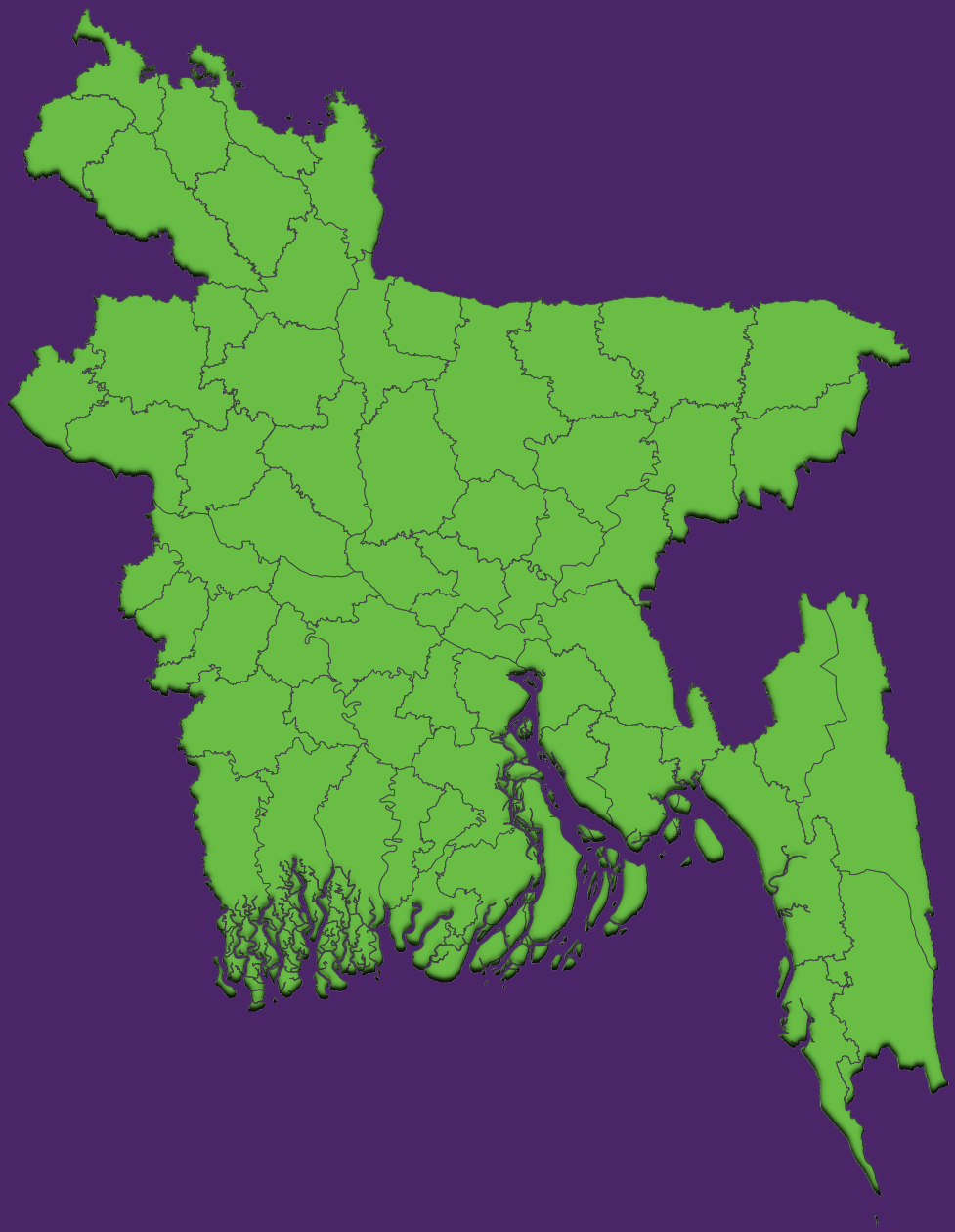
Bangladesh

District Level Socio-demographic and Health Care Utilization Indicators



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NIPORT

Bangladesh
District Level Socio-demographic and Health Care Utilization Indicators

National Institute of Population Research and Training

International Centre for Diarrhoeal Disease Research, Bangladesh

MEASURE Evaluation

Funded by:

Government of the People's Republic of Bangladesh

U.S. Agency for International Development, Bangladesh

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government. TR-20-395
ISBN: 978-1-64232-221-7

ACKNOWLEDGMENTS

The data for this report come from the 2016 Bangladesh Maternal Mortality and Health Care Survey (BMMS). This report was prepared by the National Institute of Population Research and Training (NIPORT), MEASURE Evaluation, and Research for Decision Makers (RDM) project of the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b). MEASURE Evaluation and RDM are funded by the United States Agency for International Development (USAID)/Bangladesh.

The funding for this report and the analysis was provided by the Government of the People's Republic of Bangladesh and the United States Agency for International Development (USAID)/Bangladesh.

Information about the BMMS 2016 may be obtained from the National Institute of Population Research and Training (NIPORT), 13/1 Sheikh Shaheb Bazar, Azimpur, Dhaka 1205, Bangladesh (Telephone: 880-2-5861-1206; Fax: 880-2-86113362; Internet: www.niport.gov.bd; email: directorresearch.niport@gmail.com and alam.niport@gmail.com).

Cover illustration: Atik Ahsan

Suggested citation:

National Institute of Population Research and Training (NIPORT), International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), and MEASURE Evaluation. (2019). *Bangladesh District Level Socio-demographic and Health Care Utilization Indicators*. Dhaka, Bangladesh, and Chapel Hill, NC, USA: NIPORT, icddr,b, and MEASURE Evaluation.

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FOREWORD

The "Bangladesh District Level Socio-demographic and Health Care Utilization Indicators" is the third initiative of NIPORT to highlight the district-level socio-demographic and maternal healthcare utilization indicators in Bangladesh through secondary data analysis of the 2016 Bangladesh Maternal Mortality and Health Care Survey (BMMS). The first of its kind was published in 2001 using secondary data of the 2001 BMMS.

Bangladesh has demonstrated much progress in achieving the Sustainable Development Goals (SDGs). It has achieved substantial success in health sector in improving maternal, child health and family planning services including vaccination coverage, and higher life expectancy at birth. Bangladesh has also made tremendous strides in immunisation and child health and received Vaccine Hero Award.

In Bangladesh, information on utilization of maternal and child health services is not widely available at the district level. Despite progress and strong political commitments, Bangladesh is facing challenges to inequities and vulnerabilities within divisions and districts. Current district level indicator analysis will be instrumental to identify the need and challenges. Like the previous two, hopefully, the current one will facilitate the use of district-level data for local-level planning and monitoring of maternal health indicators. I hope, the full range of information in this report and the insights given in analyzing the data will be thought-provoking and useful reference document for those who are involved in policy formulation and strategic planning of the health, population and nutrition sector program.

Although it was late in publishing such an important issue, however, 'better late than never' policy prompted us to undertake this report. A technical committee formed by Ministry of Health and Family Welfare (MOHFW) reviewed the findings of the 2016 BMMS. The review took a long time to complete resulting delay in publishing the 2016 BMMS report. We are publishing the current report after the publication of the 2016 BMMS.

The Report has been prepared successfully due to the dedicated support and involvement of a large number of Individuals, Academicians and Institutions. I am deeply indebted and grateful to all those who contributed to it. It is my pleasure to congratulate the contributors who participated in preparing the useful document successfully.

I express my thanks to the colleagues in the research unit of NIPORT for participating in and also coordinating this effort. I am thankful to MEASURE Evaluation, USA, icddr,b and USAID/Bangladesh for their technical assistance at every stage of the survey. I acknowledge the financial assistance of the Government of Bangladesh, USAID, and the United Kingdom Department for International Development in accomplishing the entire work.

I believe our effort will be worth if the policy makers, program managers, researchers, academicians utilize the findings in policy making and program planning for the further improvement of the health sector.

(Susanta Kumar Saha)

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1. INTRODUCTION

1.1. BACKGROUND

The purpose of this report is to present health care utilization and socio-demographic indicators at the district level. The data from this report comes from the 2016 Bangladesh Maternal Mortality and Health Care Survey (BMMS). The objectives of the 2016 BMMS were to a) estimate the national level Maternal Mortality Ratio (MMR); b) identify the specific causes of maternal and nonmaternal deaths among adult women; c) assess the pattern of antenatal, delivery, and postnatal care practices; d) assess maternal complications experience and care-seeking; e) estimate childhood mortality rates; f) measure the level of selected maternal morbidities (obstetric fistula and pelvic organ prolapse); g) provide district-level socioeconomic, demographic, family planning, and health care utilization indicators.

Most national surveys concerning the health sector provide data on the country's socioeconomic development, health and family planning only down to the division level. There is a need for district-level data for monitoring of program indicators at that level. Due to the large sample size of the BMMS, it is possible to present utilization of services and socioeconomic information at the district level.

1.2. METHODS AND INDICATORS

This report is based on secondary analysis of the 2016 BMMS. The 2016 BMMS used a representative sample designed to provide estimates for maternal mortality at the national level and for most of the other indicators at the national, urban/rural, divisional, and district levels. The 2016 BMMS used a multistage sampling procedure, using sampling frames derived from the 2011 census (BBS, 2015). In the first stage, wards and unions were used as the primary sample units in urban and rural areas, respectively.

The second stage of sampling involved selecting two *mohallas* in each ward selected in the first stage and two mouzas in each union selected in the first stage. Each selected *mohalla* and mouza was segmented into clusters, and one of these was selected from each selected *mohalla* and mouza. A total of 1,922 urban and 2,826 rural clusters were selected, for a total of 4,748 clusters overall. Of these clusters, 4,739 were successfully interviewed. Sixty-five households were randomly selected in each cluster to receive a household questionnaire. All ever-married women of these households received a women's questionnaire. A total of 321,214 ever-married women ages 13–49 from 298,284 households were successfully interviewed (NIPORT, icddr,b, & MEASURE Evaluation, 2019).

In order to analyze the 2016 BMMS data for district-level mapping, a technical group was formed from the members of the 2016 BMMS Technical Working Committee (TWC). This technical group primarily considered the targets of the ongoing health sector program, the Fourth Health, Population and Nutrition Sector Program (4th HPNSP) 2017–2022, for categorizing indicator values in the district-level maps. Where applicable, the 2022 target of the 4th HPNSP is considered as the "most improved" category (color-coded as green) for an indicator

and subsequent categories were set in order as yellow, orange, and red. This scheme would allow the readers to easily locate from the maps the districts which have already achieved the 2022 targets and which were lagging behind. For the indicators that were not included in the Results Framework of the 4th HPNSP (MOHFW, 2017), sorting and categorizing data into green to red groups were done based on the range of the indicators' district-level values.

Data from the earlier rounds of BMMS were also used for producing reports on district-level socio-demographic and health care utilization indicators in Bangladesh (NIPORT, MEASURE Evaluation, & icddr,b, 2011; NIPORT & ORC Macro, 2003). For demonstrating changes in selected indicators across the BMMS rounds, this report compared district-level data from the 2001, 2010, and 2016 rounds of BMMS by applying the same cut-off points used for 2016 data.

In order to present district-level socioeconomic, demographic, family planning, and health care utilization status in Bangladesh, the following indicators are presented in this report:

Socioeconomic status

- Percentage of households with electricity;
- Percentage of households with improved sanitary toilet;
- Percentage of households with improved housing;
- Percentage of households owning a TV;
- Percentage of households owning a mobile phone;
- Percentage of households in lowest quintile (poorest households);
- Percentage of male and female youths ages 20–24 with at least some secondary education;
- Percentage of sampled respondents ages 15–49 with at least some secondary education.

Marriage and fertility

- Total fertility rate;
- Percentage of female adolescent (ages 15–19) currently married;
- Contraceptive prevalence rate (any method and modern method).

Maternal health

- Antenatal care from a medically-trained provider;
- Four or more antenatal care with at least one from a medically-trained provider;
- Antenatal care received with all essential components;
- Four or more antenatal care, with at least one from a medically-trained provider, with all essential components;
- Deliveries attended by a skilled birth attendant;
- Deliveries at a health care facility;
- Postnatal care for mothers from a medically-trained provider within two days of delivery;
- Postnatal care for mothers from a medically-trained provider within two days for non-institutional deliveries.

Childhood mortality

- Neonatal mortality rate;
- Post-neonatal mortality rate;
- Infant mortality rate;
- Child mortality rate;
- Under-five mortality rate.

1.3. IMPLEMENTING ORGANIZATIONS

The 2016 BMMS was an activity in the Operational Plan (OP) of Training, Research and Development (TRD) of the National Institute of Population Research and Training (NIPORT) under the Health, Population and Nutrition Sector Development Program (HPNSDP) 2011–2016 (MOHFW, 2011). The survey was conducted under the authority of NIPORT of the Medical Education and Family Welfare Division, the Ministry of Health and Family Welfare. MEASURE Evaluation, icddr,b, and USAID provided technical assistance in all phases of the survey. NIPORT employed two local research firms/agencies (Mitra and Associates and Associates for Community and Population Research [ACPR]) for field data collection, data editing, and data entry.

1.4. FUNDING SOURCES

The funding for this report and the analysis was provided by the Government of the People's Republic of Bangladesh and the United States Agency for International Development (USAID)/Bangladesh.

2. SOCIOECONOMIC STATUS

Globally, scientific literature has extensively documented the direct contributions of socioeconomic factors on health status and utilization of health services in both developed and developing countries. Before the mid-1980's, socioeconomic status was largely absent in studies on health except as a control variable, whereas since 1985 there has been a substantial increase in the number of studies about the relationships between socioeconomic status and health—it is now established that the effect of socioeconomic factors is much broader than just poverty, and there is a gradient effect between socioeconomic status and health: as socioeconomic status increased, health improved (Adler and Ostrove, 1999; Gornick, 2002; Marmot, et al,. 2010).

The 2016 BMMS collected information on the physical characteristics of households, which reflect the general socioeconomic condition of the household population and the individual survey respondents. Collected information includes access to basic amenities (e.g., electricity, sanitation), household structure, and possession of durable household goods (i.e., assets). The information on household asset ownership is used to create an indicator of household economic status, the wealth index. The wealth index was constructed from data on ownership of durable household assets, as well as dwelling characteristics such as type of drinking water available, sanitation facilities, roofing, and flooring. Each asset was assigned a weight (factor score) generated through principal components analysis. Each household's scores (the weight in the instance that the household owned the asset, zero otherwise) were then summed; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into population quintiles ranked from poorest (lowest 20% score) to richest (highest 20% score) (NIPORT, icddr,b, & MEASURE Evaluation, 2019). This chapter provides information on some of the socioeconomic characteristics of the households to show trends in socioeconomic status in Bangladesh between 2001 and 2016.

Table 1. Selected household characteristics by district, Bangladesh 2016

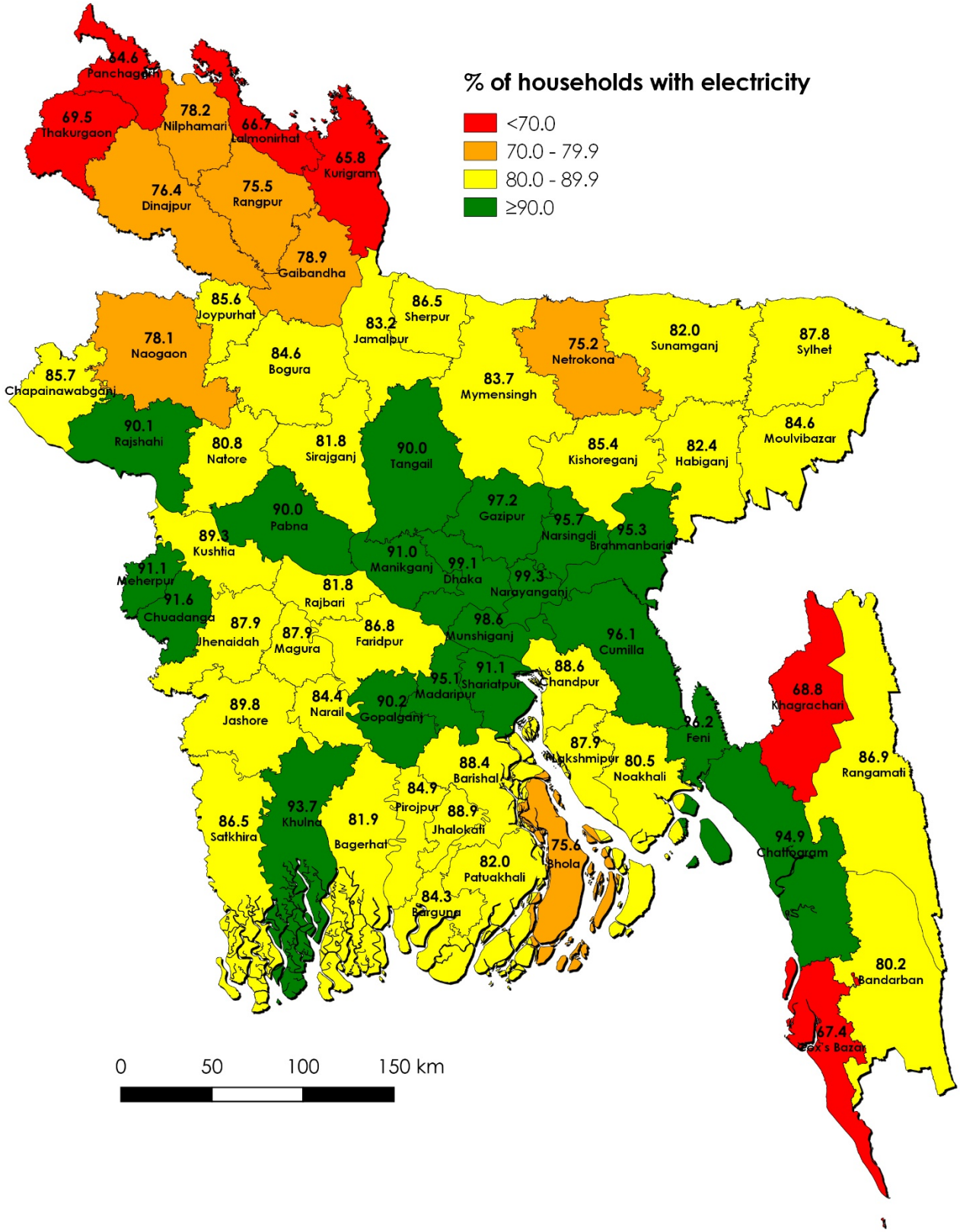
Percentage of households by selected housing characteristics, according to district.

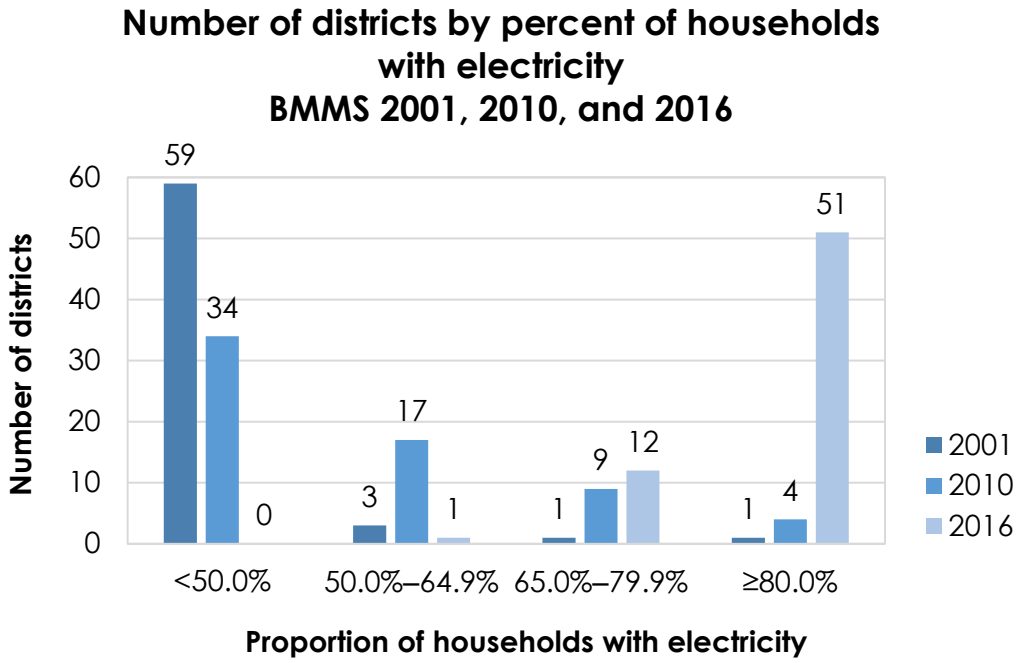
Division and district	Household with electricity[1]	Household with improved sanitary toilet[2]	Household with improved housing[3]
Barishal Division	**83.7**	**80.0**	**93.8**
Barguna	84.3	85.1	94.4
Barishal	88.4	78.8	95.8
Bhola	75.6	73.9	97.2
Jhalokati	88.9	83.4	90.1
Patuakhali	82.0	78.4	96.0
Pirojpur	84.9	87.1	83.7
Chattrogram Division	**89.0**	**53.5**	**77.9**
Bandarban	80.2	34.6	29.3
Brahmanbaria	95.3	46.0	95.7
Chandpur	88.6	64.7	99.1
Chattogram	94.9	49.3	69.4
Cumilla	96.1	63.6	97.0
Cox's Bazar	67.4	38.8	31.7
Feni	96.2	66.2	79.9
Khagrachhari	68.8	42.3	40.6
Lakshmipur	87.9	60.1	97.3
Noakhali	80.5	58.2	94.0
Rangamati	86.9	39.1	34.7
Dhaka Division	**95.2**	**45.5**	**95.6**
Dhaka	99.1	40.0	98.8
Faridpur	86.8	74.5	91.7
Gazipur	97.2	36.3	85.6
Gopalganj	90.2	73.2	95.0
Kishoreganj	85.4	37.2	98.7
Madaripur	95.1	80.6	94.8
Manikganj	91.0	51.0	98.1
Munshiganj	98.6	49.7	99.4
Narayanganj	99.3	33.2	98.2
Narsingdi	95.7	49.4	89.1
Rajbari	81.8	71.6	91.8
Shariatpur	91.1	40.7	95.8
Tangail	90.0	46.9	94.5
Khulna Division	**88.7**	**63.8**	**74.1**
Bagerhat	81.9	77.6	69.0
Chuadanga	91.6	58.6	75.0
Jashore	89.8	64.2	77.6
Jhenaidah	87.9	59.7	79.0
Khulna	93.7	55.9	69.6
Kushtia	89.3	62.4	78.6
Magura	87.9	65.9	86.8
Meherpur	91.1	65.9	73.4

Division and district	Household with electricity[1]	Household with improved sanitary toilet[2]	Household with improved housing[3]
Narail	84.4	72.3	87.5
Satkhira	86.5	64.5	61.0
Mymensingh Division	**82.4**	**39.5**	**90.3**
Jamalpur	83.2	39.9	95.8
Mymensingh	83.7	39.9	88.7
Netrokona	75.2	32.7	85.9
Sherpur	86.5	48.3	93.0
Rajshahi Division	**84.6**	**56.6**	**69.2**
Bogura	84.6	63.2	68.6
Chapainawabganj	85.7	45.2	69.0
Joypurhat	85.6	64.0	44.6
Naogaon	78.1	56.1	48.7
Natore	80.8	59.6	64.1
Pabna	90.0	59.2	91.8
Rajshahi	90.1	56.4	59.4
Sirajganj	81.8	52.1	91.4
Rangpur Division	**73.6**	**54.9**	**76.0**
Dinajpur	76.4	58.3	53.8
Gaibandha	78.9	50.2	90.8
Kurigram	65.8	56.4	95.2
Lalmonirhat	66.7	62.8	95.0
Nilphamari	78.2	49.5	78.5
Panchagarh	64.6	60.0	51.9
Rangpur	75.5	52.5	83.9
Takurgaon	69.5	55.2	45.5
Sylhet Division	**84.8**	**45.2**	**73.9**
Habigonj	82.4	38.8	77.6
Moulvibazar	84.6	51.9	64.3
Sunamganj	82.0	34.2	75.2
Sylhet	87.8	51.9	76.0
Bangladesh	**87.3**	**52.9**	**82.6**

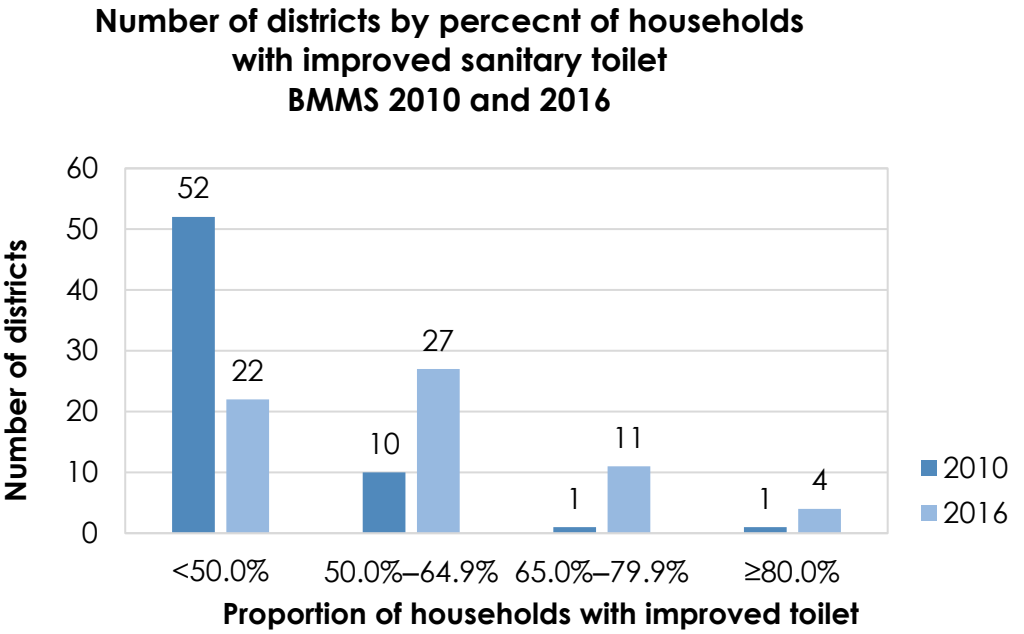
[1] Either national grid or solar electricity.
[2] Flush toilet, ventilated improved pit latrine, and pit latrine with slab that are not shared with other households.
[3] House with finished roof (tin, wood, cement, and tiles) and finished wall (tin, wood, and cement).

Households with electricity



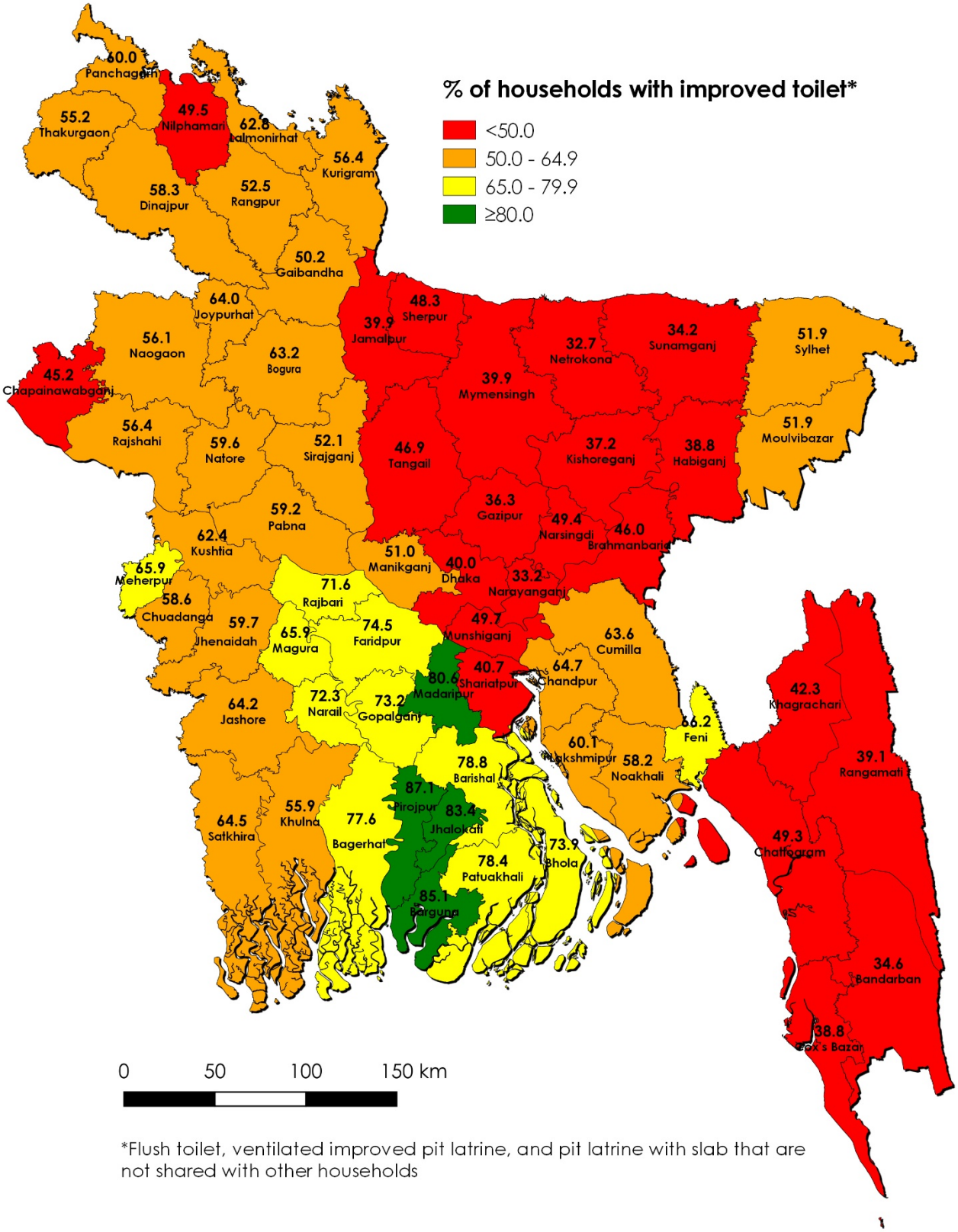


- In 2016, there was no district in Bangladesh where less than 50% of the households had access to electricity.
- In 2016, 51 districts had 80% or more households with access to electricity. In 2001, only one district had so.

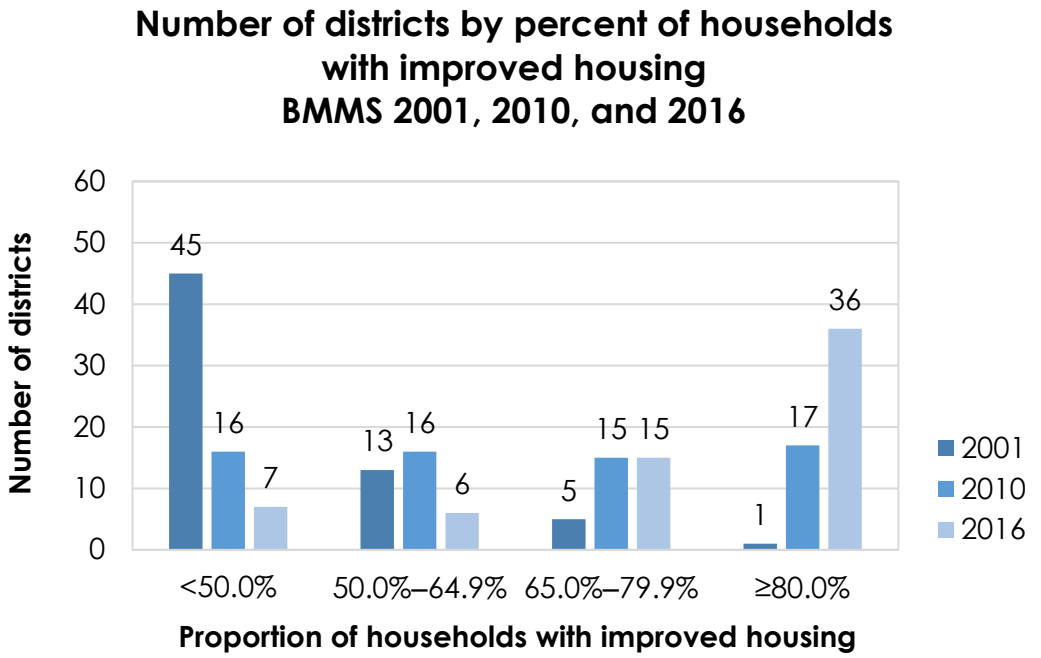


- In 2016, 22 districts had less than 50% of households with improved sanitary toilets, which was 52 districts in 2010.
- Only one district in 2010 had 80% or more households with improved sanitary toilet. In 2016, it increased to four districts.

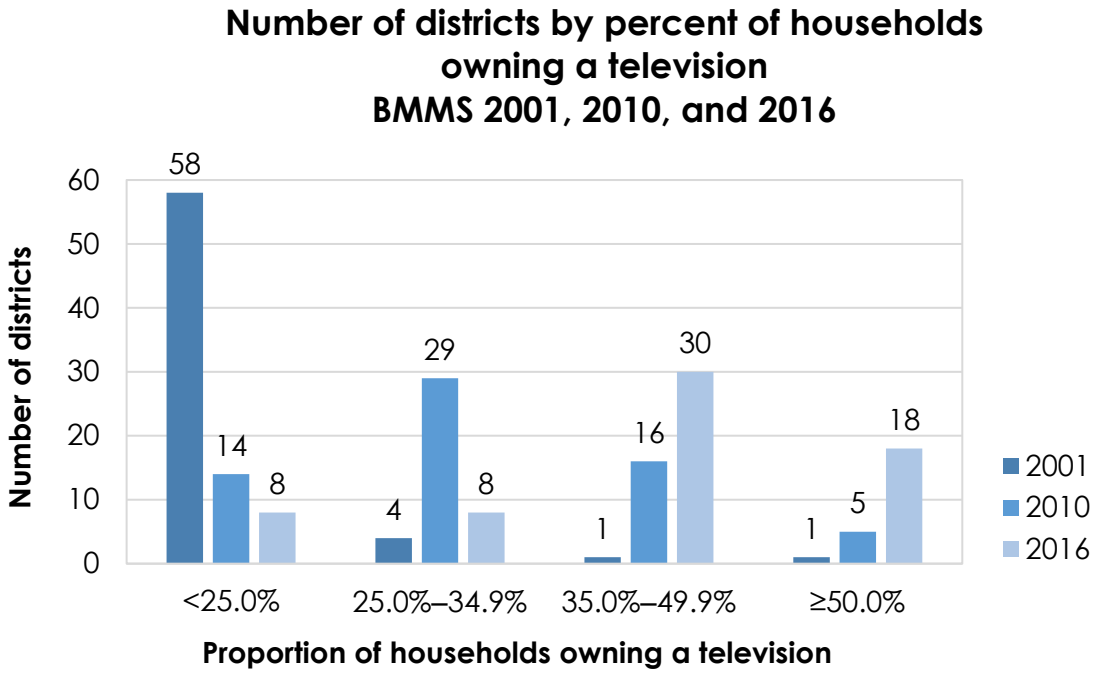
Households with improved sanitary toilet



*Flush toilet, ventilated improved pit latrine, and pit latrine with slab that are not shared with other households

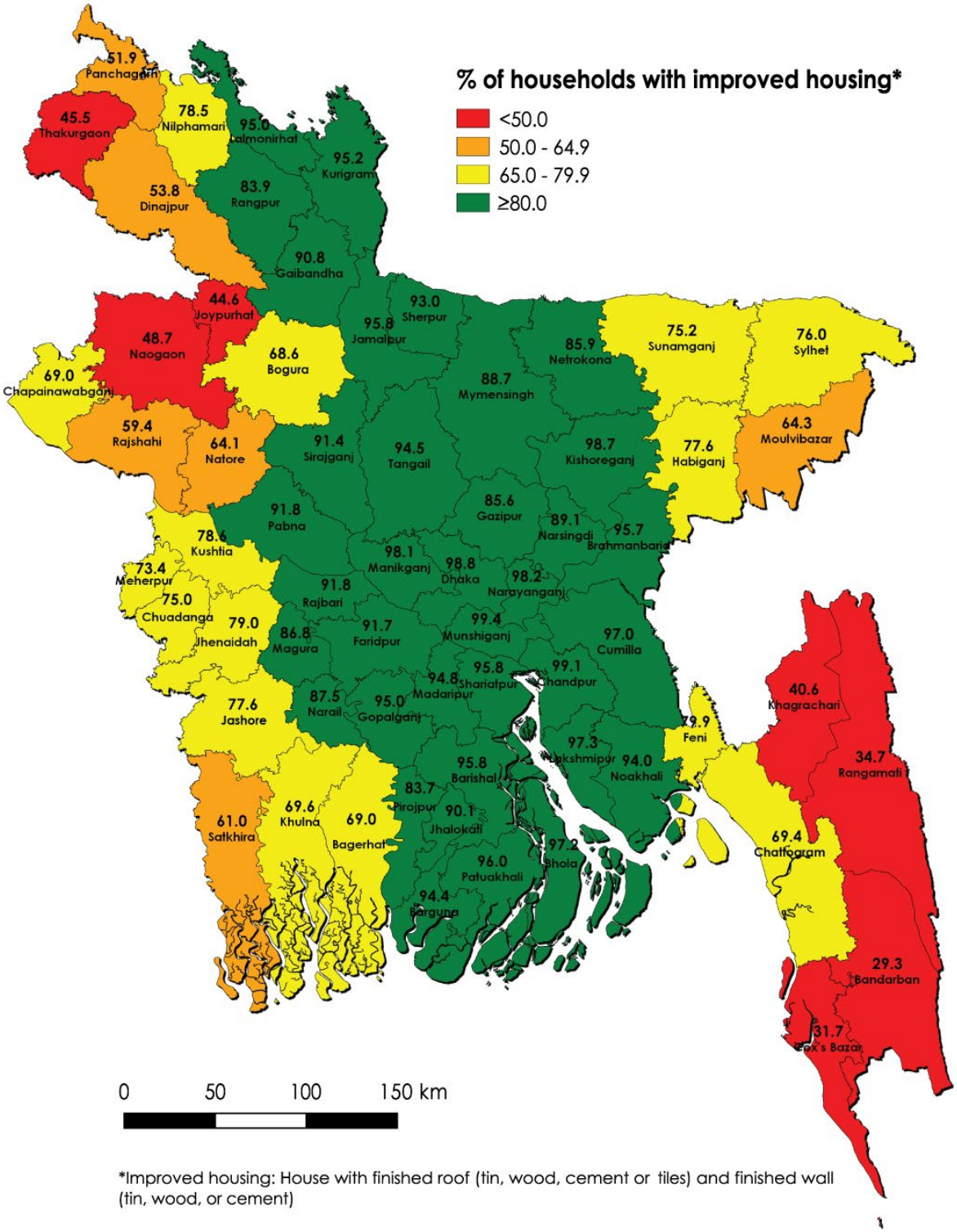


- Over the years, the overall socioeconomic status of the households in Bangladesh improved.
- Only one district in 2001 had 80% or more households with improved housing structure, which increased to 37 districts in 2016.
- In 2001, 45 districts had less than half of the households with improved housing structure, which reduced to only seven districts in 2016.



- Only one district in 2001 had 50% or more households owning a tv, which increased to 18 districts in 2016.
- In 2001, 58 districts had less than one-quarter of the households owning a television, which reduced to only eight districts in 2016.

Households with improved housing



*Improved housing: House with finished roof (tin, wood, cement or tiles) and finished wall (tin, wood, or cement)

Table 2. Household asset ownership by district, Bangladesh 2016

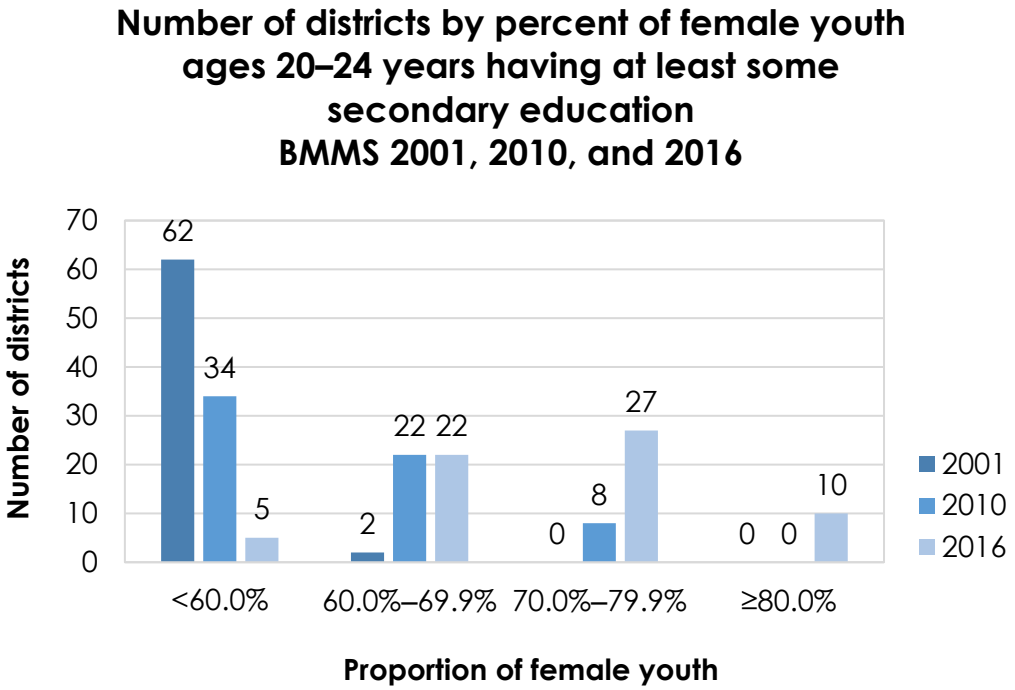
Percentage of households by possession of selected household durable goods and socioeconomic status, according to district.

Division and district	Household owning a television	Household owning a mobile phone	Poorest household[1]
Barishal Division	**29.8**	**94.8**	**41.2**
Barguna	23.6	94.5	54.5
Barishal	42.0	94.2	29.9
Bhola	16.9	93.9	49.6
Jhalokati	39.8	97.0	21.8
Patuakhali	18.2	94.5	60.6
Pirojpur	37.3	96.3	30.6
Chattrogram Division	**48.1**	**96.1**	**18.2**
Bandarban	37.4	91.3	31.5
Brahmanbaria	49.8	95.0	10.4
Chandpur	40.3	96.2	20.3
Chattogram	62.4	97.2	7.3
Cumilla	56.6	97.7	7.1
Cox's Bazar	16.5	92.8	43.0
Feni	56.0	98.3	5.1
Khagrachhari	34.6	90.3	49.1
Lakshmipur	35.7	96.5	38.2
Noakhali	39.9	95.1	31.0
Rangamati	43.6	96.5	30.8
Dhaka Division	**65.1**	**95.7**	**8.5**
Dhaka	78.6	96.7	0.7
Faridpur	42.6	95.7	25.7
Gazipur	72.0	95.6	3.2
Gopalganj	42.1	96.1	21.8
Kishoreganj	33.2	91.5	27.7
Madaripur	54.4	96.6	9.7
Manikganj	56.2	94.7	16.5
Munshiganj	74.6	96.8	2.8
Narayanganj	75.4	96.7	1.8
Narsingdi	58.0	94.8	8.5
Rajbari	42.6	96.2	25.3
Shariatpur	35.7	94.5	32.5
Tangail	52.3	92.8	15.5
Khulna Division	**47.9**	**94.2**	**14.8**
Bagerhat	35.6	93.6	27.3
Chuadanga	48.4	92.4	10.4
Jashore	50.6	95.9	9.1
Jhenaidah	48.8	94.0	15.7
Khulna	56.4	95.2	11.9
Kushtia	50.6	91.1	16.0
Magura	34.3	94.1	19.7
Meherpur	53.4	93.1	11.2

Division and district	Household owning a television	Household owning a mobile phone	Poorest household[1]
Narail	43.1	95.6	19.6
Satkhira	45.5	95.4	14.0
Mymensingh Division	**34.8**	**91.5**	**32.2**
Jamalpur	34.2	89.4	33.4
Mymensingh	40.0	93.4	26.9
Netrokona	22.9	92.2	46.4
Sherpur	31.9	86.9	30.5
Rajshahi Division	**48.3**	**92.3**	**22.2**
Bogura	54.7	92.2	21.9
Chapainawabganj	36.7	94.7	16.5
Joypurhat	51.4	91.5	22.1
Naogaon	46.5	92.7	26.5
Natore	45.6	92.8	25.8
Pabna	47.8	94.3	16.7
Rajshahi	62.5	90.4	13.5
Sirajganj	37.4	91.0	33.0
Rangpur Division	**34.9**	**90.8**	**37.8**
Dinajpur	45.2	93.3	27.9
Gaibandha	36.6	89.6	34.3
Kurigram	21.9	89.9	59.4
Lalmonirhat	21.6	90.8	45.7
Nilphamari	36.8	89.2	31.3
Panchagarh	28.1	90.8	50.7
Rangpur	37.4	89.7	35.0
Takurgaon	33.7	93.0	37.4
Sylhet Division	**35.8**	**92.9**	**28.9**
Habigonj	32.3	90.1	31.6
Moulvibazar	37.2	91.4	26.8
Sunamganj	22.2	92.3	48.8
Sylhet	45.0	95.5	16.8
Bangladesh	**48.5**	**94.1**	**20.9**

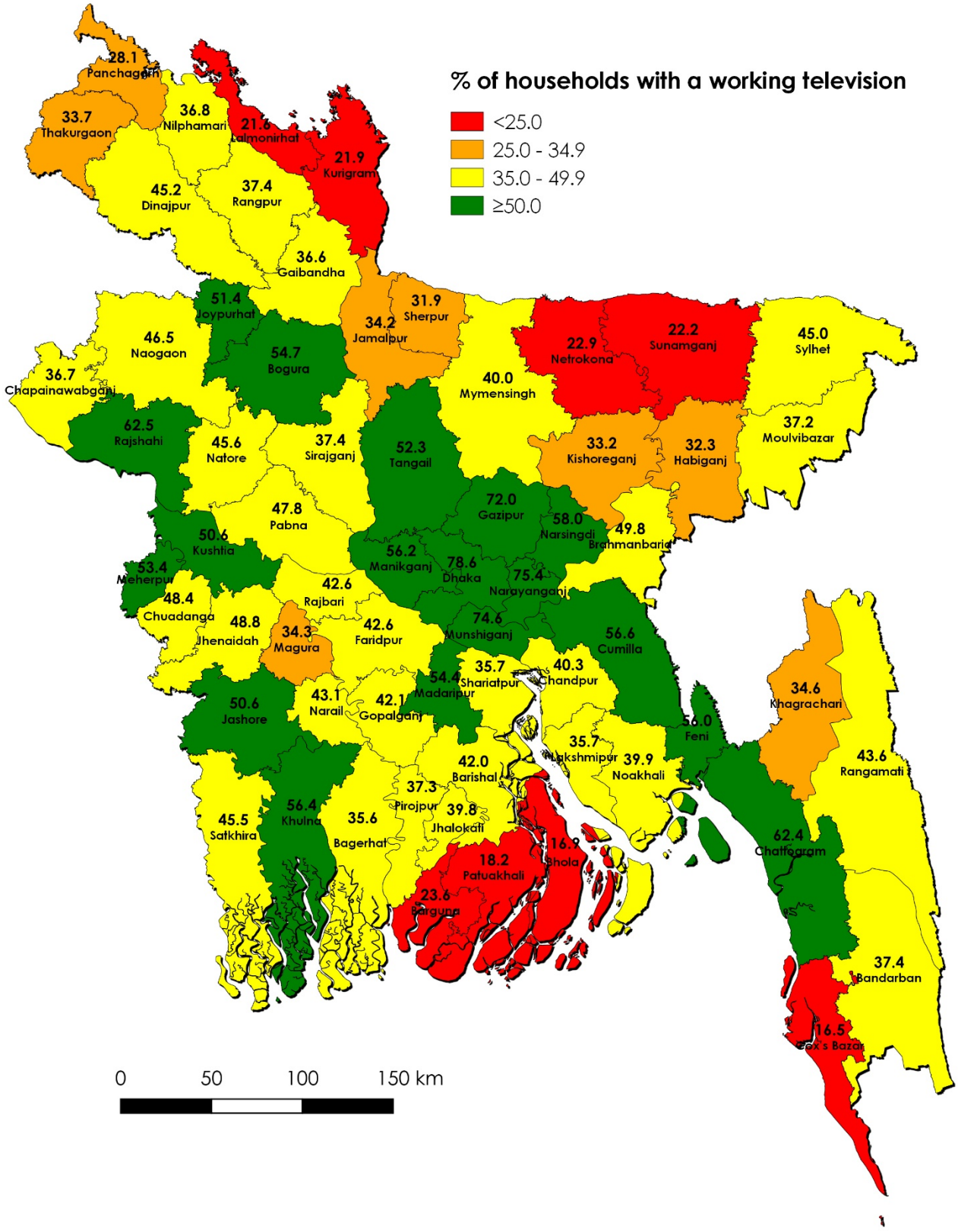
Note: Radio was dropped from this list, which was a part of the earlier reports, as the ownership was found to be too low (<3% of households).

[1] Households in the lowest wealth quintile, calculated based on household wealth index.

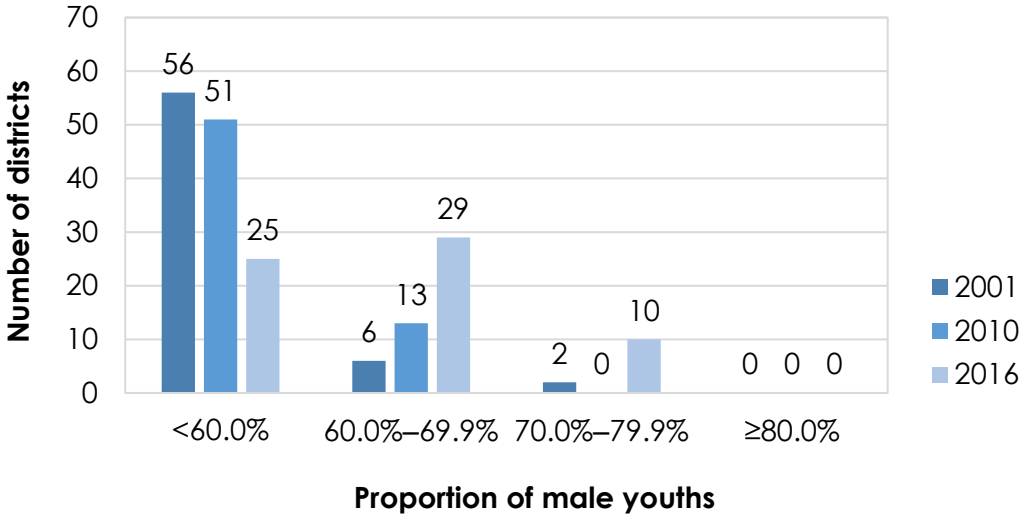


- In 2016, 10 districts had 80% or more of the female youths with at least some secondary education. In 2001 there were none.

Households owning a television

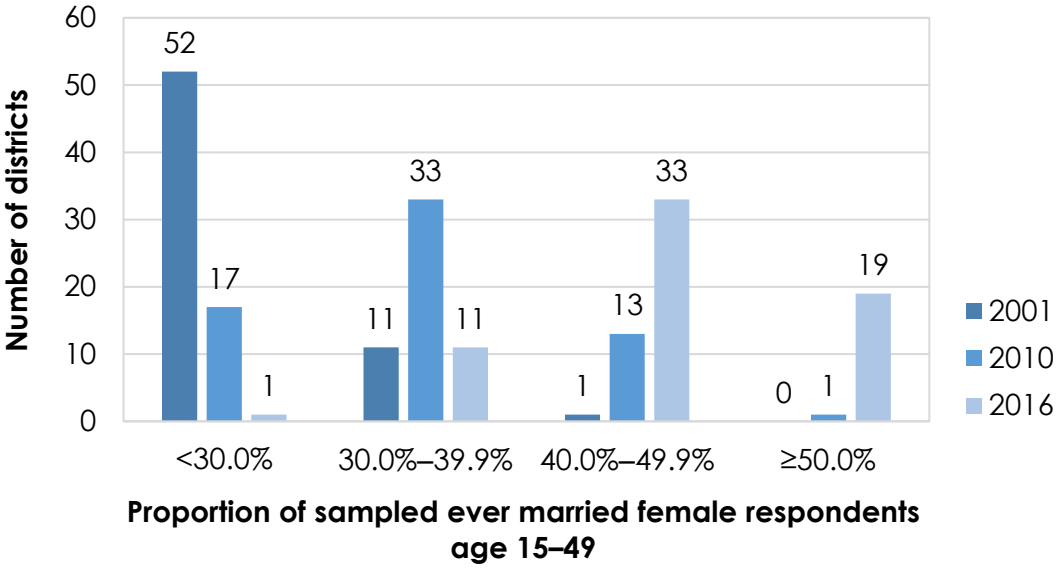


Number of districts by percent of male youths ages 20–24 years having at least some secondary education BMMS 2001, 2010, and 2016



- In 2016, 10 districts had 70%–79% of the male youths with at least some secondary education. In 2001, only two districts had similar educational attainment among male youths.

Number of districts by percent of sampled ever married female respondents ages 15–49 years having at least some secondary education BMMS 2001, 2010, and 2016



- In 2016, 19 districts had 80% or more of the sampled female respondents with at least some secondary education. In 2001, no districts had such a level of educational attainment among the sampled female respondents.

Households in the lowest wealth quintile

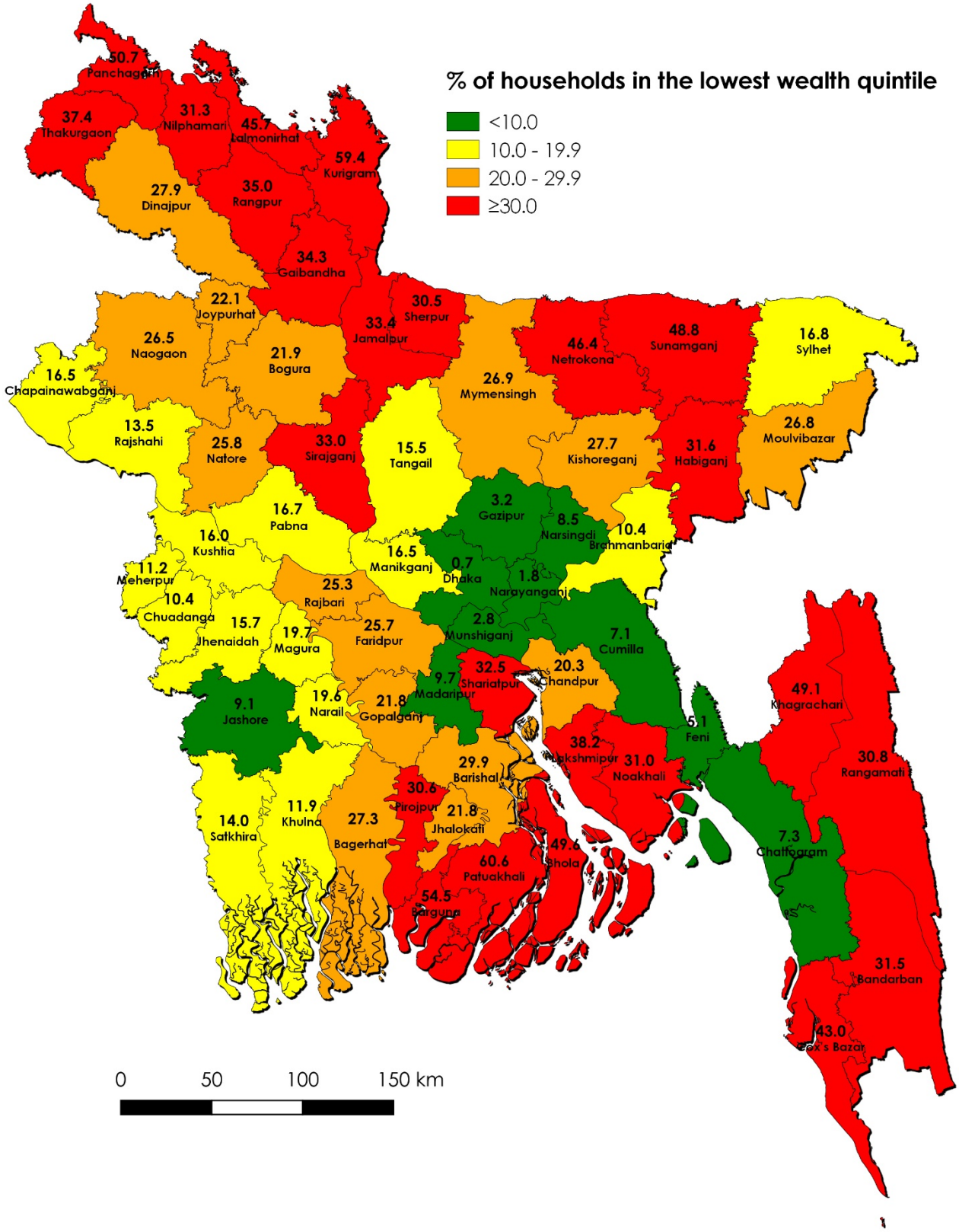


Table 3. Female/male youths ages 20–24 and sampled female respondents ages 15–49 years with some secondary education by district, Bangladesh 2016

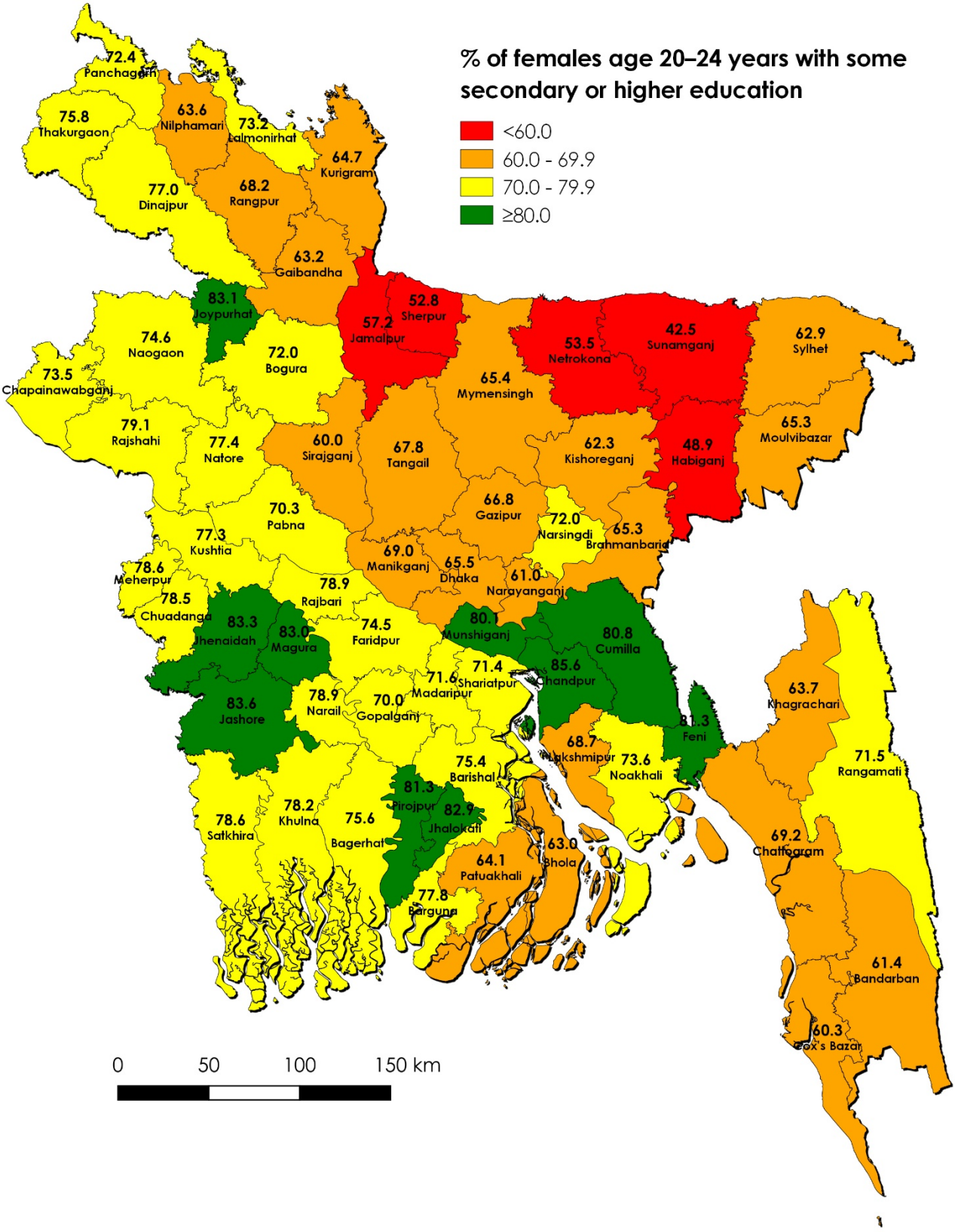
Percentage of de facto female and male youths ages 20–24 years and sampled female respondents ages 15–49 years who has at least some secondary education, according to district.

Division and district	Female youths with some secondary education	Male youths with some secondary education	Female respondents with some secondary education
Barishal Division	**72.2**	**64.5**	**47.4**
Barguna	77.8	70.5	47.7
Barishal	75.4	68.2	52.5
Bhola	63.0	50.9	37.4
Jhalokati	82.9	79.6	57.6
Patuakhali	64.1	59.8	38.4
Pirojpur	81.3	71.9	57.2
Chattogram Division	**72.3**	**59.2**	**53.3**
Bandarban	61.4	52.5	39.5
Brahmanbaria	65.3	49.9	46.6
Chandpur	85.6	68.2	62.2
Chattogram	69.2	62.2	53.3
Cumilla	80.8	62.4	59.5
Cox's Bazar	60.3	46.3	40.5
Feni	81.3	66.0	63.4
Khagrachhari	63.7	55.0	41.6
Lakshmipur	68.7	58.8	48.9
Noakhali	73.6	62.1	56.1
Rangamati	71.5	62.4	54.1
Dhaka Division	**67.6**	**63.1**	**48.4**
Dhaka	65.5	63.6	49.3
Faridpur	74.5	67.1	50.2
Gazipur	66.8	66.4	50.3
Gopalganj	70.0	65.0	47.3
Kishoreganj	62.3	50.9	40.5
Madaripur	71.6	70.5	45.6
Manikganj	69.0	73.2	44.6
Munshiganj	80.1	67.2	60.4
Narayanganj	61.0	59.0	46.3
Narsingdi	72.0	60.1	52.5
Rajbari	78.9	68.8	46.0
Shariatpur	71.4	57.0	44.2
Tangail	67.8	59.6	45.2
Khulna Division	**79.7**	**69.4**	**50.4**
Bagerhat	75.6	69.0	54.1
Chuadanga	78.5	60.7	44.1
Jashore	83.6	72.4	54.8
Jhenaidah	83.3	70.1	47.9
Khulna	78.2	73.7	54.2

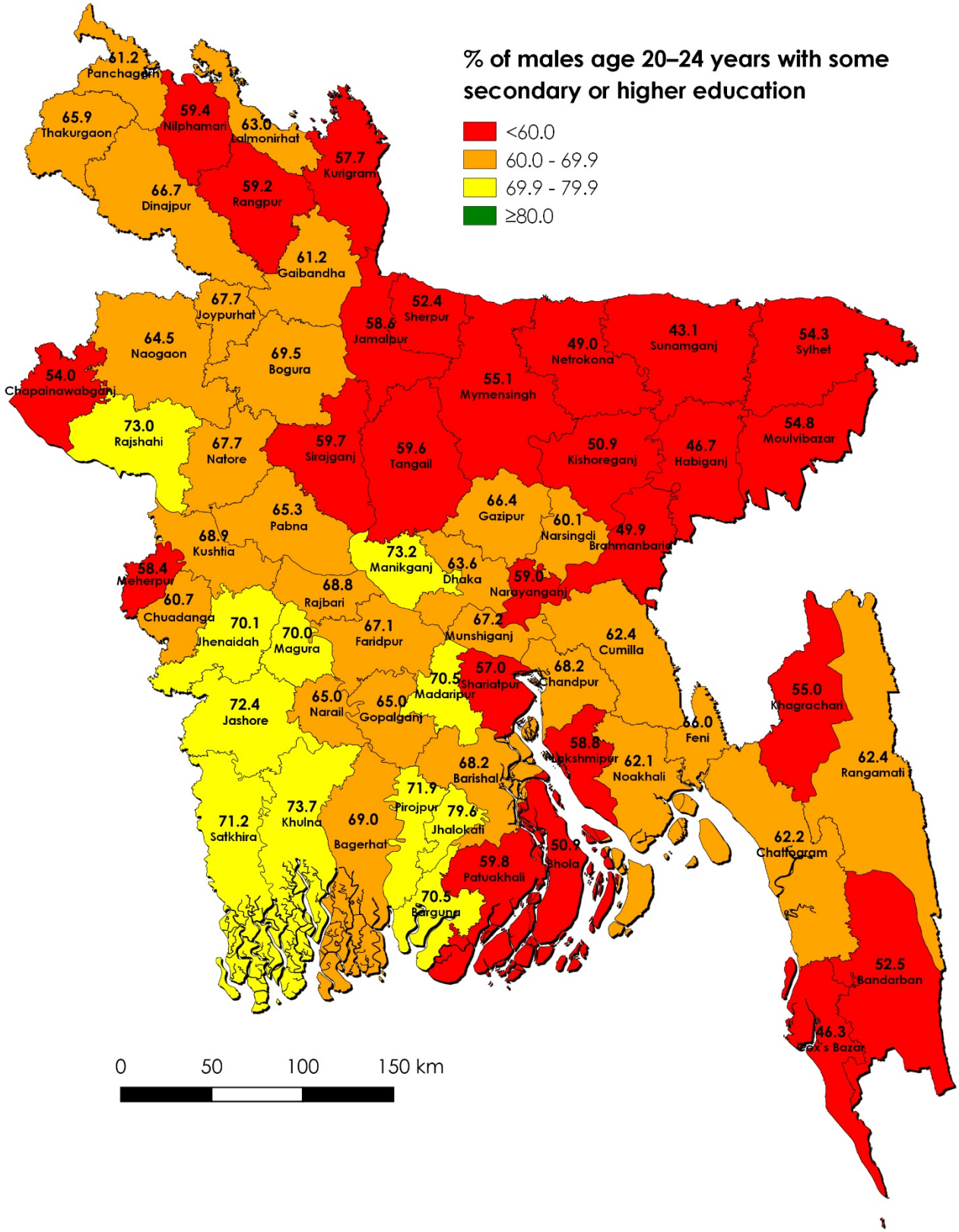
Division and district	Female youths with some secondary education	Male youths with some secondary education	Female respondents with some secondary education
Kushtia	77.3	68.9	46.7
Magura	83.0	70.0	51.4
Meherpur	78.6	58.4	44.4
Narail	78.9	65.0	52.7
Satkhira	78.6	71.2	47.9
Mymensingh Division	**60.2**	**54.4**	**39.1**
Jamalpur	57.2	58.6	35.9
Mymensingh	65.4	55.1	43.8
Netrokona	53.5	49.0	34.6
Sherpur	52.8	52.4	32.3
Rajshahi Division	**72.4**	**65.0**	**44.8**
Bogura	72.0	69.5	47.0
Chapainawabganj	73.5	54.0	46.1
Joypurhat	83.1	67.7	48.3
Naogaon	74.6	64.5	45.4
Natore	77.4	67.7	44.8
Pabna	70.3	65.3	42.2
Rajshahi	79.1	73.0	50.8
Sirajganj	60.0	59.7	36.0
Rangpur Division	**69.7**	**62.1**	**43.2**
Dinajpur	77.0	66.7	49.9
Gaibandha	63.2	61.2	39.1
Kurigram	64.7	57.7	36.3
Lalmonirhat	73.2	63.0	42.8
Nilphamari	63.6	59.4	39.6
Panchagarh	72.4	61.2	48.1
Rangpur	68.2	59.2	43.7
Takurgaon	75.8	65.9	46.2
Sylhet Division	**56.4**	**50.6**	**36.4**
Habigonj	48.9	46.7	31.7
Moulvibazar	65.3	54.8	43.9
Sunamganj	42.5	43.1	25.9
Sylhet	62.9	54.3	41.1
Bangladesh	**69.4**	**61.6**	**47.1**

Note: The de facto population includes all residents and nonresidents who stayed in the sampled household the night before the survey interview.

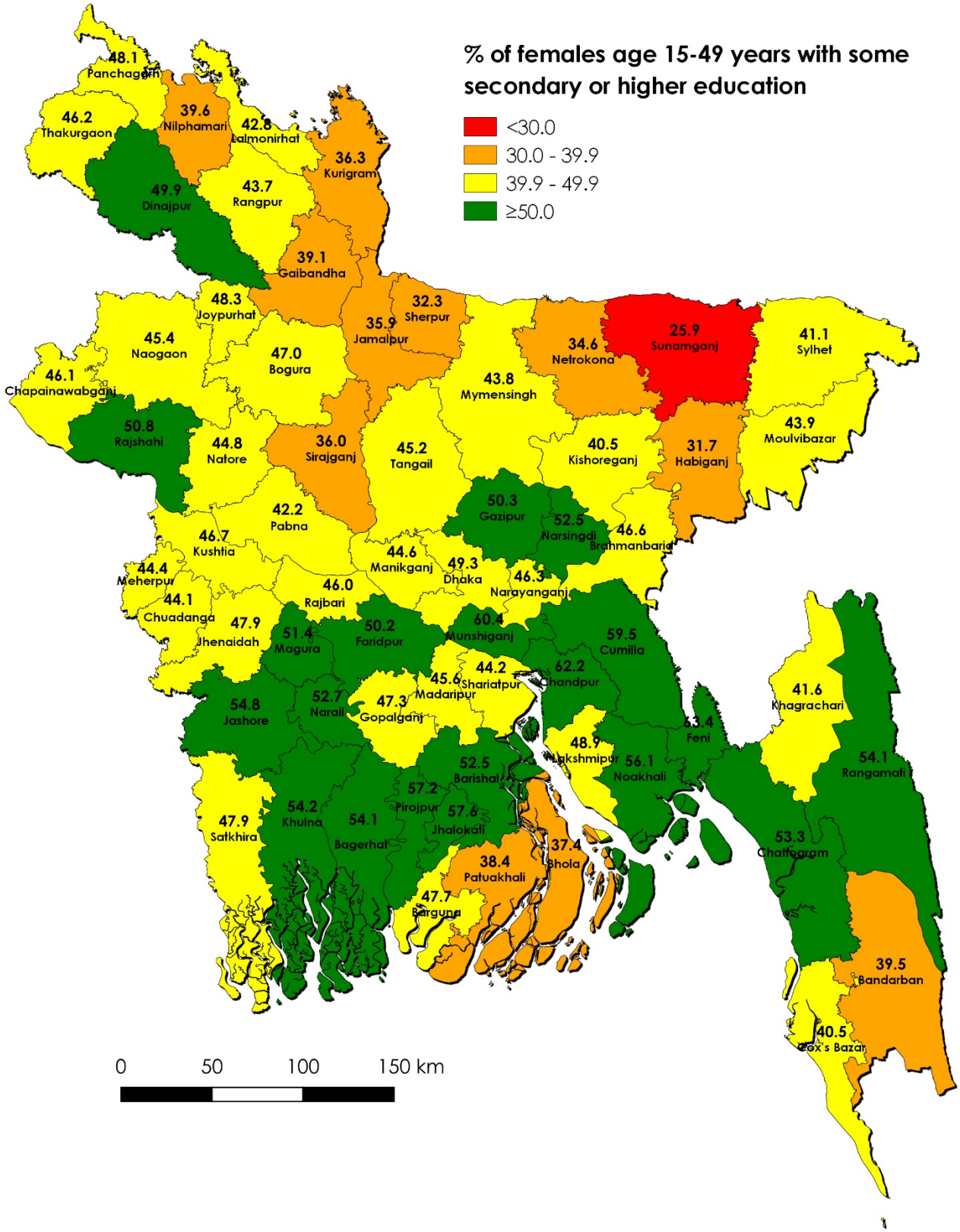
Female youths with some secondary or higher education



Male youths with some secondary or higher education



Female age 15-49 years with some secondary or higher education



3. MARRIAGE AND FERTILITY

Fertility is one of the three principal components of population dynamics that determine the size, structure, and composition of a country's population. Marriage is a primary indication of the exposure of women to the risk of pregnancy. The 2016 BMMS collected information on a complete birth history from the sampled ever-married women of reproductive age for the measurement of maternal mortality and health care utilization. This chapter presents district-level information, which will help policymakers and program managers in planning appropriate improvements in health and family planning services in Bangladesh.

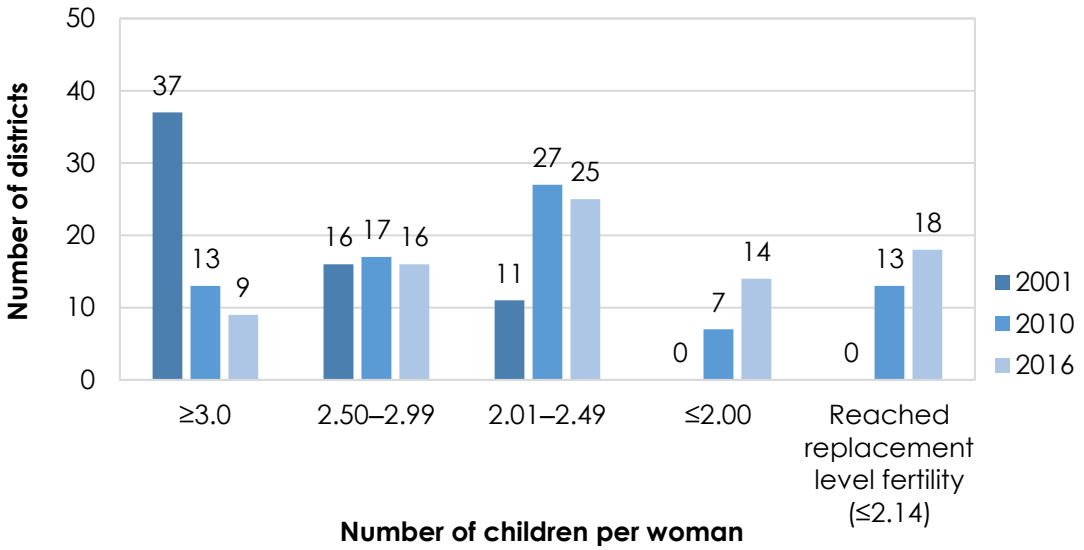
Table 4. Total fertility rate (TFR) by district, Bangladesh 2016

TFR for the three years preceding the survey, which represents the average number of children a woman would have by the end of her reproductive period if her experience followed the currently prevalent age-specific fertility rates, according to district.

Division and district	Total fertility rate (TFR)
Barishal Division	**2.40**
Barguna	1.73
Barishal	2.69
Bhola	3.32
Jhalokati	2.16
Patuakhali	2.26
Pirojpur	2.32
Chattogram Division	**2.53**
Bandarban	3.53
Brahmanbaria	3.57
Chandpur	2.52
Chattogram	2.83
Cumilla	2.68
Cox's Bazar	3.62
Feni	2.56
Khagrachhari	2.92
Lakshmipur	2.61
Noakhali	3.18
Rangamati	3.08
Dhaka Division	**2.01**
Dhaka	2.32
Faridpur	2.70
Gazipur	1.89
Gopalganj	2.53
Kishoreganj	2.57
Madaripur	2.77
Manikganj	1.80
Munshiganj	1.83
Narayanganj	2.15

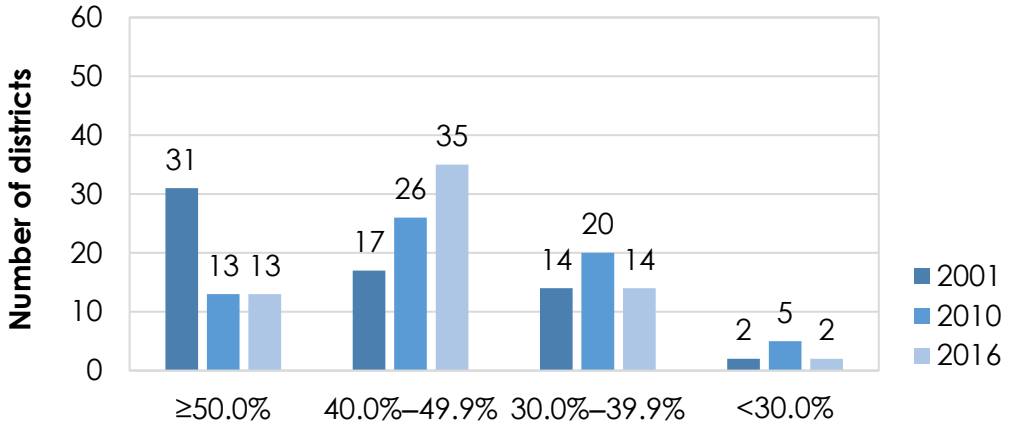
Division and district	Total fertility rate (TFR)
Narsingdi	2.34
Rajbari	1.96
Shariatpur	2.48
Tangail	2.50
Khulna Division	**1.97**
Bagerhat	2.39
Chuadanga	2.28
Jashore	2.33
Jhenaidah	2.39
Khulna	1.66
Kushtia	1.99
Magura	2.20
Meherpur	1.72
Narail	2.43
Satkhira	1.79
Mymensingh Division	**2.49**
Jamalpur	2.26
Mymensingh	3.02
Netrokona	3.19
Sherpur	2.42
Rajshahi Division	**2.03**
Bogura	1.92
Chapainawabganj	2.27
Joypurhat	1.99
Naogaon	2.18
Natore	1.84
Pabna	2.13
Rajshahi	2.10
Sirajganj	2.38
Rangpur Division	**2.17**
Dinajpur	1.90
Gaibandha	2.64
Kurigram	2.10
Lalmonirhat	2.29
Nilphamari	2.09
Panchagarh	2.34
Rangpur	1.80
Takurgaon	2.18
Sylhet Division	**2.69**
Habigonj	2.67
Moulvibazar	2.90
Sunamganj	3.64
Sylhet	2.99
Bangladesh	**2.23**

Number of districts by total fertility rate (TFR)
BMMS 2001, 2010, and 2016



- The number of districts with high TFR (i.e., three children or more per woman) declined from 37 to 9 between 2001 and 2016.
- In 2001, no district attained the replacement-level fertility (i.e., TFR ≤2.14)—it increased to 18 districts in 2016 (data not shown).
- In 2016, 14 districts had achieved a below-replacement-level TFR of 2.0 or less, which is the 2022 target of the 4th HPNSP.

Number of districts by percent of married female adolescents ages 15–19 years
BMMS 2001, 2010, and 2016



- The number of districts with a high proportion of adolescent marriage (i.e., 50% or more of the female adolescents ages 15−19 years were married) more than halved from 31 to 13 between 2001 and 2016.
- The number of districts with low adolescent marriage (i.e., less than 30% of the female adolescents ages 15−19 years were married) remained the same during this period.

Total fertility rate

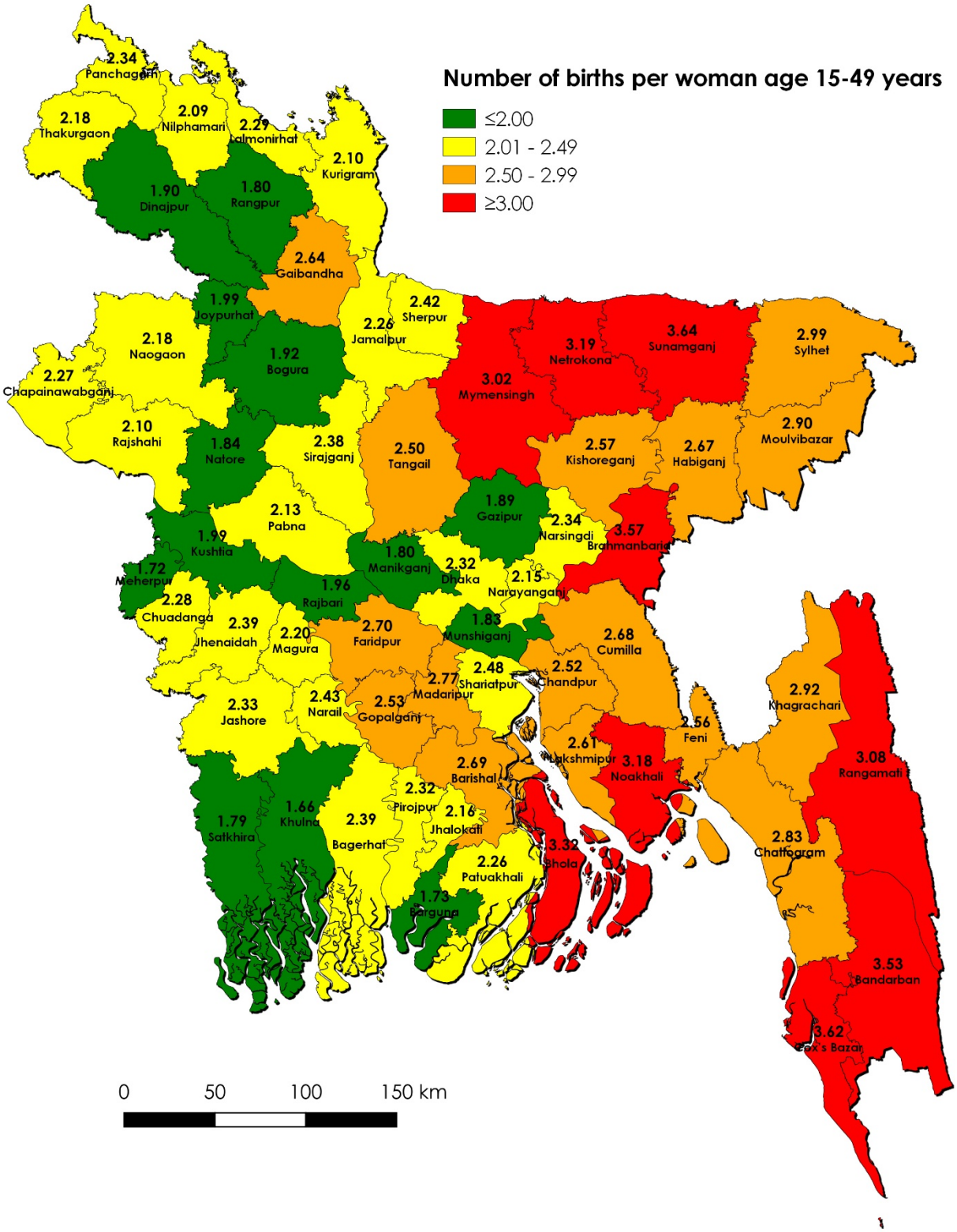


Table 5. Married female adolescents ages 15–19 years by district, Bangladesh 2016

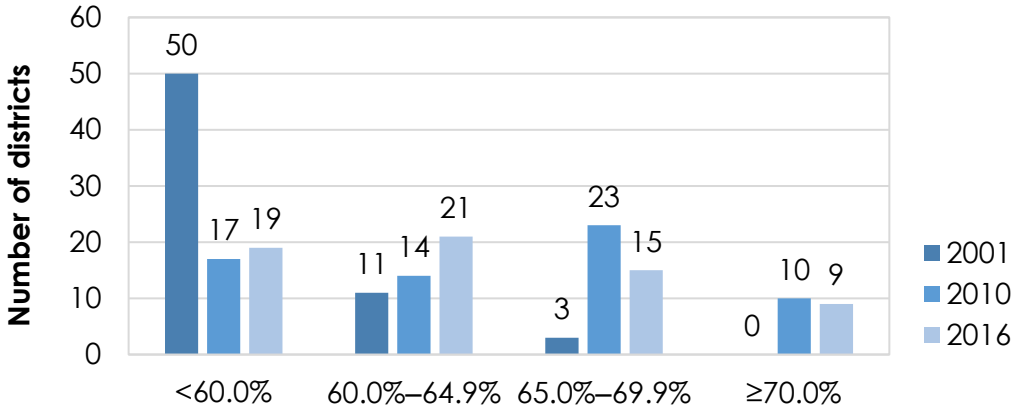
Percentage of de facto females ages 15–19 years who are currently married, according to district.

Division and district	Percentage currently married
Barishal Division	**44.3**
Barguna	45.4
Barishal	38.7
Bhola	48.9
Jhalokati	37.5
Patuakhali	50.3
Pirojpur	44.7
Chattogram Division	**37.2**
Bandarban	30.3
Brahmanbaria	44.2
Chandpur	38.3
Chattogram	32.0
Cumilla	42.6
Cox's Bazar	32.2
Feni	32.0
Khagrachhari	33.0
Lakshmipur	45.0
Noakhali	37.0
Rangamati	34.5
Dhaka Division	**44.4**
Dhaka	40.7
Faridpur	44.3
Gazipur	50.4
Gopalganj	41.7
Kishoreganj	40.0
Madaripur	32.8
Manikganj	55.0
Munshiganj	48.6
Narayanganj	46.7
Narsingdi	43.8
Rajbari	48.4
Shariatpur	37.0
Tangail	57.6
Khulna Division	**47.5**
Bagerhat	44.0
Chuadanga	53.5
Jashore	45.7
Jhenaidah	49.1
Khulna	40.4
Kushtia	52.0
Magura	44.2
Meherpur	54.2

Division and district	Percentage currently married
Narail	46.9
Satkhira	52.4
Mymensingh Division	**44.5**
Jamalpur	49.7
Mymensingh	42.4
Netrokona	42.1
Sherpur	49.7
Rajshahi Division	**50.9**
Bogura	54.6
Chapainawabganj	55.9
Joypurhat	49.9
Naogaon	55.4
Natore	48.2
Pabna	48.6
Rajshahi	43.8
Sirajganj	49.2
Rangpur Division	**46.3**
Dinajpur	42.6
Gaibandha	51.1
Kurigram	53.0
Lalmonirhat	41.6
Nilphamari	47.4
Panchagarh	41.0
Rangpur	46.2
Takurgaon	41.1
Sylhet Division	**25.3**
Habigonj	32.0
Moulvibazar	24.7
Sunamganj	31.6
Sylhet	19.1
Bangladesh	**42.5**

Note: The de facto population includes all residents and nonresidents who stayed in the sampled household the night before the survey interview.

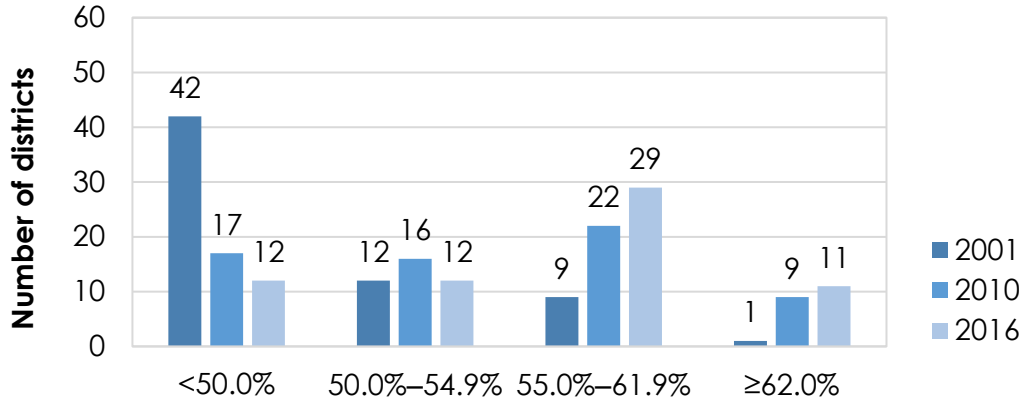
Number of districts by contraceptive prevalence rate (CPR) for any method BMMS 2001, 2010, and 2016



Proportion of currently married women using any contraceptive method

- The number of districts with less than 60% CPR for any method decreased from 50 to 19 between 2001 and 2016.
- In 2001, no district had a CPR of 70% or more for any method, which increased to 9 districts in 2016.
- The number of districts with 65% or more CPR for any method, however, declined from 33 districts to 24 districts between 2010 and 2016.

Number of districts by contraceptive prevalence rate (CPR) for modern methods BMMS 2001, 2010, and 2016



Proportion of currently married women using a modern contraceptive method

- The number of districts with less than 50% CPR for modern methods decreased from 42 to 12 between 2001 and 2016.
- In 2001, only one district had a CPR of 62% or more for modern methods, which increased to 11 districts in 2016.

Married female adolescents age 15-19 years

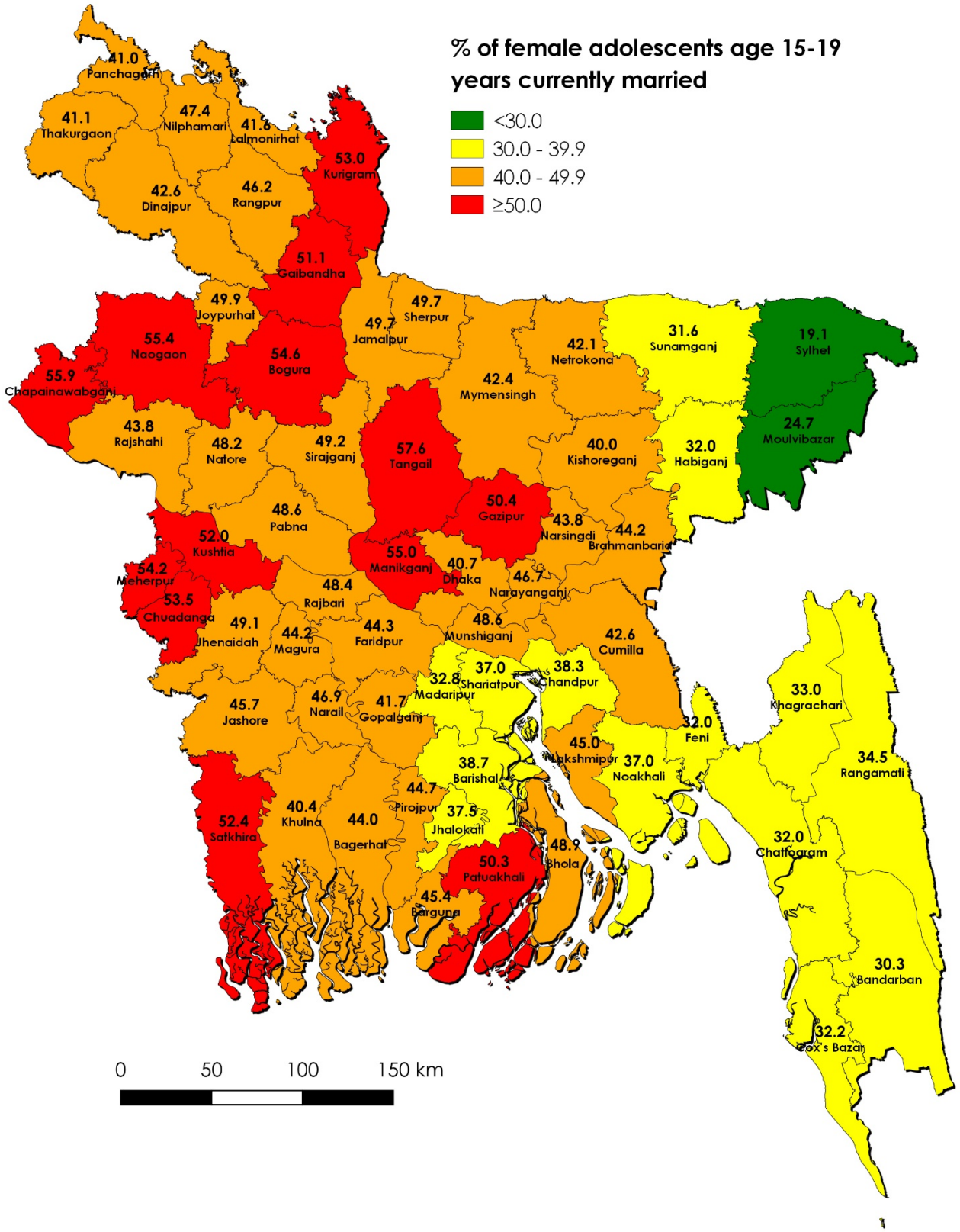


Table 6. CPR by district, Bangladesh 2016

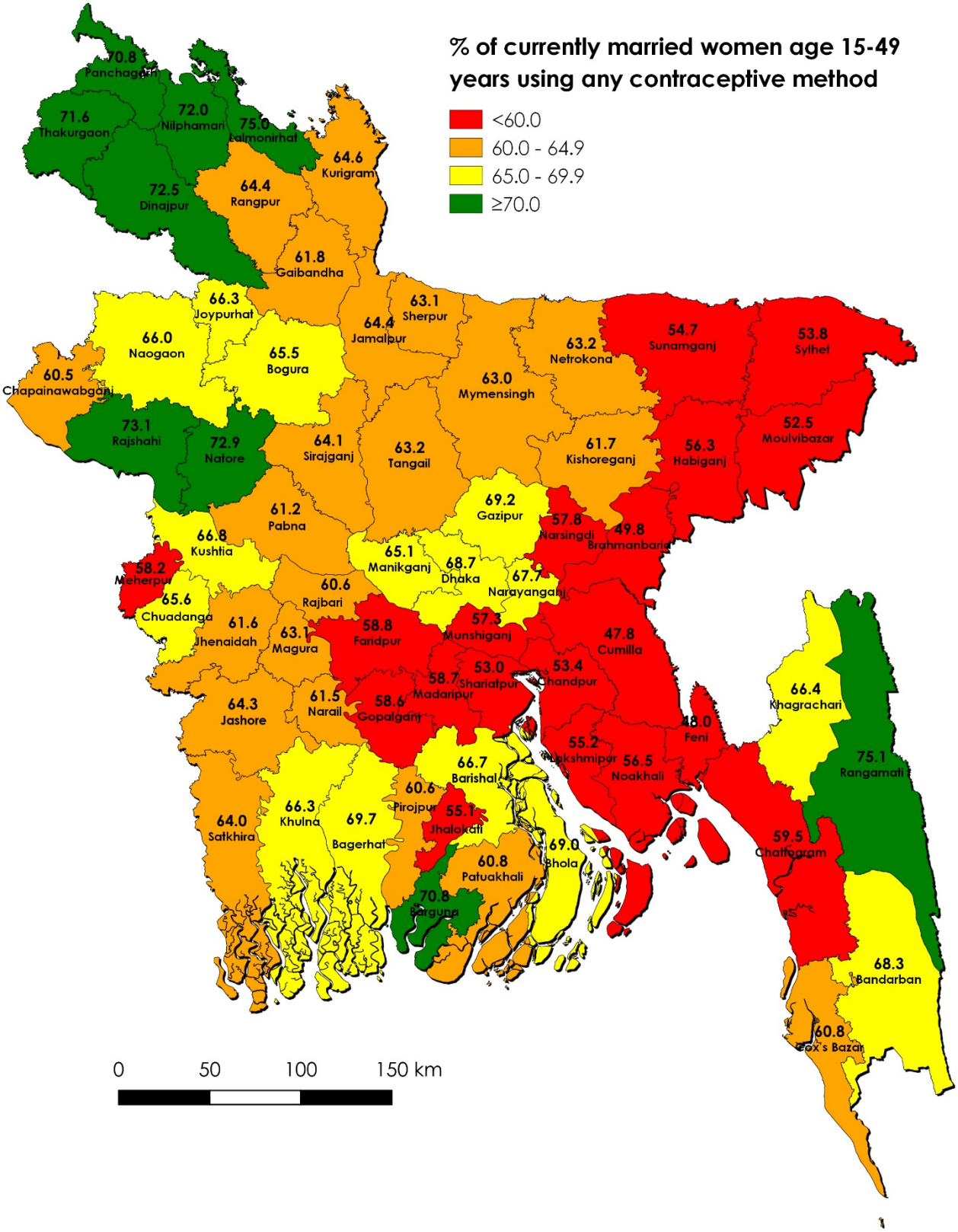
Percentage of currently married women ages 15–49 currently using any method and modern methods of contraception, according to district.

Division and district	CPR for any method	CPR for modern method
Barishal Division	**64.7**	**57.8**
Barguna	70.8	62.6
Barishal	66.7	58.3
Bhola	69.0	65.9
Jhalokati	55.1	46.2
Patuakhali	60.8	56.6
Pirojpur	60.6	49.6
Chattogram Division	**55.3**	**49.1**
Bandarban	68.3	60.3
Brahmanbaria	49.8	42.2
Chandpur	53.4	47.8
Chattogram	59.5	52.5
Cumilla	47.8	41.6
Cox's Bazar	60.8	56.1
Feni	48.0	43.8
Khagrachhari	66.4	59.6
Lakshmipur	55.2	51.0
Noakhali	56.5	50.6
Rangamati	75.1	68.4
Dhaka Division	**64.7**	**57.1**
Dhaka	68.7	60.2
Faridpur	58.8	50.1
Gazipur	69.2	61.0
Gopalganj	58.6	47.5
Kishoreganj	61.7	54.8
Madaripur	58.7	51.2
Manikganj	65.1	59.4
Munshiganj	57.3	51.4
Narayanganj	67.7	62.2
Narsingdi	57.8	50.9
Rajbari	60.6	51.2
Shariatpur	53.0	46.1
Tangail	63.2	57.6
Khulna Division	**64.7**	**56.4**
Bagerhat	69.7	58.1
Chuadanga	65.6	58.3
Jashore	64.3	55.5
Jhenaidah	61.6	54.3
Khulna	66.3	56.2
Kushtia	66.8	59.5
Magura	63.1	56.9
Meherpur	58.2	51.2

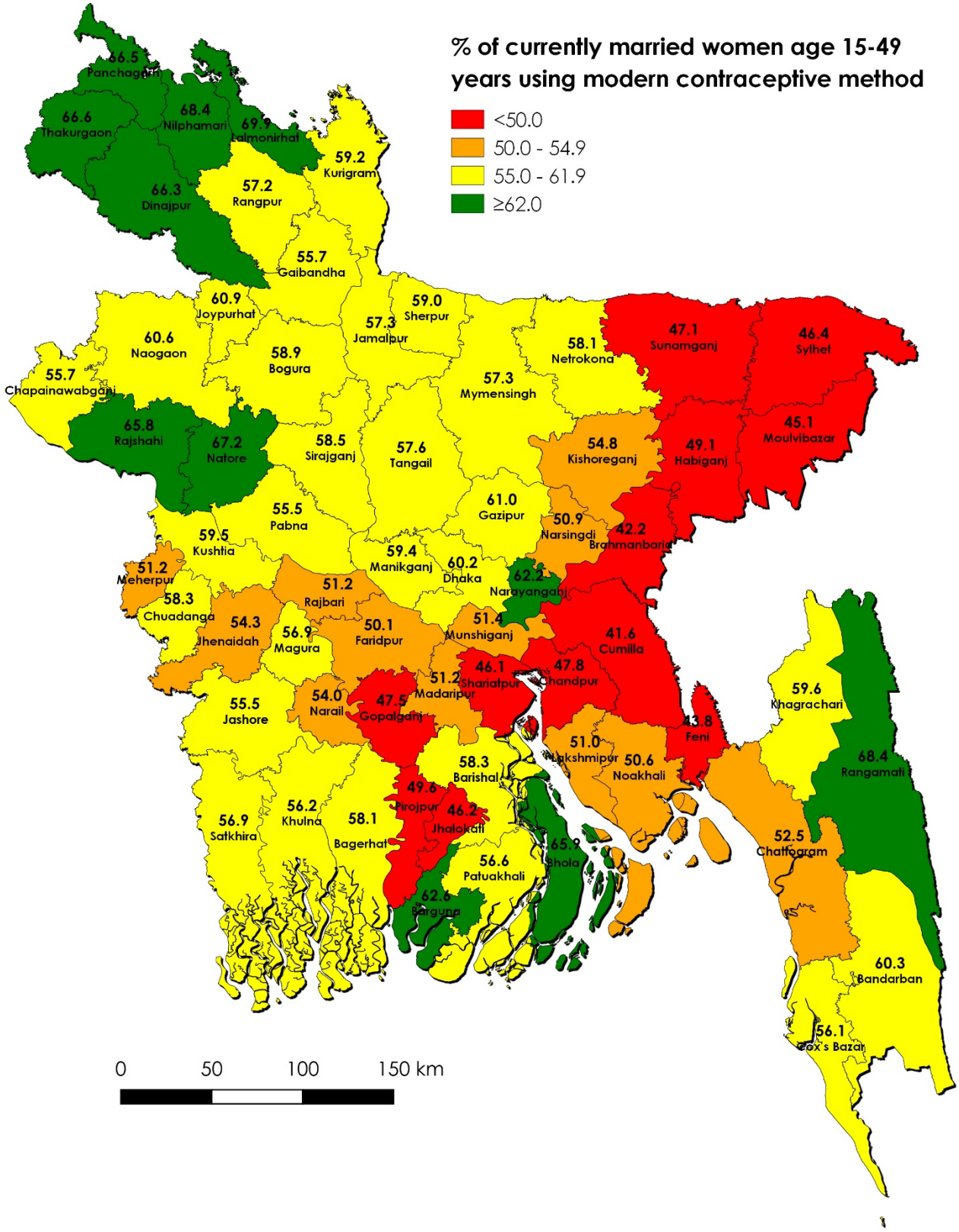
Division and district	CPR for any method	CPR for modern method
Narail	61.5	54.0
Satkhira	64.0	56.9
Mymensingh Division	**63.4**	**57.6**
Jamalpur	64.4	57.3
Mymensingh	63.0	57.3
Netrokona	63.2	58.1
Sherpur	63.1	59.0
Rajshahi Division	**66.0**	**60.1**
Bogura	65.5	58.9
Chapainawabganj	60.5	55.7
Joypurhat	66.3	60.9
Naogaon	66.0	60.6
Natore	72.9	67.2
Pabna	61.2	55.5
Rajshahi	73.1	65.8
Sirajganj	64.1	58.5
Rangpur Division	**68.1**	**62.4**
Dinajpur	72.5	66.3
Gaibandha	61.8	55.7
Kurigram	64.6	59.2
Lalmonirhat	75.0	69.9
Nilphamari	72.0	68.4
Panchagarh	70.8	66.5
Rangpur	64.4	57.2
Takurgaon	71.6	66.6
Sylhet Division	**54.3**	**46.9**
Habigonj	56.3	49.1
Moulvibazar	52.5	45.1
Sunamganj	54.7	47.1
Sylhet	53.8	46.4
Bangladesh	**62.8**	**56.0**

Note: CPR includes the lactational amenorrhea method (LAM), which is a short-term family planning method based on the natural effect of breastfeeding on fertility (i.e., by suppressing the release of hormones that are necessary for ovulation).

Contraceptive prevalence rate (CPR) for any method



Contraceptive prevalence rate (CPR) for modern methods



4. MATERNAL HEALTH

The health care that a woman receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and the child. The Government of Bangladesh is committed to achieving the targets for the Millennium Development Goal (MDG) 5 and the Sustainable Development Goal (SDG) 3, which put emphasis on increasing coverage of essential maternal health services to reduce MMR, among other health-related goals (UN, 2015; UNDP, 2015).

This chapter provides information from the 2016 BMMS on several aspects of maternal health, including antenatal care, delivery, and postnatal care. Women who had given birth in the three years preceding the survey were asked a number of questions about maternal health care—for the last live birth in that period, mothers were asked whether they had received antenatal care during pregnancy and whether they had sought postnatal care for themselves and their children. Information was also collected on the place of delivery and on attendance at birth for all births in the three years preceding the survey.

Table 7. Antenatal care (ANC) by district, Bangladesh 2016

Percent distribution of women ages 15–49 who had a live birth in the three years preceding the survey by antenatal care during pregnancy for the most recent birth, according to district.

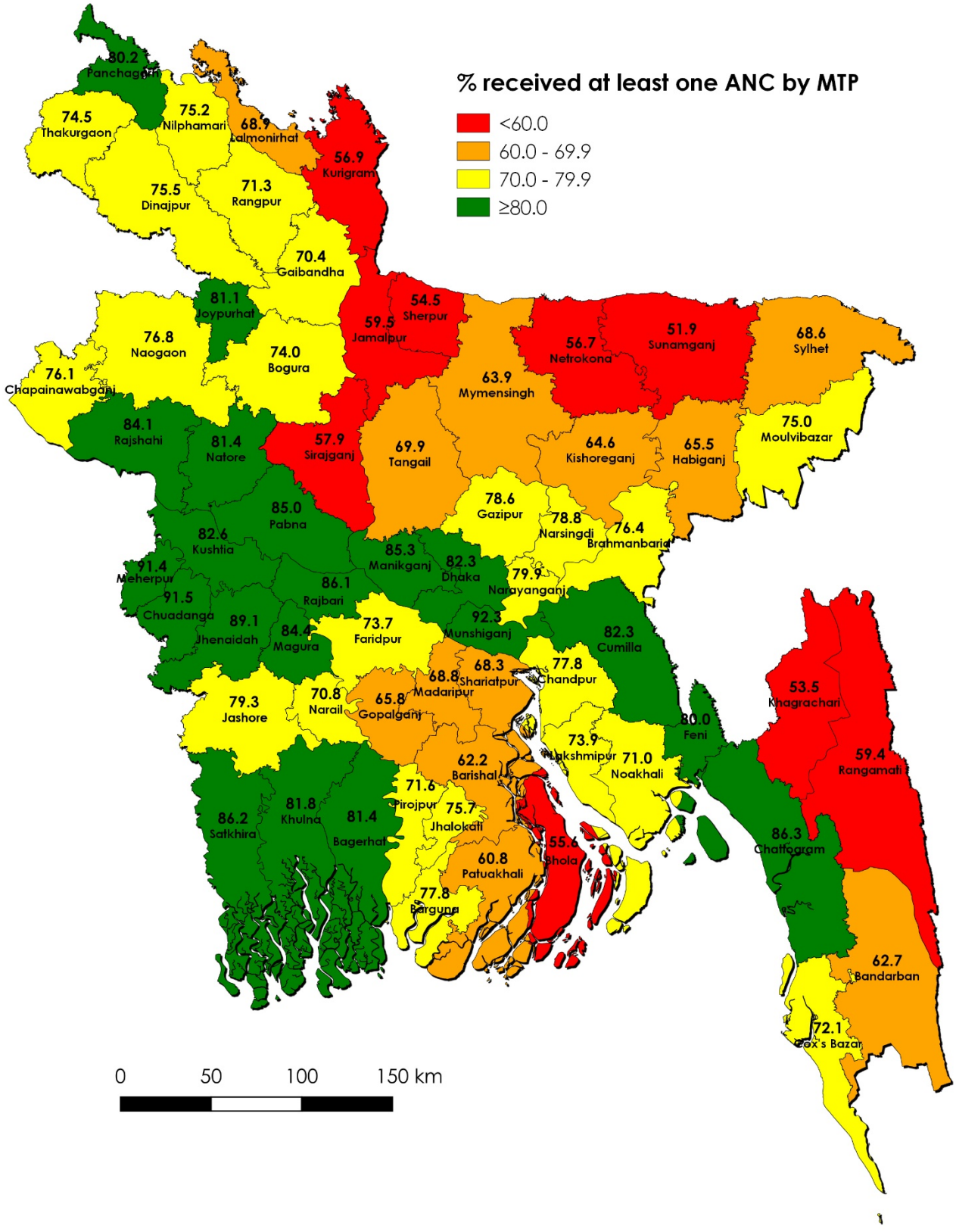
Division and district	ANC by medically-trained provider (MTP)[1]	ANC 4+ with at least one from MTP	All essential components of ANC[2]	ANC 4+ with at least one from MTP and all components
Barishal Division	**63.7**	**24.0**	**24.1**	**12.1**
Barguna	77.8	26.7	41.0	17.0
Barishal	62.2	28.0	27.5	14.3
Bhola	55.6	15.1	16.5	7.2
Jhalokathi	75.7	41.6	29.5	22.4
Patuakhali	60.8	16.3	23.4	8.2
Pirojpur	71.6	33.6	21.5	14.8
Chattrogram Division	**78.2**	**32.1**	**22.6**	**12.7**
Bandarban	62.7	32.8	31.8	21.6
Brahmanbaria	76.4	16.5	18.0	8.2
Chandpur	77.8	23.1	25.9	11.3
Chattogram	86.3	53.9	28.2	21.1
Cumilla	82.3	28.3	14.0	7.2
Cox's Bazar	72.1	28.2	20.4	11.8
Feni	80.0	31.1	37.6	16.0
Khagrachari	53.5	22.3	16.6	9.1
Lakshmipur	73.9	23.8	23.2	7.9
Noakhali	71.0	20.5	25.4	10.4
Rangamati	59.4	31.7	20.3	14.2

Division and district	ANC by medically-trained provider (MTP)[1]	ANC 4+ with at least one from MTP	All essential components of ANC[2]	ANC 4+ with at least one from MTP and all components
Dhaka Division	**78.3**	**36.4**	**33.1**	**19.6**
Dhaka	82.3	46.5	40.1	26.6
Faridpur	73.7	30.6	25.0	14.9
Gazipur	78.6	31.5	33.3	17.5
Gopalganj	65.8	19.1	9.9	5.2
Kishoreganj	64.6	23.5	21.3	11.2
Madaripur	68.8	23.6	27.1	12.8
Manikganj	85.3	31.4	41.7	19.3
Munshiganj	92.3	60.1	50.7	36.8
Narayanganj	79.9	32.8	38.2	19.4
Narsinghdi	78.8	28.1	27.4	14.6
Rajbari	86.1	42.5	18.1	8.6
Sariatpur	68.3	20.9	13.7	6.5
Tangail	69.9	25.1	25.7	12.5
Khulna Division	**83.2**	**41.3**	**31.2**	**19.1**
Bagerhat	81.4	34.4	35.7	20.2
Chuadanga	91.5	57.6	20.1	13.7
Jashore	79.3	37.6	41.9	22.1
Jenidah	89.1	31.1	31.0	14.8
Khulna	81.8	51.0	32.1	24.4
Kustia	82.6	30.8	36.1	16.9
Magura	84.4	38.5	16.7	11.2
Meherpur	91.4	52.9	25.0	18.5
Narail	70.8	31.0	20.8	15.4
Satkhira	86.2	51.3	29.4	22.6
Mymensingh Division	**60.7**	**26.7**	**14.6**	**8.4**
Jamalpur	59.5	19.4	15.1	7.1
Mymensingh	63.9	31.2	14.3	9.0
Netrakona	56.7	22.0	16.7	8.4
Sherpur	54.5	29.3	10.7	8.2
Rajshahi Division	**75.2**	**29.8**	**25.9**	**12.8**
Bogura	74.0	35.2	28.7	17.1
Joypurhat	76.1	59.3	26.1	22.0
Noagaon	81.1	30.4	28.3	14.8
Natore	76.8	28.5	41.4	13.3
Chapai Nawabganj	81.4	27.4	14.9	6.7
Pabna	85.0	34.9	20.5	12.1
Rajshahi	84.1	37.3	41.3	20.3
Sirajganj	57.9	12.4	17.2	5.7
Rangpur Division	**71.1**	**46.1**	**27.0**	**19.4**
Dinajpur	75.5	44.9	38.0	25.4
Gaibanda	70.4	44.0	24.6	17.2

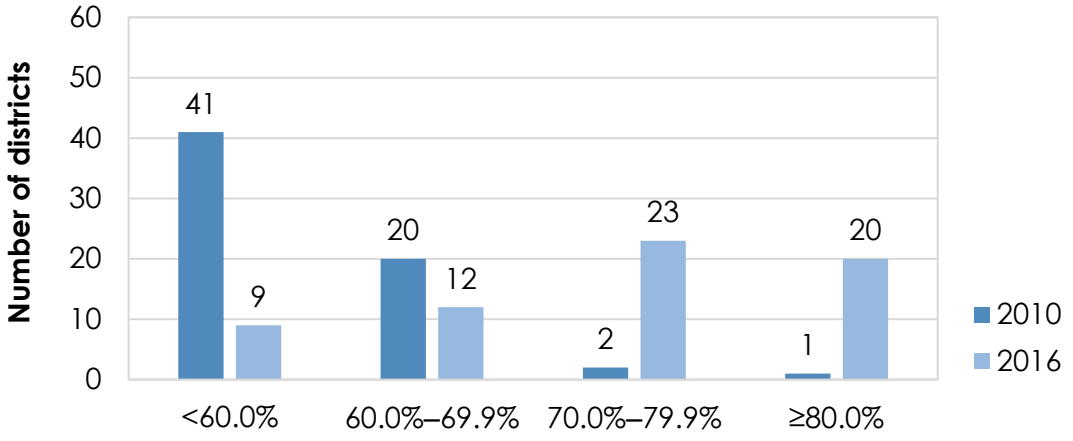
Division and district	ANC by medically-trained provider (MTP)[1]	ANC 4+ with at least one from MTP	All essential components of ANC[2]	ANC 4+ with at least one from MTP and all components
Kurigram	56.9	39.6	18.9	15.2
Lalmonirhat	68.9	44.4	20.4	14.2
Nilphamari	75.2	55.9	23.4	17.6
Panchagar	80.2	49.2	31.5	22.6
Rangpur	71.3	47.5	29.1	21.5
Thakurgaon	74.5	47.1	23.9	17.7
Sylhet Division	**64.9**	**24.6**	**21.6**	**10.2**
Habiganj	65.5	23.1	29.5	12.6
Mauluvibazar	75	27.2	28.4	13.1
Sunamganj	51.9	17.3	13.4	6.1
Sylhet	68.6	28.9	19.9	10.5
Bangladesh	**74.4**	**33.8**	**26.2**	**15.2**

[1] Qualified doctor, nurse, midwife, paramedic, family welfare visitor (FWV), community skilled birth attendant (CSBA), medical assistant (MA) or subassistant community medical officer (SACMO).
[2] During ANC, women had their weight and blood pressure measured, blood test and urine test done, and were given information on potential danger signs during pregnancy.

Received at least one antenatal care (ANC) by a medically trained provider (MTP)



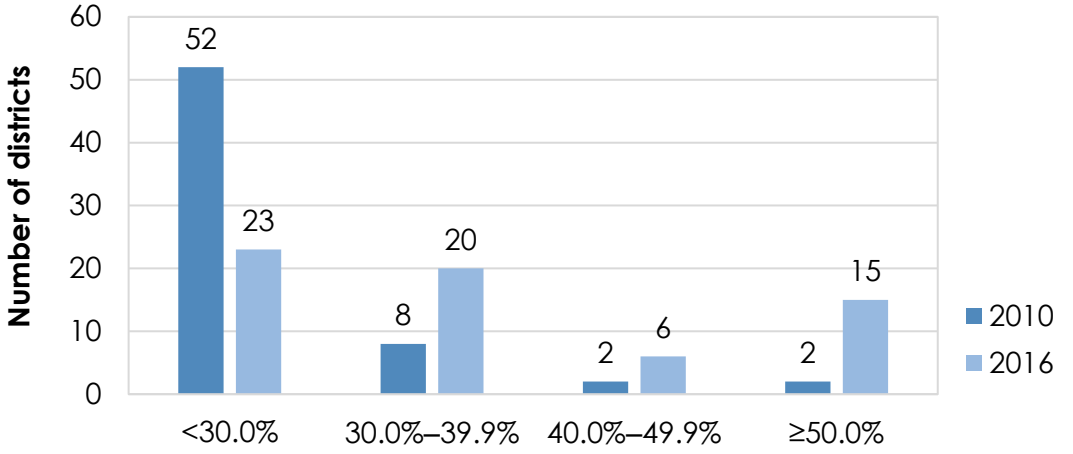
Number of districts by antenatal care (ANC) coverage from a medically-trained provider BMMS 2010 and 2016



Proportion of women ages 15–49 years who had a live birth in last 3 years

- In 2010, 41 districts had less than 60% coverage of ANC by a medically-trained provider, which reduced to 9 districts in 2016.
- Between 2010 and 2016, the number of districts with 80% or higher coverage of ANC by a medically-trained provider increased from 1 to 20.

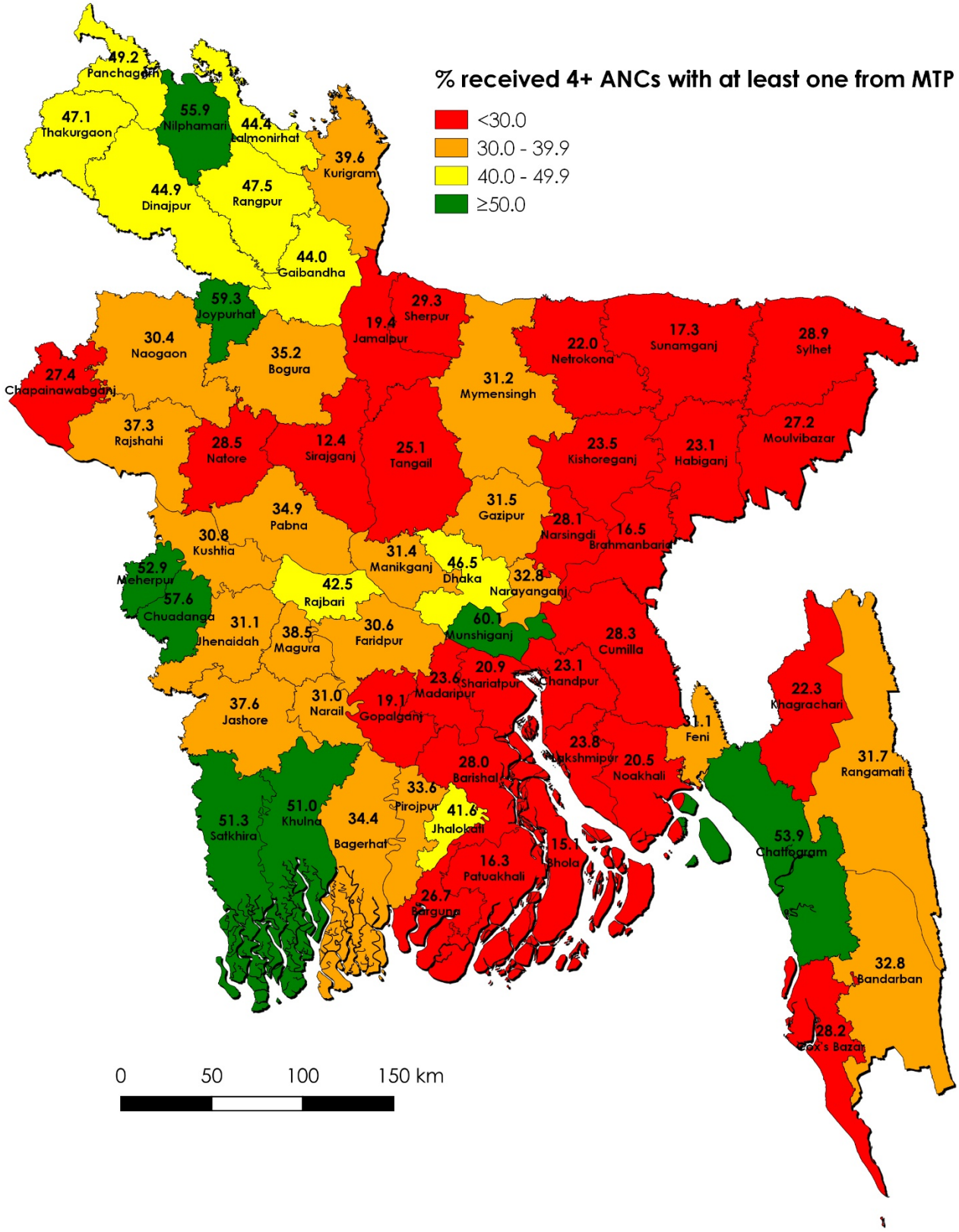
Number of districts by 4 or more antenatal care (ANC) coverage from any provider BMMS 2010 and 2016



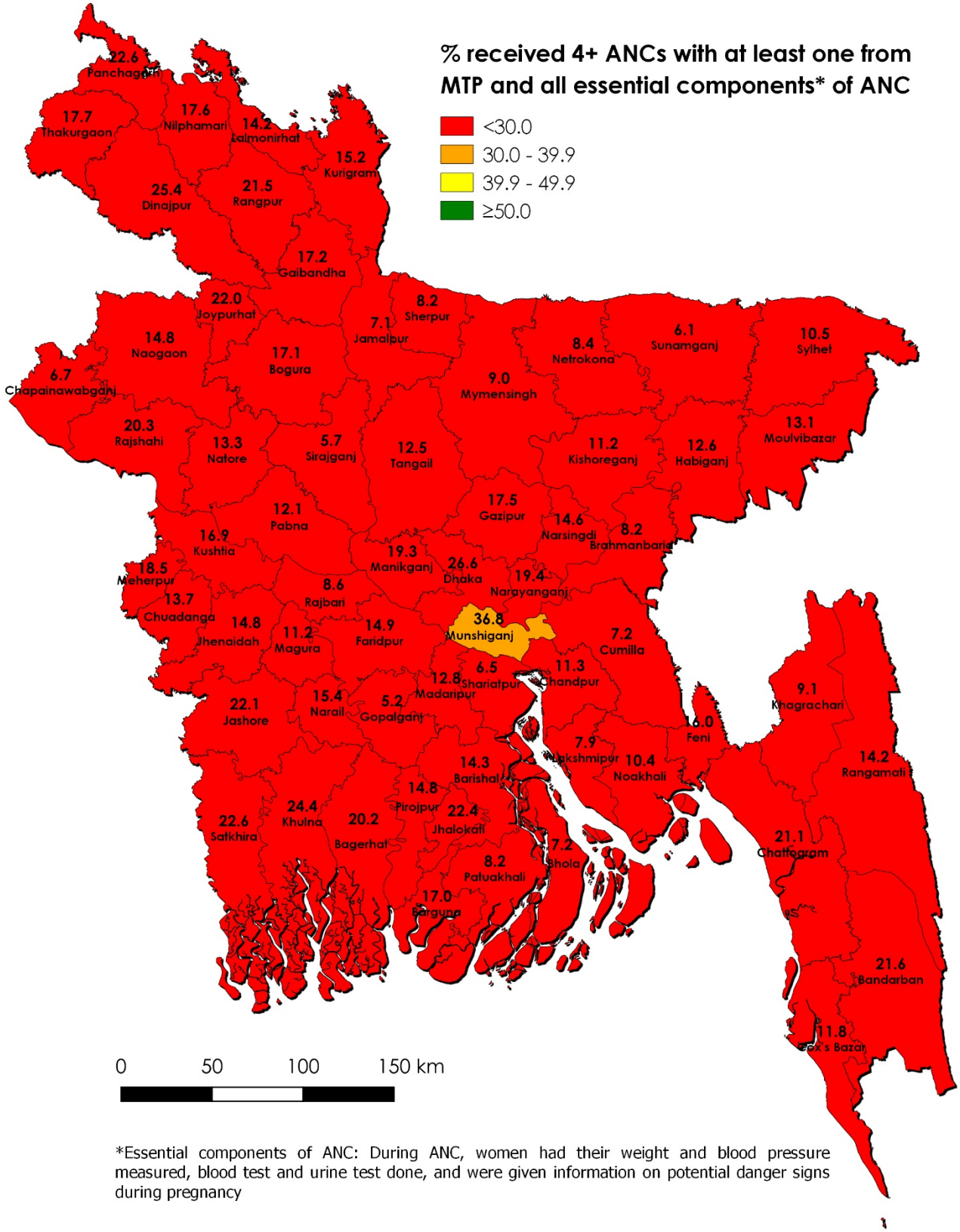
Proportion of women ages 15–49 years who had a live birth in last 3 years

- Between 2010 and 2016, the number of districts with 50% or higher coverage of 4+ ANC by any provider (data not shown) increased from two to 15.
- In 2010, 52 districts had less than 30% coverage of 4+ ANC by any provider (data not shown), which reduced to 23 districts in 2016.

Received 4 or more ANCs with at least one from MTP



Received 4+ ANCs with at least one from MTP and all essential components of ANC



*Essential components of ANC: During ANC, women had their weight and blood pressure measured, blood test and urine test done, and were given information on potential danger signs during pregnancy

Table 8. Delivery by skilled birth attendant (SBA) and in a health facility by district, Bangladesh 2016

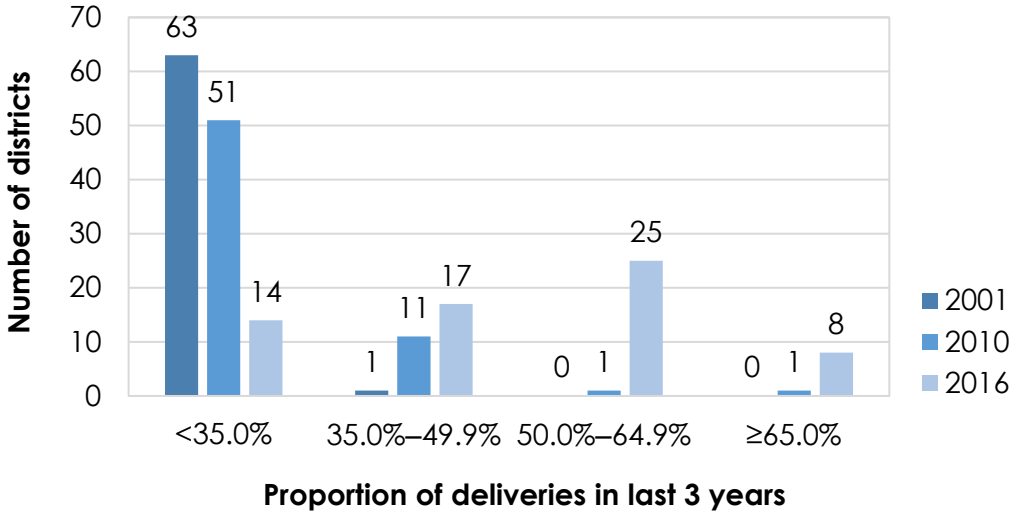
Percentage of live births during the three years preceding the survey attended by SBA during delivery and percentage delivered at health facility, according to district.

Division and district	Deliveries attended by SBA[1]	Deliveries at health facility
Barishal Division	**38.6**	**33.7**
Barguna	47.2	37.2
Barishal	43.6	41.3
Bhola	26.2	21.9
Jhalokati	54.9	50.0
Patuakhali	30.3	25.6
Pirojpur	51.4	43.4
Chattrogram Division	**46.3**	**41.7**
Bandarban	28.8	21.1
Brahmanbaria	36.0	31.9
Chandpur	53.7	47.8
Chattogram	60.4	57.3
Cumilla	52.6	48.5
Cox's Bazar	26.1	21.5
Feni	49.4	43.1
Khagrachhari	31.8	21.6
Lakshmipur	42.3	36.6
Noakhali	38.0	32.1
Rangamati	31.4	26.6
Dhaka Division	**58.9**	**57.4**
Dhaka	64.9	64.8
Faridpur	62.4	60.5
Gazipur	59.5	57.7
Gopalganj	45.9	45.9
Kishoreganj	33.7	31.3
Madaripur	51.0	46.7
Manikganj	69.7	68.9
Munshiganj	81.6	78.3
Narayanganj	62.1	60.1
Narsingdi	54.5	50.5
Rajbari	54.2	53.5
Shariatpur	39.1	35.3
Tangail	51.1	49.6
Khulna Division	**64.0**	**61.8**
Bagerhat	55.9	53.1
Chuadanga	75.0	75.1
Jashore	60.2	59.0
Jhenaidah	78.4	77.9
Khulna	61.4	56.8
Kushtia	69.9	68.7
Magura	57.3	55.3

Division and district	Deliveries attended by SBA[1]	Deliveries at health facility
Meherpur	94.5	94.5
Narail	48.9	45.6
Satkhira	56.0	51.7
Mymensingh Division	**34.3**	**31.7**
Jamalpur	29.5	27.3
Mymensingh	40.9	38.3
Netrokona	25.6	22.5
Sherpur	28.5	26.0
Rajshahi Division	**52.3**	**50.6**
Bogura	49.9	48.5
Chapainawabganj	44.8	42.5
Joypurhat	65.9	65.9
Naogaon	59.5	59.6
Natore	59.1	57.8
Pabna	54.3	51.3
Rajshahi	73.4	73.2
Sirajganj	34.6	31.2
Rangpur Division	**48.0**	**46.1**
Dinajpur	61.5	62.4
Gaibandha	48.1	45.4
Kurigram	30.0	27.5
Lalmonirhat	34.5	33.7
Nilphamari	57.8	54.5
Panchagarh	55.5	51.0
Rangpur	44.9	42.8
Takurgaon	50.7	47.5
Sylhet Division	**38.1**	**35.5**
Habigonj	37.4	33.6
Moulvibazar	43.9	40.6
Sunamganj	28.2	26.3
Sylhet	42.4	40.3
Bangladesh	**49.8**	**47.1**

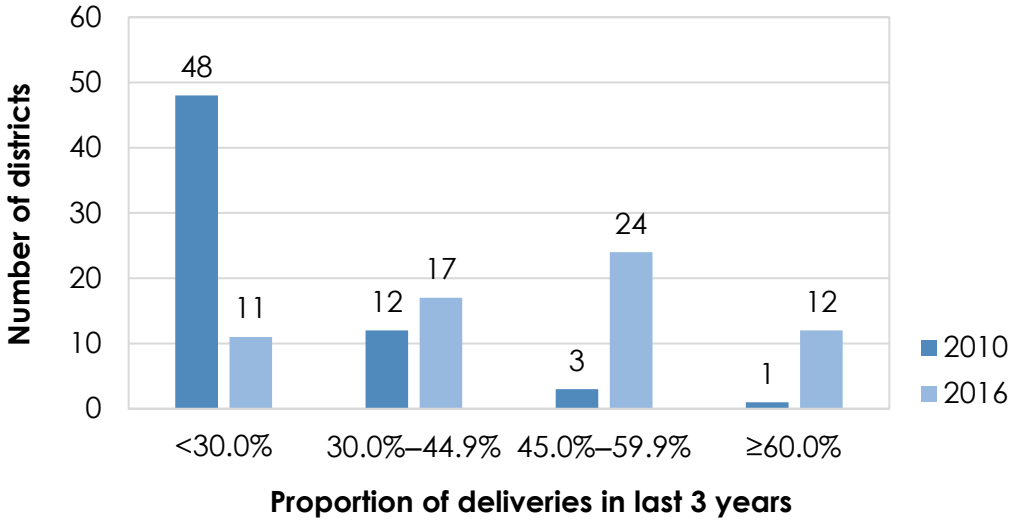
[1] Qualified doctor, nurse, midwife, paramedic, family welfare visitor (FWV), or community skilled birth attendant (CSBA)

Number of districts by percent of deliveries assisted by skilled birth attendants (SBA) BMMS 2001, 2010, and 2016



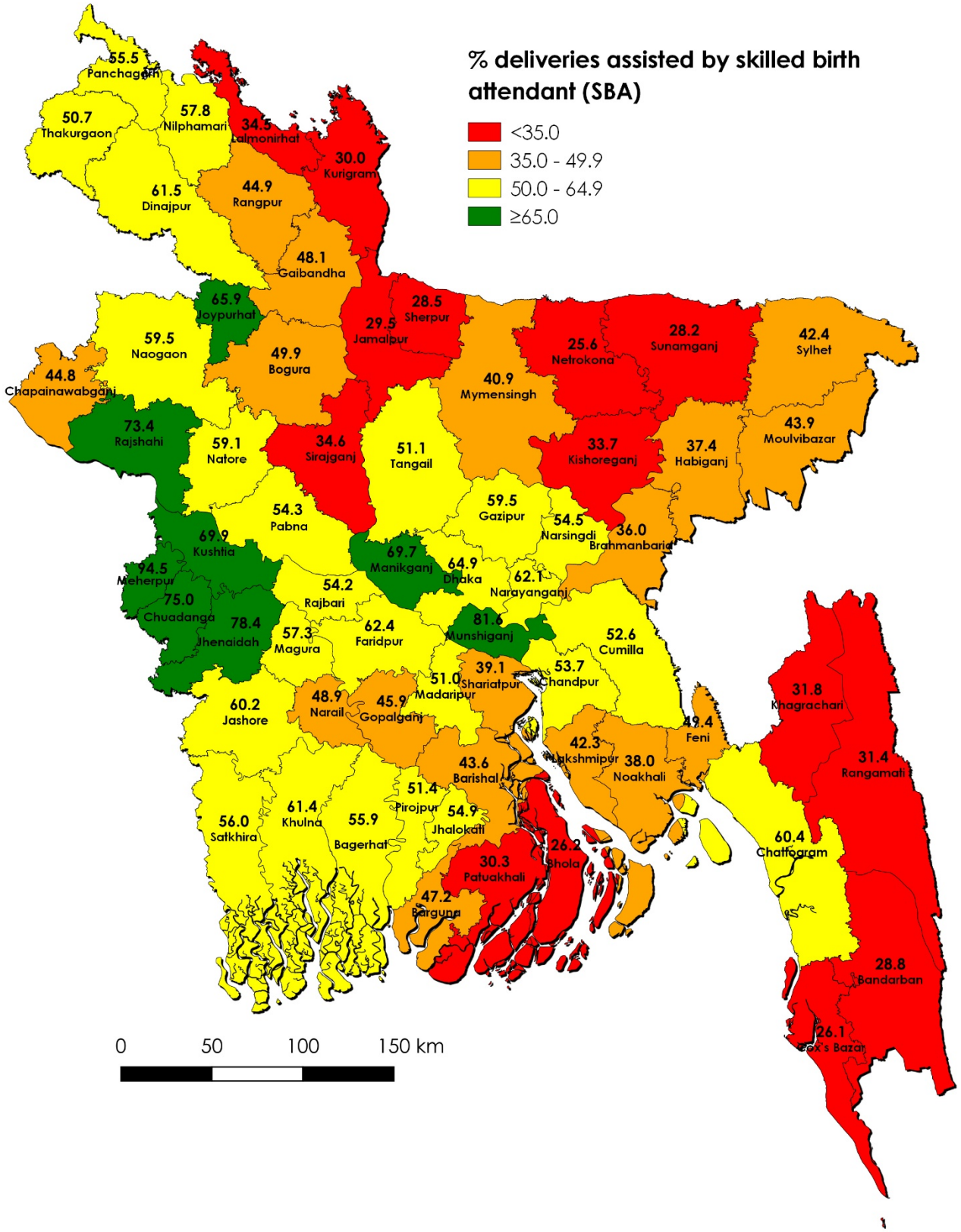
- In 2016, eight districts already attained an SBA coverage of 65% or more, which is the 2022 target for the 4th HPNSP.
- The number of districts with at least half of the deliveries attended by an SBA increased from two to 33 between 2010 and 2016.
- In 2001, almost all (63 out of 64) districts in Bangladesh had less than 35% of deliveries attended by an SBA, which reduced to 14 districts in 2016.

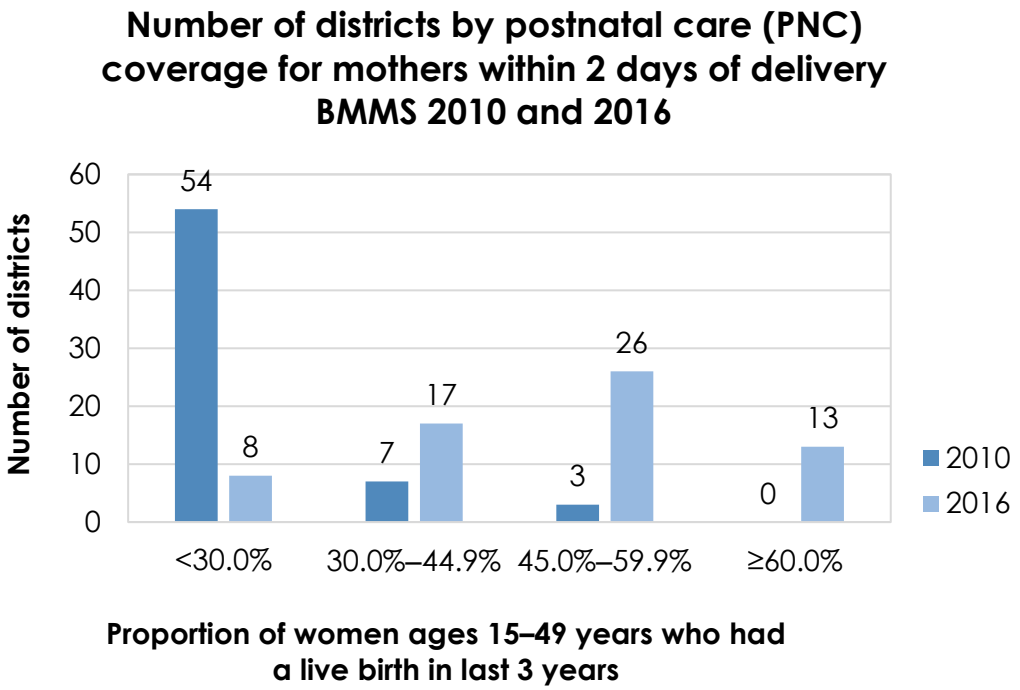
Number of districts by percent of deliveries at health facilities BMMS 2010 and 2016



- In 2010 less than 30% of the deliveries took place in a health facility in 48 districts, which reduced to 11 districts in 2016.
- In 2016, in 36 districts 45% or more of the deliveries occurred at health facilities. In 2010, there were only four districts that had done so.

Deliveries attended by skilled birth attendants





- The number of districts with 60% or more mothers receiving PNC increased from zero to 13 between 2010 and 2016.

Deliveries at health care facilities

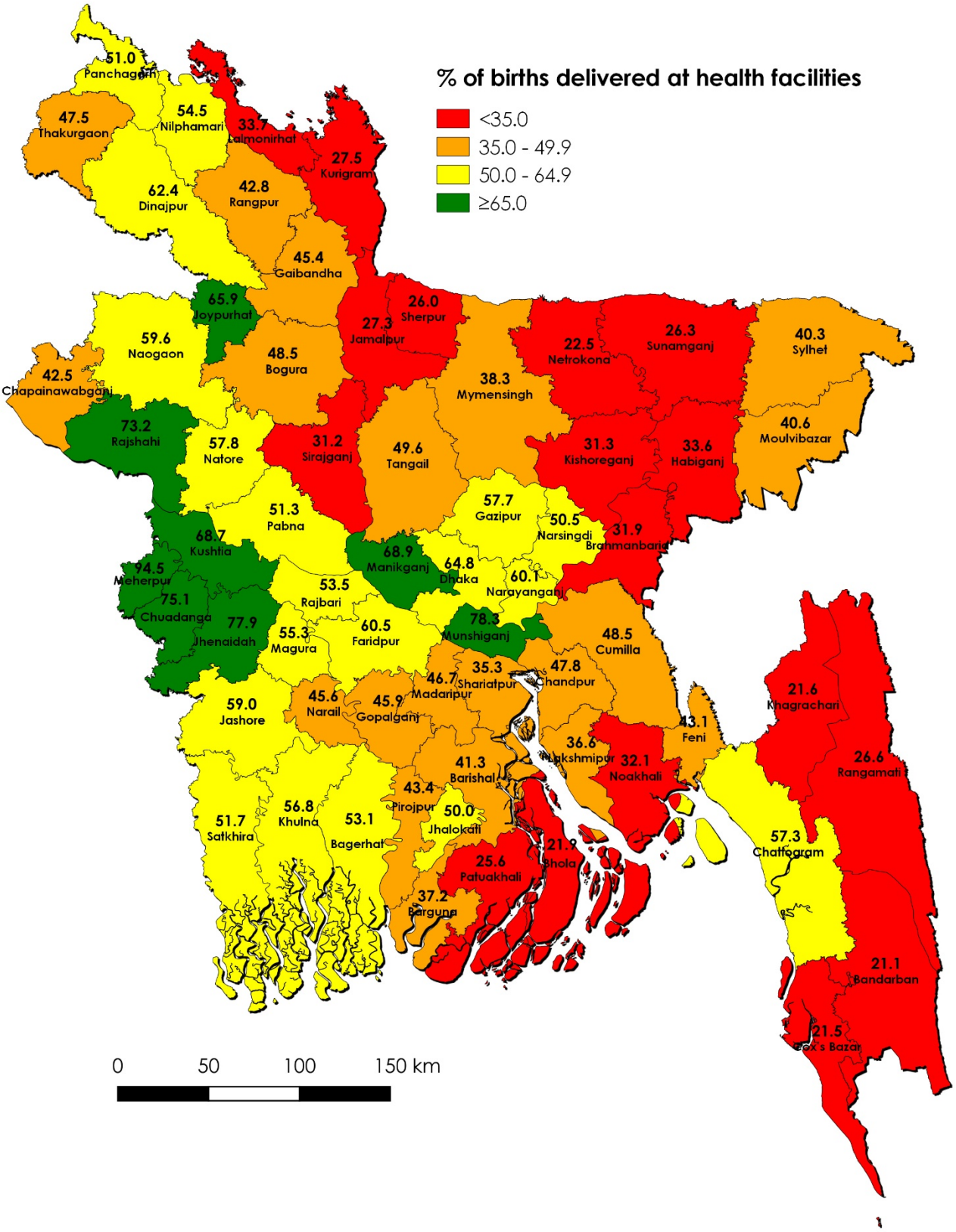


Table 9. Postnatal care (PNC) for mothers by district, Bangladesh 2016

Among women ages 15–49 giving birth in the three years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth within two days of delivery, according to district.

Division and district	PNC from MTP[1]
Barishal Division	**37**
Barguna	46.4
Barishal	40.6
Bhola	23.3
Jhalokati	53.8
Patuakhali	29.6
Pirojpur	54
Chattrogram Division	**45.5**
Bandarban	25.2
Brahmanbaria	36
Chandpur	50.6
Chattogram	59.1
Cumilla	52.4
Cox's Bazar	27.6
Feni	49.7
Khagrachhari	31.7
Lakshmipur	41.5
Noakhali	34
Rangamati	31.2
Dhaka Division	**54.4**
Dhaka	59.1
Faridpur	61.5
Gazipur	50.8
Gopalganj	47.9
Kishoreganj	35.9
Madaripur	45.1
Manikganj	62.9
Munshiganj	75.2
Narayanganj	53.8
Narsingdi	50.5
Rajbari	54.7
Shariatpur	40.5
Tangail	49.1
Khulna Division	**62.3**
Bagerhat	53.7
Chuadanga	74.4
Jashore	60.4
Jhenaidah	76.3
Khulna	60.4
Kushtia	62.7
Magura	58.2

Division and district	PNC from MTP[1]
Meherpur	90.3
Narail	47.6
Satkhira	55.3
Mymensingh Division	**33.2**
Jamalpur	29.1
Mymensingh	39.9
Netrokona	23.2
Sherpur	28
Rajshahi Division	**51.4**
Bogura	50
Chapainawabganj	43
Joypurhat	67.1
Naogaon	60
Natore	56.3
Pabna	53.3
Rajshahi	74.3
Sirajganj	31
Rangpur Division	**47.1**
Dinajpur	61.5
Gaibandha	46.4
Kurigram	30.6
Lalmonirhat	34
Nilphamari	57.6
Panchagarh	53.1
Rangpur	43.6
Takurgaon	48.2
Sylhet Division	**36.9**
Habigonj	32
Moulvibazar	39.2
Sunamganj	28.3
Sylhet	43.9
Bangladesh	**48**

[1] Qualified doctor, nurse, midwife, paramedic, family welfare visitor (FWV), or community skilled birth attendant (CSBA).

Mothers received PNC by MTP within 2 days of delivery

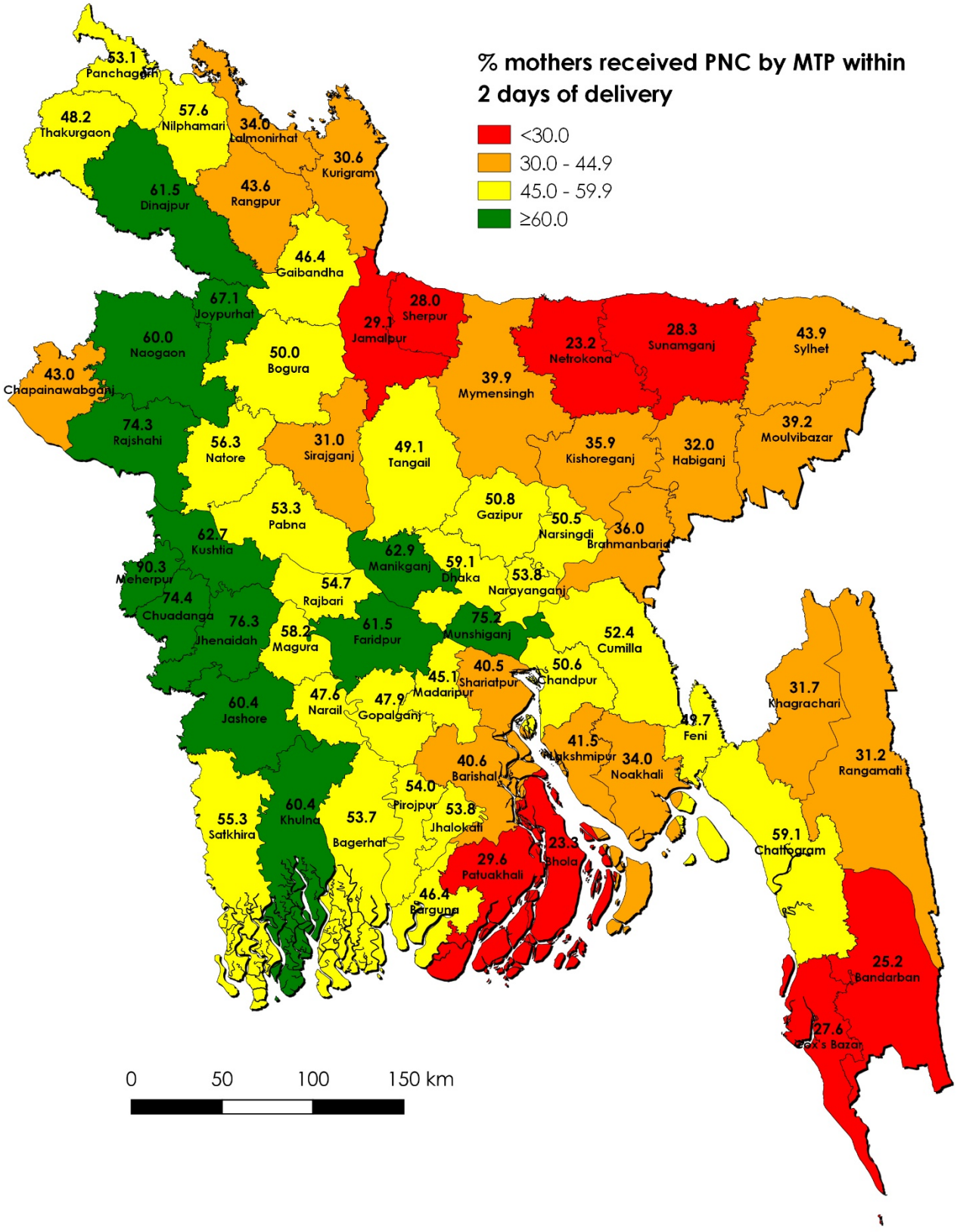


Table 10. PNC for noninstitutional delivery by district, Bangladesh 2016

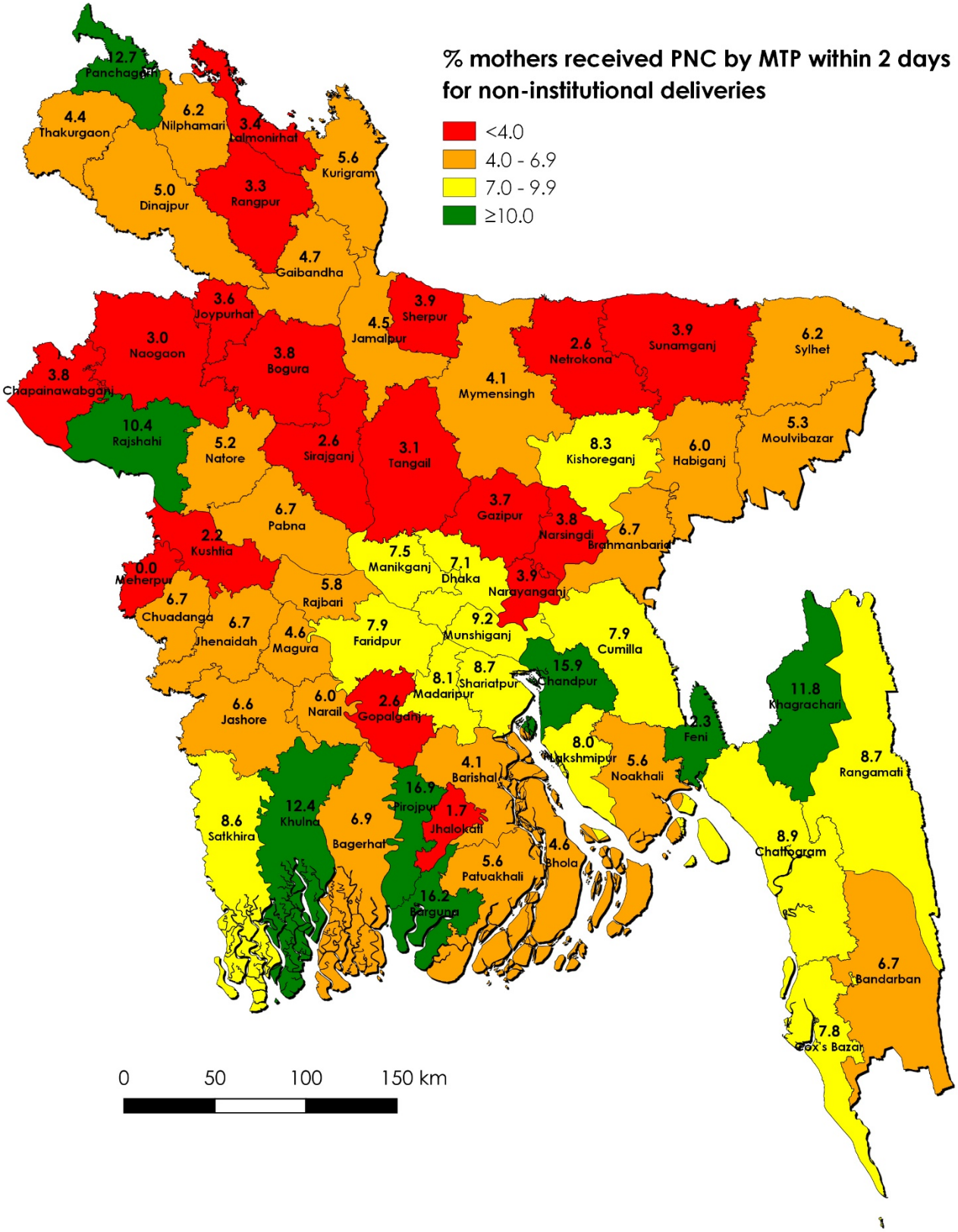
Percentage of women ages 15–49 who had noninstitutional delivery for the most recent live birth in the three years preceding the survey who received PNC within two days after delivery from a medically-trained provider, according to district.

Division and district	PNC from MTP[1]
Barishal Division	**7**
Barguna	16.2
Barishal	4.1
Bhola	4.6
Jhalokati	6.6
Patuakhali	5.6
Pirojpur	16.9
Chattrogram Division	**8.5**
Bandarban	6.7
Brahmanbaria	6.7
Chandpur	15.9
Chattogram	8.9
Cumilla	7.9
Cox's Bazar	7.8
Feni	12.3
Khagrachhari	11.8
Lakshmipur	8.0
Noakhali	5.6
Rangamati	8.7
Dhaka Division	**6.0**
Dhaka	7.1
Faridpur	7.9
Gazipur	3.7
Gopalganj	2.6
Kishoreganj	8.3
Madaripur	8.1
Manikganj	7.5
Munshiganj	9.2
Narayanganj	3.9
Narsingdi	3.8
Rajbari	5.8
Shariatpur	8.7
Tangail	3.1
Khulna Division	**7.1**
Bagerhat	6.9
Chuadanga	6.7
Jashore	6.7
Jhenaidah	1.7
Khulna	12.4
Kushtia	2.2
Magura	4.6

Division and district	PNC from MTP[1]
Meherpur	0
Narail	6.0
Satkhira	8.6
Mymensingh Division	**3.8**
Jamalpur	4.5
Mymensingh	4.1
Netrokona	2.6
Sherpur	3.9
Rajshahi Division	**4.3**
Bogura	3.8
Chapainawabganj	3.8
Joypurhat	3.6
Naogaon	3.0
Natore	5.2
Pabna	6.7
Rajshahi	10.4
Sirajganj	2.6
Rangpur Division	**5.0**
Dinajpur	5.0
Gaibandha	4.7
Kurigram	5.6
Lalmonirhat	3.4
Nilphamari	6.2
Panchagarh	12.7
Rangpur	3.3
Takurgaon	4.4
Sylhet Division	**5.3**
Habigonj	6.0
Moulvibazar	5.3
Sunamganj	3.9
Sylhet	6.2
Bangladesh	**6.2**

[1] Qualified doctor, nurse, midwife, paramedic, family welfare visitor (FWV), or community skilled birth attendant (CSBA)

Mothers received PNC by MTP within 2 days for non-institutional deliveries



5. CHILDHOOD MORTALITY

Infant and child mortality rates reflect a country's level of socioeconomic development and quality of life. The rates are also useful in identifying promising directions for health and nutrition programs in any country. Mortality levels are one of the main indicators of the standard of living or development of a population. Thus, identifying segments of the child population that are at greater risk of dying contributes to efforts to improve child survival and lower the exposure of young children to risk.

The 2016 BMMS asked all ever-married women ages 15–49 to provide a complete history of their live births, including the sex, month, and year of each birth, survival status, and age at the time of the survey or age at death to directly estimate the infant and child mortality rates (Rutstein, 1984). This chapter presents information on levels and trends in mortality among children under age five in Bangladesh, according to districts. Specifically, it presents information on neonatal, post-neonatal, infant, child, and under-5 mortality.

Table 11. Infant and child mortality by district, Bangladesh 2016

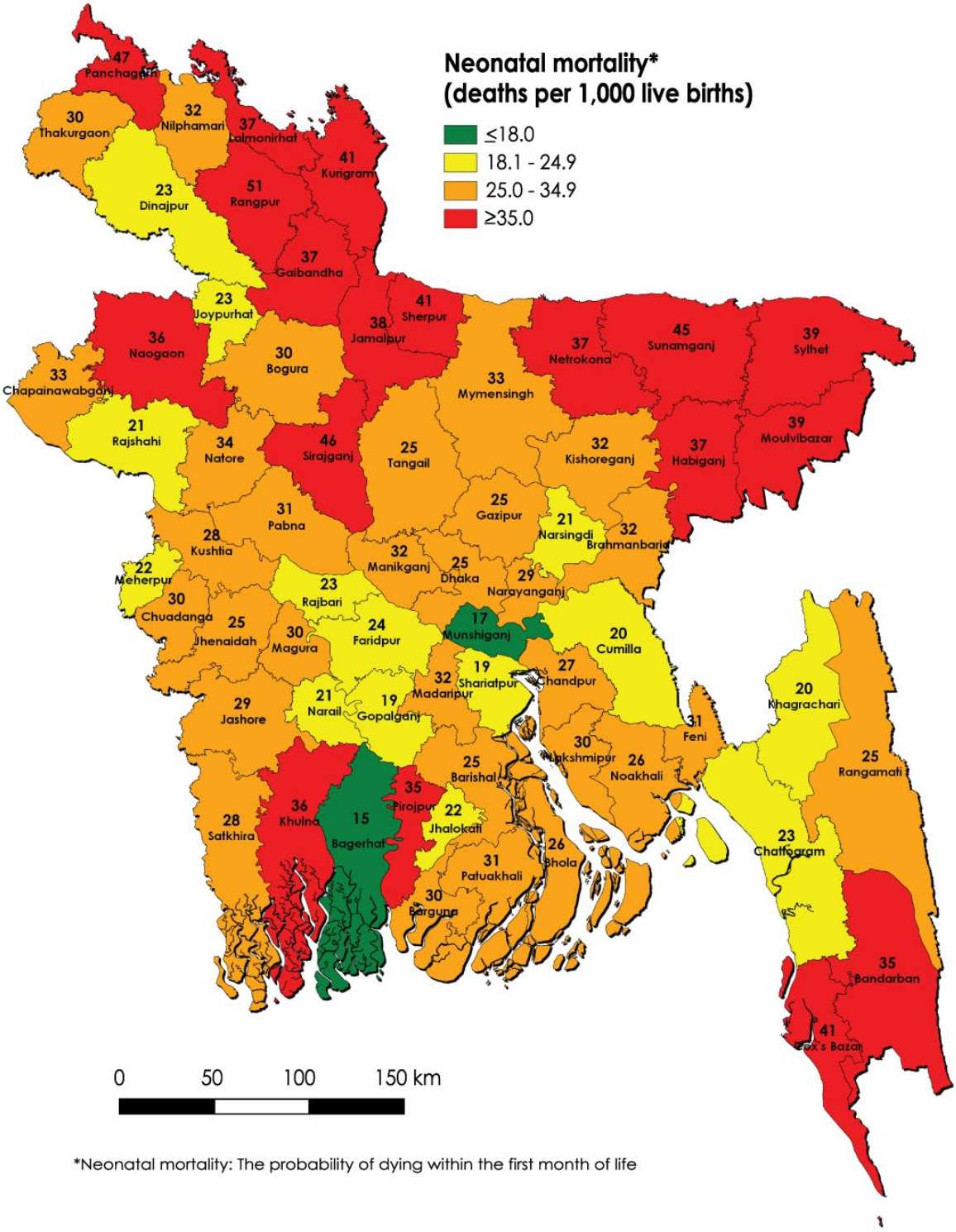
Neonatal, post-neonatal, infant, child, and under-five mortality rates for the five-year period preceding the survey, according to district.

Division and district	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under-five mortality
Barishal Division	**28**	**7**	**34**	**11**	**45**
Barguna	30	6	36	12	48
Barishal	25	7	31	7	39
Bhola	26	8	35	12	47
Jhalokati	22	2	24	11	35
Patuakhali	31	5	36	14	50
Pirojpur	35	7	42	12	54
Chattrogram Division	**27**	**9**	**36**	**11**	**47**
Bandarban	35	19	55	5	60
Brahmanbaria	32	6	38	10	47
Chandpur	27	4	31	7	38
Chattogram	23	13	36	12	47
Cumilla	20	7	26	8	34
Cox's Bazar	41	14	55	12	66
Feni	31	1	33	8	40
Khagrachhari	20	18	38	11	49
Lakshmipur	30	12	42	12	54
Noakhali	26	7	33	16	48
Rangamati	25	12	37	7	44
Dhaka Division	**25**	**8**	**33**	**6**	**39**
Dhaka	25	7	32	5	37
Faridpur	24	5	29	6	36
Gazipur	25	10	35	10	44

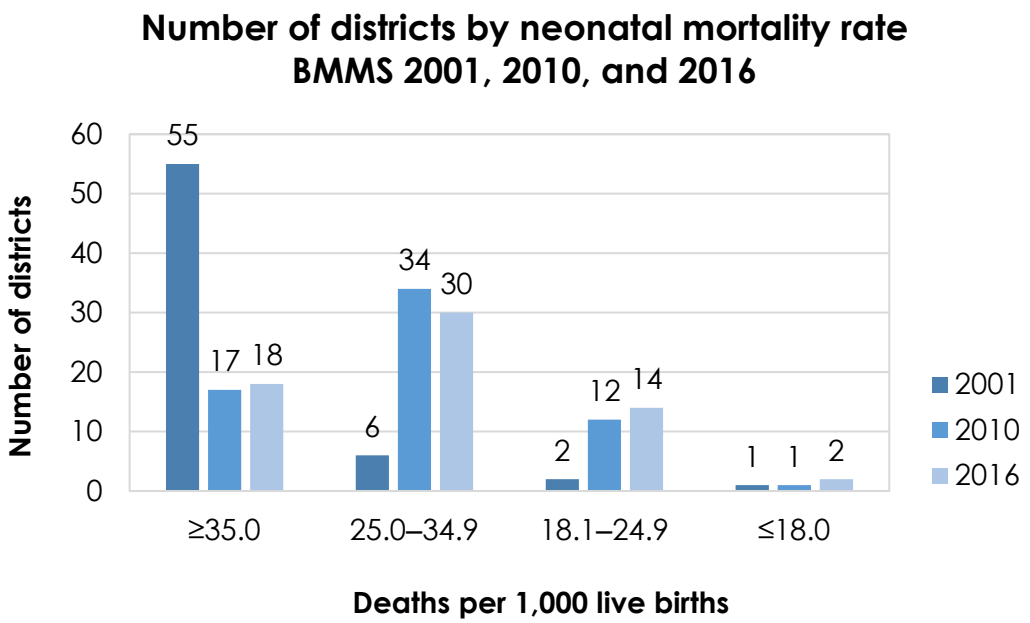
Division and district	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under-five mortality
Gopalganj	19	8	27	10	37
Kishoreganj	32	6	37	8	45
Madaripur	32	10	42	6	48
Manikganj	32	4	36	5	40
Munshiganj	17	5	22	3	25
Narayanganj	29	6	36	7	42
Narsingdi	21	15	36	6	42
Rajbari	23	9	32	9	40
Shariatpur	19	11	29	7	36
Tangail	25	6	31	5	37
Khulna Division	**27**	**6**	**34**	**6**	**40**
Bagerhat	15	7	22	14	35
Chuadanga	30	2	32	7	39
Jashore	29	7	36	4	40
Jhenaidah	25	9	35	6	41
Khulna	36	7	43	4	47
Kushtia	28	6	35	5	39
Magura	30	5	35	6	41
Meherpur	22	4	26	1	27
Narail	21	9	31	4	35
Satkhira	28	6	33	6	39
Mymensingh Division	**36**	**10**	**46**	**8**	**53**
Jamalpur	38	9	47	5	51
Mymensingh	33	10	43	9	52
Netrokona	37	10	47	10	57
Sherpur	41	10	51	9	59
Rajshahi Division	**33**	**8**	**41**	**7**	**48**
Bogura	30	6	36	6	42
Chapainawabganj	33	11	44	7	50
Joypurhat	23	9	32	9	41
Naogaon	36	7	43	5	48
Natore	34	12	46	7	53
Pabna	31	4	36	5	41
Rajshahi	21	6	27	6	33
Sirajganj	46	9	55	10	65
Rangpur Division	**37**	**8**	**45**	**8**	**53**
Dinajpur	23	7	31	6	36
Gaibandha	37	9	47	15	61
Kurigram	41	7	48	5	54
Lalmonirhat	37	5	42	6	48
Nilphamari	32	9	41	9	50
Panchagarh	47	3	49	3	51
Rangpur	51	9	60	9	69
Takurgaon	30	8	38	7	45

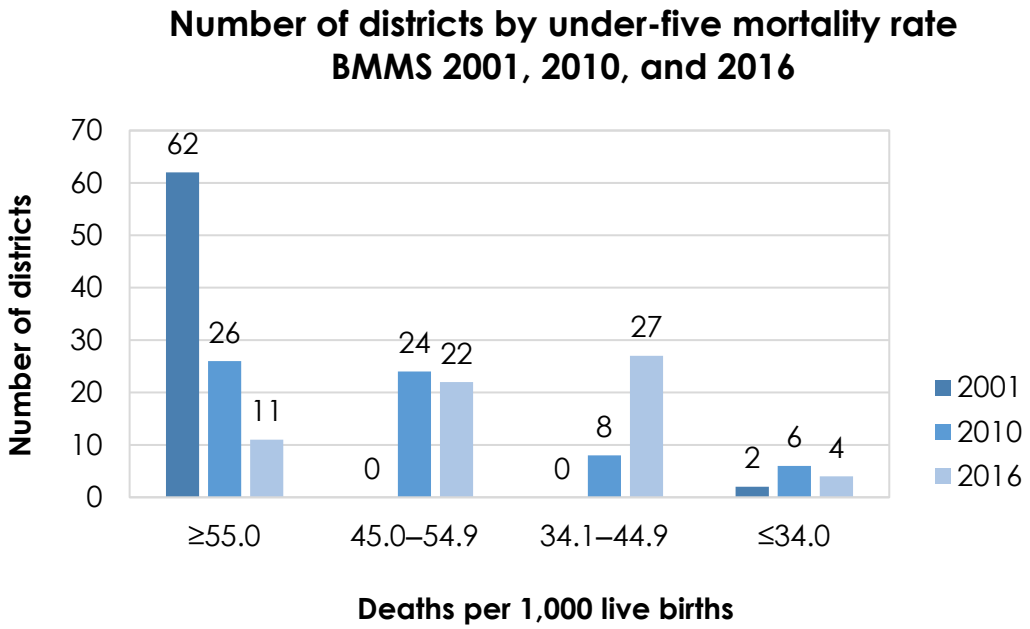
Division and district	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under-five mortality
Sylhet Division	**40**	**16**	**56**	**10**	**65**
Habigonj	37	11	48	13	60
Moulvibazar	39	13	52	5	56
Sunamganj	45	16	60	12	72
Sylhet	39	20	59	10	68
Bangladesh	**30**	**9**	**39**	**8**	**47**

Neonatal mortality



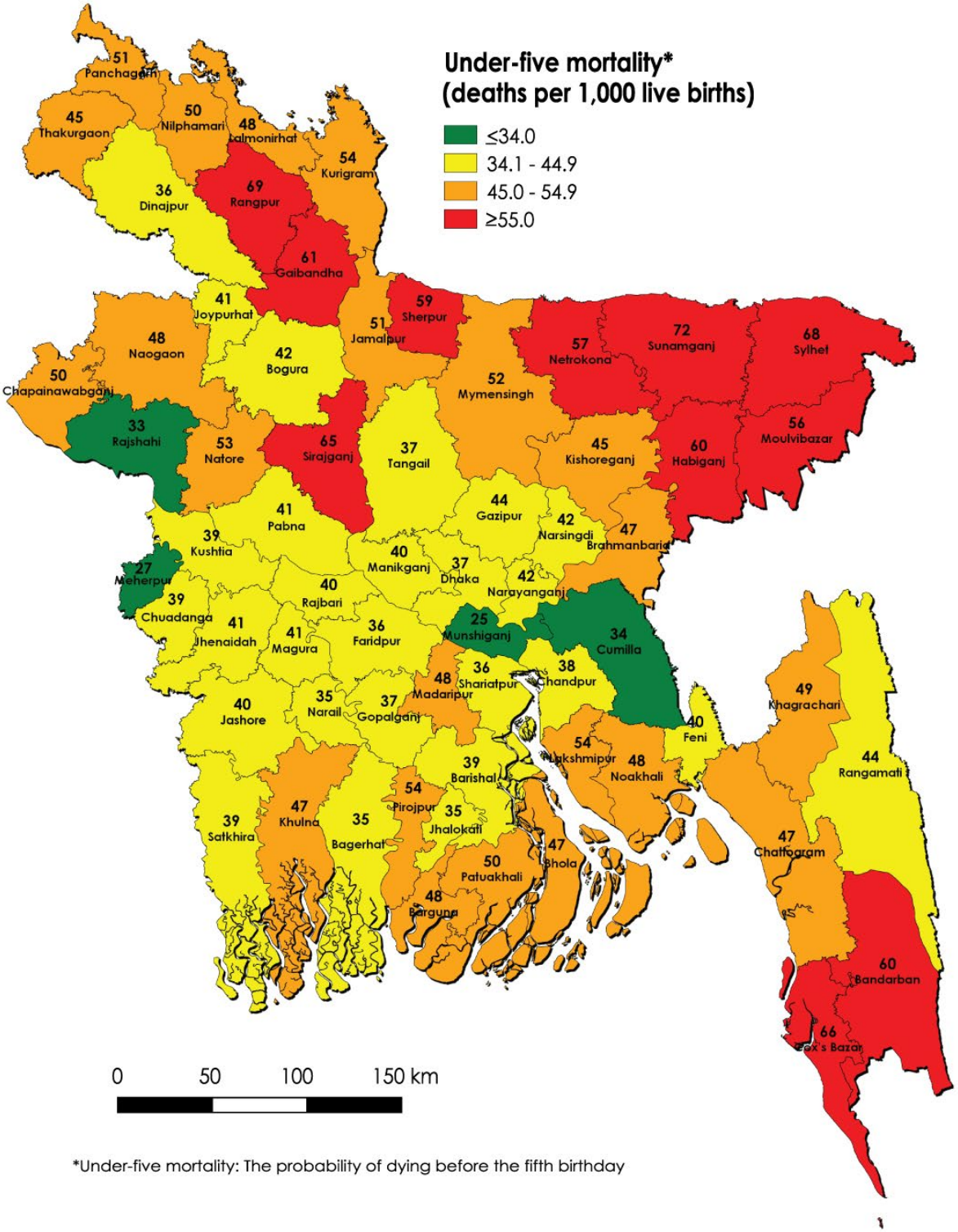
*Neonatal mortality: The probability of dying within the first month of life





- Between 2001 and 2016, the number of districts with neonatal mortality rate of 35 or more deaths per 1,000 live births reduced from 55 to 18.
- In 2001, 62 districts had high under-five mortality of 55 deaths or more per 1,000 live births, which reduced to 11 districts in 2016.
- In 2016, only two districts attained the 4th HPNSP's 2022 target for neonatal mortality rate (≤18 neonatal deaths per 1,000 live births), and four districts attained the target for under-5 mortality rate (≤34 under-five deaths per 1,000 live births).

Under-five mortality



*Under-five mortality: The probability of dying before the fifth birthday

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