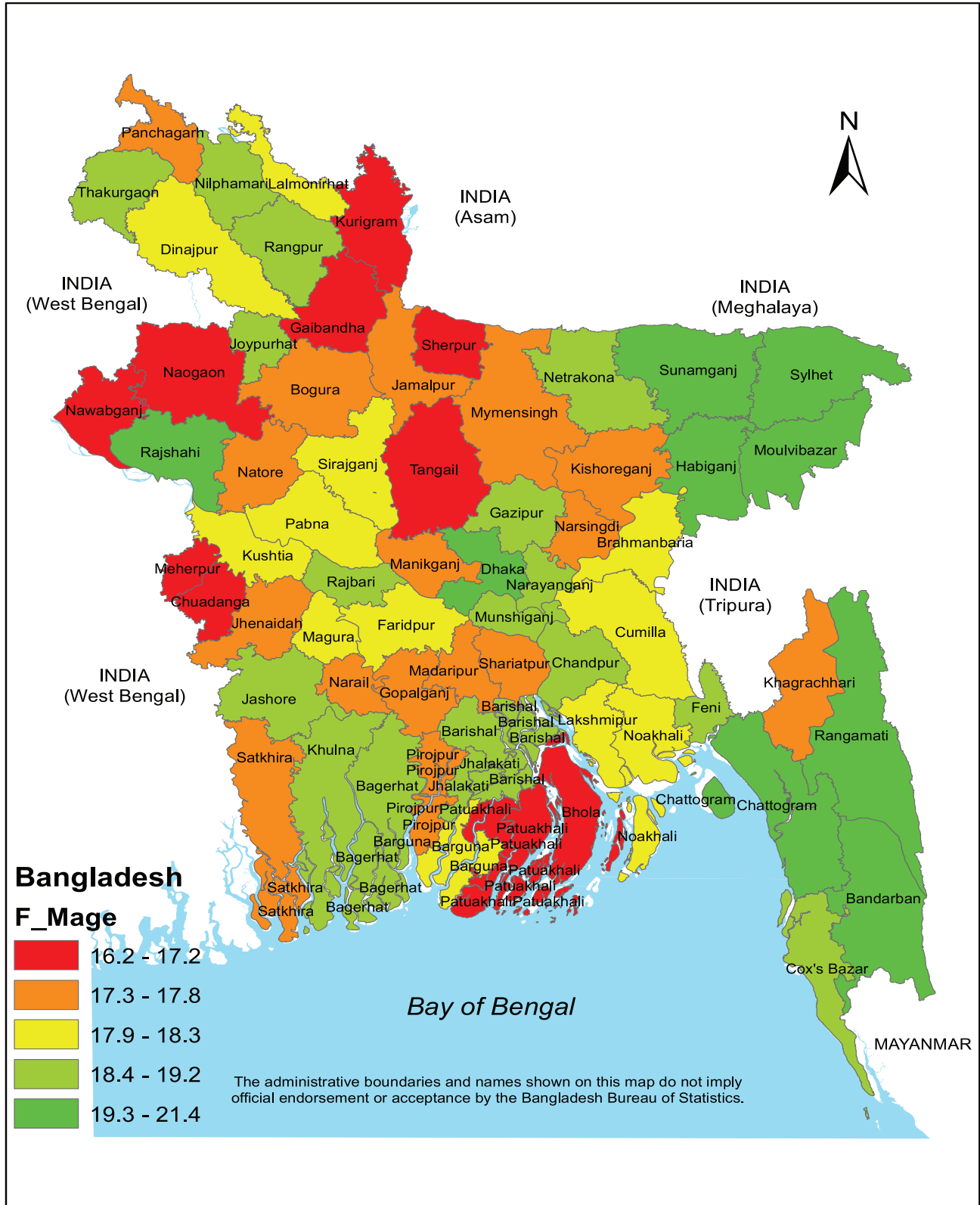
Background Characteristics	Year														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Female	—	1.6	—	—	—	—	—	1.7	0.9	2.7	2.6	3.1	2.8	2.6	2.7
Crude separation rate:	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.6	0.3	0.3	0.3
General separation rate:															
Male	—	0.3	—	—	—	—	—	0.4	0.8	0.8	1.0	1.1	0.9	0.9	0.7
Female	—	0.6	—	—	—	—	—	0.6	0.8	0.8	1.0	1.1	0.9	0.9	0.7
Mean age at marriage:															
Male	25.3	23.4	23.6	23.8	23.8	23.9	24.9	24.8	24.3	25.9	26.4	26.3	26.2	25.5	25.3
Female	17.9	18.1	18.4	19.1	18.5	18.7	18.6	19.3	18.4	18.5	18.7	18.8	18.8	18.9	18.9
Median age at marriage:															
Male	—	—	—	—	—	—	24.0	25.0	24.0	24.0	25.0	25.0	25.0	24.0	24.0
Female	—	—	—	—	—	—	18.0	19.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Mean age at first marriage:															
Male	—	—	—	—	—	—	—	—	24.3	24.9	25.3	25.2	25.1	24.4	24.2
Female	—	—	—	—	—	—	—	—	17.9	18.3	18.4	18.4	18.4	18.6	18.5
Median age at first marriage:															
Male	—	—	—	—	—	—	—	—	24.0	24.0	25.0	25.0	25.0	24.0	24.0
Female	—	—	—	—	—	—	—	—	18.0	18.0	18.0	18.0	18	18.0	18.0
Singulate mean age at marriage (SMAM):															
Male	25.6	25.7	25.6	25.9	26.0	26.1	26.1	26.0	25.47	25.4	25.8	25.7	25.6	26.0	26.3
Female	19.5	19.3	19.4	20.3	20.3	20.2	20.5	20.3	20.02	20.0	20.3	20.3	20.3	20.7	20.5

(—): Not available

Map 5.1: Mean age at first marriage of male by Zila, SVRS 2019



Map 5.2: Mean age at first marriage of female by Zila, SVRS 2019



CHAPTER VI

Contraceptive Usage

6.1 Introduction

The findings presented in this chapter are the outcomes of data collected through Schedule-9 canvassed for Monitoring the Situation of Vital Statistics of Bangladesh (MSVSB) project of BBS for the year 2019. The schedule in question was used for collecting data on the usage of the family planning methods. Specifically, the schedule includes such information on family planning as user's name, current age, level of education and economic activities of couples, ever-use and current use status of family planning methods, and methods used.

6.2 Current Use of Contraception

The current use of contraception is defined as the percent of currently married women who reported to have been using a family planning method at the time of the inquiry. The resulting value is the so-called Contraceptive Prevalence Rate (CPR). The estimated CPRs by some background characteristics have been presented in Table 6.1 for the year 2019.

Overall, 63.4 per cent of the currently married women aged 15–49 are currently using any method of contraception. Urban women are more likely (64.4%) to adopt family planning methods than their rural counterparts (62.7%). The use rate was found to be the highest (85.6%) among the women in Barishal division, the lowest rate (47.2%) being reported to be prevalent among the women of Sylhet division. Rangpur, which occupied the first position in 2018, ranks second with a use rate of 70.6 percent this year.

As evident from the results presented in Table 6.1, the overall use of contraceptives by and large, does not seem to be in much variation over the last four years. For example, the CPR as recorded in 2016 was 62.3, which rose to 62.5 in 2017, 63.1 in 2018, and currently 63.4, with an annual increment of only 0.275 percentage points in 4 years.

The age pattern of contraceptive use follows a curvilinear pattern. It starts with a rate of 57 percent for those who are adolescents, then rises slowly and reach at a peak rate of 74.6 percent when the women are in the age range 30–34, when it starts declining until it reaches to 36 percent when the women are at the end of their reproductive period.

Table 6.1: Current use of contraceptive methods (%) among the currently married women by background characteristics, SVRS 2019

Background Characteristics	Any Method	Modern Method	Traditional Method
Residence:			
Rural	62.7	61.7	1.0
Urban	64.4	62.6	1.8
Women age:			
15-19	57.0	56.2	0.8
20-24	65.3	64.4	0.8
25-29	73.6	72.5	1.1
30-34	74.6	73.2	1.4

Background Characteristics	Any Method	Modern Method	Traditional Method
35-39	65.4	63.7	1.6
40-44	55.1	53.1	1.9
45-49	36.0	34.2	1.8
Division:			
Barishal	85.6	84.2	1.4
Chattogram	55.0	53.9	1.0
Dhaka	59.7	58.3	1.4
Khulna	60.1	58.7	1.4
Mymensingh	68.3	67.8	0.5
Rajshahi	68.7	67.0	1.8
Rangpur	70.6	69.1	1.5
Sylhet	47.2	46.1	1.0
Total	63.4	62.1	1.3

The current use of contraception as reported in BDHS 2014 was 62.4 percent, a result comparable with the findings of SVRS for the last three years, though the rates are not strictly comparable due to the difference in the reference period of the studies in question.

A little over 62.0 percent of the currently married women in the SVRS area were the users of modern methods as opposed to only 1.3 percent who were opting for traditional methods. Comparison with the previous year's data shows that the use of modern methods has increased by 0.5 percentage points with a corresponding decrease in traditional method by 0.2 percentage points in one year. The corresponding rates in the 2014 BDHS were reported to be 54.1 and 8.4 respectively resulting in an overall rate of 62.5 percent.

In line with the use of any method, the use of modern methods is the highest (73.2%) for those who are aged 30–34 years and follows an identical age pattern of use as observed in the case of any method users. By and large, the difference between the use rate of any methods and current methods is only to the extent of 1.5 percentage points on the average when the rates are examined by current age of the users. The use of modern methods of contraceptives in urban area exceeds the use of the same method in rural area by a narrow margin of 0.9 percentage points (62.6% vs 61.7%).

The use of modern methods of contraception varies substantially between administrative divisions ranging from as low as 46.1 percent in Sylhet division to as high as 84.2 percent in Barishal division. In 2018, the modern method use rate was the highest (87.2%) in Rangpur division. This shift is clearly in agreement with the use rate of any method in 2019. It may be recalled that the pattern of use of modern method is highly consistent with pattern as observed in the case of any method.

The overall use of traditional method is 1.3. This rate increases consistently with the age of the currently married women: from 0.8 percent when the women are aged 15–19 to 1.8 percent when they are at 45–49. Contrary to our common believe, urban women are 1.8 times as likely as the rural women to use traditional methods. The use rate of traditional methods is more prevalent among the women of Rajshahi division (1.8%) followed by Mymensingh division with a rate of 0.5 percent. The least use rate of traditional methods (1.0%) was reported in Sylhet and Chattogram divisions with a common rate of 1.0 percent.

6.3 Ever Use of Contraception

Ever use of family planning methods in SVRS refers to the use of any contraceptive methods at any point in time before the date of interview without making a distinction between past and current use. Any respondent reporting that she or her husband had used some form of contraception was included as an ever user regardless of the time of use. Thus, a reported ever user might be a past or a current user.

Table 6.2 shows the prevalence of ever-use of any method of contraception by the currently married women with respect to a few selected background characteristics of the respondents. The overall rate of ever use of modern methods as reported in 2019 round of survey is 82.5 as opposed to a rate of 82.2 in 2018 showing a marginal increase of only 0.3 percentage points in one year. Keeping consistency with current and ever use rates, the age-specific ever use rate is the highest (87.6%) for those who are aged 30–34 and the lowest (71.2%) among the women in the youngest age group 15-19. The age pattern of ever use closely resembles the current use rate as shown in Table 6.1. Except for Sylhet division, where the rate is only to the extent of 67 percent, the ever use rates in other divisions remain pretty high centering in the neighborhood of 88 percent. The urban-rural ever use rates differ by a narrow margin of 1.1 percentage points. The levels and patterns in ever use of modern methods are nearly identical to the patterns found in the case of ever use of any method of contraceptives. By all background characteristics, the patterns and levels of use of any method and modern methods are pleasingly consistent.

In line with the current use rates of traditional methods, ever use rates of traditional methods progresses slowly as age advances, from 1.3 percent at ages 15-19 to 2.5 percent at ages 40-44, which thereafter recorded a moderate decline of 0.1 percentage points to age 45-49.

Table 6.2: Ever use of contraceptive methods (%) among the married women by background characteristics, SVRS 2019

Background Characteristics	Any method	Modern method	Traditional method
Residence:			
Rural	82.7	81.6	1.1
Urban	82.3	80.1	2.2
Women age:			
15-19	71.2	70.2	1.0
20-24	77.5	76.4	1.0
25-29	86.5	85.2	1.4
30-34	87.6	86.0	1.6
35-39	85.6	83.7	1.9
40-44	83.0	80.9	2.1
45-49	73.9	72.0	1.9
Division:			
Barishal	88.2	86.9	1.3
Chattogram	75.2	73.8	1.4
Dhaka	83.2	81.5	1.7
Khulna	84.7	83.1	1.6
Mymensingh	85.9	85.5	0.4
Rajshahi	88.9	86.5	2.5
Rangpur	88.6	87.1	1.5
Sylhet	67.0	65.6	1.4
Total	82.5	80.9	1.6

6.4 Method-Specific Contraceptive Use

Table 6.3 presents the use of contraception by type of specific methods. As expected, oral pill is the most preferred choice among the women being reported by 35.6 percent of the total users. This rate was 34.9, in 2018 round of SVRS. Oral pill is the second choice of the Bangladeshi women as a method of contraception, the percentage users of this method being 14.4. The next preferred method is condom being used by 8.0 percent of the women. Of the total users of any method, only 0.3 percent used male sterilization, 1.0 percent copper-T, 1.7 percent female sterilization, 0.5 percent foam and another 0.5 percent Norplant. The remaining 1.3 percent was the users of any traditional methods. These findings are highly consistent with the previous years findings.

Table 6.3. Method-specific contraceptive use rate among currently married women by age, SVRS 2019

Age group	Number of women	Any method	Method used									
			Condom	Oral Pill	Injections	Male Sterilization	Copper-T (IUD)	Female Sterilization	Foam tablet	Norplant	MR	Traditional method
15-19	13755	53.6	11.6	33.8	6.2	0.1	0.3	0.2	0.4	0.2	0.1	0.7
20-24	42810	62.3	10.1	38.5	10.9	0.1	0.6	0.3	0.5	0.4	0.1	0.9
25-29	51806	70.4	9.8	41.4	15.2	0.2	0.9	0.6	0.6	0.5	0.1	1.2
30-34	53017	72.4	8.4	40.5	17.9	0.3	1.2	1.4	0.7	0.6	0.1	1.4
35-39	46457	68.0	7.1	35.8	17.9	0.5	1.3	2.5	0.5	0.7	0.0	1.6
40-44	37440	58.5	5.9	29.7	15.1	0.5	1.3	3.4	0.4	0.5	0.0	1.7
45-49	28490	39.5	3.5	20.1	9.4	0.5	0.8	3.1	0.3	0.3	0.0	1.5
Total	273775	63.4	8.0	35.6	14.4	0.3	1.0	1.7	0.5	0.5	0.1	1.3

6.5 Contraceptive Method-Mix

Contraceptive method-mix indicates the percentage distribution of contraceptive users by type of methods used. Countries typically use this indicator for planning, especially for commodities and logistics planning. The method-mix provides a profile of the relative level of use of different contraceptive methods. A broad method-mix suggests that the population has access to a range of different contraceptive methods. Conversely, method mix can signal: (1) provider bias in the system, if one method is strongly favored to the exclusion of others; (2) user preferences; or (3) both.

Table 6.4 shows the contraceptive method-mix by background characteristics of the women. Overall, pill is the most widely used method accounting for 57.3 percent of the CPR, followed by injections (23.2%). This pattern is uniformly maintained for all the background characteristics of the women. A close examination of the method-mix shows that the level of pill use is highly negatively associated with age: higher the age, lower is the preference for pill by the women except for a few age groups. On the other hand, age is positively associated with the use of injections in the broad age span 15–44. The distribution of the method-mix does not appear to show any variation by divisions except for Sylhet. Women of urban areas are about 3 times more in proportions to be the users of contraceptives than the women in the rural areas irrespective of the method mix.

Table 6.4: Contraceptive method mix (%) by background characteristics, SVRS 2019

Background Characteristics	Modern	Condom	Oral Pill	Injections	Male Sterilization	Copper-T	Female Sterilization	Foam tablet	Norplant	MR
Residence:										
Rural	100.0	7.8	58.9	26.3	0.7	1.8	2.8	0.7	0.8	0.1
Urban	100.0	18.9	55.4	19.6	0.3	1.5	2.5	1.0	0.8	0.1
Age group:										
15-19	100.0	21.8	63.9	11.8	0.2	0.6	0.3	0.8	0.3	0.2

Background Characteristics	Modern	Condom	Oral Pill	Injections	Male Sterilization	Copper-T	Female Sterilization	Foam tablet	Norplant	MR
20-24	100.0	16.4	62.6	17.7	0.2	1.0	0.5	0.9	0.6	0.2
25-29	100.0	14.1	59.7	22.0	0.3	1.3	0.9	0.9	0.7	0.1
30-34	100.0	11.9	56.9	25.2	0.5	1.7	2.0	0.9	0.9	0.1
35-39	100.0	10.7	54.0	27.0	0.7	2.0	3.7	0.8	1.0	0.1
40-44	100.0	10.4	52.3	26.5	0.9	2.3	6.0	0.7	0.9	0.1
45-49	100.0	9.1	52.9	24.9	1.2	2.1	8.2	0.7	0.7	0.1
Division:										
Barishal	100.0	13.9	57.7	23.0	0.4	1.2	1.5	0.8	1.3	0.2
Chattogram	100.0	11.5	55.7	26.6	0.6	1.8	2.1	0.7	0.7	0.1
Dhaka	100.0	15.5	58.9	19.7	0.4	1.5	2.5	1.0	0.4	0.1
Khulna	100.0	11.7	59.8	23.4	0.4	1.4	1.9	0.6	0.8	0.1
Mymensingh	100.0	5.8	64.8	25.3	0.3	1.5	1.3	0.2	0.8	0.0
Rajshahi	100.0	16.5	51.9	22.6	0.6	1.9	4.7	0.9	0.8	0.1
Rangpur	100.0	10.1	55.5	27.4	0.9	1.5	2.6	0.9	1.0	0.1
Sylhet	100.0	12.4	61.1	17.2	0.4	2.4	4.6	1.2	0.5	0.1
Total	100.0	12.9	57.3	23.2	0.5	1.6	2.7	0.8	0.8	0.1

6.6 Trends in Contraceptive Use: 2005-2019

There has been a gradual increase in the use of contraceptive methods in Bangladesh over the last 45 years since 1975 when the First Bangladesh Fertility Survey was undertaken recording a contraceptive prevalence rate of 7.7 percent. The Bangladesh Demographic and Health Survey (BDHS) of 2014 reported this rate to be 62.4 percent, a more than 8-fold increase over this period. The SVRS area also demonstrated a substantial increase from 57.0 in 2005 to 62.5 in 2017, nearly a 10 percent increase in about 13 years' time. During this period, the increase in the contraceptive use rate in rural area was also about 14.3 percent, from 55.2 percent in 2005 to 63.4 percent in 2019. Table 6.5 presents an overview of the trends in contraceptive use since the initiation of the SVRS program of registration of the vital events in Bangladesh.

Note that, while the modern method use has shown an increase of more than 20 percent during 2005–2019, the traditional method use has correspondingly gone down by about 75 percent. Use of condom over this time recorded an erratic increase from 5.2 percent in 2005 to 8 percent in 2019, while the use of oral pill remained almost static remaining somewhere in the neighborhood of 35 percent reaching at 35.6 percent in 2019.

Table 6.5: Trends in current use of contraceptive methods (%), SVRS 2005–2019

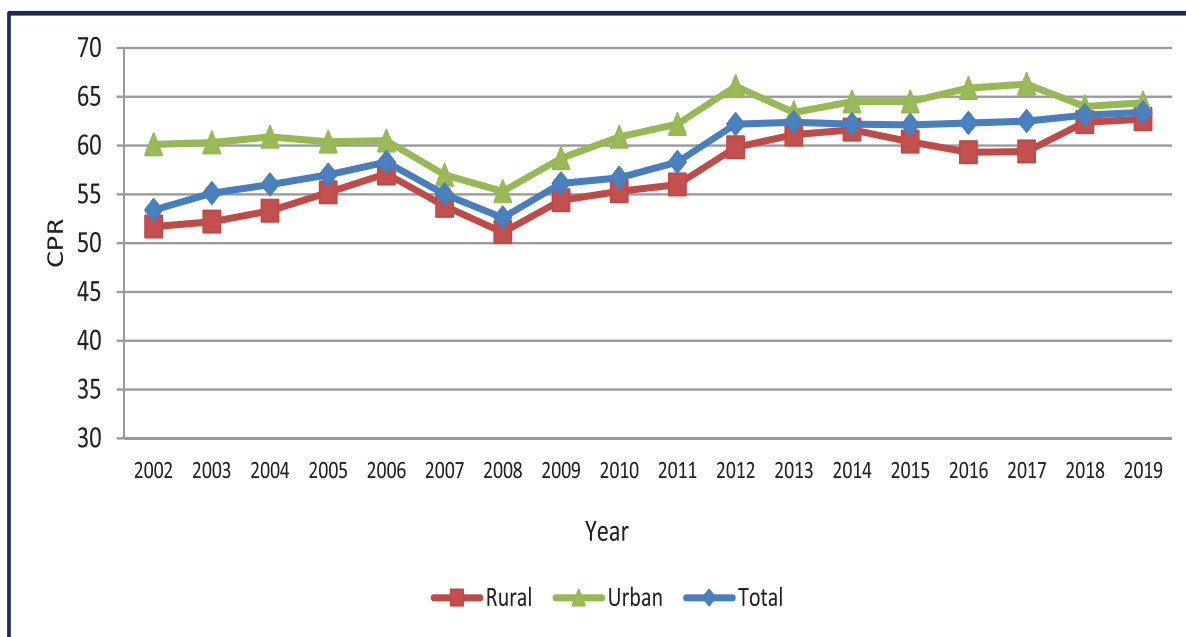
Method	Years															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Any method	57.0	58.3	55.0	52.6	56.1	56.7	58.3	62.2	62.4	62.2	62.1	62.3	62.5	63.1	63.4	
Any method (rural)	55.2	57.1	53.8	51.1	54.4	55.3	56.0	59.8	61.1	61.6	60.4	59.3	59.4	62.4	62.7	
Any method (urban)	60.4	60.5	57.0	55.3	58.7	60.9	62.2	66.1	63.4	64.5	64.5	65.9	66.3	64.0	64.4	
Any modern method:	51.7	52.5	51.8	50.6	53.6	54.8	56.6	60.2	60.0	58.4	58.4	58.4	59.2	61.6	62.2	
Condom	5.2	6.8	4.4	3.2	5.5	3.8	4.0	5.3	5.0	5.1	7.2	5.8	8.6	7.2	8.0	
Oral pill	35.4	36.2	34.5	37.9	37.1	34.4	35.0	35.8	36.1	34.8	32.7	33.4	33.4	34.9	35.6	
Injections	8.5	7.0	10.3	8.0	9.0	12.7	12.8	14.0	14.6	14.7	14.5	15.2	13.4	15.3	14.4	
Male sterilization	0.2	0.3	0.3	0.2	0.2	0.4	0.5	0.49	0.6	0.5	0.3	0.3	0.3	0.3	0.3	

Method	Years															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Copper-T	0.6	0.7	0.8	0.4	0.4	0.8	0.9	1.1	0.9	0.9	1.0	0.8	0.9	1.0	1.0	
Female sterilization:	1.8	1.7	1.9	0.9	1.3	2.0	2.1	2.5	1.8	1.7	1.8	2.0	1.6	1.8	1.7	
Foam	NA	NA	NA	NA	NA	NA	0.4	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.5	
Norplant	NA	NA	NA	NA	NA	0.0	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.1	
Any traditional method	5.1	5.3	5.8	3.2	2.1	2.5	2.0	1.8	2.0	2.4	3.8	3.9	3.3	1.5	1.3	

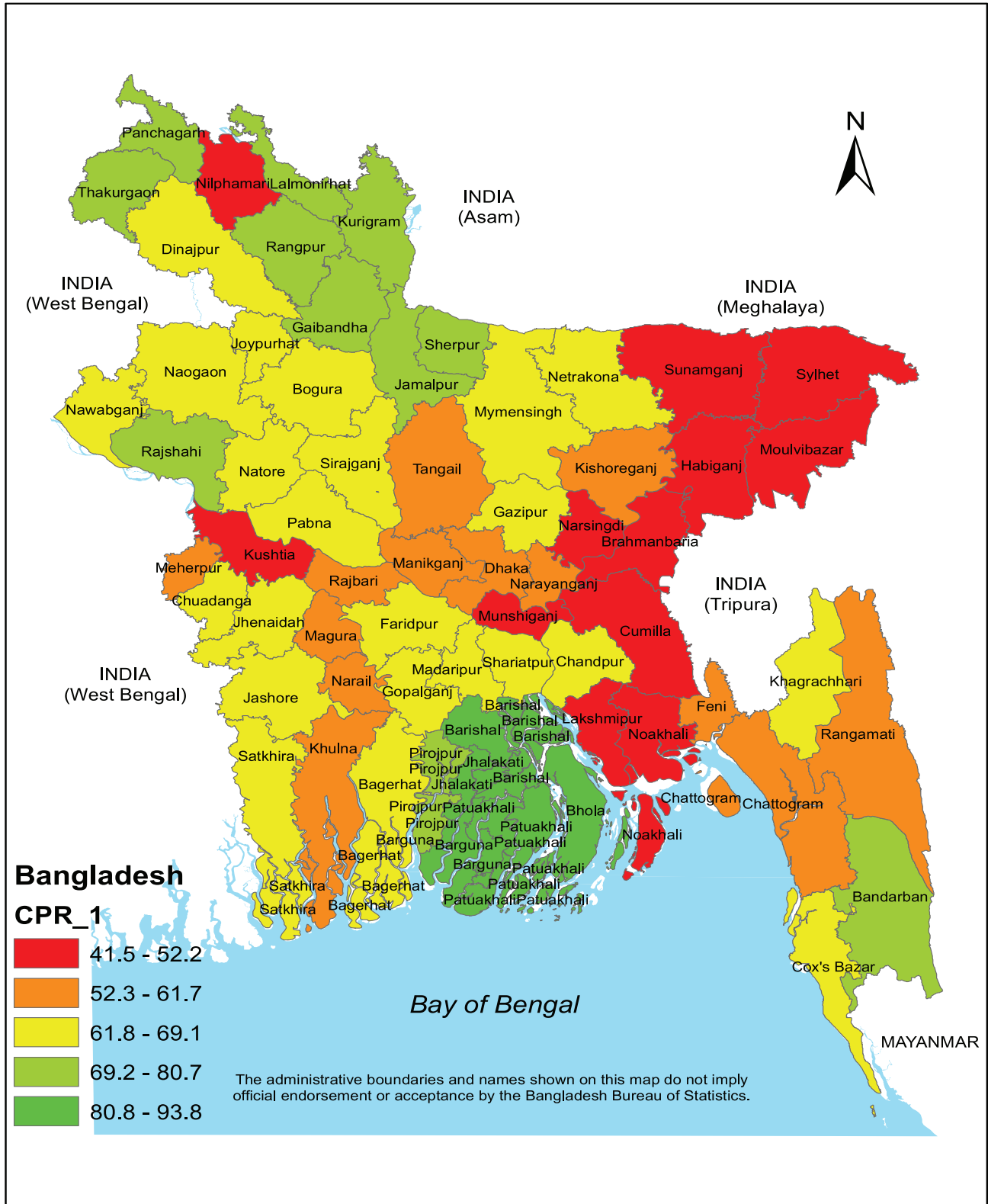
NA: Not Available

Trends in CPR by locality in case of current use are provided in Figure 6.1.

Figure 6.1: Trends in current use of contraception by locality, SVRS 2002-2019



Map 6.1: Current usage of contraception by Zila, SVRS 2019



CHAPTER VII

Internal Migration

Migration, more specifically the human migration is the movement by people from one place to another with the intention of settling in new and geographically different locations. The movements, more specifically the spatial movements, involve a change of place of usual residence and crossing of a political boundary resulting in taking-up of life in a new or different place. Migration may involve individuals, family units or large groups. In the study area migration data on internal migration were collected using Schedule 7 & 8. The period of movement in the case of SVRS has been fixed at six months or more except for marriage in which case the time period is not fixed. Needless to say, internal migration is a term employed to refer to changes of residence within residence and defined in terms of residential moves across boundaries, which are often taken as the boundary of minor divisions or districts or regions of the country

7.1 Migration Rate

In-migration is a process that involves movement into or come to live in a region or community especially as a part of a large-scale and continuing movement of population. An in-migrant is a person who enters a migration-defining area by crossing its boundary, but within the same country.

Out-migration is a process that involves movement from one region or community in order to settle in another especially as part of a large-scale and continuing movement of population. Every move is an out-migration with respect to the area of origin and an in-migration with respect to the area of destination. An out-migrant is thus a person, who departs from a migration defining area by crossing the boundary to a point outside it but within the same country.

The overall in-migration rate in the sample area in 2019 is 72.4 per thousand population. This compares with an out-migration rate of 72.7 per thousand population resulting in a loss of 0.3 persons per thousand population. These rates were 72.8 and 72.4 in 2018 resulting which resulted in a gain of 0.4 persons per 1000 population. Migratory movement of the females was more pronounced than their male counterparts. For example, while only 64.2 per thousand males made move into the sample area in 2019, the corresponding rate for females was to the extent of 80.7 per thousand. A similar feature of movement was also noted in the case of out-migration: 64.4 for males and over 80.9. for females.

Urban people are more than 4 times as likely as the rural people to move in. The tendency to out-migrate of the urban people was also very high compared to their rural counterparts; the rural-urban ratio being 1: 3.7. The flow of in and out -migration in rural area resulted in a loss of 2.6 persons per thousand population. The urban area, on the contrary, is a gaining population with a net gain of 2.6 persons per thousand populations. The scenario was completely reverse in the previous years with respect to the net migration.

Migratory movement was the highest in Dhaka division with an in-migration rate of 119.4 and an out-migration rate of 113.9 resulting in a net gain of 5.5 persons per 1000 population. Data seem to support the fact that except Chattogram and Sylhet, all other divisions are gaining population as a result of net balance between in and out migration.

Gross-migration

Gross migration is the sum of the number of in-migrants and number of out-migrants. The overall in and out-migration rates resulted in a gross migration rate of 145.1 persons per thousand population, there being no change in the last one year. Urban area compared to the rural area experienced the

higher gross migration rate: 131.6 versus 75.6. Among the 8 divisions, Dhaka division had the highest gross migration rate of 233.3 followed by Barishal (184.8). The least incidence of gross migration was seen to occur in Mymensingh (71.0). The detailed results have been presented in Table 7.2.

Table 7.1: Migration rates per 1000 population by sex and selected background characteristics, SVRS 2019

	Male			Female			Both sexes		
	In-migration	Out-migration	Net migration	In-migration	Out-migration	Net migration	In-migration	Out-migration	Net migration
Residence:									
Rural	27.4	29.4	2.0	45.7	48.8	-3.1	36.5	39.1	-2.6
Urban	110.0	108.1	1.9	124.2	120.8	3.4	117.1	114.5	2.6
Division:									
Barishal	85.8	83.9	1.9	100.6	99.7	0.9	93.1	91.7	1.4*
Chattogram	59.0	60.7	-1.7	76.6	79.3	-2.7	67.9	70.1	-2.1
Dhaka	112.4	106.2	6.2	126.3	121.6	4.7	119.4	113.9	5.5*
Khulna	56.1	54.4	1.7	75.6	74.0	1.6	65.8	64.2	1.6*
Mymensingh									1.6*
h	17.4	38.7	-21.3	27.3	59.0	-31.7	22.3	48.7	
Rajshahi	41.1	41.1	0	60.8	59.2	1.6	50.9	50.0	0.9*
Rangpur	46.6	43.9	2.7	65.1	59.2	5.9	55.7	51.4	4.3*
Sylhet	54.7	60.6	-5.9	68.7	70.4	-1.4	61.8	65.6	-3.8
Total	64.2	64.4	-0.2	80.7	80.9	-0.2	72.4	72.7	-0.3

Table 7.2: Gross migration rates per 1000 population by sex and selected background characteristics, SVRS 2019

Background	Male			Female			Both sexes		
	In-migration	Out-migration	Gross migration	In-migration	Out-migration	Gross migration	In-migration	Out-migration	Gross migration
Residence:									
Rural	27.4	29.4	56.8	45.7	48.8	94.5	36.5	39.1	75.6
Urban	110.0	108.1	218.1	124.2	120.8	245.0	117.1	114.5	231.6
Division:									
Barishal	85.8	83.9	169.7	100.6	99.7	200.3	93.1	91.7	184.8
Chattogram	59.0	60.7	119.7	76.6	79.3	155.9	67.9	70.1	138.0
Dhaka	112.4	106.2	218.6	126.3	121.6	247.9	119.4	113.9	233.3
Khulna	56.1	54.4	110.5	75.6	74.0	149.6	65.8	64.2	130.0
Mymensingh	17.4	38.7	56.1	27.3	59.0	86.3	22.3	48.7	71.0
Rajshahi	41.1	41.1	82.2	60.8	59.2	120.0	50.9	50.0	100.0
Rangpur	46.6	43.9	90.5	65.1	59.2	124.3	55.7	51.4	107.1
Sylhet	54.7	60.6	115.3	68.7	70.4	139.1	61.8	65.6	127.4
Total	64.2	64.4	128.6	80.7	80.9	161.6	72.4	72.7	145.1

7.2 Age-Specific Migration Rates

Age-specific migration rates presented in Table 7.3 are simple refinements of the migration rates presented above in Table 7.1. The age-specific rates are particularly important in understanding how the incidence of migration varies over the life cycle.

The highest incidence of in and out migration for both sexes together was noted in the broad age group 15–29. It is particularly true for females. Males are significantly less likely to move in or out than their female counterparts when they are between 15 and 24. Investigation shows that a substantial number of children of 0–4 age group move in and out along with their parents as a result of which migration of these children occur at a high rate.

The age pattern of both in and out migration for both sexes is curvilinear in nature. It is somewhat high in the childhood, rises slowly to age 25–29 and then sharply declines at advanced ages. The age patterns of migrants obtained in 2019 are similar to the one obtained in 2017 and 2018 in terms of their levels and patterns but significantly different from one another in terms of its structure.

Table 7.3: Age -specific migration rates per 1000 population by sex, SVRS 2019

(Overall)

Age group	Male		Female		Both sexes	
	In-migration	Out-migration	In-migration	Out-migration	In-migration	Out-migration
0-4	92.7	81.4	94.3	82.4	93.5	81.9
5-9	71.9	72.3	69.3	72.4	70.6	72.3
10-14	54.2	59.7	58.3	69.0	56.3	64.4
15-19	49.6	53.1	190.8	183.6	112.5	111.2
20-24	60.8	64.5	133.4	133.6	98.9	100.7
25-29	95.7	91.5	106.5	107.7	101.6	100.3
30-34	89.1	91.0	68.9	73.9	78.3	81.9
35-39	83.4	79.4	61.5	60.7	72.0	69.7
40-44	62.1	65.5	45.3	48.2	53.7	56.9
45-49	54.2	51.8	43.3	41.3	49.0	46.8
50-54	42.0	45.5	38.4	39.9	40.2	42.7
55-59	33.4	37.2	28.5	30.6	31.0	34.0
60-64	36.6	35.0	34.9	33.2	35.8	34.2
65-69	26.4	28.0	29.6	26.4	27.9	27.3
70-74	30.3	28.8	34.9	29.1	32.4	28.9
75+	24.5	25.6	33.7	23.7	29.1	24.7
Total	64.2	64.4	80.7	80.9	72.4	72.7

Tables 7.4 and 7.5 present the age and sex specific migration rates for rural and urban areas separately. Here too, in the rural area, migratory movement both in and out is more pronounced among the females compared to the males. In contrast, there are little sex-differentials in migration in the urban area.

Table 7.4: Age-specific migration rates per 1000 population by sex, SVRS 2019

(Rural area)

Age group	Male		Female		Both sexes	
	In-migration	Out-Migration	In-migration	Out-migration	In -migration	Out -migration
0-4	42.1	38.1	44.8	39.5	43.4	38.8
5-9	31.1	35.7	32.3	34.7	31.7	35.2
10-14	22.5	28.5	26.7	45.2	24.6	36.8
15-19	21.1	25.7	169.9	169.4	86.2	88.6
20-24	31.0	32.5	88.5	92.6	60.0	62.8
25-29	44.7	45.9	54.3	57.1	49.9	51.9
30-34	40.4	41.8	28.8	36.2	34.1	38.8
35-39	33.6	33.5	23.7	25.4	28.4	29.2
40-44	23.8	27.5	15.5	19.3	19.6	23.3
45-49	19.6	20.9	16.6	14.4	18.1	17.7
50-54	15.1	17.8	14.1	14.3	14.6	16.0
55-59	12.5	12.8	9.4	11.5	10.9	12.1
60-64	12.0	12.0	14.9	13.3	13.4	12.6
65-69	10.1	8.4	11.9	14.5	11.0	11.3
70-74	10.1	11.6	21.8	17.0	15.6	14.1
75+	10.6	11.6	21.9	10.9	16.1	11.3
Total	27.4	29.4	45.7	48.8	36.5	39.1

Table 7.5: Age-specific migration rates per 1000 population by sex, SVRS 2019

(Urban area)

Age group	Male		Female		Both sexes	
	In-migration	Out-Migration	In-migration	Out-migration	In-migration	Out-migration
0-4	162.9	141.4	162.9	142.0	162.9	141.7
5-9	124.9	119.8	119.8	123.9	122.5	121.8
10-14	99.2	103.9	101.6	101.6	100.4	102.8
15-19	89.3	91.2	217.8	201.8	147.9	141.6
20-24	98.5	104.9	181.1	177.1	143.7	144.4
25-29	153.7	143.4	162.4	161.8	158.5	153.6
30-34	141.4	143.9	113.3	115.7	126.4	128.9
35-39	136.6	128.5	103.9	100.4	119.8	114.1
40-44	103.4	106.6	80.1	81.6	92.0	94.4
45-49	92.4	85.8	75.2	73.3	84.3	80.0
50-54	72.4	76.7	68.6	71.7	70.6	74.3
55-59	58.9	66.9	55.1	57.2	57.1	62.4
60-64	67.5	63.9	63.4	61.5	65.7	62.9
65-69	49.2	55.4	57.7	45.5	53.0	51.0
70-74	60.7	54.6	56.0	48.5	58.6	51.8
75+	50.5	51.9	54.7	46.1	52.6	49.0
Total	110.0	108.1	124.2	120.8	117.1	114.5

7.3 Causes of In and Out-Migration

The causes of migration have been presented in Table 7.6. A large number of people move (in and out) for sheer reasons for living with their family members. This cause accounts for about 56.4 percent of all causes in the case of in-migration and 52.0 percent in the case of out-migration. Farming, in the case of males and matrimonial (especially among the females) issues also stand out as two major causes of migratory movements. Causes of migration by age, sex and distributions of migrants by causes are shown in the appendix in greater details.

Table 7.6: Causes of in and out-migration by sex, SVRS 2019

Causes of migration	In-migration			Out-migration		
	Male	Female	Both sexes	Male	Female	Both sexes
Matrimonial	0.7	16.3	9.4	0.8	15.9	9.2
Education	3.5	2.9	3.2	3.3	2.6	2.9
In search of job	4.5	2.1	3.2	4.4	2.3	3.2
To perform job duty	3.9	1.3	2.5	2.9	1.2	2.0
Due to transfer	5.8	2.1	3.7	6.0	3.2	4.5
River eroded	1.4	0.8	1.1	1.8	1.3	1.5
Farming	15.8	4.9	9.7	15.0	6.3	10.2
To join the family	48.0	63.1	56.4	46.6	56.3	52.0
Business	4.9	1.0	2.8	3.7	1.2	2.3
Due to retirement	0.4	0.1	0.2	0.5	0.3	0.4
Abroad	0.2	0.1	0.2	0.2	0.2	0.2
Others	10.8	5.2	7.7	14.8	9.3	11.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

The trends in migration rates in Bangladesh over the last 30 years both in and out are shown in Figure 7.1 and Figure 7.2. Figure 7.3 shows the overall trends in out and in-migration rates for the same period.

Figure 7.1: In-migration rates per 1000 population, SVRS 2002-2019

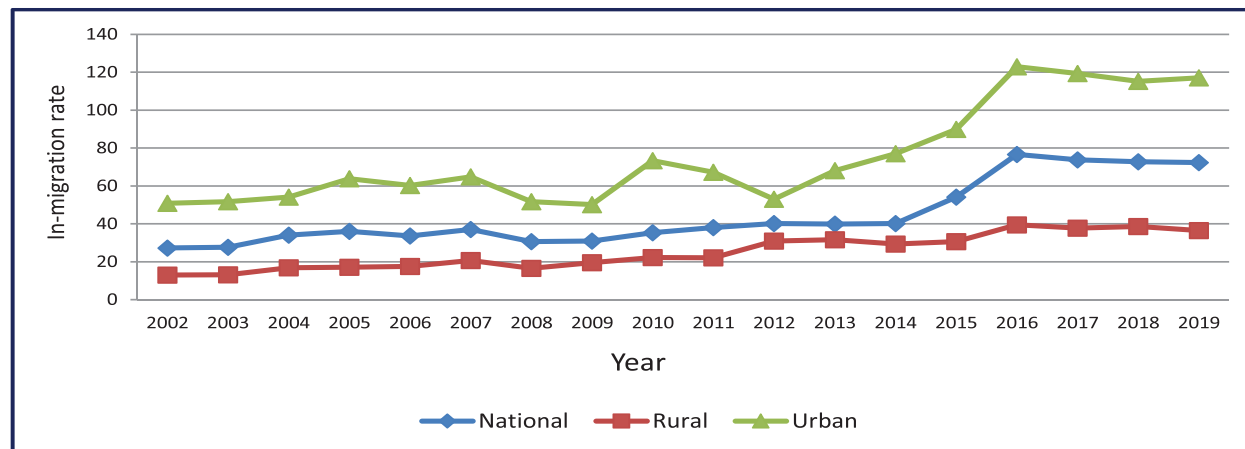


Figure 7.2: Out-migration rates per 1000 population, SVRS 2002-2019

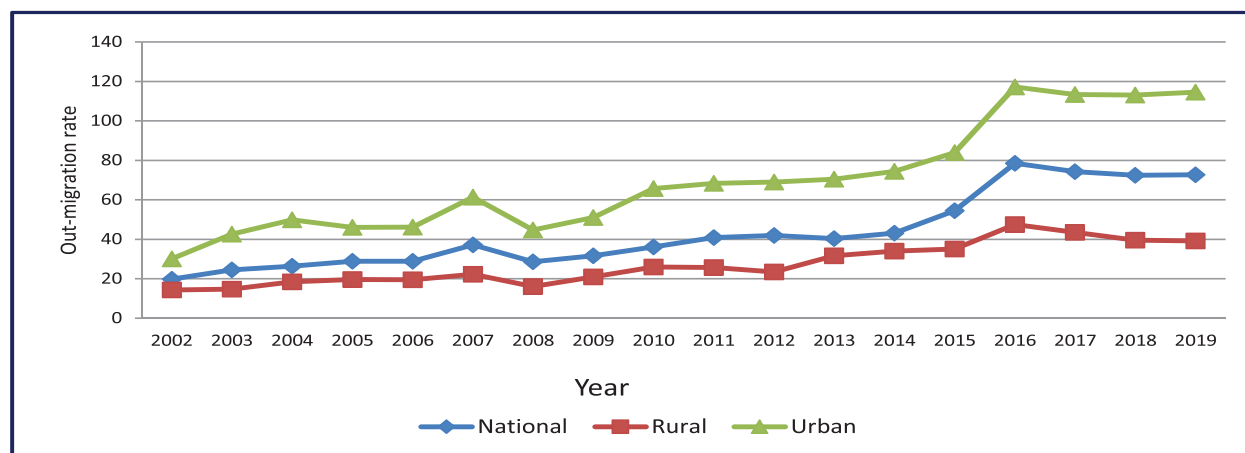
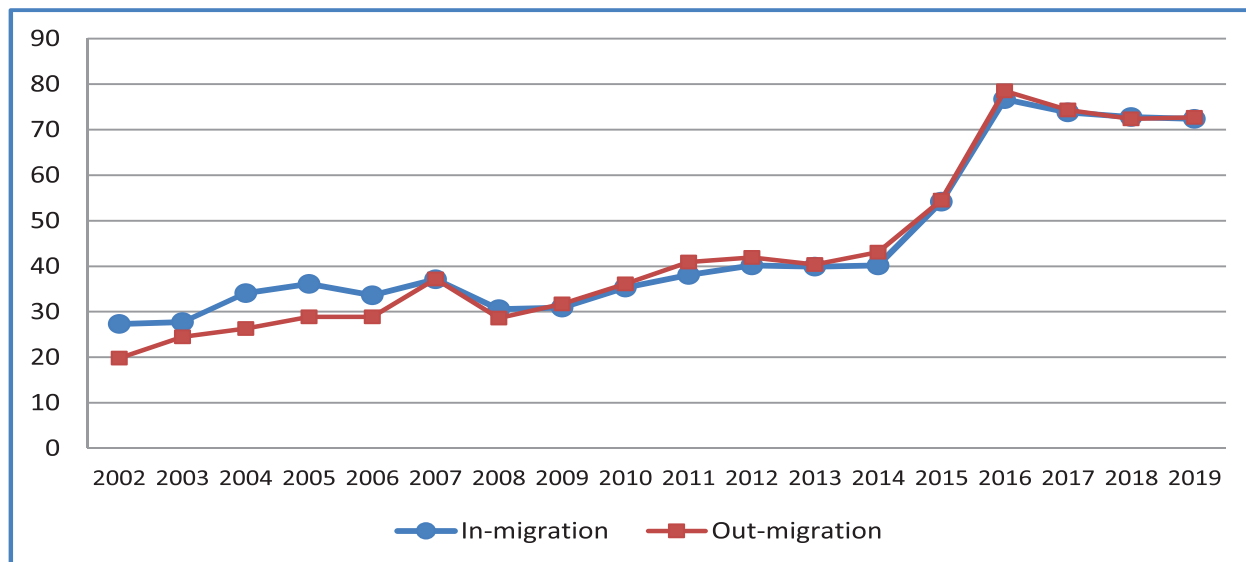


Figure 7.3: In-migration & Out- migration rates per 1000 population, SVRS 2002-2019



CHAPTER VIII

Disability

Disability is an umbrella term, a consequence of an impairment that covers physical activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus, disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives. A disability may remain present from birth, or occur during a person's lifetime.

An individual may also be labeled disabled if he/she has had impairment in the past or is seen as disabled based on a personal or group standard or norm. Such impairments may include physical, sensory, and cognitive or developmental disabilities. Mental disorders (also known as psychiatric or psychosocial disability) and various types of chronic disease may also qualify as disabilities.

Some advocates object to describing certain conditions (notably deafness and autism) as "disabilities", arguing that it is more appropriate to consider the developmental differences that have been unfairly stigmatized by society. Furthermore, other advocates argue that disability is a result of exclusion from mainstream society and not any inherent impairment.

The types of disability present in a member of a household considered in SVRS-2015 are as follows:

- Problem to view even with spectacles;
- Problem of hearing even with hearing aids;
- Problem to wake up;
- Problem to remember something due to sickness;
- Problem of self-care such as eating, bathing, using toilet and wearing dress;
- Problem to understand another person and
- Problems of communicating to others and the like.

8.1 Level of Disability

Based on the information collected through SVRS Schedule-10, the present chapter has been developed to shed light on the disability scenario in the study area. The simplest measure of disability is the crude disability rate. It is defined as the ratio of the disabled persons to the total mid-year population expressed in percentage. These rates have been presented in Table 8.1 with respect to some background characteristics of the population. These characteristics include, among others, the residence, administrative division, religion and level of education of household heads.

As noted in the table under reference, a little more than 8 per thousand population suffer from some form of disability. Males suffer relatively more (9.2 per thousand population) from disability than their female counterparts (7.6 per thousand population) indicating a slight improvement since last year: from 9.3 to 9.2 for males and from 7.7 to 7.6. The overall disability rate as recorded in 2019 virtually does not show any discernable change over the last 7 years.

Urban people are less likely (7.6) than the rural people (9.1) to suffer from disability without causing any discrimination by sex. Rangpur has the highest (9.9) disability rate followed by Rajshahi and

Khulna with a rate of 9.3 per thousand population pertaining to each division and the lowest (7.2)) is prevalent in Dhaka division.

Contrary our previous year’s findings, Hindus are more likely (9.0) to suffer from disability compared to their Muslim counterparts (8.3). Followers of other religions appear to suffer most with a disability prevalence of 11.0 per thousand population. By and large, the disability rate shows a consistent fall as the level of education of the household head increases. In contrast to our findings, the sample census of 2011 revealed an overall disability rate of 14.1. This might have fallen to a lower level within a time lag of 8 years since 2011 thus approaching the SVRS findings of 2019.

Table 8.1: Disability rate per 1000 population by sex and background characteristics, SVRS 2019

Background Characteristics	Sex		
	Male	Female	Both sexes
Residence:			
Rural	10.1	8.2	9.1
Urban	8.2	6.9	7.5
Division:			
Barishal	8.4	7.2	7.8
Chattogram	9.4	7.8	8.6
Dhaka	7.5	7.0	7.2
Khulna	10.5	8.2	9.3
Mymensingh	8.6	6.8	7.7
Rajshahi	10.1	8.5	9.3
Rangpur	11.1	8.6	9.9
Sylhet	8.4	6.4	7.4
Religion:			
Muslim	9.2	7.5	8.3
Hindu	9.7	8.3	9.0
Others	10.3	11.7	11.0
Household head education:			
No education	18.6	16.2	17.4
Primary	7.3	5.7	6.5
Secondary	5.5	2.9	4.1
Above secondary	3.7	2.1	3.0
Total	9.2	7.6	8.4

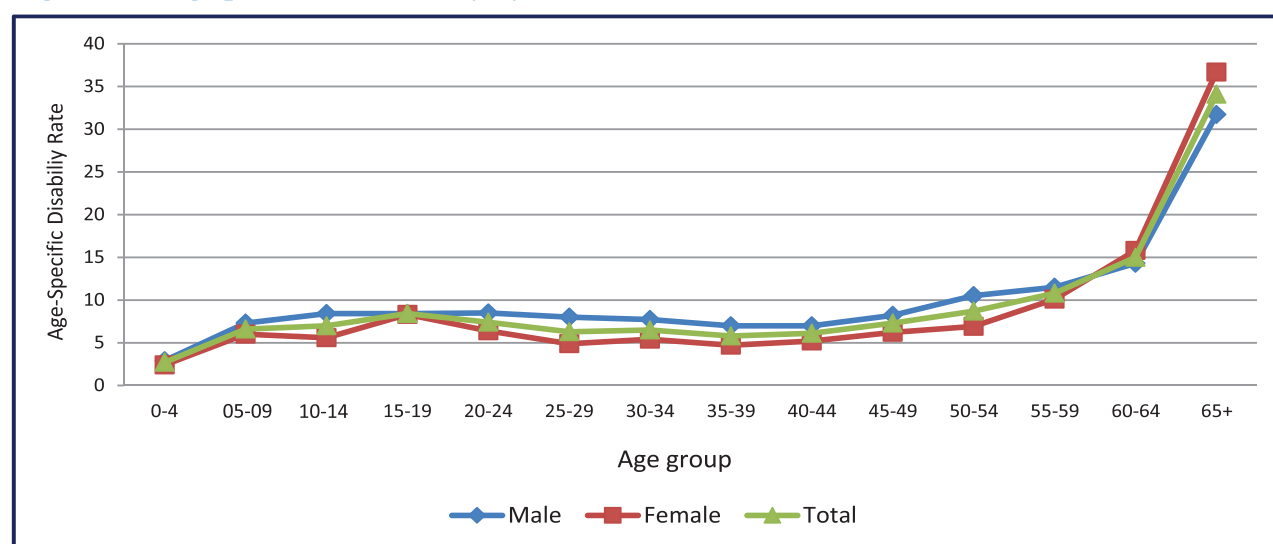
8.2 Age Pattern of Disability

As shown in Table 8.2, the age-specific disability rates by and large tend to remain in the neighborhood of 7–8 per thousand population till the age of forties, which thereafter shows an alarmingly increasing trend. The rate progresses at a slow pace from 2.7 per thousand population at age 0–4 to 8.7 per thousand population at age 50–54. The age pattern of disability among the males is almost identical to the pattern as observed among females but the prevalences are much higher among the males than among the females at all ages except for those who are over 60 years. The rates are displayed graphically in Figure 8.1.

Table 8.2: Disability rates per 1000 population by age and sex, SVRS 2019

Age groups	Sex		
	Male	Female	Both sexes
0-4	2.9	2.4	2.7
5-9	7.3	6.0	6.6
10-14	8.4	5.6	7.0
15-19	8.4	8.3	8.4
20-24	8.5	6.4	7.4
25-29	8.0	4.9	6.3
30-34	7.7	5.4	6.5
35-39	7.0	4.7	5.8
40-44	7.0	5.2	6.1
45-49	8.2	6.2	7.3
50-54	10.5	6.9	8.7
55-59	11.5	10.1	10.8
60-64	14.3	15.8	15.0
65+	31.7	36.7	34.1
Total	9.2	7.6	8.4

Figure 8.1: Age pattern of disability by sex, SVRS 2019



The district level disability rates are shown in Map 8.1.

8.3 Intensity of Disability

The survey captured three types of disability that reflect the intensity associated with disability, viz. complete disability, complex disability and light or partial disability. The resulting estimates of these phenomena are presented in Table 8.3. As shown in the table under reference, of those who were reported to be disabled, 31.0 percent of them were completely disabled, 43.0 percent had complex disability and 26.0 percent were partially or light disabled. These results are in close agreement with results of 2018. A close examination of the data presented in Table 8.3 by sex reveals that males are at the higher risk of suffering from disability by type and causes of disability listed in Table 8.3.

8.4 Types and Causes of Disability

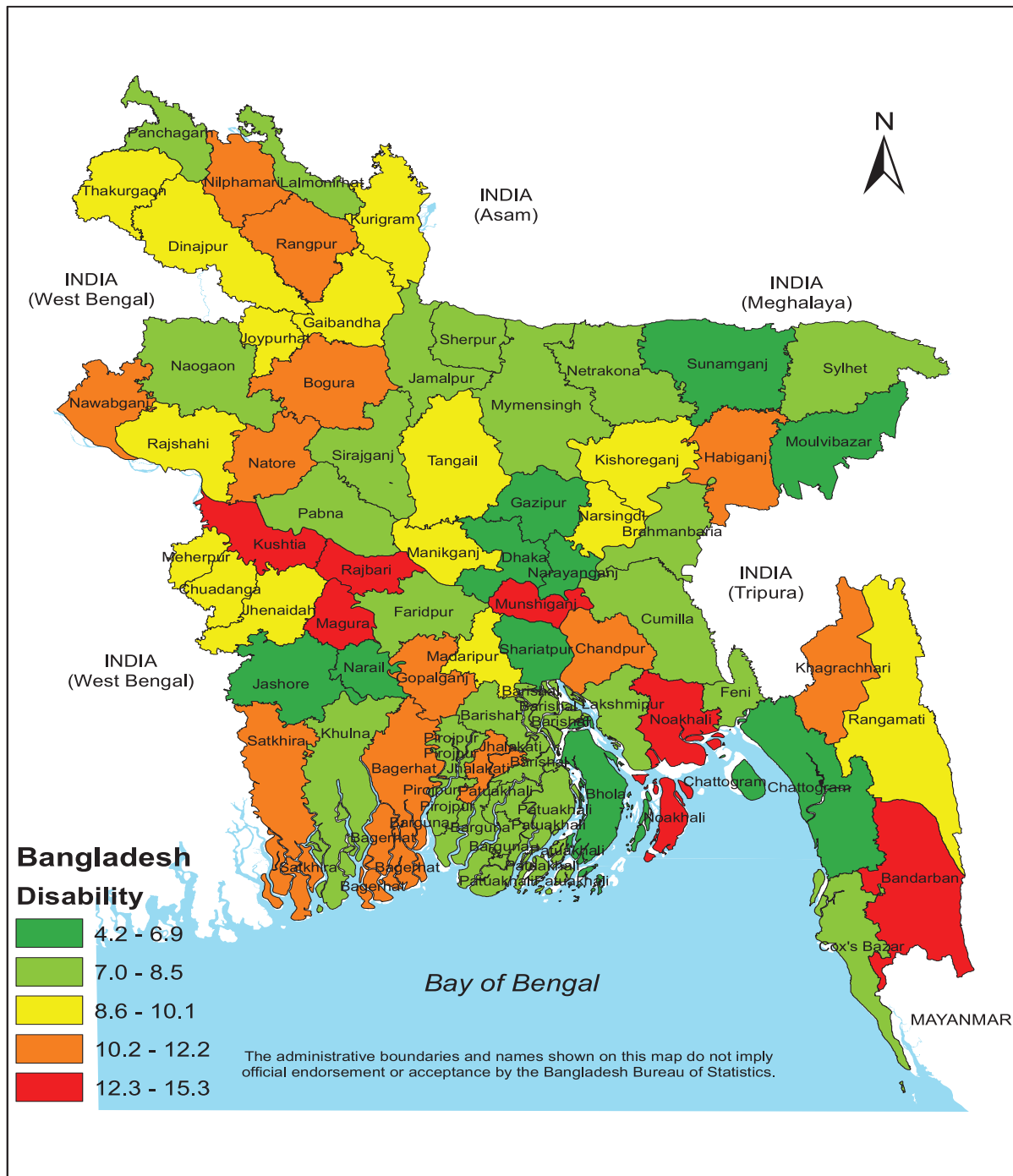
Most people were reported to be suffering from the problem of ‘wake up’ type of disability. This accounts for about 27.8 percent of all cases. The problem of taking care of self in performing such activities as eating, bathing, using toilet and wearing dress. This accounts for 18 percent of all cases and stand as one of the most prominent problems attributable to disability. A substantial proportion (17.8 percent) of the people is unable to understand others or even themselves. These findings are in close agreement with results obtained in 2018 round of survey. The results of this investigation are presented in Table 8.3.

The survey made an effort to identify the causes of disability prevalent in the study area. These include, among others, natal, accident, general illness, old age, wrong treatment. The most conspicuous cause of disability has been identified to be associated with birth or birth injury (natal). This accounts for a little over half (54.8%) of the total cases of disability followed by some sort of undefined illness (20.0%). The other causes as reported were accident (12.8%), old age senility (7.4%), and wrong treatment (3.3%). Neither sex nor the place of birth makes any pronounced variation with respect to the causes of disability. The lower panel of Table 8.3 shows these findings.

Table 8.3: Intensity, type and causes of disability by background characteristics, SVRS 2019

Intensity, Type and Causes of Disability	Rural			Urban			Total		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
Intensity of disability:									
(a) Completely disabled	31.0	30.9	31.0	26.7	26.6	26.7	29.3	29.2	29.3
(b) Complex disabled (not completely disabled)	44.2	41.5	43.0	45.5	43.3	44.5	44.7	42.2	43.6
(c) Light disabled	24.8	27.6	26.0	27.8	30.1	28.9	26.0	28.6	27.2
Type of disability:									
Problem to see even with eye glass	9.3	10.3	9.7	7.4	9.2	8.2	8.5	9.8	9.1
Hard of hearing even with hearing aids	6.7	7.3	7.0	5.9	7.1	6.4	6.4	7.2	6.8
Problem to wake up	27.8	21.5	25.0	27.3	24.1	25.8	27.6	22.5	25.3
Problem to remember something for sickness	7.8	9.1	8.4	10.5	9.7	10.1	8.9	9.3	9.1
Problem of taking care of self in performing such activities as eating, bathing, toilet using and wearing the dress	18.9	20.7	19.7	18.3	19.3	18.8	18.7	20.1	19.3
Problem to understand others or even self	17.8	19.2	18.4	16.2	16.6	16.4	17.2	18.2	17.6
Autistic	3.8	4.4	4.1	5.8	5.7	5.8	4.6	4.9	4.7
Others	7.8	7.6	7.7	8.5	8.3	8.5	8.1	7.9	8.0
Causes of disability									
Natal	54.8	50.7	53.0	51.9	51.6	51.7	53.7	51.1	52.5
Accident	12.8	6.4	9.9	10.7	6.3	8.7	12.0	6.3	9.4
Illness	20.0	23.6	21.6	23.2	24.6	23.8	21.3	24.0	22.5
Being old aged	7.4	13.7	10.2	8.8	13.4	10.9	7.9	13.6	10.5
Wrong treatment	3.3	3.5	3.4	3.4	2.5	3.0	3.3	3.1	3.2
Others	1.7	2.2	1.9	2.1	1.5	1.8	1.8	1.9	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Map 8.1: Disability rates (per 1000 population) by Zila, SVRS 2019



CHAPTER IX

HIV/AIDS Related Knowledge and Attitudes

9.1 Introduction

Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) is a spectrum of conditions caused by infection with the human immunodeficiency virus (HIV). Following initial infection, a person may experience a brief period of influenza-like illness. This is typically followed by a prolonged period without symptoms. As the infection progresses, it interferes more and more with the immune system, making the person much more susceptible to common infections like tuberculosis, as well as opportunistic infections and tumors that do not usually affect people who have working immune systems. The late symptoms of the infection are referred to as AIDS. This stage is often complicated by an infection of the lung known as pneumocystis pneumonia, severe weight loss, a type of cancer known as Kaposi's sarcoma, or other AIDS-defining conditions.

HIV is transmitted primarily via unprotected sexual intercourse (including anal and oral sex), contaminated blood transfusions, hypodermic needles, and from mother to child during pregnancy, delivery, or breastfeeding. Some bodily fluids, such as saliva and tears, do not transmit HIV. Common methods of HIV/AIDS prevention include encouraging safe sex, needle-exchange programs, and treating those who are infected. There is no cure or vaccine for HIV/AIDS as such; however, antiretroviral treatment can slow the course of the disease and may lead to a near-normal life expectancy. While antiretroviral treatment reduces the risk of death and complications from the disease, these medications are expensive and have side effects. Without treatment, the average survival time after infection with HIV is estimated to be 9 to 11 years, depending on the HIV subtype.

Since its discovery, AIDS has caused an estimated 36 million deaths worldwide (as of 2012). In 2013 it resulted in about 1.34 million deaths. As of 2012, approximately 35.3 million people are living with HIV globally. Closed to 37 million people globally were living with HIV in 2017, of whom about 35 million are males and the remaining 2 million are females. In 2017, 1.8 million people became newly infected with HIV. In the same year, 940,000 people died of AIDS related illness. More than 77 million people have become infected with HIV since the starts of the epidemic and 35.4 million have died from AIDS related illness during the same period. A recent estimate by WHO shows that 37.9 million people are living with HIV in the world at the end of 2018. Every week, around 7,000 young women become infected with HIV.

HIV/AIDS is considered a pandemic—a disease outbreak which is present over a large area and is actively spreading. Genetic research indicates that HIV originated in West-Central Africa during the late nineteenth or early twentieth century. HIV/ AIDS was first recognized by the United States Centers for Disease Control and Prevention (CDC) in 1981 and its cause—HIV infection—was identified in the early part of the decade.

HIV/AIDS has had a great impact on society, both as an illness and as a source of discrimination. The disease also has significant economic impacts. There are many misconceptions about HIV/AIDS such as the belief that it can be transmitted by casual non-sexual contact. The disease has become subject to many controversies involving religion. It has attracted international medical and political attention as well as large-scale funding since it was identified in the 1980s.

Bangladesh initiated an early response to the HIV epidemic starting in the mid-1980s. Since then, the response has been enhanced considerably, and many HIV-prevention interventions among the most

at-risk populations and the general youth are being undertaken. Alongside prevention activities, gathering of data has been a key activity fostered by both the Government and individual development partners. Available data show that the HIV epidemic is still at relatively low levels and is concentrated mainly among injecting drug users (IDUs) in Dhaka city. Another population group that appears to be especially vulnerable is migrant workers who leave their families and travel abroad for work. However, all sources of data confirm that risk behaviors that make individuals vulnerable to HIV are high—this is apparent within most at-risk populations and the general population (adult males and youth males and females).

9.2 Level of Knowledge

Bangladesh is a low HIV-prevalence country, and as such poses no immediate threat to the general population. Yet the country's HIV/AIDS prevention program was initiated in 1985. The first case of HIV was detected in 1989. In 2014, a total of 433 new cases of HIV infection, 251 AIDS cases and 91 deaths due to AIDS were reported (BDHS, 2014). The number of HIV-positive people has increased, from 1,207 in 2007 to 3,674 in 2014, implying a 3-fold increase over a period of 7 years (Bdnews 24.com, 2014). Keeping this aggravating scenario in perspective, it is important to assess the current knowledge, awareness and attitudes towards HIV/AIDS prevention and transmission among the general population particularly among those who are the most vulnerable group. Correct knowledge and information is the first step towards raising awareness and thus protect them from this deadly disease. The present chapter is devoted to assess the knowledge and attitude of the respondents in the SVRS area on the HIV/AIDS through a limited number of questions incorporated in Schedule-11.

Our survey in the registration area reveals that 79.7 percent of the respondents in 2019, as opposed to 80.2 percent in 2018 have correct knowledge of at least one mode of transmission of HIV. The level of the present year knowledge is prevalent among 85.1 of the urban people and 75.1 percent among the rural people. The knowledge is most prevalent (86.5 %) among the people of Khulna division followed by the people of Barishal division, where 84.4 percent were reported to have this knowledge. The people of Mymensingh division have the least knowledge (76.1). Young people are seen to be more knowledgeable than their older counterparts, demonstrating a negative association between age and extent of correct knowledge: more they are aged; lesser they are in possession of correct knowledge of at least one mode of transmission.

9.2.1 Awareness of HIV/AIDS

On a query to the reasons associated with the causes of HIV/AIDS, more than 72 percent of the women mentioned 'unsafe sexual relation' as one of the main causes of HIV/AIDS as shown in Table 9.1. The current year survey shows a significant increase in the level of knowledge on this over the last year: from 42.9 percent in 2018 to 71.1 percent in 2019, about an increase of 66 percent.

Urban women are 15 percent more aware of this knowledge compared to their rural counterparts. About 3 percent of the women believe that some supernatural (or magic) ways might be responsible to cause this havoc. This belief is more prevalent among the rural women (4.2%) than their urban counterparts (2.1%). Non-use of condoms was held responsible as a causative agent of HIV/AIDS by more than 23 percent of the respondents, showing a downward trend of this knowledge since last year (2018), when about one-third of the women believed this.. The respondents also had a misconception that mosquitoes carry this deadly disease to the human body. This was reported by 1.3 percent of the women. Five percent of the respondents had a feeling that sharing food with a person who has AIDS may also cause this disease, while BDHS 2014 reports this knowledge to be exorbitantly higher (64%).

Table 9.1: Awareness of respondent about HIV/AIDS by background characteristics, SVRS 2019

Background Characteristics	Awareness of respondent							Total
	Correct knowledge of at least one mode of transmission	Unsafe sexual relationship	Because of Magic or other super natural means	Not using a condom every time they have sex	From mosquito bites	By sharing food with a person who has AIDS	Others	
Residence:								
Rural	75.1	67.2	4.2	25.8	1.9	0.8	0.2	100.0
Urban	85.1	77.2	2.1	19.6	.6	0.3	0.2	100.0
Age group:								
15-19	84.5	75.3	2.1	20.9	1.1	0.4	0.2	100.0
20-24	86.1	75.7	2.8	20.0	1.0	0.3	0.2	100.0
25-29	85.2	79.0	2.5	17.2	.8	0.3	0.1	100.0
30-34	79.7	69.9	3.6	24.3	1.3	0.6	0.2	100.0
35-39	75.5	67.4	3.9	26.1	1.6	0.7	0.2	100.0
40-44	69.1	63.3	4.4	29.2	2.0	0.9	0.3	100.0
45-49	64.2	61.7	4.3	30.4	2.3	1.0	0.3	100.0
Division:								
Barishal	84.4	78.3	2.4	17.9	1.0	0.2	0.1	100.0
Chattogram	78.5	61.9	6.6	29.1	1.6	0.8	0.1	100.0
Dhaka	78.0	73.3	2.1	22.8	1.1	0.5	0.1	100.0
Khulna	86.5	77.4	2.2	19.0	.9	0.4	0.1	100.0
Mymensingh	76.1	66.5	3.3	26.5	2.2	1.1	0.3	100.0
Rajshahi	77.8	68.5	2.5	26.8	1.3	0.5	0.4	100.0
Rangpur	78.3	82.2	1.3	15.5	.6	0.2	0.2	100.0
Sylhet	78.0	68.0	4.2	24.6	2.2	0.8	0.2	100.0
Total	79.7	72.1	3.1	22.8	1.3	0.5	0.2	100.0

9.2.2 Knowledge on Mode of Transmission of HIV/AIDS

The respondents were asked to say categorically whether HIV/AIDS virus might be transmitted in a child through his/her mother (i) while the mother is pregnant, (ii) during delivery or (iii) while she is breast-feeding. The results of this investigation have been presented in Table 9.2. Close 60 percent of the ever-married women believed that AIDS may be transmitted to the child from its mother while the mother is pregnant. This belief is 10 percent more prevalent among the women in urban area (62.6 %) than among the women in rural areas (56.8%). The regional variations in this knowledge level are wide with the highest rate (69.2%) in Barishal division and the lowest (54.0%) in Mymensingh division. About fifty seven percent of the women believe that breast-feeding is a viable means of transmission of HIV/AIDS in newborns from mothers. Keeping in line with the previous findings, the urban women are more in proportion (59.1%) than the rural women (54.7%) to believe that breast-feeding is a viable means through which AIDS may be transmitted in children from their mothers. Barishal (64.8%) followed by Khulna and Rangpur (64.4% each) occupy the first and second position in having this knowledge.

Closed to 43 percent of the women have a misconception that the disease in question might be transmitted to the children during delivery. This is more prevalent (45.0%) among the urban women, than their rural counterparts (40.2%).

Table 9.2 further shows that nearly 30 percent of the women expressed their complete ignorance about the mode of transmission of the HIV/AIDS virus from mothers to their children. The level of this ignorance has increased by 42 percent since last year. At least one mode of transmission is known to about 70 percent of the women. About 36 percent of the women were on the opinion that all the

three means viz. during pregnancy, during delivery and through breast-feeding, are responsible to cause HIV/AIDS to their offspring.

In examining the relationship between the age of the respondents and level of knowledge on the issues listed in Table 9.2, we note that as age increases, the proportions of women tend to decrease at a rapid pace. However complete ignorance of the mode of transmissions of knowledge of mother to child HIV transmission goes up as age of the respondent rises.

Table 9.2: Knowledge of mother-to-child HIV transmission by background characteristics, SVRS 2019

Background Characteristics	No knowledge of transmission	Know at least one mode of transmission	Know that all modes of transmission	During pregnancy	During delivery	Through breastfeeding
Residence:						
Rural	32.4	67.6	33.8	56.8	40.2	54.7
Urban	27.0	73.0	37.3	62.6	45.0	59.1
Age group:						
15-19	22.8	77.2	50.9	69.2	55.9	67.6
20-24	24.0	76.0	36.9	64.4	44.5	61.9
25-29	24.0	76.0	43.2	66.3	49.8	63.8
30-34	30.7	69.3	30.4	57.3	38.4	54.2
35-39	35.1	64.9	26.5	52.7	34.6	49.2
40-44	41.2	58.8	23.9	47.8	30.9	44.2
45-49	46.2	53.8	21.5	43.6	28.2	39.8
Division						
Barishal	23.5	76.5	50.9	69.2	57.7	64.8
Chattogram	32.6	67.4	23.0	52.9	33.7	47.9
Dhaka	33.3	66.7	27.6	54.5	34.4	53.0
Khulna	22.3	77.7	36.8	65.8	43.0	64.4
Mymensingh	34.3	65.7	25.8	54.0	31.8	52.5
Rajshahi	32.3	67.7	37.7	58.7	43.2	55.7
Rangpur	28.9	71.1	55.9	67.6	59.3	64.4
Sylhet	30.9	69.1	27.4	55.1	36.4	53.6
Total	29.9	70.1	35.5	59.5	42.4	56.7

Annexure – 1

Zila Table

Table A1: CBR, TFR, GFR, CDR, IMR, U5MR, CPR, Literacy rate 7+, Adult literacy 15+, Disability and Mean age at first marriage by Zila, SVRS 2019

Zila	CBR	TFR	GFR	CDR	IMR	U5MR	CPR	Literacy 7+	Adult literacy 15+	Disability rate	Mean age at first marriage	
											Male	Female
Bagerhat	18.5	2.3	68.7	4.6	8.8	13.2	62.8	81.5	83.1	11.2	25.1	18.9
Bandarban	23.4	2.8	87.6	3.8	17.9	26.8	78.5	56.4	52.9	14.4	24.2	19.7
Barguna	16.8	2.0	62.7	5.4	23.0	23.0	93.8	87.1	89.1	7.3	25.5	18.0
Barishal	17.2	1.9	61.2	5.4	27.6	35.8	84.4	85.9	87.0	7.5	25.1	19.0
Bhola	20.8	2.5	82.8	4.8	23.4	31.8	83.2	72.1	71.6	6.5	22.9	17.1
Bogura	17.2	2.0	62.5	5.1	19.9	24.3	68.9	68.1	68.1	10.3	23.0	17.4
Brahmanbaria	22.9	2.6	86.3	5.6	16.9	31.4	46.7	65.9	64.6	7.9	23.5	18.1
Chandpur	22.4	2.4	82.8	5.3	15.8	18.5	62.9	75.9	76.7	11.6	24.9	18.7
Chattogram	17.2	1.7	58.3	4.5	23.0	32.4	59.0	80.5	81.4	6.3	26.4	19.8
Chuadanga	17.0	2.0	59.4	6.0	17.8	17.8	66.7	68.5	70.3	9.9	23.6	16.6
Cumilla	23.3	2.6	84.5	6.1	15.2	21.5	44.8	77.0	76.7	8.3	24.4	18.3
Cox'S Bazar	25.5	2.9	98.1	4.7	22.6	35.1	63.7	67.8	67.7	8.1	24.3	18.8
Dhaka	13.9	1.3	45.4	3.3	19.6	23.4	59.2	81.0	83.0	4.2	25.5	20.4
Dinajpur	19.1	2.2	70.1	5.1	14.3	16.3	65.9	74.5	73.9	8.9	23.0	18.2
Faridpur	15.6	1.8	57.1	5.3	22.1	33.1	62.9	73.3	74.3	8.0	24.3	18.1
Feni	18.7	2.0	67.1	5.5	22.1	33.1	57.0	80.4	81.3	7.9	26.8	19.1
Gaibandha	18.4	2.3	69.9	5.2	23.4	29.2	76.4	67.1	64.2	9.5	22.4	16.9
Gazipur	14.9	1.4	47.6	3.5	18.3	22.0	67.8	77.8	80.5	6.3	24.6	18.7
Gopalganj	18.1	2.3	74.1	5.9	36.0	36.0	65.4	77.7	73.5	10.9	24.0	17.5
Habiganj	17.7	2.1	67.6	4.6	29.9	40.5	44.3	74.0	73.9	10.3	26.2	19.9
Joypurhat	14.2	1.7	48.9	4.7	10.6	21.3	66.0	76.2	76.6	8.6	23.7	18.6
Jamalpur	18.5	2.4	74.0	5.0	19.8	23.7	71.7	57.6	54.5	7.9	22.0	17.3
Jashore	17.8	2.0	62.3	5.2	19.8	22.3	63.4	74.3	75.1	6.8	23.7	18.6
Jhalokati	19.0	2.3	70.1	5.9	17.6	17.6	87.5	84.5	85.8	11.7	26.7	18.5
Jhenaidah	20.0	2.4	71.9	4.8	19.8	23.1	63.7	72.0	72.2	8.7	24.0	17.6
Khagrachhari	20.1	2.3	79.1	5.5	46.9	54.7	66.5	67.9	66.0	11.8	21.6	17.5
Khulna	15.1	1.6	51.6	4.7	24.7	30.9	58.3	81.5	83.0	7.1	25.2	19.2
Kishoregonj	20.6	2.5	81.6	5.0	20.6	25.8	55.5	65.4	64.1	8.6	24.0	17.7
Kurigram	18.5	2.2	69.1	4.5	8.5	19.9	75.5	67.3	64.8	9.2	22.5	17.2
Kushtia	19.4	2.3	69.5	5.1	13.1	16.3	52.2	67.9	68.3	13.0	24.0	18.0
Lakshmipur	24.2	2.8	91.7	5.2	10.2	13.6	49.0	72.0	73.6	7.3	23.8	18.3
Lalmonirhat	19.7	2.3	74.7	5.4	52.1	52.1	73.0	69.3	68.4	8.5	22.9	17.9
Madaripur	20.8	2.6	85.3	5.5	21.4	28.6	62.6	65.4	65.1	9.8	25.5	17.8
Magura	21.2	2.6	80.6	4.8	6.5	12.9	56.8	69.7	70.8	15.3	24.9	18.2
Manikganj	15.8	1.9	57.8	6.0	12.8	19.2	61.1	66.5	64.4	9.5	23.9	17.4
Meherpur	15.4	1.8	54.4	5.1	47.1	47.1	53.6	73.1	70.7	10.1	22.5	16.2
Moulvibazar	17.0	1.8	60.8	5.5	33.3	38.5	47.3	75.1	74.4	6.7	25.6	20.0
Munshiganj	16.3	1.8	57.9	5.0	24.8	24.8	52.0	71.7	72.0	14.5	25.4	18.6
Mymensingh	18.3	2.2	72.4	5.3	19.5	30.1	65.0	69.2	67.7	7.5	22.7	17.7

Zila	CBR	TFR	GFR	CDR	IMR	U ₅ MR	CPR	Literacy 7+	Adult literacy 15+	Disability rate	Mean age at first marriage	
											Male	Female
Naogaon	15.6	1.9	55.5	5.3	14.9	26.0	68.6	68.6	68.2	8.5	23.5	17.2
Narail	22.5	2.7	86.2	5.2	24.0	24.0	55.3	79.2	76.5	6.3	22.3	17.8
Narayanganj	16.8	1.8	58.1	4.6	16.4	26.3	60.8	73.1	73.6	6.9	24.4	18.8
Narsingdi	20.9	2.4	77.7	4.6	15.6	15.6	45.9	67.2	67.0	9.9	23.6	17.4
Natore	16.8	2.0	59.6	5.4	24.5	29.4	68.3	70.4	68.2	11.3	23.5	17.6
Nawabganj	23.4	2.6	83.4	4.5	13.2	16.6	65.2	71.8	71.4	10.7	21.8	17.1
Netrakona	17.4	2.2	68.4	5.0	19.8	23.7	68.9	70.7	67.0	8.2	23.8	19.2
Nilphamari	22.9	2.6	84.9	3.3	17.3	20.2	51.8	70.8	70.9	11.9	23.5	18.6
Noakhali	24.3	2.7	91.8	5.0	19.9	39.8	45.9	73.6	75.1	13.8	23.5	18.3
Pabna	16.7	2.0	61.6	4.9	12.7	15.9	69.1	68.1	67.3	7.9	22.8	17.9
Panchagarh	23.7	2.8	87.8	6.2	32.6	38.0	76.8	75.2	70.5	7.9	22.4	17.5
Patuakhali	17.8	2.2	68.0	4.6	26.2	35.0	89.9	83.1	84.1	8.2	22.5	17.0
Pirojpur	20.8	2.4	77.8	5.8	20.5	30.8	80.7	87.1	87.0	8.2	25.3	17.7
Rajshahi	15.5	1.7	52.4	5.3	22.6	24.0	71.9	79.8	80.5	9.5	24.6	19.6
Rajbari	20.4	2.4	77.0	4.6	34.2	47.9	60.8	71.7	69.1	13.6	23.2	18.5
Rangamati	13.4	1.7	50.1	4.9	51.9	64.9	61.7	73.0	69.4	9.1	23.3	20.0
Rangpur	17.8	2.0	62.2	5.2	28.3	30.3	72.2	75.3	76.0	10.8	24.6	19.2
Shariatpur	23.3	2.9	91.4	4.4	39.1	39.1	64.6	75.7	72.2	6.5	25.5	17.6
Satkhira	16.7	2.0	60.6	5.4	7.7	11.5	64.0	71.0	70.6	12.2	23.6	17.4
Sirajganj	16.7	2.1	64.6	5.5	45.2	55.3	64.8	64.6	64.1	7.9	23.7	17.9
Sherpur	17.1	2.2	67.2	4.9	31.7	47.6	74.3	60.6	59.7	7.3	23.4	17.0
Sunamganj	19.9	2.4	77.0	5.8	19.0	26.9	41.5	68.9	67.7	6.1	25.0	20.2
Sylhet	17.5	1.8	61.7	4.5	18.0	25.8	50.6	76.3	77.3	7.2	26.3	21.4
Tangail	16.1	1.9	59.6	5.4	16.6	24.9	59.4	67.8	66.4	8.9	23.7	17.1
Thakurgaon	18.7	2.2	68.0	4.4	20.6	20.6	73.8	75.7	76.4	9.4	23.4	18.5
Total	18.1	2.0	65.7	4.9	21.5	27.9	63.4	74.4	74.7	8.4	24.2	18.5

Supplementary Tables

Table 2A: Goals of some SDG indicators and our achievements

Indicators	Our achievement or findings (2019)	Target
Maternal Mortality Ratio (Per 1000 live births)	1.65	0.70
Under-5 Mortality Rate (Per 1000 live births)	28	25
Neo-natal Mortality Rate (Per 1000 live births)	15	12
Adolescents birth rate:		
Aged 10-14 yrs (Per 1000)	0.5	NA
Aged 15-19 yrs (Per 1000)	73.5	50
Proportion of women aged: 20-24 yrs were married or in a union:		
Before age 15	6.2	0%
Before age 18	41.1	10%
Proportion of population using safely managed drinking's water services	98.1	100%
Proportion of population with access to electricity	93.4	100%
Proportion of individuals who own a mobile telephone		
Total	73.7	NA
Male	86.0	NA
Female	61.4	NA
Percentage of household members living in households using clean fuels and technologies for cooking and lighting		
Total	26.3	35%
Rural	6.7	2030 Target
Urban	50.8	
Hand wash with both soap and water	70.5	

Table 2B. Population in SVRS area, SVRS 2019

Age group	Male	Female	Both sex	Male %	Female %	Both sex %
0-4	54,631	51,986	106,617	8.6	8.2	8.4
5-9	60,210	58,409	118,619	9.5	9.2	9.3
10-14	67,946	68,936	136,882	10.7	10.9	10.8
15-19	68,445	54,976	123,421	10.8	8.7	9.7
20-24	53,646	59,020	112,666	8.4	9.3	8.9
25-29	47,859	58,076	105,935	7.5	9.2	8.3
30-34	48,460	56,021	104,481	7.6	8.8	8.2
35-39	45,767	49,396	95,163	7.2	7.8	7.5
40-44	41,094	40,955	82,049	6.5	6.5	6.5
45-49	36,133	32,841	68,974	5.7	5.2	5.4
50-54	31,215	30,891	62,106	4.9	4.9	4.9
55-59	24,756	23,785	48,541	3.9	3.8	3.8
60-64	20,156	17,068	37,224	3.2	2.7	2.9
65+	35,225	31,838	67,063	5.5	5.0	5.3
Total	635,543	634,198	1269741	100.0	100.0	100.0

Table 2C: Distribution of out- migrants by age and causes of migration for males, SVRS 2019

Age group	Causes of out-migration												Total
	Marriage	Education	Looking for Job	Getting Job	Transfer	Floating/river fall	Earning	Living with family	Business	Retirement	Abroad	Other	
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.8	0.0	0.0	0.0	3.3	100.0
5-14	0.2	4.9	0.9	0.4	2.0	1.3	3.7	82.5	0.7	0.0	0.3	3.1	100.0
15-24	0.6	4.3	4.9	3.3	2.5	1.4	17.2	51.5	1.5	0.1	6.4	6.4	100.0
25-34	0.4	0.8	8.1	6.2	8.0	1.3	25.2	21.5	5.1	0.2	4.7	18.5	100.0
35-44	0.3	0.9	7.0	4.5	10.7	1.9	26.0	13.6	6.9	0.2	3.9	24.1	100.0
45-54	0.2	1.2	4.8	3.3	9.9	2.7	24.3	13.5	8.7	0.8	1.9	28.8	100.0
55-64	0.5	0.4	3.0	1.9	9.3	2.9	21.5	20.8	8.1	3.1	1.8	26.8	100.0
65+	0.7	0.6	1.4	2.2	5.7	3.8	16.6	35.9	6.6	2.0	1.1	23.5	100.0
Total	0.4	2.2	4.5	3.2	5.6	1.5	16.8	44.8	3.8	0.3	3.2	13.9	100.0

Table 2D: Distribution of out- migrants by causes of migration and age for females, SVRS 2019

Age group	Causes of out-migration												Total
	Marriage	Education	Looking for Job	Getting Job	Transfer	Floating/river fall	Earning	Living with family	Business	Retirement	Abroad	Other	
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	0.0	0.0	0.0	3.0	100.0
5-14	9.2	3.6	0.9	0.5	1.8	1.5	3.3	75.5	0.4	0.0	0.3	2.9	100.0
15-24	34.6	1.9	2.0	1.3	1.5	0.7	4.4	47.8	0.5	0.2	0.4	4.7	100.0
25-34	6.0	0.7	2.7	2.1	3.5	0.9	6.9	68.3	1.1	0.1	0.6	7.1	100.0
35-44	1.1	1.2	2.6	1.4	3.8	1.9	8.7	68.4	1.1	0.2	0.4	9.3	100.0
45-54	0.4	0.4	1.7	1.1	3.5	1.3	9.5	67.6	1.7	0.7	0.6	11.6	100.0
55-64	0.3	0.5	0.9	1.2	3.7	2.8	7.7	69.8	1.0	0.3	0.6	11.2	100.0
65+	0.0	0.3	0.5	0.7	2.1	2.1	3.9	79.3	1.2	0.4	1.3	8.3	100.0
Total	14.7	1.6	1.8	1.2	2.2	1.1	5.1	65.3	0.7	0.1	0.4	5.8	100.0

Table 2E: Distribution of out-migrants by causes of migration and age for both sexes, SVRS 2019

Age group	Causes of out-migration												Total
	Marriage	Education	Looking for Job	Getting Job	Transfer	Floating/river fall	Earning	Living with family	Business	Retirement	Abroad	Other	
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.85	0.0	0.0	0.0	3.15	100
5-14	4.8	4.3	0.9	0.5	1.9	1.4	3.5	78.9	0.6	0.0	0.3	3.0	100.0
15-24	23.6	2.7	3.0	1.9	1.8	1.0	8.6	49.0	0.8	0.2	2.3	5.3	100.0
25-34	3.3	0.8	5.3	4.1	5.7	1.1	15.8	45.6	3.1	0.1	2.6	12.6	100.0
35-44	0.7	1.0	5.2	3.2	7.8	1.9	18.8	36.5	4.5	0.2	2.4	17.9	100.0
45-54	0.3	0.8	3.4	2.3	7.1	2.1	17.7	37.6	5.6	0.7	1.3	21.1	100.0
55-64	0.4	0.5	2.2	1.6	7.0	2.9	15.8	41.0	5.2	2.0	1.3	20.3	100.0
65+	0.4	0.4	1.0	1.5	4.0	3.0	10.7	56.1	4.1	1.3	1.2	16.5	100.0
Total	8.0	1.9	3.1	2.1	3.8	1.3	10.6	55.7	2.2	0.2	1.7	9.5	100.0

Table 2F: Distribution of in- migrants by causes of migration and age for males, SVRS 2019

Age group	Causes of in-migration												Total
	Marriage	Education	Looking for Job	Getting Job	Transfer	Floating/river fall	Earning	Living with family	Business	Retirement	Abroad	Other	
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.3	0.3	0.0	0.1	3.3	100.0
5-14	0.0	6.7	0.9	0.6	1.8	1.1	2.5	82.5	0.6	0.0	0.1	3.4	100.0
15-24	1.3	5.9	3.8	2.1	2.0	1.2	12.5	59.6	2.0	0.1	1.9	7.7	100.0
25-34	1.2	1.1	7.8	7.2	8.1	1.3	24.7	22.6	6.0	0.2	5.5	14.3	100.0
35-44	0.6	0.9	7.0	5.4	10.2	2.0	26.1	14.7	8.1	0.2	5.7	19.3	100.0
45-54	0.8	1.5	5.1	4.4	9.0	2.1	24.6	14.2	10.2	0.5	6.3	21.4	100.0
55-64	0.7	1.0	3.4	2.0	7.2	3.2	21.9	20.1	9.2	3.4	4.6	23.5	100.0
65+	0.7	0.5	2.0	1.6	4.2	3.3	17.1	36.1	6.8	5.2	1.6	21.0	100.0
Total	0.7	2.8	4.2	3.4	5.2	1.4	15.5	47.1	4.4	0.4	3.2	11.7	100.0

Table 2G: Distribution of in- migrants by causes of migration and age for females, SVRS 2019

Age group	Causes of in-migration												Total
	Marriage	Education	Looking for Job	Getting Job	Transfer	Floating/river fall	Earning	Living with family	Business	Retirement	Abroad	Other	
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.3	0.5	0.0	0.1	3.0	100.0
5-14	2.8	6.3	1.0	0.5	1.7	1.0	2.3	80.0	0.6	0.0	0.1	3.7	100.0
15-24	36.5	2.6	2.1	1.2	1.2	0.5	3.7	48.1	0.6	0.1	0.2	3.4	100.0
25-34	5.9	1.1	3.4	2.1	3.1	0.8	6.3	69.6	1.0	0.1	0.5	6.2	100.0
35-44	2.1	1.5	3.3	1.5	3.7	1.2	9.4	65.6	1.3	0.1	0.9	9.5	100.0
45-54	1.3	0.7	2.4	1.1	3.6	1.6	9.7	65.4	1.6	0.4	0.8	11.6	100.0
55-64	0.5	0.7	1.3	1.1	2.8	1.5	7.3	71.4	1.4	0.8	0.5	10.8	100.0
65+	0.4	0.5	0.4	0.7	1.7	2.0	4.7	78.9	1.0	0.2	0.4	9.2	100.0
Total	14.5	2.3	2.0	1.1	2.0	0.8	4.6	66.1	0.8	0.1	0.4	5.3	100.0

Table 2H: Distribution of in- migrants by causes of migration and age for both sexes, SVRS 2019

Age group	Causes of in-migration											Total	
	Marriage	Education	Looking for Job	Getting Job	Transfer	Floating/ river fall	Earning	Living with family	Business	Retirement	Abroad		Other
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.3	0.4	0.0	0.1	3.1	100.0
5-14	1.4	6.5	0.9	0.5	1.7	1.1	2.4	81.2	0.6	0.0	0.1	3.6	100.0
15-24	26.8	3.5	2.6	1.4	1.4	0.7	6.1	51.3	1.0	0.1	0.7	4.6	100.0
25-34	3.6	1.1	5.5	4.6	5.5	1.0	15.3	46.7	3.4	0.1	2.9	10.2	100.0
35-44	1.2	1.1	5.5	3.7	7.4	1.6	19.0	36.3	5.2	0.1	3.7	15.2	100.0
45-54	1.0	1.1	3.9	3.0	6.7	1.9	18.2	36.2	6.5	0.5	3.9	17.2	100.0
55-64	0.6	0.9	2.4	1.6	5.3	2.4	15.4	42.8	5.8	2.2	2.8	17.9	100.0
65+	0.5	0.5	1.1	1.1	2.9	2.6	10.6	58.5	3.7	2.6	1.0	14.8	100.0
Total	8.2	2.3	3.0	2.2	3.4	1.1	9.6	57.4	2.5	0.2	1.7	8.2	100.0

Table 2I: Out- migration rates per 1000 population by sex and direction, SVRS 2019

Direction of out-migration	Male	Female	Both sexes
Total out-migrants	64.4	80.9	72.7
Rural out-migrants	29.4	48.8	39.1
Rural to Rural	23.1	41.4	32.2
Rural to Urban	4.3	4.3	4.3
Urban out-migrants	108.1	120.8	114.5
Urban to Rural	26.2	33.3	29.7
Urban to Urban	83.8	90.9	87.4

Table 2J: Distribution of out-migrants by sex, causes and direction, SVRS 2019

Causes of out-migration	Male	Female	Both sexes
Total Out-migration	100.0	100.0	100.0
Marriage	0.8	15.7	8.9
Education	3.2	2.6	2.9
Looking job	4.7	2.3	3.4
Getting job	2.8	1.2	2.0
Transfer	5.6	3.2	4.3
Float/River eroded	1.7	1.3	1.5
Earning	17.2	6.5	11.4
Living with family	43.6	56.0	50.3
Business	3.5	1.2	2.3
Retirement	0.5	0.4	0.4
Abroad	2.6	0.4	1.4
Other	13.8	9.2	11.3
Rural Out-migration			
Marriage	1.3	32.7	21.1
Education	2.5	1.6	1.9
Looking job	3.0	1.1	1.8
Getting job	1.7	0.8	1.1
Transfer	5.0	2.4	3.3
Float/River eroded	4.9	2.9	3.6
Earning	14.7	4.7	8.4
Living with family	52.0	45.2	47.7
Business	3.7	1.1	2.0
Retirement	0.6	0.5	0.5
Abroad	0.3	0.3	0.3
Other	10.5	6.8	8.2
Rural to Rural Out-migration			

Causes of out-migration	Male	Female	Both sexes
Marriage	1.5	40.3	27.5
Education	2.9	1.6	2.0
Looking job	3.2	1.2	1.9
Getting job	2.0	0.8	1.2
Transfer	4.4	2.0	2.8
Float/River eroded	5.6	3.1	3.9
Earning	17.1	4.9	8.9
Living with family	51.9	39.3	43.5
Business	3.1	0.9	1.6
Retirement	0.3	0.3	0.3
Abroad	0.3	0.3	0.3
Other	7.8	5.3	6.1
Rural to Urban Out-migration			
Marriage	1.1	18.4	10.9
Education	2.0	1.7	1.8
Looking job	2.6	0.9	1.7
Getting job	1.3	0.9	1.1
Transfer	5.6	3.1	4.2
Float/River eroded	3.9	2.6	3.2
Earning	12.0	4.4	7.7
Living with family	52.2	56.3	54.5
Business	4.4	1.5	2.7
Retirement	1.0	0.7	0.8
Abroad	0.2	0.2	0.2
Other	13.8	9.5	11.4
Urban Out-migration			
Marriage	0.7	6.3	3.5
Education	3.4	3.1	3.3
Looking job	5.3	2.9	4.1
Getting job	3.2	1.5	2.3
Transfer	5.8	3.6	4.7
Float/River eroded	0.6	0.4	0.5
Earning	18.1	7.5	12.8
Living with family	40.8	62.1	51.5
Business	3.4	1.3	2.3
Retirement	0.5	0.3	0.4
Abroad	3.4	0.5	1.9
Other	14.9	10.5	12.7
Urban to rural Out-migration			
Marriage	1.2	13.3	6.5
Education	3.9	3.6	3.7
Looking job	10.2	6.6	8.6
Getting job	6.0	2.9	4.6
Transfer	2.4	1.7	2.1
Float/River eroded	0.7	0.6	0.7
Earning	34.4	14.7	25.7
Living with family	24.2	50.9	35.9
Business	2.1	1.1	1.6
Retirement	0.5	0.3	0.4
Abroad	12.7	1.0	7.5
Other	1.9	3.4	2.6
Urban to Urban- Out-migration			
Marriage	0.5	5.0	2.8
Education	3.3	3.1	3.2
Looking job	4.0	2.3	3.1
Getting job	2.5	1.2	1.8

Causes of out-migration	Male	Female	Both sexes
Transfer	6.7	4.0	5.3
Float/River eroded	0.6	0.4	0.5
Earning	13.9	6.1	9.9
Living with family	45.1	64.2	54.9
Business	3.8	1.3	2.5
Retirement	0.5	0.3	0.4
Abroad	1.0	0.4	0.7
Other	18.2	11.9	14.9
Total	100.0	100.0	100.0

Table 2K: In-migration rates per 1000 population by sex and direction, SVRS 2019

Direction of in-migration	Male	Female	Both sexes
Total In migration	64.2	80.7	72.4
Rural in migration	27.4	45.7	36.5
Rural to rural	23.1	41.4	32.2
Urban to rural	4.3	4.3	4.3
Urban in migration	110.0	124.2	117.1
Rural to urban	26.2	33.3	29.7
Urban to urban	83.8	90.9	87.4

Table 2 L: Distribution of in-migrants by sex, causes and direction, SVRS 2019

Causes of in-migration	Male	Female	Both sexes
Total In Migration	100.0	100.0	100.0
Marriage	0.7	16.3	9.2
Education	3.3	2.9	3.1
Looking job	4.3	2.1	3.1
Getting job	3.7	1.3	2.4
Transfer	5.6	2.1	3.7
Float/River eroded	1.3	0.8	1.0
Earning	15.1	4.9	9.5
Living with family	46.9	63.0	55.7
Business	4.7	1.0	2.7
Retirement	0.4	0.1	0.3
Abroad	3.6	0.3	1.8
Other	10.3	5.2	7.5
Rural In-migration			
Marriage	1.1	34.1	20.6
Education	2.6	1.6	2.0
Looking job	3.3	1.7	2.4
Getting job	2.3	0.6	1.3
Transfer	3.1	1.1	1.9
Float/River eroded	3.3	1.7	2.4
Earning	11.6	3.3	6.7
Living with family	56.4	52.4	54.1
Business	2.2	0.4	1.1
Retirement	0.6	0.2	0.3
Abroad	10.3	0.5	4.5
Other	3.3	2.4	2.8
Rural to Rural In-migration			
Marriage	1.2	37.8	24.7
Education	3.2	1.7	2.3
Looking job	3.4	1.4	2.2
Getting job	2.7	0.5	1.3
Transfer	3.5	1.0	1.9
Float/River eroded	4.5	1.9	2.8

Causes of in-migration	Male	Female	Both sexes
Earning	13.9	3.3	7.1
Living with family	60.9	49.1	53.3
Business	2.2	0.4	1.0
Retirement	0.3	0.1	0.2
Abroad	0.4	0.2	0.3
Other	3.7	2.4	2.9
Urban to Rural In-migration			
Marriage	0.9	1.8	1.2
Education	0.9	0.8	0.9
Looking job	2.9	4.2	3.4
Getting job	1.1	0.8	1.0
Transfer	2.0	1.3	1.8
Float/River eroded	0.4	0.4	0.4
Earning	5.4	2.9	4.5
Living with family	44.9	81.1	57.4
Business	2.0	0.7	1.6
Retirement	1.3	0.5	1.0
Abroad	35.7	3.4	24.6
Other	2.4	2.1	2.3
Urban In-migration			
Marriage	0.6	8.1	4.5
Education	3.6	3.5	3.6
Looking job	4.7	2.3	3.4
Getting job	4.2	1.6	2.9
Transfer	6.4	2.5	4.4
Float/River eroded	0.6	0.4	0.5
Earning	16.4	5.6	10.7
Living with family	43.5	67.9	56.4
Business	5.6	1.3	3.4
Retirement	0.4	0.1	0.2
Abroad	1.2	0.2	0.6
Other	12.8	6.5	9.5
Rural to Urban In-migration			
Marriage	0.9	15.9	9.3
Education	5.7	5.3	5.5
Looking job	5.9	3.0	4.3
Getting job	5.4	2.3	3.7
Transfer	4.8	1.5	2.9
Float/River eroded	1.5	0.9	1.2
Earning	21.8	7.6	13.9
Living with family	43.0	58.9	51.9
Business	5.9	1.3	3.4
Retirement	0.2	0.1	0.1
Abroad	0.1	0.0	0.1
Other	4.8	3.3	4.0
Urban to Urban In-migration			
Marriage	0.5	5.2	2.9
Education	2.9	2.9	2.9
Looking job	4.3	2.0	3.1
Getting job	3.9	1.4	2.6
Transfer	7.0	2.9	4.8
Float/River eroded	0.3	0.2	0.3
Earning	14.7	4.9	9.6
Living with family	43.7	71.2	57.9
Business	5.5	1.3	3.3
Retirement	0.4	0.1	0.3

Causes of in-migration	Male	Female	Both sexes
Abroad	1.5	0.2	0.8
Other	15.3	7.7	11.4
Total	100.0	100.0	100.0

Annexure - 2

Operational Definitions of Indicators

(a) SOCIAL INDICATORS

Household

Household is defined as a unit consisting of group of persons, related or unrelated, live together and taking food from the same kitchen.

Proportion of individuals who own a mobile telephone, by sex

The proportion of individuals who own a mobile telephone, by sex is defined as the 'proportion of individuals who own a mobile telephone, by sex'.

Dependency Ratio

Dependency ratio is defined as the ratio of sum of population aged 0-14 years and 65+ years to the population aged 15-64 years expressed as percentage.

Sex Ratio

The ratio of males to females in a given population usually expressed as the number of males per 100 females.

Index of Ageing

Index of ageing is the ratio of older persons of age 60 years and above to the population of age 0-14 years expressed as percentage.

Literacy

A person who is able to write a simple letter is defined as literate.

Literacy Rate (Age 7+yrs)

Percentage of population of age 7 years and over who can write a letter to the total population of the same age-group is the literacy rate.

Adult Literacy (Age 15+ yrs)

Percentage of population of age 15 years and over who can write a letter to the total population of the same age-group is the adult literacy rate.

Child- Woman Ratio (CWR)

The ratio of children under five (0-4) years old to women of ages 15-49 is called the child-women ratio. This is commonly expressed per 1000 women.

Gross Enrolment Rate (GER)

GER is the relative number of boys and girls enrolled in the grade I to V in a year to the total population of the age-group 6-10 years expressed in percentage.

Net Enrolment Rate (NER)

NER is the percentage of boys and girls of age 6-10 years enrolled in grade 1-V to the total population of the same age-group.

(b) FERTILITY RELATED INDICATORS

Crude Birth Rate (CBR)

The ratio of live births in a specified period (usually one calendar year) to the average population in that period (normally taken to be the mid year population). The value is conventionally expressed per 1000 population.

General Fertility Rate (GFR)

The ratio of number of live births in a specified period to the average number of women of child bearing age in the population during the period.

Age-Specific Fertility Rate (ASFR)

Number of live births occurring to women of a particular age or age group normally expressed per 1000 women in the same age- group in a given year. It is usually calculated for 5 years age groups from 15-19 to 40-44 or 15-19 to 45-49.

Total Fertility Rate (TFR)

The sum of the age-specific fertility rates (ASFRs) over the whole range of reproductive ages for a particular period (usually a year). It can be interpreted as the number of children; a woman would have during her lifetime if she were to experience the fertility rates of period at each age and no mortality till they reach to their reproductive period. .

Gross Reproduction Rate (GRR)

The average number of daughters that would be born to a woman during her lifetime if she would pass through the childbearing ages experiencing the average age-specific fertility pattern of a given year. and no mortality till they reach to their reproductive period.

Net Reproduction Rate (NRR)

The average number of daughters that would be born to a woman if she passed through her lifetime from birth confirms to the age specific fertility rates of a given year. This rate is similar to the gross reproduction rate and takes into account that some women will die before completing their childbearing years. NRR means each generation of mothers is having exactly enough daughters to replace itself in the population.

(c) MORTALITY RELATED INDICATORS**Crude Death Rate (CDR)**

The crude death rate (CDR) is the number of deaths per 1000 mid-year population in a given year.

Child Death Rate (ChDR)

Child death rates are defined as the number of deaths among children in age 1-4 per 1000 mid-year population in the same age group.

Under-5 Mortality Rate (U₅MR)

The under-5 mortality rate is defined as the number of deaths to children under-5 year of age per 1000 live births in a given year.

Infant Mortality Rate (IMR)

The number of deaths occurring during a given year among the live-born infants who have not reached their first birthday, divided by the number of live births in the given year and usually expressed per 1000 live births.

Neo-natal Mortality Rate (NMR)

The neo-natal mortality rate is defined as the number of deaths of infants under one month of age during a year per 1000 live births in that year.

Post-Neo-natal Mortality Rate (PNMR)

The post-Neo-natal mortality rate is defined as the number of deaths of infants of age 1 month through 11 months per 1000 live births in that year.

Maternal Mortality Ratio (MMR)

The maternal mortality ratio is defined as the number of total deaths of women due to complications of pregnancy, child birth and puerperal causes per 1000 live births during a year.

Life Expectancy (e_x)

Expectation of life is the average longevity of an individual or the average number of years of life remaining at specified age x . Expectation of life at birth (e_0) is the average number of years of life remaining at beginning, i.e. '0' year of age.

Natural growth rate (NGR)

The natural growth rate is the difference between crude birth rate (CBR) and crude death rate (CDR) expressed in percentage.

(d) NUPTIALITY RELATED INDICATORS

Crude Marriage Rate (CMR)

Crude Marriage Rate is defined as the number of marriages solemnized per thousand mid year population irrespective of their marital status.

General Marriage Rate (GMR)

GMR is the relative number of marriage of population aged 15+ years per 1000 population of the same group.

Age-Specific Marriage Rate (ASMR)

ASMR is defined as the relative number of marriage per 1000 population of specific age group

Singulate Mean Age at Marriage (SMAM)

SMAM is defined as an estimate of the mean number of years lived by cohort of women before their first marriage. This is an indirect method of estimation of the mean age at first marriage.

Crude Divorce Rate (CDiR)

Crude Divorce Rate is a relative number of divorces per 1000 population.

General Divorce Rate (GDR)

General Divorce Rate is a relative number of divorces of population of age 15+ years per 1000 population of the same age group.

Crude Separation Rate (CSR)

Crude separation rate is a relative number of separations per 1000 population.

General Separation Rate (GSR)

Relative number of separations of persons of age 15+ years to total population of the same age-group.

(e) MIGRATION RELATED INDICATORS

Migration Rate (MR)

The in and out migration rate is defined as the number of in or out migration per 1000 mid-year population of a particular area for a specified time interval.

Internal Migration (IM)

Migration that takes place within the country.

Rural to Rural Migration

Migration that takes place from rural to rural areas of Bangladesh.

Rural to Urban Migration

Migration that takes place from rural to urban areas of Bangladesh.

Urban to Rural Migration

Migration that takes place from urban to rural areas.

Urban to Urban Migration

Migration that takes place from urban to urban area.

(f) DISABILITY RELATED INDICATORS

Crude Disability Rate

Crude disability rate is defined as the number of disabled persons per 1000 population.⁴

(g) CONTRACEPTIVE USE RELATED INDICATORS

Contraceptive Prevalence Rate (CPR): CPR is defined as the percentage of couple currently practicing any contraceptive method to number of currently married women of reproductive age.

(h) DATA QUALITY RELATED INDICATORS

Whiple's Index: The Whiple's index is a simple, robust and easy to interpret index to measure age heaping. As per definition the Whiple's Index is the ratio of the observed frequency of ages ending in 0 or 5 to the frequency predicted by assuming a uniform distribution of terminal digits.

Myer's Blended Index: Myer's Blended Index is calculated for the age above 10 years and shows the excess or deficit of people in ages ending in any of the 10 terminal digits expressed as percentages. It is based on the assumption that the population is equally distributed among the different ages.

UN Age-Sex Accuracy Index/Un Joint Score Index: UN Age-sex accuracy index is a measure of the quality of age data presented in 5-year age groups by sex. The index is based on the age rates and sex ratios and is computed as $3(\text{mean of the differences in sex ratios}) + \text{mean of the differences in age ratios for males} + \text{mean of the differences in age ratios for females}$

The quality of data is ranked as accurate if the index is below 20, inaccurate if it is between 20 & 40 & highly inaccurate if it is over 40.

(i) CONFIDENCE INTERVAL

A Confidence interval is an interval or range of numbers, constructed around the point estimate so that we are very sure or confident, that the population parameter (Such as the mean, or rate) is inside the interval.

(j) Zila: District.

Annexure - 3

Composition of Steering Committee

01	Secretary, Statistics and informatics Division, Ministry of Planning	Chairperson
02	Director General, BBS	Member
03	Representative, Ministry of Public Administration{ (not below the Joint Secretary(JS))}	Member
04	Representative, Finance Division, Ministry of Finance (not below the JS)	Member
05	Representative, LG Division, Ministry of LGRD (not below the Joint Secretary)	Member
06	Representative, Ministry of Health & Family Welfare (not below the Joint Secretary)	Member
07	Representative, Ministry of Information (not below the Joint Secretary)	Member
08	Representative, Information & Communication Technology Division (not below the Joint Secretary)	Member
09	Representative, Ministry of Women & Children Affairs (not below the JS)	Member
10	Joint Secretary (Development), Statistics and Informatics Division	Member
11	Director General, IMED	Member
12	Deputy Director General, BBS	Member
13	Director General, NIPORT	Member
14	Joint Chief, Population Planning Wing, Planning Commission	Member
15	Joint Chief, Programming Division, Planning Commission	Member
16	Joint Chief, GED, Planning Commission	Member
17	Project Director, A2i Program, Prime Minister's Office	Member
18	Director, Demography and Health Wing, BBS	Member
19	Director, Census Wing, BBS	Member
20	Project Director, MSVSB 3rd Phase Project, BBS	Member
21	Deputy Secretary (Development), Statistics and Informatics Division	Member Secretary

Terms of reference:

1. Policy decision in connection with MSVSB activities.
2. Coordination of MSVSB activities with concerned Ministries.
3. Assessment of data needs by different Ministries, Government, Semi-Government organization and Autonomous bodies.
4. Administrative and Financial support in implementing the Project activities.
5. They may Co-opt additional members when needed.
6. Miscellaneous.

Annexure - 4

Composition of Technical Committee

01	Director General, Bangladesh Bureau of Statistics	Chairperson
02	Prof. Dr. M. Nurul Islam, Former Professor Department of Statistics, Dhaka University Former VC, Mawlana Bhashani Science and Technology University(MBSTU), Tangail	Co-Chairperson
03	Joint Secretary (Development), Statistics and Informatics Division	Member
04	Deputy Director General, Bangladesh Bureau of Statistics	Member
05	Representative, Applied Statistics Department, University of Dhaka	Member
06	Representative, Department of Gender Statistics, University of Dhaka	Member
07	Deputy Secretary (Development), Statistics and Informatics Division	Member
08	Representative, Ministry of Health and Family Welfare (not below DS)	Member
09	Director (Research), NIPORT	Member
10	Director (MIS), DG Health, Mohakhali, Dhaka	Member
11	Representative, Population Planning Wing, Planning Commission	Member
12	Representative, GED, Planning Commission	Member
13	Representative, Programming Division, Planning Commission	Member
14	Representative, IMED, Ministry of Planning	Member
15	Director (Demography), icddr,b	Member
16	Director, Demography and Health Wing, BBS	Member
17	Project Director, MSVSB 3rd Phase Project, BBS	Member Secretary

The terms of reference of the committee are as follows:

- (1) To review the technical activities and progress of the wing and guide for undertaking future survey activities;
- (2) To identify the data gaps in the areas of population, health and demography and suggest ways and means for the improvement of data collection, compilation and dissemination systems;
- (3) To provide technical backstopping for conducting health survey including HIV/AIDS and health expenditure, nutrition, demography and population composition related surveys between the census years to meet the annual data needs;
- (4) To suggest techniques for improvement of migration and urbanization related data and development of MNSDS (Minimum National and Social Data Set) and indicators of MDGs;
- (5) To suggest suitable studies/investigations in the field of fertility, mortality, morbidity nutrition to complement the census results;
- (6) To undertake critical studies of different approaches to population projection and recommend method suitable for the country;
- (7) To recommend improvement of urbanization, migration statistics and other social statistics; and
- (8) Any other tasks assigned by the NSC from time to time.

Annexure – 5

Report Review Committee

01	Mr. Ghose Subobrata, Deputy Director General, Bangladesh Bureau of Statistics	Chairperson
02	Dr. Shadat Hossain, Director (Joint Secretary), Planning and Development Cell, BBS	Member
03	Mr. Md. Zahidul Hoque Sardar, Director (Joint Secretary), Census Wing, BBS	Member
04	Mr. Abul Kalam Azad, Director, Statistical Staff Training Institute (SSTI), BBS	Member
05	Mr. Md. Mashud Alam, Director (Deputy Secretary), Demography and Health Wing, BBS	Member
06	Dr. Dipankar Roy, Project Director (Deputy Secretary), Household Income and Expenditure Survey (HIES) Project, BBS	Member
07	Mr. Md. Dilder Hossain, Project Director (Deputy Secretary), NSDS Implimentation Support Project, BBS	Member
08	Mr. Mohammad Abdul Kadir Mia, Director, National Accounting Wing, BBS	Member
09	Mr. Kabir Uddin Ahmed, Director, Industry and Labour Wing, BBS	Member
10	Mr. Md. Emdadul haque, Director, FA & MIS Wing, BBS	Member
11	Mr. Mahfuzul Islam, Director, FA & MIS Wing, BBS	Member
12	Mr. Ziauddin Ahmed, Director, National Accounting Wing, BBS	Member
13	Prof. Dr. M. Nurul Islam, Former VC, Mawlana Bhashani Science and Technology University(MBSTU), Tangail	Consultant
14	Dr. Syed Shahadat Hossain, Professor, ISRT, Dhaka University	Special Member
15	Mr. A K M Ashraful Haque, Joint Director and Project Director, MSVSB (3 rd Phase) project, BBS	Member Secretary

Annexure – 6

Survey Team

Consultant:

Prof. Dr. M. Nurul Islam

Former Professor Department of Statistics, Dhaka University

Former VC, Mawlana Bhashani Science and Technology University (MBSTU), Tangail

01. Data Capturing, Processing and Analysis

1. Mr. A K M Ashraful Haque, Project Director, MSVSB 3rd Phase Project, BBS
2. Mr. Md. Abul kasem, Programmer, MSVSB 3rd Phase Project, BBS
3. Mr. S M Anwar Husain, Asstt. Programmer, MSVSB 3rd Phase Project, BBS

02. Report Preparation

1. Mr. A K M Ashraful Haque, Project Director, MSVSB 3rd Phase Project, BBS
2. Mr. Md. Abul kasem, Programmer, MSVSB 3rd Phase Project, BBS
3. Mr. S M Anwar Husain, Asstt. Programmer, MSVSB 3rd Phase Project, BBS

03. Project Personnel

1. Mr. Md. Saidur rahman, Statistical Officer
2. Mr. Jashim Uddin Chowdhury, Asstt. Statistical Officer
3. Ms. Supti Das, Statistical Investigator
4. Ms. Sheuly Akter, Data Entry/Computer Operator
5. Mr. Md. Serajul Islam, Data Entry Operator (DEO)
6. Mr. Md. Abu Taleb Miah, Data Entry Operator (DEO)
7. Ms. Shamima Akter, Data Entry Operator (DEO)
8. Mr. Md. Mostafa Kamal Masum, Data Entry Operator (DEO)
9. Labiba Binte Qayum, Data Entry Operator (DEO)
10. Emran Biswas, Data Entry Operator (DEO)

Team Leader

A K M Ashraful Haque

(Joint Director)

Project Director

MSVSB 3rd Phase Project

e mail: ahaque_62@yahoo.com

Tel: 02-55007055



Annexure-7

গোপনীয়

খানা তালিকা

তফসিল-১

Shedule

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
বাংলাদেশ পরিসংখ্যান ব্যুরো
মনিটরিং দি সিচুয়েশন অফ ভাইটাল স্ট্যাটিসটিকস্ অফ বাংলাদেশ (এমএসভিএসবি) (৩য় পর্যায়)
প্রকল্প
পরিসংখ্যান ভবন

ই-২৭/এ, আগারগাঁও, ঢাকা -১২০৭।

খানা তালিকা প্রণয়ন তফসিল

নমুনা এলাকা পরিচিতিঃ

PSU নং	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		জিও কোড			
জেলা	<input type="text"/>	<input type="text"/>		
উপজেলা/থানা	<input type="text"/>	<input type="text"/>		
ইউনিয়ন/ওয়ার্ড	<input type="text"/>	<input type="text"/>		
মৌজা/মহল্লা	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
RMO			<input type="text"/>	

স্থানীয় রেজিস্ট্রারের পরিচিতিঃ

নাম	:								
পিতার/স্বামীর নাম	:								
মাতার নাম	:								
গ্রাম/মহল্লা/সড়ক	:								
ডাকঘর	:								
উপজেলা/থানা	:								
রেজিস্ট্রারের	খানার	:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
নম্বর	:									
মোবাইল নং	:		0	1						

খানা তালিকা প্রণয়ন তফসিল

নমুনা এলাকার মৌজা/মহল্লা/ সড়কের নাম উপজেলা/থানা
 নমুনা এলাকার নিকটতম রেলওয়ে স্টেশন/লঞ্চ ঘাট/স্টীমার ঘাট/বাস স্টেশনের
 নাম নমুনা এলাকা হতে দূরত্ব (কিঃ মিঃ) নমুনা এলাকায়
 যাতায়াতের উপায় (উপজেলা/থানা হতে নমুনা এলাকা)

১। বাৎসরিক সাম্প্রতিক ০১ জানুয়ারির খানা ও জনসংখ্যাঃ

বৎসর	২০১৯	২০২০
খানার সংখ্যা		
জনসংখ্যা	পুরুষ	
	মহিলা	
	হিজড়া	
	সর্বমোট	
রেজিস্ট্রারের নাম, স্বাক্ষর ও তারিখ		
সুপারভাইজারের নাম, স্বাক্ষর ও তারিখ		

২। ত্রৈমাসিক সাম্প্রতিক খানা ও জনসংখ্যাঃ

ত্রৈমাসিক	খানার সংখ্যা	২০২০			
		জনসংখ্যা			
		পুরুষ	মহিলা	হিজড়া	মোট
জানুয়ারি-মার্চঃ ১ম (৩১ মার্চের খানা ও জনসংখ্যা)					
এপ্রিল-জুনঃ ২য় (৩০ জুনের খানা ও জনসংখ্যা)					
জুলাই-সেপ্টেম্বরঃ ৩য় (৩০ সেপ্টেম্বরের খানা ও জনসংখ্যা)					
অক্টোবর-ডিসেম্বরঃ ৪র্থ (৩১ ডিসেম্বরের খানা ও জনসংখ্যা)					

৩। সুপারভাইজারের নাম, স্বাক্ষর ও তারিখঃ

ত্রৈমাসিক	নাম ও পদবী	২০২০	
		স্বাক্ষর ও তারিখ	
জানুয়ারি-মার্চঃ ১ম			
এপ্রিল-জুনঃ ২য়			
জুলাই-সেপ্টেম্বরঃ ৩য়			
অক্টোবর-ডিসেম্বরঃ ৪র্থ			

নমুনা এলাকার খানার হ্রাস/বৃদ্ধির তালিকা

বৎসর	ত্রৈমাসিক	বৃদ্ধিপ্রাপ্ত খানার নম্বরসমূহ	হ্রাসপ্রাপ্ত খানার নম্বরসমূহ
২ ০ ২ ০	জানুয়ারি হতে মার্চ ১৮ পৌষ হতে ১৭ চৈত্র		
	এপ্রিল হতে জুন ১৮ চৈত্র হতে ১৬ আষাঢ়		
	জুলাই হতে সেপ্টেম্বর ১৭ আষাঢ় হতে ১৫ আশ্বিন		
	অক্টোবর হতে ডিসেম্বর ১৬ আশ্বিন হতে ১৭ পৌষ		
২ ০ ২ ১	জানুয়ারি হতে মার্চ ১৮ পৌষ হতে ১৭ চৈত্র		
	এপ্রিল হতে জুন ১৮ চৈত্র হতে ১৬ আষাঢ়		
	জুলাই হতে সেপ্টেম্বর ১৭ আষাঢ় হতে ১৫ আশ্বিন		
	অক্টোবর হতে ডিসেম্বর ১৬ আশ্বিন হতে ১৭ পৌষ		
২ ০ ২ ২	জানুয়ারি হতে মার্চ ১৮ পৌষ হতে ১৭ চৈত্র		
	এপ্রিল হতে জুন ১৮ চৈত্র হতে ১৬ আষাঢ়		
	জুলাই হতে সেপ্টেম্বর ১৭ আষাঢ় হতে ১৫ আশ্বিন		
	অক্টোবর হতে ডিসেম্বর ১৬ আশ্বিন হতে ১৭ পৌষ		

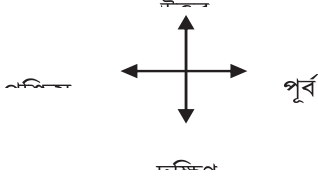
মানচিত্রে ব্যবহার্য চিহ্ন বা সংকেত সমূহ

নমুনা আলাপকার মানচিত্রে তৈরীর প্রথম দিকের প্রথম চিহ্নসমূহ হইতে প্রয়োজনীয় চিহ্নগুলি মানচিত্রে অবশ্যই সঠিকভাবে প্রদর্শন করিতে হইবে।

১।	মৌল্য সীমানা	:	— M — M — M — M — M —
২।	সমন্য এলাকা	:
৩।	গাল সীমানা	:	— XX — XX — XX — XX —
৪।	পাহাড়/রক	:	— X — X — X — X — X —
৫।	পালি বাঁধ	:	=====
৬।	অর্ধগোলক বাঁধ	:	=====
৭।	কঁচা রাজপথ	:	=====
৮।	রেল সড়ক	:	+++++
৯।	খুল/কালভার্ট	:	
১০।	নদী/খাল	:	
১১।	বড় শুকুর/ছোট শুকুর/ডোক	:	
১২।	মসজিদ/মন্দির/গর্ভা	:	
১৩।	মিনার/মহাবিদ্যালয়	:	
১৪।	কবর গ্রাম	:	
১৫।	ঐক্যাত্মক বাতির থালা বা খুঁটি	:	
১৬।	পানির কল/ মজলুপ	:	

নমুনা এলাকার স্কেচ ম্যাপ

(প্রথমে অন্য কাগজে ভালভাবে স্কেচ ম্যাপ করার পর এখানে প্রস্তুত করুন)

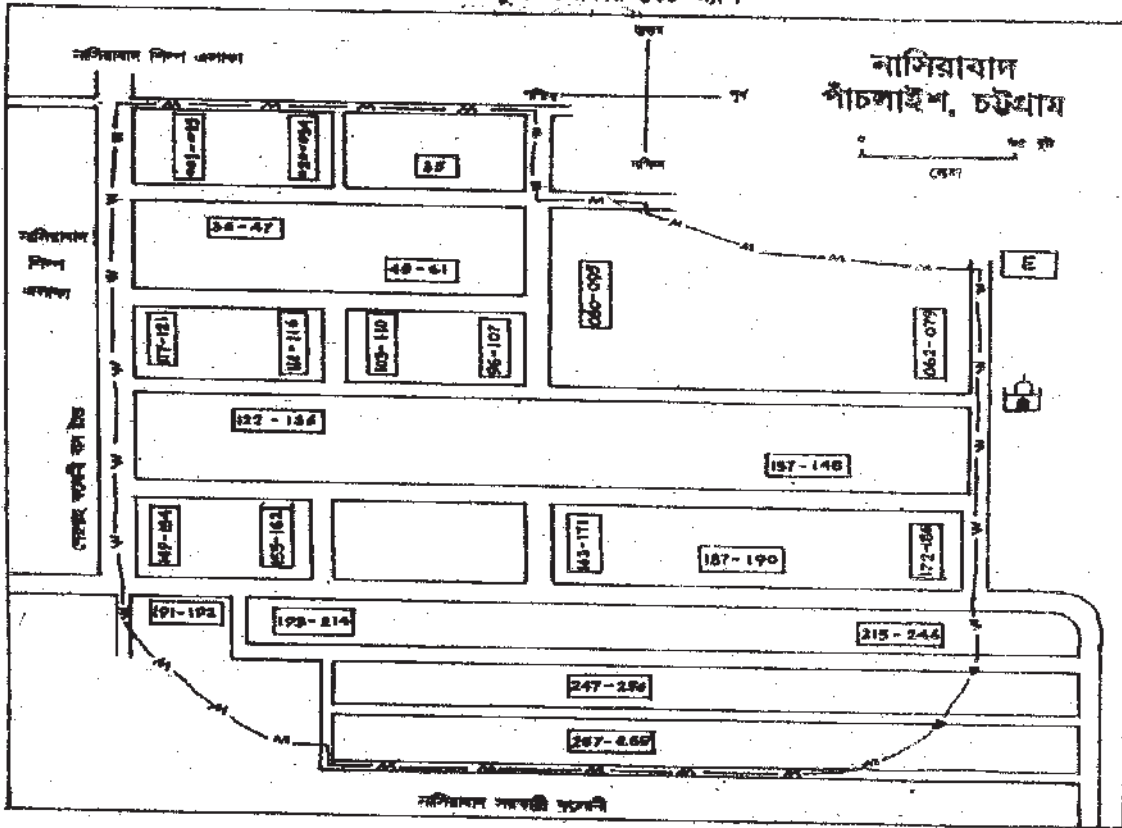


নমুনা এলাকার নামঃ

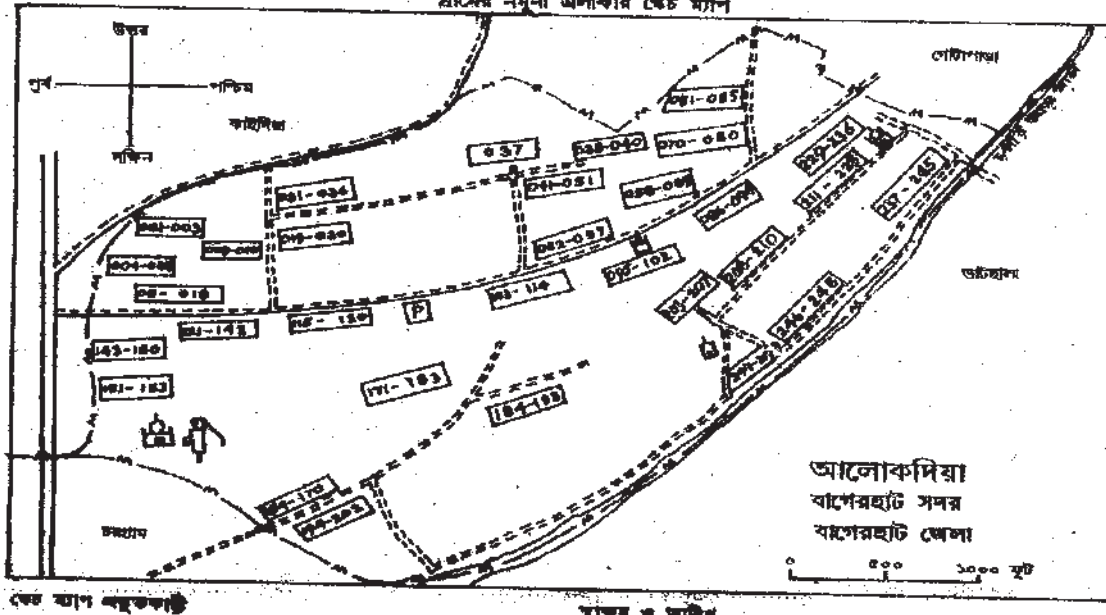
ঠিকানাঃ

ম্যাপ প্রস্তুতকারীর নাম ও পদবী
স্বাক্ষর ও তারিখ

ঘাটমের নমুনা এলাকার কেচ মাপ



ঘাটমের নমুনা এলাকার কেচ মাপ



ভাইটাল স্ট্যাটিস্টিকস্-এ ব্যবহৃত কোডের তালিকা

১। অর্থনৈতিক কার্যাবলীঃ	
অর্থনৈতিক কার্যাবলী	কোড
জমির মালিক	01
মালিক কৃষক	02
পারিবারিক কৃষি কর্মী	03
চুক্তিবদ্ধ কৃষি কর্মী	04
নিজ জমিসহ বর্গা কৃষক	05
ভূমিহীন কৃষি শ্রমিক	06
অন্যান্য কৃষি শ্রমিক	07
অন্যান্য অকৃষি শ্রমিক	08
মৎস্য চাষী	09
জেলে	10
পেশাজীবী কর্মকর্তা	11
নির্বাহী কর্মকর্তা	12
পেশাগত কর্মচারী	13
অন্যান্য অফিস কর্মচারী	14
কারখানা/উৎপাদন শ্রমিক	15
শিক্ষক	16
ব্যবসায়ী	17
পরিবহন/যোগাযোগ শ্রমিক	18
ভ্রাতী	19
কামার	20
কুমার	21
স্বর্ণকার	22
সেবামূলক কাজের সাথে সম্পৃক্ত ব্যক্তি	23
ছাত্র/ছাত্রী	24
গৃহস্থালী	25
চাকর/চাকরানী	26
গৃহকর্মে সাহায্যকারী	27
কাজ খুঁজছেন	28
কাজ করতে অক্ষম	29
ডিম্বুক	30
অন্যান্য (উল্লেখ করুন)	99

২। খানা প্রধানের সাথে খানার সদস্যদের সম্পর্কঃ	
খানা প্রধানের সাথে সম্পর্ক	কোড
খানা প্রধান স্বয়ং	1
স্বামী/স্ত্রী	2
সন্তান	3
পিতা/মাতা/শ্বশুর/শ্বশুরী	4
অন্যান্য (আত্মীয়)	8
অন্যান্য (অনাত্মীয়)	9

৩। খানা সদস্য/ সদস্যদের বৈবাহিক অবস্থাঃ	
বৈবাহিক অবস্থা	কোড
অবিবাহিত	1
বিবাহিত	2
বিধবা/ বিপন্নিক	3
তালাকপ্রাপ্ত/ বিচ্ছিন্ন	4
পৃথক বসবাস	5

৪। শিক্ষার স্তরসমূহঃ	
শিক্ষার স্তরসমূহ	কোড
১ম শ্রেণি উত্তীর্ণ হয়নি	00
১ম শ্রেণি উত্তীর্ণ	01
২য় শ্রেণি ,,	02
৩য় শ্রেণি ,,	03
৪র্থ শ্রেণি ,,	04
৫ম শ্রেণি ,,	05
৬ষ্ঠ শ্রেণি ,,	06
৭ম শ্রেণি ,,	07
৮ম শ্রেণি ,,	08
৯ম শ্রেণি ,,	09
মাধ্যমিক বা সমতুল্য	10
উচ্চ মাধ্যমিক বা সমতুল্য	11
স্নাতক বা সমতুল্য	12
স্নাতকোত্তর বা সমতুল্য	13
ডাক্তার/ইঞ্জিনিয়ার/কৃষিবিদ	14
ডিপ্লোমা	15
ভোকেশনাল	16
অন্যান্য	99

৫। জন্ম/মৃত্যুর স্থানসমূহঃ	
জন্ম/মৃত্যুর স্থান	কোড
নমুনা এলাকার নমুনা খানাতে	1
নমুনা এলাকার অন্য খানাতে	2
অন্য এলাকার খানাতে	3
হাসপাতাল	4
ক্লিনিক	5
মাতৃসদন	6
অন্যান্য	9

৬। প্রসবকালীন সাহায্যকারীঃ	
প্রসবকালীন সাহায্যকারীঃ	কোড
ডাক্তার	01
নার্স/মিড ওয়াইফ	02
প্রশিক্ষিত দাই/ধাত্রী	03
প্যারামেডিক/পরিবার কল্যাণ পরিদর্শিকা (FWV)	04
মেডিক্যাল এসিস্টেন্ট (MA)/ সাব-এসিস্টেন্ট কমিউনিটি মেডিক্যাল অফিসার (SACMO)	05
স্বাস্থ্য সহকারী (HA)/পরিবার কল্যাণ সহকারী (FWA)	06
সনাতন দাই/ধাত্রী	07
প্রশিক্ষণবিহীন ডাক্তার/QUACK/ হাতুড়ে ডাক্তার	08
প্রতিবেশি/আত্মীয়	09
অন্যান্য	10

৭। ধর্ম সংক্রান্তঃ	
ধর্ম	কোড
ইসলাম	1
হিন্দু	2
বৌদ্ধ	3
খ্রিস্টান	4
অন্যান্য ধর্মাবলম্বী	9

৮। মৃত্যুর কারণসমূহঃ	
মৃত্যুর কারণসমূহ	কোড
গুটি বসন্ত	01
হাম	02
ম্যালেরিয়া	03
টাইফয়েড/ প্যারা টাইফয়েড	04
ইনফ্লুয়েঞ্জা	05
ডেঙ্গু	06
চিকনগুনিয়া	07
অন্যান্য জ্বর	08
জন্ডিস	09
আর্সেনিক	10
কলেরা	11
জটিল ডায়রিয়া	12
দীর্ঘস্থায়ী ডায়রিয়া	13
জটিল আমাশয়	14
দীর্ঘস্থায়ী আমাশয়	15
রক্ত আমাশয়	16
যক্ষ্মারোগ	17
হীপানি	18
শ্বাসরোগ	19
নিউমোনিয়া	20
হুপিং কাশি	21
উচ্চ রক্তচাপ	22
হৃদরোগ	23
হৃদযন্ত্রের ক্রিয়া বন্ধ (হার্ট অ্যাটাক)	24
বহুমূত্র (ডায়াবেটিস)	25
মস্তিষ্কে রক্তক্ষরণ (ব্রেইন স্ট্রোক)	26
পিত্ত রোগ	27
বাত রোগ	28
তীব্র বাত জ্বর (Acute Reumectic fever)	29
পক্ষাঘাত	30
ডিপথেরিয়া	31
পেপটিক আলসার	32
মেনিনজাইটিস	33
অপুষ্টিজনিত ব্যাধি	34
টিউমার	35
ব্লাড ক্যানসার	36
বোন ক্যানসার	37
ব্রেইন ক্যানসার	38
পাকস্থলী ক্যানসার	39
লিভার ক্যানসার	40
ব্রেস্ট ক্যানসার	41
জরায়ু ক্যানসার	42
অন্যান্য ক্যানসার (উল্লেখ করুন)	43
চর্মরোগ	44
কুষ্ঠ	45
জটিল গর্ভাবস্থা/বিতৃষ্ণা/ ক্ষুধামন্দা/পায়ে পানি নামা/ফুলে যাওয়া	46
জটিলতার সাথে সন্তান প্রসব/গর্ভ ফুল আটকে যাওয়া/প্রসবকালে প্রচণ্ড ব্যথা, জরায়ুর বিচ্যুতি হওয়া/ছিড়ে যাওয়া	47
প্রসবের পর রক্তক্ষরণ (PPH)	48
জটিলতার সাথে গর্ভপাত/জটিল গর্ভপাত	49

ভাইটাল স্ট্যাটিস্টিকস্-এ ব্যবহৃত কোডের তালিকা

মৃত্যুর কারণসমূহ	কোড
গর্ভাবস্থায় রক্তপাত (APH)	50
সূতিকার	51
ধনুষ্টংকার	52
পোলিও	53
আত্মহত্যা	54
খুন	55
পুড়ে যাওয়া	56
সাপে কাটা	57
বিষক্রিয়া	58
পানিতে ডুবে মৃত্যু	59
সড়ক দুর্ঘটনা (Road Traffic Accident)	60
অন্যান্য দুর্ঘটনা (উল্লেখ করুন)	61
মানসিক রোগ	62
মাদকাসক্ত	63
জলাভঙ্গ	64
কৃমি সংক্রান্ত রোগ	65
নাক, কান ও গলা সংক্রান্ত রোগ	66
যৌন রোগ	67
এইচআইভি/এইডস	68
ফুসফুসে পানি জমা	69
অ্যাপেন্ডিসাইটিস	70
মৃগী	71
কিডনি সমস্যা	72
অন্যান্য (উল্লেখ করুন)	99
৯। ডালাক/পৃথক বসবাসের কারণসমূহঃ	
কারণসমূহ	কোড
ভরণ পোষণদানে ব্যর্থতা	01
দাম্পত্য জীবন পালনে ব্যর্থতা	02
পুরুষত্বহীনতা	03
দুরারোগ্য ব্যাধি	04
প্রাপ্ত বয়স নাওয়ার আগে বিবাহ হওয়া	05
নিরুদ্দেশ হওয়া	06
কারাদন্ড	07
শারীরিক নির্যাতন	08
দুশ্চরিত্র	09
যৌতুক	10
পুনঃ বিবাহ	11
সন্তান না হওয়া	12
অন্যান্য	99
১০। আগমন/বহির্গমনের কারণ সম্পর্কিতঃ	
আগমন/বহির্গমনের কারণ	কোড
বিবাহের কারণে	01
লেখাপড়ার জন্য	02
চাকুরীর উদ্দেশ্যে	03
চাকুরী পেয়ে	04
বদলীজনিত কারণে	05
ছিন্নমূল/নদীভাঙ্গা	06
রোজগারের জন্য	07
স্বামী/স্ত্রী/পিতামাতা/আত্মীয়ের নিকট বসবাসের জন্য	08
ব্যবসার উদ্দেশ্যে	09
চাকুরী হতে অবসরজনিত কারণে	10
বিদেশ ফেরত	11
অন্যান্য (উল্লেখ করুন)	12

১১। আগমন/বহির্গমনের জেলাসমূহঃ	
জেলার নাম	কোড
একই জেলায়	99
পঞ্চগড়	01
ঠাকুরগাঁও	02
দিনাজপুর	03
নীলফামারী	04
লালমনিরহাট	05
রংপুর	06
কুড়িগ্রাম	07
গাইবান্ধা	08
বগুড়া	09
জয়পুরহাট	10
নওগাঁ	11
চাঁপাইনবাবগঞ্জ	12
রাজশাহী	13
নাটোর	14
সিরাজগঞ্জ	15
পাবনা	16
কুষ্টিয়া	17
চুয়াডাঙ্গা	18
মেহেরপুর	19
ঝিনাইদহ	20
মাগুরা	21
নড়াইল	22
যশোর	23
সাতক্ষীরা	24
খুলনা	25
বাগেরহাট	26
বরগুনা	27
পটুয়াখালী	28
ভোলা	29
বরিশাল	30
ঝালকাঠি	31
পিরোজপুর	32
শরীয়তপুর	33
মাদারীপুর	34
গোপালগঞ্জ	35
ফরিদপুর	36
রাজবাড়ী	37
মানিকগঞ্জ	38
ঢাকা	39
গাজীপুর	40
নারায়নগঞ্জ	41
মুন্সিগঞ্জ	42
নরসিংদী	43
টাংগাইল	44
জামালপুর	45
শেরপুর	46
ময়মনসিংহ	47
কিশোরগঞ্জ	48
নেত্রকোনা	49
সুনামগঞ্জ	50
সিলেট	51
মৌলভীবাজার	52
হবিগঞ্জ	53

আগমন/বহির্গমনের জেলাসমূহঃ	
জেলার নাম	কোড
ব্রাহ্মণবাড়ীয়া	54
কুমিল্লা	55
চাঁদপুর	56
লক্ষ্মীপুর	57
নোয়াখালী	58
ফেনী	59
চট্টগ্রাম	60
কক্সবাজার	61
বান্দরবান	62
রাংগামাটি	63
খাগড়াছড়ি	64
১২। আগমন/বহির্গমনের দেশসমূহঃ	
দেশের নাম	কোড
ভারত	01
পাকিস্তান	02
নেপাল	03
শ্রীলংকা	04
ভূটান	05
সৌদি আরব	06
ইরাক	07
ইরান	08
কুয়েত	09
অন্যান্য মধ্যপ্রাচ্যের দেশসমূহ	10
জাপান	11
কোরিয়া	12
সিংগাপুর	13
মালয়েশিয়া	14
অন্যান্য এশিয়ান দেশসমূহ	15
গ্রেট ব্রিটেন	16
জার্মানী	17
ইতালী	18
অন্যান্য ইউরোপীয়ান দেশসমূহ	19
মার্কিন যুক্তরাষ্ট্র	20
কানাডা	21
অন্যান্য আমেরিকান দেশসমূহ	22
অস্ট্রেলিয়া	23
লিবিয়া	24
মিশর	25
অন্যান্য আফ্রিকান দেশসমূহ	26
অন্যান্য (নাম উল্লেখ করুন)	99

পরিদর্শনকারী কর্মকর্তার মন্তব্য ও তারিখসহ স্বাক্ষর

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
বাংলাদেশ পরিসংখ্যান বুরো
মনিটরিং দি সিস্টেমেশন অব আইটাল স্ট্যাটিস্টিকস্ অব বাংলাদেশ (৩য় পর্যায়) প্রকল্প
পরিসংখ্যান ভবন, ই-২৭/এ, আগারগাঁও, ঢাকা -২২০৭

গোপনীয়
মৃত্যু
তফসিল- ৪

৪.১ নমুনা এলাকা পরিচিতিঃ PSU নং : জেলাঃ উপজেলা/থানাঃ

ইউঃ/ওয়ার্ডঃ মৌজা/মহল্লাঃ RMO :

৪.২ গত হতে পর্যন্ত নমুনা এলাকায় নিয়মিত উপস্থিত/সাময়িকভাবে অনুপস্থিত সদস্য/ সদস্য যারা মারা গেছেন তাদের ব্যক্তিগত ও অন্যান্য তথ্য নিম্নে উল্লেখিত ছকে সংগ্রহ করুন।

খানার নম্বর	লাইন নং	১। মৃত ব্যক্তির নাম	২। লিঙ্গ পুরুষ- 1 মহিলা- 2 হিজড়া-3	৩। মৃত্যুর সময় বয়স			৪। মৃত্যুর স্থান (কোড)	৫। মৃত্যুর কারণ (কোড ৪৬- ৫২ না হলে প্রশ্ন ৭ এ যান)	৬। মাতৃমৃত্যু কোড 46, 47, 48, 49, 50, 51, 52) হলে, ডেলিভারিগণ্ডপাতের তারিখ			৭। মৃত্যুর তারিখ দিন মাস সন	৮। মৃত ব্যক্তির ইউঃপরিষদ/পৌরসভা/ সিটি করপোরেশন/ক্যান্টনমেন্ট বোর্ডে মৃত্যু নিবন্ধন করা হয়েছে কি? হ্যাঁ- 1, না- 2 (মৃত্যুর ৬০ দিনের মধ্যে)	৯। মৃত্যু নিবন্ধনের তারিখ							
				বছর	মাস	দিন			দিন	মাস	সন			দিন	মাস	সন					
																	দিন	মাস	সন		

বিঃ দ্রঃ মৃত জন্ম হলে তফসিল-৪ পূরণ করতে হবে না।
মৃত্যুর কারণ আত্মহত্যা (৫৪) হলে কারণসহ লিখুন।
৪ নং প্রশ্নের কোড ১ নং তফসিলে আছে।

সুপারভাইজার/রেজিস্ট্রারের নাম
স্বাক্ষর ও তারিখ

মৃত্যুর কারণ ও কোড

মৃত্যুর কারণ	কোড	মৃত্যুর কারণ	কোড
গুটি বসন্ত	01	ব্রেইন ক্যানসার	38
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ম্যালেরিয়া	03	লিভার ক্যানসার	40
টাইফয়েড/ প্যারা টাইফয়েড	04	ব্রেষ্ট ক্যানসার	41
ইনফ্লুয়েঞ্জা	05	জরায়ু ক্যানসার	42
ডেঙ্গু	06	অন্যান্য ক্যানসার (উল্লেখ করুন)	43
চিকনগুনিয়া	07	চর্মরোগ	44
অন্যান্য জ্বর	08	কুষ্ঠ	45
জন্ডিস	09	জটিল গর্ভাবস্থা/বিতৃষ্ণা/ ক্ষুধামন্দা/পায়ে পানি নামা /ফুলে যাওয়া	46
আর্সেনিক	10	জটিলতার সাথে সন্তান প্রসব/গর্ভ ফুল আটকে যাওয়া/প্রসবকালে প্রচণ্ড	47
কলেরা	11	ব্যথা, জরায়ুর বিচ্যুতি হওয়া /ছিঁড়ে যাওয়া	
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Annexure – 8

Abbreviation

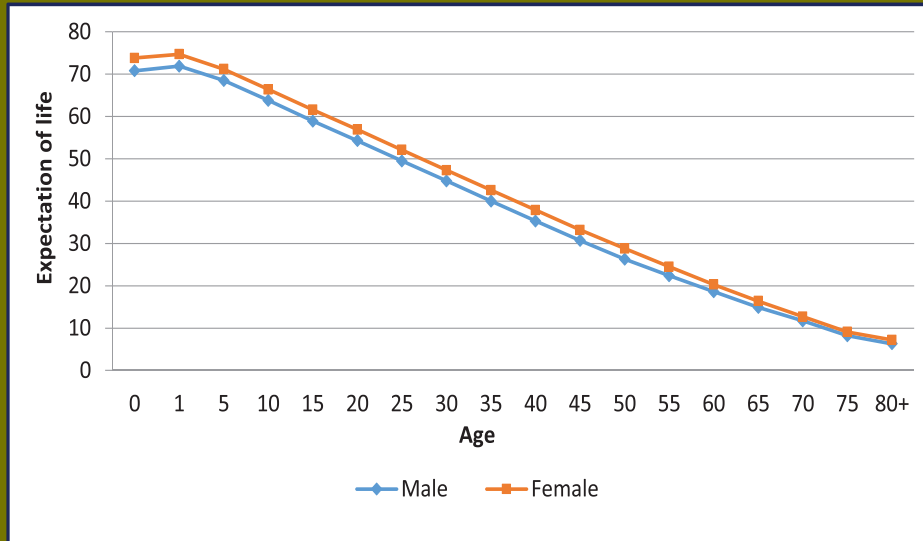
ASMFR	:	Age-Specific Marital Fertility Rate
ASDR	:	Age-Specific Death Rate
ASFR	:	Age- Specific Fertility Rate
ASMR	:	Age- Specific Marriage Rate
BBS	:	Bangladesh Bureau of Statistics
BFS	:	Bangladesh Fertility Survey
BS	:	Both Sexes
CBR	:	Crude Birth Rate
CDR	:	Crude Death Rate
CDiR	:	Crude Divorce Rate
ChDR	:	Child Death Rate
CMR	:	Crude Marriage Rate
CPR	:	Contraceptive Prevalence Rate
CPS	:	Contraceptive Prevalence Survey
CSDR	:	Cause Specific Death Rate
CSR	:	Crude Separation Rate
GDR	:	General Divorce Rate
GFR	:	General Fertility Rate
GMR	:	General Marriage Rate
GSR	:	General Separation Rate
HDS	:	Health and Demographic Survey
HH	:	Household
IMR	:	Infant Mortality Rate
MAM	:	Mean Age at First Marriage
MMR	:	Maternal Mortality Ratio
NGR	:	Natural Growth Rate
NMR	:	Neo-Natal Mortality Rate
NRR	:	Net Reproduction Rate
OMR	:	Optical Marks Reader
OCR	:	Optical Character Reader
ICR	:	Intelligent Character Reader
PNMR	:	Post Neo-Natal Mortality Rate
PSU	:	Primary Sampling Unit
SMA	:	Statistical Metropolitan Area
SSVRS	:	Strengthening of Sample Vital Registration System
SVRS	:	Sample Vital Registration System
TFR	:	Total Fertility Rate

Annexure – 9

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