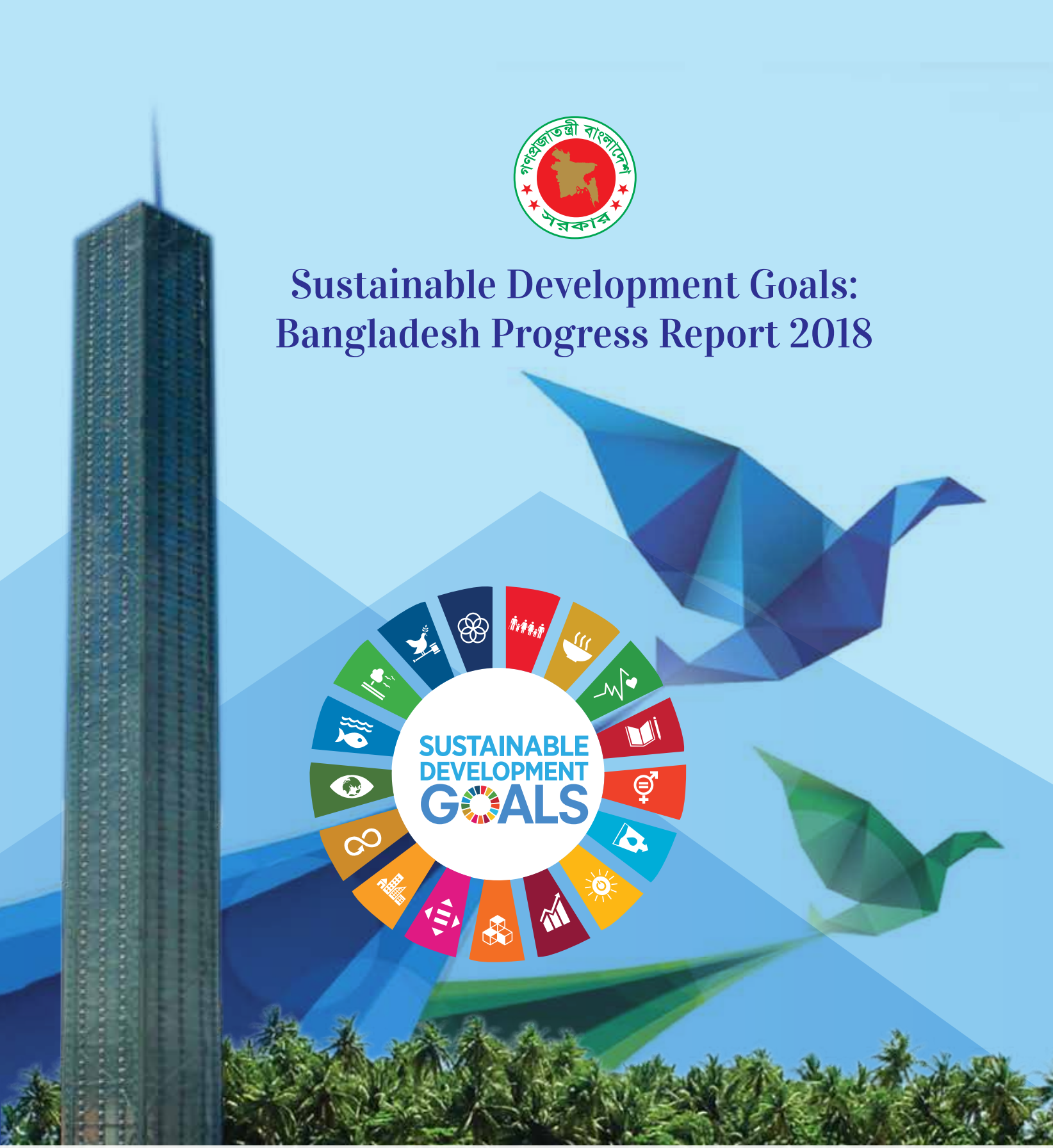
Sustainable Development Goals: Bangladesh Progress Report 2018



Bangladesh Planning Commission
Ministry of Planning
Government of the People's Republic of Bangladesh
December 2018

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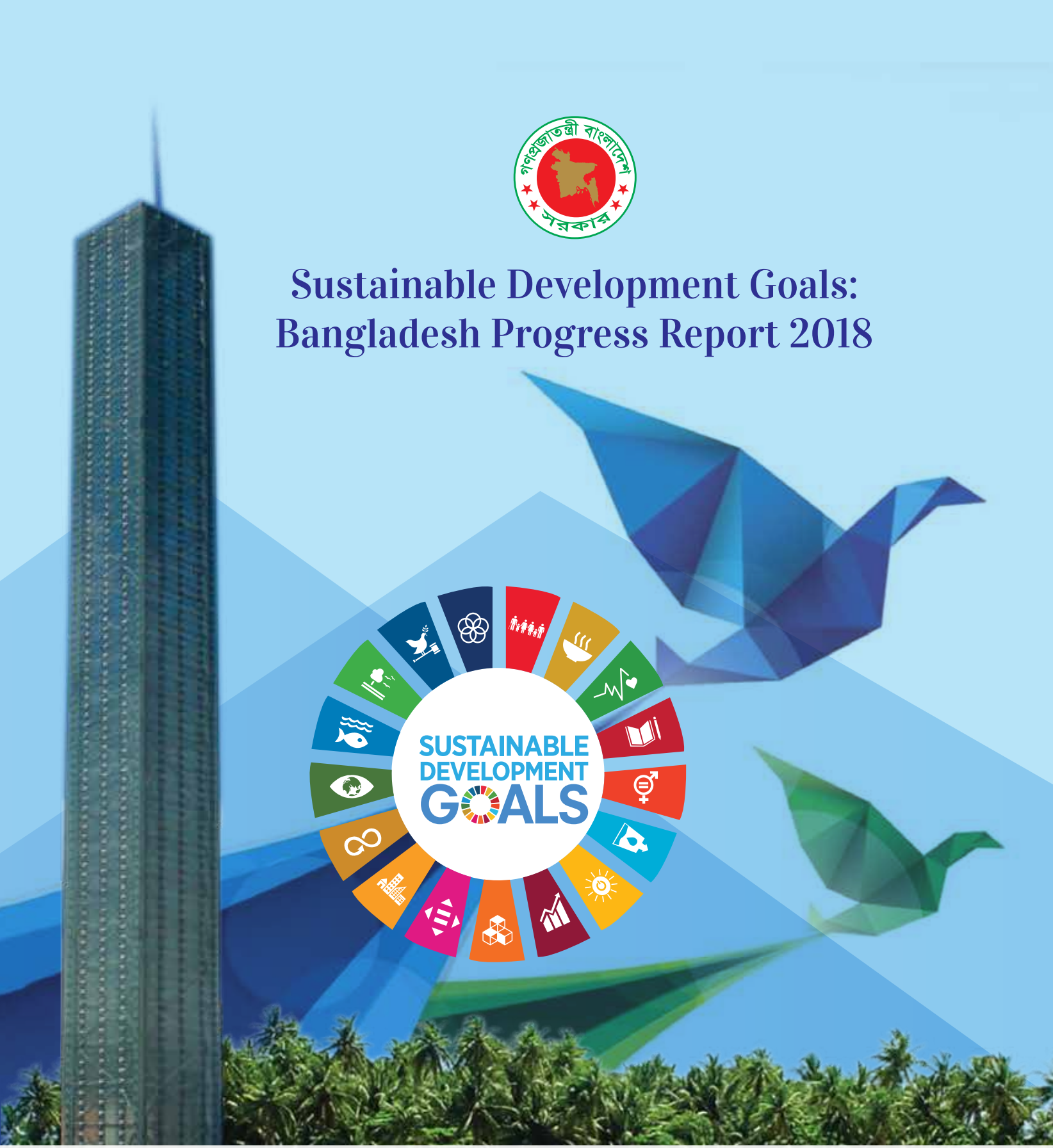

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Sustainable Development Goals: Bangladesh First Progress Report 2018

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A H M Mustafa Kamal, FCA, MP
Minister
Ministry of Planning
Government of the People's Republic of Bangladesh

Message

I wish to extend my deep appreciation to the General Economics Division (GED) of Bangladesh Planning Commission for successful preparation of the first formal progress report on 'Bangladesh Sustainable Development Goals (SDGs) - 2018', that aims to appraise the progress made by Bangladesh towards implementation and achievement of the 2030 Global Development Agenda.

The Government of Bangladesh has been standing in good stead for its outstanding progress in the areas of poverty alleviation, ensuring food security, primary school enrolment, gender parity in primary and secondary level education, lowering infant and under-five mortality rate and maternal mortality ratio, improving immunization coverage, and reducing the incidence of communicable diseases under the Millennium Development Goals (MDGs). Buoyed by the successes of the MDGs, Bangladesh became one of the forerunners in embracing the SDGs – otherwise known as the 2030 Global Development Agenda – to end poverty by increasing national income through redistributive justice, fight inequality and tackle adverse impacts of climate change.

Bangladesh takes pride as one of the early starters by completing all groundworks for implementing the SDGs as well as embedding the Global Development Agenda into the 7th Five Year Plan, Mapping of Ministries by goals and targets, Data Gap Analysis, SDG Monitoring and Evaluation Framework, SDGS Financing Strategy, Preparation of Ministry/Division Action Plan, Preparation of Sector Strategy Action Plan. It has also submitted Bangladesh Voluntary National Review 2017 in HLPF in July 2017. Therefore, formulation of the Bangladesh SDGs Progress Report 2018 will serve as an overview of the progress during the beginning years of SDG implementation and a guideline for planning future steps towards achieving the Global Goals.

I take this opportunity to thank the GED of the Ministry of Planning, various ministries/divisions and the broader stakeholders who have provided input into preparation of this publication. I also thank the UNDP for providing technical and financial support in bringing out the report.

I hope the SDGs Progress Report will be pivotal in demonstrating the overview of advances made towards achieving each of the 17 Global Goals and I am confident Bangladesh would be a major achiever of SDGs.

(A H M Mustafa Kamal, FCA, MP)

M. A. Mannan, MP
Minister of State
Ministry of Finance and Ministry of Planning
Government of the People's Republic of Bangladesh

Message

I would like to congratulate the General Economics Division (GED) of Bangladesh Planning Commission for publishing the 'Bangladesh Sustainable Development Goals (SDGs) Progress Report 2018' – an outline of the goal wise progress we achieved and where we are lagging behind – within the first two years of adoption of the universally adopted 2030 Global Development Goals.

The SDGs built on the success of its predecessor, the Millennium Development Goals (MDGs), are comprehensive, far reaching and people centered in nature and call for collaborative partnership to implement these universal and transformative Goals and targets of the 2030 Agenda. In accordance to the very essence of the SDGs to 'Leave No one Behind', the Government of Bangladesh has been instrumental in carrying out the task of SDGs implementation by engaging with various stakeholders. To this end, the country has integrated the goals and targets of the Agenda 2030 in its 7th Five Year Plan including preparation of a number of key policy documents to identify the Ministries and Agencies responsible for SDGs implementation and guide them in their actions.

The SDGs Progress Report 2018 is a guiding document that sheds light on the progress as well as on the challenges behind achieving the 17 Global Goals and the 169 targets for Bangladesh. Therefore, the Report is a new impetus for reinforcing revision of existing policies for taking more holistic approach towards implementation of the SDGs by 2030.

I would like to take this opportunity to thank the GED officials for their initiative, different ministries/ divisions providing inputs and the UNDP for their technical and financial support for preparation of the 2018 SDGs Progress Report. I hope this document will pave the way for taking more planned actions and open gateway for different stakeholders to work jointly with the Government for fully realizing the SDGs.

(M. A. Mannan, MP)

Md. Abul Kalam Azad
Principal Coordinator (SDGs Affair)
Prime Minister's Office
Government of the People's Republic of Bangladesh

Message

I am delighted to hear that the General Economics Division (GED) of Bangladesh Planning Commission is publishing the 'Bangladesh Sustainable Development Goals (SDGs) Progress Report 2018.

Bangladesh has earned plaudits from the global development community for its outstanding achievements in attaining the Millennium Development Goals (MDGs), particularly in achieving the goals of universal primary education, reducing child mortality, promoting gender equality and women empowerment. Owing to its success during the MDGs, the country has been an active participant in embracing the all-encompassing 2030 Global Development Agenda (SDGs) along with inclusion of the 17 Global Goals into its National Development Plan. Formulation of other key policy documents such as Action Plan by the Ministries/Divisions, Data Gap Analysis, Monitoring and Evaluation Framework, SDGS and Financing Strategy and Education Sector Strategy, and Bangladesh Voluntary National Review 2017 were commendable works by the GED. Thus, preparation of this first SDGs Progress Report will act as an overview of the progress and shortfalls in achieving the supremely ambitious and transformational vision of the 2030 Agenda.

I would like to extend my special thanks to the GED officials' and leadership for their effort, dedication and insights in successful preparation of the SDGs Progress Report. I would also like to thank officials and colleagues from different Ministries/Divisions and Agencies for providing their invaluable inputs in completing the report. I would also like to offer my sincere thanks to UNDP for assisting the Government for formulation of this report.

I believe that this report will be an effective instrument for highlighting the progress while at the same time pinpointing the areas that call for a more inclusive and immediate response to translate the strategies into tangible actions. In light of the country's 'whole of society' approach, I hope that the document will enhance partnership among various stakeholders – to work collectively in the spirit of 'together we can' – to achieve the SDGs in Bangladesh.

(Md. Abul Kalam Azad)

Dr. Shamsul Alam
Member (Senior Secretary)
General Economics Division
Bangladesh Planning Commission

On SDGs First Progress Report 2018

The 'Sustainable Development Goals (SDGs): Bangladesh Progress Report 2018' is the first formal report on implementation progress of SDGs in the country. This report is prepared with the inputs received from different Ministries/Divisions/Agencies implementing various programmes/projects relating to SDGs following the result framework developed for monitoring progress of SDGs.

Bangladesh is one of the forerunner countries in completing all preparatory works for seamless transition from MDG to SDG. The important exercises that completed are: integrating SDG in the 7th 5-year plan, conducted a data gap analysis, completed financing needs analysis, developed a National Action Plan and Monitoring Framework for SDG. These are important building blocks to guide strategies to achieve the SDGs.

The 2018 SDG report covering the years 2016 and 2017 illustrates that progress made by Bangladesh in various areas of economic and social development field including but not limited to our success in reducing extreme poverty measured by $1.90 a day / national poverty line (LPL). Similarly, progress on expanding coverage of social protection and proportion of government expenditure on services (health, education and social protection) as share of total government expenditure are also on track. Progress on wasting is moving at a desired pace, while we have made considerable progress on addressing stunting. Under 5 mortality rate (U5MR) and neo natal mortality rate (NMR) are on track to reach the 2020 targets.

The Gross Enrollment Ratio in Pre Primary education has been increasing at a slow pace of 1.45 percentage points per annum since 2013. Gender Parity Index (GPI) exceeded 1 at primary and secondary levels of education and has remained above 1 for more than a decade. According to Global Gender Gap Index of 2017, of the seven countries from South Asia, Bangladesh has emerged as the top performer by reducing its overall gender gap to about 72% with a global ranking of 47. Compared to other neighbouring countries of South Asia, the improvement in sanitation and reduction in open defecation is impressive. Access to improved sanitation improved by 26% while open defecation has reduced by 33%.

Bangladesh appears to have made an upward shift in the average annual growth rate of 6-7 per cent to more than 7 per cent in the last three years (FY2015-FY2018). It is also heartening to note that the average annual growth rate of GDP per employed person has already reached the 2020 target in FY2017. The share of manufacturing value added in GDP has been steadily increasing and has already exceeded 2020 milestone in FY2017. The proportion of population covered by mobile network has reached close to 100 per cent in case of 2G technology. In case of 3G technology the 2020 milestone has already been achieved in 2017. Bangladesh has got access to 4G technology.

Bangladesh has acquired credible capacity in disaster management. This is widely recognized by the world community. In facing the climate change impact, the country has made solid progress. A number of climate change related strategies, plans and actions have been formulated and mitigation measures have been operationalized. Bangladesh has recently gained a vast swath of marine territory. This marine

area is rich in bio resources and biodiversity and the enormous potential has to be tapped.

Despite these facts, the country is facing many challenges in implementation of SDGs. One of the major challenges is mobilization of required resources for implementation of interventions for achieving the SDGs. A study conducted by the General Economics Division reveals the fact that Bangladesh would need additional investment of US$ 928 billion or US$ 66 billion on annual basis to achieve SDGs. We need to put renewed emphasis on our domestic resource mobilization strategy, and create opportunities for the private sector to play its due role in SDG implementation. Combined and coordinated approach of all stakeholders is critical for attainment of 2030 Global Development Goals.

The data paucity has emerged as a major challenge for monitoring of SDGs. We have felt the pinch in preparing the 2018 SDG progress report, because we have data for only 70 indicators (30%) out of 232 indicators prescribed by UN to assess progress of SDGs. National Statistical Organization (NSO) needs to step up its efforts to reduce the gap. For this to happen, capacity of the BBS needs to be strengthened, perhaps revamped. The Line Ministries/Divisions should also take initiative in generating administrative data related to SDGs. UN agencies and other development partners have to come forward immediately to strengthen BBS and other Administrative line Ministries capacity to generate quality and reliable data in timely manner.

A bit sadly, UN Sustainable Development Solutions Network (UN SDSN) ranked Bangladesh 120 out of 157 countries in the SDG Index and Data Dashboards Report 2017 observing change for only one year (2016). The ranking could have been made based on partially available data or data gathered from non – credible sources. Latest data, albeit often with a lag of 2/3 years, of course do not support this ranking. It is therefore has become necessary to harmonize data between Government of Bangladesh source and UN SDSN.

Finally, I am thankful to all my colleagues in GED and Focal Points of the line Ministries who helped us by providing data/information in preparation of this report. From GED, we tried our best to make this first evaluation report empirical and therefore become objective in reflecting the changes in three fronts, viz. economic, social and climate changes capturing the three core pillars of the SDGs. I would like to take this opportunity to thank UNDP Bangladesh for supporting us through its 'Engaging with Institutions (EI),' IP Project.

We all from GED are grateful to our Hon'ble Minister, Ministry of Planning, Mr. A H M Mustafa Kamal, FCA, MP; Hon'ble State Minister, Ministry of Planning and Ministry of Finance, Mr. M. A. Mannan and Principal Coordinator (SDGs Affairs), Prime Minister's Office (PMO), Mr. Md. Abul Kalam Azad for their wholehearted support and inspiration in bringing out this first report on SDG progress.

(Dr. Shamsul Alam)

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Acronyms

ADB	Asian Development Bank
ADP	Annual Development Programme
AIMS	Aid Information Management System
APA	Annual Performance Assessment
BBS	Bangladesh Bureau of Statistics
BB	Bangladesh Bank
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCCTF	Bangladesh Climate Change Trust Fund
BCCRF	Bangladesh Climate Change Resilience Fund
BDF	Bangladesh Development Forum
BDT	Bangladesh Taka
BEN	BD ECD Network
BIDA	Bangladesh Investment Development Authority
BOBLME	Bay of Bengal Large Marine Ecosystem
BMI	Body Mass Index
BR	Birth Rate
BRIS	Birth and Death Registration Information System
BTRC	Bangladesh Telecommunication Regulatory Commission
BWDB	Bangladesh Water Development Board
CCs	Community Clinics
CCGAP	Climate Change and Gender Action Plan
CEGIS	Centre for Environmental and Geographic Information Services
C-in-Ed	Certificate in Education
DAC	Development Assistance Committee
DBHWD	Department of Bangladesh Haor and Wetland Development
DFQF	Duty Free Quota Free
DGHS	Directorate General Health Services
DNCC	Dhaka North City Corporation
DPHE	Department of Public Health Engineering
DPEd	Diploma in Primary Education
DoE	Department of Environment
DoF	Department of Fisheries
DoP	Department of Prison
DOTS	Directly Observed Therapy with short course chemotherapy)
DR	Death Rate
DSCC	Dhaka South City Corporation
ECNEC	Executive Committee of the National Economic Council
EPI	Expanded Programme on Immunization
EU	European Union

ECA	Ecologically Critical Area
ECA	Export Credit Agency
ECD	Early Childhood Education
FFW	Food for Work
ERD	Economic Resources Division
ESP	Essential Services Package
ETP	Effluent Treatment Plant
FD	Forest Department
FDI	Foreign Direct Investment
FSRUs	Floating Storage Regasification Units
FY	Financial Year
FYP	Five Year Plan
GATS	Global Adult Tobacco Survey
GDP	Gross Domestic Product
GED	General Economics Division
GER	Gross Enrollment Rate
GCF	Green Climate Fund
GoB	Government of Bangladesh
GPI	Gender Parity Index
GNI	Gross National Income
GPEDC	Global Partnership for Effective Development Cooperation
HCWMP	Health Care Waste Management Plan
HEQEP	Higher Education Quality Enhancement project
HICs	High-Income Countries
HIES	Household Income and Expenditure Survey
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HLPF	High Level Political Forum
HLPW	High Level Panel on Water
HNPSP	Health, Nutrition and Population Sector Programme
HPNSDP	Health, Population and Nutrition Sector Development Programme
HRD	Human Resources Development
IHR	International Health Regulations
ICAI	Independent Commission for Aid Impact
ILO	International Labour Organization
IMCI	Integrated Management of Childhood Illness
INDC	Intended Nationally Determined Contribution
INFED	Integrated Non-Farm Education Programme
IOCs	International Oil Companies
IWRM	Integrated Water Resources Management
JMP	Joint Monitoring Programme

LDCs	Least Developed Countries
LGD	Local Government Division
LGED	Local Government Engineering Department
LMICs	Low and Middle-income Countries
MLD	Million Litres per Day
MCP	Micro Credit Programmes
MCP	Malaria Control Programme
MDGs	Millennium Development Goals
MDR-TB	Multi Drug Resistance Tuberculosis
MoC	Ministry of Commerce
MFN	Most Favoured Nation
MICS	Multiple Indicator Cluster Survey
MoDMR	Ministry of Disaster Management and Relief
MoHA	Ministry of Home Affairs
MoWCA	Ministry of Women and Children Affairs
MoWR	Ministry of Water Resources
MPA	Marine Protected Areas
NAP	National Adaptation Plan
NCBs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
NHD	National Household Data Base
NP	National Park
NPDC	National Policy on Development Cooperation
NSDS	National Sustainable Development Strategy
NSSS	National Social Security Strategy
NTPA	National Tripartite Plan of Action
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OIC	Organization of Islamic Countries
O&M	Operation and Maintenance
PA	Protected Areas
PEDP	Primary Education Development Project
PHC	Public Health Care
PKSF	Palli Karma Sahayak Foundation
PMED	Primary and Mass Education Division
PMO	Prime Minister's Office
POs	Partner Organisations
POE	Panel of Experts
PPP	Public Private Partnership
PPP	Purchasing Power Parity

PSD	Public Security Division
PSMP	Power Sector Master Plan
RCS	Road Condition Survey
RHD	Roads and Highways Department
RLI	Red List Index
RMG	Ready Made Garments
RTIs	Road Traffic Injuries
SD	Standard Deviation
SDGs	Sustainable Development Goals
SEDP	Secondary Education Development Program
SIR	SDGs Implementation Review
SLIP	School Learning Improvement Plan
SPS	Sewerage Pump Station
SSD	Security Services Division
SSNPs	Social Safety Net Programmes
STP	Sewage Treatment Plants
TVET	Technical and Vocational Education and Training
UHC	Universal Health Care
ULGIs	Urban Local Government Institutions
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNSGAB	United Nations Secretary-General's Advisory Board on Water and Sanitation
VAT	Value Added Tax
VNR	Voluntary National Review
VAW	Violence against Women
VWB	Vulnerable Women Benefit
WASA	Water Supply and Sewerage Authority
WARPO	Water Resources Planning Organization
WASH	Water Sanitation and Hygiene
WFHI	Women Friendly Hospital Initiative
WB	World Bank
WDI	World Development Indicators
WHO	World Health Organization
WTO FCTC	WTO Framework Convention on Tobacco Control

Executive Summary

The progress report on SDGs implementation in Bangladesh has been prepared following a methodological framework. This involves a thorough understanding of the 7th Five Year Plan document, and the documents related to SDGs prepared by General Economics Division of the Bangladesh Planning Commission. Significant efforts were made to gather data on the indicators from Bangladesh Bureau of Statistics, the National Statistical Organisation, and other concerned Ministries/Divisions. Data and information have been also collected from international sources such as the World Bank, the UN and the OECD to fill the data gap.

Bangladesh has been widely acclaimed as one of the forerunners of MDGs implementation. It made outstanding progress in the areas of poverty alleviation, ensuring food security, primary school enrolment, and gender parity in primary and secondary level education, lowering infant and under-five mortality rate and maternal mortality ratio, improving immunization coverage, and reducing the incidence of communicable diseases. Many targets were achieved ahead of time and some others were achieved within the 2015 deadline. Bangladesh had been an active participant in the global process leading to the preparation of the post-2015 Development Agenda. Bangladesh proposals to the UN were strikingly similar to the proposals made by the Open Working Group (OWG) of the United Nations where 9 out of 11 goals were similar and other goals proposed by OWG were also these in Bangladesh proposal but as targets of different goals. Bangladesh could thus articulate the sustainable development problems that the world would have to grapple with in the coming one and a half decade.

The starting time of the Sustainable Development Goals (2016-2030) and the 7th Five Year Plan (2016-20) was a mere coincidence but it provided the country a good opportunity to integrate SDGs in the 7th FYP and Bangladesh was an early starter of implementation of SDGs. All the 17 goals were integrated into the plan - 14 goals (82%) are thematically fully aligned 3 goals (Goal 14, Goal 16 and Goal 17) of the SDGs (18%) are partially aligned with the 7FYP. Thus achievement of Plan objectives and targets will contribute towards achievement of SDGs. Bangladesh's achievement in implementing the 7th FYP will be rewarding internationally for fulfilling the global commitments.

Recognizing the challenge of coordination of various Ministries and agencies responsible for implementing projects/programmes contributing toward attainment of SDGs and providing data and information for monitoring and evaluation of progress at the national level the Honorable Prime Minister established an Inter-Ministerial Committee on SDGs Implementation and Review demonstrating her commitment. The Committee comprising Secretaries from 20 Ministries/ Divisions coordinates SDGs monitoring and implementation. The Principal Coordinator (SDGs Affairs), a newly created high level position in the Prime Minister's office, heads the Committee. GED is the secretariat for the committee to coordinate implementation at the policy level along with monitoring and reporting SDGs status.

The Government has been following "whole of society" approach in carrying out the task of SDGs implementation by involving various stakeholders. Several important documents, quick in succession, have been prepared to identify the Ministries and Agencies responsible for SDGs implementation and guide them in their actions. These include Mapping of Ministries by Targets in the Implementation of SDGs aligning with 7th Five Year Plan (2016-2020), Preparation of Ministry/Division action plan to achieve SDGs, National Action Plan of Ministries/Divisions by Targets for the Implementation of SDGs, Data gap analysis for SDGs, Monitoring and Evaluation Framework of SDGs, SDGs financing strategy and Education Sector Strategy. Thus the initial intellectual work for assignment of responsibilities across Ministries and their Agencies and related tasks for implementation have been largely done. It was imperative to see the progress during the first two years of implementation of SDGs (2016-2017). This exercise will show several things. First, given the availability of data, it will shed light on where we are on track and where we are lagging behind to achieve the targets. Secondly, it will reveal the data gap which must be filled. Otherwise, our success cannot be numerically measured and demonstrated. Thirdly, it will prompt us to rethink our policies and strategies and actions to help achieve the targets.

SDG 1: End poverty

The progress on reducing extreme poverty measured by $1.90 a day or by national poverty line (LPL) is on track. Similarly, progress on expanding coverage of social protection and proportion of government expenditure on services (health, education and social protection) as share of total government expenditure are also on track. Progress on reducing incidence of poverty (upper poverty line) does not seem to be on track. With higher expected economic growth in the economy (based on most recent developments) it is possible to achieve the 2020 milestone for poverty if the increase in income inequality does not offset the impact of higher growth on poverty reduction. The incidence of headcount poverty was 24.3 per cent in 2016 and estimated povery level stood at 23.1 per cent and 21.8 per cent in 2017 and 2018 respectively.

The Government has adopted policies and programmes to address multidimensional nature of poverty in the country. These include fostering accelerated, inclusive and resilient growth, increasing coverage and effectiveness of social protection, achieving gender parity, increasing the size, reach, and diversity microcredit programmes, promoting financial inclusion, and providing stable macroeconomic environment. Constraint on mobilization of resources especially external resources, implementation of NSSS, enhancing profressional capacity of BBS and preventing slippage into poverty or deeper poverty are some key challenges of achieving SDG 1. Bangladesh will continue to strive to achieve SDG1 emphasizing job creation, social protection, human capital development, improving private investment climate and mitigating the impact of various shocks.

SDG 2: End Hunger

Progress on reducing stunting which stood at 36.1 per cent in 2014 is virtually on track at the current rate of reduction. Similarly, progress on reducing wasting which stood at 14.3 per cent is also on track. Agriculture Orientation Index with a value exceeding 0.5 compares favourably with those of India (0.4), Sri Lanka (0.4) and Nepal (0.2). Total official flows to agriculture sector is low mainly because of changing development partners' preferences in aid allocation over time. It will require alignment of aid policy in view of SDGs emphasis on international support to agricultural transformation.

Besides government policies and programmes to ensure food security to people some specific progrmmes have been adopted to address specific hunger and nutrition issues. These include introduction of nutrition fortified rice, distribution of iron-folic supplementation among pregnant, lactating women and adolescent girls, Vitamin A distribution for children, deworming, salt iodization, maternity leave for mothers to assist breast-feeding, and implementation of WASH programme emphasizing quality water, sanitation and hygiene.

Challenges to Zero Hunger will be related to implementation of the Delta Plan 2100 which takes account of future uncertainties in climate change, socio-economic development, population growth and regional cooperation, addressing hunger in lagging regions and of disadvantaged groups, building resilience of poor people and problems emerging from urbanization. The Government has articulated that these challenges and policies will be in place to address those.

SDG 3: Healthy lives and Well-being

According to SVRS 2017, the child related indicators, namely, under 5 mortality rate (U5MR) (31 per thousand live births) and neo natal mortality rate (NMR) (17 per thousand live births) have already surpassed or reached their 2020 milestone targets (U5MR-34 and NMR-17) ahead of time. Some of the women related targets such as number of medically-trained care providers during child birth, proporption of currently married women who use modern contraceptive method (59.2%) and adolescent (women aged 15-19 years) are very close to reaching their targets in 2020. Steps have been taken to reach the 2020 target of health worker density per 10,000 population. The number of births attended by skilled personnel has increased from 9.5 per cent in 1994 to 53 per cent in 2017 (BDHS 2017). The proportion of births attended by skilled health personnel is targeted to increase to 65 in 2020 indicating the progress is on track.

Bangladesh has remained a low HIV/AIDS prervalence and incidence country. But it is one of the 30 high TB burden countries in the world, one of the major malaria endemic countries in South East Asia, and one of the top 10 countries in the world with high prevalence of current tobacco use.

The Government has been following sector wide approach in the health sector of the country from 1998 and presently the 4th program – Health, Population and Nutrition Sector Program (HPNSP) (2017-22) is being implemented. The program is comprised of three components, namely, governance and stewardship of the sector, strong health systems, and quality health services to achieve health, population and nutrition sector targets and the health related SDGs.

Health sector faces considerable challenges concerning increasing access to, improving quality of and achieving equity in health care services for all. There is also increasing burden of NCDs, increasing incidence of various injuries, drowning, ageing and geriatric diseases, spread of infectious diseases, health effects of geo-climatic disasters and arsenicosis and re-emergence of traditional diseases such as Malaria and TB as mentioned before.

SDG 4: Inclusive and Equitable Quality Education

Gender Parity Index (GPI) exceeded 1 at primary and secondary levels of education and has remained above 1 for more than a decade. GPI at tertiary education reached its peak at 0.737 in 2014 and then declined to 0.701 in 2016 and 0.71 in 2017 respectively. Concerted efforts are needed to reverse the direction of change in tertiary GPI. The proportion of primary school teachers with DPAD/C-in-Ed degree has been rising reaching more than 80 per cent of total teachers in 2015.

The Gross Enrolment Ratio in Pre Primary education has been increasing at a slow pace of 1.45 percentage points per annum since 2013.

The Government has continued to implement policies and programmes to increase access to education and training, improve quality and relevance of education, reduce inequality in education and leverage on knowledge and skills in science, technology and innovation. Despite various government efforts and progress achieved in the education sector in different dimensions significant challenges remain. They concern inclusive and equitable education, quality of education at all levels, quality of teaching, adult literacy and lifelong learning. Future policies and programmes in education sector will focus on sustaining past achievements and dealing with the emerging issues.

SDG 5: Gender Equality and Women Empowerment

Women and girls aged 15 years and over are subjected to different types of violence by their current or former intimate partner as well as by persons who are not intimate partners, and they are significantly more vulnerable to violence by their intimate partners. In 2017, the ***proportion of women aged 20-24 years who were married or in a union before age 15 years stood at 10.70 per cent and before age 18 years 47 per cent which registered some decline over time.*** Women bear significantly greater burden of unpaid domestic and care work in the family than men. ***About a quarter of women's daily time is spent on such work. The proportion of female members in the Parliament has been slowly increasing over time reaching 20.57 per cent in 2017.***

Bangladesh ranks 48 in global ranking of countries with a score of 0.721 indicating significantly better performance in promoting women empowerment compared to her South Asian neighbours.

The Government's efforts to address gender differences pertain to participation in global initiatives, providing policy and legal framework, improving women's human capabilities, increasing their economic benefits, creating enabling environment for women's advancement and implementing Gender Responsive Budget. Some of the key challenges of achieving gender equality in the country are: eradication of violence against women, prevention of child marriage and addressing gender digital divide.

SDG 6: Clean Water and Sanitation

The success of Bangladesh in achieving MDG targets is well recognized. As part of this recognition, Hon'ble PM has been made a member of High Level Panel on Water (HLPW) for SDG 6. This membership has induced lots of activities in SDG 6 and an action plan has been formulated by MoWR. ***Currently 87% of population has access to safe water sources (Target 6.1) and 61% population has access to safe sanitation (Target 6.2).*** For sustainable management of water resources, two key initiatives can be observed related to Target 6.3 (improvement of water quality) and Target 6.6 (protection of water ecosystem). Hazaribag tannery industries have been relocated to Savar in order to improve the severely degraded water quality of Buriganga. To preserve Halda river ecosystem, drastic efforts have been taken this year bearing immediate results in terms of large fish egg collection.

SDG 7: Affordable, Reliable, Sustainable and Modern Energy

It is heartening to note that ***Bangladesh is moving steadfastly towards ensuring access of 100 per cent households to electricity well ahead of the target time in 2025; it reached 85.3 per cent in 2017 (91% in 2018 December).*** The country lags behind in other energy indicators. The combined effect of slow increase in renewable enregy and fast increase in non-renewable energy is very slow rise in the share of renewable energy in the total final energy consumption. Energy efficiency in the country appears to have been improving.

The Government's ongoing efforts to ensure reliable energy supply to all households has been complemented by yet another effort to achieve SDG 7. Key challenges to implementation of the Action Plan will involve financing, pricing and subsidy, fuel mix, gas exploration and energy efficiency.

SDG 8: Sustained, Inclusive and Sustainable Economic Growth and Decent Work

Bangladesh has made an upward shift in the average annual growth rate to more than 7 per cent in the recent years (FY2015-FY2018) from the above 6 per cent rate over the last decade. This coupled with slower population growth led to increasing per person GDP growth and the country is nearly on track to achieve the 2020 target. It is also heartening to note that ***the average annual growth rate of GDP per employed person has already reached the 2020 target in FY2017.*** The estimated unemployment rate in Bangladesh has been closer to 4 per cent for a long time and it can be reasonably expected to remain closer to this long run level in the near future.

There is no official data on child labour after 2013. It may be expected that with stronger growth, and elimination of extreme poverty as well as greater access to education the child labour situation will improve in the future. There has been gradual improvement in financial inclusion variables in recent years indicating increased access of households and businesses to financial services.

There are, however, some aspects of the labour market which are not currently on track. Increasing informality which undermines government efforts to ensure decent jobs and higher unemployment rate of women and persons aged 15-29 years need to be addressed to achieve the 2020 targets. ***About 29 per cent of youth was not in education, not in employment (NEET) in the base year which increased to about 30 per cent in the following year.*** While the proportion of youth male NEET is closer to 10 per cent the proportion of youth female is closer to 50 per cent in 2016/17. Both rates are higher than their levels in the preceding year which puts them off-track.

Achieving SDG 8 targets face some key challenges such as increasing informality in job market, high youth unemployment rate, skills demand and supply mismatch, low female labour force participation, low inflow of foreign resources particularly FDI, workplace injuries, child labour and problems involving migration of workers. The Government's growth enhancing and job creating policies and programmes would be revamped by other policies and programmes such as increasing growth through diversification of the economy, better integration of education system and labour market, enhancing women employmwnt opportunities, lifelong education and attracting external resources.

SDG 9: Resilient Infrastructure, Sustainable Industrialisation and Innovation

The road density per 100 square kilo meter increased to 14.61 kilo meters in 2017 from 14.41 kilo meters in 2010. Upgrade of existing roads by constructing additional lanes has been an important aspect of road infrastructure development in recent years. ***The share of manufacturing value added in GDP has increased significantly already exceeding the 2020 milestone in FY2017.*** Similarly, manufacturing value added per worker has been increasing but its target for 2020 is yet to be set. The share of manufacturing employment in total employment increased up to 2013 and then levelled off in the last two years. Whether this is the beginning of a long term phenomenon whereby rising value added share will be associated with falling employment share will have to wait for judgement.

Total international support to infrastructure has been increasing with some annual fluctuation. ***The proportion of population covered by mobile network has reached close to 100 per cent in case of 2G technology. In case of 3G technology the 2020 milestone has already been achieved in 2017.***

Government's efforts to achieve SDG 9 rest, on the one hand, on providing infrastructure comprising all modes of transport and ICT infrastructure and, on the other hand, on providing policy support to private sector investment as well as foster public-private partnership. Financing, capacity constraints of implementation agencies, complexity of land acquisition are some of the key challenges in this sector. In the face of vulnerability to natural disasters which are worsening due to climate change impact Bangladesh has been building resilient infrastructure.

SDG 10: Reduced Inequalities

The Government has been following a pro-poor development strategy which combines acceleration of economic growth and reduction of poverty and inequality. While the policies have been largely effective in enhancing growth and reducing poverty they have not succeeded in reversing the worsening income distribution. ***According to recent available data (HIES 2016) income inequality has increased while consumption inequality has remained relatively stable.***

There have been some developments with regard to reducing inter-country income inequality. Bangladesh has approved Expatriates' Welfare and Overseas Employment Policy 2016 in January, 2016 with a view to ensuring and encouraging safe migration and protection of migrants and their families.The proportion of tariff lines applied to imports from least developed countries with zero tariffs remains the same as the Doha Round of WTO negotiations—formally, the Doha Development Agenda launched in 2001.

Official development assistance has an increasing trend which has continued in the SDGs period. Foreign direct investment shows an increasing trend with annual fluctuation reaching US$ 2454.8 million in 2017.

The increasing inequality which has implications for poverty reduction and relative deprivation poses a challenge confronting Bangladesh. Partly it is a problem of the inability to bring all types of income under progressive taxation and partly a problem of not being able to appreciably increase the share of government expenditure on education, health, rural development, and social protection in total government expenditure. More focused policies and programmes which have larger impact on reducing inequality have been identified. These include better governance and institutions to combat transfer of income and wealth through rent seeking behavior, corruption in public procurement and spending, illegal land grabbing, and delivery of public services.

SDG 11: Sustainable Cities and Communities

Bangladesh has yet a low level of urbanization with an estimated 35 per cent of the population living in urban areas in 2016. In terms of absolute urban population of 56.28 million, it is quite large. The level

of urbanization in the country ranges from 7.2 per cent in Satkhira district to more than 90 per cent in Dhaka district. Bangladesh has some 570 urban centers, of which Dhaka is a megacity, Chittagong, Khulna, Rajshahi and Sylhet are metropolitan areas, 25 cities are with population of over 100,000 and the rest are smaller towns.

Lack of adequate housing is a key problem in all of the cities and secondary towns in Bangladesh which is manifested in housing deficit of 4.6 million units in 2010. ***Nearly 44 per cent of the urban population lived in purely temporary structures and 29 per cent lived in semi-permanent structures.*** Thus an overwhelming proportion of urban households lived in poor quality houses. There has been significant improvement in the quality of housing in recent years as evident from HIES 2016. Close to 96 per cent of slum households live in poor quality (not pucca) houses.

Phenomenal growth of the demand for transportation services resulting in manifold increases in motorized and non-motorized vehicles causes extreme traffic congestion. In Dhaka city traffic jam incurs a loss of estimated 3.2 million work hours in a day (World Bank, 2018).

According to HIES 2016, 37.28 per cent urban households have access to piped water with wide variation in access to piped water across urban centers. The highest coverage exists in mega city Dhaka where Dhaka Water Supply and Sewerage Authority meets 90 per cent of requirements in its service area.

In almost all the urban centers (except Dhaka) there are no sewers and a large number of households lack connection to septic tanks (Ahmed 2017). There has been, however, significant improvement in the use of sanitary toilet from 32.4 per cent in 1981 to 76.8 per cent in 2017 (BBS, 2017).

In Dhaka City, only 60 per cent of the solid wastes generated daily are collected by the City Corporation. The situation is better in Sylhet and Chattogram with 76 per cent and 70 per cent of solid wastes being collected respectively. Lower proportions of solid wastes are collected in Rajshahi, Khulna and Barisal cities (GED, 2015).

Many of the cities in Bangladesh are vulnerable to various natural disasters such as river erosion, cyclones, droughts, tornadoes, cold waves, floods, flash floods and earthquakes as well as human induced disasters such as fire and building collapse. Bangladesh has made significant efforts to reduce its disaster vulnerability and is considered today a global leader in coastal resilience due to its significant long term investments in protecting lives. Despite these efforts, the vulnerability of the coastal population is on the rise due to climate change. According to Earthquake Disaster Risk Index of Stanford University, in a global perspective Dhaka is one of the most vulnerable cities to earthquake.

Making sustainable cities and communities has become a shared responsibility of diverse stakeholders all contributing to provision of various urban services: urban housing, slum housing, urban transportation, water supply and sanitation, solid waste management, urban disaster risk reduction, air pollution and urban safety and security. Local Government Engineering Department (LGED), Urban Local Government Institutions (ULGIs) and their agencies such as WASA, Development Partners (DPs) and Civil Society Organizations (CSOs) are some of these institutuions.

In order for the cities and towns to play the role of a driving force behind economic and social development a number of challenges have to be addressed including ensuring adequate, safe and affordable housing, ensuring affordable, accessible and sustainable urban transport, ensuring urban resilience, and resource constraints.

SDG 12: Sustainable consumption and production patterns

Food loss and waste is a matter of grave concern globally but especially in developing countries like Bangladesh where millions of people go hungry. Food loss occurs due to problems in harvesting, storage, packing, transport, infrastructure or market / price mechanisms as well as climatic conditions. ***An estimated 10 per cent of crop productivity in Bangladesh is lost during postharvest operations.***

Food that is fit for human consumption, but is not consumed because it is left to spoil or discarded by retailers or consumers is called food waste. ***About 5.5 per cent of the total procured food is wasted*** of which 3 per cent is wasted during procurement and preparation stage, 1.4 per cent during serving, and another 1.1 per cent from the plates.

Solid waste in urban areas is generated from several sources such as domestic, commercial, industrial, street sweeping and health care facilities. The total solid waste generation in all urban centres in Bangladesh in 2005 stood at 13,332.9 tonnes per day of which Dhaka and Chattogram accounted for 34.8 per cent and 11.6 per cent of total waste respectively.

Waste management system in Bangladesh comprising formal, community initiative and informal system is still not well organized. A small proportion of solid waste is recycled into compost. The amount of GHG emission from urban solid waste was estimated at 2.19 million CO2 e per year in 2005.

SDG 13: Climate Action

Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population (Indicator 13.1.1) have fallen over the years. Now it stands at 12,881 with a target of 6500 by 2020 and 1500 by 2030. Given the track record of Bangladesh in disaster management, this target will not be difficult to achieve. MoDMR has prepared Disaster Risk Reduction Strategies of Bangladesh (2016-2020) in line with the Sendai Framework which will be helpful in this regard.

In facing the climate change scenarios, Bangladesh is well prepared with a number of climate change related strategies, plans and actions. Through BCCTF, it has spent around 2700 crores of taka over last 8 years in climate change adaptation. Bangladesh Delta Plan 2100 has been formulated primarily to address climate change adverse impacts and ensuring availability of water for safe multi-uses.

SDG 14: Life below Water

Bangladesh has recently gained a vast swath of marine territory. This marine area is rich in natural gas resources and biodiversity. Exploitation of gas resources may pose grave danger to the biological resources. Sustainable management of these resources is now a big challenge for the country. In recent times, it has declared two marine protected areas, one targeting Hilsa breeding ground and another targeting Cetaceans. Total protected area now stands at 2.05% of the marine area (Target 14.5). Major success has been achieved in Hilsa protection with production almost doubling in last 15 years.

SDG 15: Life on Land

The forest coverage of the country now stands at 17.5% which is targeted to increase to 20% by 2020. The quality of the forest in terms of canopy coverage is becoming a major concern. Increasing tree density is therefore a major target under 7th FYP. In order to protect its very rich bio-diversity, the country has taken many steps which include continuing moratorium on tree felling, declaring ECAs, creating special bio-diversity zones and creating two vulture safe zones.

SDG 16: Peace, Justice and Strong Institutions

The number of victims of intentional homicide reduced significantly from baseline values. Appropriate measures undertaken by the government of Bangladesh contributed significantly to improving human trafficking and youth mental and physical abuse. Improvement has also taken place in other vital sectors. For example, number of victims of human trafficking declined more than the required rate in the past couple of years. If the current average performance continues, majority of the SDG targets of Goal 16 will be achieved ahead of the estimated time frame.

Some important challenges to ensuring peace and justice include lack of comprehensive and updated data on various types of offences, proper enforcement of laws, capacity of the judicial system to handle heavy volume of cases and lack of reporting/timely reporting of incidence of violence/crime.

To build effective and accountable institutions and combat corruption in public service the Government has been implementing some governance related initiatives, e.g., Annual Perfomance Agreement (APA), Citizen Charter, National Integrety Strategy (NIS), and Grievance Redress System (GRS) under social protection programmes. These tools will ensure creation of more responsive and corruption free public institutions in the future.

SDG 17: Global Partnership for Sustainable Development

Majority of the indicators, for which data are available, suggests that they remarkable progress has been made during the SDGs implementation period and they are on track. Government revenue as proportion of GDP has increased more than the estimated required rate due mainly to the measures undertaken for increasing the number of tax payers, and prudent tax collection and management mechanism. Data on ODA indicate modest growth although its contribution to the national budget fell marginally in the recent years. Inflow of FDI and remittance requires substantial increase. Other indicators such as access to internet, and use of internet communication facilities by individuals have improved significantly in the recent years. Expansion of fiber optics cable network, increase in optical fiber capacity etc. have been contributing towards achieving the SDG target. If the current average annual performance rate continues in the following years the targets for 2030 will be achieved quite easily in almost all the cases.

Achieving SDGs will critically depend on the availability of resources including external resources. The need for enhanced international cooperation and support has been emphasized for achieving 41 of the 169 targets of SDGs. International community will have to provide adequate and timely support to Bangladesh to help implement a comprehensive and all-encompassing development agenda like SDGs 2030.

Way Forward

All the indicators for which data are available reveal improvement in the SDGs period except a few such as the Gender Parity Index at tertiary level education. In other cases the rate of progress varies from indicators which will reach the target at the current pace of progress to indicators which will miss the target. The implementing Ministries and their Agencies will need to assess their respective status and fix their future work plans accordingly to achieve the SDGs. Ministries need to be particularly attentive in implementing SDGS Action Plan what they have formulated.

In fact, these findings are a source of encouragement for rejuvenated actions by all people of Bangladesh towards achieving the SDGs by the deadline or well ahead of the deadline as happened in the case of MDGs. In this context, the performance assessment of progress in SDGs implementation by UN Sustainable Development Solutions Network may be mentioned. Incidentally, the report found Bangladesh lagging in several areas resulting in “red” threshold on 10 of 17 SDGs. Experience from preparing this assessment report indicates that the UN report was carried out with limited data on the relevant indicators to show any meaningful progress. While limitation of data still persists, evidence based improved situation can be obtained from the current exercise with the latest data available.

Introduction:
On SDGs Implementation Pathway

Background

The challenge of maintaining sustainability in the context of prevailing patterns of growth and development began to be recognized at the global level since the early seventies. The UN Conference on the Human Environment in Stockholm in 1972 and several influential publications such as Limits to Growth published by the Club of Rome (1972) and World Conservation Strategy: Living Resource Conservation for Sustainable Development (IUCN 1980) brought the issue of sustainable development to the global forefront. The formal definition of the concept of sustainable development was first introduced in the Brundtland Report, Our Common Future, by the World Commission on Environment and Development (WECD) in 1987: Sustainable development is development that meets the needs of the current generations without compromising the ability of the future generations to meet their needs. This intergenerational concept of sustainable development was widely adopted including at the United Nations Conference on Environment and Development (UNCED) in 1992 (Rio Earth Summit).

Overtime the concept of sustainable development has evolved from focusing less on intergenerational needs and more on the holistic approach embracing economic development, social inclusion and sustainability. In 2002, at the World Summit on Sustainable Development (WSSD) in Johannesburg the governments adopted the Johannesburg Plan of Implementation which called upon "the integration of the three components of sustainable development – economic development, social development and environmental protection – as interdependent and mutually reinforcing pillars." The concept of intergenerational justice remains but is now secondary to the holistic view of sustainable development.

The UN Conference on Sustainable Development held in 2012 to commemorate the twentieth anniversary of the Rio Summit (Rio + 20 Summit) emphasized the three-part vision of sustainable development in the final outcome document, "The Future We Want". The Sustainable Development Goals called for in the same outcome document were also based on the three-part framework.

The United Nations General Assembly at the 70th session held on 25 September 2015 adopted the outcome document of the UN summit for the adoption of the post-2015 development agenda entitled Transforming Our World: the 2030 Agenda for Sustainable Development and decided on new global Sustainable Development goals (SDGs). At the core of the 2030 Agenda is a list of 17 Sustainable Development Goals (SDGs) and 169 targets to end poverty, hunger and inequality, take action on climate change and the environment, improve access to health and education, care for people and the planet, and build strong institutions and partnerships. The SDGs are unprecedented in terms of scope and significance and go much beyond the MDGs (2001-15) by including economic growth, sustainable production and consumption, sustainable urbanization, innovation, data generation for tracking progress and the importance of peace and justice for all in the agenda. The Agenda calls for action by all countries, poor, rich and middle income. The SDGs are not legally binding, but governments are expected to take ownership and establish national frameworks for the achievement of the goals.

Bangladesh's engagement in the 2030 Agenda process

Bangladesh has been widely acclaimed as one of the forerunners of MDGs implementation. It achieved many targets ahead of time and others within the 2015 deadline. It made outstanding progress in the areas of poverty alleviation, ensuring food security, primary school enrolment, and gender parity in primary and secondary level education, lowering infant and under-five mortality rate and maternal mortality ratio, improving immunization coverage, and reducing the incidence of communicable diseases. Buoyed by its success Bangladesh became an active participant of the global process underlying the preparation of post-MDG agenda with its domestic and global actions.

Internally, the General Economics Division (GED) of the Planning Commission, supported by the UN System in Dhaka led by UNDP, steered the preparation of a draft of the post-2015 Development Agenda along with Goals and Targets and several indicators. Several rounds of consultations with multiple stakeholders including government officials, public representatives, CSOs, and media representatives took place in 2013 at both the national and the sub-national levels. The document also

benefited from inputs provided by relevant government ministries, experts from UN organizations, and development partners. The final consultation held in June 2013 was inaugurated by the Hon'ble Prime Minister and was participated among others by Ministers, Advisors to the Prime Minister, Secretaries of Ministries, and Civil Society Organizations. Finally, the Post-2015 Development Agenda: Bangladesh Proposal to UN came up with 11 goals, 58 targets and 241 indicators. The goals concerned pressing development issues embracing human potential, poverty and inequality, food security and nutrition, health and family planning, gender equality, quality education and skills, employment and worker rights, good governance, sustainable production and consumption, environmental sustainability and disaster management, and international cooperation and partnership.

Notably the Bangladesh proposals were consistent with the global aspirations as 9 out of 11 proposals were common to those proposed by Open Working Group (OWG) of the United Nations and other goals proposed by OWG were also these in Bangladesh proposal but as targets of different goals. The Government of Bangladesh along with other UN Member States formally adopted the Sustainable Development Goals (SDGs) as a global agenda on 25 September, 2015.

Integrating SDGs into the national development agenda

SDGs and the 7th Five Year Plan

Bangladesh experienced a fortuitous combination of two simultaneous processes which significantly facilitated integration of SDGs into the national development agenda. While the Government was participating in the 2030 Agenda process at the global level, it was also preparing the 7th Five Year Plan at the national level. Accordingly, the sustainable development goals proposed by the UN Open Working Group (OWG) received serious consideration for integration into the national plan. The goals were also given emphasis while setting the priority areas of the 7FYP. The 7th Plan being the guiding document that would be implemented in five years, achievement of Plan objectives and targets will contribute towards achievement of SDGs. All the 17 goals have been integrated into the plan. Of these goals Goal 14, Goal 16 and Goal 17 of the SDGs (18%) are partially aligned with the 7FYP while the rest 14 goals (82%) are thematically fully aligned with it.

A Development Results Framework (DRF) has been embedded in the Plan for monitoring the 7FYP. The outcomes and targets in the DRF which are aligned with the SDGs focus on macroeconomic development, poverty reduction, employment, education, health, water and sanitation, transport and communication, power, energy and mineral resources, gender and inequality, environment, climate change and disaster management, ICT, urban development, governance, and international cooperation and partnership. The DRF was prepared in a consultative process in order to address the views of different actors and develop a robust and rigorous result based monitoring and evaluation framework.

Means of implementation of SDGs

Institutional arrangements for achieving SDGs

Recognizing the challenge of implementation of ambitious and transformational SDGs the Prime Minister established an Inter-Ministerial Committee on SDGs Monitoring and Implementation demonstrating her commitment. The Committee comprising Secretaries from 20 Ministries/ Divisions will coordinate SDGs monitoring and implementation. The Principal Coordinator (SDGs Affairs), a newly created high level position in the Prime Minister's office, heads the Committee. GED is the secretariat for the committee to coordinate implementation at the policy level along with monitoring and reporting SDGs attainment status.

The Committee has already started working on priority setting and contextualizing global goals with the national ambitions requesting all ministries to identify relevant goals and targets and reflect these in their respective sector plans as well as in newly introduced Annual Performance Appraisal (APA). The Committee will report the SDGs implementation status to the Cabinet in every six months.

Mapping of ministries by sustainable development goals and targets

The 7th Five Year Plan framework comprises two broad parts: Part 1 focuses on macroeconomic perspective, and Part 2 focuses on sector development strategies spreading over 13 sectors. The plan is implemented mainly through programs and projects derived from the sectoral strategies. The sectors are highly aggregative and a number of Ministries/Divisions are responsible for preparing and implementing projects/programs under a particular sector. A cursory look at the targets of SDGs indicates a complex web of Ministries/Divisions are responsible for attaining a particular target. In order to delineate the responsibilities of different ministries/divisions to each of the targets the Government has mapped the relevant ministries/divisions by goal and associated target. The mapping exercise has assigned the lead role in attaining a target to a particular ministry/division or organization which is supported in most cases by a co-lead ministry/division. All other ministries/divisions which have a stake in a particular target are grouped under associate ministries/divisions. The SDG Mapping is done in the Action Plan Format that identifies the actions during the Plan period, existing policy instruments and proposed global indicators for performance measurement.

Preparation of Ministry/Division Action Plan and the National Action Plan for the implementation of SDGs

As a sequel to the mapping exercise the ministries/divisions/organizations are required to prepare their respective action plans which would have specific actions/activities and interventions to achieve their respective goals/targets. The Ministries are consulting both the 2030 Agenda and the 7th FYP to formulate short, medium and long-term sector specific plans for the 7th FYP period and beyond.

The National Action Plan for the implementation of the SDGs has been prepared by GED, Bangladesh Planning Commission which has coordinated the Action Plans of the 43 lead Ministries/Divisions through a rigorous process of consultations, review and feedback. The Plan lists the ongoing projects/programmes that contribute to the achievement of a particular goal and its targets, identifies new projects/programmes that will need to be undertaken during the remaining period of the 7th Plan as well as beyond the current Plan period with indicative costs. New policies/strategies that might be needed in the process are also stipulated. This Plan will guide the Ministries/Divisions/Agencies to determine their respective investment portfolio that will be realized to attain SDGs as well as the related objectives of Five Year Plans and help assess the performance of the ministries in achieving goals /targets. The Plan represents a dynamic/living document which leaves scope for amendment/revision during the preparation of the 8th Five Year Plan.

Data gap analysis for SDGs

The need for data and statistics to monitor the progress on SDGs to ensure their full implementation by target date was amply demonstrated by the United Nations Secretary General's High Level Panel of Eminent Persons on the Post-2015 Development Agenda which called for a "data revolution" in 2013. It is also realized that countries especially developing countries do not currently generate all the data needed for monitoring the relevant indicators. Accordingly, Bangladesh undertook two separate exercises – one by the BBS and the other by the Planning Commission to understand the current state of data and nature and extent of data deficit to monitor progress on and take informed policy decisions on the implementation of the post-2015 agenda.

The General Economics Division (2017a) undertook an assessment of the current status of data in the country – the availability of data from different sources and the gap that needs to be filled through generation of new data. The exercise involved all the relevant data generating agencies including Bangladesh Bureau of Statistics.

The report divides the indicators into three types depending on the status of data availability: i. Indicators for which data are readily available, ii. Indicators for which data are partially available meaning that some modification, addition and analysis are required in the existing census or survey for obtaining pertinent data, and iii. Indicators for which data are not available giving rise to need for new census or

survey. It is observed that 70 indicators (29 per cent) belong to the first category, 63 indicators (26 per cent) belong to the third category, and 108 indicators (45 per cent) belong to the second category. Data availability, its timeliness and quality pose a significant challenge to effective monitoring that could help informed policy decisions.

Prior to the data gap analysis undertaken by GED, Bangladesh Bureau of Statistics (BBS, 2016) carried out an exercise to identify the data gaps in setting base year and reference year and in monitoring progress on the implementation of the Development Results Framework (DRF) of 7th Five Year Plan (2016-2020) and the targets of Sustainable Development Goals (2016-2030). BBS classifies data into three categories: data available from BBS, data available outside BBS, and data not available. BBS can directly provide the first category of data and it needs to mainstream "administrative data" in the second category of data. BBS can play a leading role in generating administrative and official data. The exercise also identifies relevant short, medium and long term projects and programs that have to be undertaken to fill the data gaps and establish strong data base for reference/base year for measurement of progress implementation of 7th FYP and SDGs.

Monitoring and Evaluation Framework of SDGs

The Monitoring and Evaluation Framework of SDGs (GED, 2018) has been developed to track progress on implementation and achievement of SDGs in Bangladesh in the next 13 years. Several issues need to be highlighted before discussing the M&E framework. First, because of the wide range of aspects of the economy and its depth that need to be measured to assess the progress on SDGs, the set of indicators to measure progress is diverse and complex. In many cases a target is not measured by a single number rather by multiple numbers depending on the level of disaggregation. Secondly, BBS did not generate data on many aspects of the economy to meet the data requirements of our national development plans and consequently data on many indicators are simply not available. Thirdly, data are generated by BBS or other government agencies through periodic surveys, the periodicity varies from five years for Household Income and Expenditure Survey to three years for Bangladesh Demographic and Health Survey. Interestingly, BBS has been conducting Quarterly Labour Force Survey which it used to conduct traditionally at three years interval. Fourthly, data generation through more frequent surveys as well as generation of more disaggregated data (such as spatial, gender, age-group, ethnicity, employment status) will require increasing financial and human resources, logistics support as well as use of modern technology.

The monitoring framework provides baseline data for each indicator for which data are available and the target for the terminal year of SDGs, i.e., 2030 with two milestones -2020 and 2025, in the intervening period. Information on relevant agency currently responsible for generating data along with the ministry/division to which the agency belongs as well as the title of the publication where the data appear are provided for quick and easy identification of data sources.

Lacking availability of data uniform baseline could not be set for all the indicators. The indicators for which annual data are available 2014-15, the final year of MDGs, has been taken as the baseline. On the other hand, if an indicator does not have data for 2014-15 the latest available survey data is taken as the baseline. The baseline data is set for 127 indicators and M&E framework is designed for 108 indicators. Milestones are yet to be set for some of the indicators that are of qualitative in nature. Following the classification in the Data Gap Analysis the indicators are classified into readily available, partially available, and not available data. Presently, 64 indicators are readily available, 58 indicators are partially available, and 110 indicators are not available. Lacking data from national sources, international sources like WB, FAO, WHO, and ILO have been utilized to set baseline for 22 indicators. It is to be noted that the not available category includes 81 indicators for which metadata is yet to be finalized by the IAEG-SDGs. This indicates the enormity of the data generating task confronting the country.

Some other aspects of data in terms of availability and sources may be highlighted. First, an analysis of data availability by Goal shows that while SDG 3, SDG 4, SDG 9, SDG 5, SDG 8, SDG 17, SDG 7 and SDG 2 are in better situation in terms of data availability, data availability is challenging for SDG 12, followed by SDG 14, SDG 13, SDG 11, SDG 16, SDG 10 and SDG 15.

Secondly, majority of data of SDGs will be generated by the Statistics and Informatics Division (SID); out of 244 indicators, 105 will be provided by them. Ministry of Environment and Forest will be the second largest data provider (42), followed by the Ministry of Health and Family Welfare (34). Economics Relations Division will provide information for 28 indicators and Finance Division for 20.

Thirdly, considering agencies or units of Ministries/Divisions that will be responsible for data generation for SDGs monitoring it is observed that BBS, NSO of the Government, will be the single largest institution to produce reliable and disaggregated data timely. BBS will be followed by DoE, DGHS, BFD, NIPORT and BB.

SDGs financing strategy

Implementation of ambitious SDGs requires huge amount of resources during the 2017-2030 period. Mobilization and effective use of this resource pose considerable challenge to the developing countries. Bangladesh is committed to achieving SDGs and hence needs to estimate the amount of resources that will be required, financing sources, and financing instruments and strategies. The "SDGs Financing Strategy: Bangladesh Perspective" prepared by the General Economics Division of the Planning Commission provides an estimate of the annual resource gap and an opportunity to revise the government interventions and financing strategies accordingly. The estimates show that an additional amount, over the current provision of investment related to SDGs by public sectors and external sources, would be US$ 928.48 billion at 2015-16 constant prices. This amount would be required for SDGs implementation over the period of FY 2017-FY 2030, which is 19.75 per cent of the accumulated gross domestic product (GDP) under the 7th Five-Year Plan (FYP) extended growth scenario. The annual average cost of SDGs would be US$ 66.32 billion (at constant prices) for this period. The costing exercise covers close to 80 per cent of the 169 targets of SDGs.

The study has suggested five potential sources of gap financing. These are: Private Sector Financing, Public Sector Financing, Public-Private Partnership (PPP), External Financing comprising Foreign Direct Investment (FDI) and foreign aid and grants, and Non-Governmental Organizations (NGOs).On average, public sector would account for around 34 per cent of the financing requirement, whereas private sector has the share of around 42 per cent during 2017-30 period. The Goals and associated targets of SDGs have large public goods aspect whose provision would require higher public funding relative to private sector's contribution. The average share of PPP is 6.0 per cent. The external sources would constitute close to 15 per cent where FDI would make up 10 per cent and foreign aid would comprise 5.0 per cent of financing gap. Finally, the NGOs would contribute around 4.0 per cent for the same period.

Assimilation of SDGs targets in performance agreement

The Government has introduced Annual Performance Agreement (APA), a results-based performance management system, to help ensure a systematic review of all Ministries/Divisions to generate more accountability and effectiveness in public organizations. Under this system an Annual Performance Agreement is signed between the Secretary of concerned Ministry/Division and the Cabinet Secretary. The APA is expected to enhance the performance of concerned Ministries/Divisions involved in SDGs implementation.

Approach to SDGs implementation: 'Whole of Society' approach

The Government of Bangladesh has consistently applied "whole of society" approach to the preparation of national development plans and policy documents of national importance. The Government has been applying this approach throughout the processes of SDGs preparation. For example, the Post-2015 Development Agenda: Bangladesh Proposal to UN (GED 2013) was prepared with inputs from multiple stakeholders including national experts, private sector and CSO representatives, and development partners.

The Government has extended this strong tradition to the implementation of ambitious SDGs. Several consultations on 'Stakeholders' Engagement on the SDGs Implementation in Bangladesh' have been held with representatives from NGOs, CSOs, businesses, development partners, ethnic minorities, professional groups, labour associations, women network and Media. The consultations have sought to raise more awareness, interest and commitment to create more engagement from all stakeholders towards attaining SDGs.

In view of the critical role of the private sector in attaining SDGs consultation meetings between the Government of Bangladesh, private sector and the UN System on the 'Role of the Private Sector in Facilitating the SDGs' have been held to highlight the broad outlines for private sector actions on SDGs implementation. The Government also appreciates the value of media in creating awareness of people that the agenda guiding development up to 2030 is sustainable development. Effective and coherent role of both print and electronic media in creating SDGs awareness and branding of success would be strongly needed.

Methodology and process for preparation of the first progress report

The first progress report on SDGs implementation in Bangladesh has been prepared following a rigorous methodological framework. This involves a thorough understanding of the 7th Five Year Plan document, and the documents related to SDGs prepared by General Economic Division of the Planning Commission including Monitoring and Evaluation Framework of Sustainable Development Goals (SDGs): Bangladesh Perspective (2018), National Action Plan of Ministries/Divisions by Targets in the Implementation of Sustainable Development Goals (2018), Data Gap Analysis for Sustainable Development Goals (SDGs) : Bangladesh Perspective (2017) and SDGs Financing Strategy: Bangladesh Perspective (2017).

Significant efforts were made to gather data on the indicators from Bangladesh Bureau of Statistics, the National Statistical Organisation, and other concerned Ministries/Divisions. Data and information have been collected also from international sources such as World Bank, UN, FAO, ILO and OECD to fill the data gap. At a later stage further updated data were provided by concerned Ministries/Divisions during the Conference on SDGs Implementation Review (SIR) in July 2018.

The preliminary draft of the document has been reviewed internally in GED and necessary revisions were carried out. Following the long established tradition of GED of involving stakeholders in the various stages of preparation of national policy and plan documents, two stakeholder consultations were organised. The valuable inputs obtained from these consultations have helped improve the document.

Constraints on monitoring SDGs implementation in Bangladesh

Complexity of targets

In many cases the targets are complex and emphasize many different aspects. It may be said, SDGs cover too many targets to attain at a time. Whole SDGs were seemingly academically done rather than considering practical aspects of implementation. Nontheless achievement of broad goals/targets will make our planet a much better place to live. Achieving a particular target requires investment which can contribute to improvement in some aspects of the target but not all. In such cases investment might have to be spread over several projects/programmes increasing the investment size. Taking a simpler example, Target 1.1 stipulates eradication of poverty for all people by 2030 and in indicator 1.1.1 people are classified by gender, age, employment status and geographical location (rural/urban). Currently Bangladesh generates data on poverty at national level and by geographical location, education level of household head and sex of household head.

Synergy and dissonance of SDGs

Designing and implementing policies to SDGs by target year of 2030 poses considerable challenge for planners and policymakers. Many of the SDGs are linked, sometimes in subtle ways. SDG policy in one sector can cause unanticipated underachievement in another sector. For example, if a nation (least developed or developing) emphasizes Goal 8 through private and public investment for accelerated growth for job creation, may affect rise of inequality concerning Goal 10 as of usual development plan. Conversely, SDG policy in one sector can cause synergistic overachievement in another sector (Pedercini and Arquitt 2016). Policies and programmes to achieve SDGs need to take into account these complex linkages characterized by synergy and dissonance.

Limitations of data

Given the all-encompassing nature of SDGs even the developed countries face the problem of adequate data for monitoring implementation of SDGs. The problem of lack of sufficient data is more acute in developing countries like Bangladesh. The Government has conducted a Data Gap analysis which identifies the nature and extent of limitations of data for monitoring SDGs. Of the 232 indicators data for 70 indicators are readily available from existing data generating system (of course, for some with lag of two three years). Data for another 108 indicators can be generated by modifying data from existing censuses, surveys and MIS, and that would require time to get required data. Whatever data are available they are, in many cases, not available at the required level of disaggregation. Further, as data are generated at different time intervals – from every quarter (Labour Force Survey) to every five years (Household Income and Expenditure Survey) to every ten years (Population and Housing Census), at any point of time many indicators lack up to date data making uniform assessment of implementation progress of SDGs obviously difficult.

Lack of data also affects design and implementation of projects/programmes. The situation of a particular indicator cannot be assessed in the absence of data and evidence based policies and programmes cannot be designed to influence this indicator in the desired direction.

Limitations of the report and way forward

The report could not present uniform assessment of all SDGs because of complete lack of data and lack of up to date data for the relevant indicators. Where data for two consecutive years from the start of SDGs are available simple linear projection has been used to see if the progress is on track to hit the 2020 milestone. In other cases data from SDGs period have been used in combination with data from the latest years of MDGs period to make such a judgment. In the case of a single data point the report abstains from making any quantitative judgment.

The Government is fully aware of the paucity of relevant data and has been undertaking measures to generate timely and quality data and update data at regular frequency. Notwithstanding the data inadequacies GED decided to go ahead with the task of the first evaluation report to reveal the inner problems of implementation and to be aware of limitations. This demonstrates the level of commitment of the government to its pledges to the international community to take all the necessary steps to design and implement policies and programmes and evaluate progress and adopt necessary actions to be on the right course.

This report will be a source of motivation for all stakeholders to undertake actions to enhance performances in SDGs implementation to achieve the milestones in the course of achieving the SDGs by the deadline of 2030. To capture the rate of progress existing weaknesses in data generation regarding timeliness, frequency, quality and disaggregation have to be addressed adequately and perhaps urgently.

1

End Poverty

End poverty in all its forms everywhere

1.1 Global perspective on SDG 1

An estimated 767 million population lived below the poverty line in 2013 amounting 11 per cent of the world population. Most of this population lived in developing countries especially sub Saharan Africa and South Asia. South Asia alone is the home of 50 per cent of world's poor. SDG 1 calls for eradication of extreme poverty everywhere and halving poverty in all its dimensions over the next 15 years. It envisions poverty reduction of all people irrespective of gender and age and social protection benefits for people including the poor and the vulnerable. It seeks to ensure equal rights and access to economic and natural resources as well as to technology and financial resources. It focuses on building resilience of the poor and reducing their vulnerability to all types of shocks including climate related ones. It also emphasizes mobilization of resources from a variety of sources including through enhanced development cooperation and creating sound policy frameworks based on pro-poor and gender-sensitive development strategies for accelerated poverty reduction.

1.2 Assessment of Progress on SDG 1 by indicators

Indicator 1.1.1 Proportion of population below the international poverty line

Despite notable progress in poverty reduction a large number of population are still poor and about half of them are extreme poor. The proportion of the population living on less than $1.25 a day measured at 2005 international prices, adjusted for purchasing power parity (PPP) was estimated by the World Bank as the measure of extreme poverty. This was the average of 15 national poverty lines from some of the poorest countries in the world. This poverty line has been updated with proportion of population living on less than $1.90 a day at 2011 international prices adjusted for PPPs used as the new measure of extreme poverty Table 1.1 shows declining trend in the incidence of poverty over the years. The incidence of extreme poverty is considerably lower for the updated measure but both measures display similar downward trends.

Between 2010 and 2016 the incidence of poverty declined at an average annual 0.94 percentage points. This poverty line was estimated by the World Bank to make inter-country comparisons of poverty across countries. However, for measuring poverty within a country national poverty line is more appropriate.

Table 1.1 Proportion of population below the international poverty line

Poverty measure	1992	2000	2005	2010	2016
$1.90 a day	44.2	33.7	24.5	18.5	13.8
$1.25 a day	70.2	58.6	50.5	43.3	NA

Source: World Bank, World Development Indicators

Indicator 1.2.1 Proportion of population below the national poverty line

Bangladesh has been successful, as mentioned above, in achieving significant reduction in poverty since 1991-92. National poverty measured as the proportion of population living below the national upper poverty line has consistently declined reaching 31.5 per cent in 2010 and 24.3 per cent in 2016. According to recent estimates it has declined to 21.8 per cent in 2018.

Table 1.2 Trends in Poverty Using Upper Poverty Line (2122 kcal/day), 1992-2016

	1991-92	2000	2005	2010	2016	2017 (Estimated)
National	56.7	48.9	40	31.5	24.3	23.1
Urban	42.8	35.2	28.4	21.3	18.9	na
Rural	58.8	52.3	43.8	35.2	26.4	na

Source: BBS, Household Income and Expenditure Survey, various years.

While poverty has consistently declined over the period the rate of fall shows some weakening during the 2010-16 period compared to the 2005-2010 period. Poverty rate declined by average annual 1.7 percentage points in the earlier period but it fell by 1.2 percentage points in the latter period. The weakening of the effect of growth on poverty is attributable to rising inequality in income distribution during the latter period. Both urban and rural poverty exhibit similar downward trends with narrowing of rural-urban disparity in poverty. Rural poverty has been falling at a relatively faster rate compared to urban poverty resulting from rapid transformation of the rural economy. A notable feature of poverty reduction is that not only poverty rate has declined over the period but also the absolute number of poor has declined from 83.06 million in 1992 to 39.60 million in 2016 implying millions of people have been lifted out of poverty. However, with sustained growth rate in excess of 7 per cent in recent years and still higher growth rate expected in the coming years poverty rate will continue to fall at a faster rate and may reach the milestone. The estimated poverty rate stood at 23.1 per cent 2017.

Extreme poverty (lower poverty line) has also declined persistently during this period with rate of decline slowing down in the 2010-16 period (0.78 percentage points) compared with the 2005-10 period (1.5 percentage points). According to recent estimates extreme poverty has declined to 11.3 per cent in 2018.

Table 1.3 Trends in Poverty Using Lower Poverty Line, 1992-2016 (Per cent)

	1991-92	2000	2005	2010	2016	2017 (Estimated)
National	41	34.3	25.1	17.6	12.9	12.1
Urban	24	19.9	14.6	7.7	7.6	na
Rural	43.8	37.9	28.6	21.1	14.9	na

Source: BBS, HIES various years

Extreme poverty has been falling in both urban and rural areas and urban-rural disparity has also been falling though rural poverty stood twice as high as urban poverty in 2016. Extreme poverty is overwhelmingly rural phenomenon. Further, while extreme poverty declined sharply in rural areas it remained almost unchanged in urban areas between 2010 and 2016. The absolute number of extreme poor has declined from about 27 million people to about 21 million people during this period which implies Bangladesh has been able to lift 6 million people out of extreme poverty. Despite progress in reducing extreme poverty the number of extreme poor is staggering.

Bangladesh Bureau of Statistics (BBS) does not yet generate statistics for many of the poverty indicators relevant for monitoring progress towards attaining SDGs. A notable gap is in information on poverty by sex. However, BBS provides statistics by gender of household heads as shown in Table 1.1b.

Table 1.4 Trends in poverty by gender of household heads, 2000 – 2016 (Per cent)

	2000	2005	2010	2016
Male				
National	49.0	40.8	32.1	24.8
Urban	35.1	28.7	21.7	18.8
Rural	52.5	44.9	35.9	27.1
Female				
National	47.2	29.5	26.6	19.9
Urban	37.1	24.4	17.5	19.7
Rural	50.6	31.0	29.3	20.0

Source: BBS, Household Income and Expenditure Survey, various years.

It is evident that incidence of poverty of female headed households has declined over time at national as well as regional levels. Two interesting features of female poverty are clear from the table. The incidence of poverty is lower in female headed households compared with male headed households. Disparity between urban and rural poverty in female headed households has been declining over time and by 2016 regional parity has been nearly achieved. Remittance flows to female headed households especially in rural areas, government programs benefitting women and increase in wages in rural areas account for such a pattern of poverty of female headed households.

The sustained decline in poverty with periodic variations in the rate of decline is an outcome of sustained growth of the economy exceeding 7 percent in recent years. Other important factors that contribute to significant poverty reduction include public spending on health, education, social protection and infrastructure, increased inflow of external remittances and expansion of micro-credit programs.

Indicator 1.3.1 Proportion of population covered by social protection systems

Bangladesh has developed a wide network of Social Protection Programs (SPPs) to address the problems of poverty, vulnerability and marginalization. The programs include civil service pensions, allowances for population groups with special needs, food security and disaster assistance programs, workfare programs and programs focused on human development and empowerment.

Allocation of resources across 140 programs under 20 ministries reduces the impact of programs and gives rise to duplication in program objectives and beneficiaries. The Government of Bangladesh has adopted National Social Security Strategy in 2015 prepared by the GED, Planning Commission to create a social protection system that is inclusive, better mitigates lifecycle risks and prioritizes the poorest and most vulnerable.

BBS started to provide data on coverage of Social Safety Net Programs (SSNPs) beginning with the Household Income and Expenditure Survey 2005. The number of the programs included increased in subsequent surveys. The coverage of SSNPs has increased both in terms of percentage of households as well as percentage of beneficiaries over time. Between 2010 and 2016 the proportion of program beneficiaries has increased annually by about half a percentage point.

Table 1.5 Trends in Coverage of Social Safety Net Programs, 2005-2016 (Per cent)

Survey year	National		Urban		Rural	
	Household	Program beneficiary	Household	Program beneficiary	Household	Program beneficiary
2016	27.8	28.7	10.6	10.9	34.5	35.7
2010	24.6	24.6	9.4	9.4	30.1	30.1
2005	13.06	NA	5.45	NA	13.06	NA

Sources: BBS, HIES, various years

Indicator 1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

Bangladesh is prone to various types of natural disasters because of its unique geographical location with the Himalayas to the north and the Bay of Bengal to the south. Key natural disasters are riverine floods, river erosion, flash floods, tropical cyclones, storms/wave surges, water logging, droughts, and landslides. Earthquake is also a potential threat to the country. Bangladesh is one of the countries that are most vulnerable to climate change impacts. The frequency and magnitude of the natural disasters will increase with global warming and climate change impact. However, the Government of Bangladesh has over the years adopted measures to establish an elaborate disaster management system involving the central and local governments, non-government organizations and community level organizations

to mitigate impacts of disaster and disaster related risks. This has resulted in significant reduction in natural disaster related deaths. A report (BBS 2015) on Impact of Climate Change on Human life by shows that 12,881 per 100,000 persons were affected by climate related disasters in 2014.

Indicator 1.5.2 Direct economic loss attributed to disasters in relation to global GDP

Direct economic loss is estimated as the monetary value of total or partial destruction of physical assets existing in the affected area. These include homes, schools, hospitals, commercial and governmental buildings, transport, energy, telecommunications infrastructures and other infrastructures; business assets and industrial plants; production such as standing crops, agricultural infrastructure and livestock. They may also include environmental and cultural heritage (OECD, 2016). The estimates of BBS (2015) show the direct economic loss inflicted by disasters as a proportion of GDP stood at 1.3 per cent in 2014 (baseline).

Indicator 1.5.3 Adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030

The Sendai Framework is the first major agreement of the post-2015 development agenda which aims to achieve substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

The agenda includes seven global targets and four priorities for action. The agreement is non-binding and envisages that the government has the primary responsibility to reduce disaster risk. But the responsibility has to be shared with other stakeholders including local government, the private sector and other stakeholders.

Ministry of Disaster Management and Relief (MoDMR) has prepared National Plan for Disaster Management (NPDM) (2016-2020) based on Sendai Framework for Disaster Risk Reduction (2015-2030) (SFDRR) and other international protocol ratified by the Government of Bangladesh.

Indicator 1a.2: Proportion of total government spending on services (education, health, and social protection)

During the MDGs period Bangladesh made considerable progress in universalization of primary education, reducing drop outs, improving completion of the cycle, and improving quality of education. It also achieved gender parity in primary and secondary education.

Similarly, in the Health, Population and Nutrition sector Bangladesh was able to attain some of the health indicators of MDGs such as reduction of prevalence of underweight children, reduction of under-five child mortality rate. However, in the case of other indicators such as reduction of maternal mortality rate and reduction of under nutrition, progress was achieved in different degrees.

The focus of social protection and its coverage have been pointed out above. In order to meet its commitments to deliver these essential services government has devoted significant amount of resources to these sectors. There has been increasing trend in the absolute level of government spending in these sectors. But the share of these sectors in total government expenditure shows annual fluctuations. In FY2015 government spending on these essential services as proportion of total government expenditure stood at 4.81 per cent for health, 12.82 per cent for education and 12.72 per cent for social protection. The share of health sector peaked at 6.53 per cent in FY 2016-17. The share of education sector peaked at 15.15 per cent in FY2016 followed by a decline in the following year. The share of social protection peaked at 15.25 per cent in 2016-17. As proportion of government expenditure share of the three components of services show mixed trends which may increase to achieve 2020 milestone provided education's share rises in the future.

Table 1.6 Proportion of government expenditure on services as proportion of total government expenditure (Per cent)

Services	2013-14	2014-15	2015-16	2016-17
Education	13.39	12.82	15.15	14.42
Health	4.60	4.81	4.80	6.53
Social protection	12.30	12.72	13.60	15.25

Source: Calculated from budget figures by Ministry of Finance

1.3 Government efforts to achieve goa1 1

Faster, inclusive, sustainable and resilient growth: Bangladesh adopted strategies for rapid economic growth and complementary strategies and policies to make the growth path inclusive, responsive and adaptable to the transformation process. Policies are also in place to ensure that growth is sustainable and resilient to climate change. Special measures such as targeted livelihood programs and measures for preventing and mitigating shocks are being taken for the most vulnerable population to reduce extreme poverty

Coverage and effectiveness of Social Safety Net Programs: Government Social Safety Net Programs (SSNPs) helped reduce poverty and inequality through addressing risk and vulnerability of the poor and people experiencing shocks. BBS is developing the National Household Database (NHD) under Social Safety Net Systems (SSNS). This will substantially increase the effectiveness of SSNPs through better targeting of the poor households and also improving coordination among various ministries/agencies.

Migration and remittance: Remittance has been a key driver of economic growth, economic transformation of less well-off households, poverty reduction through positive impact on rural wages and entrepreneurship development in rural areas. But there are concerns about exploitation, human rights violation, and violence against women. To ensure safe, orderly and regular migration for all workers including women, Overseas Employment and Migrants Act 2013, and Overseas Employment Policy 2016 have been enacted. The Government policies aim to encourage human resources development for export as well as to ensure smooth migration and welfare services for migrant workers. It should be noted that annual flow of migrant workers peaked at more than one million in 2017 and annual remittance inflow peaked at US$15 billion in 2015 which constituted 7.2 per cent of GDP.

Gender discrimination: Gender parity has been achieved in primary and secondary education but its reflection is not yet visible in the labour market. The Government encourages women to enter the rural labour market in larger number. The relative male-female wage ratio has increased from 73 per cent in FY 10 to 78 per cent in FY 2014. Specific strategies have been adopted to narrow the gender wage gap in agriculture, the predominant sector in the rural economy.

Micro-credit programs: Bangladesh has a rich experience in administering microcredit programs. Microcredit programs (MCP) in Bangladesh are implemented by various formal financial institutions (State-Owned Commercial Banks and Private Commercial and Specialized Banks), Specialized Government Organizations, Various Ministries of the Government and Non-Government Organizations (NGOs). Palli Karma Sahayak Foundation (PKSF) is an apex organization involved in wholesaling micro credit. It delivers micro credit services to the poor through its partner organizations (POs).

Despite the fact that more than a thousand of institutions are operating microcredit programs, top 50 NGO-MFIs had about 87 per cent of membership, occupied about 78 per cent of market share, disbursed about 91 per cent of loans, and had 89 per cent of loan outstanding in 2016-17. As the microcredit market grows in size, reach and diversity of products its effect on poverty reduction continues to be debated. A recent study (Khandker, et al. 2016) finds that microfinance institutions have had sustained benefits over two decades in reducing poverty and increasing incomes in Bangladesh. Microcredit accounted for a 10 per cent reduction in rural poverty during this period- meaning MFIs lifted some 2.5 million Bangladeshis from poverty.

One House, One Farm project: A model for poverty alleviation

One House, One Farm was undertaken by the present government with a view to alleviating poverty and sustainable development through capital formation, financial inclusion, and income generating activities in rural areas. The project aims to build the habit of saving in rural areas by granting an amount equal to weekly savings, which is contrary to the traditional approach of micro credit. Village Development Organizations (VDOs) are created by rural poor, ultra poor and beggars to develop entrepreneurship among the members. The project operates in all districts of the country with 75531 VDOs as of June 2018. Total number of enrolled beneficiaries is 3.61 million households, which is targeted to reach 6 million (30 million hardcore poor). The project increased income and solvency of poor families. Low income family is estimated to be lowered to 3 percent from 15 percent in project area. For the sustainability of the impact beyond project period, a new bank called Rural Savings Bank was established. It is the first of its kind in the world as it provides 100 percent online banking dedicated for the poor.

Promoting Financial Inclusion: Access of the poor to finance is a key enabler for poverty reduction. The Bangladesh Bank has introduced some innovative ways to promote financial inclusion of the poor who have been beyond the reach of formal financial services. Such initiatives include introducing mobile financial services, requiring banks to establish 50 per cent of their branches in rural areas, starting agent banking, and opening 10 Taka deposit bank account by farmers. Bangladesh is preparing National Financial Inclusion Strategy for accelerating the progress of financial inclusion in the country.

Adoption of Multidimensional Poverty Index (MPI): Jointly developed by the UNDP and Oxford Poverty and Human Development Initiatiative at Oxford University, MPI is considered a better measure of progress on SDG 1- end poverty in all its dimensions.The Government of Bangladesh plans to invest on capacity building for introducing Multidimensional Poverty Index (MPI) measurement that complements monetary measures of poverty by considering overlapping deprivations suffered by individuals at the same time.

Macroeconomic Environment: Bangladesh has been consistently maintaining stable macroeconomic environment which has contributed to poverty reduction. Macroeconomic stability underpinned by higher growth, stable single digit inflation, low budget deficit and improved external balance will provide an environment conducive to poverty eradication.

1.4 Challenges of achieving sustainable development goal 1

Poverty reduction is a multi-dimensional issue and a whole-of-government approach is required to address it. The mapping of Ministries for various SDGs targets reveals that 44 Ministries/Divisions are involved in addressing this goal. Effective coordination of these different ministries/divisions poses a challenge for success.

- Resource mobilization particularly from external sources remains a big challenge.
- The National Social Security Strategy requires substantial increase in resources and streamlined efforts for implementation.
- The professional capacity of Bangladesh Bureau of Statistics, the national statistical organization, needs to be significantly enhanced to meet the data requirements for tracking the progress of SDG 1 through generating quality data and validating data of other organizations.
- In Bangladesh many households live close to the poverty line and any shock can push these households below the poverty line ruining the gains in poverty reduction.
- Bangladesh faces frequent floods, droughts, cyclones, hailstorms and other natural disasters that make implementation of SDG 1 greatly challenging particularly in the coastal areas.

1.5 Way forward

Job creation through growth and diversification: There has been dramatic increase in the size of the labour force in FY2017 when 1.4 million new workers entered the labour market compared to annual average of about half a million new entrants during the period 2013-FY2016. The Government will meet the challenge of generating employment for an increasing labour force by fostering creation of productive and inclusive jobs in the economy. Higher growth will be achieved through higher investment comprising public and private sector investment as well as foreign direct investment. Improving management skills, improving technology, upgrade labour skills, reducing regulatory barriers and ensuring energy supply will be critical for investment. It should be mentioned that Bangladesh's growth has not been "jobless growth" as is mentioned in some quarters. There is variation in sectoral and sub-sectoral performance in generating jobs, as expected, but there has been positive employment growth across the sectors with some sectors being more successful in creating jobs than others. Iqbal and Paban (2018) point out, citing data from Labor Force Survey (LFS), that 1.4 million new jobs were created between 2013 and 2015-16 and another 1.3 million were created between 2015-16 and 2016-17. In terms of percentage change, these figures translate to 1% annual increase in number of jobs between 2013 and 2015-16 and 2.2% annual increase between 2015-16 and 2016-17.

Diversification has to be achieved in several directions. While continued emphasis on food security will remain, agricultural diversification will receive emphasis through higher land and labour productivity and assured supply of quality inputs, appropriate mechanization and infrastructure and reduced rent seeking. In manufacturing, while emphasis on sustained success in RMG will continue, other potential labour intensive sectors such as leather, footwear, plastics, toys, electronics, jute goods and light engineering will need to flourish. Emphasis on labour service export will continue but emphasis will be placed on ensuring greater market access and safe international migration. Expansion of microcredit and microcredit plus programmes will be important for job creation and poverty reduction.

Human capital development: Disparity in education by income has decreased in all types of education over the years. The remaining gap has to be closed to ensure access of all children to education. More emphasis is now placed on ensuring access to quality education as poor quality education leading to low skills fails to get poor children out of poverty. Other types of disparity in education such as disparity by disability and ethnic groups need to be addressed. The complex issue of providing quality education at the primary and secondary levels has to be addressed.

Improving investment climate: Government needs to put more emphasis on improving the investment climate to increase private investment by removing its impediments such as land procurement, energy shortage, trade logistics, contract enforcement and tax issues. Though these are long term issues continued efforts are needed to address them.

Public investment will need a boost to reduce the infrastructure-energy deficits and improve trade logistics through increased mobilization of resources.

Social protection: The Government has developed a broad-based strategy for social protection called National Social Security Strategy (NSSS). Implementation of the strategy will help elimination of extreme poverty, reduction of vulnerability and inequality. Direct job creation programme or workfare programmes operated by the Government such as Employment Generation Programme for the Poorest (EGPP), the Food for Work (FFW) programme and the National Service (NS) programme will also be important for creating jobs for the poorest.

Preventing and mitigating shocks: Shocks such as natural, income, asset and health shock can be devastating for the poor making the poor poorer and the extreme poor destitute. Bangladesh would have progressed much faster in poverty reduction had there been no shock experienced by the poor households. Government will undertake measures to prevent and mitigate the impact of shocks.

1.6 Summary

The progress on reducing extreme poverty measured by $1.90 a day or by national poverty line (LPL) is on track. Similarly, progress on expanding coverage of social protection and proportion of government expenditure on services (health, education and social protection) as share of total government expenditure are also on track. Progress on reducing incidence of poverty (upper poverty line) does not seem to be on track. With higher expected economic growth in the economy (based on most recent developments) it is possible to achieve the 2020 milestone if the increase in income inequality not offset the impact of higher growth on poverty reduction. The incidence of headcount poverty was 24.3 per cent in 2016 and estimated povery level stood at 23.1 per cent in 2017.

The Government has adopted policies and programmes to address multidimensional nature of poverty in the country including fostering accelerated, inclusive and resilient growth, increasing coverage and effectiveness of social protection, achieving gender parity, increasing the size, reach, and diversity microcredit programmes, promoting financial inclusion, and providing stsable macroeconomic environment. Constraint on mobilization of resources especially external resources, implementation of NSSS, enhancing profressional capacity of BBS and preventing slippage into poverty or deeper poverty are some key challenges of achieving SDG 1. Bangladesh will continue to strive to achieve SDG 1 emphasizing job creation, social protection, human capital development, improving private investment climate and mitigating various shocks.

2

End Hunger

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

2.1 Global Perspective on SDG 2

Globally 793 million people, i.e., one in nine persons were undernourished in 2014-16. Southern Asia faces the greatest hunger burden, with about 281 million undernourished people (24 percent of the population). SDG 2 seeks to end hunger and malnutrition and ensure access to enough safe and nutritious food. This has to be achieved by doubling agricultural productivity and incomes of small-scale food producers. Sustainable food production systems and resilient agricultural practices are a key factor in achieving this goal. Sustainable agricultural practices that protect biodiversity and genetic resources are essential for future food security. This will require increased investment in rural infrastructure, agricultural research and development and extension services. While increased agricultural production will enhance food availability, improved food security will also require efficient food markets through reducing trade restrictions and elimination of export subsidies and export measure with equivalent effects. Proper functioning of food commodity markets will also require access to market information to avoid excessive price fluctuation.

2.2 Assessment of Progress on SDG 2 by indicators

Indicator 2.1.1: Prevalence of undernourishment

Malnutrition is one of the conditions that contributes to intergenerational poverty. Malnutrition at young age is likely to retard a child's readiness for school and capacity to learn and to make him/her vulnerable to diseases as an adult. A person with disease cannot work full time and hence loses income. Further, treatment cost imposes a burden on the household budget worsening poverty. Undernourished pregnant women are likely to give birth to undernourished child which adversely impacts the life cycle development of the child. Undernutrition costs Bangladesh more than USD one billion in lost productivity every year, and even more in health care costs (FAO, 2016). In 2016 the prevalence of undernourishment stood at 16.4 per cent of the population (FAO, 2016) implying about 26 million population suffer from undernourishment.

Table 2.1 Percentage of undernourishment among ever-married women aged 15-49 years

	1996-97	1999-00	2004	2007	2011	2014
Thinness	52	45	34	30	24	19
Obesity	3	5	9	12	17	19

Source: NIPORT, BDHS, various years

Malnutrition in women, encompassing both undernutrition and overweight, is a major problem with important consequences for survival and healthy development. Table 2.2 shows that the proportion of women suffering from thinness has a downward trend. On the other hand, the incidence of obesity has an upward trend. If the rate of decline experienced between 2011 and 2014 continues in the future the proportion of undernourished women will decline to 9 per cent in 2020. As no target has yet been set for women undernourishment in Bangladesh, possibility of attaining target cannot be judged at this point.

Indicator 2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

Height-for-age measures linear growth of a child. A child who is more than two standard deviations below the median (-2 SD) of the WHO reference population in terms of height-for-age is considered short for his or her age, or stunted. Stunting reflects a failure to receive adequate nutrition over a long period of time and is worsened by recurrent and chronic illness. Bangladesh has made some progress in reducing the proportion of stunted children which declined from 60 per cent in 1996-97 to 36 per cent in 2014 (BDHS 1990-2000 and BDHS 2014).

Table 2.2 Trends in Nutritional Status of Under Five Children, 1996-97 to 2014 (Per cent)

Indicators	1996-97	1999-2000	2004	2007	2011	2014
Stunted	60	45	51	43	41	36
Wasted	17.7	10	15	17	16	14

Sources: NIPORT, Bangladesh Demographic and Health Survey, Various Years

Indicator 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

Weight-for-height measures body mass in relation to body length and describes current nutritional status of a child. A child who is more than two standard deviations below (-2 SD) the reference median for weight-for-height is considered to be too thin for his or her height, or wasted. This condition reflects acute or recent nutritional deficit. Despite increased cereal and vegetables production as well as production of animal proteins there has not been much progress in addressing high prevalence of malnutrition among children over time. The proportion of wasted children has fluctuated over time and peaked at 17 per cent in 2007 from 10 per cent in 1999-2000. It gradually declined to 14 per cent in 2014.

Indicator: 2.5.2 Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction

Maintaining plant and animal genetic diversity will allow future generations to select stocks or develop new breeds to cope with emerging issues, such as climate change, diseases and changing socio-economic factors. In this context it is important to know the percentage of local breeds at risk, not-at-risk or at unknown level of risk of extinction at a point in time as well as its trend. In Bangladesh 47 crops are threatened, 35 are landraces crops and 17 are risk fish for extinction.

Indicator SDG 2.a.1 Agriculture Orientation Index (AOI) for government expenditures

Agricultural productive capacity needs to be enhanced in developing, especially in least developed countries to achieve SDG target 2. Public investment in agriculture which complements private investment, is of significant importance in enhancing productive capacity. The Government of Bangladesh seeks to promote the use of agricultural technology with supportive policies, reforms and incentives for raising productivity. Agricultural Orientation Index (AOI) for government expenditure shows the type of government commitment to agriculture relative to other sectors.

AOI is the ratio of the share of government expenditures on agriculture to the contribution of agriculture to the economy where agriculture comprises crops, forestry, fishing and hunting sector. It is calculated as: AOI = ((Central government expenditures on agriculture/Total government expenditure)/ (Agricultural value added/ GDP)). An AOI exceeding one indicates that the government gives more importance to agriculture relative to its contribution to the economy. A value of less than one indicates other sectors receive more importance by the government.

Table 2.3 Trends in Agriculture Orientation Index of Bangladesh, 2001-2015

	2001	2005	2010	2011	2012	2013	2014	2015
AOI	0.20	0.28	n.a.	0.52	0.58	0.78	0.56	0.53

Source: FAO

Agriculture Orientation Index for government expenditures in Bangladesh was low in the beginning of the new millennium and jumped to 0.50 in 2008. The year was marked by sharp worldwide increase in food prices with negative effects on government's efforts at poverty reduction. Agricultural investment received increased priority in government budgetary allocations. With the exception of 2013 when AOI peaked at 0.78, it has been hovering near 0.50. **This implies agriculture receives half as much priority in government investment compared to its contribution to economy's GDP. It also means non-agricultural sectors receive higher priority in budgetary allocations.**

AOI has wide a range of values with lower values in developing countries where agriculture comprises a relatively larger share of the economy and higher values in developed countries where it has a lower share in GDP. Further, AOI does not bear any systematic relationship with malnutrition rate – countries with same malnutrition rate have very different AOI values. Thus, there is no unique AOI for a country. But a very low AOI involves risks for environmental sustainability and food security, as well as for agricultural research and public infrastructure.

Indicator 2.A.2 Total official flows (official development assistance plus other official flows) to the agriculture sector

Developed countries have to provide adequate support to developing countries to close the gap between required investment and available domestic resources for public investment in agriculture. The total official flows to the agricultural sector in Bangladesh has a trend with annual fluctuations which peaked at US$ 363 million in 2014 but decreased to US$ 192.58 million in 2017 followed by a decline in the following year.

Table 2.4 Total official flows (official development assistance plus other official flows) to the agriculture sector, 2012 to 2017 (million US$)

Year	2012	2013	2014	2015	2016	2017
Total official flows (Loan & Grant)	34.99	65.01	363.02	210.57	177.83	192.58

Source: AIMS web portal, Economic Relations Division

Despite this volatility which is a characteristic of official aid flows Bangladesh may succeed in attracting larger aid flows to agriculture sector provided development partners align their aid policy with SDGs.

2.3 Government efforts to achieve SDG 2

Addressing Nutrition Issues

The Institute of Public Health & Nutrition (IPHN) has been assigned as the institutional home for nutrition studies and awareness building. Nutrition Program of the Government has been mainstreamed through an operational plan titled National Nutrition Services (NNS) to provide regular nutritional services.

Ministry of Agriculture provides extension services for different crops fortified with nutrition elements, newly developed by research institutes of Bangladesh. A new variety of rice namely, 'Golden Rice', fortified with beta carotene as Vitamin A supplement is a major achievement, which are being extended in suitable areas.

The multidimensional approach to address the intergenerational health impact include awareness on child/women nutrition, food value and food diversity. Iron-folic acid supplementation among pregnant, lactating women and adolescent girls to cover iron-deficiency anaemia are being distributed through health and family planning facilities.

Vitamin A capsules distribution for children is continuing. Post-partum Vitamin-A distribution to improve vitamin A status of neonates through breast milk is being scaled up. Monitoring of salt iodization has been strengthened. Zinc for treatment of diarrhoea has been adequately promoted. Expansion of

intestinal parasite treatment, including the distribution of albendazole tablets, along with a separate deworming program is being considered. With the coverage of Integrated Management of Childhood Illness (IMCI), zinc tablets are expected to be freely provided to children with diarrhoea.

To help assist exclusive breast-feeding of new born babies up to six months, maternity leave for the working mothers has been increased to six months by the government, which augmented the nutritional status of the new-born babies.

The National Social Security Strategy (NSSS) acknowledges the importance of nutrition for vulnerable people. The strategy advocates a consolidated income transfer under a reformed Vulnerable Women's Benefit (VWB) program and increasing children allowances. The Government has already started introducing fortified rice distribution, a cash grant for vulnerable women and nutrition BCC in its VGD program.

The nutritional status of children and adults alike is also influenced massively by the quality of water, sanitation, and hygiene—a group of factors that has collectively come to be known as WASH. Among the three components of WASH, Bangladesh has made the most progress in sanitation, followed by access to safe drinking water (albeit spoiled, to some extent, by arsenic contamination), but remains far below the desired level in terms of personal hygiene. A recent study has found that only 27 percent of caregivers (of children) use appropriate hand washing behaviour; shockingly, even among the top wealth quintile, only 35 percent of caregivers were found to display appropriate hand washing behaviour. Clearly, a key intervention at household and community level is a massive campaign for the promotion of hand washing with soap.

2.4 Key Challenges

Sustaining agricultural growth especially in foodgrains sector faces some challenges arising from climate change impact. The Bangladesh Delta Plan 2100 adopted by the Government on 4 September, 2018 will allow planning to be adaptive and dynamic by constantly taking into account uncertainties in future developments in, e.g., climate change, socio-economic development, population growth and regional cooperation. The Delta Plan will contribute to addressing the emerging problems but its implementation might itself be challenging.

The incidence of hunger is distributed unevenly in the country. There has been little change in the incidence of poverty in Rangpur division during the 2010-16 period where close to half of the population live in poverty and about 30 per cent of the population live in extreme poverty. Stunting still affects more than one third of the children. Women still suffer more when a family faces food shortage.

It is necessary to build resilience of the poor, vulnerable, and affected people by increasing their capacity to adapt to mild, moderate and severe shocks such as draughts, cyclones, and floods so that they do not slip into poverty once they climb out of poverty.

Some new problems are emerging in the wake of urbanization, which although not unique to urban life, are especially relevant to it. These are (a) lack of food safety, (b) increasing obesity, especially among women, and (c) increasing difficulty of combining the pursuit of work outside the home with caregiving, which is essential for the nutritional well-being of children.

2.5 Way Forward

Bangladesh has achieved considerable success in increasing agricultural production several folds including production of rice, vegetables, culture fisheries, poultry and eggs which along with increase in general level of income has helped reduce the burden of hunger and malnutrition in the country. A prosperous agriculture will be necessary to meet the growing demand of all types of food due to population growth and growth of income. The later will create demand for some non-cereal foods at a faster rate because of their income elastic demand.

Public Investment in agriculture: The Government will continue to invest in agricultural research for development of stress tolerant crop varities in respect of water, fertlizer and time economy, global warming, and GM technology and adoption of modern agricultural practices by farmers; and expanded use of surface water for irrigation and expanded use of renewable energy for small scale irrigation. Investment will also be made in rural infrastructure which facilitates easy access to inputs and marketing of agricultural products and ensures better price for small producers by connecting them to countrywide markets.

Creating awareness: People's awareness about nutritious food, cleanliness including that of caregivers to children, maternal care, and nutrition supplements will continue to be created through electronic media and use of digital technology. Similarly, farmers' awareness about sustainable production will be created.

Programmes for lagging regions and disadvantaged groups: Despite commendable progress in poverty rerduction certain regions and special groups are characterized by high incidence of poverty. These regions will need focused attention of the Government in terms of resource allocation, encouraging private investment through infrastructure development and promoting Special Economic Zones, expanded social protection programmes and expanded microcredit programmes.

2.6 Summary

Progress on reducing stunting which stood at 36.1 per cent in 2014 is virtually on track at the current rate of reduction. Similarly, progress on reducing wasting which stood at 14.3 per cent is also on track. Agriculture Orientation Index with a value exceeding 0.5 compares favourably with those of India (0.4), Sri Lanka (0.4) and Nepal (0.2). Total official flows to agriculture sector is low mainly because of changing development partners' preferences in aid allocation over time. It will require alignment of aid policy in view of SDGs emphasis on international support to agriculture. Undernutrition of women as measured by thinness has a declining trend contrasting increasing obesity with the proportion of thin and obese women both standing at 19 per cent in 2014. Obesity is also emerging as a problem among children side by side with wasting and thinness.

Besides government policies and programmes to ensure food security to people some specific progrmmes have been adopted to address specific hunger and nutrition issues. These include introduction of nutrition fortified rice, distribution of iron-folic supplementation among pregnant, lactating women and adolescent girls, Vitamin A distribution for children, deworming, salt iodization, maternity leave for mothers to assist breast-feeding, and implementation of WASH programme emphasizing quality water, sanitation and hygiene.

Challenges to Zero Hunger will be related to implementation of the Delta Plan 2100 which purports to take account of future uncertainties in climate change, socio-economic development, population growth and regional cooperation, addressing hunger in lagging regions and of disadvantaged groups, building resilience of poor people and problems emerging from urbanization. The Government has articulated these challenges and policies will be in place to address those.

3

Healthy Lives and Well-being

Ensure healthy lives and promote well-being for all at all ages and improved nutrition and promote sustainable agriculture

3.1 Global Perspective on SDG 3

Significant progress has been achieved during 2000-15 in reducing under five and maternal mortality rate, reducing the burden of communicable diseases, and increasing life expectancy. Despite this progress more than six million children died before their fifth birthday in 2015. This translates into a global under five mortality rate of 42 deaths per 1000 live births. An estimated 303,000 women died globally during child birth and due to pregnancy related complications which implies a global maternal mortality rate of 216 deaths per 100,000 live births. SDG 3 aspires to ensure health and well-being for all at all ages by improving maternal and child health; ending the epidemics of major communicable diseases; reducing non-communicable and mental diseases and ensuring access to reproductive health-care services. It also intends to reduce behavioural and environmental health risk factors. These objectives will be achieved through realizing other objectives such as providing universal health coverage; ensuring access to safe, affordable and effective medicines and vaccines for all; supporting research and development of vaccines and medicines for communicable and non-communicable, substantially increasing health financing and developing health workforces in developing countries. In addition, capacity of developing countries for early warning, risk reduction and management of national and global risks will need to be enhanced.

3.2 Progress on SDG 3 by indicators

Indicator 3.1.1 maternal mortality ratio (per 100,000 live births)

The maternal mortality ratio is the number of women who die from any cause related to pregnancy or child birth per 100,000 live births. It is an important mortality index of mothers who are exposed to risk of death during child birth. As Table 3.1 shows, the maternal mortality ratio has been on the decline since 1995 and the trend has continued in 2017. There is discrepancy between rural and urban mortality rates which has narrowed significantly due to improvement in access to maternal health care.

Table 3.1 Maternal Mortality Ratio, 1995-2016

	1995	2000	2005	2010	2015	2016	2017
National	447	318	348	216	181	178	172
Rural	452	329	358	230	191	190	182
Urban	380	261	275	178	162	160	157

Source: BBS, SVRS, various years

Indicator 3.1.2 Proportion of births attended by skilled health personnel

Ensuring safe delivery attendance by properly trained skilled personnel is critical to reduce maternal mortality and infant mortality rates. The number of births attended by skilled health personnel has increased from 9.5 per cent in 1994 to over 42.1 percent in 2014 and further to 53 per cent in 2017. The proportion of births attended by skilled health personnel will increase to 65.7 per cent in 2020 indicating the progress will be on track. Improving maternal health through medically-trained providers care during child birth remains a challenge. Moreover, there remain disparities between rural-urban divide as well as across educational levels and wealth quintiles.

Table 3.2 Births Attended by Skilled Health Personnel, 1994-2016 (Per cent)

	1994	2004	2007	2009	2010	2011	2013	2014	2016
Births attended by skilled health personnel	9.5	15.6	20.9	24.4	26.5	31.7	34.4	42.1	50*

*Source: NIPORT, BDHS, various years; * Bangladesh Maternal Mortality and Health Care Survey 2016*

Indicator 3.2.1 Under-five mortality rate (per 1,000 live births)

The under 5 mortality rate (U5MR) is the number of deaths of children under the age of five years for every 1000 live births. There has been persistent decline in U5MR during 1995-2015 which has continued in 2017. Sharp discrepancy between rural and urban rates existed in the early years but the rates tend to converge over the years marking much higher improvement in the rural areas. The 2020 target for U5MR (34) has already been achieved by 2017.

Table 3.3 Under-five mortality rate (per 1,000 live births)

	1995	2000	2005	2010	2015	2016	2017
Rural	130	90	71	48	39	36	33
Urban	83	55	56	44	32	32	27
National	125	84	68	47	36	35	31

Source: BBS, SVRS, Various years

Indicator 3.2.2 Neonatal mortality rate (per 1,000 live births)

The Neonatal mortality rate (NMR) is measured as the number of deaths of infants under the age of one month for every 1000 live births in a year. There has been consistent decline in the mortality rate during the 2000-15 period with the pace of decline slowing. Rural-urban discrepancy has vanished and converged to the national level. This marks a significant improvement in access to infant health care even to rural people.

The NMR will decline to about 13 in 2020 provided the current downward trend continues implying the progress is on track.

Table 3.4 Neonatal mortality rate (per 1000 live births)

	2000	2005	2010	2014	2015	2016	2017
National	39	33	26	21	20	19	17
Rural	43	35	26	21	20	19	17
Urban	28.	28	25	19	20	20	17

Source: BBS, SVRS, various years

Bangladesh is a densely populated country where burden of communicable diseases including emerging diseases such as HIV/AIDS and dengue and re-emerging diseases such as tuberculosis, malaria, leprosy, filariasis, and kalaazar is significant. Ending and combatting these diseases create a situation of double burden of communicable and non-communicable diseases.

Indicator 3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations

Bangladesh continues to be a low HIV/AIDS prevalence and incidence country. The incidence of HIV stood at 0.04 per cent at the national level with <0.1 per cent for both men and women aged 15-49 years in 2016. In 2017, the incidence of HIV/AIDS declined to <0.01 (UNAIDS 2017). The low prevalence rate is due to the preventive efforts targeting the high risk population such as injecting drug users, female sex workers in towns bordering India, unprotected sex partners and international returned migrant workers.

Indicator 3.3.2 Tuberculosis incidence per 100,000 population

Bangladesh continues its battle against tuberculosis, an infectious disease that can be fatal if not treated properly. According to WHO Global TB Report 2016, Bangladesh is one of the world's 30 high TB burden countries with annual occurrence of 362,000 new Tuberculosis cases. About 73, 000 people die annually due to Tuberculosis. Another important challenge is Multi Drug Resistance Tuberculosis (MDR TB) - with an estimated 9,700 MDR cases per year. Spread of TB among temporary migrant workers living in overcrowded and poorly ventilated shacks, lack of awareness about TB infection as well as freely available treatment (DOTS) and lack of access to good quality diagnostic services underlay the high TB prevalence rate.

The National TB Programme (NTP) of Bangladesh along with its partners has been maintaining good basic TB control services with reasonable case detection and excellent treatment outcomes. Bangladesh is the first country in the Region that introduced shorter treatment regimen for MDR-TB and is achieving high cure rate for MDR-TB patients (75%). National Strategic Plan for TB Control for 2018-2022 is under process of updating. Free of cost TB control services have been made available throughout the country and are integrated with general health services. An estimated incidence rate for all forms of Tuberculosis in 2015 was 225 per 100,000 population. An estimated 45 per 100,000 people died of Tuberculosis in the same year (NTP, Annual Report 2017).

Indicator 3.3.3 Malaria incidence per 1,000 population

Bangladesh has been one of the major malaria endemic countries in South East Asia. Malaria has been a major public health concern in the country. Malaria incidence per 1000 population stood at 4.3 in 2015 (MCP 2015).Government interventions for malaria eradication independently as well as in collaboration with NGOs have resulted in decline in incidence nationally though most endemic areas (North East and South East districts) have not experienced much decline.

Indicator 3.4.1 Mortality rate attributed to (between 30 and 70 years of age) cardiovascular disease, cancer, diabetes or chronic respiratory disease

Disease burden from non-communicable diseases (NCDs) has been rising rapidly in Bangladesh as in other developing countries due to ageing and other factors such as food habits, environmental degradation and physical inactivity. Cardiovascular diseases, cancer, diabetes and chronic respiratory diseases are the main causes of NCD burden. Probability of dying between 30 and 70 years of age from NCDs is defined as the per cent of 30 year old people who would die before their 70th birthday from NCDs. This rate declined to 21.6 per cent in 2016 from 21.7 per cent in 2015 (WHO, 2016).

Indicator 3.4.2 Suicide mortality rate (per 100,000 population)

Suicide is the most common cause of unnatural death in Bangladesh with higher proportion of women having tendency to commit suicide. While mental disorders in the form of depression and anxiety are common causes of suicide in many societies there are some proximate causes of suicide for women in Bangladesh such as physical and domestic violence. The suicide mortality rate (per 100,000 population) is defined as the number of suicide deaths in a year divided by the mid-year population for the same year and multiplied by 100,000. Suicide mortality rate has been declining from 7 per 100,000 population in 2000 to 5.5 in 2015 However, data reported by Public Security Division (PSD) shows the rate to be 7.1 in 2015.

Indicator 3.6.1 Death rate due to road traffic injuries (per 100,000 population)

Road traffic injuries (RTIs) is a leading cause of death world over. Rapid motorization and urbanization in Bangladesh have resulted in increasing RTIs causing death, illness and disability. RTIs impose significant economic burden on individuals, families and the nation as a whole. Death rate due to road traffic injuries is defined as the number of road traffic fatal injury deaths per 100.000 population. In 2015 death rate due to RTIs has been estimated as 2.49 per 100,000 population (PSD, 2015). However,

WHO provides a higher rate of death due to traffic injuries which increased to 15.56 in 2017 from 13.6 in 2013.

Indicator 3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods

Meeting demand for family planning with modern methods enable women and their partners to decide the number and spacing of children and investment in children. This also contributes to maternal and child health by preventing unwanted pregnancies and closely spaced pregnancies. If modern methods satisfy 75 per cent or more of the demand it is termed as high while 50 per cent or less is termed as low. The percentage of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods stood at 72.6 per cent in the baseline year of 2014.

Indicator 3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group

Women who become pregnant and give birth in early years of their reproductive life are subject to many complications during pregnancy and child birth with risk of death. Children born to adolescent mothers are likely to be vulnerable. The consequences that follow child birth have lifelong effects. Their opportunity for socio-economic development is restricted as study and jobs become difficult and balancing job and housework becomes challenging. The adolescent birth rate is defined as the number of live births born to women aged 15-19 years during a given year divided by the population of women in the same age group. It is defined in the same way for the age group 10-14 years.

Table 3.5 Adolescent (aged 15-19 years) birth rate per 1000 women in that age group

1999-00	2004	2007	2011	2014
144	135	126	118	113

Source: NIPORT, BDHS, Various years

Adolescent birth rate per 1000 women in 15-19 age group has been declining from 144 in 1999-00 to 113 in 2014. Since the target has not yet been set using BDHS data progress towards milestone cannot be assessed at this point. It may be expected that with the expansion of women education, increased labour force participation of women and delayed marriage of women this age specific birth rate will continue to fall in the future.

Indicator 3.9.1 Mortality rate attributed to household and ambient air pollution (per 100,000 population)

The mortality resulting from exposure to ambient (outdoor) and indoor (household) air pollution from polluting fuels use for cooking is rising in Bangladesh. Mortality rates are calculated by dividing the number of deaths by the total population multiplied by 100,000 which stood at 68.6 in 2012 (WHO, 2012). There is only one data point for this indicator. More data points are needed to set target and make comment on progress against target.

Indicator 3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services) (per 100,000 population)

Inadequate water, sanitation, and hygiene cause death which can be prevented by improving those services and practices. Bangladesh has made considerable progress in coverage of water and sanitation services. However, hygiene services warrant much more attention. The mortality rate attributed to exposure to unsafe WASH services per 100,000 population is estimated at 5.96. There is only one data point for this indicator. More data points are needed to set target and make comment on progress against target.

Indicator 3.9.3 Mortality rate attributed to unintentional poisoning (per 100,000 population) air pollution

Deaths from unintentional poisonings give an indication of the lack of proper management of hazardous chemicals and pollution in a country and lack of an effective health system. These deaths can be prevented with adequate management. The mortality rate attributed to unintentional poisoning per 100,000 population is estimated at 0.3 in 2015 (WHO, 2017). There is only one data point for this indicator. More data points are needed to set target and make comment on progress against target.

Indicator 3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older

Tobacco use is a major cause of illness and death from non-communicable diseases (NCDs) in developing countries. Tobacco use means use of smoked tobacco and/or smokeless tobacco products. Bangladesh is one of the top 10 countries in the world with high prevalence of current tobacco use. Bangladesh was the first developing country to sign the WHO Framework Convention on Tobacco Control (WHO FCTC) in 2003. The age-standardized prevalence of current tobacco use among persons aged 15 years and older is 58 for male and 29 for female in 2015 (WHO, 2017). Global Adult Tobacco Survey (GATS) data shows that age-standardized prevalence of current tobacco use among persons aged 15 years and older has declined from 43.3 per cent in 2009 to 35.3 per cent in 2017. Bangladesh has been using different measures including tobacco tax and awareness creation to reduce tobacco use in the country and wants to be a tobacco free country by 2040. There is only one data point for this indicator. More data points are needed to set target and assess progress against target.

Indicator 3.b.1 Proportion of the target population covered by all vaccines included in their national programme

Bangladesh has developed an effective national immunization programme starting from 1979 with the implementation of the Expanded Programme on Immunization (EPI) of the World Health Organization. The implementation of the programme received heavy emphasis in 1985 when Bangladesh made its commitment at the United Nations to reach universal child immunization by 1990. The programme consists of vaccination against six childhood diseases: polio, measles, pertussis, tetanus, diphtheria and tuberculosis. The proportion of the population with access to affordable medicines and vaccines on a sustainable basis stood at 78 per cent in 2014 (BDHS, 2014). According to Health Services Division (HSD) data the proportion of vaccinated children aged <12 months and the proportion of vaccinated children aged , 23 months stood at 82.3 per cent and 86.8 per cent respectively. There is only one data point for this indicator. More data points are needed to set target and make comment on progress against target.

Indicator 3.b.2 Total net official development assistance to medical research and basic health sectors

Total net official development assistance to medical research and basic health sectors stood at US $ 274.1 million in 2012 which declined to US$ 177.4 million in 2015 and then increased to US$ 252.5 in 2017. Total net official development assistance shows annual fluctuations with an upward trend since 2015.

Table 3.6 Net official development assistance to medical research and basic health care, 2012-17 (Million US$)

2012	2013	2014	2015	2016	2017
274.1	224.1	242.7	177.4	206.2	252.5

Source: Economic Relations Division

Indicator 3.c.1 Health worker density (per 10,000 population) and distribution (physician: nurse: health technologist)

Resources for Health (HRH) is a key component of the health system. The success of the health system to deliver quality health services depends largely on the quality of health workers including physicians, nursing and midwifery personnel, dentistry personnel, and pharmaceutical personnel. Bangladesh suffers from a shortage and mal-distribution of health workers. Health worker density per 10,000 population stood at 7.4 in 2016. Physician, nurse and health technologist are distributed in the proportion: 1: 0.5: 0.2 indicating imbalance in the composition of the workforce. Now the density has increased to 8.3 per 10,000 population and the distribution is 1:0.56:0.40 (HRD unit, HRH country profile, 2017, MOHFW) which is on track to reach the target of 2020.

Indicator 3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness

The International Health Regulations (IHR) 2005 define core capacity requirements for each of the 194 countries that are party to the IHR to ensure that all countries have the ability to detect, assess, notify and report events, and respond to public health risks and emergencies of national and international concern. The 13 core capacities are: (1) National legislation, policy, and financing; (2) Coordination and national focal point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communications; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; and (13) Radionuclear emergencies. The indicator is measured as the percentage of attributes of 13 core capacities that have been attained at a specific point in time. The value of the indicator stood at 87.5 per cent in 2016 (WHO, 2016) and Bangladesh wants to have all core requirements to be in place by 2030.

3.3 Government's efforts to achieve SDG 3

The Government has been following sector wide approach in the health sector of the country from 1998. So far three programs have been implemented and the 4th program- Health, Population and Nutrition Sector Program (HPNSP) would be implemented from January 2017 to June 2022. The 4th HPNSP is the first of the three successive programs that would be implemented by 2030 to achieve health, population and nutrition sector targets of Bangladesh and the health related SDGs.

The current program has three components: a) governance and stewardship of the sector; b) stronger health systems; and c) quality health services. The first component will address issues regarding regulation of drug administration and quality drug management, legal and regulatory framework, and strengthening roles of the autonomous organizations such as BMDC and SMF including effective use of NGOs and the private sector.

The second component addresses strengthening of health systems focusing on planning and budgeting monitoring and evaluation, management information system, research and development, strengthening human resources for health, procurement and supply chain management, maintenance of physical facilities, inter-sectoral coordination and financial management. The third component seeks to improve access to and quality of priority health services in order to accelerate the achievements of health related SDGs. This component supports the priority interventions, such as reproductive, maternal, new born child and adolescent health and family planning services, nutrition and food safety, communicable and non-communicable disease, alternative medical care and behaviour change communication related programs.

Approaches to Universal Health Coverage (UHC)

The 4th HPNSP is aligned to the goal of achieving UHC by 2030 which emphasizes the right of every citizen to gain access to quality health care irrespective of provider of these services- public or private. The program also aims to improve efficiency through reducing wastage and increasing impact of resource use.

Community Clinics (CCs) have been established throughout the country as the first tier contact facility to provide Primary Health Care (PHC) and Maternal and Neonatal Health (MNH) services. This is a flagship program of the GOB and is globally recognized as a model for PHC. On average 40 patients receive service in a day, 90 per cent of whom are women and children.

Provision of Essential Service Package (ESP)

The ESP represents GOB's commitment to ensure the right to health and equitable access to the most essential health services. First introduced in 1998 the scope of these services has been updated to keep abreast of change in disease pattern over time. The Government has been consistently pursuing this strategy to ensure equity along with quality and achieving UHC. Focus on pro-poor ESP and provisions of PHC through CCs have contributed to reduction of gap between rich and poor with respect to health outcome in rural areas. Similar improvement has also occurred in respect of women's health situation.

Gender, Equity, Voice and Accountability (GEVA)

GEVA is the cornerstone of the sector wide program aimed at enhancing availability of quality service to women and creating a congenial environment for women and adolescent girls to receive health services, with dignity, respect and privacy. Women-friendly hospitals render specialized psychosocial counselling to women survivors of violence and link them with legal aid services. The Women Friendly Hospital Initiative (WFHI) will be expanded to other facilities in the hospital service network.

Expanded Program of Immunization (EPI)

EPI is a successful activity of GOB in the development of maternal, neonatal and child health. Bangladesh has been successful in maintaining the national coverage of fully vaccinated children by one year of age at a level of more than 80 per cent (NIPORT, 2016).

Bangladesh also considers the healthcare waste management a critical issue in the context of environmental pollution. The Government has developed a Health Care Waste Management Plan (HCWMP) to effectively address this issue.

Road Safety

The Government has been implementing a series of road safety action plans beginning with the first "National Road Safety Strategic Action Plan 1997-99" adopted in February, 1997. The 8th action plan (2017-2020) has been prepared which addresses the road safety issues raised in the 2030 Agenda. The Cabinet approved a draft road transport law in August 2018 to curb road accidents and bring discipline to the road transport sector. The bill, expected to be passed into a law in parliament next month, will introduce tougher punishments for traffic rule violations compared to the existing one, aiming to ensure safe movement on the roads of Bangladesh.

3.4 Key Challenges

Health sector in Bangladesh continues to grapple with the existing issues of increasing access to, improving quality of and achieving equity in health care services for all. There is also the increasing burden of non-communicable diseases (NCDs) such as diabetes, cardio-vascular diseases and cancer contributing to increasing morbidity and mortality. New challenges facing the sector include increasing incidence of injuries including burn and acid injuries, drowning and other accidents including road traffic injuries, ageing and geriatric diseases, spread of infectious diseases such as Hepatitis B and C, health effects of geo-climatic disasters and arsenicosis. Against this background, the health sector has the following structural challenges:

- ***Demographic Transition***

  Demographic transition includes, population shift to the urban area where PHC services are not as well organized as in the rural area. Expansion of city areas up to Upazila level,

rural-urban migration and a rising urban population pose new challenge for effective urban PHC service delivery. Absence or paucity of PHC service facilities in urban areas means that the disadvantaged are the worst sufferers, which is evident from the health status of urban people living in slums. Coordination between the two ministries of MOHFW and MOLGRDC for developing an effective urban health services delivery mechanism with functional referral between PHC providers (LGIs) and secondary/tertiary health care facilities (MOHFW) remains a challenge.

- *Epidemiological transition*

  The society is now facing double diseases burden because of epidemiological transition. Non-communicable diseases as major cause of death jointly with urbanization and increasing population with old age. The epidemiological transition has huge direct impact on the financial vulnerability of the patients, especially the poor and has long term implications on health budget.

- *Governance and Stewardship*

The expanding and dominating role of private sector (generally covering 86% of health service provision) along with mushroom growth of clinics and diagnostic centers has made the health sector unregulated with limited supervision from the government. Quality of service provided by the private sector raises questions though they charge high prices for services.

In addition the health sector is faced with the following specific challenges:

1. Reducing out-of pocket expenditure with a view to achieving UHC;
2. Ensuring urban primary health care service delivery especially for the poor;
3. Ensuring increased skilled birth attendance to reduce MMR;
4. Improving overall nutrition situation including underweight and stunting;
5. Improving service quality, standardization and accreditation for quality of care;
6. Ensuring availability of skill-mix HR through implementation HW strategy;
7. Developing new approaches and partnerships with the private sector and the community for ensuring basic services for the poor.
8. Sustainable health financing and promotion of equity in the context of achieving UHC.
9. Chronic shortage of health workforce and skill-mix imbalance.
10. Inadequacy of adolescence friendly health services

3.5 Way forward

The Government has already recruited doctors, nurses, Community Health Care Provider, and midwives to improve Maternal and Neo Natal Health (MNH). A large number of personnel including Family Welfare Assistant and Family Welfare Visitor will be recruited to support family welfare services. To improve Family Planning services in hard to reach area and low performing area adequate staff will be provided.

National Strategy for Adolescent Health (2017-30) was approved and National Plan of Action is being prepared. Measures are being taken to create demand for family planning services among adolescent girls and newly wed couples, to bring RMG workers under these services and to increase access to FP services in general.

3.6 Summary

According to SVRS 2017, the child related indicators, namely, under 5 mortality rate (U5MR) (31 per thousand live births) and neo natal mortality rate (NMR) (17 per thousand live births) have already surpassed or reached their 2020 milestone targets (U5MR-34 and NMR-17) ahead of time. Some of the women related targets such as number of medically-trained care providers during the child birth, proporption of currently married women who use modern contraceptive method and adolescent (women aged 15-19 years) are very close to reaching their targets in 2020. Steps have been taken to reach the 2020 target of health worker density per 10,000 population. The number of births attended by skilled personnel has increased from 9.5 per cent in 1994 to 42.1 per cent in 2014 and further to 50 per cent in 2016.

Bangladesh has remained a low HIV/AIDS prervalence and incidence country. But it is one of the 30 high TB burden countries in the world, one of the major malaria endemic countries in South East Asia, and one of the top 10 countries in the world with high prevalence of current tobacco use.

The Government has been following sector wide approach in the health sector of the country from 1998 and presently the 4th program – Health, Population and Nutrition Sector Program (HPNSP) (2017-22) is being implemented. The program is comprised of three components, namely, governance and stewardship of the sector, strong health systems, and quality health services to achieve health, population and nutrition sector targets and the health related SDGs.

Health sector faces considerable challenges concerning increasing access to, improving quality of and achieving equity in health care services for all. There is also increasing burden of NCDs, increasing incidence of various injuries, drowning, ageing and geriatric diseases, spread of infectious diseases, health effects of geo-climatic disasters and arsenicosis.

4

Inclusive and Equitable Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.1 Global Perspective on SDG 4

Despite considerable progress in primary school enrolment between 2000 and 2014, 9 per cent of primary-school-aged children worldwide were out of school in 2014. Proficiency in reading differs markedly between children from richest 20 and those from poorest 20 per cent households as well as between urban and rural children. Pre-primary school enrolment rate differs between rich and poor countries. Goal 4 emphasizes attaining proficiency in primary and lower secondary education, ensuring access of both boys and girls to quality early childhood development and pre-primary education, ensuring access to quality technical, vocational and tertiary education and eliminating disparities in education and ensuring equal access to all levels of education and vocational training for vulnerable population especially persons with disabilities, indigenous peoples and children in vulnerable situations. Employment, decent jobs and entrepreneurship will require substantial increase in skilled adult and youth population. Achieving literacy and numeracy by all youths and substantial proportion of adults is also emphasized. Providing skills and education to promote sustainable development and facilities that are child, disability and gender sensitive is emphasized. The goal cannot be achieved without increase in supply of quality teachers including through international cooperation for teacher training and increase in the number of scholarships available to developing countries for higher education in developed countries.

4.2 Assessment of Progress on SDG 4 measured by indicators

Indicator 4.1.1 Proportion of children and young people achieving at least a minimum proficiency level in reading and mathematics by sex

These indicators require students at primary and lower secondary levels to acquire a minimum level of proficiency. In 2015, the minimum proficiency in reading Bangla is achieved by 54 per cent of the students at the end of lower secondary level with 55 per cent boys and 54 per cent girls. English reading proficiency is achieved by only 19 per cent students with 22 per cent boys and 18 per cent girls. A higher percentage of boys are proficient in all these subjects. The low proportion of students achieving minimum proficiency in English, which is the second language in schools, is alarming. Lack of competent teachers is a major reason for this poor performance. In mathematics the minimum proficiency is achieved by 57 per cent of the students with 62 per cent boys and 52 per cent girls (LASI 2015). The inability of about half of the students to achieve minimum proficiency in reading their mother tongue and in mathematics represents huge wastage of resources. The progress in achieving minimum proficiency cannot be assessed for lack of new data.

Indicator 4.2.2 Participation rate in organized learning (one year before the official primary entry age)

Early childhood education (ECD) has been considered important in Bangladesh from the early years of its independence when the first education commission formed in 1974 recognized the importance of early childhood education and recommended its introduction in the country. Subsequent education commission reports including the latest “National Education Policy 2010” have also emphasized the inclusion of pre-primary education in the school system. Informal baby classes have existed for pre-school age children of less than 6 years along with government primary school from long ago. The major objective of baby classes in primary school is to adapt children to the school environment to avoid drop out later on. As there is a growing demand for formal early education, many private organizations, NGOs along with the Government are initiating more and more programs to enhance the delivery of ECD education. A network of government, non-government, UN and donor agencies named as ‘Bangladesh ECD Network (BEN)’ was formed in 2005 to promote ECD in Bangladesh. ECD has shown a lot of promise in terms of equalizing learning outcomes, such as enrolment, retention, and cognitive development among children from diverse backgrounds. The learning gains have been shown to be high for children from the poorest backgrounds.

Table 4.1 Gross Enrollment Ratio, Pre Primary, 2000-2016

	2000	2005	2010	2013	2015	2016
Boys	16.9	10.9	12.7	31.7	31.0	33.7
Girls	17.3	11.1	12.6	31.7	31.5	34.9
Total	17.1	11.0	12.6	31.7	31.2	34.3

Source: World Development Indicators, World Bank

The Gross Enrollment Ratio in Pre Primary education has been increasing since 2005 with a dip from its 2000 level. The upward trend has continued in 2016 and the GER more than tripled between 2005 and 2016. The GER for girls has been marginally higher than for boys. The scaling of GER has consisted of two major initiatives: First, creating a national curriculum, training materials and an additional 37,762 assistant teacher posts for Pre-Primary Education. Second, School Learning Improvement Plan (SLIP) has been working to devolve decision-making and planning on pre-primary to the grassroots level. Enrolment ratio of pre-primary students has been rising at a slow pace of 1.45 percentage points per annum since 2013.

Indicator 4.5.1. Gender Parity Indices in Education

Gender Parity Index (GPI) is defined as the ratio of female to male enrollment rates – gross or net. When GPI has a value of 1 female enrollment and male enrollment rates are equal. A value of less (more) than 1 indicates that proportionately less (more) female have enrolled than male. Gender Parity Indices in primary, secondary and tertiary levels of education were all less than 1 with lowest GPI in tertiary education in the early 1990s.

Table 4.2 Gender Parity Index in Education, 1990-2016

Levels of education	1990	2000	2005	2011	2013	2015	2016
Primary	0.843	0.96	1.046	1.059	1.044	1.08	1.06
Secondary	0.51	1.029	1.066	1.152	1.083	1.129	1.105
Tertiary	0.194	0.491	0.521	0.693	0.737 (2014)	NA	0.701
Technical	N.A.	0.320	0.350	0.297 (2010)	0.394	0.315	0.315

Sources: World Development Indicators, World Bank

GPI in Technical education was calculated from data provided in BANBEIS, Bangladesh Education Statistics 2017.In the beginning of the new millennium GPI exceeded 1 at primary and secondary levels of education and has remained above 1 with annual fluctuations. Tertiary level GPI almost tripled in the beginning of the new millennium from its level in 1990. It has continued to improve but was still below one in 2015. In 2016 GPI shows some decline at all three levels of education implying proportionately more male students enrolled in this year than in the preceding year. GPI in technical education stood at 0.320 in 2000 and has remained closer to this figure even in 2016 with annual fluctuations in the intervening period.

Inclusive economic growth leading to increase in per capita income of persons in all income groups has created demand for education. More importantly different government policies and programs in the education and related sectors have contributed to increased access of poor children to schools. Specially, government programs increasing physical access to schools, food for education/cash for education programs for girls at the primary level and stipend and tuition programs at the secondary level have been very critical in rapid increase in girls' school enrolment. The Government has to undertake programs to enhance girls' enrolment in technical education to improve GPI in technical education.

Government programs have to continue in primary, secondary and tertiary education to sustain (or increase) gender parity. It should be noted that GPI measures the disparity between girls and boys in terms of enrolment; it does not provide any indication about the quality of education.

Indicator 4.6.1 Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

Despite progress in primary school enrollment there are still millions of school age children who are out of school. These children remain illiterate when they grow adults if some special measures are not adopted to make them literate. The Government has been implementing education programmes targeting to adults both male and female to allow them to come out of the vicious cycle of illiteracy, poor skills and low income. There has been a shift in focus of adult literacy programme from providing basic literacy skills to basic literacy with skills development linked to livelihood. In addition to government, NGOs and Civil Society Organisations are actively engaged in running adult literacy programmes in the country.

Table 4.3 Adult literacy rate of population aged 15 years and above

	2005	2010	2015	2016	2017
Total adults	53.5	58.6	64.6	72.3	72.9
Male	58.3	62.9	67.6	75.2	75.7
Female	48.6	55.4	61.6	69.5	70.1

Source: BBS, Report on Sample Vital Registration Statistics, various years

There was acceleration in the adult literacy rate from 1990 to 2000 when the rate increased from about 37 per cent to close to 52 per cent. There has been sustained increase in the adult literacy rate reaching 72.9 per cent in 2017 with 75.7 male and 70.1 per cent female. Large differences between male and female adult literacy rates which existed earlier has been converging over time. Key factors which contributed to the expansion of adult literacy rate are continued expansion of primary and secondary education, adoption of the non-formal education programme by the Government and implementation of literacy and non-formal programmes by the Government and NGOs (Choudhury and Rahaman 2015)

Indicator 4.a.1 Proportion of schools with access to basic services and facilities

Some key basic services and facilities are necessary to provide a safe and effective learning environment in schools for all students. These include electricity to avail the benefits of ICT, internet and computer to enhance teaching and learning, adapted infrastructure (ramp) and materials such as books for students with disabilities, basic drinking water for use during school hours, separate sanitation facilities for boys and girls and hand washing facilities with soap and water. All schools should have all these services and facilities. However, the indicator does not refer to their quality; their mere existence is counted in constructing the indicator. Coverage of schools by these services is uneven varying from 82 per cent schools having basic drinking water to less than 1 per cent having internet and computers for pedagogical purposes. Bangladesh's efforts to ensure safe water and sanitation throughout the country have resulted in wider coverage of schools by water and sanitation services. However, the quality of water and sanitation is still a matter of concern.

Indicator 4.c.1 Proportion of teachers who have received at least the minimum organized teacher training for teaching at the relevant level

Teachers play a pivotal role in ensuring the quality education in an institution. Ideally all teachers should receive appropriate pedagogical training to teach at the relevant level of education. They should also be well-qualified in the subjects they teach. The only data available on teachers receiving organized teacher training is that of primary level teachers receiving DPEd/C-in-Ed training.The proportion of primary school teachers with

Table 4.4 Percentage of C-in-Ed teachers in primary schools

	2015	2016
% of C-in-Ed Teachers	73	75.5

Sources: Annual Primary School Census various years, Ministry of Primary and Mass Education

C-in-Ed degree has been rising reaching to 75.5% in 2016 from 73 per cent of total teachers in 2015.

4.3 Government Efforts to Achieve SDG 4

The broad goal of the education sector is to increase access to education and training, improve quality and relevance of education, reduce inequality as well as leverage on knowledge and skills in science, technology and innovation for global competitiveness.

The Government has been implementing certain programs/projects which contribute to achieving the education sector targets. A succession of programs titled "Primary Education Development Program (PEDP)" is being implemented in phases to support primary education and PEDP 4 has been approved in the ECNEC Secondary Education Development Program (SEDP) has been adopted for the period 2017/18 to 2022/23 to support secondary education covering grades 6-12 as well as post 12 grade technical and vocational education and training. Higher Education Quality Enhancement Project is being implemented to support quality improvement initiatives at the tertiary level in both public and private universities with the aim to delineate strategies to accelerate reform in the education sector.

4.4 Key Challenges

Bangladesh made significant progress in increasing enrolment rate at different levels of education in the past. However, the country faces considerable challenge in ensuring inclusive and equitable quality education promoting lifelong learning opportunities for all.

Inclusive and equitable education: Despite progress in enrolment of both boys and girls at the primary level, there are about 4 million children out of school throughout the country with specific groups of children facing greater constraints to access such as working children, disabled children, indigenous children and children living in remote areas or slums or living in poverty.

The enrolment rate in secondary schools indicates that a large proportion of primary students cannot make transition to secondary schools. There is also gender, rural- urban and economic status disparity in enrolment of secondary school children aged 11-15 years. The enrolment of children from poor households is 76.8 per cent compared to 86.9 per cent from non-poor households (HIES, 2016). Striking difference exists between enrolment of poor children in rural (79.0 per cent) and urban (68.1) areas indicating urban poor households are worse off in sending their children to schools. Further, a large proportion of students cannot graduate from secondary schools. Tertiary education is characterized by low enrolment rate and gender disparity as well as disparity across economic status.

Quality and relevance: Quality is a major concern at all levels of education beginning at the primary level which spills over to successive levels of education. As mentioned earlier a significant proportion of primary children cannot achieve minimum proficiency in reading and mathematics resulting in high dropout rates. The proportion of grade 9 students who mastered grade 8-level competencies in Bangla, English, and Mathematics are respectively 44, 44, and 35 per cent. It is evident that the proportion of students mastering relevant competencies is larger than grade 5 (compared to 25 percent in Bangla and 33 percent in Mathematics). This can be partly attributed to poorly performing students dropping out before reaching grade 9. Certain constraints on the provision of quality education at secondary level have been identified: (i) acute shortage of trained teachers, especially in science, math, English and computer Science; (ii) issues of articulation, consistency and content burden in curricula across primary

and secondary education; (iii) an adequate teacher management system for recruitment, registration, and performance evaluation; (iv) lack of teaching standards; and (v) shortages of teaching-learning materials and equipment.

The quality and relevance of higher education and training are inadequate to meet the skills demand of the labour market. Some of the reasons are: (i) seemingly outdated curricula and teaching-learning materials; (ii) inadequate teaching facilities such as modern labs and equipment; (iii) limited opportunities for teachers' professional development, particularly in TVET and tertiary colleges making them less capable of delivering state of the art materials; (iv) lack of employer engagement to be able to provide students with skills valued by employers.

Quality of teaching: Secondary education is provided mostly (96 per cent) by private schools with support from government subsidies. The schools lack teachers with professional training, adequate knowledge in their subjects and pedagogical skills. Application of knowledge and skills acquired in training to class room teaching learning does not always happen.

Lifelong learning: In an increasingly globalized economy Bangladesh needs human resources with higher and higher competencies, skills and knowledge. This means people have to upgrade their skills and knowledge at every stage of their lifespan to be able to contribute to development and welfare of the country. In this context lifelong learning, training and education becomes an integral part of the education system. Bangladesh will need to design lifelong learning programs including workplace learning, continuous professional development, refresher courses, orientation programs, open learning, distance learning and e-learning for sustaining economic growth and employment generation.

4.5 Way forward

Bangladesh has been grappling with the issues concerning inclusive and equitable quality education and adult literacy. The issues become increasingly important as the country moves toward upper middle income status combining economic growth, social development and environmental protection. Past achievements in access to education and gender parity have to be sustained with emphasis on quality and skills improvement at all levels.

i. One year pre-primary education has to be expanded to gradually cover all children to bolster early learning and healthy brain development. Simultaneously, the problem of malnutrition has to be adequately addressed early on to foster physical and mental development of children which will facilitate learning at the primary and higher levels.

ii. The primary and secondary education systems will focus on (a) access to ensure that all school age children of different socio-economic groups, regions, ethnicity and health status attend schools; (b) retention; and (c) improved teaching-learning of foundational skills through appropriate curriculum and pedagogy skills, management of teachers focusing on fair selection and recruitment, pre-service training, professional development and assessment.

iii. School and teacher performance at school level can be improved through (a) articulating and consistently measuring standards of performance for students and teachers and schools; (b) enhancing teacher performance through quality pre-service and relevant in-service training and continuous lifetime education.; and (c) enhancing accountability and incentives for good performance of teachers and schools.

iv. Quality and relevance of tertiary education can be improved through (a) infrastructural development at the universities; (b) establishing more public universities focusing on science and technology; (c) updated curricula to provide knowledge, skills and relevant competencies;(d) restructuring University Grants Commission (UGC) to ensure accountability and transparency in the higher education sector led by eminent educationists; (e) inclusion of experts, employers and expert alumni in curriculum design; (f) establishing effective institutions-industry linkages

through partnership in research and development, experience sharing, and internships; (g) implementing the Quality Assurance Mechanism; (h) develop promotion system based on comprehensive performance assessment, and (i) operationalization of competency based skills qualifications and recognition system in the TVET sector.

v. High quality research and innovation has to be encouraged in both public and private universities through (a) development of research infrastructure and enabling research environment (b) access to competitive research funding; (c) inter-university, university-industry and university-national research organizations research collaboration; (d) partnerships with foreign universities and international institutions; and (e) partnerships with Non-resident Bangladeshis.

vi. The nature and role of Lifelong Education will be identified as an integral part of the education system.

vii. Management will be improved through implementation of the Education Act which is under process and strengthening management capacities at the ministry and institution levels.

4.6 Summary

Gender Parity Index (GPI) exceeded 1 at primary and secondary levels of education and has remained above 1 for more than a decade. GPI at tertiary education reached its peak at 0.737 in 2014 and then declined to 0.701 in 2016. Concerted efforts are needed to reverse the direction of change in tertiary GPI.

About half of the students at the end of lower secondary levels were unable to achieve the minimum proficiency in reading Bangla and mathematics and less than 20 per cent students achieved the minimum proficiency in English reading in 2015.The Gross Enrolment Ratio in Pre Primary education has been increasing at a slow pace of 1.45 percentage points per annum since 2013.

The Government has continued to implement policies and programmes to increase access to education and training, improve quality and relevance of education, reduce inequality in education and leverage on knowledge and skills in science, technology and innovation. Despite various government efforts and progress achieved in the education sector in different dimensions significant challenges remain. They concern inclusive and equitable education, quality of education at all levels, quality of teaching, adult literacy and lifelong learning. Future policies and programmes in education sector will focus on sustaining past achievements and addressing the emerging issues.

5

Gender Equality and Women Empowerment

Achieve gender equality and empower all women and girls

5.1 Global Perspective on SDG 5

Significant progress was achieved during the 2000-2015 period in achieving gender equality worldwide. Girls' enrolment into schools expanded significantly and many countries achieved gender parity in primary as well as secondary education. Women participation in the labour force outside agriculture increased noticeably. Despite such progress gender inequality persists in various forms depriving women and girls of their basic rights and opportunities. Achieving gender equality and ensuring women's and girl's empowerment are essential to accelerate economic growth and promote social development. Goal 5 emphasizes elimination of all forms of discrimination against women and girls, elimination of all forms of violence against all women and girls, and elimination of harmful practices affecting child and women. Ensuring universal access to sexual and reproductive health, and affording women equal rights to economic resources such as land and property are important for attaining the goal. Enhancing use of enabling technology especially ICT and adoption of sound policies and enforceable legislation are also vital for this goal. Above all, a legal framework to promote, enforce and monitor equality and non-discrimination needs to be in place.

5.2 Assessment of Progress on Goal 5 by Indicators

Indicator 5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age

In male dominated societies violence against women by (current or former) intimate partner may be perceived as a common component of marital or other formal union relationship and thus represents one manifestation of gender inequality. Bangladesh Bureau of Statistics has conducted two surveys –one in 2011 and the other in 2015, to identify incidence of violence against women. In 2011 the percentage of women subjected to any form of violence by her current intimate partner in the last 12 months from the survey period stood at 66.9. In 2015, 54.7 per cent of ever-partnered women and girls were subjected to any form violence by their husbands. There is no corresponding data for violence inflicted on by past intimate partner in 2015. The lower value of the indicator in 2015 implies a reduction in the number of occurrences between the two survey periods indicating an improvement in women's situation. But as BBS (2016) points out the observed difference may be due to methodological differences between the two surveys rather than actual differences.

Indicator 5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence

Sexual violence is defined as any sort of harmful or unwanted sexual behaviour that is imposed on someone. In Bangladesh it has been interpreted as forced engagement in sexual acts imposed by the perpetrator. In 2015, 2.5 per cent of women and girls aged 15 years and older were subjected to sexual violence by persons other than an intimate partner in the previous 12 months (BBS 2016).

5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18.

Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18 stood at 23.8 per cent (MICS, 2012-13) and 58.6 per cent (BDHS, 2014) respectively.

Indicator 5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location

Time spent on unpaid domestic and care work refers to the average time men or women spend on household provision of services for own consumption. Usually women carry a disproportionate burden of domestic and care work implying gender discrimination. The indicator is calculated by dividing the daily average number of hours spent on unpaid domestic and care work by 24 hours. Time Use Survey conducted by BBS in 2012 is the only source of this information which shows that while men spend on average 5 per cent of their time, women spend 25.8 per cent of their time on such work.

Indicator 5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments

Bangladesh is the example of a country with dominant leadership of women in the national parliament and government. Currently, the Speaker of the National Parliament, the Prime Minister, and the Leader of the Opposition and the Deputy Leader of the House are all women.

Table 5.1 Proportion of Female Members in the Parliament, 1991-2015

	1991	1996	2001	2008	2014	2015	2016	2017
No of female members	42	43	41	64	70	71	71	72
No of total seats	330	330	330	345	350	350	350	350
Percentage	12.73	13.03	12.42	18.55	20.00	20.29	20.29	20.57

Source: Bangladesh Parliament Secretariat (BPS)

The situation of women empowerment and gender equality appears promising from this perspective. However, broader participation of women in the National Parliament was quite limited in the early nineties. Though still low it is heartening to note that women's participation in the Parliament stood at 20.29 per cent in 2015 compared to 12.73 per cent in 1991. In the last Parliament, the share of reserved seats for women was raised to 50 from 45. However, the current Parliament has 20 directly elected women Parliamentarians. In addition, one woman Parliamentarian has been elected later on in a by-election in 2015. Similarly, another woman Parliamentarian has been elected in a by-election in 2017 raising proportion of women parliamentarians to 20.57 per cent. In order to ensure greater participation of women in important decision making positions, initiatives are now underway to increase the representation of women in the legislative, judiciary and executive branches of the government.

5.3 Government efforts to achieve SDG 5

Bangladesh was cognizant of the existence of gender differences in the nation and the importance of addressing this issue for women development since independence of the country. The commitment of the nation to address this issue was enshrined in the country's Constitution.

Government's participation in global initiatives: Bangladesh has been a signatory to several important international conventions and agreements on women's and girls' rights and development. It ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1984, endorsed the Beijing Platform for Action (BPFA) in 1995, and committed itself to the MDGs in 2000 and SDGs in 2015.

Policy and legal framework: The Government has adopted several legal and policy measures to uphold the rights of women in the country. Laws formulated include the Domestic Violence (Prevention and Protection) Act 2010, and the Domestic Violence Prevention and Protection Rules 2013, Prevention and Suppression of Human Trafficking Act 2012, Hindu Marriage Registration Act 2012 National Acid Crime Prevention Act (amended) 2010, and the Pornography Control Act 2012, National Children Policy 201I, Child Marriage Restraint Act, 2017, DNA Act, 2014 and Dowry Prohibition Bill 2018 (placed to the Parliament). Other laws addressing national and sectoral issues also paid sufficient attention to women's rights wherever relevant. A notable action of the Government was the adoption of National Women Development Policy 2011 and the Action Plan to implement the policy.

Improve women's human capabilities: This area deals with women's and girls' access to health care, life expectancy, nutrition, reproductive health, education, information, training, and other services that enable women to achieve better health and educational outcomes. This also includes women's freedom from violence and coercion.

Increase women's economic benefits: This area relates to women's access to or control over productive assets, resources, services, skills, property, employment, income, information, technology, financial services, and other economic opportunities including community resources such as land, water and forest.

Creating an enabling environment for women's advancement: The socio-political environment, legal and policy support, and congenial social norms are key in this area. Oversight, enforcement of laws, regular collection of sex-disaggregated data, gender and social analysis skills including the capacity to develop, implement, and monitor gender strategies, understanding of gender issues in the sector are the key areas.

Gender responsive budget: The Government has taken steps to incorporate gender dimensions in the formal budgeting process. In 2005, the GoB introduced Gender Responsive Budgeting (GRB) in an effort to mainstream gender issues in all policies and decision making. A set of guidelines has also been issued to ensure development projects are prepared and reviewed in a gender sensitive way. The number of Ministries undergoing GRB has increased to 43 in FY 2019 from 4 in FY 2010. The share of expenditure on women development as proportion of total budget increased to 29.65 per cent in FY 2019 which constitutes 5.43 per cent of GDP from 24.65 per cent in FY 2010.

5.4 Challenges

Eradicating violence against women

Violence against women in different ways –physical, sexual and mental/psychological, has been widespread both at home (82 per cent) and outside (18 per cent) in Bangladesh while women empowerment is also progressing. As violence originates from multiple sources and has multiple causes its elimination requires multipronged actions. These include motivation of family, enhancing community support, enforcement of legal provisions, improving women's capabilities, access to low cost prosecution services and economic self-reliance of women. GO has adopted many initiatives but they are still inadequate given the scale and complexity of the problem.

Preventing child marriage

Because of specific efforts of the Government to prevent child marriage and the general improvement in the socio-economic conditions of the people proportion of marriage of girls aged below 18 years has been declining. Bangladesh will continue to adopt legislation, policies and programmes to address the issues that underlie behind child marriage such as lack of or poor education, poverty, natural disasters and climate change, gender discrimination, harassment and intimidation, and social pressures.

Ensuring conducive environment for women in the workplaces and public spheres: Public opinon against VAW in workplaces and public spheres needs to be created to discourage and eventually eliminate such outrageous activities. Creation of community awareness and motivation against VAW, enactment of laws to address sexual harassment, full prosecution of VAW committed in public spheres and publicizing the punishment are some of the areas of action to improve workplace and public place environment.

Gender digital divide

The gender digital divide is still an important challenge, with women facing challenges in accessing information and communication technologies (ICT), which affects their educational and employment opportunities. For example, use of ICTs to improve English skills markedly differs between male and female. While 55 per cent of male use TV, 88 per cent of male use mobile and 81 per cent of male use web to improve English skills the corresponding perentages for female are 45 per cent, 12 per cent and 19 per cent respectively (Tyers, 2011).

5.5 Progress Summary

Women and girls aged 15 years and over are subjected to different types of violence by their current or former intimate partner as well as by persons who are not intimate partners, and they are significantly more vulnerable to violence by their intimate partners. In 2015, 2.5 per cent of women and girls aged 15 years and older were subjected to sexual violence by persons other than an intimate partner in the previous 12 months. Women bear significantly greater burden of unpaid domestic and care work in the family than men. The proportion of female members in the Parliament has been slowly increasing over time reaching 20.57 per cent in 2017.

The commitment of the Nation to address the issue of gender differences is enshrined in the country's Constitution. The Government's efforts to address gender differences pertain to participation in global initiatives, providing policy and legal framework, improving women's human capabilities, increasing their economic benefits, creating eneabling environment for women's advancement and implementing Gender Responsive Budget. Some of the key challenges to achieving gender equality in the country are: eradication of violence against women, prevention of child marriage and addressing gender digital divide.

In this connection it may be interesting to present the position of Bangladesh in comparison with other South Asian countries in terms of women empowerment.

Table 5.2 Comparative Picture of Women Empowerment in South Asia

Total	Bangladesh	Maldives	India	Sri Lanka	Nepal	Bhutan	Pakistan
Ranking	48	113	108	100	105	122	148
Score	0.721	0.662	0.665	0.676	0.671	0.638	0.550

Source: World Economic Forum, Global Gender Gap Report 2018

Bangladesh ranks 48 in global ranking of countries with a score of 0.721 indicating significantly better performance in promoting women empowerment compared to her South Asian neighbours.

6

Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all

6.1 Global Perspective on SDG 6

To ensure sustainable management of water and sanitation for all, it is essential to look at the water cycle in its entirety, including all uses and users. Countries need to move away from sectoral development and resources, and together with target SDG 11.5 on water-related disasters, it covers all the main aspects related to freshwater in the context of sustainable development. Bringing these aspects together under one goal is a first step towards addressing sector fragmentation and enabling coherent and sustainable management of water resources, in favour of a more integrated approach that can balance different needs in a just manner. This is exactly what SDG 6 seeks to do: by expanding the Millennium Development Goal (MDG) focus on drinking water and basic sanitation to include water, wastewater and ecosystem thus making SDG 6 a major step forward towards a sustainable water future (UNWater, 2016).

Goal 6 aims to tackle challenges related to drinking water, sanitation and hygiene for populations, as well as to water-related ecosystems. Without quality, sustainable water resources and sanitation, progress in many other areas across the SDGs, including health, education and poverty reduction, will also be held back. According to United Nations SDG Report 2017 (UN, 2017), 71 percent of the people used a "safely managed" drinking water service and 39 percent "safely managed" sanitation service respectively.

Bangladesh has done remarkably well in ensuring access for its population to drinking water and sanitation over the years. Before the discovery of Arsenic, the country enjoyed almost universal access to drinking water. Open defecation has become almost nil. As a result of such improvements the casualty from enteric diseases has fallen rapidly.

High-Level Panel on Water (HLPW)

In November 2015, the United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB) recommended to form high-level alliances to tackle priority water-related challenges, as to convene a Heads of State/Government Panel on Water. The Panel would lead global advocacy for water resilience and adaptation.

At the World Economic Forum in Davos, January 2016, the UN Secretary-General Ban Ki-moon and the President of the World Bank Group Jim Yong Kim, announced their intention to form a High-Level Panel on Water (HLPW), to mobilize urgent action towards the Sustainable Development Goal for Water and Sanitation (SDG-6) and related targets.

The HLPW was launched on 21 April 2016 at the UN Headquarters for a period of two years, and comprises 11 Heads of State/Government, as well as a Special Advisor. Sheikh Hasina, the Hon'ble Prime Minister of Bangladesh, was nominated as one of the important members of the High Level Panel on Water (HLPW) from Asia. The outstanding successes of Bangladesh in achieving the MDGs during the period of 2000-2015 under the dynamic leadership of Hon'ble Prime Minister Sheikh Hasina catalyzed hold on her strong position in the 11-member HLPW. The major task of the HLPW is to achieve SDG-6 particularly and other SDGs that rely on the development and management of water resources.

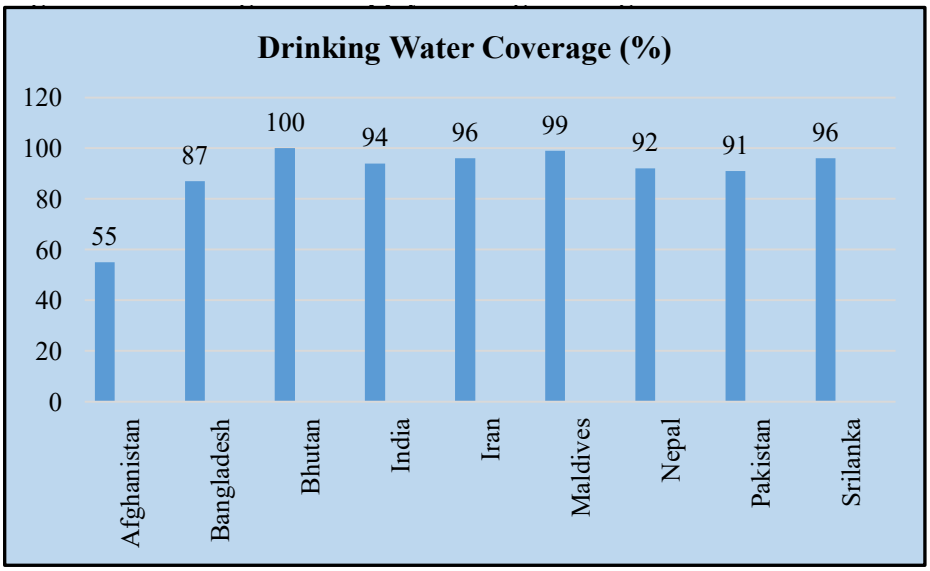
Since its establishment the HLPW has actively engaged in an initial consultation process. Co-convened by United Nations Secretary-General Ban Ki-moon and World Bank Group President Jim Yong Kim, the ten-member Panel - composed of 10 Heads of State and Government, as well as two Special Advisors, and co-chaired by the Presidents of Mauritius and Mexico - has tasked its sherpas/advisors to consult broadly with water experts on the action plan of the HLPW.

6.2 Assessment of Progress on Goal 5 by Indicators

Indicator 6.1.1 Proportion of population using safely managed drinking water services

Currently, the proportion of population using safely managed drinking water services stands at 87 per cent after making adjustments for arsenic contamination. Despite the remarkable progress made, at the beginning of the SDG era, Bangladesh has the 2nd lowest water supply coverage figures among the South-Asian countries. In the South Asian region, Bhutan has the highest percentage of population using improved drinking water source, followed by Maldives, and Sri Lanka (Figure 1).

Figure 1.1 Drinking water supply coverage among South Asian Countries



Source: WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation UNJMP, 2017

Indicator 6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) defines 'safely managed sanitation services' as population using an improved sanitation facility which is not shared with other households and where excreta are safely disposed in situ or treated off-site. According to the JMP report in 2015, only 1% of the population are practicing open defecation, 10% of the population are using unimproved latrines, 28% of the population are sharing latrines and 61% of the population are using improved latrines (UNICEF & WHO, 2015). In Bangladesh a nationwide baseline survey was conducted for the first time in 2003 revealed that improved sanitation coverage was only 33% and 42% of the population had no latrine for defecation. This indicates that improved sanitation coverage in the country has increased by 28% since 2003.

According to BBS and UNICEF (2014), seventy seven per cent of the population of Bangladesh is living in households using improved sanitation facilities including shared facilities. This percentage is 86.3 per cent in urban areas and 74.4 per cent in rural areas. Residents of Barisal division are particularly less likely than others to use improved facilities (58.8 per cent). Use of improved sanitation facilities is strongly correlated with wealth, 95.8 per cent in the richest households use improved sanitation facilities whereas only half of 45.6 per cent, use in the poorest households. The percentage of population without any toilet facility, though overall low, is still significant among the poorest households, and in Rangpur division.

Bangladesh has already identified hydro-geologically and socio-economically difficult areas (Hard to Reach Areas) and people while preparing the "National Strategy for Water and Sanitation in the Hard-to-Reach Areas of Bangladesh, 2012". Government investment in Water, sanitation and Hygiene (WASH) has also been increasing over the last four years. Total ADP allocation for WASH in FY2015-16 was 46.19 billion BDT and increase of 5.06 billion than FY 2014-15. However, allocation for sanitation was 10 times lower in comparison to water. In addition, other disparities, affecting sanitation improvement need to be addressed. WASH investment in geographically difficult area like char, haor (wetland), coastal belt and hilly areas is much lower compared to other areas. There is a gap in ensuring appropriate toilet technologies for differently abled people at affordable cost. The threat poses by climate change particularly in disaster prone areas also need serious attention for sanitation (DPHE, 2016b).

The sudden influx of almost a million Rohingya refugees in Teknaf area has put enormous pressure on drinking water and sanitation facilities. Arranging safe drinking water and proper sanitation in a geographically challenging area has been proven to be extremely difficult despite the best efforts of national and international agencies. Tubewells are becoming dry and latrines are overflowing creating an unhygienic situation for the refugees.

Indicator 6.3.1 Proportion of wastewater safely treated

Bangladesh has laws in place for safe disposal of wastewater since the formulation of Environmental Rules in 1997. But many industries do not have waste water treatment facilities to comply with the set standards under these rules. Among the urban areas, only Dhaka city has wastewater treatment facility which serves only 20% of the city.

Relocation of tanneries from Hazaribag, Dhaka

The relocation of tanneries in Hazaribag to Savar has been completed this year. Hazaribag has been in operation for last 60 years. This shifting was necessitated due to heavy pollution of Buriganga river from tannery wastes from Hazaribag. This is the first example of shifting an entire industrial unit in order to save a river from industrial pollution. A central ETP has been established at Savar which will treat the effluents before discharging into Dhaleswari river.

Indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

According to GED (2015) the proportion of total water resources used in Bangladesh was 2.9 percent in 2010. Bangladesh is endowed with rich water resources. Internal renewable water resources are estimated at 105 km^3/year (based on the National Water Plan Phase II), including 84 km^3 of surface water produced internally as stream flows from rainfall and approximately 21 km^3 of groundwater resources from within the country. Annual cross-border river flows that also enter groundwater are estimated at 1105.64 km^3 and represent over 90 percent of total renewable water resources which are estimated to be 1210.64 km^3. Total water withdrawal in 2008 was estimated at about 35.87 km^3, of which approximately 31.50 km^3 (88 percent) is used by agriculture, 3.60 km3 (10 percent) by municipalities and 0.77 km^3 (2 percent) by industries. About 28.48 km3 or 79 percent of total water withdrawal comes from groundwater and 7.39 km^3 or 21 percent, from surface water.

Indicator 6.5.2 Proportion of trans boundary basin area with an operational arrangement for water cooperation

Bangladesh has 57 trans-boundary rivers. It shares 54 rivers with India and 3 rivers with Myanmar. Among these rivers, it has treaty for Ganges River which was signed in 1996 and effective till 2027. According to this treaty, the quantum of waters agreed to be released by India to Bangladesh will be at Farakka on the basis of an agreed upon formula for ten day periods from the 1st January to the 31st May every year. A joint committee was formed to monitor flow below Farakka point. The Joint Committee is responsible for implementing the arrangements contained in this Treaty and examining

any difficulty arising out of the implementation of the above arrangements and of the operation of Farakka Barrage. Any difference or dispute arising in this regard, if not resolved by the Joint Committee, shall be referred to the Indo-Bangladesh Joint Rivers Commission.

The two Governments recognized the need to cooperate with each other in finding a solution to the long-term problem of augmenting the flows of the Ganges during the dry season. Guided by the principles of equity, fairness and no harm to either party, both the Governments agreed to conclude water sharing Treaties/Agreements with regard to other common rivers.

Indicator 6.6.1 Change in the extent of water-related ecosystems over time

Halda river restoration project

Halda river in Chattogram is an important riverine ecosystem of the country. It is the only tidal freshwater river in the world where major Indian carps spawn naturally. The fish egg collection has been dropping rapidly in recent years due to deterioration of the ecosystem as a result of various human activities such water abstraction for irrigation, illegal fishing, sand mining of river beds, industrial pollution etc. Recently Prime Minister's Office has formed a committee to restore the river and directed all concerned agencies and local government to take necessary steps. Various decisions have been taken and implemented such as stopping sand lifting from the river, plying of mechanized boats, lowering the rubber dams, ban on fishing in a river stretch to save the broodfish and raising the local's awareness. As a result of such steps, this year (2018) has been a record year for fish egg collection in Halda.

6.3 Way forward - Preparation of Action Plan to Achieve SDG-6 in Bangladesh

In order to achieve SDG-6 in Bangladesh as well as to support Hon'ble HLPW Member of Bangladesh in the global platform, the Principle Secretary as the Sherpa formed a 10 (ten) Member Advisory Committee comprising senior officials from different ministries and renowned experts. The Sherpa has also formed a Working Group comprising six members for organizing a National Workshop to prepare an action-oriented road map for the Hon'ble Prime Minister for her advocacy in the next two years in HLPW. The Centre for Environmental and Geographic Information Services (CEGIS) was assigned to provide intellectual and logistical support for the entire activities related to the workshop. It was planned to prepare action plans for six different targets along with two implementation mechanisms of SDG-6.

6.3.1 Initiation Meeting for the Preparation of the Concept Paper

The Ministry of Water Resources (MoWR), arranged an initiation meeting on 20 July, 2016 as the coordinator for developing Concept Papers on SDG-6. The meeting was chaired by the Secretary, MoWR, which was attended by representatives from Ministries, Departments, NGOs, Development partners, Academicians, Research institutes relevant to the water and environment. In this meeting, responsibility was given to five government organizations to coordinate activities of the concept paper preparation highlighting lighthouse initiatives and future actions for six major targets. These are: (i) Department of Public Health Engineering (DPHE), (ii) Department of Environment (DoE), (iii) Water Resources Planning Organization (WARPO), (iv) Bangladesh Water Development Board (BWDB), and Department of Bangladesh Haor and Wetland Development (DBHWD). CEGIS was given the responsibility to facilitate the whole process of Concept Papers development and organize National Workshop to finalize the documents.

In the meeting, all the coordinating agencies were requested to nominate the Panel of Experts (PoEs) to review and improve each of the concept notes during its process of preparation. Later on, thirteen renowned academicians, researchers and professional experts were selected as the PoEs following the recommendations from the coordinating agencies and associated agencies.

6.3.2 *Light house initiatives*

Bangladesh has undertaken two light house initiatives as part of HLPW activities. These are as follows

Excavation and Re-excavation of Ponds for ensuring Safe Drinking Water and help keeping local weather cool

Under this scheme, one pond per mauza would be protected from contamination, it would provide a source of drinking water with minimal treatment and water for other domestic uses without treatment. The protected ponds should not receive any surface discharge and should only be replenished by rain and groundwater infiltration.

Development of WASH blocks at School

The Government of Bangladesh has set a standard WASH for Schools in Bangladesh especially in the Government Primary Schools. Primary Education Development (PED) program is one of the milestone programs taken by the Directorate of Primary Education (DPE) where innovative solution called Wash Block has been initiated with the provision of separated toilet facilities with running water supply for boys and girls. DPE is implementing this project and the Department of Public Health Engineering (DPHE), the lead agency in water supply and sanitation, is working as the co-implementer.

6.4 Progress Summary

The success of Bangladesh in achieving MDG targets is well recognized. As part of this recognition, Hon'ble Prime Minister has been made a member of HLPW for SDG-6. This membership has induced lots of activities in SDG-6 and an action plan has been formulated by MOWR. 87% of population has access to safe water sources (Target 6.1) and 61% population has access to safe sanitation (Target 6.2) in 2015. No updated data is available on these indicators. For sustainable management of water resources, two key initiatives can be observed related to Target 6.3 (improvement of water quality) and Target 6.6 (protection of water ecosystem). Hazaribag tannery industries have been relocated to Savar in order to improve the severely degraded water quality of Buriganga. To preserve Halda river ecosystem, drastic efforts have been taken this year bearing, bearing in this instance, immediate results in terms of large fish egg collection.

7

Affordable, Reliable, Sustainable and Modern Energy

Ensure access to affordable, reliable, sustainable and modern energy for all

7.1 Global Perspective on SDG 7

Access to affordable, reliable and sustainable energy is not only a global goal in its own right but is also fundamental to achieving many of the SDGs- from poverty eradication through advancement in health, education, water supply, industrialization and environmental sustainability to mitigating the impact of climate change. Significant progress has been achieved in many regions of the world in access to electricity since 2000. China reached full electrification in 2015. Globally the proportion of population with access to electricity increased to 87.03 per cent in 2015 from 77.73 per cent in 2000. There exists urban-rural divide in access with 96.58 per cent urban population and 77.73 per cent rural population having access. One billion population world over lack access to electricity. Goal 7 seeks to ensure universal access to affordable, reliable and modern energy services. Substantial expansion of renewable energy and increase in energy efficiency are required. International cooperation needs to be enhanced to facilitate access to clean energy research and technology. Expansion of infrastructure and upgrade of technology for supplying modern and sustainable energy services in developing countries will be achieved with support of foreign resources.

7.2 Assessment of Progress on SDG 7 by indicators

Bangladesh has adopted both short-term and long term measures to increase electricity supply to meet the growing demand arising from accelerated economic growth and structural transformation of the economy. The installed generation capacity has increased to 11,532 MW in FY2014-15 from 4005 MW in FY2000-01 and maximum generation reached 7817 MW from 3033 MW during the same period. The proportion of households with access to electricity has increased to about 80 per cent in 2015 from a mere 18 per cent in 2000. This is an outcome of the relentless effort of the Government to reach power generation capacity of 24,000 MW and ensure electricity for all by 2021. Households in Bangladesh have depended mostly on bio-mass fuels including fuel wood, tree leaves, crop residue, dung cake/stick and sawdust for cooking food. Kerosene stoves have also been used for cooking and kerosene lamps have been used for lighting. As is known these fuels create in-house air pollution and are a major source of health hazards for women and children in the country. Both supply and demand factors underlay the move towards use of non-biomass clean energy such as natural gas, LNG, grid electricity, solar PV, storage cell and dry-cell battery for fuel and lighting. There has also been introduction of cleaner technology such as improved cook stove and other initiatives in cooking. BBS data (SVRS, 2018) show that in 2017 the overall use of gas was only 20.5 per cent and 23.1 percent in 2017. A major reason for such low use is lack of access to natural gas. Faced with depleting stock, increasing demand and lack of new discoveries of natural gas fields the Government rations new gas connections. Bangladesh has also attempted to diversify its energy sources by emphasizing generation of renewable energy such as solar energy, wind energy, and hydro power. The proportion of electricity generated from renewable sources is still low.

Indicator 7.1.1 Proportion of population with access to electricity

Electricity helps learning, facilitates household production and keeps agriculture, industry and businesses running. The proportion of population with access to electricity increased to 55.26 per cent in 2010 from 31.2 per cent in 2000. It continued to increase reaching 75.92 per cent in 2016 and increased further to 85.3 per cent in 2017. About 20 percentage points increase between 2010 and 2016 and about 10 per cent points jump in the following year was possible because of heightened efforts of the government to increase supply through domestic production as well as imports. The present Government undertook immediate, short term and long term plan to enhance electricity supply. The sector was liberalised for private investment as well as foreign direct investment. Private sector was encouraged to generate electricity under Public-private partnership (PPP), rental power producer (RPP), and independent power plant (IPP) arrangements as well as captive power. Diversification of sources was planned to produce electricity from fossil fuels including coal, nuclear power and renewable sources. Simultaneously, demand side management is being done through different measures including pre-paid metering, tariff adjustment, rationing of new connections and reduction of system loss. The Government has prepared an Action Plan up to 2030 to achieve SDG 7. Power System Master Plan 2016 has been prepared for managing the electricity sector up to 2041.

Table 7.1 Proportion of population with access to electricity (Per cent)

Region	2000	2005	2010	2016	2017
National	31.2	44.23	55.26	75.92	85.3
Urban	80.4	82.61	90.10	94.01	na
Rural	18.7	31.19	42.49	68.85	na

Source: BBS, HIES, Various years; Data for 2017 is from Power Division

It should be noted, however, this indicator does not capture the quality aspect of electricity in terms of affordability, reliability and sustainability. Power outages is still common especially in some rural areas. Bangladesh has sought to boost supply through coal based power stations which undermines environmental sustainability through air pollution. However, the Government has decided to use ultra-super critical technology in Rampal coal –fired power plant which will be less polluting. Further, the Government is moving towards using eco-friendly technology in coal based power plants.

Indicator 7.1.2 Proportion of population with primary reliance on clean fuels and technology

In Bangladesh differences exist between rural and urban households in the use of fuels used for cooking. Households in peri-urban and rural areas depend primarily on biomass fuels which include fuel wood, twigs and leaves, animal dung cake/stick, and agricultural residues such as straw, rice husks, bagasse, and jute sticks. In urban areas middle- and upper-income households use electricity or relatively clean cooking fuels such as piped natural gas and LNG.

However, in recent years energy efficient electric stoves and LNG are becoming popular in peri-urban and rural areas. The proportion of population with access to clean fuels and technology increased by 0.63 percentage points per year during the period 2000-2015. In 2016 the access increased by 1.04 percentage points from its previous level in 2015. If the latest trend continues to hold the proportion of population with access to clean fuels and technology will reach 20.93 per cent in 2020 which will be below the target.

Table 7.2 Proportion of population with access to clean fuels and technology for cooking (per cent)

2000	2005	2010	2015	2016
7.24	9.74	12.9	16.68	17.72

Source: World Development Indicators, World Bank

Indicator 7.2.1 Renewable energy share in the total final energy consumption

Traditional biomass is a major source of non-renewable energy that has been used for cooking and parboiling rice in rural areas. Considering the depleting stocks of fossil fuels, increasing and volatility of imported fuels prices and long term environmental sustainability the Government has taken initiatives to develop and promote renewable energy sources. Available renewable energy sources including solar energy, biomass gasification, waste biogas, hydropower and wind can be harnessed to provide affordable power supply to off-grid rural areas of the country as well as connect to national grid. Solar photovoltaic (PV) is becoming popular technology mainly in off-grid rural, hill tracts, and coastal areas in the country. The share of renewable energy sources in total final energy consumption is estimated at 2.79 per cent in 2015. Bangladesh has planned to produce 10 per cent of total power generation from renewable sources by 2020. This target seems hard to achieve for two interrelated reasons. On the one hand, renewable energy supply has been increasing but at a slower rate and on the other hand, the supply of electricity from non-renewable sources is increasing at a much faster rate.

Table 7.3 Renewable energy share in the total final energy consumption (per cent)

2015	2016	2017
2.79	2.85	2.87

Source: SREDA

Indicator 7.3.1 Energy intensity measured in terms of primary energy and GDP

Energy intensity is a proxy for energy efficiency in an economy – the efficiency with which the economy is able to produce economic output. It is measured as the units of energy (mega joule (MJ)) used to produce one unit of constant PPP dollar GDP. It is, however, an imperfect proxy for energy efficiency as it can be affected by a number of factors such as climate, structure of the economy and nature of economic activities in the economy. A lower value indicates that the economy's energy efficiency increases. Energy intensity level of primary energy has shown fluctuation since 2015. Energy efficiency has improved in 2017 relative to previous years but it is difficult to ascertain whether the target in 2020 will be met. This is because the unit of measurement used by SREDA is not comparable with that used in the M&E Framework.

Table 7.4 Energy intensity level of primary energy (kilotonne of oil equivalent (ktoe) per billion BDT)

2015	2016	2017
3.63	3.67	3.56

Source: SREDA

7.3 Government efforts to ensure access to affordable, reliable, sustainable and modern energy for all

In the first decade of 2000 lack of investment in power generation, regular maintenance, and expansion of transmission and distribution lines in the face of growing demand resulted in power shortage, frequent outages and unstable supply with negative effect on economic growth and welfare of citizens. To overcome this situation and to support the accelerated growth targets in the medium to long term the Government formulated Power System Master Plan 2010 which set a target to increase installed electricity generation capacity to 24000 MW by 2021 and 39,000 MW by 2030. Accordingly, the Sixth Five Year Plan (2010-15) accorded highest priority to improving the supply of electricity in the country. A policy was formulated to encourage private sector to generate electricity under public-private partnership (PPP), rental power producer (RPP), and independent power plant (IPP) arrangements. Diversification of primary fuel for electricity generation from overwhelming dependence on domestic natural gas to coal, petroleum products and nuclear energy has been emphasized. Measures were undertaken to enhance power sector efficiency and reduce transmission and distribution losses. The Government announced Renewable Energy Policy in 2008 to guide power generation from these sources. However, the targets to produce 500MW of solar, 200MW of wind and 100MW of other renewables by 2015 were not achieved. Domestic supply-demand deficit was sought to be filled with imports from India. Bangladesh is contemplating investment in hydro power in neighbouring countries such as Nepal and import electricity from Nepal through India. Coordinated investment in transmission and distribution has been undertaken to reduce T & D losses, ensure uninterrupted power distribution and achieve the target of power supply for all. As part of the efforts to ensure access to cleaner and more sustainable energy for all use of Improved Cook Stove (ICS) has been encouraged. ICS provides higher energy efficiency and less smoke using traditional biomass fuels.

The Ministry of Power, Energy and Mineral Resources has prepared SDG Action Plan for the Ministry up to 2030. The Plan envisages the actions to be undertaken to achieve the relevant targets.

To ensure universal access to affordable, reliable and modern energy services by 2030, the following actions have been planned:

i. Increase power generation capacity to 23,000 MW by FY2020 (end of Seventh Plan); 24,000 MW by 2021; and 40,000 MW by 2030;

ii. Raise share of coal based power from only 3 percent (FY2015) to 21 percent by the end of the Seventh Plan and subsequently to 50 percent by FY2030;

iii. Expansion/upgrade of electric distribution line; Construction/Upgrade of sub-station; switching station construction; River crossing tower construction; Replacement of Overloaded Distribution transformer ; Replacement of electromechanical/digital meter by pre-paid meter; Rehabilitation and Intensification of Distribution System; Establish Gas Allocation Policy (incl. LPG and Biogas Alternative policy); Domestic Gas Exploration Policy; Domestic Coal Export Policy; Develop Energy Subsidy Policy; Promote Use of LPG in Domestic and Transport Sector; Import LNG Strategy; Planning for Import Coal Facilities; and

iv. New 70, 00,000 consumer connection and 30,000 Village electrification

To increase substantially the share of renewable energy in the global energy mix by 2030, the following actions will be undertaken:

i. 500WM Solar Programme (340MW commercial purpose and 160MW social sector);

ii. Commercial Projects: (a) Solar Park (grid connected); (b) Solar Irrigation; (c) Solar Minigrid/ micro-grid; and (d) Solar rooftop; and

iv. Social projects: (a) Rural health centres; (b) Remote educational institutes; (c) Union e-Centres; (d) Remote Religious Establishment.

To double the global rate of improvement in energy efficiency by 2030, the following actions will be undertaken:

(i) Energy Efficiency and Conservation Programme; and (ii) Financial Incentive Mechanism for Improved Cooking Stove

7.4 Key Challenges

Bangladesh faces formidable challenges in attaining sustainable development goal 7.

- Expanding supply of electricity at a faster rate to meet existing unmet industry, commerce and household demand and rising future demand.

- Faced with the risk of complete depletion of existing gas reserve by 2023, expanding on-shore and off-shore exploration of gas field engaging national public sector organizations as well as International Oil Companies (IOCs).

- Addressing energy efficiency issue in the power sector through converting simple cycle power plants into combined cycle power plants, in the industrial sector (for example adopting co-generation system to utilize exhausted gas from broiler) and in the household sector through pre-metering.

- LNG imports expose Bangladesh to international gas trade price which has several consequences. The weighted average of Bangladesh gas tariff is estimated to jump from USD 1.7 per gigajoules (GJ) to at least USD 3.1 per GJ. This price jump will escalate production cost in the industrial sector affecting competitiveness of industries.

- Emphasis on coal-fired power projects to produce projected amount of electricity will require 60 million tonnes of coal per year. Building huge infrastructure including port, rail transport and coal stocking infrastructure to handle this massive volume of coal is a challenge.

- Energy pricing (electricity, fuel and gas) and subsidies present a challenge to the economy. If electricity price is based on full cost of oil and the opportunity cost of domestic gas the economic cost of electricity will be much higher and the resultant electricity price will also be higher. Power sector subsidy is estimated to be 2-3 per cent of annual GDP of the country.

- As coal fired projects come into being in the future sustainability of power and energy sector will show some regress.

7.5 Way forward

The Government has been working relentlessly to ensure access to electricity for all and has been implementing policies and strategies towards this goal. The current policy environment needs to continue and new initiatives have to be undertaken.

- In previous years power sector was mostly dependent on natural gas. More than 90% of the generation capacity was based on gas-based power plant. Due to depleting gas reserve and the difficulties of domestic coal development, Bangladesh is moving towards imported fuel. As a result, keeping the generation cost at marginal level is a major challenge. The Government is introducing highly efficient power plants to the national power grid. Eligible single cycle power plants are being upgraded to combined cycle power plants. Some of the older power plants are in the process of repowering to increase its capacity with high efficient machines. All the upcoming coal power plants are being equipped with latest ultra-supercritical technology, flue gas desulphurization and electrostatic precipitator to minimize the impact on the environment. Adopting such proven and latest technologies will ensure the proper use of resources to achieve efficiency in power sector. In order to meet the gas demand the Government has plans to import Liquefied Natural Gas (LNG). For this purpose Floating Storage Re-gasification Units (FSRUs) are under construction.

- In line with the SDGs target, power sector utilities have taken initiatives to implement grid based renewable power generation projects. Under the initiatives some projects are in preparatory stage. To promote development of renewable energy the Government is giving assistance to private sector in terms of incentives for implementing renewable energy based generation facilities. NGOs and private entities are playing a vital role in implementing solar home system (SHS) in rural areas. Renewable wind energy, mainly in the coastal areas, haors and offshore islands has to be emphasised.

- Mobilization of additional financing needed to implement SDG Action Plan will be a major challenge. Other than the conventional financing by GOB and Development Partners, Power Division will continue to explore innovative financing such as Export Credit Agency (ECA) financing, private sector financing in IPP projects, joint venture project financing and G to G financing.

- Bangladesh has been successful in making significant progress in increasing generation capacity as well as actual production and consumption of electricity and increasing access of consumers to electricity. This has been achieved by making higher public investment in electricity generation as well as transmission and distribution, attracting private investment, engaging in cross border power trade, reducing T & D losses and managing demand side of the market. This strategy will continue. Two issues that need to be addressed are: (a) increasing cost of electricity production, and (b) continued operational deficits in the power sector.

- Efficient operation and maintenance of running plants have to be undertaken regularly to reduce capacity loss. The quality of power system has to be improved through the system enabling stable frequency and voltage with no unplanned fluctuation. Quality power supply will encourage private companies to substitute grid electricity for their own costly electricity from oil-based generators.

- The Government will have to finalize and adopt the National Energy Policy or develop an Energy Master Plan embracing (i) gas allocation policy, (ii) domestic gas exploration policy, (iii) domestic coal utilization, (iv) energy import, (v) demand side management and energy conservation, (vi) Improved Cooking Stove, and (vii) energy subsidy and pricing.

7.6 Summary

It is heartening to note that Bangladesh is moving steadfastly towards ensuring access of 100 per cent households to electricity well ahead of the target time in 2025; it reached 85.3 per cent in 2017. The country lags behind in other energy indicators. The proportion of households with primary reliance on clean fuels and technology will reach 20.93 per cent in 2020 which will be below the target. The combined effect of slow increase in renewable enregy and fast increase in non-renewable energy is very slow rise in the share of renewable energy in the total final energy consumption. This makes it difficult for the share of total renewable energy in the total energy consumption to reach the target of 10 per cent in 2020. Energy efficiency in the country appears to have been improving.

The Government's ongoing efforts to ensure reliable energy supply to all households has been complemented by yet another effort to achieve SDG 7. The Ministry has prepared SDG Action Plan up to 2030 to achieve the targets of SDG 7 embracing universal access to affordable, reliable and modern energy services, increase in the share of renewable energy in total energy, and improving energy efficiency in the country. Key challenges to implementation of the Action Plan will involve financing, pricing and subsidy, fuel mix, gas exploration and energy efficiency. National Energy Policy (or Energy Master Plan) addressed to resolve these issues.

8

Sustained, Inclusive and Sustainable Economic Growth and Decent Work

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8.1 Global Perspective on SDG 8

In recent years, there has been significant improvement at the global level in several economic aspects including the growth rate in real GDP, estimated to be 3.9 percent in 2017. The average annual growth rate of real gross domestic product (GDP) per capita worldwide has also increased from 0.9 per cent in 2005-2009 to 1.6 per cent in 2010-2015 (World Bank 2016). Unemployment and decent work deficits still remain very high in many parts of the world. In 2017, global unemployment rate was recorded 5.7 per cent with the total number of unemployed exceeding 192 million persons. Rate of unemployment among women is higher than men across all age groups. Labour force participation rate for men and women aged 15 and over continued to decline globally.

The decline in women's participation rate has been slower than that of men although more women than ever are both educated and participating in the labour market today. Also, women earn, on an average, 24 per cent less than men globally. (UN MDG Report 2015).

Child labour still remains a serious concern, though the number of working children (5 to 17 years of age) has declined, from 246 million in 2000 to 152 million in 2016 (ILO 2017).

SDG 8 focuses on improving economic growth that is sustainable while also ensuring that average real income of both employed and unemployed persons, especially in the least developed countries, are improved significantly. High economic growth will be achieved through increased diversification and continued technological upgrading and innovation that will be biased towards the labour intensive sectors. More productive employment opportunities and better work environment will be created for both men and women across all age groups and for the disabled in the formal sector. This will result in significant reduction in unemployment rate, wage gap, and decent work deficits.

8.2 Assessment of Progress on SDG 8 by indicators

Indicator 8.1.1 Annual growth rate of real GDP per capital

Attaining high growth has always been the top agenda in addressing the country's biggest challenge of eradicating poverty. The 7th Five Year Plan is built around the pillars that include growth acceleration, employment generation, and rapid poverty alleviation. In the recent years Bangladesh has attained sustained impressive economic growth which contributed to its transition from low – to lower middle income country status in July 2015 and graduation in the first triennial consideration from least developed to developing country status in March 2018.

In 2017 real growth in GDP per capita has increased to 5.96 per cent from 5.14 per cent in the baseline year of 2015 due to the substantial growth in real GDP of 7.28 per cent combined with successful population management policy as reflected in falling population growth rate- 1.37 per cent per annum in 2016 as well as falling TFR of women aged 15-49 years – 2.1 per woman in 2016. In fact, the average growth of real GDP per capita has accelerated over the previous years estimated to be 4.3 per cent in 2001-2010 and 5 per cent in 2011-2013. Accelerated growth in GDP per capita contributed to a continuous expansion of GDP per capita measured in terms of current US dollars. As a result, per capita GDP grew substantially from US$ 757 in 2010 to US$1544 in June 2017. Increase in growth rate in the SDGs period raises hope that accelerated growth rate as envisaged in the 7th FYP is within reach of Bangladesh.

Indicator 8.2.1 Annual growth rate of real GDP per employed person

This indicator is used to assess the likelihood of a country's economic environment to create and sustain decent employment opportunities with fair and equitable remuneration. It measures increase in growth rate of output per unit of labour input or in other words labour productivity. Growth in labour productivity is an important driver of GDP growth and therefore contributes to full and productive employment and decent work for all. Growth rate/real GDP per employed person increased to 4.99 per

cent in 2016 from 4.49 per cent in 2015. It is heartening to note the indicator has already reached 2020 target in FY2017. According to the 2017 labour force survey number of persons employed, defined as persons in employment or engaged in economic activity in the age group of 15 years and above, is 60.8 million (55.8 percent of the total), up by 2.18 per cent over the previous year. This employed population comprises 33.9 per cent women and 29.5 per cent in the younger age group of 15-29 years and 66.5 per cent in adult group of 30-64 years. However, for further acceleration in the pace of labour productivity growth it is imperative that special attention is paid on enhancing labour use efficiency, increased use of physical or human capital.

Table 8.1 Economic growth (per cent)

	2010	Baseline 2015	2015-16	2016-17
8.1.1 Annual growth rate of real GDP per capita	4.20	5.14	5.77	6.05
8.2.1 Annual growth rate of real GDP per employed person		4.49	4.99	5.0

Source: BBS

Indicator 8.3.1 Proportion of informal employment in non agriculture employment, by sex

Informal employment, comprising an overwhelming majority of the total labour force, is one of the major issues that characterise the economy of Bangladesh. Such a high scale of informal labour force presents substantial challenge to the sustainable development initiatives of the country as they are engaged in activities that are unregulated, unrecognized, and considered low productive. These jobs generally lack social or legal protections or employment benefits.

However, informal sector contributes significantly to the country's economy by creating employment opportunities for a large number of people who are either displaced from or could not be absorbed in the formal sector. According to the recent labour force survey of 2016-17, informal employment comprises 85.1 per cent with 82.1 per cent male and 91.8 per cent female.

Non-agriculture sector, comprising industry and services sectors, account for 59.4 per cent of the total employment, formal and informal combined. The proportion of informal employment in the non-agriculture sector employment has increased slightly from 77.5 per cent in 2015 to 78 per cent in 2016.

In the informal sector, 15-29 year old youth population accounts for 31 per cent of employment, declined from 35.6 per cent in 2015. For the 30-64 year group, informal sector employment has increased from 62.4 per cent in 2015 to 64.9 per cent in 2017. The shift in the age structure of employment implies that workers delay entering the labour market as well as it takes longer time to get absorbed in the labour market.

Indicator 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

Average earning of employed persons is an indicator for assessing their skill level and status of employment. According to the recent BBS survey, average monthly wage has improved slightly in FY 2016-17 over the baseline amount of Tk. 12,897 although real wage has declined for both male and female workers in the last 4 years. Average monthly wage in FY 2016-17 is Tk. 13,258 which was estimated at Tk. 14,152 in 2013.

Wage disparity by gender has deteriorated further in the recent period due to faster reduction in real wage rate for female than for male. Reduction is wage rate for female workers is estimated to be 3.8 per cent in 2016 compared to 1.9 per cent for male workers from the 2013 figure indicating greater degree of wage disparity between male and female for the same type of work. In 2016, average wage for male and female workers is estimated at Tk. 13,583 and Tk. 12,254 respectively. Average wage for male and female workers was estimated at Tk. 14,309 and Tk. 13,712 respectively in 2013.

In order to improve earning levels of the employees and addressing the SDG target 8.5 which focuses primarily on productive and full employment, the government of Bangladesh has undertaken a number of initiatives through its relevant ministries and departments with the Ministry of Labour and Employment as the lead ministry. Major emphasis has been given on institutional capacity building of technical and vocational education, and ICT education across the country for creating skilled manpower for both domestic and international markets.

Indicator 8.5.2 Unemployment rate, by sex, age and persons with disabilities

Rate of unemployment is a critical indicator for assessing performance of the economy. Bangladesh Bureau of Statistics (BBS) in the labour force survey considers someone unemployed if the person is currently without work but available for work and actively searching jobs. However, the rate of unemployment, defined as the percentage of unemployed persons in the total labour force, does not show any noticeable change during the period from 2013 to 2017 when it varied between 4.2 and 4.3 per cent. The overall unemployment situation has marginally improved in the recent years, from 4.6 per cent in 2010 to 4.2 per cent in 2017. The female labour has experienced higher unemployment marked with declining trend since 2013. Female unemployment rate is more than double the male unemployment rate. Unemployment rate for male has increased marginally from 3 per cent in 2013 to 3.1 per cent in 2016. **Among all the age groups, 15-24 age group youth has the highest unemployment rate of 12.3 per cent in 2017 which declined from 20.6 per cent in 2015-16.**

The estimated unemployment rate in Bangladesh has been closer to 4 per cent for a long time and it is not much of a policy concern. Increasing informality which undermines government efforts to ensure decent jobs and higher unemployment rate of women and persons aged 15-29 years need to be addressed to achieve the 2020 targets.

Table 8.2 Unemployment rate, non-agriculture informal employment and earnings

	2013	Baseline 2015	2016-17
8.3.1 Proportion of informal employment in non agriculture employment, by sex (Per cent)	78.86 (M:78.38 F:80.32)	77.8 (M: 75.2, F:88.7) (QLFS, 2015-16)	78.0 (M:76.0, F: 85.5) (QLFS,2016-17)
8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities (Taka per month)	Average monthly earnings: Tk. 11493 (M:11621 F: 11136)	Average Monthly earning: Tk. 12,897 (Male: 13,127 Female:12,072) 15-24: 10,862 25-34: 12,801 35-44: 14,053 45-54: 14,857 55-64: 13,160 65+:10,844 (QLFS, 2015-16)	Tk.13258 (M:13583 F:12254) 15-24:10831 25-34:13204 35-44:14143 45-54:15446 55-64:14511 65+ :11580 (QLFS,2016-17)
8.5.2 Unemployment rate, by sex, age and persons with disabilities (Per cent)	a) Sex:Both: 4.3 (M: 3.0; F: 7.3)	(a) Sex: Both: 4.2 (Male:3.0; Female: 6.8) (b)Age 15-17:10.5 18-24:10.1 25-29:6.7 30-64:1.9 65+:4.2 (QLFS, 2015-16)	a) Sex: Both:4.2 (Male:3.1; Female: 6.7) (b)Age 15-24:12.3 25-34:5.7 35-44:1.2 45-54:0.8 55+ : 0.6 (QLFS,2016-17)

Source: BBS, LFS 2013 and QLFS 2015-16 and 2016-17

Indicator 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training (NEET)

This indicator is used for assessing the complexities of youth transition to labour market and vulnerabilities. This proportion represents the number of young persons outside the education system, not in employment, or not training (NEET) as a percentage of the total youth population. This indicator actually measures the size of youth population who are the potential entrants to the labour market. In general, a high NEET rate and low youth unemployment rate may indicate significant discouragement for young people.

About 29.8 per cent of youth (aged 15-24 years) was not in education, not in employment (NEET) in the base year which increased to about 30 per cent in the following year. While the proportion of youth male NEET is closer to 10 per cent the proportion of youth female is about 50 per cent in 2016/17.

Table 8.3 Proportion of youth not in education, not in employment (NEET)

	Baseline 2015	2016-17
8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training (Per cent)	28.88 (M: 9.9, F: 46.9)	29.8 (M-10.3; F-49.6)

Source: BBS, QLFS 2015-16 and 2016-17

Indicator 8.7.1 Proportion and number of children aged 5 17 years engaged in child labour, by sex and age

Child labour is defined as the work that exceeds a minimum number of hours, depending on the age of a child and on the type of work. Any form of child labour is considered harmful and should be eliminated.

The Government has undertaken a number of initiatives to address the child labour issue. In 2010, the National Child Labour Policy was formulated with the objective of making meaningful changes in the lives of the children by withdrawing them from all forms of labour including the hazardous work and worst forms of child labour. Child Labour National Plan of Action was also implemented during 2012-2016 for the elimination of child labour. Interventions through Child Sensitive Social Protection Project (2012-2016), Enabling Environment for Child Rights Project, Primary Education Stipend Project are undertaken towards eliminating child labour from different sectors. Since 1994, ILO has been supporting the government through its International Programme on Elimination of Child Labour which directly benefited 75,000 working children through various interventions. US department of labour is also supporting implementation of the project entitled 'Country Level Engagement and Assistance to Reduce Child Labour' towards realizing its commitment to eliminate worst forms of child labour.

The Child Labour Survey 2013 is the most recent survey conducted in Bangladesh. Based on the UN convention, the survey classified children engaged in economic activities into 3 categories, working children, child labour, and hazardous child labour. **According to the survey, 8.7 per cent (3.45 million) of the 39.65 million population in the age group of 5-17 years are classified as working children, 4.3 per cent (1.7 million) as child labour, and 3.2 per cent (1.28 million) as hazardous child labour.**

Child labour survey 2002-03 show that 17.5 per cent of the 42.4 million children in the 5-17 year age group were engaged in economic activities that include the children either at work only (11.8 per cent), and both at work and at school (5.7 per cent) involving 24.1 per cent of the boys and 9.9 per cent of the girls.

Indicator 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status

This indicator is used to assess workplace safety situation which is an important indicator for 'decent work'. Recent data on occupational injuries indicate that significant improvement has taken place at the workplaces that is reflected through substantial reduction in fatal injuries from 382 in 2015 to 75 in 2016 – the target set for 2030. On the other hand, non-fatal injuries have increased substantially to 488 in 2017 from 246 in 2015 with a dip in 2016.

Table 8.4 Fatal and non-fatal occupational injuries

	Baseline 2015	2016	2017
8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status (per year)	a)Fatal injuries: 382 (Male: 362 Female: 20) b)Non-fatal injuries: 246 (Male:177; Female: 19)	a)Fatal injuries: 103 (Male: 124 Female: 08) b)Non-fatal injuries: 90 (Male: 62 Female: 39)	Fatal injuries: 75 (Male:105 Female:27) Non-fatal injuries: 488 (Male:285 Female: 248)

Source: MoLE, Department of Inspection for Factories and Establishments,

Indicator 8.10.1 (a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults

This indicator helps assess level of accessibility to the financial institutions or the retail locations for the residents in different parts in a country, including the rural locations. Access to finance typically expand opportunities for all with higher levels of access and use of banking services associated with lower financing obstacles for people and businesses.

In 2016, number of commercial bank branches for every 100,000 adults increased to 8.44 in 2016 from 8.37 in 2015 and 7.44 in 2010. Access to ATMs has also improved significantly in the recent years, from 2.05 in 2010 to 6.79 in 2015 and 7.77 in 2016.

Indicator 8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider.

Table 8.5 Financial Inclusion Indicators

	2005	2010	Baseline 2015	2016
8.10.1 (a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults	(a) 6.86 (b) 0.196	(a) 7.44 (b) 2.05	(a) 8.37 (b) 6.79 (IMF, 2015)	(a) 8.44 (b) 7.77 (WB, 2017)

Source: World Development Indicators, World Bank

Financial inclusion ensures improved access to and better utilization of resources, and better access to services that ensures the poor better quality of life. Increasing financial inclusion will help households and businesses to utilize formal financial services such as loans, deposit and saving accounts, payment services, and insurance to meet their specific needs for consumption and investment. There has been gradual improvement in financial inclusion indicators in Bangladesh over the years.

Indicator 8. A.1 Aid for Trade commitments and disbursements

Aid for Trade (AfT) is an umbrella policy comprising a wide variety of activities. It combines conventional measures of technical assistance to trade, intended to enhance the ability of the recipient country to comply with international trade rules and to develop its trade, with other types of trade related aid, such

as the provision of physical infrastructure and productive capacity for trade, or adjustment assistance to firms and households in the case of trade liberalization. Bangladesh received US$ 824.1 million as aid for trade during the period 2012-2014 against commitment of US$1340.1 million indicating difference between commitment and disbursement.

8.3 Key challenges

SDG 8 is set for inclusive and sustainable growth with employment and decent work for all. Bangladesh faces some challenges in the way of achieving this goal.

1. The economy has to create more jobs and more productive jobs to absorb the flow of new entrants with higher average schooling. The majority of workers are employed in the informal sector. Unemployment rates among youths continue to be high.

2. There seems to be some inconsistencies between skills demand and supply. In the formal sector where about 15 per cent of the labour force is engaged, half of the employment demands are for less than secondary education graduates. A large part of demand for university graduates comes from education, finance, and public administration sectors. While university graduates are more likely to take professional levels of occupations, there seems to exist a mismatch between the labour market demand for academic specialties and academic disciplines that university students study (World Bank 2013). Evidence also indicates that the skills of the workforce are not meeting the demands of emerging or, indeed, established industries. Difficulty of finding appropriately skilled workers is a substantial constraint to growth of industries (ADB and ILO, 2016).

3. Overseas employment is of considerable importance as a source of employment especially for low or un-skilled workers. But high cost of migration, fraudulent practices, substitution of contracts in destination countries and unacceptable conditions of work and living constrain the outward flow of workers.

4. Female labour force participation (FLFP) remains very low by international standards and while women's education at higher secondary level and above is now widespread, highly educated women face high unemployment rates, much higher than those for comparably educated men. There exist barriers to female labour force participation in the country. These include absence of infrastructure to facilitate and support women's employment, such as child care facilities near women's workplaces, violence against women- both in workplaces and outside, and safe and women friendly transportation.

5. FDI along with other sources of foreign resources will be important for attaining SDGs including the growth and decent work goal. The net annual FDI flow has been low and concentrated on a few sectors such as textiles and apparels, telecommunication, and energy and power. Despite government's effort to provide FDI friendly environment in the country by undertaking reforms in a wide range of areas Bangladesh still has a weak institutional architecture to serve the private investors. The country needs improvement in broader investment climate, strengthening of the investment promotion and facilitation agencies, continued simplification of regulatory frameworks and procedures for FDI entry and operations, and development of an integrated investor service delivery mechanism.

8.4 Way forward

1. Raising growth and achieving diversification of the economy: The current rate of growth does not seem to be sufficient to absorb the growing labour force. The economy needs to grow at a higher rate- at least 8 per cent per annum to at absorb the labour force. Since manufacturing will be main driver of growth, it has to grow at the rate of 12-15 per cent per annum during the next 15 years (ADB and ILO, 2016).

At the same time the economy has to diversify its production structure. Bangladesh has been succeeded in creating manufacturing employment especially employment for women by expanding labour intensive textiles and garment industry. There is a need for diversification with more such industries growing. Over the last four decades the economy has not been much successful outside textiles and garments to generate output and employment. For such growth to happen, the incentive structure has to be neutral between exports and import substitutes and there should neither be any favour nor any discrimination between them (ADB and ILO, 2016). In addition the supply side bottlenecks that constrain the growth and diversification of manufacturing have to be improved. These include physical infrastructure, high costs of ports and transport, shortage of skilled workers, difficulty in upgrading technology, and shortage of managerial and entrepreneurial skills.

2. Strengthening tie between the education system and the labour market: The tie between the education system and the labour market needs to be strengthened in several ways. First, the skills the education system is providing to the students need to fit what the labour market needs in terms of kinds and quality. The education system needs to provide more non-cognitive skill which the labour market requires. Second, there has to be effective communications between educational and training institutions and employers. There has to be systematic support to the graduates of educational and training institutions for job placement. The employers have to regularly communicate with the educational and training institutions about their skill needs. Since in a growing economy undergoing structural change skills demand evolves, both sides of the labour market should be in touch with each other and the education system needs to respond to industry demands. The private universities should be able torespond to the increasing and diversified demand for skills in manufacturing and services sectors through curriculum revision, introduction of new programmes and faculty development.

3. Enhancing women employment: Bangladesh has to address the multifarious barriers faced by women in order to enhance their labour force participation rate. The Government has developed legal framework to address issues such as child marriage and violence against women. However, application of laws needs to be much stricter. Infrastructure facilitating women's participation in the labour force needs to be expanded where both public sector and private sector can participate. Other policies and actions that facilitate women's work also need to continue. These include promoting women's education, reducing fertility rate, reserving certain proportion of jobs in the public sector for women and provision for maternity leave.

4. Providing skill development opportunities for existing workforce: The main beneficiaries of education and training system are the new generations of students. But a large part of the existing employees continue to contribute to the economy for decades. The skill levels of these employees need to be updated to achieve robust growth. Education and training has to be viewed as a lifelong process not a one-off affair.

5. Promoting foreign direct investment: Foreign direct investment has been gradually increasing in Bangladesh but the absolute amount is still low and focused on few sectors. As FDI not only augments investment but also brings new technology and management skills which have spill over effects Bangladesh should attract larger volume of FDI as part of its strategy to mobilize significantly bigger amount of resources for achieving accelerated growth, poverty reduction and employment generation.

8.5 Summary

Bangladesh has made an upward shift in the average annual growth rate to more than 7 per cent in the recent years (FY2015-FY2017) from the 6-7 per cent rate experienced earlier. This coupled with slower population growth led to increasing per person GDP growth and the country is nearly on track to achieve the 2020 target. It is also heartening to note that the average annual growth rate of GDP per employed person has already reached the 2020 target in FY2017. The estimated unemployment rate in Bangladesh has been closer to 4 per cent for a long time and it can be reasonably expected to remain closer to this long run level in the near future.

There is no official data on child labour after 2013. It may be expected that with stronger growth, and elimination of extreme poverty as well as greater access to education the child labour situation will improve in the future. There has been sustained improvement in financial inclusion which will contribute to growth and poverty reduction. There has been gradual improvement in financial inclusion variables in recent years indicating increased access of households and businesses to financial services.

There are, however, some aspects of the labour market which are not currently on track. If the recent erosion in real wages persist the targeted 20 increase in real wage by 2020 may not be achievable. Increasing informality which undermines government efforts to ensure decent jobs and higher unemployment rate of women and persons aged 15-29 years need to be addressed to achieve the 2020 targets. About 29 per cent of youth was not in education, not in employment (NEET) in the base year which increased to about 30 per cent in the following year. While the proportion of youth male NEET is closer to 10 per cent the proportion of youth female is closer to 50 per cent in 2016/17. Both rates are higher than their levels in the preceding year which puts them off-track.

Achieving SDG 8 targets face some key challenges concerning increasing informality in job market, high youth unemployment rate, skills demand and supply mismatch, low female labour force participation, low inflow of foreign resources – ODA and FDI, workplace injuries, child labour and problems involving migration of workers. The Government's growth enhancing and job creating policies and programmes would be revamped by other policies and programmes such as increasing growth through diversification of the economy, better integration of education system and labour market, enhancing women employmwnt opportunities, lifelong education and attracting external resources.

9

Resilient Infrastructure, Sustainable Industrialisation and Innovation

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

9.1 Global Perspective on SDG 9

Goal 9 addresses three important aspects of sustainable development: resilient infrastructure, inclusive and sustainable industrialization and research and innovation. Infrastructure provides the basic physical facilities and access to services that are critical for economic development. In a world faced with various shocks especially climate change and natural disasters of increasing frequency and greater intensity infrastructure has to be made resilient to cope with the shocks. Manufacturing has been one of the prime drivers of economic growth and decent job creation and hence has contributed to reduction of income poverty. However, inequalities in the value added in the manufacturing sector across countries pose a challenge to sustainable development. Innovation – introduction of new products, processes and business models, will spur manufacturing growth with environmental sustainability. The Goal is aimed at consolidating national and international efforts towards promoting infrastructure development, industrialization and innovation. Increased domestic and international financial mobilization, technological and technical support, research and innovation, and increased access to information and communication technology is required to achieve this goal.

9.2 Assessment of progress on SDG 9 by indicators

9.1.1a Road density per 100 square kilo meter

The Government recognizes the critical role of infrastructure comprising transport, energy, Information Communication Technology (ICT), water supply, sanitation, buildings, embankments and cyclone shelters in promoting economic growth and mitigating climate change effects and natural shocks. A countrywide road network has been established connecting rural and urban areas with Dhaka, the capital city and Chittagong, the port city. Similar expansion and upgrade actions have also been implemented in the railways network, inland waterways, ports and airports.

Three types of paved roads – national highways, regional highways and feeder roads, connect the country through linking its administrative centres, urban areas, commercial and business locations and sea and land ports. Besides, there are some roads constructed and maintained by local governments to ensure connectivity within their respective administrative areas. Roads and Highways Department (RHD) provides data on the former types of roads generated through its Road Condition Survey (RCS). Table 9.2 provides road density in the country calculated by dividing length of RHD road network by land area of the country and multiplying the quotient by 100. The length of paved road per

Table 9.1 Road density per 100 square kilo meter

2000	2010	2015	2016	2017
14.09	14.41	14.48	14.45	14.61

Source: Calculated from RHD and BBS data

100 square kilo meter has increased over time from 14.09 kilo meters in 2000 to 14.61 kilo meters in 2017. During this period a major work has been upgrade of existing roads by constructing additional lanes.

Indicator 9.2.1 Manufacturing value added as a proportion of GDP (per cent)

Manufacturing has been a more dynamic sector in the economy achieving relatively higher growth rate. Accordingly manufacturing value added as a proportion of GDP has been rising steadily since 2000-01 reaching 19.47 per cent in 2014-16. This trend has continued in the SDG period. It should be noted that manufacturing value added as a proportion of GDP has a downward trend in most countries both developed and developing and it exceeds 20 per cent only in a handful of countries, obviously Bangladesh being one of them. While developed countries have declining share as a natural pattern of structural change, developing countries are said to have falling share because of early

deindustrialization. In this context increasing share of manufacturing in GDP in Bangladesh is a notable phenomenon. It is heartening to note that the share of manufacturing value added in GDP already reached the 2020 milestone in FY2017.

Table 9.2 Share of Manufacturing value added in GDP, 2001-02 to 2016-17 (per cent)

2001-02	2005-06	2010-11	2014-15	2015-16	2016-17
15.76	16.13	17.75	20.16	21.01	21.74

Source: Ministry of Finance, Bangladesh Economic Review, various years

It should be noted that the growth of the sector has been dominated by large and medium scale industries with lackluster growth in small scale industries. There has been remarkable shift in the composition of manufacturing output from jute goods dominated one to RMG dominated one. Manufactured goods serve both the domestic market as well as the export market with RMG, dominating the export basket. The transition of the sector benefited from supportive government policies including fiscal incentives, favourable policies of the trading partners such as MFA, GSP, and QFDF access and surplus labour condition in the labour market which kept wages low.

Indicator 9.2.1 Manufacturing value added per capita (constant 2010 US $)

Manufacturing value added per worker has been calculated by dividing manufacturing value added in constant 2010 US dollar by the number of workers employed in the manufacturing sector in a particular year when labour force survey was conducted. Per capita manufacturing value added has increased steadily during the period from 1999-2000 to 2015-16 with a dip in 2013.

Table 9.3 Manufacturing value added per person (constant 2010 US $), 1999-2000 to 2015-16

1999-2000	2002-03	2005-06	2010	2013	2015-16	2016-17
2380	2479	2635	2774	2607	3877	4210

Source: Calculated using GDP data from World Bank and employment data from BBS, Labour Force Survey, various years

Indicator 9.2.2 Manufacturing employment as a proportion of total employment (per cent)

Manufacturing sector has been steadily expanding in Bangladesh over last two decades. Dominant segments of the sector such as textiles, RMG, jute goods, leather are labour intensive and consequently there has also been increase in manufacturing employment. Higher growth of manufacturing output has resulted in higher proportion of employment in the sector. There has been a decline in the manufacturing employment share in 2015-16. In recent years there has been a tendency in the RMG sector undergoing upgrade of technology to substitute capital for labour. A recent study (CPD 2015-16) found that the average yearly growth of employment in the sample enterprises during 2012-16 was 3.3 percent, down from 4.01 percent during 2005-2012. These tendencies in the RMG which is the dominant sector in manufacturing in terms of output and employment help explain this change. The employment share remained stable in 2016-17. The stability in manufacturing employment share in last two years, if continues, will make it difficult to attain the 2020 milestone. This type of development may be explained with the help of Table 9.4. The table indicates increasing productivity of manufacturing workers which would imply less workers are needed to produce a given unit of output. Thus while the share of manufacturing in GDP increases its employment share in total employment might decrease.

Table 9.4 Manufacturing employment as a proportion of total employment (per cent)

1999-2000	2002-03	2005-06	2009	2010	2013	2015-16	2016-17
7.3	9.71	11.03	13.53	12.46	16.4	14.4	14.4

Source: BBS, Labour Force Survey and Quarterly Labour Force Survey, Various years

Indicator 9.5.2 Researchers (in full-time equivalent) per million inhabitants

In Bangladesh research is mainly undertaken by government research organisations and public universities. Since the private investors mainly depend on imported technology especially in the export oriented manufacturing sector there is little motivation for having a dedicated unit for research and development. The National Agricultural Research System (NARS) has been successful in innovating new varieties seeds which are appropriate to the climatic conditions of the country. Bangladesh Atomic Energy Commission (BAEC) and Bangladesh Centre for Scientific and Industrial Research (BSCSIR) undertake research which can lead to innovation in manufacturing sector.

Table 9.5 Researchers (in full-time equivalent) per million inhabitants

2012	2013	2014	2015	2016	2017
5.56	5.66	5.69	5.98	6.16	6.63

Source: GoB, Ministry of Science and Technology

On the whole Bangladesh has low budget for research and engages a very small group of scientists in research. The number of researchers per million inhabitants has, however, been increasing over time; the average annual rate of increase grew from 2.5 percent between 2012 and 2015 to 5.4 per cent between 2015 and 2017 implying higher growth in the SDG period.

Indicator 9.a.1 Total official international support (official development assistance plus other official flows) to infrastructure

The Government lays heavy emphasis on building infrastructure to support its objective of achieving accelerated growth and poverty reduction and becoming upper middle income country by 2021. Quality infrastructure is also essential for ensuring competitiveness of the economy. Bangladesh has been implementing a wide range of projects in power and energy, roads and bridges, railways, port and deep sea port including 10 fast track projects or mega projects to remove the infrastructural bottlenecks. In FY2017 these projects were allocated about 40 percent of the Annual Development Program. The volume of funds required to implement the infrastructure projects is so large that foreign resources are needed to complement the domestic resources.

Table 9.6 Total international support to infrastructure (million US$), 2012 to 2016

2012	2013	2014	2015	2016	2017
813.1	1167.4	1580.2	1247.2	1736.5	6.63

Source: ERD

Total international support to infrastructure shows an upward trend with a dip in 2015. Annual flow of resources depends on a number of factors including size of aided projects, inclusion of new aided projects, and progress in implementation. Bangladesh expects continuous support from development partners to finance its infrastructure development projects.

Indicator 9.c.1 Proportion of population covered by a mobile network by technology (per cent)

Mobile phone was first introduced in Bangladesh in October 1990 which provided people with the possibility to subscribe to and use mobile cellular services to communicate. Bangladesh introduced 2G in 1992, the second generation of cellular telephone technology, to offer more services. 3G networks succeed 2G ones, offering faster data transfer rates and are the first to enable video calls. Bangladesh moved closer to achieving the Digital Bangladesh Vision with the launch of 4G, the fourth generation of mobile phone communications technology in February 2018. 2G technology coverage has reached closer to 100 per cent population in 2017. 3G technology coverage in 2017 has already exceeded the target set for 2020. It is clear that the spread of mobile network technology has been taking place at a rate faster than anticipated.

Table 9.7 Proportion of population covered by a mobile network by technology (per cent)

Technology	2012	2013	2014	2015	2016	2017
2G	99	99	99	99.4	99.46	99.49
3G	NA	NA	NA	71	90.2	92.55
4G				NA	NA	NA

Source: Bangladesh Telecommunication Regulatory Commission By browsing BTRC website, no information is found on accessibility of 4G (23 December 2018)

9.3 Government efforts to achieve SDG 9

The Government has undertaken various measures to build resilient infrastructure, promote inclusive sustainable industrialization and foster innovation

Transport and communication

A well-maintained, cost effective and safe road network plays an important role in sustainable development. In order to realise this outcome the Government sought to develop, maintain, and manage strategic road corridors, linking rural areas with National and District roads, improve Dhaka-Chittagong highway to six lanes, and other National Highways and corridors to 4/6 lanes, construct bridges, tunnels, overpasses, and flyovers and reduce road accidents. Steps have been taken to improve regional road connectivity with India, Nepal and Bhutan. The initial work for connectivity to the Asian Highway network has also been started.

Railway provides a cheaper and user friendly means of transport for passenger and cargo in Bangladesh. Truncated rail links due to independence from the British in 1947 and neglect of the railway in the allocation of resources worsened its service. In addition, rapid expansion of road transport reduces the demand for railway services. The Government wants to recover it as an attractive means of transportation. In this context necessary steps have been taken to renovate existing rail tracks, purchase locomotives, wagons and new coaches and modernization of signalling system and level crossing gates, bring reform in railway and collection of Diesel Electric Multiple Unit (DEMU). Work is underway to connect Mongla port with Chittagong port and Ramu with Cox's bazar. Efforts are also being made to re-establish railway links with India renovating the abandoned but once busy lines as well as to establish international connections to Trans Asian Rail Network and SAARC network.

In the past river transport was the dominant transport in riverine Bangladesh. With the drying up and siltation of rivers throughout the country rivers became less navigable. On the other hand, rapid expansion of faster road transport has substituted water transport services. The main focus was on maintaining year round navigability of inland waterways through dredging. A River Protection Commission has been formed under the River Protection Commission Act 2013 to protect rivers from activities such as illegal encroachment, river pollution, and illegal construction.

Information Communication Technologies (ICT)

Information Communication Technologies (ICTs) is an integral part of "Digital Bangladesh" vision of the Government. Use of ICTs in education and health sectors and in enabling e-payment, e- commerce and trade, and e-governance and such other uses will bring a rapid transformation in the socio-economic conditions in the country. The Government has formulated several acts, policies and guidelines to ensure rapid expansion and secure use of ICTs. It has worked towards development of ICT infrastructure and service capacities.

Science and technology

The Government adopted National Science and Technology Policy 2010 which aims to meet the basic needs of the citizens by harnessing the potential of science and technology. It focused on providing R&D environment for harnessing technologies for use in meeting the basic human needs

Manufacturing sector

A dynamic manufacturing sector is key to accelerating growth and generating decent employment in the economy. Globally policy makers have searched for appropriate policies to promote manufacturing growth. Bangladesh has moved from its inward looking and public sector dominated industrialization policy to export oriented policies where private sector is the dominant player. The Government is still in search for the right balance between policies for export promotion and protection of industries mainly serving the domestic market. Policies have focused on promotion of production for export and making exports competitive and creation of favourable market access conditions. Bangladesh adopted Comprehensive Trade Policy to achieve accelerated and sustainable economic growth by an integrated trade approach.

9.4 Key Challenges

Transport and communication

Road transport improvement faces challenges from complexity of land acquisition along with resettlement and compensation complexity. Other pertinent issues which need to be aligned properly include road construction technology, adequate finance, proper data, and axle load. Road safety maintenance requires proper and adequate roads, accurate road accident data, and awareness of users as well as special attention from traffic police.

A major challenge in project implementation in transport and communication sector is capacity constraint often leading to delays in project completion. Delays and underfunding result in cost escalation and lower rate of return on investment. Inadequate maintenance affects reliability and quality of infrastructure services with negative effect on growth.

9.5 Way forward

Building resilient infrastructure: Bangladesh has been historically vulnerable to natural shocks such as floods, flash floods, cyclones, storms, sea level rise, and river erosion with devastating impact on infrastructure – roads, railways, bridges, and embankments as well as public and private buildings. With climate change impacts the frequency and magnitude of these incidents are predicted to increase with greater devastative effects not only on infrastructure but also on lives and livelihoods, household assets including standing crops and fisheries. Bangladesh will need to mainstream the probable impact of these natural shocks in building infrastructure. Bangladesh also experiences devastation caused by man-made disasters such as structure collapse and fire. The mainstreaming has to be planned systematically, that is, based on scientific assessment of the impacts and vulnerabilities of climate change. Bangladesh has already begun to implement some such projects. The implementation of such projects should be expanded and integrated under the Delta Plan 2100.

Inclusive and sustainable industrialization: Manufacturing sector growth has in the past been inclusive. Textiles and apparel sector, the key driver of manufacturing growth, has been a labour intensive industry which created employment opportunities for 4.4 million workers in 2016 of which 80 per cent are young and unskilled women workers. Other sub-sectors such as jute and jute goods, leather and leather products, and frozen shrimps are also labour intensive. As mentioned earlier the RMG industry appears to be undergoing upgrade of technology causing reduced employment growth. These points to the need for expansion of other labour intensive industries such as food products, leather and leather goods, electronics and tourism (ADB and ILO 2016) even with continued dominance of RMG.

Despite continuing efforts of Department of Environment (DOE) towards curbing industrial pollution, a number of industries still remain polluters because they do not operate effluent treatment plants (ETP). Garments, textile and dying and washing factories have been established without due attention to their environmental consequences. Key polluting sectors also include cement, pulp and paper, chemical and pharmaceuticals, tanneries, brick kilns, and ship-breaking yards. Even if some industries have installed and operate ETP they dump their used up chemicals on land as solid waste. These industrial practices

are violation of sustainable development. The 7th FYP plan proposes a new approach to industrial waste management under which community, local institutions, news media, law enforcing agencies and relevant stakeholders will be engaged to curb pollution.

9.6 Summary

The road density per 100 square kilo meter increased to 14.61 kilo meters in 2017 from 14.41 kilo meters in 2010. Upgrade of existing roads by constructing additional lanes has been an important aspect of road infrastructure development. The share of manufacturing value added in GDP has increased significantly already exceeding the 2020 milestone in FY2017. Similarly, manufacturing value added per worker has been increasing but its target for 2020 is yet to be set. The share of manufacturing employment in total employment increased up to 2013 and then levelled off in the last two years. Whether this is the beginning of a long term phenomenon whereby rising value added share will be associated with falling employment share will have to wait for judgement.

Total international support to infrastructure has been increasing with some annual fluctuation. The proportion of population covered by mobile network has reached close to 100 per cent in case of 2G technology. In case of 3G technology the 2020 milestone has already been achieved in 2017.

Government's efforts to achieve SDG 9 rest, on the one hand, on providing infrastructure comprising all modes of transport and ICT infrastructure and, on the other hand, on providing policy support to private sector investment as well as foster public-private partnership. Financing, capacity constraints of implementation agencies, complexity of land acquisition are of the key challenges in this sector. In the face of vulnerability to natural disasters which are worsening due to climate change impact Bangladesh is building resilient infrastructure. Manufacturing growth has to be inclusive and sustainable.

10

Reduced Inequalities

Reduce inequality within and among countries

10.1 Global perspective on SDG 10

The inequality between countries has declined because of relatively faster growth of GDP per person in developing countries. The progress in reducing within country income inequality has been mixed. While income inequality has decreased in countries which have enjoyed sustained growth, it has deteriorated in countries with negative growth. Globally the richest 10 per cent earns about 40 per cent of global income while the poorest 10 per cent earns 2-7 per cent. Rising inequality is regarded as a threat to socio-political stability of the country. SDG 10 calls for nations to increase the income of the bottom 40 % of the population by empowering and promoting social, economic and political inclusion of all people irrespective of sex, age, disability, race, class, ethnicity, religion and opportunity as well as by ensuring equal opportunity and reducing inequalities of outcome by adopting appropriate legislation, policies and action discarding any discriminatory laws, policies and practices. Achieving greater equality will also depend on adoption of fiscal, wage and social protection policies.

Regulation and monitoring of international financial markets and institutions have to be improved and the voices of developing countries need to be strengthened in decision making in international economic and financial institutions. Migration of workers which benefits both host and sending countries should take place in safe, regular and responsible manner to avoid exploitation, human rights violation and cheating. The cost of transfer of remittance should be brought down to less than 3 per cent to enhance worker's benefit. Duty-free treatment and favourable access conditions for exports from least developed and developing countries have to be ensured. Official development assistance and other financial flows including FDI need to be encouraged to flow to states which need those most to support their national plans and programmes. Also promises made in SDGs including SDG 17 should also be kept.

10.2 Assessment of Progress on SDG 10 by indicators

For over a decade (2005-06 to 2014-15) Bangladesh grew at an average annual rate of 6.2 per cent. The growth rate increased to 7.11 per cent in 2015-16 and increased further to 7.28 per cent in 2016-17. Growth rate for 2017-18 has been estimated at 7.86 per cent, the highest ever rate in the country's history. Based on IMF, World Economic Outlook data base Bangladesh has been found to be one of the top 20 high growth performing countries in the world during the last 10 years (2008-2017). However, sustained growth has not been associated with declining income inequality. On the contrary inequality shows an increasing trend with periodic fluctuations. Gini coefficient, a common measure of the degree of inequality in the distribution of income (or consumption) increased from 0.338 in 1991-92 to 0.467 in 2005 which was followed by a marginal decline to 0.458 in 2010. During the period 2000-2010 income Gini was stable around 0.45. The stability of Gini in the first decade of the new millennium implies that the pro-poor and inclusive growth policies of the Government yielded positive results in restraining rise in income inequality.

The latest HIES (2016) shows that Gini is back to its long run trend with a value of 0.483 in 2016 indicating an increase in income inequality in the last six years. Rising inequality shows government policies have been inadequate to offset the forces that create inequality in the economy. Increasing inequality has dampened the effect of growth on poverty reduction; the incidence of poverty would have been lower by certain percentage points if inequality did not rise. The trend in rising inequality is also evident from the Palma ratio, which measures the ratio of incomes of the richest 10 per cent and the poorest 40 per cent of the population. The Palma ratio has gradually increased from 1.7 in the 1980s to 2.1 in the 1990s and further to 2.5 in the 2000s (Osmani, et al. 2015).

Remarkably, consumption Gini has been lower than income Gini and has remained relatively stable around 0.32 during the 2010-2016 period. This implies that the consumption expenditure of the poorer segments of the population has grown closely in line with average growth with positive impact on poverty reduction (as poverty is measured in terms of consumption expenditure not in terms of income).

Indicator: 10.7.1 Recruitment cost borne by employee as a percentage of yearly income earned in the country of destination

At present, around 10 million Bangladeshis are working in 161 countries around the globe and sending remittance which contributes to economic growth and poverty reduction. A larger proportion of temporary workers could have migrated and sent remittance but for the high recruitment cost. The cost is too high for the workers from poor families. In this context, the Government decided to reduce the cost of recruitment as proportion of annual income of migrant workers based on the migration cost and income in 17 countries in 2016 which have been used as baselines. Against these baselines milestones have been set for 2020 for each country. Data available from Ministry of Expatriates' Welfare and Overseas Employment (MoEWOE) show that recruitment cost borne by employee as a percentage of yearly income earned in the country of destination has not yet changed from their baseline values in 2018. It may be noted that recruitment cost/yearly income ratio varies from 10 per cent in Qatar to 67 per cent in Egypt in the baseline year.

Indicator 10.a 1 Proportion of tariff lines applied to imports from least developed countries with zero tariffs

The proportion of tariff lines applied to imports from least developed countries with zero tariffs remains the same as Doha round negotiation of WTO .

Indicator 10.b.1 Total resource flows for development by type of flow (e.g. official development assistance, foreign direct investment and other flows)

Official development assistance has an increasing trend which has continued in the SDG period. Foreign direct investment shows an increasing trend with annual fluctuation. It crossed the 2 billion mark in 2016 and continued to increase reaching US$ 2454.8 million in 2017.

Table 10.1 Resource flows for development by type of flows (US $ million)

	2012	2013	2014	2015	2016	2017
ODA	2057.2	2760.8	3046.8	3005.5	3531.7	3677.29
FDI	1194.9	1730.6	1438.5	1833.9	2003.5	2454.8

Source: ERD

10.3 Government efforts to reduce inequality

The Government has been following a pro-poor development strategy which combines promotion of economic growth and reduction of poverty and inequality. The policies that aimed to reduce inequality include employment generation and enhancing labour productivity and wages, development of human capital- education and training, health and nutrition, with greater access to poor, development of lagging regions, increased spending on social protection and improving its effectiveness, expansion of micro-credits and loans to SMEs, emphasis on agriculture and rural development, undertaking tax reforms focusing on progressive personal income taxation. It may be pointed out that the proportion of government expenditure on social protection has increased to 15.25 per cent in FY2017 from a paltry 2.54 per cent in FY 2011 (Table 1.7). In the following two years the proportion declined and reached 13.92 per cent in FY2019 despite large increases in absolute level of social protection expenditure (32.7 per cent in FY2018 and 19.3 per cent in FY2019).

10.4 Key Challenges

The increasing inequality or growing concentration of wealth which has implications for poverty reduction and relative deprivation poses a challenge confronting Bangladesh. Partially it has been the result of failure to implement planned policies. Progress in employment creation and enhancing labour productivity and wages, and expansion of micro-credit and loans to SME helped reduction of

inequality. However, tax reform to bring all types of income under progressive taxation could not be fully implemented. While government expenditure increased the share of expenditure on education, health, rural development and social protection could not be raised.

Remittance-led SMEs in the rural community can be promoted to address economic empowerment of women as well as alleviation of poverty in their locality. More targeted financial support, necessary training can facilitate SMEs development. Particular attention should be paid to enhancing the regulation of financial entities providing credit and micro-credit. Entrepreneurs should also be offered information and opportunities for training, and protection against risks e.g. insurance, to prevent them from failing into unsustainable debt. The Government is also working to reintegrate the returnees with the mainstream socio-economic activities of the country, which has not yet been visible.

10.5 Way forward

The Government is cognizant of the upward trend of inequality in the country and its implications for growth and poverty reduction. High and growing inequality could harm the overall growth of the country and the efforts to reduce poverty. Government policies foster inclusive growth to simultaneously address the challenge of poverty reduction as well as reduction of inequality. More focused policies are required to have larger impact on inequality. The 7th Five Year Plan (2016-20) has identified some such policies.

Human capital: An important way to reduce inequality is to ensure access of all people especially the poor and the disadvantaged to quality education and health services. This helps the poor to break the cycle of poverty by getting better jobs and also helps increase the rate of growth as well as improve income distribution. To achieve this the share of public expenditure on education and health has to be raised to at least 3.5 and 2 per cent of GDP respectively.

Rural infrastructure and agricultural development: Public spending on rural infrastructure- rural roads, rural electricity, irrigation, flood control and salinity control has to be increased. There is also need for cultivation of high yielding, climate change tolerant rice varieties and diversification of agriculture to high value crops. This will help increase growth rate, average labour productivity, rural wages and facilitate transfer of labour from the rural to the urban sector.

Micro-credit and SME loans: Micro-credit helps accumulate assets by the poor and get out of poverty. Similarly, SME loans help accumulate assets of micro and small entrepreneurs and create jobs for less skilled workers.

Social protection: The Government has been expanding coverage of social protection which now claims 1.6 per cent of GDP excluding government service pensions. The programmes, however, raise concern about their quality and targeting. Targeting these benefits and services to the poorest people, and improving the timing of safety net responses to mitigate the effects of various natural disasters and global shocks, will ensure that growth remains inclusive. National Social Security Strategy (NSSS) was approved by the Cabinet on 1st June 2015 and an action plan has been formulated and adopted to implement the strategy.The objective of the action plan is to formulate a detailed inventory of activities to be executed by line ministries over the next five years (up to 2021). The action plan provides indicators that will be used to track the implementation progress of the action plan.

Quality skills development: As mentioned earlier there are concerns about skills mismatch and quality of skills acquired by workers. The skills development programme should address these problems to meet the demand of a growing economy in a globalized world. Linking labour to productive employment in both domestic and global labor markets will help both poverty reduction and increase the flow of remittances. The private sector should also invest in the skills of employees and provide on the job training to meet the need for higher skilled workers and increasing wages for workers.

Temporary migration of workers: Migration of workers and its appropriate role in promoting pro poor growth needs to be emphasized. In this context migration will be mainstreamed with national development process. Skill development program will be strengthened by upgrading skills, international certification and mutual skill recognition by Country of Origins (COOs) and Country of Destinations (CODs) Safe and decent work for female migrant workers will be ensured. An efficient, inclusive, governance framework for labour migration will be put in place. Migration related legal frameworks will be updated and enforced. Awareness will be created among the aspirants workers so that they are not exploited through their expatriate friends and family members.

Progressive taxation: A progressive tax system is crucial to fight inequality both through raising sufficient revenue to invest in essential public services which benefit the poor and the less wealthy in the society and by directly reducing income and wealth inequality. There is some progressivity in the present income tax system but tax avoidance and evasion reduce the tax base. The tax system should be able to combat tax avoidance and evasion and ensure that everyone pays one's fair share of tax.

Better governance and institutions: The rule of law has to be established to combat transfer of income and wealth through rent seeking behavior as demonstrated in discretionary access to (public) bank loans, non-repayment of these loans, corruption in public procurement and public spending spheres, illegal land grabbing including public land and in the delivery public services. Improved governance and better institutions that work should improve the distribution of income.

10.6 Summary

The Government has been following a pro-poor development strategy which combines promotion of economic growth and reduction of poverty and inequality. While the policies have been largely effective in enhancing growth and reducing poverty they have not succeeded in reversing the worsening income distribution. According to recent available data (HIES 2016) income inequality has increased while consumption inequality has remained relatively stable.

There have been some developments with regard to reducing inter-country income inequality. Bangladesh has approved Expatriates' Welfare and Overseas Employment Policy 2016 in January, 2016 with a view to ensuring and encouraging safe migration and protection of migrants and their families.The proportion of tariff lines applied to imports from least developed countries with zero tariffs remains the same as the Doha Round of WTO negotiations—formally, the Doha Development Agenda launched in 2001.

Official development assistance has an increasing trend which has continued in the SDGs period. Foreign direct investment shows an increasing trend with annual fluctuation reaching US$ 2454.8 million in 2017.

The increasing inequality which has implications for poverty reduction and relative deprivation poses a challenge confronting Bangladesh. Partly it is a problem of the inability to bring all types of income under progressive taxation and partly a problem of not being able to appreciably increase the share of expenditure on education, health, rural development, and social protection in total government expenditure. More focused policies and programmes which have larger impact on reducing inequality have been identified. These include better governance and institutions to combat transfer of income and wealth through rent seeking behavior, corruption in public procurement ans spending, illegal land grabbing, and delivery of public services.

11

Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

11.1 Global perspective on SDG 11

In recent decades the world has witnessed phenomenal urban growth. In 2015, about 4 billion people- 54 per cent of world's population lived in urban centres. Rapid urbanization has created formidable challenges –growth of urban slums, inadequate urban services and infrastructure, and air pollution. Goal 11 seeks to make cities and human settlements inclusive, safe, resilient and sustainable. Ensuring access for all to adequate, safe and affordable housing and basic services and upgrade of slums are critical for this goal. The goal emphasises access to safe, affordable, accessible and sustainable transport system with special attention to the needs of vulnerable people, inclusive and sustainable urbanization and participatory and integrated sustainable planning and management and protection and safe guard of the world's cultural and natural heritage. Reduction of environmental impact of cities and deaths due disasters is also needed to make cities safer. The quality of life is enhanced by universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities. The least developed countries need support including financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

11.2 Status of SDG 11 in Bangladesh

Urbanization is inevitable in the development process. An ideal healthy and sustainable urban environment can be defined in terms of ease of access to different urban services and types of services (Haque, et al. 2014):

- Transport — less than 500 metres (via paved footpath wide enough for a wheelchair) to a bus, train or tram stop with regular services of at least every 30 minutes, off peak.
- Food and goods — less than 500 meters to shops.
- Green space — less than 500 metres to parks.
- Access — less than 30 minutes by mass transit to a range of employment, education, social and cultural opportunities; safe walking and cycling paths to a primary and secondary school.
- Housing — a mix of housing types and prices, suitable for living, housing built, or adapted, using environmental principles; good outdoor and indoor air quality.
- Social cohesion — a sense of community in the neighborhood; tolerant and safe environment.

Bangladesh has a low level of urbanization (defined as the proportion of urban population of the total population of a region or a country). It is estimated that in 2016 about 35 per cent of the population lived in urban areas. In terms of size of urban population, however, it is quite large and translates into an absolute population of 56.28 million. This is larger than the total population of South Korea in 2016.

There is wide spatial variations in the level of urbanization in the country ranging from 7.2 per cent in Satkhira district to more than 90 per cent in Dhaka district. Bangladesh has some 570 urban centers, of which Dhaka is a megacity and Chittagong, Khulna, Rajshahi and Sylhet are metropolitan areas, 25 are cities with population of over 100,000 and the rest are smaller towns.

Urban Housing: Lack of adequate housing is a key problem in all of the cities and secondary towns in Bangladesh. Housing deficit in urban areas grew from 1.13 million units in 2001 to 4.6 million units in 2010. ***Nearly 44 per cent of the urban population lived in purely temporary structures and 29 per cent lived in semi-permanent structures.*** Thus an overwhelming proportion of urban households lived in poor quality houses. There has been significant improvement in the quality of housing in recent years as evident from HIES 2016. About 57 per cent of urban households live in houses made of brick/cement walls. Besides, housing has been unaffordable for low-to-middle income group because of skyrocketing land prices in Dhaka in recent years (Ahmed 2017).

Continuous migration of poor people from rural to urban areas and lack of any mechanism to provide them immediate shelter have resulted in growth of slums in urban areas. In 2014 24.35 per cent of slums were located in Dhaka followed by Chattogram with 15.90 per cent. Close to 96 per cent of slum households live in poor quality (not pucca) houses.

Urban Transportation: Rapid growth of urban population, urban economic activities and growth of average income have led to phenomenal growth of the demand for transportation services resulting in manifold increases in motorized and non-motorized vehicles on the city streets (GED 2015). Extreme traffic congestion is a major problem in urban transportation in the cities. This problem is more acute in Dhaka, the capital city, but it also a common problem in other cities and urban centers. In Dhaka the speed of motorized vehicles has come down to walking speed – 5 kilometers an hour. A recent study (Hossain 2018) estimates the loss in working hours in Dhaka city due to traffic jam at 5 million hours in a day. Several factors have created this situation which include lack of planning and forethought about future transport needs and deficiency of public transport system. For women public transport system is even worse - it is insecure, overcrowded and unsafe and many a times they face sexual harassment on the vehicle.

Water supply and sanitation: There has been increase in the supply of piped water in urban areas but rapid increase in urban population has made the progress appear very small. According to HIES 2016 , 37.28 per cent urban households have access to piped water. There is, however, wide variation in access to piped water across urban centers with highest coverage in mega city Dhaka where Dhaka Water Supply and Sewerage Authority meets 90% of requirements in its service area. In district towns only 19 % of the population living in the core city areas are covered by piped water.

In almost all the urban centers (except Dhaka) there are no sewers and a large number of households lack connection to septic tanks (Ahmed 2017). There has been, however, significant improvement in the use of sanitary toilet from 32.4 per cent in 1981 to 76.8 per cent in 2017 (BBS 2017).

Solid Waste: Most urban centers face problems of collection and disposal of urban solid waste. In Dhaka City, only 60 per cent of the solid wastes generated daily is collected by the City Corporation. The situation is better in Sylhet and Chattogram with 76 per cent and 70 per cent of solid wastes collected respectively while lower proportions of solid wastes are collected in Rajshahi, Khulna and Barisal cities (GED 2015).

Disaster losses: Bangladesh is exposed to various natural disasters such as river erosion, cyclones, droughts, tornadoes, cold waves, floods, flash floods and earthquakes as well as human induced disasters such as fire and building collapse. In addition, emerging issues such as climate change and salinity pose new challenges. Especially, climate change increases the frequency and severity of natural disasters. Some argue that about 1% of GDP is lost annually due to disasters and it will increase due to climate change impact (GED 2015). Following the devastating cyclones of 1970 and 1991, Bangladesh has made significant efforts to reduce its disaster vulnerability and is considered today a global leader in coastal resilience due to its significant long term investments in protecting lives. Despite these efforts, the vulnerability of the coastal population is on the rise due to climate change.

Dhaka, the capital city, is among the most at risk cities in the world with assets extremely vulnerable to earthquakes and with its high population density and rapid urbanization intensifying this risk. According to Earthquake Disaster Risk Index of Stanford University, in a global perspective Dhaka is one of the most vulnerable cities to earthquake. The major risk of earthquake risk is connected with the high vulnerability of buildings to collapse. With unplanned compact building construction, constant tendency of narrowing roads, usage of flammable building materials and unauthorized electrical system as well as lack of resources to raise awareness and response skills have resulted in to growing risk in large scale.

Various urban Disaster Risk Reduction (DRR) actors in Bangladesh have been actively working to address the above hazards. However, their capacity and action has been more effective in rural areas rather than in complex urban contexts. The major challenges in implementing urban resilience programmes are: complex relations and linkages between city governance, line department and service providers; rapid growth and dynamic composition of urban population; and unplanned urbanization. In addition, unsynchronized approaches and lack of proper coordination among urban actors/stakeholders is an issue. Besides, local urban authorities suffer from inadequate responsibility and autonomy and financial capacity (Save the Children 2017).

11.3 Government efforts to ensure sustainable cities and communities

Housing: The Government undertakes several measures to ensure housing to people. It constructs houses and flats for providing housing to public sector employees. It develops residential plots for low and middle income group people. In view of acute shortage of land it has started to construct high rise flats and sell those on affordable terms.

Slum housing: The Government has initiated in 2016 Bangladesh- Pro-poor Slums Integration Project funded by the World Bank with the objective to improve shelter and living conditions in selected low income and informal settlements in designated municipalities in Bangladesh. There are five components in the project including the shelter component and lending. The government has been planning to construct some 10,000 residential flats for slum dwellers in Dhaka for their rehabilitation. The National Housing Authority will build the rental-based flats at Mirpur Housing Estate. Construction of residential apartments for the cleaners working for city corporations and municipalities has been in progress.

The government with the support of international agencies initiated various slum improvement projects. The first such project funded by UNICEF was initiated in 1982. The projects focused mainly on infrastructure improvements of the slums and reducing poverty of slum dwellers. Infrastructure improvements involved construction of drains and sewage lines, footpaths, latrines, garbage bins, water supply, flood protection and street lighting. Provision of skill, hygiene and nutrition training and access to credit contributed to poverty reduction. The Government implemented a slum rehabilitation project in 1993 at Bhasantek, Mirpur. This was a public/private partnership project where the Government provided the land and a private developer took the responsibility of providing flats to the poor people on Built, Operate and Transfer basis. Ultimately, the poor could not get these flats as they failed to afford them.

Road infrastructures: Road communication and drainage infrastructure are being developed and maintained through LGED, WASAs and ULGIs itself. LGED, under guidance of LGD, has been contributing to developing urban services especially in the area of road communication and other social infrastructure development through implementing various projects, imparting trainings and providing technical supports. At present, LGED is implementing 20 projects funded by the Government for improving urban services. LGED has another 8 infrastructure development projects that are supported by different DPs with significant amount of matching fund from the Government. Completion of the ongoing urban development projects will lead to creation of 7360 km road, 1502 km drain, 3329 meter bridge/ culverts, 36 bus/truck terminals, 22 cyclone shelters, 152 km footpath, 40 solid waste disposal grounds, and 35 fecal sludge treatment plants.

Northern Bangladesh Infrastructure Development Project (NOBIDEP) supported by JICA covers 18 paurashavas. For urban areas of coastal belt, CTEIP has been undertaken with the financial support of ADB. The project has been designed for 10 paurashavas of Barisal-Khulna region to improve climate resilient infrastructure and strengthen institutional capacity and governance (ERD 2018a).

Drainage infrastructure: Dhaka WASA has developed a drainage master plan. Khulna WASA is preparing their ones. City corporations and paurashavas also have projects to develop and maintain drainage system. With the support of Bangladesh Climate Change Trust Fund (BCCTF) more than 100 small

scale drainage improvement projects have been undertaken by different paurashavas for improving their resilience to climate change. A number of urban sector projects to improve drainage network at selected paurashavas are being implemented through LGED (ERD 2018a).

Waste management: It is one of the priority services provided by ULGIs. Dhaka city alone produces around 6000 tonnes of household solid waste per day. Traditionally, waste management was carried out by dumping it at open landfills. Only Dhaka North City Corporation (DNCC) and Dhaka South City Corporation (DSCC) have sanitary landfills which will be exhausted soon. Considering the land scarcity in the country, the Government has decided to go for modern technology based waste management like incineration. To this end, projects for land acquisition have already been approved by ECNEC for DNCC, DSCC and Narayanganj City Corporation (NCC) (ERD 2018a)

Water supply: In Dhaka, Chittagong, Khulna and Rajshahi cities, water supply is managed by respective WASAs. ULGIs are responsible for remaining cities and towns. Traditionally, urban water supply heavily depends on ground water extraction. The Government has made a paradigm shift in this sector. For greater sustainability, Honorable Prime Minister Sheikh Hasina has instructed to reduce dependency on ground water. Accordingly, capacity of WASAs in surface water supply is being improved through several sophisticated technology based projects. In Dhaka, daily water demand is around 235 crore liters per day. Dhaka WASA's capacity has been improved to produce 242 crore liters where ratio of ground and surface water supply is around 70:30. The Government has undertaken three mega projects, namely, Padma (Jashaldia) Water Treatment Plant Project with 45 crore liters daily capacity, Saidabad Water Treatment Plant Project (phase-3) with 45 crore liters daily capacity, and Dhaka Environmentally Sustainable Water Supply Project with 50 crore liters daily capacity to reverse the situation.

In Chittagong WASA (CWASA) area, potable water demand is 50 crore liters. Through successful commissioning of Sheikh Hasina Water Treatment Plant that supplies 14.3 crore liters from Karnaphuli river, CWASA is presently able to meet nearly 70 percent of the demand. With the support of development partners, three more projects, namely, Karnaphuli Water Supply Project (phase-2) with 14.3 crores daily capacity, Chittagong Water Supply Improvement and Sanitation Project with 9 crore liters daily capcity, and Bhandal Jhuri Water Supply Project with 6 crore liters daily capacity are being implemented to augment the existing daily supply.

Khulna Water Supply Project is being implemented for supplying 11 crore liters water daily which will increase water supply coverage to 46 percent. The 2nd phase of the project will be implemented by Khulna WASA to ensure 100 percent of water supply from surface source by 2023.

For Rajshahi city area, a project is in the pipeline for providing potable water from the Godagari point of the Padma. Through this project, 100 percent of water supply will be ensured from surface source.

Sylhet and Barisal City Corporation as well as 18 paurashavas have surface water supply schemes. Projects are also in place to establish another 23 surface water treatment plants in different paurashavas through DPHE. A total of 152 paurashavas now have piped water supply services developed by DPHE (ERD 2018a). WASAs provide water to the poorer community for which bills have been paid from revenue budget of the government.

Sanitation/sewage management: Bangladesh has successfully reduced open defecation to 1 percent in 2015. Improved sanitation coverage has also been increased to 63 percent. However, in Dhaka city, sewage network coverage is only around 20 percent. Dhaka WASA has finalized its Sewage Master Plan (SMP) and started to implement it. Out of 5 Sewage Treatment Plants (STP) to be established under the SMP, one has been in progress at Dasherkandi for treating 50 crore liters of sewage daily. Projects for construction of two STPs at Saidabad and Uttara are in the pipeline. The remaining two at Mirpur and Rayer Bazar will also be constructed in phases. CWASA has completed its sewerage and drainage master plan with the support of the World Bank. KWASA has completed its feasibility study for a sewage master plan with the support of ADB to undertake sewage management activities in three phases (ERD 2018a).

Urban Resilience Project: Urban Resilience Project is being implemented in Dhaka North, Dhaka South and Sylhet City Corporation areas. It seeks to create an enabling environment for centrally coordinated and locally managed disaster risk management (DRM). It will establish, in addition to increasing institutional capacity, Emergency Operation Centers, Emergency warehouses, satellite control rooms, heavy equipment for emergency management, rescue and life-saving equipment.

Air pollution: Bangladesh has set an ambient air quality standard and a number of specific strategies have been undertaken in the past addressing specific emissions sources in order to reduce the concentration of the criteria air pollutants to the ambient AQ standards. These include lead (pb) phase out from petrol, ban on two-stroke three wheelers in Dhaka, promoting CNG conversion of vehicles, ban on older vehicles responsible for larger amount of emissions, ban on vehicles older than five years, setting vehicle emission standards, policies to reduce emissions from brick kilns, ban on high Sulphur coal, and disseminate use of improved cooking stoves. Some of these strategies were successful, while others were not so. (DOE 2012).

Despite these policies air quality in Bangladesh especially in Dhaka has not improved. On the contrary, Dhaka's air quality has been continually deteriorating since 2010 making it the third most polluted in the world according to an air quality data compiled by the World Health Organisation (WHO) for megacities with a population of 14 million or more. The Indian capital Delhi has been found to be the world's most polluted city followed by greater Cairo in Egypt as the second most polluted city. Air pollution is estimated to claim 122,400 lives in Bangladesh a year (Health Effects Institute 2017).

Efforts to protect and safeguard the world's cultural and natural heritage: Ministry of Cultural Affairs (MoCA) has prepared an Action Plan for the period up to 2020 to preserve the cultural heritage of the country and implement projects which will contribute towards achievement of SDG targets. Important current and recent past activities include excavation of 23 archeological sites during last 3 years, plan to excavate 08 archeological sites in the 2018-19 financial year and completion of archaeological surveys in 34 districts. Conservation activities are also going on simultaneously in possible cases. Financial support is provided to non-government organizations engaged in archaelogical preservation work and research both of tangible and intangible heritages and persons engaged in cultural activities.

ADB aided South Asia Tourism Infrastructure Development project (Bangladesh Portion) has been completed with an aim to improve culture based tourism and to strengthen linkages between tourism and local people by building capacity of communities to enable them to obtain greater benefits from tourism.

About 57 research books and journals have been published during last 3 years for development of Bengali language and literature. Besides, 13 thousand folk songs and music that were on the verge of extinction have been collected and preserved. 'Mongal Shovajatra' and 'Shitalpati' (Traditional Shitalpati Weaving of Sylhet) have been enlisted by UNESCO as Intangible Cultural Heritage of Humanity in last two years.

11.4 Key Challenges

If cities and towns are to successfully play their role as a driving force behind economic and social development, the following challenges have to be addressed.

Adequate, safe and affordable housing: Rapid urbanization has created increasing demand for housing creating housing deficit. With current rate urbanization and supply of housing, deficit is likely to persist in the future with housing remaining unaffordable for low and middle income households and rising house rents draining a disproportionately large portion of wage income.

Affordable, accessible and sustainable urban transport: Lack of efficient public transport system has multiple related effects- slower vehicle speed costs working hours lowering labour productivity, incurs higher fuel consumption and emission. Overcrowded bus trip affects comfort and safety of riders especially

of women. Dhaka city transport system will improve substantially after completion of the construction of five metro rail lines, two rapid bus routes, 1,200km of new roadways, six flyovers and three ring roads in Dhaka by 2035. A metro rail line between Uttara and Motijheel and a rapid bus line from Gazipur to Mohakhali which will be built by 2019 will ease the transportation problem to some extent.

Air Quality improvement: Rising demand for construction materials fuelled by urbanization and construction itself has been major cause of air pollution in the country especially in the cities. Despite government regulations, numerous brick kilns around Dhaka are producing huge levels of dust and smoke accounting for 52 per cent of the pollution. Around 60 percent of the brick kilns have switched to efficient energy sources. Government is closely monitoring their operations so the rest uses efficient and sustainable technology and also discouraging unregistered brick kilns from operating in the area. Under-construction buildings and roads are adding more dust to the environment, making the situation even worse.

Private construction operators must strictly maintain the (government's) building code and carry material more carefully so as to avoid more dust.

The urban traffic system has to be improved and made it more efficient through reducing traffic jams and old vehicles on the road which result in burning fuel inefficiently, adding more particulate matter 2.5 in the air.

Urban Resilience: Environmentally challenged areas such as coastal, haor, monga and river bank erosion areas have been major sources of poor rural migrants who move to urban areas especially to Dhaka. Climate change will worsen the incidence of natural disasters such as floods/flash floods, cyclones and storm surges, salinity intrusion and climate change induced sea level rise and its impacts mainly in low-lying coastal areas will force millions of people to migrate to Dhaka. In order to relieve pressure on Dhaka secondary cities which will be climate-resilient and migrant friendly needs to be developed. The Government is providing urban services in Upazilla headquarters (491 in number) to make them grow as smaller towns and trying to develop residential hubs in rural growth centres (1400 in number) (ERD 2018b).

The World Bank has been implementing Urban Resilience Project to strengthen the emergency response system and to develop the capacity of city corporations, while JICA exchanged its Loan Agreement on December 13, 2015 for Urban Building Safety Project which would serve as the catalytic role of public and private building safety. These programs have helped concerned government officials to identify necessary actions forward, such as identification of urban risk, legislative system for emergency operations and building safety, improvement of design and construction skill, establishment of coordination mechanism, awareness raising to the citizens and improvement of university education program.

Resource constraints: Rapid urbanization and overall socioeconomic development in the country in recent years have substantially increased demand for improved urban services. Many of these services involve modern technology based solutions that require large investment. Existing resource bases of Urban Local Government Institutions (ULGIs) are not sufficient to meet these investment requirements. The Government has been increasing its contribution to ULGIs through ADP allocation as well as through block allocations but more is needed. Heavy dependence on national government grant is not a sustainable option. ULGIs require exploiting their full potential to increase revenue income prudently. Mobilization of additional resources will require exploring innovative initiatives and alternative options for financing like public-private-partnership (PPP) and access to credit facilities.

Coordination amongst key stakeholders in Dhaka and other cities: There are many service providers and stakeholders in urban areas. Effective coordination among them is important for greater interest of the urban dwellers. City Corporation (CC) Act 2009 clearly authorizes CCs to coordinate amongst stakeholders. The Government has issued an official circular mentioning the roles and responsibilities

of all departments/ agencies when they are invited by CC to coordination meetings. CCs have started to activate this mechanism for better partnership, accountability and transparency. Other several committees with citizen participations are in place. These committees are being activated by different DP supported projects. Capacity building, empowerment and engagement of committees with citizen participation will be enhanced to strengthen ULGIs for planning, budgeting, implementation and monitoring of basic urban services, especially for urban poor.

Synchronization of policies, strategies and master plans: Almost all organizations functioning in the CCs have their own development policy, strategy and master plans. These master plans are scarcely synchronized resulting in conflicts between master plans during implementation. Development interventions causes sufferings of people during implementation which could be avoided and causes loss of resources. CCs have been given the authority to ensure coordination and synchronization amongst these master plans.

11.5 Summary

Bangladesh has a low level of urbanization with an estimated 35 per cent of the population living in urban areas in 2016. In terms of absolute urban population of 56.28 million, it is quite large. The level of urbanization in the country ranges from 7.2 per cent in Satkhira district to more than 90 per cent in Dhaka district. Bangladesh has some 570 urban centers, of which Dhaka is a megacity, Chittagong, Khulna, Rajshahi and Sylhet are metropolitan areas, 25 cities are with population of over 100,000 and the rest are smaller towns.

Lack of adequate housing is a key problem in all of the cities and secondary towns in Bangladesh which is manifested in housing deficit of 4.6 million units in 2010. Nearly 44 per cent of the urban population lived in purely temporary structures and 29 per cent lived in semi-permanent structures. Thus an overwhelming proportion of urban households lived in poor quality houses. There has been significant improvement in the quality of housing in recent years as evident from HIES 2016. Close to 96 per cent of slum households live in poor quality (not pucca) houses.

Phenomenal growth of the demand for transportation services resulting in manifold increases in motorized and non-motorized vehicles causes extreme traffic congestion. In Dhaka city traffic jam incurs a loss of estimated 5 million work hours in a day.

According to HIES 2016 , 37.28 per cent urban households have access to piped water with wide variation in access to piped water across urban centers. The highest coverage exists in mega city Dhaka where Dhaka Water Supply and Sewerage Authority meets 90 per cent of requirements in its service area.

In almost all the urban centers (except Dhaka) there are no sewers and a large number of households lack connection to septic tanks (Ahmed 2017). There has been, however, significant improvement in the use of sanitary toilet from 32.4 per cent in 1981 to 76.8 per cent in 2017 (BBS 2017).

In Dhaka City, only 60 per cent of the solid wastes generated daily are collected by the City Corporation. The situation is better in Sylhet and Chattogram with 76 per cent and 70 per cent of solid wastes being collected respectively. Lower proportions of solid wastes are collected in Rajshahi, Khulna and Barisal cities (GED 2015).

Many of the cities in Bangladesh are vulnerable to various natural disasters such as river erosion, cyclones, droughts, tornadoes, cold waves, floods, flash floods and earthquakes as well as human induced disasters such as fire and building collapse. Bangladesh has made significant efforts to reduce its disaster vulnerability and is considered today a global leader in coastal resilience due to its significant long term investments in protecting lives. Despite these efforts, the vulnerability of the coastal population is on the rise due to climate change. According to Earthquake Disaster Risk Index of Stanford University, in a global perspective Dhaka is one of the most vulnerable cities to earthquake.

Making sustainable cities and communities has become a shared responsibility of diverse stakeholders all contributing to provision of various urban services: urban housing, slum housing, urban transportation, water supply and sanitation, sold waste management, urban disaster risk reduction, air pollution and urban safety and security. Local Government Engineering Department (LGED), Urban Local Government Institutions (ULGIs) and their agencies such as WASA, Development Partners (DPs) and Civil Society Organizations (CSOs) are some of these institutuions.

In order for the cities and towns to play the role of a driving force behind economic and social development a number of challenges have to be addressed including ensuring adequate, safe and affordable housing, ensuring affordable, accessible and sustainable urban transport, ensuring urban resilience, and resource constraints.

12

Sustainable Consumption and Production Patterns

Ensure sustainable production patterns and sustainable consumption

12.1 Global Perspective on SDG 12

Humanity is pushing against the finite planetary resources. The global population is estimated to reach 9.6 billion by 2050 which could require the equivalent of almost three planets to provide the natural resources needed to sustain current lifestyles. Each year, an estimated one third of all food produced – equivalent to 1.3 billion tonnes worth close to USD 1 trillion – ends up in the bins of consumers and retailers, or spoiling due to poor transportation and harvesting practices. Humanity urgently needs to change the current pattern of consumption and production of goods and resources to reduce the ecological adverse footprint. SDG 12 aims at 'doing more and better with less', increasing net welfare gains from economic activities by reducing resource use, degradation and pollution, while increasing the quality of life.

SDG 12 calls for action on all fronts: adoption of sustainable management and efficient use of natural resources, environmentally sound management of chemicals and all wastes and sustainability reporting by businesses; promotion of sustainable procurement practices and rationalisation of inefficient fossil-fuel subsidies by policy-makers that encourage wasteful consumption ; environmentally-aware lifestyles of consumers; development of new technologies and production and consumption methods by researchers and scientists and others. SDG 12 envisions sustainable consumption and production, which uses resources efficiently, reduces global food and other waste, and disposes safely toxic waste and pollutants. It also highlights the importance of strengthening scientific and technological capacity in developing countries to move to sustainable patterns of consumption and production and developing tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products. This will evolve a new global partnership between business, consumers, policy makers, researchers, scientists, retailers, the media and development cooperation agencies.

12.2 Status of sustainable consumption and production patterns

Sustainable consumption and production has been part of the global development agenda since the UN Conference on Environment and Development in 1992 and was defined in 1994 at the Oslo Symposium. In 2012, heads of states at the UN Conference on Sustainable Development (Rio+20) adopted the 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP). This is a global framework for action to shift towards SCP and is closely connected to SDG 12-indicator 12.1 refers explicit to implementing it. Bangladesh has not yet developed the 10 Year Framework of Programmes on SCP. However, the Government is aware of the challenges of achieving accelerating economic growth, social inclusion and environmental sustainability in the face of limitation of natural, physical, human and social capital (GED 2013).

There has been growing awareness of the importance of increasing productivity and efficiency of resources, minimizing waste in production as well as consumption and management of waste, safe disposal of toxic waste, reducing threats to health and environment.

In the past 10 years starting from 2009 Bangladesh has been growing at an annual rate of 6.6 per cent. In the last three years it has been over 7 per cent peaking to 7.86 per cent in FY 2017-18. Sustained growth has led to increase in per person income to US$ 1751 in FY2017-18 from US$759 in 2010. Bangladesh graduated to lower middle income country according to the World Bank definition in 2015 and met the criteria for graduation from the LDCs to developing economy group during the Committee for Development Policy (CDP) triennial review of the the LDCs in March 2018 as per UN criteria. Bangladesh has been able to reduce poverty by an average 1.8 percentage points during 2000-05 period, by 1.7 percentage points during 2005-10 period and by 1.2 percentage points during 2010-16 period. The declining rate of poverty reduction observed in the 3 consecutive HIES highlights the challenge of poverty reduction in the future. The head count poverty rate is estimated to decline to 21.8 per cent in 2018 from 31.5 per cent in 2010 and 48.9 in 2000. In spite of the impressive success in poverty reduction close to 36 million people are still below the poverty line.

In this backdrop the development strategy of the Government is to accelerate the growth rate underpinned by increasing investment rate and manufacturing growth. Higher growth rate is required to achieve accelerated poverty reduction so as to bring down incidence of extreme poverty to zero by 2030 as well as to achieve higher rate of employment generation to reap the benefit of demographic dividend.

Higher growth driven by manufacturing growth will inevitably lead to higher energy consumption in the economy to meet the demand for energy as input to the production process as well as household demand. In this context, it is important to promote twine objectives of higher economic growth and reducing environmental damage by increasing resource and energy productivity, safely managing chemicals, shifting away from carbon-intensive energy and transport systems, and reducing the amount of waste going to landfills. Minimising waste and resource use through maintenance, reuse, repair, refurbishing and recycling of existing materials and products to maintain their value for as long as possible would be equally important. This would reduce pressures on environment and also bring major economic benefits.

Historically, expansion of economic activities has been associated with growing energy consumption. However, SCP requires increasing energy productivity by improving energy efficiency and the restructuring of economies so they produce more from the same energy input. In recent years energy efficiency has increased partly due to faster growth driven by relatively less energy intensive RMG sector (Sustainable and Renewable Energy Development Authority (SREDA) and Power Division (2015). Energy Efficiency and Conservation (EEC) Rule 2013 and Energy Efficiency and Conservation Master Plan (2015) were adopted by the Government to promote efficient energy consumption. The rules apply to different stakeholders, namely, residential and commercial , industry and services and public sector and efficiency would be achieved through awareness building, promotional activities and undertaking programmes as well as providing supplemental funding for EEC measures.

Target 12.3 halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

Food loss and waste is a matter of grave concern globally but especially in developing countries where millions of people go hungry. Food loss may occur due to problems in harvesting, storage, packing, transport, infrastructure or market / price mechanisms. Climatic conditions such as flood, heavy rains, drought and other related factors also cause significant postharvest crop loss. It has been estimated that at least 10% of the crop productivity in Bangladesh is lost during postharvest operations (Nath, et al. 2016).

Food that is fit for human consumption, but is not consumed because it is left to spoil or discarded by retailers or consumers is called food waste. This may be because of rigid or misunderstood date marking rules, improper storage, buying or cooking practices (FAO 2015). Ahmed (2018) estimated that about 5.5 per cent of the total procured food is wasted. Of the total wastage, 3 per cent is being made during procurement and preparation stage, 1.4 per cent during serving, and another 1.1 per cent from the plates.

Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frame-works and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Municipal solid waste

Solid waste in urban areas is generated from several sources such as domestic, commercial, industrial, street sweeping and health care facilities. Major concerns regarding solid waste are generation of increasing volume of waste and its management. The total solid waste generation in all urban centres in Bangladesh in 2005 stood at 13,332.9 tons per day of which Dhaka and Chattogram accounted for 34.8 per cent and 11.6 per cent of total waste (Iftekhar 2006).

Waste management system in Bangladesh is still not well organized. There are three systems of waste management in Bangladesh – formal system, community initiative and informal system. In the `Formal System" municipalities/city corporations are responsible for Solid Waste Management (SWM). The system is based on the conventional system of collection-transportation-disposal of waste carried out by the local authorities. In this system the concept of recycling is absent. Next is the `Community Initiative" that is based on primary solid waste collection by CBOs and NGOs. Finally, "Informal System" represented by the large informal labor force involved in the solid waste recycling trade chain (Abedin and Jahiruddin 2015).

A small proportion of solid waste is recycled into compost. Waste Concern has been operating a large scale compost plant in Dhaka, Bangladesh, using PPP model. Under this project, Waste Concern could collect up to 700 ton/day of organic waste (not mixed, only vegetable waste) incrementally starting from 100 ton/day (Enayetullah and Hashmi 2006). Solid waste management is a source of Green House Gas emission from open burning, illegal dumping and open landfill. The amount GHG emission from urban solid waste was estimated at 2.19 million CO2 e per year in 2005.

12.3 Government Efforts to Ensure Sustainable Consumption and Production Patterns

Bangladesh has been able to achieve accelerated growth and lift several millions people out of poverty over the past two decades or so. Recently, it has graduated from the LDCs group to the developing group. But development has been accompanied by negative environmental impacts which, if unchecked, can threaten the economic development. The Government has been aware of the negative impacts and their consequences. Accordingly, policies and strategies have been adopted to promote sustainable production, consumption, and disposal patterns in the economy. Many of these policies and strategies have been highlighted in the National Sustainable Development Strategy (NSDS) adopted by the Government in 2013. Some of these sectoral policies and strategies provided here.

12.3.1 Sustainable production in agriculture

Sustainable production in crop agriculture would be ensured through increased surface water irrigation, restricting conversion of agricultural land to other uses, balanced fertilizers use, use of organic fertilizer, and expandining Integrated Pest Management system.

Sustainable production in open water fisheries would be ensured through restocking, restricting catch during peak breeding season, preserving fish sanctuaries, conserving aquatic biodiversity and indigenous fish species and enhanced culture fisheries.Sustainable shrimp cultivation would be ensured through defining shrimp farming zones, stopping encroachment of forested land for shrimp cultivation and expanding organic shrimp farming.

12.3.2 Sustainable production in manufacturing

Sustaianble production in manufactuting would be ensured through increased public awareness of effecrs of environmental pollution and dumping of hazardous materials on land and water, effective use of Effluent Treatment Plants (ETP) in industries, green labeling of industries, providing appropriate incentives to reduce emission and developing industrial complexes able to harvest rai water.

12.3.3 Sustainable energy and power

Electricity generation would be enhanced through coal based and nuclear power based power plant ensuring adequate safeguards and using environment friendly technology, and utilizing renewable sources. Hydroelectric power generation and use in co-operation with Bhutan, India, and Nepal as well as import of electricity from neighbouring countries would be emphasized to meeting increasing demand.

12.3.4 Improving water quality and air quality

Adequate water supply would be ensured through encoursging use of surface water and harvesting rain water. Water quality would ensured through provision of fiscal and other financial incentives for retro-fitting or for reduction of effluents from industries, and enforcing the Environment Conservation Act & Rules. CO2 emission will be controlled through banning older vehicles, introducing improved mass-transit systems in cities, promoting energy efficient technology in brick kilns as well as in household cooking. Dust control measures would be made mandatory in construction works.

12.3.5 Waste generation and management

Various programmes would be inintiated under 3r ((Reduce Recycle and Reuse) policy adopted by the Government. Community initiatives will be encouraged to reduce and manage solid waste.

12.4 Sustainable Consumption

Sustainable consumption of electricity will be encouraged through demand management measures such as reducing opening hours of shops, keeping the temperature of ACs in all offices at a minimum of 25 degrees Celsius, avoid unnecessary illumination at home, shopping centres and other places, replacing inefficient incandescent lights, refrigerators, ACs, pumps, motors, and other electrical appliances by efficient ones and replacing the road lights by energy efficient LED and solar powered lights. Adjustment of prices of electricity, gas and liquid fuel to reflect cost of production and achieve social objectives in electricity distribution through cross subsidization and explicit budget support will also be adopted.

12.5 Summary

Food loss and waste is a matter of grave concern globally but especially in developing countries like Bangladesh where millions of people go hungry. Food loss occurs due to problems in harvesting, storage, packing, transport, infrastructure or market / price mechanisms as well as climatic conditions. An estimated 10 per cent of crop productivity in Bangladesh is lost during postharvest operations.

Food that is fit for human consumption, but is not consumed because it is left to spoil or discarded by retailers or consumers is called food waste. About 5.5 per cent of the total procured food is wasted of which 3 per cent is wasted during procurement and preparation stage, 1.4 per cent during serving, and another 1.1 per cent from the plates.

Solid waste in urban areas is generated from several sources such as domestic, commercial, industrial, street sweeping and health care facilities. The total solid waste generation in all urban centres in Bangladesh in 2005 stood at 13,332.9 tons per day of which Dhaka and Chattogram accounted for 34.8 per cent and 11.6 per cent of total waste respectively.

Waste management system in Bangladesh comprising formal, community initiative and informal system is still not well organized. A small proportion of solid waste is recycled into compost. The amount of GHG emission from urban solid waste was estimated at 2.19 million CO2 e per year in 2005.

13

Climate Action

Take urgent action to combat climate change and its impacts

13.1 Global perspective

Planetary warming continued in 2016, setting a record of about 1.1 degrees Celsius above the pre-industrial period. The extent of global sea ice fell to 4.14 million square kilometres in 2016, the second lowest on record. Mitigating climate change and its impacts will require building on the momentum achieved by the Paris Agreement on Climate Change. Stronger efforts are also needed to build resilience and limit climate-related hazards and natural disasters (UN, 2017).

The annual average losses from earthquakes, tsunamis, tropical cyclones and flooding amount to hundreds of billions of dollars, requiring an investment of US$6 billion annually in disaster risk management alone. The goal aims to mobilize $100 billion annually by 2020 to address the needs of developing countries and help mitigate climate-related disasters (UNDP, 2018).

The number of deaths attributed to natural hazards continues to rise, despite progress in implementing disaster risk reduction strategies. From 1990 to 2015, more than 1.6 million people died in internationally reported natural hazards. Many countries have begun implementing national and local disaster risk reduction strategies. In 2014-2015, most reporting countries indicated that environmental impact assessments, legislation on protected areas, climate change adaptation projects and programmes, and integrated planning played a major role in reducing underlying risk factors (UN, 2017).

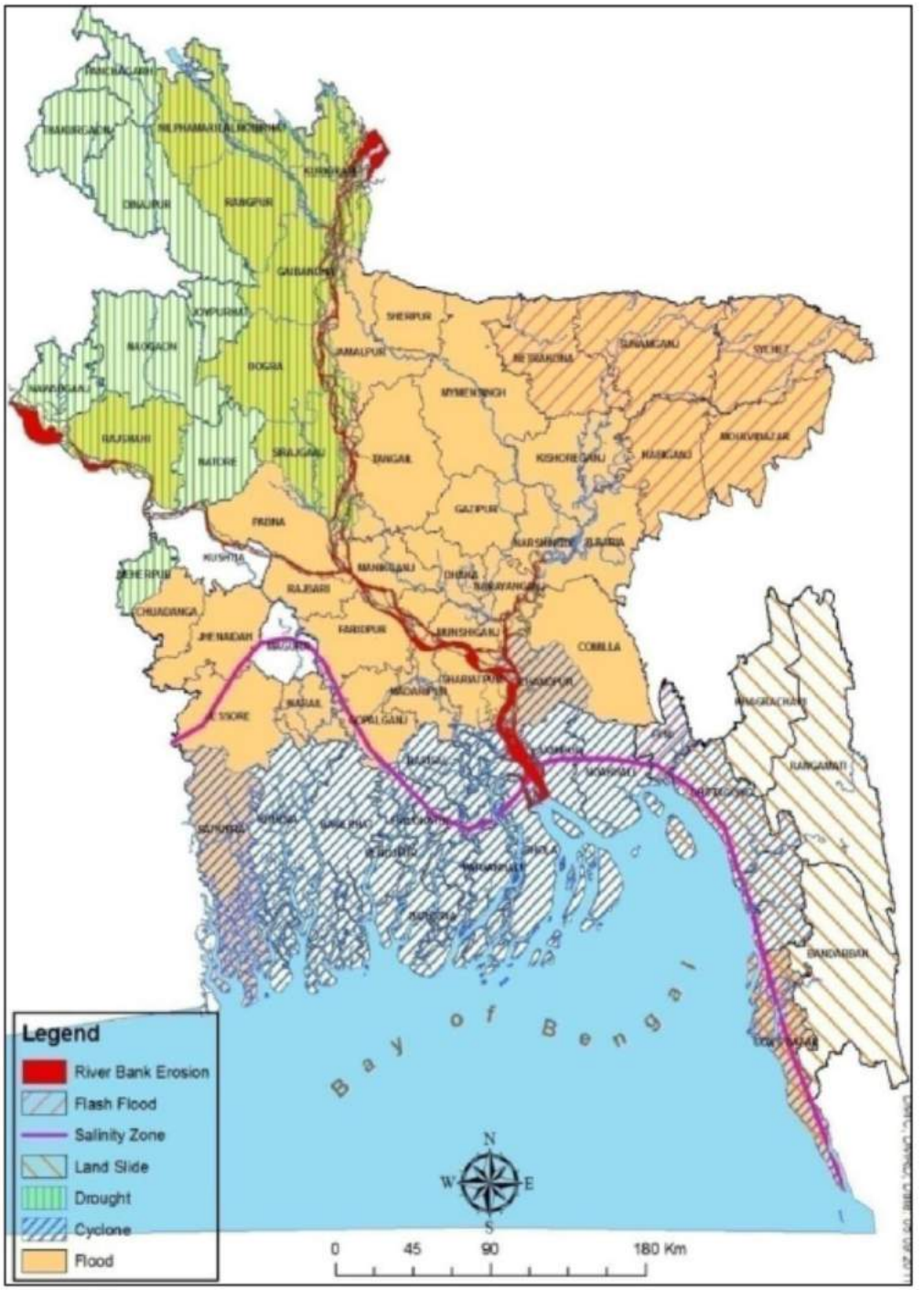
13.2 Assessment of progress

Indicator 13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

The country is exposed to severe environmental hazards like river erosion, cyclones, droughts, tornadoes, cold waves, etc. In addition, climate change could substantially increase the frequency and intensity of existing climatic events. Impacts of climate change are visible in Bangladesh in the form of temperature extremes, erratic rainfalls and increased number of intensified floods, droughts, and prevalence of rough weather in the Bay. (GED 2015).

The main disasters affecting Bangladesh are floods, cyclones, tornadoes and earthquakes among others. Figure 13.1 shows vulnerability to multiple hazards across the country.

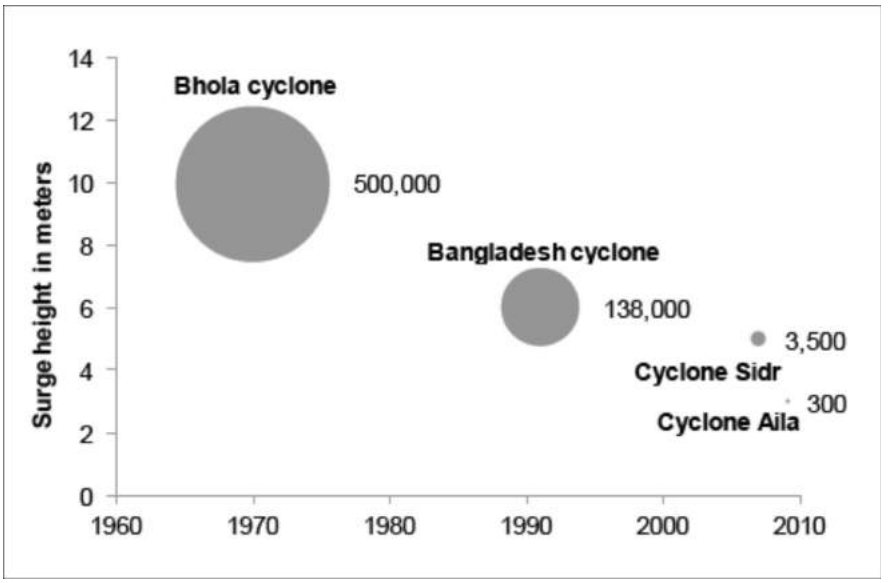
Figure 13.1: Multi-Hazard map of Bangladesh



(Source: GED, 2015)

Over the years, the country has improved its disaster response mechanism significantly reducing death tolls during disasters. Figure 13.2 shows how fatalities due to cyclones have reduced in recent times. As the population increases and climate change accelerates, however, risks to people and livelihoods are increasing.

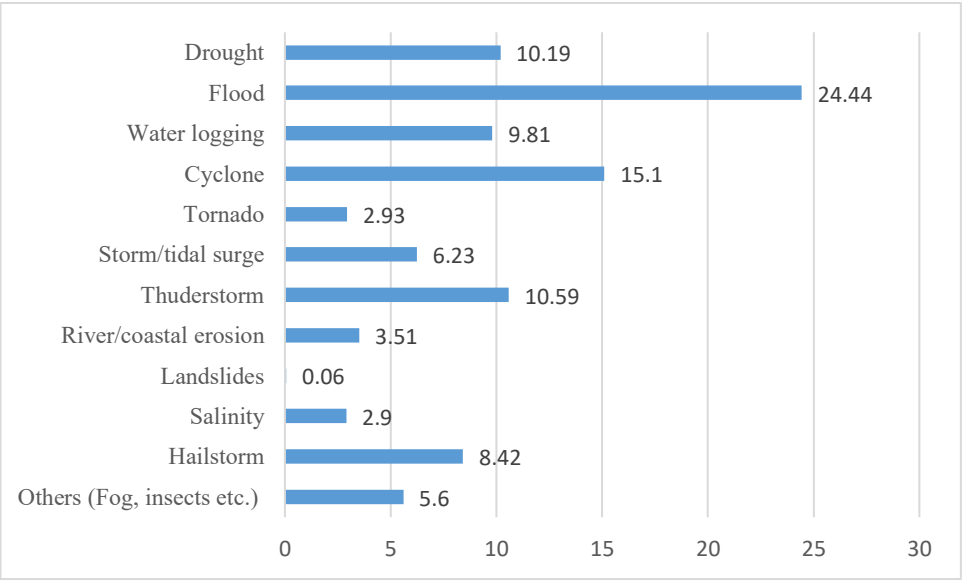
Figure 13.2: Death tolls during cyclone events



Source: ICAI, 2011

Figure 13.3 shows the distribution of disaster affected households by disaster categories. Flood and cyclone are the most common disasters affecting 24.44% and 15.10% of disaster affected households respectively.

Figure 13.3: Percentage of disaster affected households by disaster categories 2009-'14



Source: BBS, 2015

Table 13.2 highlights the percentage distribution of affected households by division and disaster categories during 2009-'14. Sylhet division has the most flood affected households at 70%. Barisal is affected mostly by cyclone at 78%. Khulna division suffers mainly from water logging (34.88%) and salinity (22.24%).

Table 13.1: Distribution of Disaster affected household by division and disaster, 2009-14

Division	Disaster Affected Household (%)											
	Drought	Flood	Water logging	Cyclone	Tornado	Storm/Tidal Surge	Thunderstorm	River/Coastal Erosion	Landslides	Salinity	Hailstorm	Others (Fog, Insect etc.)
Bangladesh	14.80	34.48	13.88	21.31	4.14	8.65	14.94	4.95	0.08	4.09	11.88	7.90
Barishal	1.41	5.24	3.91	78.31	0.91	31.51	3.72	4.35	0.00	0.85	0.31	0.05
Chattogram	10.61	32.03	34.39	30.96	1.80	13.51	8.39	7.01	0.80	5.30	9.46	12.86
Dhaka	19.89	51.89	18.68	0.00	3.88	0.00	17.69	6.42	0.00	0.00	20.86	9.27
Khulna	9.30	7.68	34.88	23.23	2.62	9.16	7.39	4.15	0.00	22.24	10.31	7.32
Rajshahi	25.39	48.47	0.65	0.00	7.51	0.00	20.40	3.39	0.00	0.00	12.86	14.73
Rangpur	23.99	41.74	0.68	0.00	12.30	0.00	23.53	6.87	0.00	0.00	16.62	8.34
Sylhet	16.51	69.97	2.57	0.00	1.30	0.00	31.84	1.95	0.02	0.00	12.54	5.42

Source: BBS, 2015

Indicator 13.1.2: Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030

Ministry of Disaster Management and Relief (MoDMR) has prepared Disaster Risk Reduction Strategies of Bangladesh (2016-2020) in line with the Sendai Framework for Disaster Risk Reduction 2015-2030 and other international protocol ratified by the Government of Bangladesh.

13.2.1: Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

The following section provides an overview of key climate change related national plans and frameworks after ERD (2018).

Bangladesh Climate Change Strategy and Action Plan (BCCSAP): BCCSAP (2009-2018) is the key climate change national plan and basis for climate investment in Bangladesh. BCCSAP provides an overall framework (see Table 13.3) for action, recognizing the need for adaptation and highlighting the GoB's willingness to follow a low carbon pathway towards achieving development. BCCSAP is a strategy/plan and a basic reference for aligning investments with climate change objectives. Six thematic areas with 44 programs (and 145 actions) have been identified within these thematic areas. The thematic areas are (1) Food Security, Social Protection and Health; (2) Comprehensive Disaster Management; (3) Infrastructure; (4) Research and Knowledge Management; (5) Mitigation and Low Carbon Development; and (6) Capacity Building and Institutional Strengthening.

A roadmap for developing the National Adaptation Plan (NAP) was prepared in 2015, supported by the Norwegian Government. Institutional arrangements have been set up for the NAP process, through the formulation of an Inter-Ministerial Steering Committee, a Technical Advisory Committee and a core NAP formulation team. In terms of current work, both UNDP and GIZ are supporting the GoB in developing their National Adaptation Plan.

Considering the vulnerabilities, the government has identified the following areas of interventions to address adverse impacts of climate change.

Key areas to address adverse impacts of climate change	
1.	Food security, livelihood and health protection (incl. water security)
2.	Comprehensive disaster management
3.	Coastal Zone Management including Salinity intrusion control
4.	Flood Control and Erosion protection
5.	Building Climate Resilient infrastructure
6.	Increased Rural Electrification
7.	Enhanced Urban Resilience
8.	Ecosystem based adaptation (including forestry co-management)
9.	Community based conservation of wetlands and coastal areas
10.	Policy and Institutional Capacity Building

Climate Change and Gender Action Plan (CCGAP): The underlying principle of the ccGAP (2013) is the transformative nature of gender interventions. CCGAP also has the potential to enhance the effectiveness and efficiency of climate change and socio-economic development responses. The development of ccGAP followed a participatory process that included in-country meetings, stakeholder consultations involving representatives from several ministries/ government departments, civil society, academia, research institutions, local NGOs and international organizations, a desk review of several key reports, publications, websites, surveys and in-person interviews.

The Government of Bangladesh has prepared and enacted the Climate Chang Trust Act 2010 to redress the adverse impacts of climate change. Bangladesh was the first government to set up a trust fund namely 'Bangladesh Climate Change Trust Fund' to create a national resource for climate change investments with the aim to support implementation of the BCCSAP. Bangladesh Climate Change Resilience Fund (BCCRF) was created mainly by donors to provide funding for climate change management, primarily adaptation, but also mitigation.

Intended Nationally Determined Contribution (INDC): INDC (now National Determined Contributions – NDC), lays out adaptation and mitigation strategies to increase climate resilience.

Bangladesh's mitigation contribution covers the power, transport and industry sectors. Under a 'business-as-usual'(BAU) scenario, GHG emissions in Bangladesh in these sectors are expected to represent 69% of total emissions by 2030. Bangladesh is committed to reduce this GHG emissions in these three sectors by 5% by 2030 using only domestic resources, or by 15% by 2030 if sufficient and appropriate support are received from developed countries.

Indicator 13.b.1- Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities

In this year (2018), Bangladesh has received funding from Green Climate Fund (GCF) for the following two projects:

Global Clean Cooking Program – Bangladesh; Removing barriers in the development of a sustainable market for the adoption of improved cook stoves in Bangladesh.

About 66 percent of Bangladesh's population live in rural areas, where women predominantly do the cooking using traditional, wood fueled stoves. Burning wood for cooking releases carbon dioxide, methane and black carbon. It also leads to deforestation and negative health impacts, causing an estimated 46,000 casualties every year in Bangladesh. Currently only 3 to 5 percent of households in the country use improved cook stoves.

The scaling up of investment in improved cook stoves will increase demand and help extend the existing supply chain. The project will provide technical assistance to support partner organizations and local entrepreneurs to produce improved cook stoves, raise awareness, and carry out research and development of the stoves.

Total project investment is USD 82.2 million out of which GCF grant will be USD 20.0 million. The project has an estimated lifespan of 3.5 years. Approximate number of beneficiaries is 17.6 million and anticipated avoided tons of CO2 equivalent is 2.9 million tons Infrastructure Development Company Limited (IDCOL) will implement the project.

Enhancing adaptive capacities of coastal communities, especially women, to cope with the impacts of climate-induced salinity

The coastal belt of Bangladesh is vulnerable to cyclones, storm surges, and sea-level rise, which have recently been observed to be becoming more intense. Increased occurrence of these hazards is accelerating saltwater intrusion into the fresh water resources along Bangladesh's coastline.

The strengthening of adaptive capacities in this project is projected to reduce the adverse impacts to agricultural livelihoods that are freshwater dependent, and to address the availability and quality of drinking water in vulnerable coastal communities. This community-based approach in planning and managing climate-resilient water supply targets the highly vulnerable, specifically women and girls.

Total project investment is USD 33.0 million out of which GCF grant will be USD 24.0 million. The project has an estimated lifespan of 6 years. Anticipated number of people with increased resilience at the end of project is 719,200. Ministry of Women and Children Affairs will implement the project.

13.3 Key Challenges

Over the years, the country has invested heavily in disaster management infrastructures such as flood embankments, flood shelters, cyclone shelters etc. due to which mortality rate has fallen significantly in recent times. However, many of such structures are suffering from lack of proper operation and maintenance. As a result, when disaster strikes the structures fail to provide adequate protection. Rehabilitation of these structures after a disaster is also becoming a major problem due to requirement of large funds. As a case in point is the considerable time required to rehabilitate the coastal polders after Cyclones Sidr in 2007 and Aila in 2009. People within the polder had to suffer for long time as the polders remained water congested in the meantime. Such situations will become more common as cyclones and floods are expected to be more frequent due to climate change.

13.4 Way forward

Bangladesh is a signatory to Paris Climate Agreement. According to this agreement, Bangladesh can expect adaptation fund from industrialized countries. Significant funding will be required to build a disaster resilient future for the country. It is only fair that Bangladesh receives such funding from industrialized countries. Some funding are being made through Green Climate Fund of which Bangladesh

has been a recipient in recent times. In order to maximize the gathering and utilization of such highly competitive funds, the country needs to build institutional capacity and mainstream climate policies.

13.5 Summary

Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population (Indicator 13.1.1) now stands at 12,881 with a target of 6500 by 2020 and 1500 by 2030. Given the track record of Bangladesh in disaster management, this target will not be difficult for her to achieve. MoDMR has prepared Disaster Risk Reduction Strategies of Bangladesh (2016-2020) in line with the Sendai Framework which will be helpful in this regard.

In facing the climate change scenarios, Bangladesh is well prepared with a number of climate change related strategies, plans and actions. Through BCCTF, it has spent around 2700 crores of taka over last 8 years in climate change adaptation. Revision of BCCSAP and preparation of NAP is already underway. International cooperation and funding are also forthcoming. It has received grants from GCF for two projects in 2018.

14

Life below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

14.1 Global perspective on SDG 14

Oceans cover almost three quarters of the planet, comprising the largest ecosystem on Earth. The increasingly adverse impacts of climate change (including ocean acidification), overfishing and marine pollution are jeopardizing recent gains in protecting portions of the world's oceans. According to United Nations SDG Report 2017 (UN, 2017). The average coverage of marine key biodiversity areas (KBAs) by protected areas has risen from 32 per cent in 2000 to 45 per cent in 2017. On the other hand, the proportion of marine fish stocks worldwide that have been overfished—that is, are at biologically unsustainable levels—increased from 10 per cent in 1974 to 31 per cent in 2013. The SDG aims to sustainably manage and protect marine and coastal ecosystems from pollution, as well as address the impacts of ocean acidification. Enhancing conservation and the sustainable use of ocean-based resources through international law will also help mitigate some of the challenges facing our oceans.

14.2 Assessment of progress

Marine resources of Bangladesh

The coastline extends 710 kilometers starting from St. Martin's island in the south-east to the Sundarbans mangrove in the south-west. The east coast is an important breeding ground for marine turtles. The only coral community is located on the east coast in association with high diversity and moderate density of marine algae and mollusks. The central coast has been identified as the stepping stone, staging ground and wintering ground of more than 100 species of migratory shore birds belonging to East-Asia-Australasian and Central Asian Flyways. Bangladesh coast supports more than 10 globally threatened migratory shorebirds (DOE, 2015). The west coast supports important mammals such as Royal Bengal Tiger and reptiles such as Salt Water Crocodile.

Almost all of Bangladesh's marine fishing is carried out in shallow and shelf waters, beyond which no fishing is being currently done due to lack of vessel capacity and appropriate fishing technologies. The harvest of marine capture fisheries was 379,497 tonn during 2000-2001 that increased to 626,000 tonn in 2015-2016. The contribution of marine catch to the fisheries production stands at 16%. Hilsa shad (Tenualosa ilisha) is the largest and single most valuable species with annual catch of 395,000 tonn.

Bangladesh is yet to assess the true potential of its offshore oil and gas prospects. So far, drilling for gas in the off-shore area has not been very successful. The shallow offshore blocks of Bangladesh adjacent to the Myanmar blocks are considered an area of particular interest because of the recent discoveries of several large gas fields (Shwe, Shwe phu, Mia) in the Arakan offshore of Myanmar (FAO, 2014).

Indicator 14.5.1: Coverage of protected areas in relation to marine areas

The Government has established the country's first marine protected area 'the Swatch of No Ground Marine Protected Area' on 27 October 2014 that may safeguard whales, dolphins, sea turtles, sharks, and other oceanic species. The two Marine Protected Areas (MPAs) as shown in Figure 14.1, one in 'Swatch of No-ground' of Bay of Bengal, declared under Bangladesh Wildlife (Conservation and Security) Act, 2012 and another in 'Middle Ground and South Patches' of Bay of Bengal, declared under the Marine Fisheries Ordinance 1983 together comprise 243,600 hectares (2436 sq. km) constituting 2.05% of the total marine area 11,881,300 hectares (118,813 sq. km) of Bangladesh. If the area protected during the spawning season of Hilsa is included then the protected area rises to 7.94%.

14.3 Government efforts

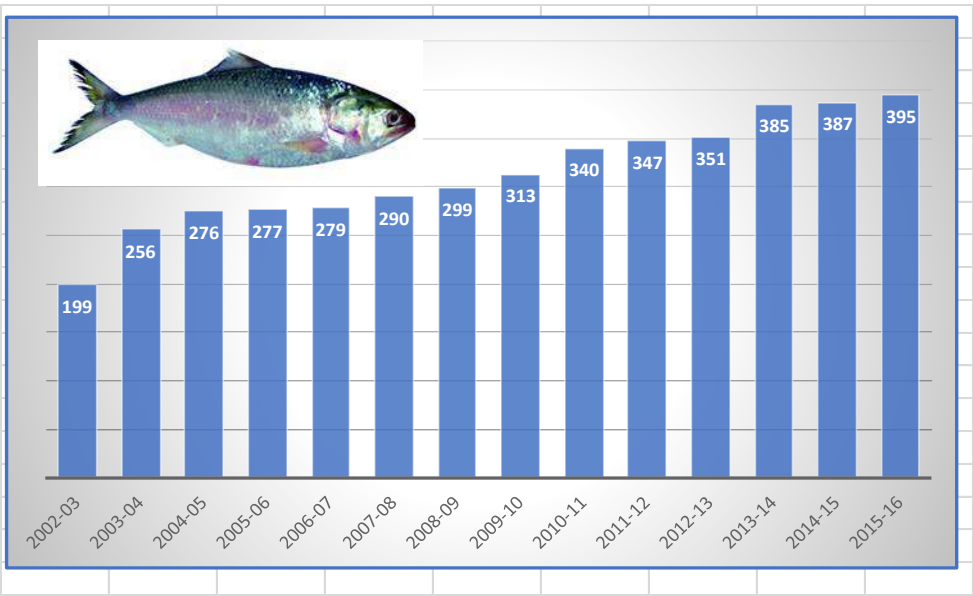
Protection for Hilsa

Hilsa is the national fish of Bangladesh. In order to arrest the precipitating fall in Hilsa production, five Hilsa sanctuaries and four major spawning grounds in the coastal and freshwater areas of the country have been established under the 'Protection and Conservation of fish Act-1950' for the effective

conservation of Jatka and brood Hilsa in the major nursery and spawning areas. This twenty-two days (October 12-November 02, 2016) has been banned for fishing in the sea, coastal areas along with the rivers by all sorts of commercial trawlers under the Marine Fisheries Ordinance 1983, section 55, subsection 2 (D) for safe migration and undisturbed spawning of Hilsa. The previous ban period was 15 days (25 September-09 October 2015) and has been extended up to 22 days and the ban period time has also been changed for the better spawning of Hilsa.

Various conservation efforts including establishing sanctuaries have resulted in considerable increase of hilsa production over the years as can be seen in the following chart.

Figure 14.1: Increase in Hilsa production over the years



Source: Yearbooks of Department of Fisheries

14.4 Key Challenges

Bidders and oil companies are most likely to drill on the shallow shelf sea first due to relative easiness and cost-effectiveness but drilling in this area without extensive and overall environmental, socio-economic and fisheries impacts analysis may prove to be harmful. Moreover, any potential oil spill near the coast, may have a far-reaching impact on fishery, fishing grounds, fish breeding and nursery heavens, salt-marsh ecosystems, coral reef, mangrove ecosystems, coastal tourism, salt industry, peoples' livelihood and health, which would reduce the benefits of the exploitation of fossil fuels (FAO, 2014).

Ship breaking and recycling industry is an important economic activity especially in Northern Chittagong coast. However, this industry has serious impact on marine environment. The fisheries in and around the industries have been seriously depleted. The major environmental concern is entry of toxins released during ship breaking into the marine food chain.

According to Chakraborty and Hossin (2016), marine biodiversity has declined sharply due to environmental degradation and numerous anthropogenic activities such as over-fishing of inshore fisheries, indiscriminate catching of juveniles, construction of barrages and dams, siltation, extensive use of pesticides, pollution etc. Increase in the human population and consequent increases in the demand for fish & fishing pressure is intensifying every year. This is believed to have caused over fishing of all stocks and populations of fishes and prawns by the use of even banned gears and methods.

Collection of shrimp fry and soft shell crab is causing loss of post larvae, juveniles and pre-adults of many other species. Municipal waters, industrial pollution, oil pollution, and ship breaking are causing chemical and thermal pollution.

14.5 Way forward

A balance need to be maintained between protection of marine biodiversity and industrial activities in and around the coast. Sustainable management of fisheries requires keeping the fish catch within sustainable yield. The government has already imposed a 2 months fishing ban in the Bay of Bengal during fish breeding season in order to conserve fish resources. In order to assess the fish stock of the Bay, a fish stock assessment has started this year after nearly three decades. The assessment is expected to be complete by 2019. At the same time, a management or strategic plan on how to manage the marine stock for sustainable use will also be prepared.

14.6 Summary

Bangladesh has recently gained a vast swath of marine territory. This marine area is rich in natural gas resources and biodiversity. Exploitation of gas resources may pose grave danger to the biological resources. Sustainable management of these resources is now a big challenge for the country. In recent times, it has declared two marine protected areas, one targeting Hilsa breeding ground and another targeting Cetaceans. Total protected area now stands at 2.05% (7.94% if the area protected for Hilsa spawning is included) of the marine area (Target 14.5). Major success has been achieved in Hilsa protection with production almost doubling in last 15 years.

15

Life on Land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1 Global perspective on SDG 15

Protected and restored ecosystems and the biodiversity they support can help mitigate climate change and provide increased resilience in the face of mounting human pressures and natural disasters. Healthy ecosystems also produce multiple benefits for communities that rely on them. Goal 15 focuses on preserving and sustainably using the Earth's terrestrial species and ecosystems. According to United Nations SDG Report 2018 (UN, 2018) the Earth's forest areas continue to shrink, down from 4.1 billion hectares in 2000 (or 31.2 per cent of total land area) to about 4 billion hectares (30.7 per cent of total land area) in 2015. However, the rate of forest loss has been cut by 25 per cent since 2000–2005. Since 1993, the global Red List Index of threatened species has fallen from 0.82 to 0.74, indicating an alarming trend in the decline of mammals, birds, amphibians, corals and cycads.

The SDG aims to conserve and restore the use of terrestrial ecosystems such as forests, wetlands, drylands and mountains by 2020. Halting deforestation is also vital to mitigating the impact of climate change. Urgent action must be taken to reduce the loss of natural habitats and biodiversity which are part of our common heritage (UNDP 2018).

15.2 Assessment of progress

Terrestrial Ecosystems

The ecosystems of Bangladesh are broadly clustered as terrestrial, inland waters, coastal and marine ecosystems. The major terrestrial forest types in Bangladesh are: 1) Tropical Wet Evergreen Forests; 2) Tropical Semi-Evergreen Forests; (3) Tropical Moist Deciduous Forest (Sal Forests); (4) Mangrove Forests; (5) Freshwater Swamp Forest; (6) Homestead Forests; and (7) Plantation Forests.

Almost half of the total area of Bangladesh is wetlands. These ecosystems are made up of a wide variety of habitats, including the main three rivers (the Ganges, the Brahmaputra and the Meghna) and their 700-plus tributaries and distributaries and their floodplains; about 6300 beels (permanent and seasonal shallow lakes in floodplain depressions); at least 47 major haors (deeply flooded depressions in the north east), baors (oxbow lakes); vast areas of seasonally flooded land; and fish ponds and tanks.

Biogeographically, the country is located at the cross roads of the Indo-Himalayan and Indo-Chinese sub-regions under the Oriental region. Thus, this country acts as an important merging and sharing habitat, land bridge and biological corridors of the flora and fauna between these sub-regions. This strategic location makes Bangladesh as one of the most ecologically significant and biologically diverse landscapes in terms of migratory species, stepping stones, staging ground and flyways for wildlife movements of the region. Consequently, a large number of plant and animal species traverses in widespread of habitats and thereby maintain a wide range of gene pool (DOE, 2015).

Indicator 15.1.1 Forest area as a proportion of total land area

Total forest area in Bangladesh is 2.58 mha which is 17.5% of the country (Table 15.2). Out of this area 10.5% forest area is managed by Forest Department (Table 15.3) and rest are unclassified and village forest.

Table 15.1 Forest area of Bangladesh

Forest types	Area (m. ha)	% with respect to country's area
FD managed forests	1.53	10.54%
Un-classed state forests	0.73	5.07%
Village forests	0.27	1.88%
Total	2.53	17.49%

Source: DOE, 2015

Table 15.2 Forest lands managed by Forest Department

Forest types	Area (m. ha)	% with respect to country's area
Hill forests	0.67	4.65%
Natural Mangrove Forests	0.60	4.09%
Mangrove Plantations	0.14	0.97%
Sal Forests	0.12	0.83%
Total	1.53	10.54%

Source: DOE, 2015

The Sundarbans, the single largest tract of natural mangrove forest in the world, is located in the south western part of the country and is a Ramsar as well as World Heritage Site. Bangladesh has successfully brought large swath of newly accreted coastal lands under afforestation. Currently 140,000 ha of land is under mangrove plantation. Coastal afforestation program is accelerated to bring more lands under afforestation.

Indicator 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Bangladesh currently has 40 Protected Areas (PA) locations of which are shown in Figure 15.3 and particulars are given in Table 15.4. Among these, 38 are forest based and managed by the forest department. These include 17 National Parks, 20 Wildlife Sanctuaries and 1 Special Biodiversity Conservation Area. A total of 21 PAs (7 National Parks, 12 Wildlife Sanctuaries, 1 Marine PA and 1 Special Biodiversity Conservation Area) have been declared by the government to conserve wildlife and their habitats since 2010. All 38 forest PAs now cover about 10.55% of total forest area which is 1.8% of the total area of the country.

Figure 15.1: Map of protected areas (two Marine Protected Areas are not shown on the map)

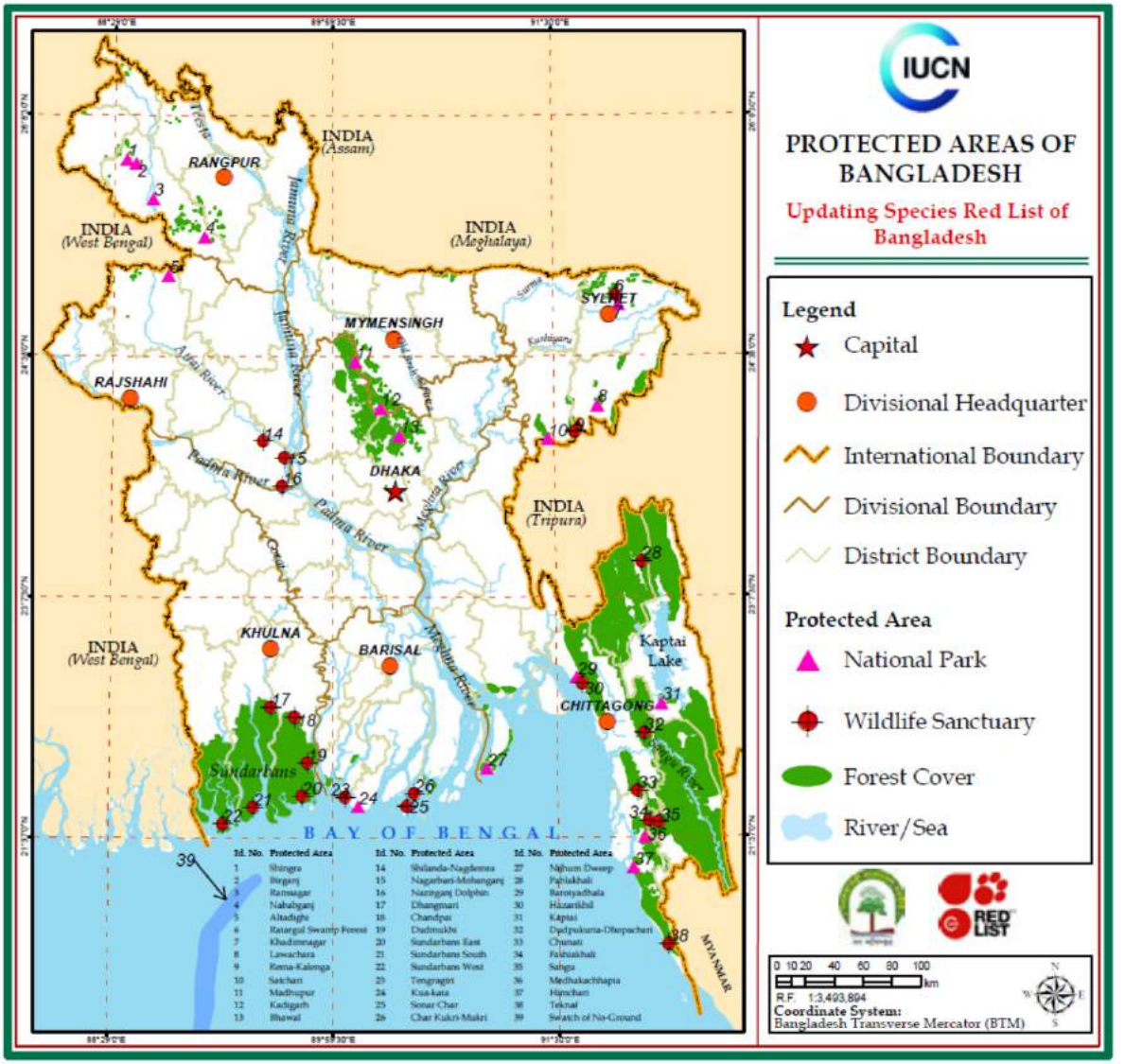


Table 15.3 Particulars of Protected Areas of Bangladesh (IUCN 2015)

Sl. No.	Protected Area	Ecosystem	Conserva-tion Focus	Location	Areas (ha.)
1	Himchari National Park	Mixed Evergreen		Cox's Bazar	1729.00
2	Kaptai National Park	Mixed Evergreen		Chittagong Hill Tracts	5464.78
3	Nijhum Dweep National Park	Planted Mangrove Forest	Deer and Bird	Noakhali	16352.23
4	Medha Kassapia National Park	Mixed Evergreen		Cox's Bazar	395.92
5	Baraiyadhala National Park	Mixed Evergreen		Chittagong	2933.61
6	Kuakata National Park	Planted Mangrove Forest		Patuakhali	1613.00

Sl. No.	Protected Area	Ecosystem	Conserva-tion Focus	Location	Areas (ha.)
7	Bhawal National Park	Shal Forest		Gazipur	5022.00
8	Madhupur National Park	Shal Forest		Tangail/ Mymensingh	8436.00
9	Ramsagar National Park			Dinajpur	27.75
10	Lawachara National Park	Mixed Evergreen		Moulvibazar	1250.00
11	Shatchari National Park	Mixed Evergreen		Hobigonj	242.91
12	Khadimnagar National Park	Mixed Evergreen		Sylhet	678.80
13	Nababgonj National Park			Dinajpur	517.61
14	Singra National Park			Dinajpur	305.69
15	Kadigarh National Park			Mymensingh	344.13
16	Altadighi National Park	Man made pond		Naogoan	264.12
17	Birgonj National Park			Dinajpur	168.56
18	Rema-Kalenga Wildlife Sanctuary	Mixed Evergreen		Hobigonj	1795.54
19	Char-Kukri-Mukri Wildlife Sanctuary	Planted Mangrove Forest		Bhola	40.00
20	Sundarban (East) Wildlife Sanctuary	Natural Mangrove Forest	Bengal Tiger, Masked Finfoot	Bagerhat	31226.94
21	Sundarban (West) Wildlife Sanctuary	Natural Mangrove Forest	Bengal Tiger	Satkhira	71502.10
22	Sundarban (South) Wildlife Sanctuary	Natural Mangrove Forest	Bengal Tiger	Khulna	36970.45
23	Pablakhali Wildlife Sanctuary	Mixed Evergreen	Asian Elephant	Chittagong Hill Tracts	42069.37
24	Chunati Wildlife Sanctuary	Mixed Evergreen	Asian Elephant	Chittagong	7763.97
25	Fashiakhali Wildlife Sanctuary	Mixed Evergreen	Asian Elephant	Cox's Bazar	1302.42
26	Dudhpukuria-Dhopachari Wildlife Sanctuary	Mixed Evergreen	Hoolock Gibbon, Elephant	Chittagong	4716.57
27	Hazarikhil Wildlife Sanctuary	Mixed Evergreen		Chittagong	1177.53
28	Shangu Wildlife Sanctuary	Mixed Evergreen		Bandarban	2331.98
29	Teknaf Wildlife Sanctuary	Mixed Evergreen	Asian Elephant & Capped Langur	Cox's Bazar	11614.57
30	Tengragree Wildlife Sanctuary	Natural Mangrove Forest	Bird & Deer	Barguna	4048.58
31	Sonarchar Wildlife Sanctuary	Planted Mangrove Forest	Bird and Deer	Patuakhali	2026.48

Sl. No.	Protected Area	Ecosystem	Conserva-tion Focus	Location	Areas (ha.)
32	Chandpai Wildlife Sanctuary	River/Marine		Bagherhat	560.00
33	Dudmukhi Wildlife Sanctuary	River/Marine		Bagerhat	170.00
34	Daingmari Wildlife Sanctuary	River/Marine		Bagerhat	340.00
35	Nizirganj (Dolphin) Wildlife Sanctuary	River	Ganges River Dolphin	Pabna	146.00
36	Shilanda-Nagdemra (Dolphin) Wildlife Sanctuary	River	Ganges River Dolphin	Pabna	24.17
37	Nagarbari-Mohanganj Dolphin Sanctuary	River	Ganges River Dolphin	Pabna	408.11
38	Ratargul Swamp Forest			Sylhet	204.25
39	Swatch of No-Ground			Bay of Bengal	173,800
40	Marine			Bay of Bengal	69,800

Indicator 15.5.1 Red List Index (RLI)

The Red List Index (RLI) expresses the extinction risk of a particular group of species, globally or regionally, by a number between '1' and '0'. Here, '1' is the best-case scenario, where all species of a group are out of extinction danger or they are in the Least Concern category. On the other hand, '0' is the worst-case scenario, where all species of a group are extinct from the world or the said region. On a global scale, for example, the latest RLI for mammals is 0.86, birds 0.91, amphibians 0.75, and corals 0.81. Over the last couple of decades, the RLIs of these four groups have been showing alarming declining trends.

For Bangladesh, the RLIs of birds, amphibians, fishes and crustaceans are higher than 0.80, indicating relatively moderate conditions for these groups. But the RLI of mammals underlines serious conservation concerns as it is close to the 0.50 mark. The RLIs also indicate grim conditions for butterflies and reptiles.

Table below compares the status of species belonging to different animal groups in 2000 and 2015. The statuses are not directly comparable as protocol and criteria of assessment for 2015 is different than of 2000. What can be said though is that among the animal groups, mammals and fishes are facing greater threats.

Table 15.4 Comparison of species status between 2000 and 2015

Group	Red List species in 2000		Red List species in 2015	
	No. of species	Threatened	No. of species	Threatened
Fish (Freshwater and brackish water)	266	54 (20%)	253	59 (23%)
Amphibians	22	8 (36%)	49	10 (20%)
Reptiles	127	63 (50%)	167	38 (23%)

Group	Red List species in 2000		Red List species in 2015	
	No. of species	Threatened	No. of species	Threatened
Birds	628	47 (7%)	566	39 (7%)
Mammals	113	43 (38%)	138	36 (26%)
Crustaceans	Not available	141	12 (8.7%)	
Butterflies	Not available	305	57 (19%)	

Source: IUCN, 2015

The positive news in the current process of assessment being the reduction in the Least Concern Category from 53% in 2000 under Not Threatened Category versus 50% as Least Concern in 2015. Eleven resident bird species have been identified and 2 mammals species among 11 mammals species reported to be extinct in 2000 has been discovered in 2015.

Biodiversity National Assessment 2015 (DOE, 2015) discusses some of the direct threats to biodiversity. Human population has become a threat to the PAs as well to other parts of the country. Expansion of human settlement and agriculture, shifting cultivation, habitat degradation and destruction are the major threats to biodiversity in Bangladesh. Over-exploitation of natural resources, like fishes, freshwater mollusks, corals, turtles, frogs, snakes, birds, and swans is also a threat to biodiversity. Terrestrial and aquatic ecosystems are polluted by discharges of untreated industrial effluents, domestic organic and inorganic wastes and agro-chemicals, i.e pesticides, insecticides, herbicides and organic fertilizers.

15.3 Government efforts

Moratorium on tree felling

The moratorium on tree felling in reserve forests has been extended till 2022 in a cabinet meeting held in August, 2016. The ban was extended for better conservation of environment and biodiversity.

Ecologically Critical Areas (ECAs)

Bangladesh has declared 13 wetlands areas of biodiversity importance as ECAs (Table 15.6) under the section 5 of the Bangladesh Environment Conservation Act, 1995. The total area of ECAs managed by Department of Environment is 384,529 hectares or about 2.60% of the total country.

Table 15.5: Ecologically Critical Areas (ECAs) of Bangladesh

Sl. No.	Name of ECA	Type if Ecosystem	Location	Areas (hectare)	Year of Declaration
1	Cox's Bazar -Teknaf Peninsula	Coastal-Marine	Cox's Bazar	20,373	1999
2	Sundarbans (10 km landward periphery	Coastal-Marine	Bagerhat, Khulna & Satkhira	292,926	1999
3	St. Martin's Island	Marine Island with coral reefs	Taknaf Upazila, Cox's Bazar	1,214	1999
4	Hakaluki Haor	Island Freshwater Wetland	Sylhet and Moulvi Bazar	40,466	1999
5	Sonadia Island	Marine Island	Moheshkhali upazila, Cox's Bazar	10,298	1999
6	Tanguar Haor	Island Freshwater Wetland	Moulvi Bazar	9,727	1999

Sl. No.	Name of ECA	Type if Ecosystem	Location	Areas (hectare)	Year of Declaration
7	Marjat Baor	Oxbow Lake	Kaliganj upazila of Jhenaidah & Chaugacha upazila of Jessore	325	1999
8	Gulshan-Baridhara Lake	Urban Wetland	Dhaka City	101	2001
9	Buriganga	River	Around Dhaka	1336	2009
10	Turag	River	Around Dhaka	1184	
11	Sitalakhya	River	Narayanganj, Dhaka, Gazipur	3771	
12	Balu including Tongi Canal	River	Around Dhaka	1315	
13	Jaflong-Dawki	River	Jaflong, Sylhet	1493	2015

Source: DOE, 2015

Special Biosphere Reserve - Ratargul swamp forest

Ratargul is a small freshwater swamp in the haor basin of north-east region of Bangladesh. It is the last stronghold and refuge of fresh water swamp forest biodiversity in the country. The ecosystem is a typical freshwater wetland forest that remains dry in winter but inundated to a depth of about 8 feet during monsoon. In order to protect the forest's environment and ecosystem, the government declared Ratargul a Special Biosphere Reserve in May, 2015.

Vulture safe zone

Two Vulture Safe Zones have been declared by the Forest Department in December 2014 in the Sylhet and Khulna regions as shown in Figure 15.5. In Sylhet region, the total area of safe zone within Bangladesh is 19,663 sq. km and core area is 7,459 sq. km. while in Khulna region. the total area of safe zone within Bangladesh is 27,717 sq. km. and core area is 7,846 sq. km.

Figure 15.2: Vulture safe zones established by Forest Department

15.4 Key challenges

The major challenges in meeting target of forest area as per GED (2015) are absence of proper document and conspicuous demarcation of forest lands and lengthy procedure of disposing up land related cases; demand for timber, fuel wood, poles and saplings, mainly as fuel wood mainly for cooking, brick burning and tobacco curing, making huts, thatches and sheds of betel leaf plantations; land tenure conflict in Chittagong Hill Tracts; and inadequate human resources and logistics:

In addition to above challenges, recent influx of Rohingya refugees from Myanmar is putting tremendous pressure on remaining forests in Teknaf-Cox's Bazar range. Already about 6000 acres of forest land belonging to Forest Department has been allotted for temporary housing of the refugees. The refugees are also collecting fire woods for cooking further depleting the forest resources in the region.

Forest Department (Ahsan et al., 2016) identified number of threats to the protected areas. Within the human disturbance regime, deliberate vandalism and/or destructive activities are the major contributing factor for the Sundarban South Wildlife Sanctuary (WS) and Kaptai National Park (NP). In Sundarban South WS, human intrusion during the Rashmela (cultural event) has been identified as a major threat. Among various biological resource use categories, logging is the highest threat, followed by hunting and killing of terrestrial animals and collection of terrestrial plants. In agriculture and aquaculture category, Madhupur NP faces the highest threat coming from annual and perennial crop cultivation, plantations (rubber and acacia) and livestock grazing inside the park. Residential and commercial development is also a major threat to Madhupur NP.

Many of the 38 PAs are popular tourist destinations. The negative impact of overuse of the PAs is that there is a general lack of awareness among the members of the public about decorum of visiting a wildlife sanctuary or a national park. Their action sometimes directly hampers the animals or plants or indirectly interfere with the natural lives of the animals and plants.

15.5 Way forward

Recognizing that tree density of the forests are not satisfactory, The 7th Five Year Plan (GED, 2015) targets to increase the tree density by more than 70%. The Forestry strategy of the plan includes continuing moratorium on felling in the natural forests, increasing tree density of the existing forests and older plantations through 'enrichment planting' and 'assisted natural regeneration', and intensification of plantation activities in coastal zones.

An estimated 50,000 ha. land of hill forest and 5,000 ha. of plain land forest will be planted during the plan period. Productivity of plantations will have to be increased manifold. Multi-purpose trees will receive special attention to increase the productivity of land under forest.

The existing coastal afforestation and enrichment plantation will also be continued. The existing mature coastal plantations will remain for reinforcing green belt. An area of 30,000 ha. will be planted and replanted in the coastal areas.

15.6 Summary

The forest coverage of the country now stands at 17.5%. The quality of the forest in terms of canopy coverage is becoming a major concern. Increasing tree density is therefore a major target under 7th FYP. In order to protect its very rich bio-diversity, the country has taken many steps among which are continuing moratorium on tree felling, declaring ECAs, creating special bio-diversity zones and creating two vulture safe zones. Strong implementation is required in order to safeguard the bio-diversity.

16

Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

16.1 Global Perspective on SDG 16

Incidence of violence and homicide, and access to justice system are important indicators for a peaceful and inclusive society and have implications for sustainable development. UN General Assembly in its resolution 68/188 emphasized that rule of law and development are interrelated and mutually reinforcing. As reported in the 2015 Doha convention, violent crime trends at the global level remained more or less stable during 2003 and 2013 with variations across regions and countries at different levels of economic development. In 2012, intentional homicide rate was recorded 6.2 per 100,000 population at the global level. Although high income countries improved significantly in different forms of violent crimes, both upper-middle income and low- and lower- middle-income countries experienced deterioration. For example, intentional homicide rate in 2013 was 2.5 times higher in the low- and lower-middle-income countries than that in the high income countries.

UN Sustainable Development Goals Report 2017 indicates that, in the recent years, although accessibility to the justice system has improved, violent conflicts are on the rise and improvement in homicide rate is quite sluggish. At the global level intentional homicide rates range between 5.7 and 6.2 for every 100,000 population with higher rates in the countries with high income inequality. In 2015, Latin America and the Caribbean countries recorded highest homicide rate of 21.3-27.3 per 100,000 population while Australia and New Zealand had the lowest range of 0.9-1 victims. About 80 per cent of the children in the 1-14 year age group go through some form of physical or psychological punishment on a regular basis. Between 2012 and 2014, more than 570 different human trafficking flows were detected, mostly from the poor countries and regions. The trafficking victims comprised 71 per cent women and 25 per cent children.

Ensuring rule of law and access to justice system are critical for upholding human rights and sustainable development. According to the United Nations Standard Minimum Rules for Non-Custodial measures (General Assembly Resolution 45/110), all efforts should be made to reduce to the minimum the length of the detention of the persons awaiting trial. Progress in this area during more than a decade in the past remained almost unchanged at the global level. Persons awaiting trial or sentencing only reduced from 32 per cent in 2003-2005 to 31 per cent in 2013-2015.

16.2 Assessment of Progress on SDG 16 by indicators

Despite significant improvement in the intentional homicide victim rates, reported in the official statistics, violence and insecurity remains a reality in Bangladesh. In particular, violence against women is quite common and a major issue in the society. Due to social reasons, rate of reporting such incidence to others is quite low. However, the 2015 survey on 'Violence Against Women Survey' indicates that 72.6 per cent of the ever-married women experienced some form of violence at least once in their lifetime by their husband. A large proportion of them also suffered injuries due to physical or sexual violence. Also, 27.8 per cent of women reported incidence of violence perpetrated by a non-partner. However, the situation has improved in 2015 in comparison with 2011 for all forms of violence against women. Political violence, challenges with expression of opinion remain areas of concern and have negative implications for economic growth.

Ensuring rule of law and access to justice for all are still quite challenging. Areas of concern include enormous amount of case back logs (approximately 3 million cases), difficulties in accessing courts especially for the poor, delayed decision making. This situation actually encourages people to rely on informal justice system for settling disputes e.g., disputes over land. Despite all these, integrating SDGs into the 7th FYP which is under implementation is quite encouraging and reflects deep country ownership of an international development agenda.

Indicator 16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age

Intentional homicide rate during 2003-2014 remained unchanged, around 2.7 victims per 100,000 population. However, according to the Ministry of Home Affairs, in 2015, the rate has dropped to 1.8 with 1.4 for male and 0.4 for female. Proactive moves by the law enforcement agencies have contributed significantly to improving the law and order situation and reducing the violent crime rates in the country. Intentional homicide rate in 2017 decreased further to 1.65 (SIR, 2017). However, over the past couple of years this indicator registered an impressive 4.26 percent annual average decline.

Table 16.1 Number of victims of intentional homicide

Indicator	2010	Baseline [2015]	2017	Milestone by 2020	Target by 2030
16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age	2.6	Total: 1.8 Male: 1.4 Female: 0.4 (MoHA, 2015)	Total 1.65 Male 1.23 Female 0.42	Total 1.6 Male 1.3 Female 0.3	Total: 1 Male: 0.9 Female: 0.1

Source: PSD, MoHA, 2015; SIR, PSD, MoHA, 2018

Indicator 16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months

This indicator measures whether the occurrence of violence is recent and ongoing. According to the VAW survey 2015, 57.7 per cent of the ever-married women experience any form of violence by their husband. Proportion of women subject to any form of violence in the previous 12 months is 38.0 per cent. Proportion of them experiencing physical or sexual violence is 54.2 per cent and 26.9 per cent in the previous 12 months. However, majority of these women (61.4 per cent) come from poorest households

Indicator 16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation

This indicator measures the condition of rule of law and effectiveness of the justice system in the country. Although falling short of the minimum standards for elimination of human trafficking, the government has made significant progress in adopting implementation of the rules of 'Prevention and Suppression of Human Trafficking Act 2012' in January 2017 and drafting an implementation roadmap for the 2015-17 national action plan. However, decrease in the government's investigations, prosecutions, and convictions of trafficking crimes requires proper attention towards addressing the issue. However, as of December 2017, number of victims of human trafficking has decreased to 0.58 from the baseline 0.85 in 2015 for every 100,000 population. This indicator recorded an average 17.4 percent rate of decline annually during the 2015-2017 period.

Table 16.2 Victims of human trafficking and sexual violence

Indicator	Baseline [2015]	2017	Milestone by 2020
16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	0.85 (M: 0.53; F 0.32) (MoHA, 2015)	0.58 Male 0.36 Female 0.22 (MoHA, 2018)	Total 0.5 (MoHA, 2018)
16.2.3 Proportion of young women and men aged 18 29 years who experienced sexual violence by age 18 (Per cent)	Female: 3.45 (VAW Survey, 2015)	Female: 0	3 (MoWCA, 2018)

Source: BBS, Violence against Women (VAW) Survey, 2015; PSD, MoHA, SIR, 2018; MoWCA, SIR, 2018

Indicator 16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms

This indicator measures access to the justice system. In 2015, 72.7 per cent of the women who experience violence from their partner never reported their experience to others. Only 2.1 per cent victims reported to local leaders and 1.1 per cent sought help from police.

Since 2015 impressive progress has been achieved in this area. Although an annual target of providing legal aid to 37000 beneficiaries by 2020 was set, in 2017 legal aid has been provided to 80000 beneficiaries. Due to this service performance, new legal aid support target of 90000 litigants per year has been set for the year 2020.

In regard to dispute settlement, 16000 cases on an average per year through ADR up to 2017 has been settled against the 7 FYP annual target of settling 25,000 under Alternative Dispute Resolution (ADR) by 2020.

16.3.2 Un-sentenced detainees as a proportion of overall prison population

This indicator helps assess performance of judicial system in finalizing cases and providing access to an effective judicial system. Available data suggests that, currently, the proportion of un-sentenced detainees is quite high (79 per cent in 2015) in Bangladesh, about double the target rate for 2030. Low rating in rule of law compared to the average of both lower middle-income countries and least developed countries need proper attention for the sake of sustainable development.

Indicator 16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions

A substantial number of female officers received overseas training during the same period. The Ministry has recently formulated an action plan to achieve the 25 per cent target for the year 2020.

16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

This indicator measures the level of social inclusion, and recognition and protection of a person's human right. This right is protected by Article 7 of the Convention on the Rights of the Child. According to the MICS 2012-13 survey jointly conducted by BBS and UNICEF, 37 per cent of the children under 5 years of age have been registered. In 2001 registration rate for this age group children was only 10 per cent. Government initiated several measures to improve the performance. In 2001, the 'Birth and Death Registration Project' began with UNICEF support under the Local Government Division and had been implemented in phases. New birth and death registration act was adopted in 2006. In 2009, Birth and Death Registration Information System (BRIS) was initiated to provide electronic registration. All these contributed to significant improvement in birth registration for all in the country.

Indicator 16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information

Right to Information Act 2009 has been enacted in Bangladesh. The Act makes provisions for ensuring free flow of information and people's right to information. The freedom of thought, conscience and speech is recognized in the Constitution as a fundamental right and the right to information is an alienable part of it. In line with the act, an Independent Information Commission has also been established.

Indicator 16.a.1 Existence of independent national human rights institutions in compliance with the Paris Principles

According to the constitution of the People's Republic of Bangladesh, the main aim of the state is to protect, promote and ensure human rights. In accordance with the provision of National Human Rights Commission Act 2009, a statutory independent National Human Rights Commission has been established in the country. The purpose of establishing such splendid institution is to contribute to the embodiment of human dignity and integrity as well as to the safeguard of the basic order of democracy so that inalienable fundamental human rights of all individuals are protected and the standards of human rights are improved in the country.

The NHRC's response to the human rights violations focuses on promotional activities such as statements, spot-visits, seminars and roundtable discussions as well as responding to gross violations of human rights. The Commission is now implementing its Second Five Year Strategic Plan (2016-20) where it has identified 17 Pressing Human Rights Issues with Priority Areas for 2016-2020. Two issue that top the list are: Violence by State Mechanism, particularly Enforced Disappearances, Torture including Custodial Torture, Extra-judicial Killings and Culture of Impunity; and Violations of Economic, Social and Cultural Rights, including Health Rights, Discrimination against the Marginalized and People with Disabilities.

In 2016 the Commission responded to 692 cases of human rights violation of which 665 were submitted to the Commission by the defenders themselves and the rest 27 were SuoMotu action by the Commission. Larger number of violations consisted of violence (108), jobs (56), dowry (21), killing (20) and abduction (10). The number of complaints resolved in 2016 stood at 503.

16.3 Key Challenges

Lack of comprehensive and updated database on various forms of offences has been making it difficult to undertake appropriate actions and guide them properly. An efficient monitoring mechanism supported by credible database can contribute to improving the situation.

Establishing rule of law has been a serious concern in the country. Law enforcement needs special attention. Although there are laws to address most of the legal issues, lack of proper implementation is constraining success in crime reduction. Capacity building of the law enforcing agencies and a properly functioning accountability mechanism can significantly improve the situation.

Ensuring access to an effective judicial system is one of the key challenges in achieving the relevant SDG targets. Shortage in human and technical resources in the judicial department has been constraining quick settlement of disputes

Reporting incidence of violence, particularly domestic violence and violence against women, is a major issue in the country. Actually preventing violence, protecting the at-risk, supporting victims and making the perpetrators more accountable requires timely reporting of the issues to the appropriate authority. Existing social taboo actually discourages reporting such violence incidents.

16.4 Summary

Above discussion suggests that since the baseline, the victims of intentional homicide reduced significantly. Appropriate measures undertaken by the government of Bangladesh contributed significantly to improving human trafficking and youth mental and physical abuse. Improvement has also taken place in other vital sectors. For example, number of victims of human trafficking declined more than the required rate in the past couple of years. If the current average performance continues, majority of the SDG targets of Goal 16 will be achieved ahead of the estimated time frame.

Some important challenges to ensuring peace and justice include lack of comprehensive and updated data on various types of offences, proper enforcement of laws, capacity of the judicial system to handle heavy volume of cases and lack of reporting/timely reporting of incidence of violence/crime.

To build effective and accountable institutions and combat corruption in public service the Government has been implementing some governance related initiatives, e.g., Annual Perfomance Agreement (APA), Citizen Charter, National Integrety Strategy (NIS), and Grievance Redress System (GRS). These tools will ensure creation of more responsive and corruption free public institutions in the future.

17

Global Partnership for Sustainable Development

Strengthen the means of implementation and revitalize the global partnership for sustainable development

17.1 Global Perspective on SDG 17

In order to achieve sustainable development goals by 2030 all the participating countries are required to mobilize and effectively utilize necessary means of implementation, financial and non-financial, public and private, domestic and international resources. Major financial resources include domestic taxes, FDI, and ODA. On the other hand, domestic policy frameworks, effective institutions and support for good governance, democracy, rule of law, human rights, transparency and accountability fall under non-financial resources category. While developing countries strive to mobilize required resources, advanced countries actually provide support through ODA to help them shift to the sustainable development paths.

Low and middle-income countries (LMICs), particularly low-income countries, rely on public international finance to fund their development agenda. However, in 2013 only five donors (Norway, Sweden, Luxemburg, Denmark, United Kingdom) from the Organization for Economic Co-operation and Development (OECD) Development Assistance Committee met the UN's longstanding target of spending 0.7 percent of gross national income on ODA, and ODA reached only US$135 billion in net terms at its peak amount.

Since 1990, average government revenue in high-income countries (HICs) has been more or less static. In the low income countries it has increased from 18 percent to 21 percent of gross domestic product (GDP) largely due to substantial increase in income taxes and value added taxes. Actually total tax revenue increased from 11 per cent to 14 per cent of GDP. Similar trends are observed for the lower-middle-income countries and upper-middle-income countries. However, domestic revenues still fall short of what is needed to support a robust development agenda in countries where poverty is highest and needs are most pronounced. Countries with some of the lowest revenue-to-GDP ratios are also those where the vast majority of the world's extremely poor live—Bangladesh, India, and Nigeria all have tax-to-GDP ratios below 15 percent. Over the past two decades, however, trends in revenues and taxes have gradually improved in countries across all income categories.

In 2015, total net official development assistance was US$131.6 billion. Of this amount, only US$37.3 billion went to the least developed countries (LDCs).

SDG 17 focuses on strengthening the means of implementation of the sustainable development goals through enhancing resource mobilization capacity, domestic and external, of the developing countries, long-term debt sustainability through coordinated policies, adopting and implementing investment promotion regimes. It also put special emphasis on revitalizing the global partnership for sustainable development through sharing knowledge, expertise, technology and financial resources.

17.2 Assessment of progress on SDG 17 by indicators

Resource Mobilisation:

General Economics Division of the Planning commission (2017) has recently estimated the cost of implementing SDGs and indicated that an additional US$ 928.48 billion, at constant 2015-16 currency, or an annual cost of US$ 66.32 billion, would be required from both domestic and foreign sources during 2017-2030 for implementing the SDGs. The potential sources, identified for financing the resource gap, would be private sector (42.09 per cent), public sector (35.50 per cent), public-private partnership (5.59 per cent), and external financing (14.89 per cent), and non-governmental organizations (3.39 per cent).

Mainstreaming the global goals and targets into its national plan with an effective drive in SDGs implementation has already begun by involving all the stakeholders. The government recognizes that the current progress in resource mobilization, both domestic and external, need substantial improvement for delivering on the sustainable development goals by 2030. Although tax revenue is the major source of domestic revenue, accounting for about 85 per cent of the government revenue, tax-GDP ratio in

Bangladesh (approximately 10 per cent) is still one of the lowest among the comparable countries. Narrow tax base, widespread exemptions, and administrative inefficiencies are identified as factors responsible for low revenue collection. Low tax effort index value of 0.493 for Bangladesh (BB, 2012) indicates underutilization of its revenue collection capacity and high potential for financing budgetary imbalance through raising tax revenue. Improvement in the existing collection performance requires institutional and legal reforms along with modernization of the NBR.

Substantial inflow of external resources, comprising official development assistance (ODA), foreign direct investment (FDI), and remittance is critical for financing SDGs implementation in the current resource scenario vis a vis the estimated resource requirement. Until recently, progress in external resource mobilization performance indicate modest improvement though still not enough to catch up with the required rate. During 2010-2014 ODA registered remarkable growth of 14.2 per cent that slowed down to 11.2 per cent during 2015-2017. FDI grew at an average annual rate of 14.4 per cent during 2010-2014 basically due to increased investment in telecommunication, textiles, and power and gas sectors. FDI growth increased to about 17 per cent in the latter period. Remittance grew at an average annual rate of 7.6 per cent during the former period but recorded negative growth in the last two years due largely to reduction in rate of migration to the traditional markets coupled with legal issues of the illegal migrants in the major middle-east markets.

Table 17.1 External Financing Sources

	2010	2011	2012	2013	2014	2015	2016	2017
ODA (ml.US$)	1777.0	1847.0	2057.2	2760.8	3046.8	3005.5	3531.7	3677.3
FDI(net) (ml.US$)	913.0	779.0	1194.9	1730.6	1438.5	1833.9	2003.5	2454.8
Remittance (bl. US$)	10.9	11.7	12.8	14.5	14.2	15.3	14.9	12.8

Source: Ministry of Finance, Bangladesh Bank

Economic Relations Division (ERD), responsible for managing external resources in the form of development co-operation from different sources, has undertaken several strategic institutional and policy measures to harness resources to support Bangladesh's SDGs implementation. It has strengthened its collaboration with different line Ministries/Divisions to speed up the process of resource mobilization and project implementation. ERD has already prepared the National Policy on Development Cooperation (NPDC) to ensure predictable and beneficial development cooperation.

In addition, active participation in the High Level Political Forum (HLPF) and presenting Voluntary National Review (VNR) that focused on the progress and challenges related to the implementation of the 2030 Agenda for Sustainable Development Goals (SDGs), High-Level Meeting (HLM2) of the Global Partnership for Effective Development Cooperation (GPEDC), and later becoming elected Co-Chair of GPEDC in HLM2 in December 2017 are some of the major steps towards developing global partnership. Regular Local consultative group meeting, introduction of online aid portal 'Aid Information Management System', Strategic transformation of cash flow through comprehensive Government financing and debt management strategy, organizing Bangladesh Development Forum (BDF) in January 2018 have been undertaken for mobilizing and efficiently managing external resources.

Indicator 17.1.1 Total government revenue as a proportion of GDP, by source

Total government revenue as a proportion of GDP measures government control on economic resources. It also indicates government capacity to meet budget requirements. Government revenue, comprising tax revenue and non-tax revenue, in 2016-17 is Tk.2185.0 billion or 11.1 per cent of GDP. The share has improved significantly from previous year share of 9.6 per cent mainly due to substantial increase in the number of registered tax payers, rise in tax revenue collection, and prudent tax collection and management mechanism. ***If the recent growth continues in the future revenue–GDP rate will exceed the 2020 milestone.***

Tax revenue, accounting for over 85 per cent of the total government revenue, increased its contribution to the domestic budget in the recent years. In 2016, contribution has dropped to 60.6 per cent from the baseline share of 63 per cent. In 2017 contribution of taxes to budget financing surpassed the 2020 milestone.

Table 17.2 Proportion of Domestic Budget Funded by Domestic Taxes (Per cent)

Indicator	2010	Baseline [2015]	2016	2017
17.1.1 Total government revenue as a proportion of GDP, by source	10.4	9.6 (FD, FY15)	10.26	10.16
17.1.2 Proportion of domestic budget funded by domestic taxes	60.8	63 (FD, FY15)	60.6	66.4

Source: Bangladesh Economic Review 2017, Ministry of Finance

Indicator 17.3.1 Foreign direct investments (FDI), official development assistance and South-South Cooperation as a proportion of total domestic budget

External sources, consisting of FDI and ODA, play critical role in financing Bangladesh's budgetary expenses with around 15 per cent contribution. Net official development assistance in 2016 was US$3.5 billion, about 16.7 percent higher than the previous year. But, the ODA contribution to the country's total annual budget declined from 2015 level. In the last couple of years development assistance declined to less than 9 per cent level which reached 9.9 per cent level during 2013-2014 in terms of its contribution to the total budget. It needs to be mentioned that, in the recent years, growth in the size of national budget has been faster than the growth in ODA to Bangladesh.

Table 17.3 Overseas Development Assistance to Annual Budget

	2010	2012	2013	2014	2015	2016	2017
Budget (billon US$)	18.27	23.69	27.82	30.86	33.81	33.80	33.86
ODA (in bill US$)	1.78	2.06	2.76	3.05	3.01	3.53	3.68
ODA as % of budget	9.7	8.7	9.9	9.9	8.9	9.6	10.9

Source: Ministry of Finance

Inflow of FDI grew at an average annual rate of 17 percent in the recent years. FDI as proportion government budget remained stable around 5 per cent. It is noteworthy that both level of FDI and FDI s proportion of budget increased in 2017. Still the 2030 milestone is too ambitious to be achieved. Another aspect of FDI can be highlighted by considering its share in financing domestic investment. This has fluctuated around 3.2 per cent in the recent years without any observable trend. Serious attention is needed to develop investment friendly atmosphere for attracting substantial amount of investment into the country.

Table 17.4 FDI as proportion of Annual Budget

	FY12	FY13	FY14	FY15	FY16	FY17
FDI (in billion US$)	1.19	1.73	1.44	1.83	2.00	2.5
FDI as % of budget	5.0	6.2	4.7	5.4	5.9	7.4
FDI as proportion of domestic investment (%)	3.2	4.1	2.9	3.2	3.0	3.2

Source: Ministry of Finance

Indicator 17.3.2: Volume of remittances (in United States dollars) as a proportion of total GDP

The annual flow of remittance had been increasing since 2010 peaking to US$15.3 billion in 2015 and then it plummeted in the following two years. There is downward trend in the remittance/GDP ratio which reached its nadir in 2017. In this context the 2020 milestone (14 per cent) seems to be highly ambitious.

Table 17.5 Remittance as proportion of GDP

	FY10	FY12	FY13	FY14	FY15	FY16	FY17
Remittance (in bill US$)	10.85	12.8	14.5	14.2	15.3	14.9	12.8
Remittance as % of GDP	8.4	9.6	9.7	8.2	7.9	6.7	5.1

Source: Ministry of Finance

Indicator 17.4.1 Debt service as a proportion of exports of goods and services (%)

This indicator measures proportion of debt service, interest and principal payments, to total export earnings. Large debt service payments actually reduces government capacity to increase development expenditure and therefore impedes economic growth. Debt service burden in the recent years has improved significantly, from 7 per cent in 2012 to 4.6 per cent in 2016 and further to 3.24 per cent in FY2017. The impressive improvement in the debt service ratio has been possible, on the one hand, due to low aid inflow and, on the other hand, sustained higher growth of exports. Notably, the targets in 2020 as well as in 2030 have already been achieved by 2017.

Table 17.6 Debt service as Percentage of Export

Indicator	FY12	FY13	FY 14	FY 15 (Baseline)	FY16	FY17
17.4.1 Debt service as a proportion of exports of goods and services (%)	7.0	8.6	6.4	5.12	4.6	3.24

Source: Ministry of Finance

17.6.2 Fixed Internet broadband subscriptions per 100 inhabitants, by speed

This indicator measures level of accessibility to technology, communication and opportunities for knowledge sharing across the world. Fixed broadband subscription provides wide scope for searching and sharing knowledge. Connectivity to broadband internet is steadily increasing in the country. In 2016, 3.77 subscriptions are recorded for every 100 population, more than double the 2014 rate. However, subscription rate increased by 54.9 percent per annum during 2010 to 2015 and 56.4 percent during 2015 to 2016. This performance is quite phenomenal and the indicator requires only 12.7 percent annual growth in the remaining years to attain 20 percent target by 2030.

Table 17.7 Fixed Internet Broadband Subscriptions

Indicator	2010	2012	2013	2014	Base-line [2015]	2016	2017
17.6.2 Fixed Internet broadband subscriptions per 100 inhabitants, by speed	0.27	0.39	0.97	1.95	2.41 (BTRC, 2015)	3.77	NA

Source: WDI, WB 2017, and BTRC 2015

Indicator 17.8.1 Proportion of individuals using Internet

This indicator also measures access to modern communication medium. Proportion of the population using internet has increased significantly in the country. Number of internet users in 2015 increased to 30.39 percent from 3.7 per cent in 2010. This new communication technology has been adopted at a fast rate with the proportion of population reaching 41.4 per cent in 2017 and close to 50 per cent in 2017. The 2020 milestone has been surpassed in 2016.

Table 17.8 Proportion of Individuals using Internet (Per cent)

Indicator	2010	2012	2013	2014	Base-line [2015]	2016	2017
17.8.1 Proportion of individuals using the Internet	3.7	5.0	6.6	13.9	30.39 (BTRC, 2015)	41.4	49.5

Source: WB, World Development Indicators 2017, and calculated from BTRC

Indicator 17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries

This indicator helps assess the level of assistance, both technical and financial, in building capacity of the developing countries to implement plans for achieving sustainable development goals. Technical and financial assistance is critical especially for the developing countries having resource mobilisation challenges. Since 2013 assistance in dollar terms has been declining. In 2016, total amount committed to Bangladesh is US $530.6 million. There has been a big jump in 2017 to US$ 3677.29 million which is way above the target for 2030.

Table 17.9 Value of Technical Assistance committed to Bangladesh (Million US $)

Indicator	2012	2013	2014	Base-line [2015]	2016	2017
17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries (in million US$)	588.0	726.3	680.7	570.8	530.6	3677.29

Source: ERD

Indicator 17.12.1 Average tariffs faced by developing countries, least developed countries and small-island developing States

Tariff is a restriction on trade which impedes free flow of goods and services between countries. As a least developed country Bangladesh enjoys preferential tariff rates in the developed country markets. In addition, membership in different bilateral and multilateral agreements provide special tariff rates to the country's exports. In 2011 average tariffs imposed by developed countries on agricultural products, textiles and clothing from Bangladesh, was between 0-9 per cent, down from 12 per cent in 2005. This indicator demonstrates that with further trade liberalization in the importing countries Bangladesh would meet the SDG target by 2030.

Table 17.10 Average Tariff Rate

Indicator	2010	Baseline [2015]	2016
17.12.1 Average tariffs faced by developing countries, least developed countries and small island developing States	12%	a) MFN: 8.25%b) Preferential: 3.88% (MoC, 2014)	a)MFN: Bangladesh faces 10.5% MFN 13.25% Weighted tariff b)Preferential: 9.47% (MoC, SIR, 2018)

Source: MoC, SIR, 2018

Indicator 17.19.2 Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration

Although the country has a long history of birth and death registration, it was never a very successful program. According to the 2004 data, only 8 per cent of people got registered in that year. In 2004, Bangladesh enacted 'Birth and Death Registration Act, 2004' which came into effect in 2006. The act was further amended in 2013 in order to make the process sustainable. Online birth registration is also operational since 2010. All these contributed significantly to a phenomenal increase in birth registration which, by December 2015 reached 139.8 million, roughly about 86 per cent of the population. Birth registration rate was only 9.8 per cent in 2006, and 31 per cent in 2011. Despite all these, 80 per cent child birth outside the hospital has been making the task quite challenging. Death registration, though covered by the same act, has not attained considerable progress so far. According to the 2015 data, only 49 per cent of the total deaths have been recorded.

17.3 Key Challenges

Despite impressive country performance there are challenges especially in the areas of resource mobilization in order to implement the required interventions towards achieving the SDG targets.

Available estimates indicate that domestic resource mobilization potential is yet to be utilized. A large part of the population still remains outside the tax net. Although number of tax payers increased significantly in the current year, about double the size is remaining outside the tax net

Enforcing VAT collection is a big challenge due to human and technical capacity constraint with the concerned departments. Capacity building involves large amount of financial resources that is hard to mobilize

Mobilizing external resources is also posing challenges in implementing programs towards achieving the SDG targets. ODA is one of the major external sources of financing budgetary expenses. In the recent years, its contribution in terms of the size of national budget is becoming smaller. Moreover, developing country status will pose additional challenges in future in terms of getting grants and low interest loans.

Remittance sources are undiversified. Traditional markets are facing economic and political challenges making it increasingly challenging to generate increase remittance flows. Skill issue with the potential migrant workers requires substantial attention.

FDI is not registering high growth due to lack of appropriate investment climate in the country. Access to power and gas, property registration, intellectual property rights are allegedly the leading factors behind low foreign investment.Economic zones are expected to accelerate FDI inflows in the country.

17.4 Summary

Majority of the indicators, for which data are available, suggest that they achieved remarkable success during the SDG implementation period and are on track. Government revenue as proportion of GDP has increased more than the estimated required rate due mainly to the measures undertaken for increasing the number of tax payers, and prudent tax collection and management mechanism. Data on ODA indicate modest growth although its contribution to the national budget fell marginally in the recent years. Inflow of FDI and remittance requires substantial increase. Other indicators such as access to internet, and use of internet communication facilities by individuals have improved significantly in the recent years. Expansion of fiber optics cable network, increase in optical fiber capacity etc. have been contributing towards achieving the SDG target.

Achieving SDGs will critically depend on the availability of resources including external resources. The need for enhanced international cooperation and support has been emphasized for achieving 41 of the 169 targets. International community will have to provide adequate and timely support to Bangladesh to help implement a comprehensive and all-encompassing development agenda like SDGs by 2030.

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Annex: SDGs: Bangladesh Progress at a Glance by Targets

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
SDG 1 End poverty				
Target 1.1 Eradicate extreme poverty measured as people living on less than $1.90 a day				
1.1.1 Proportion of population below international poverty line	18.5 (WB 2010)	13.8 (WB, 2016)	9.30	On track
Target 1.2 Reduce poverty at least by half the proportion according to national definition				
1.2.1 Proportion of population below national poverty line (upper poverty line)	24.3 (HIES,2016)	23.1 (BBS 2017)	18.6	Need attention
1.2.2 Proportion of population below lower poverty line (extreme poverty)	12.9 (HIES,2016)	12.1 (BBS,2016)	8.9	On track
Target 1.3 Introduce nationally appropriate social protection systems and achieve substantial coverage of the poor and the vulnerable				
1.3.1Proportion of population covered by social protection systems: Households Program beneficiary	24.6 24.6 (HIES,2010)	27.8 28.7 (HIES,2016)	na	Lack updated data
1.a.2 Proportion of total government spending on essential services				
Health	4.8	6.5	5	Target met
Education	12.8	14.4	15	Need attention
Social protection	12.7 (FD,2014-15)	15.3 (FD, 2016-17)	15	Target met
SDG 2 End hunger				
Target 2.1 End hunger and ensure access to safe, nutritious and sufficient food all year round				
2.1.1 Prevalence of malnourishment of women aged 15-49 years (%)	24 (BDHS,2011)	19 (BDHS 2014)		Lacks updated data
Target 2.2 End all forms of malnutrition including achieving targets on stunting and wasting in children under 5 years of age				
2.2.1 Prevalence of stunting (%)	41 (BDHS,2011)	36 (BDHS,2014)	25	On track
2.2.1 Prevalence of wasting (%)	16 (BDHS,2011)	14 (BDHS, 2014)	12	On track
2.a.1 Agriculture Orientation Index (AOI)	0.56 (FAO,2014)	0.53 (FAO, 2015)	0.8	Need attention
2.a.2 Total official flows to agriculture sector (million US$)	215 (ERD, 2015)	210.2 (ERD, 2917)	300	Need attention

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
SDG 3 Healthy Lives and Well-being				
Target 3.1 Reduce maternal mortality ratio				
3.1.1 Maternal mortality ratio per 100,000 live births	181 (SVRS,2015)	172 (SVRS,2017)	105	Need attention
3.1.2 Births attended by skilled health personnel (%)	42.1 (BDHS,2014)	50 (BMMHCS, 2016)	65	On track
Target 3.2 End preventable deaths of new-borns and children under 5 years of age				
3.2.1 Under-five mortality rate per 1,000 live births	36 (SVRS, 2015)	31 (SVRS, 2017)	34	Target met
3.2.2 Neo-natal mortality rate per 1,000 live births	20 (SVRS, 2015)	17 (SVRS, 2017)	19	Target met
Target 3.b Support research and development				
3.b.2 Total net ODA to medical research and basic health sectors (million US$)	177.4 (ERD, 2015)	252.5 (ERD, 2017)	300	On track
SDG 4 Inclusive and equitable quality education				
Target 4.2 Ensure that all girls and boys have access to quality early childhood development, care and pre-primary education				
4.2.2 Participation rate in organized learning (one year before the 0official primary entry age) by sex	Boys:31 Girls:31.5 (WDI,2015)	Boys:33.7 Girls:34.9 (WDI,2016)	Boys:80 Girls:80	Need attention
Target 4.5 Eliminate gender disparities in education				
Gender Primary Index: Primary	1.08	1.06	1.0	Target met
Gender Primary Index: Secondary	1.129	1.105	1.14	On track
Gender Primary Index: Tertiary	0.737*	0.701	0.70	Need attention
Gender Primary Index: Technical	0.315	0.315	0.41	Need attention
	(WDI,2015) *(WDI,2014)	(WDI,2016)		
Target 4.c: Substantially increase the supply of qualified teachers				
4.c.1 Proportion of DPED/C-in-Ed teachers in primary schools	All:82 Male:80 Female:86 (MOPME,2015)	All:94.3 Male:94.8 Female:94.1 (MOPME,2018)	All: 75 Mae: 80 Female:75	Target met

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
SDG 5 Gender equality and women empowerment				
Target 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making				
5.5.1 Proportion of seats held by women in national parliament (%)	20.21 (BPS, 2015)	20.57 (BPS, 2017)	33	Need attention
Goal 6: Ensure availability and sustainable management of water and sanitation for all				
Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all				
6.1.1 Proportion of population using safely managed drinking water services	87% (UNJMP, 2015)	na	100%	On track. However, according to definition of safely managed drinking water sources, only 55.7% of population have such access (UN-ESCAP statistical yearbook 2017)
Target 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations				
6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	61% (UNJMP, 2015)	na	76%	On track
SDG 7 Affordable, reliable, sustainable and modern energy				
Target 7.1 Ensure universal access to affordable, reliable and modern energy services				
7.1.1 Proportion of population with access to electricity (%)	75.92 (BBS, 2016)	85.3 (BBS, 2017	96	On track
7.1.2 Proportion of population with primary reliance on clean fuels and technology (%)	16.68 (WB, 2015)	17.72 (WB, 2016)	25	Need attention
Target 7.2 Increase substantially the share of renewable energy in total energy mix				
7.2.1 Renewable energy share in total final energy consumption	2.79 (SREDA, 2015)	2.87 (SREDA, 2017	10	Need attention
Goal 8 Sustained, inclusive and sustainable economic growth and decent work				

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
Target 8.1 Sustain per capita economic growth in accordance with national circumstances				
8.1.1 Annual growth rate of real GDP per capita (%)	5.14 (BBS, 2015)	6.05 (BBS, 2017)	6.7	On track
Target 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading, and innovation				
8.2.1 Annual growth rate of real GDP per employed person (%)	4.49 (ILO, 2015)	5.0 (BBS, 2017)	5.0	Target met
Target 8.3 Promote development oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation and encourage formalization				
8.3.1 Proportion of informal employment in non-agriculture employment by sex	Both:77.8 Male:75.2 Female:88.7 (QLFS,2015-16)	Both:78.0 Male:76.0 Female:85.5 (QLFS,2016-17)	Both: 75	Need attention
Target 8.5 Achieve full and productive employment and decent work for all women and men				
8.5.1 Average monthly earnings of female and male employees	Both:12,897 Male:13,127 Female:12072 (QLFS, 2015-16)	Both:13258 Male:13583 Female:12254 (QLFS, 2016-17)	20 per cent increase In earnings	Need attention
8.5.2 Unemployment rate by sex and persons with disabilities	Both:4.2 Male:3.0 Female:6.8 (QLFS, 2015-16)	Both:4.2 Male:3.1 Female: 6.7 (QLFS, 2016-17)	Both:4.0 Male:2.7 Female:4.2	Need attention
Target 8.6: Substantially reduce the proportion of youth not in employment, education or training				
8.6.1 Proportion of youth (aged 15-24 years) NEET (%)	Both:28.88 Male:9.9 Female:46.9 (QFLS,2015-16)	Both:29.8 Male:10.3 Female:49.6 (QFLS,2016-17)	Both:22	Need attention
Target 8.8: Protect labour rights and promote safe and secure working environment for workers				
8.8.1 Frequency rates of (a)fatal and (b) non-fatal occupational injuries, by sex, and migrant status	(a) Both:382 Male:362 Female:20 (b) Both:246 Male:177 Female:19 (DIFE,2015)	(a) Both: 75 Male: 105 Female: 27 (b) Both: 488 Male: 285 Female: 248 (DIFE,2017)	(a)<200 (b)<150	Mixed; Need attention
SDG 9 Resilient infrastructure, sustainable industrialization and innovation				
Target 9.1:Develop quality, reliable, sustainable and resilient infrastructure				
9.1.1 Road density per 100 square kilo meter	14.48 (BBS, 2015)	14.61 (BBS, 2017)		Lack up to date data
Target 9.2 Promote inclusive and sustainable industrialization and significantly raise industry's share in employment and GDP				
9.2.1 Manufacturing value added as a proportion of GDP (%)	20.16 (BBS, FY 15)	21.74 (BBS, FY 17	21.5	Target met

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
And per capita (constant 2010 US$)	2607 (estimated, 2013)	4210 (estimated, FY 17)		Target to be set
9.2.2 Manufacturing employment as a proportion total employment (%)	14.4 (QLFS, FY16)	14.4 (QLFS, FY17)	20	Need attention
9.c.1 Proportion of population covered by a mobile network by technology (per cent)				
2G	99.4	99.49	100	On track
3G	71 (BTRC, 2015)	92.55 (BTRC, 2017)	92	Target met
SDG 10 Reduced inequalities				
Target 10.1 Progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher then the national average				
10.1.1. Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	Annual income growth of: (a) bottom 40% popn:3.1% (b) total popn: 6.6 % (HIES, 2016)		(a) 8% (b) 8%	Lack updated data
10.b.1 Resource flows for development by type of flows (million US$)	ODA:3005.5 FDI:1833.9 (ERD,2015)	ODA:3677.29 FDI:2454.8 (ERD,2017)	ODA:6000 FDI:9000	ODA on track; FDI needs attention
Goal 13: Take urgent action to combat climate change and its impacts				
Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in al1 countries				
13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Affected Persons: 12,881per 100,000 people in 2014 (ICCHL, BBS, 2015)	na	6500	On track
13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030		MoDMR has prepared Disaster Risk Reduction Strategies of Bangladesh (2016-2020)		The strategy is at draft stage awaiting final approval.
Target 13.2: Integrate climate change measures into national policies, strategies and planning				

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/ strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	Nationally determined contribution (2015)	BCCSAP (2009-2018)		Needs preparation for Paris Climate Agreement
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development				
Target 14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information				
14.5.1 Coverage of protected areas in relation to marine areas		7.94% (DoF, 2016-17)	10%	On track
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss				
Target 15.1:By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and dry lands, in line with obligations under international agreements				
15.1.1 Forest area as a proportion of total land area	17.5% (DOE, 2015)	na	20%	Improving canopy coverage is needed
15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	a) Terrestrial: 1.7% (2014-15, MoEF) b) Freshwater: 1.8% (2013-14, MoEF)	na	a) 2.4% b) 5%	On track
Target 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species				

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
15.5.1 Red List Index (RLI)	a) Mammals: 0.55 b) Birds: 0.91 c) Reptiles: 0.76 d) Amphibians: 0.85 e) Fresh Water Fish: 0.81 f) Crustaceans: 0.90 g) Butterflies: 0.64 (IUCN, 2017)	na	Not set	Last RLI was done in 2015.
SDG 16 Peace, justice and strong institutions				
Target 16.1 Significantly reduce all forms of violence and related death rates everywhere				
16.1.1 Number of victims of intentional homicide per 100,000 population by sex and age	Both:1.8 Male:1.4 Female:0.4 (MOHA, 2015)	Both:1.65 Male:1.23 Female: 0.42 (MOHA, 2017)	Both:1.6 Male:1.3 Female:0.3	On track
Target 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children				
16.2.2 Number of victims of human trafficking per 100,000 population sex, age and form of exploitation	Both:0.85 Male: 0.53 Female:0.32 (MoHA,2015)	Both:0.58 Male: 0.36 Female:0.22 (MoHA,2018)	Both:0.5	On track
16.2.3 Proportion of young women and men aged 18-29 years who experienced sexual violence by age (%)	Female:3.45 (VAW Survey,2015)	Female: 0	Female:3	
SDG 17 Global partnership for sustainable development				
Target 17.1 Strengthen domestic resource mobilization				
17.1.1 Total government revenue as a proportion of GDP by source (%)	9.6 (FD, FY15)	10.16 (FD. FY17)	16	Need attention
17.1.2 Proportion of domestic budget funded by domestic taxes (%)	63 (FD, FY15)	66.4 (FD, FY17)	65	Target met
Target 17.3 Mobilize additional financial resources for developing countries from multiple sources				
17.3.1 FDI as a proportion of total domestic budget (%)	5.7 (BIDA,2015)	7.4 (FD, FY17)	14	Need attention
17.3.1a ODA as a proportion of total domestic budget (%)	8.9 (ERD, FY15)	10.9 (ERD, FY17)	11	On track

Goals, Targets and Indicators	Base year	Current status	Milestone by 2020	Remarks
17.3.2 Volume of remittance as a proportion of total GDP	7.85 (BB, FY15)	5.1 (BB, FY17)	7.60	Need attention
Target 17.4 Assist developing countries in attaining long term debt sustainability				
17.4.1Debt service as proportion of exports of goods and services	5.12 (ERD,FY 15)	3.24 (FD, BER 2018)	5	Target met
17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation				
17.6.2 Fixed broadband subscription per 100 inhabitants by speed	2.41 (BTRC,2015)	3.77 (BTRC, 2016)	8	On track
Target 17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for LDCs				
17.8.1 Proportion of individuals using the Internet (%)	30.39 (BTRC,2015)	49.5 (BTRC,2017)	40	Target met
Target 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the SDGs				
17.9.1 Dollar value of financial and technical assistance committed to developing countries (million US$)	570.8 (ERD, 2015)	3677.29 (ERD,2017)	900	Target met

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5. Millennium Development Goals: Bangladesh Progress Report-2009 (2009)
6. Millennium Development Goals: Needs Assessment and Costing 2009-2015 Bangladesh (July 2009)
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8. MDG Action Plan (51 Upazillas) (January 2011)
9. MDG Financing Strategy for Bangladesh (April 2011)
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