



# End Evaluation of the 7<sup>th</sup> Five Year Plan

**General Economics Division (GED)**  
Bangladesh Planning Commission  
Government of the People's Republic of Bangladesh

May 2023





## **End Evaluation of the Seventh Five Year Plan (FY2016-2020)**

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**M. A. Mannan, 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 End Evaluation of 7<sup>th</sup> Five Year Plan. It provides an account of the progress and achievements of the 7<sup>th</sup> Five Year Plan. The key findings and lesson learnt of the end evaluation of the 7<sup>th</sup> FYP will provide a constructive guideline of the crucial next steps to be accommodated in the current plan.

This report shows that Bangladesh demonstrated sustained and robust economic performance throughout the 7<sup>th</sup> Five Year Plan (7FYP), despite the impact of the COVID-19 pandemic on growth in the final year. Bangladesh has made considerable progress in reducing poverty. Preliminary results of HIES 2022 suggest that the poverty rate declined to 18.7% in 2022 from 24.3 % in 2016—exactly the 18.7% targeted for the last year (i.e., 2020) of the 7FYP. Large gains have also been noted for poverty gap and poverty severity indicators. Poverty gap reduced from 5.0 % in 2016 to 3.8 % in 2022, when measured against the upper poverty level. When using the lower poverty line, the gap decreased from 0.9% in 2016 to 0.2% in 2022. Besides, the per capita GDP increased from US\$1,236 in FY15 to US\$1,930 in FY20. This indicates an improvement in the income levels and a decrease in the number of people living in poverty during this period.

In recognition to the continued commitment of our Hon'ble Prime Minister Sheikh Hasina to the country's development, she was conferred with 'Champion of Skill Development for Youth' award, "Lifetime Contribution for Women Empowerment Award", Global Women's Leadership Award", Agent of Change" and "Planet 50-50 Champion" award and the IPS International Achievement Award throughout the plan period. As a result of steady progress in achieving the SDGs during 7<sup>th</sup> FYP period she received the 'SDG Progress Award' in 2021 by the UN-sponsored Sustainable Development Solutions Network (SDSN).

The General Economics Division (GED) deserves special thanks for commissioning the splendid work. I am confident that this report will serve as a guiding document to help Bangladesh attain its development aspirations through an inclusive, equitable and just society.

(M.A. Mannan, MP)



**Dr. Shamsul Alam**

Minister of State

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 End Evaluation of the Seventh Five Year Plan depicting the results achieved, as well as the lessons learned during implementation of the 7FYP. This review report comes out at a crucial time when Bangladesh stands at the cross-roads of graduating to a developing country by 2026. The lessons demonstrated in this review report will be instrumental in recommending valuable insights in the course of implementing the 8<sup>th</sup> Five Year Plan (July 2020-June 2025).

The Seventh Five Year Plan (7FYP) articulated new strategies, institutions and policies, while strengthening the existing one to accelerate economic growth and poverty reduction and comply with goals and targets under the Agenda 2030 for Sustainable Development. The 7FYP built on the success of its predecessor the 6th FYP, is also considered as instrumental for realizing the remaining agenda of the Vision 2021 and the goals of the Perspective Plan 2010-2021 for Bangladesh to reinforce linkage between political commitment with long-term development goals of the country.

The report reveals that overall development trail of Bangladesh has been steadily moving upwards throughout the tenure of the 7FYP except in the last year of the period due to the COVID-19 pandemic. Cross-country evidence suggests that Bangladesh has sustained its economic stability throughout the implementation phase of the Plan. The average GDP growth performance of the 1st four years (FY16-19) stood at 7.6% surpassing the ambitious Seventh Plan target of 7.3%. COVID-19 slowed down the GDP growth to 3.51% in the last year of the 7<sup>th</sup> Plan Period.

The 7FYP has made considerable progress in terms of its growth strategy to transform the economy of the country from an agrarian one to a manufacturing and services-oriented economy. It is heartening to note that Bangladesh made laudable headway in power and infrastructure. Bangladesh has made progress in human resource development through addressing the constraints for the development of human resource by preparing and implementing a well-thought-out education and training strategy and associated policies, improved access to health and sanitation for the poor people and to nutrition programs. The Plan period witnessed strengthen commitment from the Government of Bangladesh to reduce poverty, improve human development and reduce inequality.

I would like to thank GED officials for their hard work and efforts for commissioning such a valuable review report. I hope the End Evaluation of the Seventh Five Year Plan will be helpful in realizing the development journey of the Govt.

(Dr. Shamsul Alam)



**Dr. Md. Kawser Ahmed**

Member (Secretary)  
General Economics Division  
Bangladesh Planning Commission

## PREFACE

I am delighted to share that General Economics Division (GED) is going to publish ‘End Evaluation of the Seventh Five Year Plan (FY2016-2020)’. The report depicts the results achieved during the plan period as well as the lessons learned during the implementation. The report comes out at a crucial time when Bangladesh is on the pathway to the transition of LDC graduation along with the COVID-19 pandemic and ongoing Russian-Ukraine Crisis impacting the global economy. The lessons demonstrated in the report will be instrumental in recommending the course of action for the implementation of the 8<sup>th</sup> Five Year Plan as well as attaining the SDGs.

A rigorous approach and methodological framework were followed for this evaluation. This requires a comprehensive understanding of the Plan documents (i.e., the Seventh Plan and the Perspective Plan) and their development results frameworks (DRFs); the collection and analysis of relevant data; and the provision of insightful assessments that are not limited to merely describing the data but also providing rationale. Analysis of quantitative data has been supplemented with qualitative data obtained from a desk review of various policy documents and Key Informant Interviews (KIIs) and information received from the ministries and divisions. GED formulated this report after brief consultations with executing ministries/divisions. In this process, concerned officials from GED were actively in touch with the focal persons from ministries/divisions.

It is evident that Bangladesh exhibited sustained and vigorous economic performance throughout the 7<sup>th</sup> Five Year Plan (7FYP), despite the impact of the Covid-19 pandemic on growth in the final year of implementation. The average GDP growth rate for the first four years was 7.6% which exceeded the targets. Despite the impact of the COVID-19 pandemic, the country achieved a positive growth of 3.51% in FY20 and the average growth rate was 6.78% over the 7FYP period. Besides, the per capita GDP increased to US\$1,930 in FY20 from US\$1,236 in FY15. The macroeconomic situation in other areas also revealed strong growth. Notably, the manufacturing sector played a vital role in driving this growth, while the agriculture sector exhibited remarkable performance.

In the case of employment generation, a positive tendency was evident in ensuring gender parity as the number of employed women increased by 7.7 million between 2013 and 2022, with women’s labor force participation rate rising from 33.5% to 42.7%.

Prudent monetary and fiscal management played an effective role in containing inflation during the 7FYP. By the end of the Plan period, the inflation rate stood at 5.65%, slightly exceeding the target of 5.50%. However, the tax-to-GDP ratio remained stagnant at around 9%, posing a significant challenge to expanding public expenditure for essential sectors such as healthcare, education, infrastructure development, and social protection.

Bangladesh has made significant progress in diversifying the agricultural sector by developing improved crop varieties and increasing the availability of quality seeds. Priority has been ensured on the rational use of irrigation water, with an increasing emphasis on surface water irrigation. Fisheries and livestock production are also being enhanced sustainably to diversify the agricultural sector and improve nutrition security. Moreover, initiatives have been taken by the government to protect the sector from climate shocks through immediate support measures and long-term resilience-building interventions that significantly enhanced the performance of the sector. As a result, significant improvements in food availability have been observed in the country, with self-sufficiency achieved in food grain production and an increase in per capita availability of both food grains and non-food grains. Moreover, Bangladesh accomplished self-sufficiency in meat and egg production during the 7FYP as per capita calorie intake rose from 2210 Kcal/capita/day in 2016 to 2393 Kcal/capita/day in 2022.

Bangladesh has shown considerable success in reducing poverty. Preliminary results of HIES 2022 indicate that the poverty rate declined to 18.7% in 2022 from 24.3 % in 2016 – exactly the 18.7% target for the last year (i.e., 2020) of the 7FYP, suggesting a 5.6 percentage point reduction between 2016 and 2022. Significant improvement was evident in the healthcare sector that results in the decline of mortality rates and an increase in life expectancy from 70.9 in 2015 to 72.8 in 2020.

An intense consultation process was followed in preparing this document. I express my sincere appreciation to all the concerned officials of GED particularly the officials of the Poverty Analysis and Monitoring (PAM) Wing (Dr. Munira Begum, Joint Chief; Ms. Rumana Rahman Shampa, Deputy Chief; Mr. Mohammad Fahim Afsan Chowdhury, Senior Assistant Chief; and Mr. Shimul Sen, Senior Assistant Chief) and officials from respected ministries/divisions involved who extended their unwavering and continuous cooperation to GED in preparation for this document that would be beneficial in attaining both national and 2030 Agenda.



(Dr. Md. Kawser Ahmed)

## ACRONYMS

4IR	Fourth Industrial Revolution
a2i	Aspire to Innovate
ACC	Anti-Corruption Commission
ADM	Adaptive Delta Management
ADP	Annual Development Programme
ADR	Alternative Dispute Resolution
AES	Annual Education Survey
AFOLU	Agriculture, Forestry and Other Land Use
AGW	Access Gateway
AI	Artificial Intelligence
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
APA	Annual Performance Agreement
APSC	Annual Primary School Census
AWD	Alternate Wetting and Drying
AWDDW	Allowances for the Widow, Deserted and Destitute Women
B2B	Business-to-business
B2C	Business-to-consumer
B2G	Business-to-government
BACCO	Bangladesh Association of Contact Center and Outsourcing
BAEC	Bangladesh Atomic Energy Commission
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BARI	Bangladesh Agriculture Research Institute
BASIS	Bangladesh Association of Software and Information Services
BAU	Business-As-Usual
BB	Bangladesh Bank
BBA	Bangladesh Bridge Authority
BBS	Bangladesh Bureau of Statistics
BCC	Bangladesh Computer Council
BCCSAP	Bangladesh Climate Change Strategy and Action Plan

BCCRF	Bangladesh Climate Change Resilience Fund
BCCTF	Bangladesh Climate Change Trust Fund
BCG	Bacillus Calmette–Guérin
BDHS	Bangladesh Demographic and Health Survey
BDP	Bangladesh Delta Plan
BDT	Bangladeshi Taka
BERC	Bangladesh Energy Regulatory Commission
BES	Bangladesh Education Statistics
BEST	Bangladesh Environmental and Sustainable Transformation
BEZA	Bangladesh Economic Zones Authority
BFD	Bangladesh Forest Department
BFIS	Bangladesh Forest Information System
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BHTPA	Bangladesh Hi-Tech Park Authority
BIDA	Bangladesh Investment Development Authority
BIDS	Bangladesh Institute of Development Studies
BIGD	BRAC Institute of Governance and Development
BMET	Bureau of Manpower, Employment and Training
BNBC	Bangladesh National Building Code
BNDA	Bangladesh National Digital Architecture
BNMC	Bangladesh Nursing & Midwifery Council
BNRS	Bangladesh National REDD+ Strategy
BoI	Board of Investment
BoNFE	Bureau of Non-Formal Education
BOP	Balance of Payment

BoT	Board of Trustees
BPD	Bangladesh Poverty Database
BPDB	Bangladesh Power Development Board
BPO	Business Processed Outsourcing
BREB	Bangladesh Rural Electrification Board
BRRI	Bangladesh Rice Research Institute
BRT	Bus Rapid Transit
BRTA	Bangladesh Road Transport Authority
BRTC	Bangladesh Road Transport Corporation
BSA	Bangladesh Shishu Academy
BSCCL	Bangladesh Submarine Cable Company Limited
BSEC	Bangladesh Securities and Exchange Commission
BSMMU	Bangabandhu Sheikh Mujib Medical University
BUET	Bangladesh University of Engineering and Technology
BWPD	Bangladesh WASH Poverty Diagnostic
C2C	Consumer-to-consumer
CAAB	Civil Aviation Authority of Bangladesh
CAGR	Compound Annual Growth Rate
CAMS	Continuous Air Monitoring Stations
CASE	Clean Air and Sustainable Environment
CBO	Community Based Organization
CBOs	Community-Based Organisations
CCA	Climate Change Adaptation
CCM	Climate Change Mitigation
CCs	Community Clinics
CDA	Chattogram Development Authority
CEO	Chief Executive Officer
CFF	Climate Fiscal Framework
CFP	Climate Fiscal Policy
CGE	Computable General Equilibrium

CIP	Country Investment Plan
CIP-EFCC	Country Investment Plan for Environment, Forestry and Climate Change
CLP	Chars Livelihoods Programme
CMC	Central Monitoring Committee
CMS	Cottage, Micro and Small
CO2	Carbon dioxide
COP	Conference of the Parties to the UNFCCC
COVID 19	Coronavirus Disease of 2019
CPGCBL	Coal Power Generation Company Bangladesh Limited
CPI	Consumer Price Index
CPP	Cyclone Preparedness Programme
CPTU	Central Procurement Technical Unit
CREL	Climate Resilient Ecosystem and Livelihoods
CRR	Cash Reserve Ratio
DAE	Department of Agricultural Extension
DAP	Detailed Area Plan
DESCO	Dhaka Electric Supply Company
DFIs	Development Finance Institutions
DGNM	Directorate General of Nursing and Midwifery
DIP	Department of Immigration and Passports
DITMP	Dhaka Integrated Traffic Management Project
DLDD	Land Degradation and Drought
DLIs	Disbursement-Linked Indicators
DLS	Department of Livestock Services
DMRTDP	Dhaka Mass Rapid Transit Development Project
DoE	Department of Environment
DPDC	Dhaka Power Distribution Company
DPE	Directorate of Primary Education
DPHE	Department of Public Health Engineering
DPP	Development Project Proposal



DRF	Development Results Framework
DSA	Digital Security Agency
DTCA	Dhaka Transport Co-ordination Authority
DWA	Department of Women Affairs
ECA	Ecologically Critical Areas
ECCD	Early Childhood Care and Development
ECL	Each Child Learns
ECRRP	Emergency Cyclone Recovery and Restoration Project
EED	Education Engineering Department
EEP	Economic Empowerment of the Poorest
EFCC	Environment, Forestry and Climate Change
EGPP	Employment Generation Programme for the Poorest
EIA	Environmental Impact Assessments
ELCD	Early Learning for Child Development
EPB	Export Promotion Bureau
EPZ	Export Processing Zone
ERD	Economic Relations Division
ERQ	Export Retention Quota
ESP	Essential Service Package
ESRM	Environmental and Social Risks Management
ETPs	Effluent Treatment Plants
EU	European Union
EVM	Electronic Voting Machines
FAO	Food and Agriculture Organization
FAOSTAT	Food and Agriculture Organization Corporate Statistical Database
FCBs	Foreign Commercial Banks
FDI	Foreign Direct Investment
FEPR	Female Employment-to-Population Rate
FFW	Food for Work
FGT	Foster, Grear and Thorbecke

FIP	Forest Investment Plan
FLFS	Female Labour Force Participation
FMP	Forestry Master Plan
FPMU	Food Planning and Monitoring Unit
FY	Financial Year
FYP	Five Year Plan
G2P	Government to Person
GATS	Global Adult Tobacco Survey
GBCSRD	Green Banking and CSR Department
GBM	Ganges-Brahmaputra-Meghna
Gbps	GigaBits or GigaBytes per Second
GBV	Gender-based Violence
GCF	Green Climate Fund
GCI	Global Competitiveness Index
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
GED	General Economics Division
GGGR	Global Gender Gap Report
GHG	Greenhouse Gas
GII	Global Innovation Index
GMP	Growth Monitoring and Promotion
GoB	Government of Bangladesh
GOs	Government Organizations
GPON	Gigabit-capable Passive Optical Networks
GR	Gratuitous Relief
GRS	Grievance Redressal System
GTF	Green Transformation Fund
GVCs	Global Value Chains
HBB	Herring Bone Bond
HCFCs	Hydrochlorofluorocarbons
HEQEP	Higher Education Quality Enhancement Project
HFA	Health for All
HI	Handicap International
HIC	High Income Countries

HIES	Household Income and Expenditure Survey
HIV	Human Immunodeficiency Virus
HNP	Health, Nutrition and Population
HPNSDP	Health Population and Nutrition Sector Development Program
HPSP	Health Professions Scholarship Program
HQs	Headquarters
HR	Human Resources
HRD	Human Resource Development
HRH	Human Resources for Health
HSC	Higher Secondary School Certificate
HSD	Health Services Division
HSIA	Hazrat Shahajalal International Airport
IAS	International Accounting Standards
IBFCR	Inclusive Budgeting and Financing for Climate Resilience
ICBAAR	Integrating community-based Adaptation into Afforestation and Reforestation Programme
ICT	Information and Communication Technologies
IDR	Investment to Deposit Ratio
IFMIS	Integrated Financial Management Information System
IHI	Ishikawajima-Harima Heavy Industries
IMED	Implementation Monitoring and Evaluation Division
IMF	International Monetary Fund
IMR	Infant Mortality Rate
INDCs	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
IPF	Investment Project Financing
IPO	Import Policy Orders
IPP	Independent Power Producer
IPPU	Industrial Processes and Product Use

IPR	Intellectual Property Rights
ITeS	Information Technology Enabled Services
ITU	International Telecommunication Union
IWT	Inland Water Transport
IWTMP	Inland Water Transport Master Plan
JDC	Junior Dakhil Certificate
JICA	Japan International Cooperation Agency
JSC	Junior School Certificate
KDA	Khulna Development Authority
KPIs	Key Performance Indicators
kwh	Kilowatt per Hour
LC	Letter of Credit
LCD	Low Carbon Development
LDC	Least Developed Countries
LDCF	Least Developed Countries Fund
LEAP	Low Emissions Analysis Platform
LEED	Leadership in Energy and Environmental Design
LFPR	Labour Force Participation Rate
LFS	Labour Force Survey
LGED	Local Government Engineering Department
LGIs	Local Government Institutions
LLP	Limited Liability Partnership
LMIC	Low and Low Middle Income Countries
LNG	Liquefied Natural Gas
M&E	Monitoring and Evaluation
MAD	Minimum Acceptable Diet
MAF	Ministry Assessment Format
MATS	Medical Assistant Training School
MCBP	Mother & Child Benefit Programme
MDD	Minimum Dietary Diversity
MDG	Millennium Development Goals
MDSP	Multipurpose Disaster Shelter Project
MDU	Multi-Dwelling Unit



MEFWD	Medical Education and Family Welfare Division
MFA	Multi-Fibre Arrangement
MFI	Microfinance Institutions
MFS	Mobile Financial Services
MGSP	Municipal Governance Support Project
MICS	Multiple Indicator Cluster Survey
MIS	Management Information System
MLD	Minimal Liquid Discharge
MMC	Multimedia Classroom
MMR	Measles, Mumps and Rubella
MoA	Ministry of Agriculture
MoDMR	Ministry of Disaster Management and Relief
MoE	Ministries of Education
MoEFCC	Ministry of Environment, Forest and Climate Change
MoF	Ministry of Finance
MoFL	Ministry of Fisheries and Livestock
MoHA	Ministry of Home Affairs
MoHFW	Ministry of Health and Family Welfare
MoLGRD&C	Ministry of Local Government, Rural Development & Co-operatives
MoPME	Ministry of Primary and Mass Education
MOWCA	Ministry of Women and Children Affairs
MoWR	Ministry of Water Resources
MPA	Mongla Port Authority
MPLS	Multiprotocol Label Switching
MRT	Mass Rapid Transit
MSMEs	Medium and Small Manufacturing Enterprises
MSPVAW	Multi-Sectoral Program on Violence Against Women
MT	Metric Tonnes
MTBF	Medium-Term Budget Framework
MW	Megawatt

MYPIP	Multi-Year Public Investment Plan
NAEP	National Assessment of Educational Progress
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NARS	National Agricultural Research System
NBF	National Biosafety Framework
NBFIs	Non-bank Financial Institution
NBR	National Board of Revenue
NBSAP	National Biodiversity Strategy and Action Plan
NCDs	Non-communicable Diseases
NDC	Nationally Determined Contribution
NEAC	National Examination and Assessment Centre
NEC	National Environmental Council
NEET	Not in Employment Education
NEP	National Education Policy
NFE	Non-Formal Education
NFEA	Non-Formal Education Act
NFI	National Forest Inventory
NFMS	National Forest Monitoring System
NFOWD	National Forum of Organizations Working with the Disabled
NFP	National Food Policy
NGO	Non-Government Organization
NHA	National Housing Authority
NHD	National Household Database
NID	National Identity
NIMTP	National Integrated Multimodal Transport Policy
NIPORT	National Institute of Population Research and Training
NIS	National Integrity Strategy
NLASO	National Legal Aid Services Organization

NLDC	National Load Dispatch Centre
NMR	Neonatal Mortality Rate
NMT	Non-Motorized Transport
NNS	National Nutrition Services
NOSCOP	National Oil and Chemical Spill Contingency Plan
NPLs	Non-Performing Loans
NSDP	National Skills Development Policy
NSDS	National Strategy for Sustainable Development
NSP	NAMA Support Project
NSSS	National Social Security Strategy
NTDs	Neglected Tropical Diseases
NTP	National TB Process
NTPC	National Thermal Power Corporation
NTRCA	Non-Government Teachers Registration and Certification Authority
NTTN	Nationwide Telecommunication Transmission Networks
NWDP	National Women's Development Policy
OAA	Old Age Allowance
OCAG	Office of the Comptroller and Auditor General
OCCs	One-stop Crisis Centres
ODP	Ozone Depleting Potential
ODSs	Ozone Depleting Substances
OFC	Optical Fibre Cable
OII	Oxford Internet Institute
OLI	Online Labour Index
OMS	Open Market Sales
PA	Paris Agreement
PCBs	Private Commercial Banks
PECE	Primary Education Completion Exam
PEDP	Primary Education Development Program
PFDS	Public Food Distribution System
PFM	Public Financial Management
PG	Poverty Gap

PHC	Primary Healthcare
PIM	Public Investment Management
PKSF	Palli Karma-Sahayak Foundation
POSCO E&C	POSCO Engineering & Construction
PPB	Parts Per Billion
PPP	Public-Private Partnership
PSC	Public Service Commission
PVP	Private Voluntary Pension
PWD	Public Works Department
QR	Quantitative Restrictions
R&D	Research and Development
RAJUK	Rajdhani Unnayan Kartripakkha
RBME	Results-based Monitoring and Evaluation
RD	Regulatory Duty
RDA	Rajshahi Development Authority
REDD	Reducing Emissions from Deforestation and forest Degradation
RMB	People's Renminbi (Chinese Yuan)
RMG	Readymade Garments
ROSC	Reaching Out-of-School
RTHD	Road Transport and Highways Division
RTI	Right to Information
SACOSAN	South Asian Conference on Sanitation
SAF	Sector Appraisal Format
SCBs	State-owned Commercial Banks
SD	Supplementary Duties
SDG	Sustainable Development Goals
SEIP	Skill Enhancement and Innovation Program
SEZ	Special Economic Zone
SHS	Solar Home System
SID	Statistics and Informatics Division
SLA	Service Level Agreement
SLCPs	Short Lived Climate Pollution
SMEs	Small and Medium-sized Enterprises

SoD	Standing Orders on Disaster
Solar PV	Solar Photovoltaic
SP	Social Protection
SPG	Squared Poverty Gap
SPS	Sanitary and Phytosanitary
SREDA	Sustainable and Renewable Energy Development Authority
SSC	Secondary School Certificate
STEM	Science, Technology, Engineering and Mathematics
STEP	Skills for Training for Employment Program
STOL	Short Take-Off and Landing
STPs	Sewerage Treatment Plants
SUFAL	Sustainable Forest and Livelihoods
SVRS	Sample Vital Registration System
SWAPNO	Strengthening Women's Ability for Productive New Opportunities
T&D	Transmission and Distribution
TB	Tuberculosis
TBI-W	Temporary Basic Income for women
TBM	Tunnel Boring Machine
TEU	Twenty-foot Equivalent Units
TFR	Total Fertility Rate
TINs	Tax Identification Numbers
TOD	Transit Oriented Development
TPO	Trade Promotion Organisation
TR	Test Relief
TTC	Technical Training Centre
TVE	Technical and Vocational Education and Training
U-5MR	Under-five Mortality Rate
UDD	Urban Development Directorate
UGC	University Grants Commission
UHC	Universal Health Coverage
UMIC	Upper Middle-Income Countries
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS

UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
UPS	Universal Pension Scheme
UPS	Uninterruptible Power Supply
US	United States
USAID	United States Agency for International Development
USB	Universal Serial Bus
USD	United States Dollar
USGBC	United States Green Building Council
VAT	Value Added Tax
VAW	Violence Against Women
VAWG	Violence Against Women and Girls
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
VPN	Virtual Private Network
VTE	Vocational and Technical Education
VVER	Water-Water Energetic Reactor
WASA	Water Supply and Sewerage Authority
WASH	Water, Sanitation and Hygiene
WB	World Bank
WDI	World Development Indicators
WEF	World Economic Forum
WHO-FCTC	WHO Framework Convention on Tobacco Control
WZPDC	West Zone Power Distribution Company



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## EXECUTIVE SUMMARY

The 7<sup>th</sup> Five-Year Plan of Bangladesh was formulated with the primary objective of achieving accelerated economic growth, reducing poverty, improving human development indicators, and fostering equitable socio-economic progress. It was a crucial milestone for Bangladesh as it sought to address various developmental priorities and propel the nation toward sustainable growth and inclusive development. The plan incorporated a comprehensive set of strategies, policies, and programs spanning various sectors, including agriculture, industry, infrastructure, education, healthcare, and social protection. These initiatives aimed to leverage the country's potential, capitalize on emerging opportunities, and address the persistent challenges faced by Bangladesh.

Having regained power in 2009, the government of Bangladesh, led by the esteemed Prime Minister Sheikh Hasina, unveiled Vision 2021 with the aim of achieving Middle-Income Country status, reducing poverty, and enhancing human development through inclusive and innovative approaches. This ambitious plan was implemented through the Perspective Plan (2010-2021) and two subsequent five-year plans (6FYP and 7FYP), which played a crucial role in realizing Vision 2021. The government's audacious decisions and dynamic leadership revitalized the nation, leading to accelerated socioeconomic transformation and positioning Bangladesh as a role model for development. Over the course of a decade, the country experienced uninterrupted economic growth, surpassing expectations across several key indicators. In 2015, Bangladesh transitioned to a Lower Middle-Income Country, and in 2018, it met the UN criteria to graduate from the status of Least Developed Country. Encouraged by these achievements, the government introduced Vision 2041 and Perspective Plan 2041, aiming to become an Upper Middle-Income Economy by 2031 and a High-Income Country by 2041.

The Seventh Five Year Plan (7FYP), spanning from FY16 to FY20, was adopted in 2016. To ensure successful implementation and effective future planning, rigorous monitoring and review of the plan's progress were deemed critical. The 7FYP incorporated a Development Result Framework (DRF) for assessing the monitoring and review processes. A mid-term review was conducted in May 2019, covering the initial two years of the plan's implementation. The end evaluation of the 7FYP encompassed the entire implementation period, relying on information and data provided by ministries, divisions, and various official secondary sources. The review employed a rigorous approach and methodological framework, drawing upon a comprehensive understanding of plan documents, data collection and analysis, and insightful evaluations. Quantitative and qualitative data from diverse sources, including policy documents, key informant interviews, and secondary data, were utilized. Evaluation inputs were gathered from government agencies in Bangladesh as well as other national and international sources. The evaluation considered the indicators outlined in the development results framework (DRF) and analyzed both macro and sectoral level performance, with the report presenting the key findings of the review.

### Macroeconomic Stability and Economic Growth

Macroeconomic stability and economic growth were sustained throughout the 7FYP, despite the impact of the Covid-19 pandemic on growth in the final year. The average GDP growth rate for the first four years exceeded the targets, reaching 7.6%. Despite the Covid-19 impact, Bangladesh achieved a positive growth rate of 3.51% in FY20, with an average growth rate of 6.78% over the entire 7FYP period. Per capita GDP increased from US\$1,236 in FY15 to US\$1,930 in FY20. Other macroeconomic indicators also demonstrated strong growth, with the manufacturing sector playing a vital role while the agriculture sector displayed remarkable resilience across all subsectors despite the pandemic.

The primary objective of the 7FYP was to create 12.9 million jobs, including 2 million overseas jobs, to address underemployment. Although the plan fell short by 1.2 million jobs, a closer analysis reveals positive trends in employment. The number of employed women increased by 7.7 million between 2013 and 2022,

with the women's labor force participation rate rising from 33.5% to 42.7%. While the manufacturing sector did not achieve its target of a 20% increase in employment, the share of agriculture in total employment rose from 40.6% in 2016-17 to 45.3% in 2022, resulting in the creation of 7.5 million additional jobs. The temporary rise in agricultural employment can be attributed to urban-to-rural migration following the Covid-19 pandemic.

Prudent monetary and fiscal management contributed to effectively controlling inflation during the 7FYP, with the inflation rate standing at 5.65% at the end of the plan period, slightly exceeding the target of 5.50%. However, the tax-to-GDP ratio remained stagnant at around 9%, posing a significant challenge to expanding public expenditure in crucial sectors such as healthcare, education, infrastructure development, and social protection.

On the external front, the 7FYP coincided with unfavorable global economic trends, including trade policy reversals by the US, trade wars between the US and China, the Brexit referendum, and the Covid-19 pandemic. As a result, Bangladesh experienced lower-than-targeted export and import growth, with foreign direct investment (FDI) inflows falling short of the target. The average annual FDI inflow during the plan period was \$1.6 billion. Although Bangladesh's overall balance of payments position exceeded the target in FY16, it fell slightly short in FY17, widened in FY18, and significantly exceeded the target in FY19. However, due to the pandemic, the balance of payments position in FY20 was nearly 50% lower than the targeted value.

The 7FYP set ambitious targets for remittance growth, and although the actual flow fell short in the initial two years, the strong performance was recorded thereafter. In FY21, Bangladesh achieved a record remittance inflow of \$24.8 billion, with a year-on-year growth rate of 36%.

While the exchange rate remained relatively stable for most of the 7FYP, Bangladesh aimed to increase foreign exchange reserves from \$24 billion in FY15 to \$49.5 billion in FY20 but only reached \$36 billion. Reserves experienced rapid growth after the Covid-19 outbreak but faced pressure due to rising import payments, subdued export earnings, and uncertain remittance trends.

During the 7<sup>th</sup> Plan, Bangladesh focused on maintaining prudent external borrowing by utilizing concessional loans and diversifying external financing sources. Foreign financing played a crucial role in advancing the economy, particularly in infrastructure projects such as the Matarbari Power Hub, Dhaka Metro Rail, and Karnaphuli River Tunnel. The country's total outstanding external debt (public and private) increased from \$37.2 billion in FY15 to \$95.8 billion in FY22, with an average growth rate of 15%. However, the government aimed to reduce dependency on public external debt and lower external debt service payments in relation to exports of goods, services, and remittances, but debt service payments increased, reaching 5.5% by FY20.

Macroeconomic stability hinges on measures to control inflation, maintain food security, manage foreign reserves, and ensure debt sustainability. Priorities include domestic revenue mobilization, attracting foreign direct investment, job creation, export diversification, private sector incentives, improved implementation of development projects, institutional banking reforms, and transparency in governance. Strengthening the banking sector is vital for economic stability and growth.

### **Agriculture and Food Security**

The 7FYP in Bangladesh placed significant emphasis on agriculture and food security, leading to noteworthy progress in reducing import dependency, improving food consumption and nutrition, and boosting GDP. The plan aimed to enhance sustainable agricultural production, improve livelihoods, strengthen research and extension systems, and develop supply chains for agricultural products. Investments were made in farm mechanization and on-farm water management, while infrastructure development facilitated market access

and contributed to sectoral growth. The agriculture sector's annual average growth rate during the 7FYP was 3.7%, with fisheries and forestry demonstrating the fastest growth. The share of agriculture in GDP contracted by 2.26 percentage points, reaching 13.74% in FY20 from the base year value of 16% in FY15.

Agricultural exports showed positive growth, increasing from \$1.15 billion in FY15 to \$1.4 billion in FY19, with a slight decline to \$1.3 billion due to the Covid-19 crisis. Agriculture's share in total exports rose from 3.7% to 3.9%. Notably, certain products like mangoes and spices displayed growth potential in European markets, suggesting that significant investment could further boost exports.

The 7FYP placed a strong emphasis on ensuring food security through domestic production and largely achieved production targets. Rice production exceeded the target of 36.8 million MT in FY21, reaching an actual production of 37.6 million MT. Vegetable production also experienced significant growth during this period. The productivity of various crops, including rice, potato, pulses, maize, vegetables, and jute, increased with a growth rate of 2.634% until 2018. Rice imports declined during the 7FYP due to high domestic production, while wheat imports increased to meet changing consumption patterns.

The Government of Bangladesh made substantial progress in diversifying the agricultural sector by developing improved crop varieties and increasing the availability of quality seeds. Attention was given to rational water use, particularly surface water irrigation. Fisheries and livestock production were also improved sustainably to diversify the agricultural sector and enhance nutrition security. Measures were taken to protect the sector from climate shocks through immediate support and long-term resilience-building projects. These efforts contributed to the sector's strong and resilient performance throughout the 7<sup>th</sup> FYP.

Significant improvements in food availability were observed, with self-sufficiency achieved in food grain production and an increase in per capita availability of both food grains and non-food grains. Moreover, Bangladesh achieved self-sufficiency in meat and egg production during the 7FYP, with record-breaking numbers of eggs and milk produced. Per capita calorie intake in Bangladesh also witnessed a positive trend, rising from 2210 Kcal/capita/day in 2016 to 2393 Kcal/capita/day in 2022.

The government demonstrated its commitment to agriculture and food security by allocating 5.4% of total public spending to the sector in FY20, focusing on capital expenditures. Policies were implemented to boost agricultural productivity and ensure food security, such as the National Agriculture Policy, which emphasized modernization, farmer empowerment, and sustainable production systems. The Food and Nutrition Security Policy addressed all dimensions of food security and emphasized governance and partnerships. The government also incentivized farm mechanization, strengthened safety net programs, and enacted food safety regulations. Supportive policies included the National Forest Act and National Action Plan for Nutrition. These efforts aimed to increase agricultural output, enhance food security, and improve livelihoods.

Transforming Bangladesh's agriculture sector towards commercialization and sustainable production is crucial. Priorities include adopting modern technologies, climate-sensitive processes, balanced diets, efficient land use, improved infrastructure, critical subsidies, increased investment, and agricultural exports. Strengthening policies and implementation is essential for achieving higher agricultural productivity and food security.

### **Employment, Poverty & Regional Disparity**

The key indicators of development, namely employment generation, poverty reduction, and regional disparity reduction, offer a valuable summary of the overall progress of the economy and the adherence to the Plan. Significant strides have been made in terms of employment generation, poverty reduction, and regional disparity reduction during the 7<sup>th</sup> Five-Year Plan (7FYP) period.

According to the labor force survey (LFS, 2022) conducted by the Bangladesh Bureau of Statistics (BBS), there has been noteworthy progress in employment and labor force participation in Bangladesh. The total number of employed individuals increased from 58.07 million in 2013 to 70.8 million in 2022, accompanied by an increase in the labor force participation rate from 57.1 percent to 61.0 percent. Particularly remarkable is the substantial growth in women's labor force participation, which rose from 33.5 percent in 2013 to 42.7 percent in 2022. Consequently, there was an addition of 7.7 million employed women workers during the period from 2013 to 2022.

All three poverty measurement indicators, namely the headcount ratio, poverty gap, and poverty severity, indicate significant progress in reducing poverty. Bangladesh has made considerable headway in poverty reduction, as indicated by preliminary results of the Household Income and Expenditure Survey (HIES) 2022. The poverty rate declined to 18.7 percent in 2022 from 24.3 percent in 2016, aligning precisely with the 18.7 percent target set for the final year (2020) of the 7FYP. This represents a reduction of 5.6 percentage points between 2016 and 2022. Notable improvements have also been observed in the poverty gap and poverty severity indicators. Specifically, the poverty gap decreased from 5.0 percent in 2016 to 3.8 percent in 2022, indicating a reduction of 1.2 percentage points compared to 2016. When measured against the lower poverty line, the poverty gap decreased from 0.9 percent in 2016 to 0.2 percent in 2022 for the extremely poor. These findings reflect an improvement in income levels and a decline in the number of people living in poverty during this period.

The significant improvements in the poverty gap and severity indicators suggest that the resilience of the poor in Bangladesh has been strengthened during the 7FYP period. Despite the impact of the COVID-19 pandemic, the poverty gap decreased from 5.0 percent in 2016 to 3.8 percent in 2022 when measured against the upper poverty level. Similarly, when measured against the lower poverty line, the gap decreased from 0.9 percent in 2016 to 0.2 percent in 2022 for the extremely poor. This indicates an enhancement in income levels and a reduction in the number of people living in poverty during this period.

## Energy and Infrastructure Development

The quality of a country's infrastructure is closely linked to its ability to compete and increase export volumes. Moreover, attracting foreign direct investment and mobilizing domestic private investment necessitates high-quality infrastructure, particularly reliable power supplies. The 7<sup>th</sup> Five-Year Plan laid out a comprehensive strategy for enhancing physical infrastructure, including the power, energy, and transportation sectors.

From 2016 to 2020, Bangladesh witnessed an improvement in its infrastructure ranking, although it still lagged behind neighboring economies. The power and energy sector played a vital role in propelling Bangladesh's economic growth, despite encountering several obstacles in achieving the targets set in the 7<sup>th</sup> FYP. Nevertheless, significant progress was made in the use of renewable energy for electricity generation, although the growth rate of renewable energy was lower compared to coal-based electricity production. The access to electricity increased to 97%. Despite the government's efforts, reliance on gas and liquid fuel remained high, while there was a substantial increase in coal-based capacity, with hydro and solar PV remaining relatively low.

Notwithstanding these shortcomings, Bangladesh made strides in rural electrification and reduced disparities in power distribution and consumption through the Bangladesh Rural Electrification Board (BREB). The country surpassed the target for expanding electric distribution lines and connecting new consumers to the grid. However, there were challenges in achieving the construction and upgrading of sub-stations. In urban areas, the performance of power distribution companies varied, with some falling short of their targets. The Plan aimed to increase private sector participation in power generation, although the contribution to total electricity generation slightly decreased over the years.



Regarding transportation, the 7<sup>th</sup> Plan aimed to establish an efficient, sustainable, safe, and regionally balanced transportation system in the country, where different modes of transport complement each other. The Plan prioritized transformative transport infrastructure projects, including the introduction of Mass Rapid Transit in Dhaka and its surrounding areas. The objectives and strategies outlined in the 7<sup>th</sup> FYP for the transport sector were sound, with a focus on intermodal transport coordination, development of national highways, inter-city and regional connectivity, reducing trade logistics costs, and improving transport network asset maintenance.

While the completion of the Padma Bridge was delayed by two years, other major projects remained on schedule. The 7<sup>th</sup> FYP aimed to convert national highways into four-lane highways, with two already completed. The construction of a multi-lane tunnel under the Karnaphuli River is currently underway and is projected to be completed by 2023. Although the construction and rehabilitation of new railway lines fell short of the predetermined objectives, progress was made in acquiring and rehabilitating locomotives and passenger coaches during the Plan period.

Additionally, the 7<sup>th</sup> FYP aimed to make progress on the recommendations identified in the Inland Water Transport Master Plan (IWTMP) of 2009. However, progress has been mixed due to inadequate resources, high-cost dredging operations, institutional weaknesses, and insufficient inter-agency coordination. Nevertheless, achievements under the 7<sup>th</sup> Plan include successful hydrographic surveys of inland waterways, construction of river ports, procurement and repair of pontoons, and dredging operations.

Furthermore, the plan aimed to improve ports, recognizing their crucial role in trade. Chittagong Port's operational capacity and efficiency are in line with international best practices. Mongla Port, despite remaining underutilized, has the potential to provide faster turnaround times. Payra Port is expected to become fully operational as an international seaport by 2023.

The government has responded positively to the targets of the 7<sup>th</sup> Five-Year Plan by allocating significant funds for infrastructure development. The allocation and expenditure of the Annual Development Program (ADP) have been adjusted to align with the objectives of the 7<sup>th</sup> FYP. The total ADP expenditure in transport infrastructure has increased over the years, with a considerable portion invested in roads and railways. Although investment in power and energy initially showed a decreasing trend until FY 2018-19, a significant portion of the investment was directed toward the Power Division.

While Bangladesh has made progress in achieving its goals under the 7<sup>th</sup> FYP, additional measures are required to promptly attain the unmet targets. Policy recommendations are provided to support infrastructure development and lay the foundation for achieving the targets outlined in the 8<sup>th</sup> Five-Year Plan.

## **Trade and Industrialization**

In Bangladesh, the discourse on industrialization and trade revolves around import-substituting and export-oriented industrial policies. The manufacturing sector, led by the ready-made garment (RMG) industry, has been the primary contributor to export growth during both the 7<sup>th</sup> FYP and the preceding FYP. However, there has been limited progress in export diversification. In the context of globalization and increasing trade openness, a higher degree of competitiveness and a diversified export basket are required.

The industrialization strategy outlined in the 7<sup>th</sup> FYP focused on the development of the manufacturing sector with export-led growth, aiming for structural and economic transformation. During the 7<sup>th</sup> FYP period, the manufacturing sector grew at a rate of 11.5%, while the service sector grew at a rate of 6.5%.

In 2010, Bangladesh's trade volume accounted for 37.80% of its GDP. This figure dropped to 32.51% in 2018 due to stagnating global trade and further decreased to 26.27% in 2020 as a result of the COVID-19 pandemic. Over the past 40 years, Bangladesh has experienced a dramatic increase in exports due to

extensive export promotion efforts and preferential access to European Union and US markets. In 2018, Bangladesh's exports reached US\$36,285 million, a 6.25% increase from 2015. As a result, the export-to-GDP ratio (export-orientation ratio) has risen from 5.7% in 1972 to 10.44% in 2020. However, due to global trade stagnation, it decreased from 16.02% in 2010 to 13.09% in 2019. The cumulative effect of real exchange rate appreciation in 2006 also contributed to the drop in exports during the 7<sup>th</sup> FYP.

However, export growth has been predominantly driven by the rapid expansion of the RMG sector alone. By 2020, the RMG sector accounted for 83% of export revenues, compared to 3.89% in 1983-1984. In 2010, woven and knit RMG items represented over 77% of total export revenues, which increased to 83% by 2015, while other industries experienced a decline. During the 7<sup>th</sup> FYP, the overall import of goods and services was \$37,662 million in 2015, \$54,463 million in 2018, and \$50,690 million in 2020. Bangladesh's import penetration ratio (import to GDP ratio) increased as imports grew, reaching an average of nearly 15.83 by 2020.

The average nominal and effective protection levels in Bangladesh remained relatively unchanged during the 1990s, despite trade liberalization and tariff reductions. However, in recent years, the increasing use of para-tariffs in the form of Regulatory Duties (RD) and Supplementary Duties (SD) has posed significant obstacles to tariff liberalization in Bangladesh.

### Education Sector Development Strategy

The progress achieved in the education sector during the 7<sup>th</sup> Five-Year Plan (7FYP) period has been remarkable. The literacy rate has shown significant improvement, rising from 58.6 percent in 2014 to an impressive 75.6 percent in 2021. Both the net enrollment and completion rates for primary and secondary education have increased as well. The net enrollment rate for primary education has remained relatively stable, ranging between 97.7 and 97.9 percent since 2014. This trend applies to both boys and girls, although there is still a small gap in enrollment rates, with boys at approximately 97% and girls at around 99.9%. While the goal of achieving 100% enrollment by FY2021 was not fully met, the progress made is commendable. In secondary education, the gender gap has reduced over time, with higher participation of girls. The number of Madrassahs has increased, along with the percentage of girls attending them, although the proportion of Madrassahs offering higher education remains low. The tertiary education sector has maintained a steady net enrollment rate, but the growing teacher-to-student ratio is a concern.

There are still challenges to address, particularly in women's higher education. Given the increasing impact of automation and the Fourth Industrial Revolution (4IR), investing in skill development through high-quality education and training programs is crucial to overcome the relatively low level of skills in the workforce. It is essential to effectively implement forward-looking and pragmatic plans and policies to capitalize on the youth population and bridge the existing gap in skill demand and supply.

### Health and Population

Bangladesh is committed to achieving Sustainable Development Goal 3, which aims to ensure healthy lives and promote well-being for people of all ages. The country has made significant progress in terms of life expectancy, reduction in child and maternal mortality, contraceptive use, and child immunization campaigns. Although the targets for neonatal and under-five mortality rates specified in the 7<sup>th</sup> FYP were not fully met, Bangladesh has performed well in various other health indicators. Notably, the prevalence of stunting, underweight children, and wasting has declined. The population growth rate has also decreased, and the percentage of women of reproductive age with access to family planning has increased.

However, non-communicable diseases such as diabetes, cardiovascular disease, and cancer pose growing concerns in Bangladesh. Effectively utilizing the country's adolescent population remains a challenge. It is important to enhance coordination within the government to prevent project overlap, align objectives and goals, and address the changing population dynamics.



## **Water, Sanitation, and Hygiene**

Significant progress has been made in ensuring access to safe drinking water, improving sanitation conditions, and promoting hygiene practices in Bangladesh. Access to safe drinking water has increased nationally, although the target of 100% access was not fully achieved. Sanitation conditions have improved, with increased access to improved sanitary latrines and a reduction in open defecation. However, disparities between urban and rural areas persist. Hygiene facilities have also shown improvement, but there is still room for advancement, particularly in menstrual hygiene and household waste disposal practices. Climate change poses challenges, especially in climate hotspots and urban slum areas, requiring targeted interventions and resilient WASH policies.

To address these challenges, policy recommendations include aligning national commitments, mobilizing resources, and focusing on climate-resilient WASH policies.

## **Urban Development and Urbanization**

Bangladesh has experienced rapid urbanization, leading to challenges such as overcrowding, traffic congestion, and environmental pollution. The 7<sup>th</sup> FYP aimed to pursue comprehensive and inclusive urban development planning, emphasizing balanced urbanization, economic growth, employment generation, reduction of inequality, and poverty eradication. Significant progress has been made in housing, water supply, sanitation, transportation, infrastructure, waste management, and other urban amenities. Efforts have been made to reduce urban poverty through improved access to land and housing, slum upgrading, low-income housing loans, and enhanced infrastructure and services.

However, challenges persist, including infrastructure development, public transportation, pollution control, and affordable housing. Policies and regulations must be implemented to address these issues, promote small and medium manufacturing enterprises, provide access to technology and training, simplify business regulations, and ensure income and employment opportunities for the growing urban population.

## **Environmental Protection, Climate Change, and Disaster Management**

Bangladesh, due to its geographical location, topography, and high population density, stands as one of the most susceptible nations to natural calamities. The detrimental effects of climate change have significantly impeded the country's economic growth prospects. If current trajectories persist, Bangladesh is projected to experience a staggering one-third reduction in its agricultural GDP by 2050, leading to a mass exodus of over 13 million climate migrants.

The 7<sup>th</sup> Five Year Plan (7FYP) in Bangladesh has outlined pivotal objectives concerning the environment and climate change. These objectives aim to foster effective governance, achieve national food security, enhance environmental well-being, establish sustainable urban centers, improve the quality of life for rural communities, preserve agricultural land, stimulate production growth, safeguard wetlands, maintain air and water quality standards, increase forest coverage, adopt a low-carbon strategy, and mitigate potential economic losses associated with climate change.

Significant headway has been made in specific core environmental indicators during the 7FYP. For instance, the consumption of ozone-depleting Hydro chlorofluorocarbons (HCFCs) has been substantially reduced by 28.19 percent, amounting to 46.6 ODP tones in 2020 compared to the baseline figure. Furthermore, forest areas with tree density exceeding 70 percent have expanded by 4.3 percentage points. However, areas demanding further attention include excessive CO<sub>2</sub> emissions, surpassing the 2020 target by 62 percent, and urban air pollution that remains significantly above the set goal.

Throughout the 7FYP, several significant environmental laws and acts have been established, such as the updated National Biodiversity Strategy and Action Plan (NBSAP) for 2016-2021, Bangladesh Biodiversity

Act 2017, Forest Investment Plan (FIP) for 2017-2022, NDC Implementation Roadmap and Action Plan for 2018, National Adaptation Plan (NAP) for 2019, and Climate Fiscal Framework 2020 (updated). The Ministry of Environment, Forest, and Climate Change has devised the NAP, which addresses 11 climate stress areas and encompasses 113 interventions based on adaptation pathways and sector-specific requirements. These interventions align with the 52 climate adaptation projects of the Bangladesh Delta Plan 2100 (BDP2100). The NAP implementation aims to achieve six goals through 23 comprehensive strategies and 28 outcomes, encompassing various aspects of safeguarding against climate-induced disasters.

During the 7FYP, Bangladesh has undertaken significant initiatives to address environmental and climate change issues. These include plans to enhance river navigability, dredge 510 km of rivers by 2022 to prevent erosion, excavate and restore 4,883 km of irrigation canals, and construct or repair 200 irrigation structures to expand irrigation facilities. The Forest Department has implemented co-management practices in 22 protected areas to preserve wildlife and biodiversity. Additionally, a 20-year Haor Development Master Plan and Database have been formulated to facilitate the development of Haor areas. The government has also supported over 10,000 families in reducing their reliance on forests. Fiscal measures, such as VAT exemption for renewable energy equipment and materials used in renewable energy production, have been introduced. Furthermore, rice distribution through the Vulnerable Group Feeding Program (VGF) has provided benefits to more than 400,000 families dependent on fishing during the ban on catching mother Hilsas. Demonstrating commitment to green growth, the Economic Relations Division (ERD) has developed a \$4 billion pipeline for the Green Climate Fund (GCF) and has already mobilized nearly 94.7 million.

The environmental objectives outlined in the 7FYP encompass a wide range of long-term goals that necessitate continuous efforts. To achieve the environmental indicators, it will be crucial to integrate the implementation of the National Adaptation Plan (NAP) concurrently with the Nationally Determined Contributions (NDC) under a unified framework.

Bangladesh has been considered a successful model for disaster management, and its disaster management programs have generally performed admirably during the 7<sup>th</sup> FYP. Many programs and projects have been completed from 2016 to 2020 to enhance resilience against disasters, particularly for climate-vulnerable and rural populations, while others have been initiated and are still ongoing. These initiatives encompass the construction and availability of shelters, as well as the timely provision of relief and support measures. However, further efforts are required to fortify the resilience of the population and mitigate the adverse impacts of natural disasters on livelihoods. Long-term planning and significant public investments in these areas will be essential. The proposed Delta Region Project, NDC 2021, and NAP (2023-2050) are expected to have a substantial impact in this regard in the coming years.

## Good Governance

The 7FYP has outlined practical steps to enhance institutional performance within the judiciary. During this period, the government aimed to improve public investment management, and financial management, and establish reliable institutional arrangements. Economic oversight in critical areas was prioritized, acknowledging the increase in tax evasion alongside tax revenue.

In terms of democratic administration performance, the Election Commission has consistently and efficiently conducted elections in both rural and urban areas. The 11th National Election saw the direct election of twenty-two women to Bangladesh's Parliament, marking the highest number of directly elected women thus far. Judicial and democratic governance have improved access to justice, reduced violence against women (VAW), and enhanced judiciary capabilities. The introduction of the Annual Performance Agreement (APA), implementation of the public investment management (PIM) agenda, e-procurement, and improved functioning of case coordination committees are notable achievements in economic governance. Moreover, the effective implementation of the National Integrity Strategy (NIS) during the 7FYP has yielded positive results.

Bangladesh's relative position has moderately improved in the "World Governance Indicators" report, particularly in three indicators: "control of corruption," "rule of law," and "political stability and absence of violence/terrorism." However, there is still room for improvement in other key areas such as "voice and accountability," "government effectiveness," and "regulatory quality."

While certain areas of institutional performance pose challenges, Bangladesh has made progress in various aspects. Efforts have been made to address case backlogs and enhance judicial capacity, although further improvements are necessary. Measures to boost fiscal capacity and increase the tax-to-GDP ratio were planned under the 6FYP and 7FYP, indicating a commitment to effective resource mobilization. Despite the increase in nonperforming loans in banks, steps are being taken to tackle the issue by strengthening the legal framework, improving banking supervision, and enhancing management practices. Continued endeavors to improve service standards and overcome challenges will contribute to the growth and stability of the banking system in Bangladesh.

### **Gender Equality, Income Inequality, and Social Protection**

The government of Bangladesh is devoted to ensuring equal rights and opportunities for all individuals in the country. The Seventh Five-Year Plan places special emphasis on establishing equal rights and opportunities for both men and women. The gender strategy of the 7FYP centers on implementing strategies and action plans to enhance women's access to resources and opportunities, improve their capabilities, and dismantle structural and institutional barriers in order to achieve gender equality. Social protection programs have played a crucial role in poverty reduction and tackling income inequality during the 7FYP.

Significant strides have been made in terms of gender equality and women's empowerment during the 7FYP. Bangladesh's recent performance in gender equality indicators reflects the government's strong commitment to reducing gender inequality. According to The Global Gender Gap Report 2020 by the World Economic Forum, Bangladesh has made substantial progress in closing the gender gap, ranking first among South Asian countries in terms of gender parity for the third consecutive year. Overall, the analysis of the implementation of gender equality targets in the 7FYP indicates that Bangladesh is on track to achieve greater gender parity, although more effort is required to ensure the safety of women and children. Progress has been observed in reducing child marriage, with the percentage of women aged 20 to 24 married before the age of 18 decreasing from 65% in 2011 to 51.4% in 2019. Girls' access to secondary education has improved, with a completion rate of 59.81% compared to boys' rate of 63.99%. The representation of women in higher education has also increased, with 47.38% of college students and 24.23% of faculty members being female.

Despite Bangladesh's progress in fighting poverty, the nation still grapples with improving income inequality. The 7FYP aimed to maintain income inequality at a rate of 0.45 or lower. According to the Household Income and Expenditure Survey (HIES) in 2022, the income inequality gap between the richest and the rest of the population has widened from 0.483 in 2016 to 0.499 in 2022.

To address income inequality, it is essential to prioritize quality education and healthcare for all citizens. Additionally, implementing a robust social security system and progressive taxation, including wealth and property taxes, to redistribute wealth and fund critical social programs can be considered crucial strategies for reducing income inequality.

Regarding social protection, the key strategy during the 7FYP was the implementation of the National Social Security Strategy (NSSS). One of the primary goals of the NSSS is the consolidation of program risks throughout the life cycle. Although there is still a long way to go to achieve the desired consolidation, the process is currently underway. The number of schemes has decreased from 145 in FY2015 to below 130 in FY2020. While the number of social security programs has been decreasing, the budget allocation for social security has shown a gradual increase in absolute quantity, particularly during the initial years of

the 7FYP. Furthermore, the government has maintained an allocation of approximately 2-3% of GDP for social security in recent years. Although resource allocation and program consolidation for social security schemes have followed the proposed life cycle risk approach of the NSSS, there are still opportunities for further improvement. New tools must be explored to improve beneficiary selection in Bangladesh. In addition to consolidating social assistance programs, efforts should be made to introduce and strengthen social insurance and active labor market programs. These actions will accelerate poverty reduction and combat inequality.

### **ICT Development and Priorities for Building a SMART Bangladesh**

Bangladesh has made significant progress in harnessing information and communication technology (ICT) for development during the Seventh Five Year Plan (7FYP) period. Evaluation of the 7FYP indicators within the development results framework reveals notable advancements in expanding the submarine cable network and increasing broadband connectivity, surpassing the set targets in these areas. The digital economy in Bangladesh has witnessed remarkable growth, with mobile phone subscribers reaching 183 million and internet users reaching 125 million as of February 2023. The expansion of e-commerce and F-commerce has been substantial, with approximately 2,000 e-commerce sites and 50,000 Facebook pages offering a diverse range of products. The rapid growth of mobile financial services (MFS) has contributed to financial inclusion and the delivery of social security benefits, with over 107 million active users in 2021.

The ICT sector's contribution to GDP stood at 0.76 percent, and the government aims to achieve \$5 billion in export earnings by 2025. The business process outsourcing (BPO) industry has played a vital role in computer service exports, growing at an average rate of 35 percent. Employment in the ICT sector has experienced significant annual growth of 22.3 percent, with an estimated 0.3 million individuals employed in the industry. However, challenges such as skill shortages and employee retention persist. The demand for specialized skills exceeds the availability of graduates, underscoring the need for practical training and updates to the curriculum. Freelancing has gained popularity, positioning Bangladesh as the second-largest supplier of online labor globally.

During the 7FYP, the startup ecosystem in Bangladesh flourished, with around 1,200 active startups operating across various sectors. Startup Bangladesh Limited, a venture capital fund, supported technology-based businesses with an allocated capital of BDT 500 crores. In 2021, Bangladeshi startups raised \$415 million, attracting both local and international investments.

Foreign direct investment (FDI) has played a crucial role in the development of the ICT sector, facilitated by government incentives and a favorable investment environment. Bangladesh attracted a net FDI of \$2.37 billion in 2019-20, with \$758 million directed towards the ICT sector. Investments in ICT infrastructure, including the establishment of Hi-Tech parks, have aimed to support technology-based businesses and enhance connectivity.

In the realm of e-governance, Bangladesh has progressed in the E-Governance Development Index and implemented projects to improve communication and collaboration across various government levels. In the education sector, initiatives such as the Sheikh Russel Digital Labs project and the Sheikh Russel School of Future have incorporated ICT to transform teaching and learning processes. The She Power Project has also been implemented to promote sustainable development for women through ICT.

To prepare for the Fourth Industrial Revolution (4IR) and enhance innovation competency, Bangladesh has adopted several policies aligned with its Digital Bangladesh vision. These policies include the National ICT Policy 2018, National Blockchain Strategy, National Strategy for Artificial Intelligence, National Internet of Things Strategy, and National Strategy for Robotics, among others. By adopting and implementing these policies, Bangladesh aims to sustain its development growth momentum and drive the digital transformation of the country.

The Covid-19 pandemic has expedited digital transformation, leading Bangladesh to adopt a Post Covid-19 National ICT Roadmap to seize emerging opportunities. The country is also focused on building a Smart Bangladesh by 2041 and has witnessed significant growth in e-commerce and F-commerce. However, challenges remain in terms of consumer protection and addressing the informal nature of enterprises.

Prior to Bangladesh's graduation from the category of Least Developed Countries (LDC), it is crucial to strengthen policy incentives to enhance ICT competitiveness. This includes diversifying exports and leveraging the potential of ICT for growth. Addressing the skills gap in the ICT industry is essential, with a focus on industry-aligned training programs and upskilling the workforce in 4IR technologies. Developing a curriculum responsive to the labor market in universities by consulting foreign programs and reducing entry barriers for science and math students in IT-based programs can bridge the skills gap and reduce unemployment.

Investments in digital infrastructure are essential, encompassing high-speed broadband internet, mobile networks, cloud computing services, data centers, and cyber security measures. Proactively seeking foreign direct investment, exploring new markets, and exporting high-value-added services are recommended to boost the ICT sector. Enhancing ICT usage in education, reducing the digital divide, improving agricultural productivity through ICT solutions, and promoting financial inclusion are important areas of focus. Lastly, improving the absorptive and implementation capacity of the ICT budget is necessary to ensure the effective utilization of resources.

In conclusion, the evaluation of the 7<sup>th</sup> Five Year Plan in Bangladesh highlights significant achievements and areas that require further attention. The country has made progress in environmental protection, disaster management, governance, gender equality, income inequality, social protection, and ICT development. However, challenges such as climate change impacts, institutional performance, income inequality, and skill shortages remain. Efforts to address these challenges and continue implementing strategic policies are crucial for Bangladesh's sustainable development and progress toward its long-term goals.





## Background, Methodology and Approach

### Background and Overview

The first perspective plan of Bangladesh, covering 2010 to 2021, has been executed through two five-year plans, the Sixth Five Year (2011-2015) and the Seventh Five Year (2016-2020). In consideration of Bangladesh's future prospects as outlined in the first perspective plan, the 7<sup>th</sup> FYP was formulated with the aim to accomplish goals and targets set out in the perspective plan as well as the 7FYP itself. The central concept of the plan was “Accelerating Growth, Empowering Citizens”. The plan has strived for job-creating GDP growth and poverty reduction while exceeding the targets attained in the sixth five-year plan. A review of the first two years of implementation was conducted in 2018. The final review of the implementation of the 7FYP has also been conducted and this report represents the key findings of the 7FYP implementation review.

### Methodology

A rigorous approach and methodological framework have been applied for this evaluation. This requires a comprehensive understanding of the Plan documents (i.e. the Seventh Plan and the Perspective Plan) and their development results frameworks (DRFs); the collection and analysis of relevant data; and the provision of insightful assessments that are not limited to merely describing the data but also providing rationale. Analysis of quantitative data has been supplemented with qualitative data obtained from desk review of various policy documents and Key Informant Interviews (KIIs) and information received from the ministries and divisions.

This exercise is supplemented by the information contained in the 8FYP and the analysis of various national policies, strategies, and documents required to assess the progress of DRF indicators. Secondary data, such as that collected through periodic and regular/irregular surveys and official records, has provided the fundamental framework of the end-line review. Data from various government agencies in Bangladesh contribute to this evaluation. These include the Bangladesh Bureau of Statistics, the Bangladesh Bank, the National Board of Revenue, and various line ministries.

In addition to DRF, the evaluation includes data from a number of other relevant national and international sources. Moreover, given that the 7FYP's final assessment has been undertaken in 2023, the recommendations sections of various chapters have focused on current challenges and implementable policy and strategies. Based on the national priorities, the review has been developed based on the following issues: Overall macroeconomy and economic growth; agriculture and food security; employment, poverty and regional disparity; infrastructure development; trade and industrialization; education; health; water, sanitation and hygiene; urbanisation; environment, climate change, and disaster management; good governance; gender equality, income inequality and social protection; and ICT development.

### Result-Based Monitoring Framework

Results-based monitoring and evaluation (RBME) was first implemented in the Sixth Five-Year Plan of Bangladesh. This was done in accordance with the principles of indicative planning, according to which the Sixth Plan, and the following Seventh Plan were envisioned as a dynamic document that would be continuously evaluated for effectiveness, with adjustments made in response to new information or developments in the domestic and international economies. The Development Results Framework (DRF) is a system introduced to monitor the core set of development outcome to more effectively facilitate the evidence-based decision making process. The seventh five-year plan adopted an extended DRF containing 88 measurable indicators. Prior to adoption, the draft framework was intensively consulted with the relevant

stakeholder as required. On that note, an improved M&E database helped realize the aforementioned DRF. Furthermore, as the GoB recognized the importance of monitoring and evaluation in the advancement of the country, strong political will paved the way towards realizing the DRF. The performance of the DRF indicators are attached in the annexure.

**Table 1: National Priority Areas and Corresponding Number of Indicators Identified in the Development Regulatory Framework (DRF)**

National Priority	Number of Performance Indicators
1. Macroeconomic Stability and Economic Growth	14
2. Poverty Reduction	9
3. Education	8
4. Health	13
5. Water & Sanitation	2
6. Transport and Communication	7
7. Power, Energy and Mineral Resources	4
8. Gender and Inequality	6
9. Environment, Climate Change and Disaster Management	9
10. Information and Communication Technology (ICT)	4
11. Urban Development	3
12. Governance	6
13. International Cooperation and Partnership	3



**OVERALL MACROECONOMY  
AND ECONOMIC GROWTH**

**CHAPTER**

**1**



## 1.1 Introduction

Accelerating economic growth and empowering citizens were the foundational maxims of the 7<sup>th</sup> Five Year Plan (7FYP). The objective was to boost GDP growth and generate productive employment, aiming for equitable income distribution. On the sectoral level, manufacturing and services were considered as key drivers of growth, while emphasising to maintain the growth trend of agriculture. The 7FYP also advocated for increasing factor productivity using digital technologies. Nurturing a healthier investment climate, proliferating quality infrastructure, strengthening the financial sector, and improving governance were also key priorities.

Overall, the economy performed well during the 7<sup>th</sup> Five-Year Plan. Table 1.1 outlines the performance of the four broad macroeconomic policy areas under the plan. While progress could be made on the targets that were set, the COVID-19 pandemic severely impacted overall performance in FY2020. Otherwise, Bangladesh recorded strong growth while keeping inflation in check. Debt levels were kept at a manageable level, and remittances and exports were still acting as drivers of growth. Long-term linchpins of the economy, such as the manufacturing sector, registered strong growth. Yet, some structural issues came to the fore, such as a consistently underperforming tax-to-GDP ratio and low levels of ADP implementation leading to low actual public expenditure. As Bangladesh's development story unfolds, improved performance of these indicators could not be overstated.

**Table 1.1: Macroeconomic Performance during 7FYP (Base Year 2005-06)**

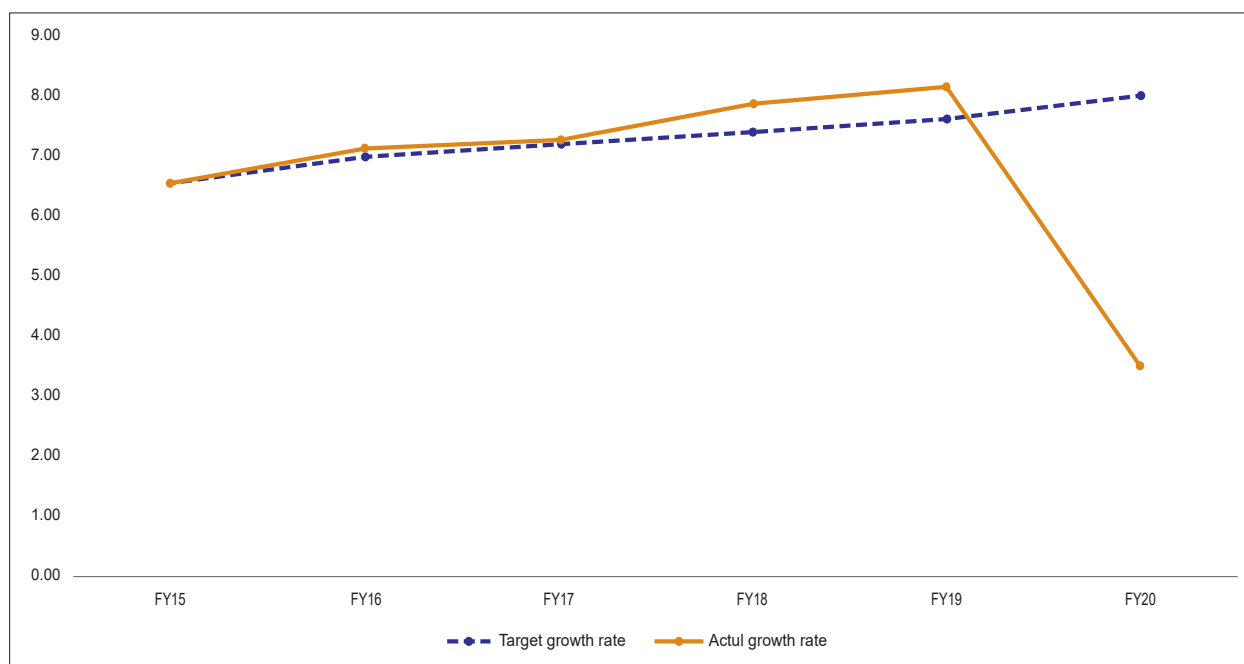
Policy Area	Performance Indicators	Baseline (FY15)	Target (Average of FY16-FY19)	Actual (Average of FY16-FY19)	Target (FY20)	Actual (FY20)	Target (Average of FY16-FY20)	Actual (Average of FY16-FY20)
Growth performance	GDP growth	6.55	7.30	7.60	8.00	3.51	7.44	6.78
	Consumption (% of GDP)	77.80	76.30	75.46	73.50	76.20	75.74	75.61
	Domestic investment (% of GDP)	28.90	31.40	30.74	34.40	30.50	32.00	30.69
	National savings (% of GDP)	29.00	29.93	29.33	32.10	28.70	30.36	29.20
Fiscal Policy	Tax to GDP ratio (%)	8.50	11.88	8.84	14.10	7.90	12.32	9.31
	Public expenditure to GDP ratio (%)	13.50	18.78	14.28	21.10	15.34	19.24	14.49
	Fiscal deficit (% of GDP)	3.70	4.70	4.29	4.70	5.50	-5.00	-4.24
	Total debt (% of GDP)	27.70	35.50	29.69	36.30	35.98	35.66	30.56
Balance of Payments	Average growth rate of exports (%)	-	11.45	6.62	14.00	-17.10	11.96	1.88
	Export to GDP ratio (%)	17.30	15.73	15.45	16.20	12.32	15.82	14.76
	Current account balance (% of GDP)	1.80	1.82	-0.97	-2.50	-1.24	-1.82	-1.07
	Remittances growth (%)	7.60	11.10	2.37	10.00	12.40	10.86	4.38
	Foreign reserves (month of imports)	6.30	6.95	6.58	7.30	7.20	7.02	6.44
	External debt (% of GDP)	12.20	12.28	13.65	11.20	15.50	12.06	14.02
Inflation Management	Rate of CPI inflation (%)	6.41	5.93	5.66	5.50	5.65	5.84	5.65
	Growth of M2 (%)	12.40	15.60	11.60	15.90	12.64	15.66	11.60
	Growth of private sector credit (%)	13.20	14.58	15.20	15.00	8.60	14.66	13.86

Source: 7FYP, Bangladesh Bureau of Statistics (BBS), Bangladesh Bank (BB)

## 1.2 Overall Macroeconomic Performance

The economy performed well and exceeded most targets set in the 7FYP until FY19 – GDP growth exceeded the target growth rates in the first four years of the 7<sup>th</sup> Plan (Figure 1.1), before falling short of the target in FY20 in the aftermath of COVID-19. Due to the Government’s quick response and effective economic management, overall growth was higher than in comparator countries. In fact, Bangladesh was one of the few countries in the world to post positive growth rates during the COVID-affected years (Table 1.2). Consequently, Bangladesh was one of the top 5 countries and top country in South Asia in COVID recovery as per the COVID-19 recovery index. Even more impressively, the economy quickly bounced back on the growth trajectory in the following year, in line with the objectives of the subsequent 8<sup>th</sup> Five-year Plan. Different initiatives and policy measures helped Bangladesh’s quick recovery (See Box 1.1 for the policy measures to mitigate the impact of covid-19). It is important to note that, due to high GDP growth during the 7FYP timeframe, other indicators as percent of GDP, may seem lower than the targeted ratio to GDP, even though the nominal or real values exhibit growth.

**Figure 1.1: Actual and Target GDP Growth during 7FYP (Base Year 2005-06)**



Source: BBS and 7FYP.

**Table 1.2: GDP Growth of Various Countries during Covid-19**

Country	GDP Growth in FY20
Bangladesh	3.5
World	-3.1
Advanced Economies	-4.5
Emerging Market and Developing Economies	-2.0
US	-3.4
EU	-6.4
China	2.2
India	-6.6

Source: BBS and IMF.

### Box 1.1: COVID-19 Response Strategies Helped Bangladesh's Fast Recovery

In 2020, most countries were forced to go into lockdown, close their borders, and initiate an “economic freeze” to prevent the spread of the deadly covid-19 virus. This affected global supply chains, domestic output, and growth performance of an overwhelming majority of global economies. Bangladesh fared much better by posting a solid growth rate of 3.5 percent in FY20 and then 6.9 percent in FY21. This was made possible due to the responsive policy measures undertaken by the Government. These encompassed both fiscal and monetary policy interventions, targeting sectoral resilience and cushioning the impact of the pandemic on the lives and livelihoods. Immediately after the COVID outbreak, the Government announced 28 economic stimulus packages in order to mitigate the adverse impacts and to facilitate faster economic recovery. The size of the entire stimulus package was BDT 2,004.29 billion or \$23.58 billion (i.e., 5.68 percent of GDP in FY21).

#### Fiscal Sector Initiatives

The stimulus package targeted small, medium and large-scale manufacturers and exporters, poor and vulnerable households, and garment and leather sector workers. A direct cash transfer to the most vulnerable populations saw a total of BDT 2,256 crore being spent in two tranches through the Government to Person (G2P) payments system. Two social protection programmes, namely old-age allowances and allowances for widow and destitute women, were expanded in 262 most poverty-stricken upazillas (first in 112 upazillas in FY21 and then another 150 upzillas in FY22). Packages also involved offering free food and selling rice at significantly subsidised rates to combat food and nutritional insecurity of almost 20 million people. Agricultural subsidies and farm mechanisation incentives were strengthened. Employment generation programmes and income generation initiatives were undertaken through the help of government agencies (such as PKSF) and specialised development organisations. A total of BDT 94,000 crore (2.66 percent of GDP in FY2021) was allocated through monetary policy packages as a response measure. Of this, BDT 40,000 crore, which is 1.13 percent of GDP, was allocated as low-interest working capital loans provided via Bangladesh Bank to various industries. An additional BDT 20,000 crore was provided through the same mechanism as working capital support for small to medium enterprises. The Bangladesh Bank also established an export development fund worth BDT 17,000 crore. A pre-shipment credit refinance scheme and an agricultural loan refinancing scheme were both launched at BDT 5000 crore. A refinancing scheme was also launched for the poor and vulnerable. Finally, a credit guarantee facilities was launched for Cottage, Micro and Small (CMS) entrepreneurs

#### Monetary Policy Interventions

BB undertook several monetary and liquidity enhancement measures by providing adequate liquidity and loanable funds to ensure uninterrupted business operations. Such policy measures include, but are not limited to, reduction in Cash Reserve Ratio (CRR), bank rate, repo and reverse repo rates, the introduction of term repo and extension of Advance to Deposit Ratio (ADR), and Investment to Deposit Ratio (IDR).<sup>1</sup>

Source: Socio-Economic Development in Bangladesh and Stimulus Packages to Combat COVID-19, MoF.

Bangladesh also performed well regarding inflation management. The inflation rates were in line with the targets set in the 7<sup>th</sup> Plan. Exports also performed well and reached 15.3 percent of GDP in FY19 and averaged 15.2 percent of GDP during the five-year time frame (Table 1.3). Given the economic shock of the Covid-19 pandemic, transmitted through depressed global demand, border closures, and lockdowns, exports were lower in FY20. Imports also stayed quite close to the targets set in the 7<sup>th</sup> Plan. Private investments fell in FY20 amidst the pandemic, despite registering above 23 percent in the first four fiscal years. The high level of public investment, which was above 8 percent of GDP in the last two years of the 7<sup>th</sup> Plan, helped maintain strong levels of economic growth. Foreign Direct Investment (FDI) were low and had not reached the levels targeted in the 7FYP. On the remittance front, consistent growth was targeted between FY15 and FY20, but the actual figures showed a steady decline until FY17 before picking back up. Remittances were targeted to reach USD 25.39 billion in FY20 but stood at \$18.21 billion. The current account balance steadily declined until 2018, before slowly rising until the end period of 7<sup>th</sup> Plan. By the end of the FYP, the current account balance as percent of GDP was one percentage point higher than the target.

1. For details, see Bangladesh Bank (2020). Policy measures of Bangladesh Bank in response to the Covid-19 pandemic. Second Edition. March 2022. [https://www.bb.org.bd/pub/special/covid19\\_policymeasures\\_2nded.pdf](https://www.bb.org.bd/pub/special/covid19_policymeasures_2nded.pdf)

The trend of consumption expenditure constituting a substantial majority of GDP continued in the 7FYP timeframe. Consumption figures were calculated at around 75 percent of GDP in FY15-FY20.

**Table 1.3: Broad Macroeconomic Performance Against the Targets in 7FYP (Base Year 2005-06)**

Year	FY15	FY16		FY17		FY18		FY19		FY20	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Real GDP growth	6.55	7.00	7.11	7.20	7.28	7.40	7.86	7.60	8.15	8.00	3.51
Exports as (percent) of GDP	17.34	15.70	16.65	15.60	15.04	15.70	14.80	15.90	15.32	16.20	11.99
Imports as (percent) of GDP	24.75	21.00	21.30	21.10	20.27	21.20	23.44	21.50	21.44	21.80	18.53
FDI as (percent) of GDP	0.94	1.20	0.58	1.80	1.07	2.20	1.20	2.50	1.63	3.00	1.00
Remittances (\$ billions)	15.17	17.27	14.72	19.08	12.59	20.99	14.98	23.09	16.42	25.39	18.21
Reserves (month of imports)		6.60		6.90		7.10		7.20		7.30	
Current account balance (percent of GDP)	1.47	-1.20	1.93	-1.50	-0.60	-1.80	-3.50	-2.10	-1.70	-2.50	-1.50
Tax to GDP ratio (percent)	8.49	10.60	8.78	11.50	9.09	12.30	8.60	13.10	8.90	14.10	11.20
Fiscal balance (excluding grants) (percent of GDP)	-3.52	-5.00	-3.83	-5.00	-3.78	-5.00	-3.46	-5.00	-4.68	-5.00	-5.46
CPI inflation (percent)	6.40	6.20	5.92	6.00	5.44	5.80	5.78	5.70	5.48	5.50	5.65
Consumption (as percent of GDP)	77.84	77.50	75.02	76.70	74.67	75.90	77.17	75.10	74.98	73.50	76.23
Gross domestic investment (percent of GDP)	28.89	30.10	29.65	31.00	30.51	31.80	31.23	32.70	31.57	34.40	30.47
Private investment (percent of GDP)	22.07	23.70	22.99	23.90	23.10	24.40	23.26	25.10	23.54	26.60	22.06
Public investment (percent of GDP)	6.82	6.40	6.66	7.10	7.41	7.40	7.97	7.60	8.03	7.80	8.41
National savings (percent of GDP)	29.02	29.10	30.77	29.70	29.64	30.20	27.42	30.70	29.50	32.10	28.67

Source: 7FYP, MoF, BB, and BBS

Therefore, macroeconomic performance demonstrates a mixed bag of success. Increased economic growth, price level stability, and growth in public investment were positive developments, weaknesses in remittances, exports, and FDI inflows fell below expectations. Global events are largely responsible for the unfavourable trends in remittances and exports.

### 1.3 Sectoral Growth Performance

The 7<sup>th</sup> Plan aimed to accelerate GDP growth from the baseline growth rate of 6.5 percent in FY15 to 8 percent in FY20. Over the course of the 7<sup>th</sup> FYP, the average annual GDP increase was 6.8 percent against the target of 7.4 percent. The overall growth performance helped per capita GDP increase from \$1,236 in FY15 to \$1,930 in FY20.<sup>2</sup>

The 7<sup>th</sup> FYP projected agriculture's share in GDP to fall from 15.6 percent to 12.9 percent. The actual share in FY20 came very close at 13.5 percent. The sector during the plan period grew at an annual average rate of 3.7 percent, slightly higher than that of in 6<sup>th</sup> FYP of 3.6 percent, as seen in table 1.5. The sector performed well in the last three years of the 7<sup>th</sup> Plan, with an annual average growth rate of 4.2 percent. Even during COVID-19, when manufacturing and services activities were subdued, the agriculture sector achieved a robust growth rate of 4.6 percent in FY20.

The crop subsector achieved an annual average growth rate of 2.9 percent during the 7<sup>th</sup> Plan against the target of 1.4 percent. The forest and related services subcomponents consistently saw a fast growth rate, reaching 7.4 percent growth in FY20. Animal farming and fishing also saw sustained and rapid growth against their respective targets.

**Table 1.4: Performance of Sectoral Share of GDP in 7FYP (% of GDP) (Base Year 2005-06)**

Sector	FY15	FY16		FY17		FY18		FY19		FY20	
	Baseline	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Agriculture	15.51	15.10	14.77	14.50	14.17	14.00	13.82	13.40	13.32	12.90	13.48
Industry	28.15	28.90	28.77	29.80	29.32	30.80	30.17	31.80	31.15	33.00	30.82
Service	56.35	56.00	56.46	55.70	56.50	55.20	56.00	54.80	55.53	54.10	55.71

Source: Bangladesh Bureau of Statistics (BBS) and 7FYP.

**Table 1.5: Sectoral Performance in 7FYP (Growth in Percent) (Base Year 2005-06)**

Component	1980s	1990s	2000s	FY11- FY15	FY16- FY20	FY15	FY16	FY17	FY18	FY19	FY20
Agriculture	1.78	3.42	3.93	3.60	3.69	3.33	2.79	2.88	4.19	3.92	4.59
Industry	5.64	7.04	7.45	8.79	9.86	9.67	11.09	10.66	12.06	12.67	3.25
- of which manufacturing	4.68	7.19	7.44	9.46	10.41	10.31	11.69	11.33	13.4	14.2	1.80
- Large & medium scale	4.56	7.34	7.39	10.25	10.79	10.70	12.26	11.73	14.26	14.84	1.39
- Small scale	5.40	6.83	7.59	7.39	8.61	8.54	9.66	9.44	9.25	10.95	3.96
Services	3.75	4.26	6.06	6.50	6.05	5.80	6.25	6.47	6.39	6.78	4.16
GDP	3.50	4.80	6.00	6.32	6.78	6.55	7.11	7.28	7.86	8.15	3.51

Source: Bangladesh Bureau of Statistics (BBS).

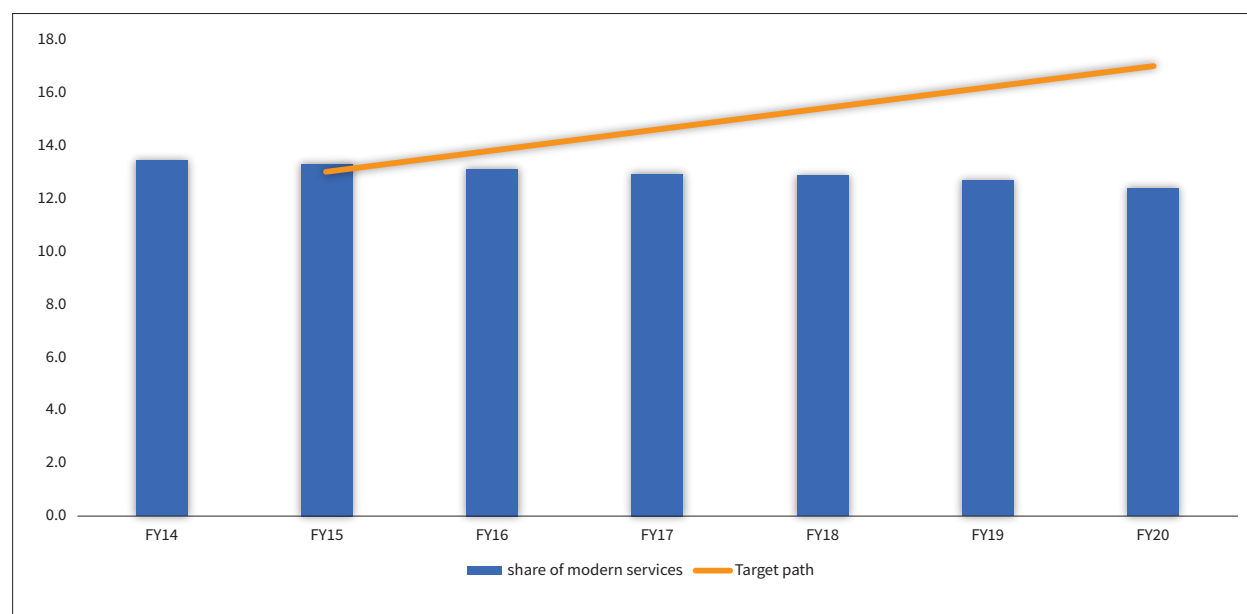
2. Per capita GDP stood at \$2,687 in FY22.

The 7FYP development strategy placed emphasis on the necessity of raising the output share of industry and modern services while lowering reliance on agriculture and informal services. On the industrial front, the manufacturing sector continued to maintain the high growth of the previous plan period and surpassed the average growth of 9.46 percent per annum achieved during FY11-FY15 by registering 10.41 percent per annum growth during FY16-FY20. The sector took the biggest hit from the COVID-19 as the sectoral growth plummeted to about 2 percent in FY20. Otherwise, the average yearly manufacturing growth during FY16-FY19 can be calculated to be 12.65 percent. With a buoyant manufacturing sector, the overall growth of the industrial sectors during the 7<sup>th</sup> Plan (9.86 percent per annum) was higher than that of the previous plan period (8.79 percent during the 6<sup>th</sup> FYP).

The average yearly growth of services during the 7<sup>th</sup> Plan, 6.05 percent, was slightly lower than that of the previous plan period (6.50 percent). This can be attributable to much lower growth in the COVID-affected end year of the plan period, when services grew by 4.16 percent as against of more than 6 percent achieved in all the previous four years under the 7<sup>th</sup> Plan. At the end of the 7<sup>th</sup> Plan, the share of services in GDP stood at 55.71 percent—slightly lower than the share of 56.35 percent registered at the end of the 6<sup>th</sup> Plan (in 2015). The 7<sup>th</sup> Plan envisaged the services share in the economy at the end of the plan period in FY20 to be 54.1 percent as against of its share of 55.71 percent (Table 1.4).

One of the key targets set in the 7FYP was to increase the share of modern services in total services. These services would include telecommunications and ICT, banking and financial services, aviation, international shipping, hotels and restaurants, and modern storage and transport support services. The share of these services in the service sector was 13.3 percent in FY 2015 and was expected to increase to 17 percent by FY 2020. The actual performance has actually fallen short of this target. In fact, throughout the plan period the share of modern services remained stagnant with the end-year (FY20) value of 12.4 percent being smaller than that of FY 2015 (13.3 percent) (Figure 1.2).

**Figure 1.2: Share of Modern Services (in Total Services)**



Source: BBS.



## Employment Performance

The 7<sup>th</sup> Plan aimed to generate substantial employment opportunities for the nation's large and growing labour force, creating 12.9 million more employment including about 2 million overseas jobs for migrant workers. The backlog of underemployment was expected to be greatly reduced as more jobs were targeted to be created than the number of new workers entering the labour force.

According to the labour force survey 2022, there were a total of 70.8 million people employed in 2022, up from 58.07 million in 2013 (Table 1.6). The labour force participation rate (LFPR) increased to 61.0 percent in 2022 from 57.1 percent in 2013. The impressive progress in the labour force participation rate is mainly accountable to women's labour force participation, which grew from 33.5 percent in the base year (2013) to 36.3 percent in 2016-17 and then further rising to 42.7 percent in 2022. Between 2013 and 2022, the number of employed women workers rose by 7.7 million.

**Table 1.6: Employment Performance during the 7FYP**

	LFS2013	LFS2015-16	LFS2016-17	LFS2022
<b>Employment (Million)</b>				
Total labour force	60.7	62.1	63.5	73.41
Total employment	58.07	59.53	60.82	70.78
Agriculture	26.2	25.4	24.7	32.2
Industry	12.1	12.2	12.4	12.05
Manufacturing employment (million)	9.5	8.6	8.8	-
Other industry	2.6	3.6	3.6	-
Services	19.8	22	23.7	26.65
<b>Share in Total Employment (Percent)</b>				
Agriculture	45.1	42.7	40.6	45.33
Industry	20.8	20.5	20.4	20.3
Manufacturing employment (million)	16.4	14.4	14.4	-
Other industry	4.4	6.1	6	-
Services	34.1	36.9	39	39.3
Labour force participation rate (percent)	57.1	58.5	58.2	61.02

Note: Provisional report of the labour force survey 2022 has been used.

Source: Labour Force Survey (various years), BBS.

The 7FYP target was to create 10.9 million additional jobs in the domestic market. Against this, only 8 million jobs could be created (Table 1.7). Employment generation in the foreign market was higher than expected: 3.7 million (Figure 1.3) as against of 2 million. Nevertheless, the total employment (domestic and overseas labour market) generated (during the plan period), 11.7 million, fell short by 1.2 million against the target of 12.9 million.

It is worth pointing out that every year on average 0.47 million people joined in the labour force between 2013 and 2015-16. Between 2015-16 and 2022, the corresponding number rose to 1.89 million (per annum). Therefore, it can be estimated that during the 7<sup>th</sup> Plan period there were 3.7 million more jobs were created in comparison with the new entrants to the job market.

**Table 1.7: Employment Generation during 7<sup>th</sup> FYP Period**

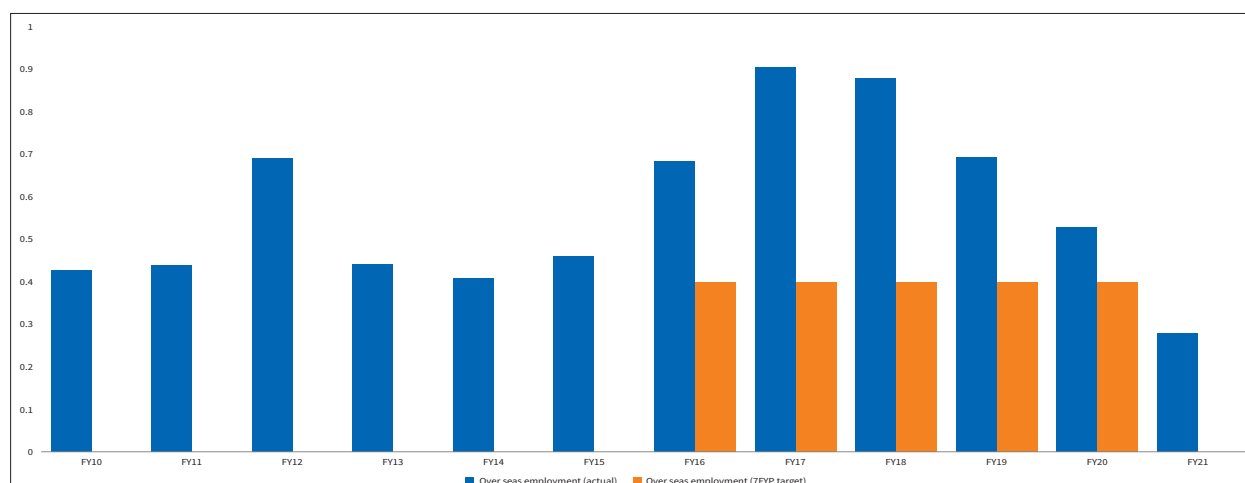
	Target (FY15-FY20)	Achievement (FY15-FY20)
Employment generation (million) <sup>3</sup>	10.9	8.0
Migrant work (million)	2	3.7
Additional employment (million) <sup>4</sup>	12.9	11.7
Additional Labour force (million)	9.9	8.0
Excess employment (million)	3	3.7

Note: Provisional report of the labour force survey 2022 has been used for estimation.

Source: Seventh Five Year Plan, Labour Force Surveys, BMET data as reported in Bangladesh Bank.

The 7<sup>th</sup> Plan envisaged increasing employment in the manufacturing sector from 15.4 percent to 20 percent between FY15 and FY20 to generate decent jobs for the sizable group of underemployed and labour force new recruits. However, the Labour Force Survey 2016–17 found that manufacturing employment accounted for 14.4 percent of all jobs, which is lower than the peak of 16.4 percent in 2013. The provisional report of the labour force survey 2022 does not provide information on manufacturing employment. However, it provides information on industrial employment, which can be used to assess the trend in manufacturing employment. As shown in Table 1.5, the share of industry in total employment has been on a secular decline since LFS 2013. The total industrial employment also declined from 12.4 million in 2016-17 to 12.05 million in 2022. On the other hand, in contrast to the target set in the 7FYP, agriculture's share in total employment increased from 40.6 percent in 2016-17 to 45.3 percent in 2022. Between 2016-17 and 2022, agriculture occupied 7.5 million additional people. The rise in the employment share of agriculture is somewhat surprising and is difficult to explain at this stage. However, the covid-19 induced reallocation of workforce could be one reason. The rising significance of agriculture in employment along with the sector's falling share in GDP means a downward pressure on the average labour productivity in the sector.

Impressive progress has been made in creating employment for migrant workers (Figure 1.3). In fact, the target for the number of migrant workers has been exceeded. During FY16-FY20, a total of 3.7 million migrant labourers departed the country, in comparison to the combined target of 2 million. This has contributed to the inflow of remittance in the country.

**Figure 1.3: Migrant Workers: Actual vs. Target under 7<sup>th</sup> Plan (Million)**

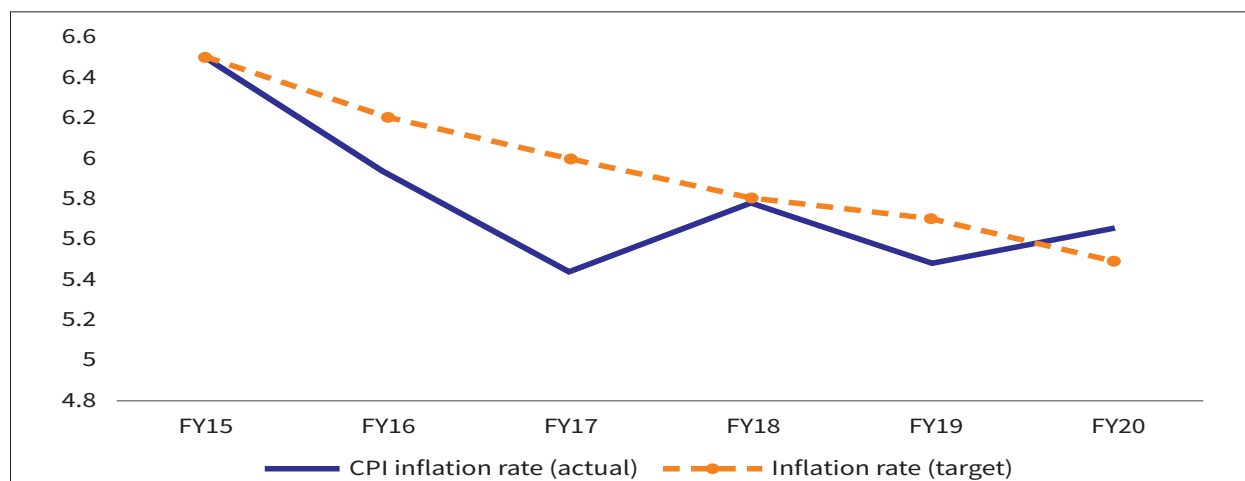
Source: BMET data as reported in Bangladesh Bank.

- 3 Employment generation and additional labour force have been calculated by comparing LFS 2013, 2015-16, and 2022 and taking simple yearly average.
- 4 Additional employment comprises new overseas employment plus new domestic employment. Excess employment is the number of jobs created (in home and abroad) over and above the number of new entrants to the labour force.

## 1.4 Inflation and Monetary Management

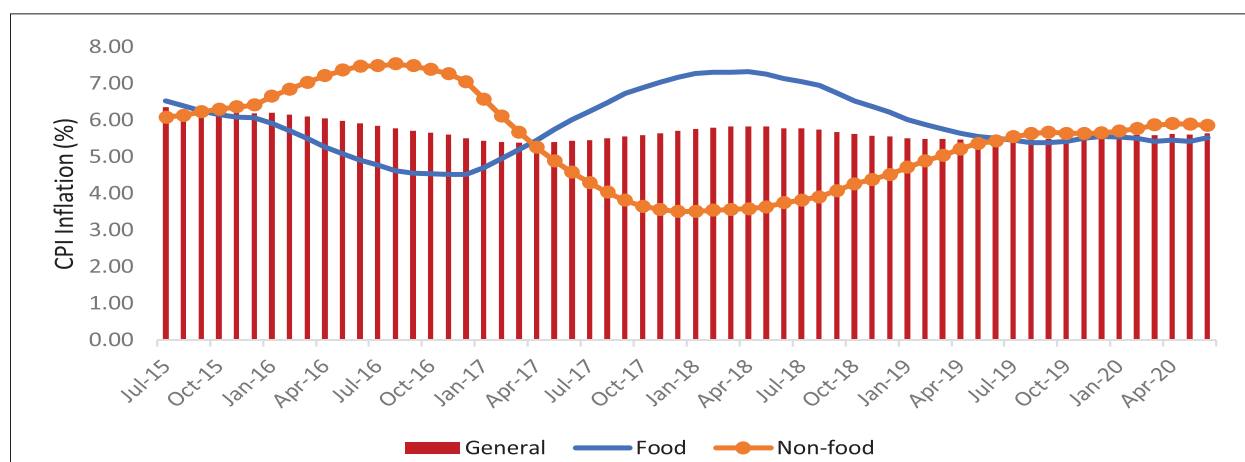
One of the top priorities of the previous Plan's macroeconomic management was to keep inflation under control—within the 6-7 percent range. The 7<sup>th</sup> Plan target was reducing inflation from 6.5 percent to 5.5 percent. Against this, except for the end period, the inflation rate was below the target (Figure 1.4). The general (overall) inflation rate averaged 5.71 percent during the 7FYP against the target rate of 5.8 percent, while food and non-food inflation averaged 5.89 and 5.43 percent, respectively (Figure 1.5). This means despite the growth in consumption, the monetary and fiscal policies worked well in keeping the demand-side inflation under check.

**Figure 1.4: Inflation Rate during the 7<sup>th</sup> Plan: Actual vs. Target**



Source: Bangladesh Bank.

**Figure 1.5: Monthly Inflation Trend during 7FYP**

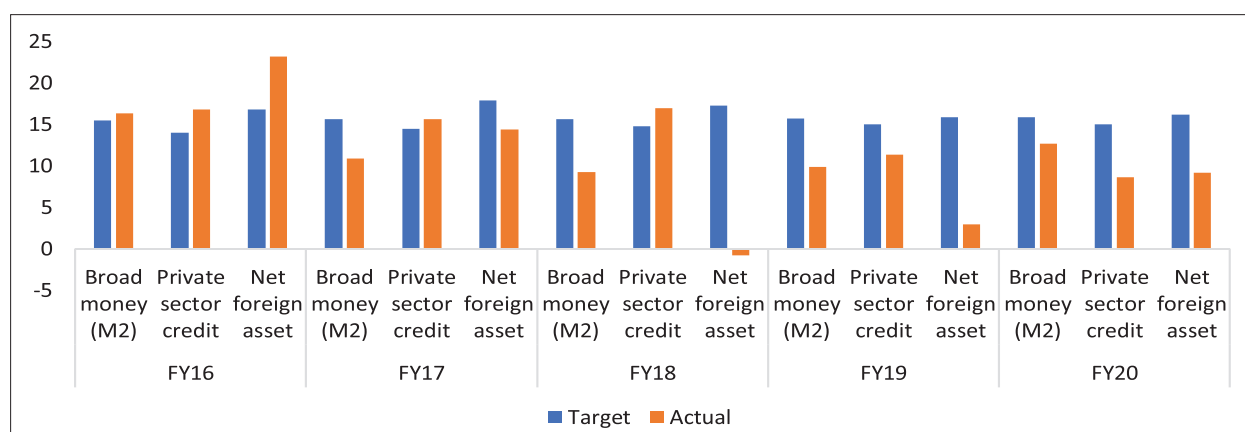


Source: Bangladesh Bank.

However, Bangladesh's monetary sector faced a few unfavourable issues in the 7FYP time frame. The longstanding challenge of a high level of non-performing loans remained unmitigated. Nevertheless, the monetary sector was still sufficiently healthy. The exchange rate depreciated by 9.15 percent in the five years. The money supply (M2) growth was 11.8 percent per annum against the 7FYP target of 15.7 percent. It exceeded the target in FY16, but missed for the remaining periods.

The Private sector credit growth exceeded the corresponding targets in the first three years of the plan period but then fell short considerably for FY19 and FY20. During the plan period, it grew annually at 13.9 percent against the target of 14.7 percent. Total domestic credit growth was 13.2 percent per annum during the 7FYP period. COVID-19 induced economic disruptions were the principal reason for weak credit growth in FY20 while demand-side constraints were also likely to have lowered the growth of credit during FY18-FY19. The net foreign assets fell short of the target growth rates after FY16, with negative growth experienced in FY18.

**Figure 1.6: Monetary Policy Targets and Outcomes during 7FYP (Base Year 2005-06)**



Source: Bangladesh Bank.

## 1.5 External Sector Performance

The 7<sup>th</sup> Plan period coincided with major unfavourable trends in the global economy, leading to an unprecedented slowdown in global trade, FDI and remittances. A trade policy reversal by the United States, trade wars between the United States and China, a prolonged period of uncertainty arising from the United Kingdom's referendum results favouring on its exit from the European Union, and then came the COVID-19 pandemic, causing havoc to global trade and investment flows.

Consequently, export and import growth figures were lower than expected in each year of the 7FYP (Table 1.8). For exports, the shortfall from the target continued to widen from around \$300 million in FY16 to about \$3.5 billion in FY17 to \$5.7 billion in FY to \$7.8 billion and finally to about \$22 billion in the COVID-affected year of FY20. In services, current transfers, and financial and capital accounts as well, lower than targeted values were recorded. Despite the weaknesses in exports, the trade deficit remained below the target each year except for FY18.

The current account was in surplus in the first year of the plan period, followed by a deficit, which was, however, smaller than the deficit projected in the Plan. The capital and financial account showed a sizable surplus but was still below the targets set in the 7<sup>th</sup> Plan. FDI inflows also could not reach the target. Against the expected FDI flows of more than \$6 billion per year during the 7<sup>th</sup> Plan, the actual average yearly inflows were \$1.6 billion.

Table 1.8 shows that Bangladesh's overall balance of payments position significantly exceeded the target in FY16 before falling slightly short in FY17. This gap widened in FY18, but the target was exceeded substantially in FY19, when the balance was 62.34 percent higher than the targeted figure. Due to the impact of the pandemic, the balance of payments position was almost 50 percent lower than the targeted value in FY20, pushing the average position during 7FYP downwards. Disregarding the COVID year, the average BoP position between FY15 and FY19 was 13.83 percent higher than the targeted average, indicating that the external sector was performing well before the unprecedented pandemic.

**Table 1.8: External Sector Performance Against the Targets under 7FYP (Base Year 2005-06)**

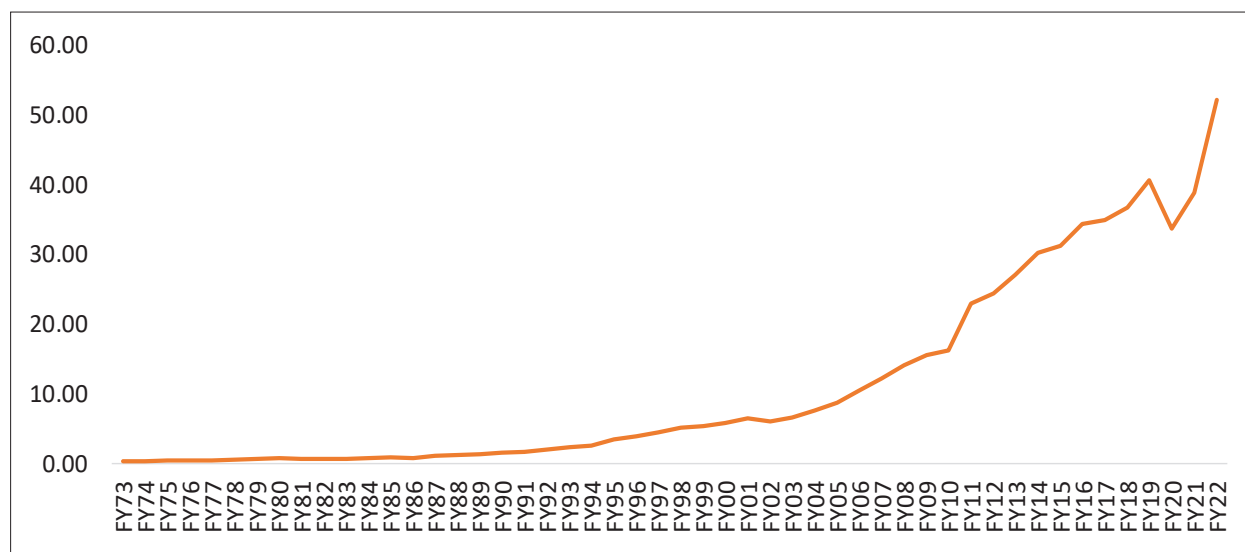
Component	FY15		FY16		FY17		FY18		FY19		FY20		Average	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Target	Actual
Trade balance	-6965.00	-11615.10	-6460.00	-12983.60	-9472.00	-14693.10	-18178.00	-16489.80	-15835.00	-18670.50	-17858.00	-14890.40	-12461.33	
Export f.o.b. (including EPZ)	30697.00	33785.10	33441.00	37501.40	34019.00	42001.60	36285.00	47461.80	39604.00	54106.40	32832.00	42971.30	34479.67	
Import f.o.b (including EPZ)	-37662.00	-45400.20	-39901.00	-50485.00	-43491.00	-56694.70	-54463.00	-63951.60	-55439.00	-72776.90	-50690.00	-57861.70	-46941.00	
Services	-3186.00	-5436.80	-2708.00	-6062.00	-3284.00	-6789.50	-4201.00	-7672.10	-3177.00	-8746.20	-2578.00	-6941.30	-3189.00	
Income	-2869.00	-3421.00	-1915.00	-4313.10	-2007.00	-5294.40	-2641.00	-6373.90	-2993.00	-7561.20	-3070.00	-5392.70	-2582.50	
Current transfers	15895.00	17945.60	15345.00	19878.50	13283.00	21936.40	15453.00	24185.00	16903.00	26693.50	18782.00	22127.80	15943.50	
Of which: Workers' Remittances	15170.00	17265.60	14717.00	19078.50	12591.00	20986.40	14703.00	23085.00	16196.00	25393.50	18205.00	21161.80	15263.67	
Current Account Balance	1406.00	-2527.30	4262.00	-3480.20	-1480.00	-4840.60	-9567.00	-6350.70	-5102.00	-8284.40	-4724.00	-5096.60	-2534.17	
Financial and Capital Account	3453.00	6323.10	1408.00	8092.60	4493.00	9985.20	9342.00	11810.00	6146.00	14603.00	8065.00	10162.80	5484.50	
Capital account	598.00	750.00	464.00	750.00	314.00	800.00	331.00	850.00	239.00	900.00	256.00	810.00	367.00	
Financial Account	2855.00	5573.10	944.00	7342.60	4179.00	9185.20	9011.00	10960.00	5907.00	13703.00	7809.00	9352.80	5117.50	
Foreign Direct Investment (FDI)	1474.00	2589.60	1285.00	4315.60	1706.00	5871.20	1778.00	7440.10	2628.00	9993.40	1271.00	6042.00	1690.33	
Errors and Omissions	624.00	0.00	-634.00	0.00	156.00	0.00	-632.00	0.00	-865.00	0.00	-172.00	0.00	-253.83	
Overall Balance	5483.00	3795.80	5036.00	4612.40	3169.00	5144.60	-857.00	5459.30	179.00	6318.60	3169.00	5066.20	2696.50	

Source: Bangladesh Bank.

## Export Performance

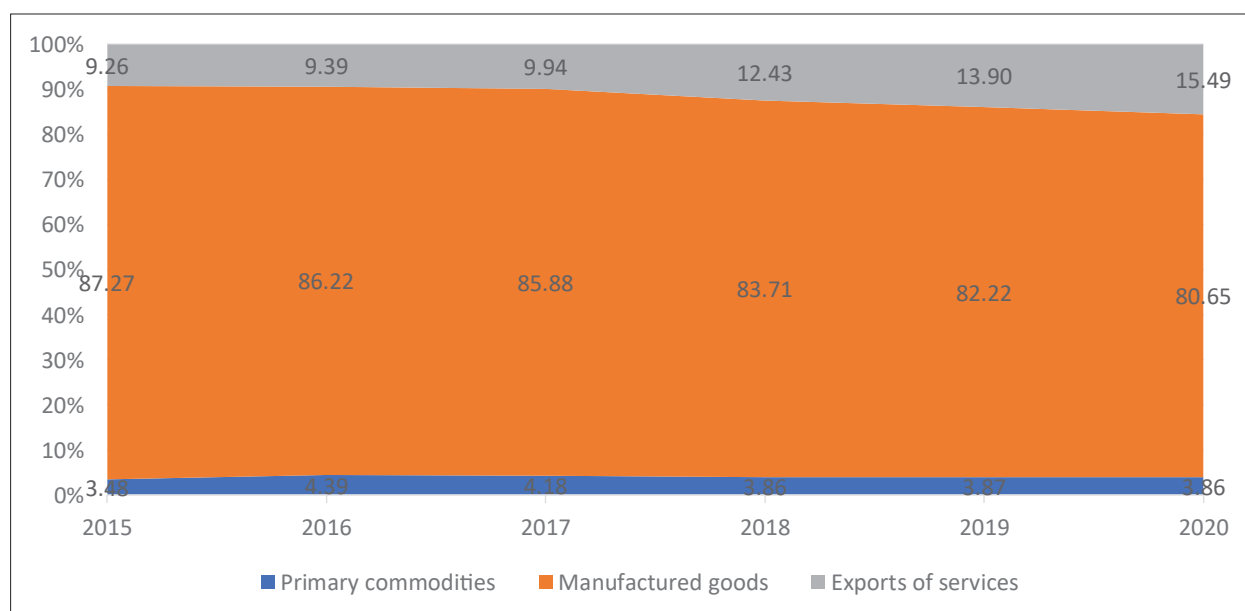
During the first four years of the 7<sup>th</sup> Plan, Bangladesh's exports of goods and services grew annually by more than 8 percent, then fell by 15.5 percent in FY20, largely due to the covid-19 but the U.S.-China trade war also caused exports to fall over the first 8 months of FY20 before COVID hit export performance from March 2020. During the 7<sup>th</sup> Plan the share of services in total exports increased from less than 10 percent to 15.5 percent in 2020, while the export share of primary products remained relatively stable at around four percent (Figure 1.8). The share of services in total exports grew significantly from 9.26 percent to 15.49 percent during the 7FYP.

**Figure 1.7: Bangladesh's Merchandise Exports (Billion \$)**



Source: Export Promotion Bureau of Bangladesh.

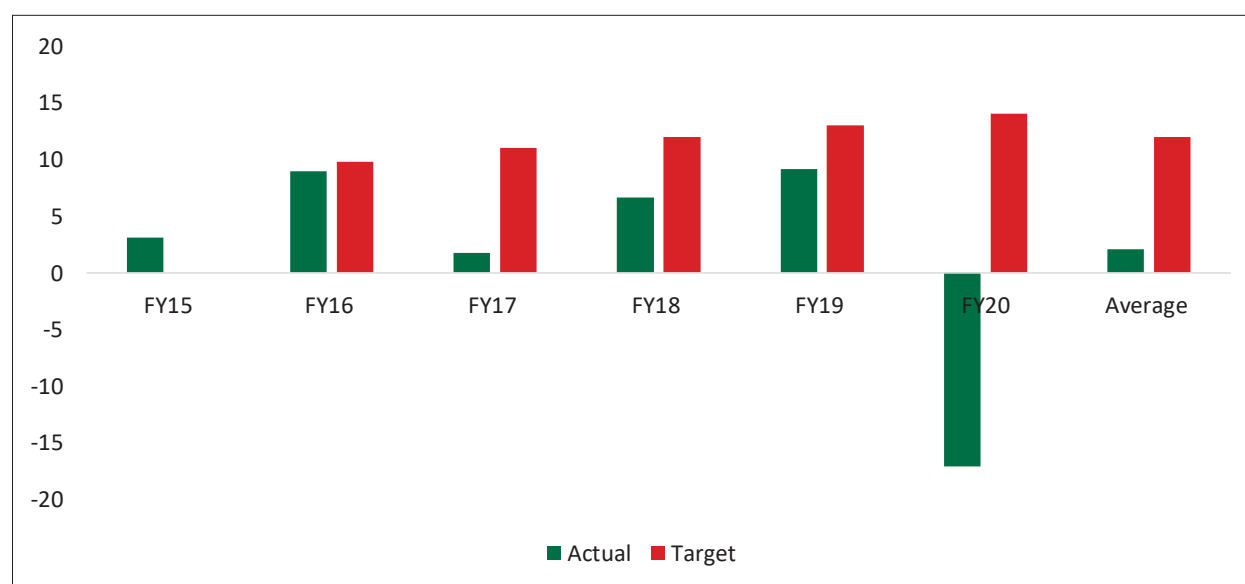
**Figure 1.8: Export Structure during 7FYP**



Source: World Development Indicators, World Bank.

The 7<sup>th</sup> Plan targeted achieving 12 percent annual average growth in merchandise exports. The actual figure was a little over 2 percent.<sup>5</sup> Exports declined by almost 17 percent in FY20, which is primarily accountable to COVID-19 related disturbances (Figure 1.9). Even without FY20, the annual average growth merchandise exports amounted to 6.8 percent during FY15-FY19, still lower than the targeted rate of 11.96 percent, as can be estimated. It is important to note that Bangladesh's exports immediately after the 7<sup>th</sup> plan period bounced back promptly and experienced a 15 percent growth in FY21, following a robust 34 percent increment in FY22. With this, the merchandise exports reached \$52 billion in FY22.

**Figure 1.9: Export Growth Targets and Achievement during 7FYP (Percent)**



Source: Export Promotion Bureau of Bangladesh.

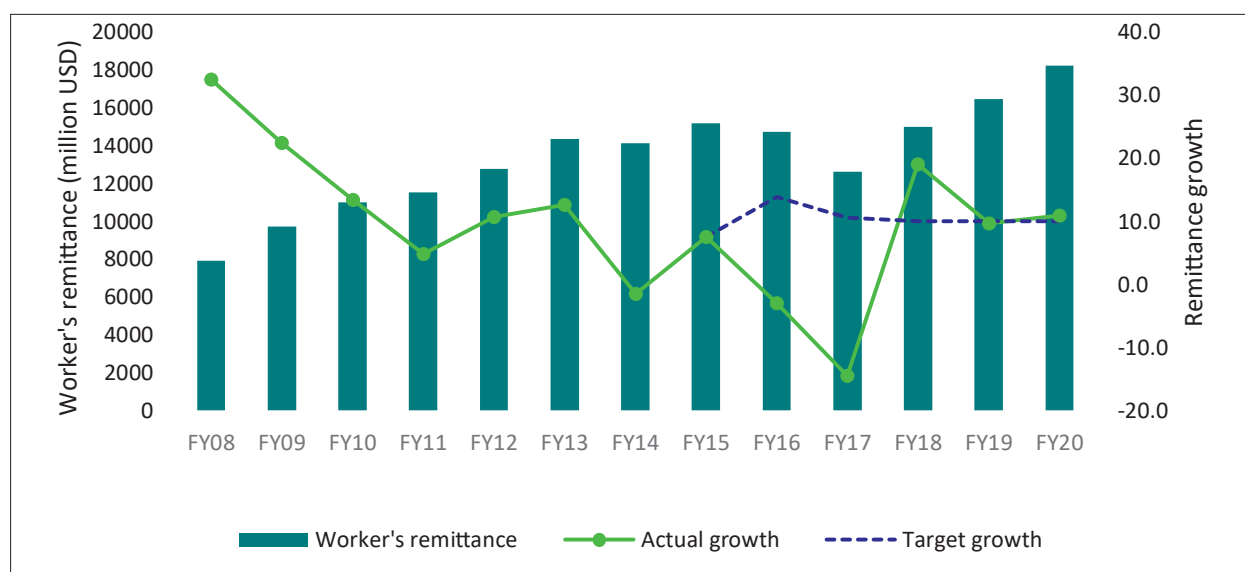
## Remittances

Given the past trends of remittances, the 7FYP had set strong targets for remittance growth. While the actual flow fell short in the first two years of the 7FYP, a strong performance was recorded afterwards (Figure 1.10). Particularly, FY18 had a growth rate of 19 percent, almost double the target of 10 percent. The growth then fell to a respectable 9.6 percent in the subsequent year, before picking up to almost 11 percent in the final year of 7FYP. This is a positive sign, especially because it signified a reversal of the long-term downward trend in remittance growth spanning back from FY08. It should also be noted that these figures include remittance inflows through formal channels only. There have been reports that a significant amount of remittance is coming to the country via hundi, an informal means of transferring funds across borders, taking advantage of often more favourable exchange rates. Various steps have been undertaken to discourage hundi transactions. It is worth pointing out that Bangladesh earned a record remittance inflow of \$24.8 billion in FY21, with a year-on-year growth rate of 36 percent.

<sup>5</sup> Services exports during the 7FYP grew annually at 14.8 percent.



**Figure 1.10: Worker's Remittance – Actual and Projected Growth under 7FYP**

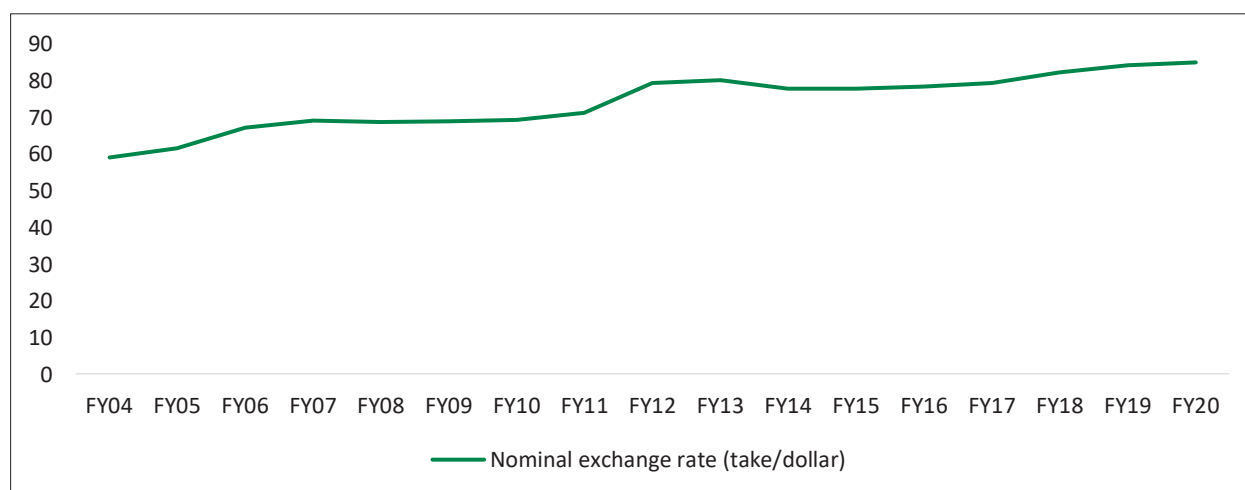


Source: Bangladesh Bank.

### Exchange Rate and Foreign Reserves

The exchange rate management significantly influences external balances and foreign assets. The central bank's most recent monetary statement seeks to continue macroeconomic stability, exchange rate stability, sustainable external sector balance, and the growth of foreign assets. During the 6FYP time frame, the exchange rate experienced relative stability after a 11 percent rise in the taka value of US dollars in FY12. During the 7<sup>th</sup> Plan, taka depreciated gradually with the overall rate of depreciation over the Plan period being a reasonable 9.2 percent (Figure 1.11). It is important to note that the exchange rate experienced larger depreciations in FY21 and FY22 following surges in import demand after COVID-19, Russia-Ukraine war, and rapidly rising prices of U.S. dollar worldwide, putting pressure on foreign reserves.

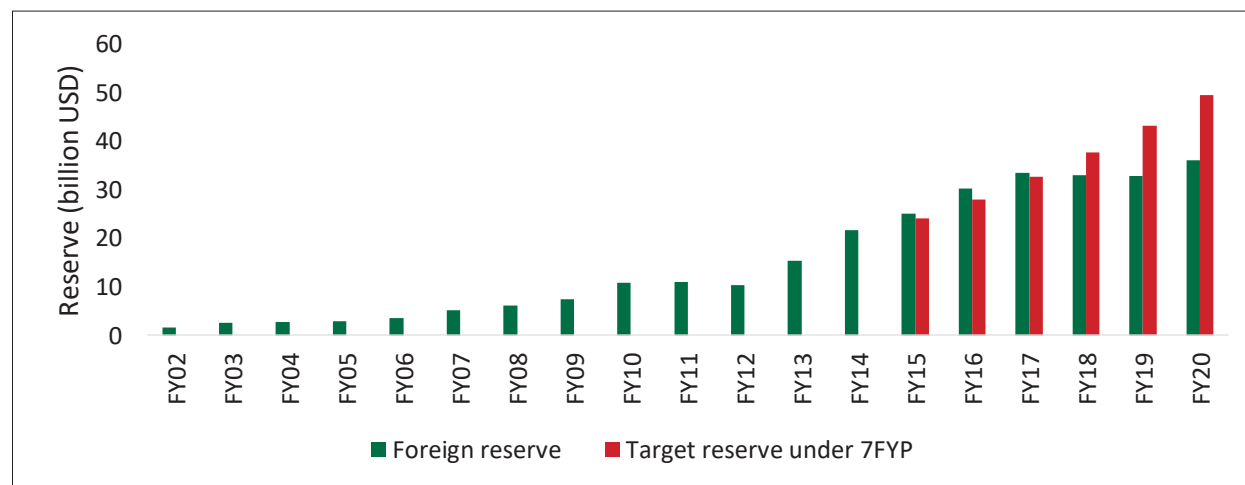
**Figure 1.11: Historical Trend in the Exchange Rate**



Source: Bangladesh Bank.

Bangladesh had set an ambition for foreign exchange reserves growth within the 7FYP time frame, rising from \$24 billion in FY15 to \$49.5 billion in FY20. However, the reserves could rise to only \$36 billion by the end of FY20. In the aftermath of COVID-19, there was a rapid rise in reserves, \$48 billion in August 2022. However, due to rising import payments, unsettling remittance trends and subdued export earnings, the reserves came under pressure. Box 1.2 provides further analysis for the causes of this trend and the policy response to that end.

**Figure 1.12: Foreign Exchange Reserve and Targets under 7FYP**



Source: Bangladesh Bank.

### Box 1.2: Depleting Foreign Reserve in Recent Times and Government Actions

Largely due to the global shocks and crises arising from monetary policy tightening in the Western developed countries to contain inflationary pressure due to their very liberal stimulus packages to mitigate Covid-19 shocks, Russia-Ukraine war causing the global food and fuel supplies to disrupt, Bangladesh has had to confront rising food and energy prices leading to domestic inflationary pressure, which was exacerbated further by a depreciating taka in response to massive import surges, partly due to the pent-up demand accumulated during COVID-19, depleting the foreign reserves. The foreign reserves of the country fell from about \$46 billion to about \$36 billion between February and October 2022. Along with higher import prices, relatively lower remittances, and a subdued export performance put further pressures on the reserves. In response, Bangladesh Bank limited the number of letter of credits (LCs) that could be opened and raised the repo rate for the first time since 2012. A floating exchange rate regime was also adopted in September in order to alleviate some of the pressure on the foreign reserves. Despite the cautionary monetary policy stance, the fixed interest rates have, unlike in other countries, continued to operate, somewhat compromising the policy scope for containing inflation.

Bangladesh has also received assistance from external development partners to mitigate the impact of the foreign reserve crisis. Notably, the country in January 2023 secured a \$3.3 billion loan under the IMF's Extended Credit Facility and a further \$1.4 billion from the Resilience and Sustainability Facility. The facilities include quantitative performance criteria for disbursement of the facilities, including a floor for net international reserves, a ceiling on the budget deficit, and indicator-specific targets. These have been designed to address the structural weaknesses in Bangladesh's economy, maintain stability, and build resilience over the long term. Such targets include increased tax-GDP ratio, financial sector reform to reduce the number of non-performing loans and monitoring improvements such as increasing the frequency of budgetary publications.

The government has taken proactive measures to ensure that the IMF guidelines are adhered to. These include drafting new regulations on financial oversight to strengthen the banking sector and boosting efforts to increase tax collection. Structural and institutional reforms are expected to allow Bangladesh to build a more resilient macroeconomic architecture for future shocks.

## External Debt

The external financing strategy under the 7<sup>th</sup> Plan was targeted to maintain prudent external borrowing on the best possible terms with maximum utilisation of concessional official bilateral and multilateral loans. It was mentioned that many infrastructure projects in the transport and energy sector (like Matarbari Power Hub, Dhaka Metro Rail, Karnaphuli River Tunnel etc.) would be financed from concessional borrowing. The external financing strategy under the Plan would also entail broadening external financing sources, creating greater scope for private investors to secure external financing on better terms through reduced country/sovereign risk and continued reliance on official bilateral and multilateral sources for financing large public sector projects.

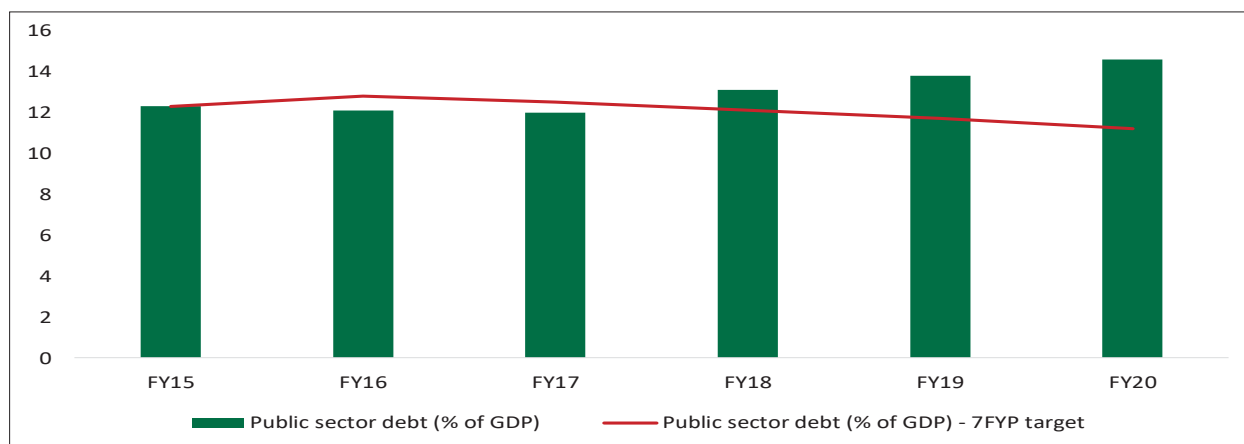
Bangladesh's rapid development has meant that the country has also engaged in external economic relations to a greater degree during the 7FYP. Table 1.9 shows external public and private sector borrowing during the 7<sup>th</sup> Plan and beyond. Bangladesh's total outstanding external debt (public and private) increased from \$37.2 billion in FY15 to \$95.8 billion in FY22, with an annual average growth rate of almost 15 percent. During the 7<sup>th</sup> Plan, public sector debt grew from \$29.4 billion in FY15 to \$65.7 billion in FY20. The 7FYP envisaged reducing dependency on public external debt from 12.9 percent of GDP in FY15 to 11.2 percent of GDP in FY20. External debt management was below the target in the first two years of the 7FYP. It then exceeded the target and was 3.4 percentage points higher than the target in the last period of the Plan. The massive infrastructural development during the plan period was facilitated by foreign financing. Some major projects under external financing are highlighted in Box 1.3.

**Table 1.9: Trends of External Debt during the 7FYP**

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total external debt (million \$)	37,268.3	40,802.1	45,239.9	54,737.1	60,356.2	65,732.9	81,570.2	95,857.9
Public sector external debt (million \$)	29,452.4	32,006.1	34,702.3	40,770.4	46,154.2	51,646.5	62,881.8	69,906.9
Private sector external debt (million \$)	7,815.9	8,796.0	10,537.6	13,966.7	14,202.0	14,086.4	18,688.4	25,950.9
External debt (percent of GDP) (base year 2005-06)	-	15.4	15.6	17.4	17.8	18.3	19.6	20.6
Public sector debt (percent of GDP) (base year 2005-06)	12.9	12.1	12	13.1	13.8	14.6	15.1	15

Source: Bangladesh Bank.

**Figure 1.13: Public Sector External Debt (Percent of GDP) – Target vs Actual (Base Year 2005-06)**



Source: 7FYP and Bangladesh Bank.

### Box 1.3: Notable Development Projects Financed by External Debt during the 7FYP

- The Rooppur nuclear power plant has been 90 percent financed by a Russian government loan, resulting in a commitment of USD \$11.87 billion during the 7FYP. It aims to further strengthen Bangladesh's position in energy and electricity security, and is expected to provide significant economic returns after implementation.
- The Matarbari deep seaport aims to enhance logistics and transportation in the shipping sector. During the 7FYP, JICA disbursed 131.06 billion yen in various loans for this purpose.
- The Mass Rapid Transit (MRT) project aims to improve transportation within Dhaka metropolitan city, leading to increased efficiency and long-term economic gains. To assist with the construction of the MRT, JICA provided 51.36 billion yen in concessional loans during the 7FYP.
- The Karnafuli tunnel aims to strengthen transport and logistics systems in south Bangladesh. The Chinese Government provided a loan of RMB 1950 million for its construction in 2016.
- Multiple countries and partners have provided assistance in Primary Education Development Programmes. The fourth iteration saw the Asian Development Bank commit USD \$500 million to strengthen the education sector.

Source: Economic Relations Division (ERD).

The Government of Bangladesh has a solid track record of prudently managing its public debt and debt service payments. The 7FYP aspired to sustainably reduce external debt service payments in relation to GDP and exports of goods and remittances, respectively, with an aim to reduce Bangladesh's vulnerability to external shocks. External debt service as percent of exports and remittances was targeted to reach 3.6 percent by FY20; however, it stood at 5.5 percent. The debt service payment shows an increasing trend which is also expected to rise in the coming years (Table 1.10).

**Table 1.10: Debt Service Payment during 7FYP**

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Total debt service (million \$)	2,371.6	2,371.6	2,011.2	2,198.2	2,823.1	3,160.9	3,297.6
Total debt service (% of export and remittance)	4.8	4.6	4.0	3.9	4.5	5.5	4.7
7FYP target of total debt service (% of export and remittance)		2.4	2.9	3.1	3.5	3.6	-

Source: 7FYP, Bangladesh Bank data as reported by ERD.

## 1.6 Fiscal Sector Performance

Bangladesh's overall budget expanded significantly during the 7FYP timeframe, with expenditures allocations rising from BDT 1,54,241 crore in FY15 to BDT 3,10,262 crore in FY20 (Table 1.11). The 7FYP consistently targeted to maintain an overall budget deficit below 5 percent of GDP. Generally, Bangladesh maintained a budget deficit below the target between FY16 and FY18, but the last two years saw an increase in the budget deficit above 5 percent due to subdued revenue collection and unprecedented economic shocks arising from covid-19. The total public expenditure was targeted to increase from 17.20 percent of GDP to 21.10 percent, but the actual expenditure was stagnant between 13.0 and 15.5 percent of GDP. This is largely due to the lower levels of revenue not allowing enough space for increased public spending.

**Table 1.11: Fiscal Sector Operations as Percent of GDP (Base Year 2005-06)**

Component	FY15	FY16		FY17		FY18		FY19		FY20	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Total revenue and grants (% of GDP)	9.62	12.50	10.12	13.90	10.22	14.70	9.66	15.50	9.97	16.50	9.80
Total revenue (% of GDP)	9.50	10.60	10.00	11.50	10.16	12.30	9.62	13.10	9.91	14.10	9.71
Tax revenue (% of GDP)	8.49	10.60	8.78	11.50	9.00	12.30	8.63	13.10	8.89	14.10	8.10
Non-tax revenue (% of GDP)	1.01	1.50	1.22	2.00	1.16	2.00	0.99	2.00	1.02	2.00	1.60
Total expenditure (% of GDP)	13.02	17.20	13.83	18.50	13.57	19.30	14.30	20.10	15.41	21.10	15.34
of which: ADP (% of GDP)	3.96	4.80	4.63	5.00	4.14	5.30	5.31	5.50	5.79	5.70	5.67
Overall balance (Incl. grants) (% of GDP)	-3.40	-4.70	-3.72	-4.60	-3.35	-4.70	-4.64	-4.70	-5.43	-4.70	-5.54
External debt (% of GDP)	0.61	1.40	0.78	1.20	0.56	1.20	1.14	1.10	1.23	1.00	1.52
Domestic borrowing (% of GDP)	2.79	3.30	2.94	3.40	2.79	3.50	3.50	3.60	4.20	3.70	3.94

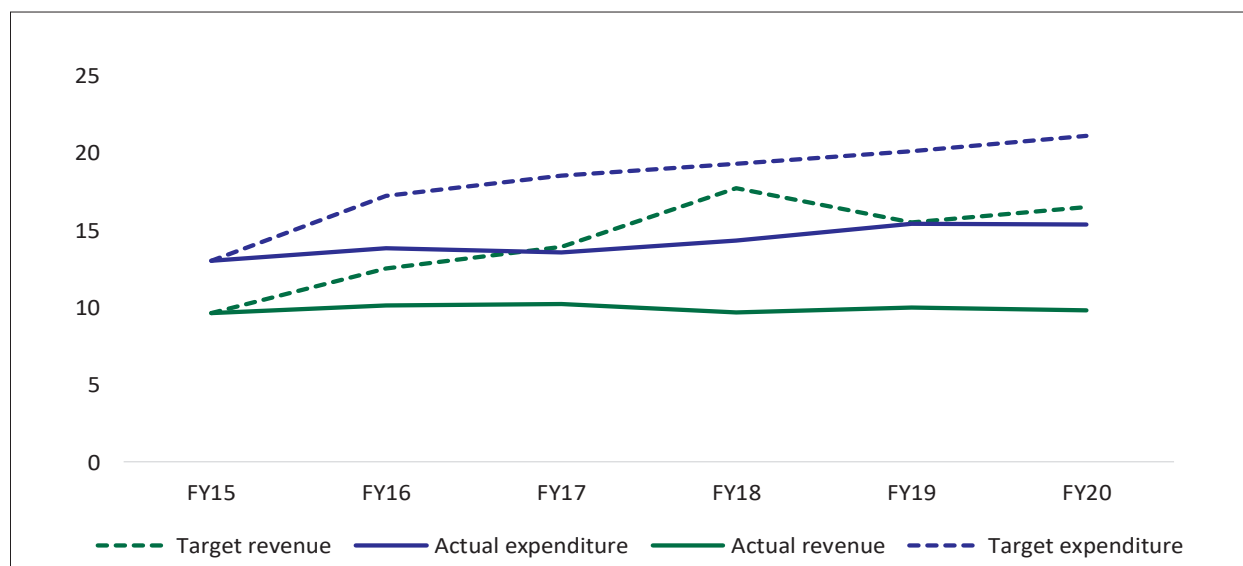
Source: MoF.

The domestic revenue generation in Bangladesh has been historically low. The average revenue-GDP ratio has been around 10 percent, with the tax-GDP ratio remaining one of the lowest among global economies—less than 9 percent of GDP. As per the macroeconomic framework of the Government's Perspective Plan 2041, Bangladesh will have to raise its tax-GDP ratio from the current level to more than 17 percent by 2031. Therefore, the target of doubling the tax-GDP ratio over the next decade should constitute an important endeavour. Only additional tax resources can increase the overall size of budgetary expenditure, which can then help expand public spending on such sectors as health, education, transport and communication and social protection.

In the 7<sup>th</sup> Plan, total revenue generation was targeted to increase from 9.5 percent of GDP in FY15 to 14.1 percent in FY20. Bangladesh has struggled to meet this target and could not exceed the 10.16 percent of GDP recorded in FY17 (Figure 1.14). Tax revenue remained below 9 percent of GDP against the target of 14 percent.

Low revenues have long been a structural constraint for Bangladesh. During the 7FYP, revenue collections remained stagnant, despite various attempts for raising the tax-GDP ratio. Measures such as enhancing the tax net modernising NBR processes and technologies and reforming relevant laws in order to generate more revenues. Despite high expectations, the actual amounts of expenditure have seemed to plateau in the 7FYP timeframe.

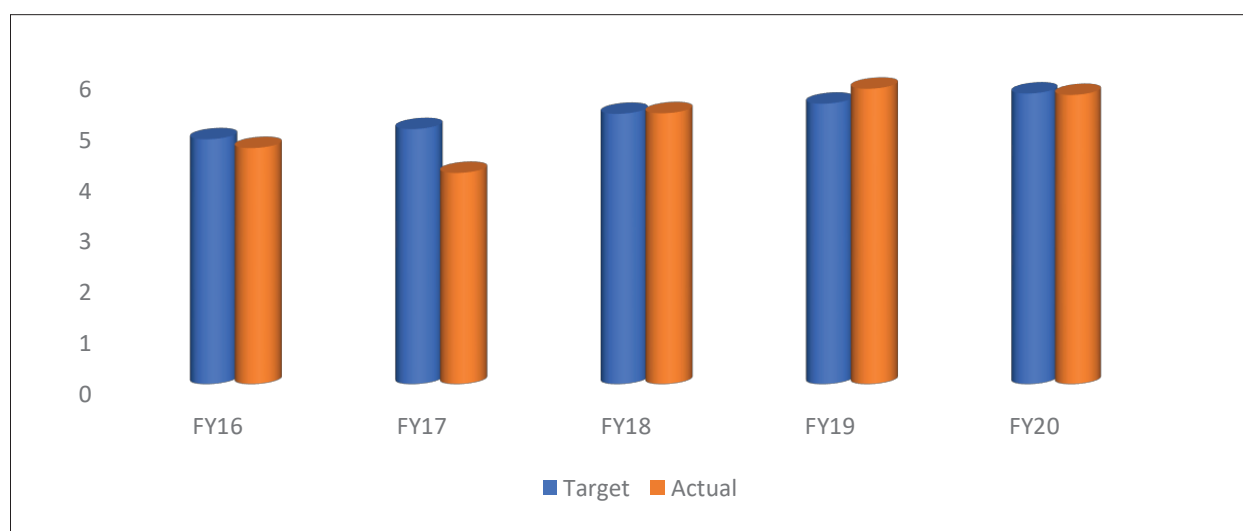
**Figure 1.14: Total Revenue and Expenditure as Percent of GDP; Actual and Targets under 7FYP (Base Year 2005-06)**



Source: Ministry of Finance (MoF).

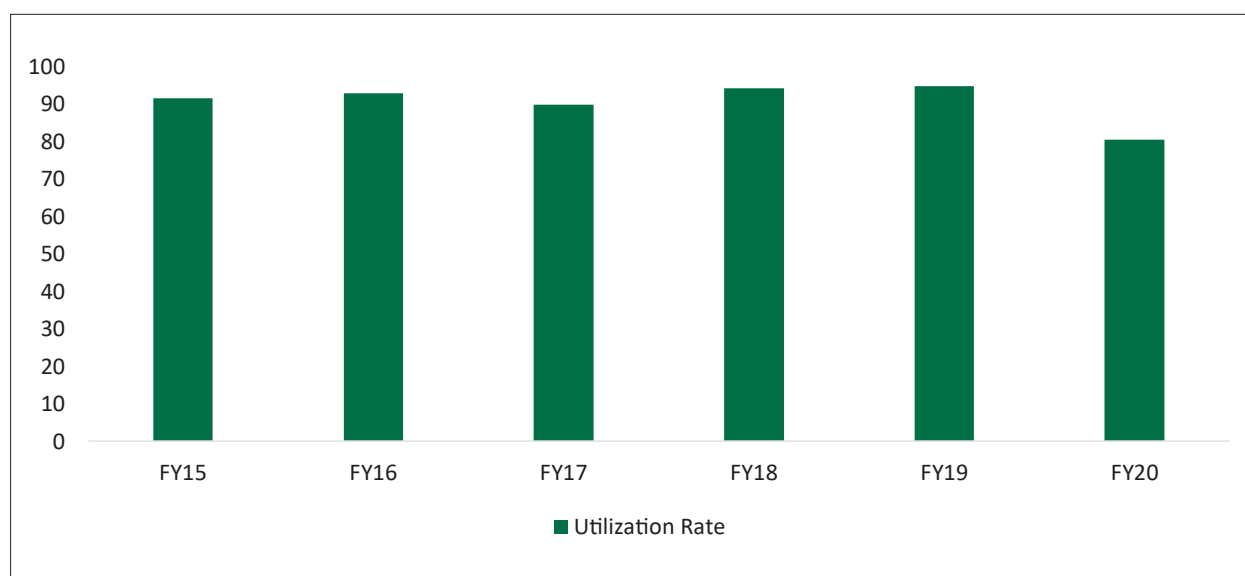
The 7<sup>th</sup> Plan aimed to increase ADP expenditure significantly to undertake large infrastructure projects. With the higher spending on ADP and significant improvements in power supplies, the infrastructure gap was expected to be reduced. The Government had prepared a fast-track list of priority activities. Several important projects in the power, energy and transport sectors were implemented under this fast-track initiative. Besides, the Government expected the Public-Private Partnership (PPP) in infrastructure investment to gain momentum in the 7<sup>th</sup> Plan. The performance of ADP implementation had fallen short of the target in the first two years of the 7<sup>th</sup> Plan. However, it fared better than in the last three years of the 7<sup>th</sup> Plan. The ADP utilisation rate was quite impressive during the 7<sup>th</sup> Plan compared to previous plan periods (Figure 1.16). However, the utilisation rate was still quite low: at 80 percent of the revised allocation, at the end period. This is due to the covid-19 induced economic shutdown during this time.

**Figure 1.15: ADP Implementation as Percent of GDP Rates under 7FYP (Base Year 2005-06)**



Source: Ministry of Finance (MoF).

**Figure 1.16: ADP Utilisation Rate, FY15-FY20 (% of Revised ADP)**



Source: Implementation Monitoring and Evaluation Division (IMED).

## 1.7 Conclusions and Way Forward

The 7<sup>th</sup> Five-Year Plan (7FYP) in Bangladesh has witnessed a commendable economic performance despite the challenges posed by the COVID-19 pandemic. The country's macroeconomic situation displayed strong growth, with manufacturing further establishing its role as a significant driver of growth, while agriculture demonstrated resilience across its subsectors. Although the plan fell short of its job creation target, positive trends were observed, including a significant increase in employed women and a rise in the share of agriculture in total employment.

Prudent monetary and fiscal management played a crucial role in containing inflation, although the tax to GDP ratio remained stagnant, posing a challenge for expanding public expenditure in critical sectors. Externally, the global economic landscape, characterized by trade policy reversals, trade wars, Brexit, and the COVID-19 pandemic, affected Bangladesh's export and import growth. Foreign direct investment (FDI) inflows were also below target, impacting the overall balance of payments position.

Despite initial setbacks, remittance growth witnessed a strong rebound, with record inflows in recent years. The exchange rate remained relatively stable during the plan period, but the emergence of global events, such as COVID-19 and the Russia-Ukraine war, led to larger depreciations of the local currency. Bangladesh made efforts to increase foreign exchange reserves, although the target set in the plan was not fully achieved due to rising import payments, subdued export earnings, and uncertain remittance trends.

The 7<sup>th</sup> Plan emphasized prudent external borrowing and the diversification of external financing sources, particularly for infrastructure projects. Foreign financing played a significant role in economic advancement, contributing to major infrastructure projects. However, the country's total outstanding external debt increased over the plan period, highlighting the need to manage debt sustainability effectively. While efforts were made to reduce dependency on public external debt, external debt service payments as a percentage of exports and remittances increased.

In conclusion, the 7<sup>th</sup> Five-Year Plan in Bangladesh showcased remarkable economic resilience despite the challenges posed by global events and the pandemic. The plan's focus on manufacturing, agriculture, job creation, inflation containment, and external financing contributed to the country's sustained growth.



However, areas such as taxation, export diversification, debt management, and reducing dependency on external borrowing require continued attention to ensure long-term economic stability and inclusive development in the future.

Despite these challenges, Bangladesh swiftly implemented pragmatic policies that aided in a speedy recovery from the disruptions. These lessons learned from the 7FYP have informed the subsequent Eighth Five Year Plan (8FYP), which aims to address emerging needs and challenges. Based on the above analysis and discussions, several recommendations can be drawn to facilitate the effective implementation of the 8FYP.

### **Prudent Macroeconomic Management**

Although Bangladesh has long been known for its prudent macroeconomic management, post-COVID global shocks have caused inflationary pressures within the domestic economy along with the country's foreign reserve situation coming under strain. In light of the post-COVID unfavorable trends, ensuring macroeconomic stability has become more important than ever. Tackling inflation, maintaining food security, managing adequate foreign reserves, and ensuring external debt sustainability will be of paramount importance for sustainable and balanced development in the 8<sup>th</sup> Plan.

Controlling inflation is essential to prevent eroding purchasing power and to maintain price stability. High inflation can adversely affect the purchasing power of consumers, lead to increased production costs for businesses, and thus disrupt overall economic activities. Implementing effective monetary and fiscal policies, including managing money supply and demand, interest rate management, ease of supplies of products in the market, and monitoring market forces will be crucial in curbing inflationary pressures. To achieve food security, measures such as implementing effective food distribution and price control mechanisms, supporting for poor and vulnerable households with food assistance, improving agricultural productivity, investing in rural infrastructure, promoting modern agricultural practices, etc. need to be prioritized.

Keeping adequate foreign reserves is crucial to maintain external stability and safeguard against potential external shocks. Foreign reserves act as a buffer to meet external payment obligations, such as import payments and debt servicing, and help maintain investor confidence. Effective management of foreign reserves through cautious monetary and exchange rate policies, promoting exports, mobilizing more remittances through formal channels, and attracting foreign direct investment (FDI) will be essential in ensuring a stable external position.

While Bangladesh's debt remains at a sustainable level, as acknowledged in the IMF's Article IV report, it is imperative to exercise caution in taking on large amounts of foreign debt in the medium term. This would entail strengthening cost-benefit analyses of projects to ensure their long-term economic viability and establishing robust monitoring frameworks to ensure proper utilization of borrowed funds.

### **Ensuring Long-Term Sustainability**

Bangladesh aspires to become an upper-middle-income country by 2031 and a high-income country by 2041. The country is also set to graduate from the least developed countries (LDCs) in 2026. To achieve the longer-term development goals and to sustain the ongoing development momentum, Bangladesh must address the challenges emanating from global shocks. The country should capitalize on its impressive resilience demonstrated during the COVID-19 pandemic. This includes giving adequate attention to sectors that impact on the lives and livelihoods of the population, such as agriculture and social security. Programs designed to provide social protection should have sufficient coverage and effectively protect those who are most vulnerable. While there are already provisions in the safety net for covariate and economic shocks, these should be strengthened, particularly during the implementation phase of the programs.

## **Expanding Fiscal Space**

As aforementioned, Bangladesh's tax-to-GDP ratio is low, which constrains the country's fiscal space. The low levels of revenue collection mean that financing critical sectors may become more difficult in times of crisis or sudden economic shock. It also leaves fewer funds for pro-poor policies, such as subsidising fertilisers and providing social security support. During the 7FYP timeframe, revenues had consistently underperformed against the targets. Consequently, the GoB and NBR have taken various initiatives to increase collections, combined with policies implemented by other revenue-generating agencies. Bangladesh's recent loan from the IMF has outlined policies to increase tax collection in the country. To this end, it is now of utmost importance to develop a roadmap for domestic resource mobilization and implement it effectively.

## **Attracting Foreign Direct Investments**

Foreign Direct Investment (FDI) plays a crucial role in the economic development of any country, including Bangladesh. FDI can bring in much-needed capital, technology, management expertise, and market access, which can help stimulate economic growth and create job opportunities. Therefore, it is imperative for Bangladesh to incentivize private investment through a healthy and robust business environment.

Despite various efforts, Bangladesh has not been able to attract adequate foreign direct investment in productive and export sectors. The country consistently missed the target for FDI inflows. While FDI was expected to rise up to 3 percent of GDP in 2020, it has remained hovering around one percent. The COVID-19 pandemic and subsequent unfavourable macroeconomic developments may have further disincentivised foreign investments. While Bangladesh has undertaken policies to attract more FDIs in the recent past, it should come to the fore of policymaking during the 8FYP. One of the key areas that need improvement is the reduction of administrative complexities. Simplifying government services for private sector firms, such as streamlining registration requirements and digitizing processes, can significantly improve the ease of doing business in Bangladesh. FDI firms must be provided with effective one-stop-services to facilitate their enterprise development in various special economic zones and high-tech parks throughout the country. Institutional, infrastructural, and financial incentives should be strengthened for foreign investors.

In addition to administrative reforms, infrastructural improvements are also crucial. Enhancing intra-regional communications through better transportation networks, power supply, and other necessary infrastructures can create a favorable business environment and attract more foreign investors. Removing infrastructural bottlenecks can also facilitate smoother trade and investment flows within the country and with other countries in the region.

Another important aspect for attracting FDI is the establishment and strengthening of appropriate legal frameworks and protections, including intellectual property rights. Ensuring that investors' rights are safeguarded through robust legal frameworks can boost their confidence in the business environment and encourage them to invest in Bangladesh.

## **Increasing Productivity Across Various Sectors**

Another structural constraint that has come to the forefront of policy discussion is employment. Agricultural employment has recently increased, which will further reduce the average labour productivity of the sector. Another major concern is the reduction in employment in the manufacturing sector. The reduced significance of manufacturing employment could imply that Bangladesh appears to have been caught in a premature de-industrialisation process. In this critical juncture, Bangladesh needs to generate productive employment in the manufacturing sector while absorbing the shock arising from capital-intensive technology. Labour productivity in the agriculture sector must be increased through skill-development initiatives and the adoption of modern technology in agricultural production.

## **Export Expansion and Diversification**

The 7FYP set out strong targets for export growth which has been expanded in the subsequent 8FYP. These policies should be a key priority in Bangladesh's ongoing structural transformation and export diversification. As such, the efforts to diversify and expand exports, particularly in non-RMG and modern services exports, should be further encouraged. Several subsectors in the manufacturing sector have been identified in the export policy as the highest priority sectors. Policy support should be provided to the potential sectors to expand their exports. When choosing its policy mix, the government should consider the instruments that can be enacted to facilitate these sectors, such as tax breaks, subsidies, tackling anti-export bias, and export promotion support. With the impending LDC graduation of Bangladesh, the significance of export diversification cannot be overstated. Export development strategies should focus on emerging realities in which as a graduating LDCs Bangladesh will lose certain some market access benefits in some of the major importing countries, necessitating the scope of improved competitiveness.

## **Reinvigorating Private Investment**

While private investment did grow in the first years of the 7FYP, the country has not been able to reach pre-pandemic levels since FY20. In this context, the country must reinvigorate the private sector. Economists have long contended that a healthy and robust business environment would positively affect private investment. This can be done by eliminating red tape and bureaucracy, digitising government services for private sector firms (such as various registration requirements), and further infrastructural improvements to bolster intra-regional communications. Significant time lags in the registration process and important document filing hinder business operations' efficiency. Appropriate legal frameworks and protections, including intellectual property rights, should also be enacted and strengthened. Infrastructural bottlenecks should be removed.

## **Improving the ADP Implementation Rate**

ADP implementation rate has historically been around 80 percent of the budgetary allocation. There is therefore considerable scope for further resource utilization. Rather than driving the spending toward the end of the fiscal year, project planning and implementation must be improved from the beginning of each project's lifecycle. Socio-economic impacts of development programmes would be greater with stronger monitoring in project planning, design, and implementation phases.

## **Strengthening Banking Sector Reforms**

While the 7FYP set out goals for reform, the banking sector in Bangladesh continues to face challenges such as high levels of non-performing. It is therefore imperative for critical implemented are sustained and strengthened going forward, mobilizing sufficient political capital to revitalize the banking sector.

A stronger banking sector would have multiple benefits for the economy. It would enable higher levels of investment in productive activities, instead of non-productive assets like land. This would incentivize higher savings for the middle class, providing them with a buffer against shocks. Moreover, a healthier business environment, which was also a goal of the 7FYP, could be facilitated by a stronger banking sector.

A weak banking sector poses the risk of liquidity and/or financial crises in the economy. Strengthening the banking sector would ensure a stable economy without the risk of a financial meltdown, allowing the country to reap the benefits of economic stability.



# **AGRICULTURE AND FOOD SECURITY**

**CHAPTER**

**2**



## 2.1 Introduction

Agriculture and food security have been correctly identified as priority areas for Bangladesh. Ensuring adequate access to nutrition and food security for a fast-growing population, which stands at 169 million, has received significant attention from policymakers over the decades. Bangladesh has made impressive progress in ensuring food security and making positive movements toward the delivery of SDG 3 – end hunger, achieve food security and improved nutrition and promote sustainable agriculture by 2030. The country has boosted domestic agricultural production over the years and substantially reduced import dependency. This has contributed to a healthy and productive workforce, generated significant employment, and boosted GDP. According to the World Food Programme (WFP), the country’s prevalence of undernourishment decreased from 16.4 percent in 2016 to 9.7 percent in 2020. Other nutritional indicators have also improved. For instance, the Multiple Indicator Cluster Survey (MICS) 2019 reveals the prevalence of stunting among children under five fell from 41.30 percent in 2011 to 28.00 percent in 2019, while the prevalence of wasting declined from 15.70 percent to 9.80 percent within the same timeframe. These figures suggest that food consumption and nutritional status have also improved in the country during the past decades.

Through policies and plans, the Government of Bangladesh has consistently committed to achieving food security and nutrition for its people. Ever since the country’s independence in 1971, food security has been one of the primary agendas to be pursued by the Government. Building upon a strong commitment to agriculture and food security, the Government has also approved the National Agriculture Policy in 2018 and the National Food and Nutrition Security Policy in 2020.

The 7FYP targeted to ensure food and nutritional security, enhancement of sustainable intensification and diversification of climate-resilient agricultural production with increased commercialisation and livelihood improvement through technological innovations; strengthening research and extension system; developing supply chain extension of agricultural products; and linking the farming community with markets, both local and global. The major focus was centred on consolidating and expanding the productivity gains already achieved in food grain production as well as designing policies, strategies, and actions to accelerate the crop diversification and commercialisation process by increasing local and export market opportunities by the farmers and other stakeholders.

## 2.2 Agricultural Progress during 7FYP

In Bangladesh, agricultural growth has accelerated from less than 2.0 percent per year during the first two decades after independence to around 3.0 in the first decade of the 20th century (FY00-FY10). It then increased to 3.6 percent per year during the 6th Plan. This steady growth in agriculture largely attributed to a strong emphasis on rice production along with a proportionately balanced emphasis on non-rice crops has enabled Bangladesh to achieve virtual self-sufficiency in basic food grain and some other non-rice crops, especially vegetables, except in abnormal years marked by severe weather conditions and floods. Solid agricultural performance of the past decade has been instrumental in raising farm incomes and increasing real agricultural wages, thereby contributing handsomely to rural poverty reduction. Against the backdrop, the 7FYP aimed to sustain agricultural growth and diversification of agricultural production.

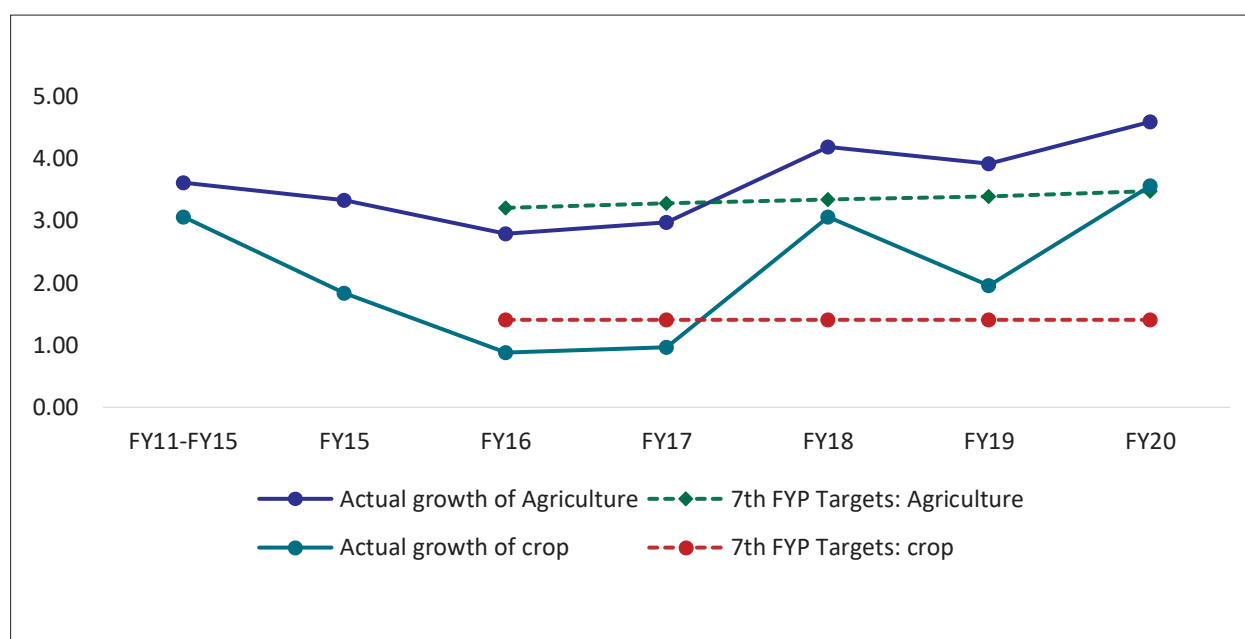
When compared to the other two sectors, the industrial and services sectors, agriculture is known for having lower growth. It is challenging to achieve and sustain the sector’s improved growth performance due to its subsistence nature of operation with very low labour productivity. In the first two years under the 7<sup>th</sup> Plan, the sector faced adverse circumstances: the growth rates were lower than the targets. However, the agriculture sector sufficiently exceeded the growth targets set in the 7FYP in the last three fiscal years. In particular, crop growth has performed well above expectations, which comprises more than half of the agricultural



GDP. During the 7<sup>th</sup> Plan, the agriculture sector grew at an annual average rate of 3.7 percent against the target of 3.3 percent. In contrast to the target rate of 1.4 percent, the crop subsector expanded at an annual average rate of 2.1 percent. It is worth noting that the 7FYP timeframe saw qualitative improvements in the agriculture sector, such as the integration of new and improved varieties of crops.

It is pertinent to note that rapid infrastructure development has aided agriculture in terms of growth and productivity. Smallholding farmers, farmer's groups, and large-scale farm operations have all benefitted from a smoother supply chain with easier access to more markets as a result of not only better roads and bridges, but also improved communications infrastructure, electrification, and internet connectivity. In order to do so, effective partnerships have been built with other government agencies, such as the Local Government Engineering Department (LGED). All subsectors have been positively impacted by these developments. This has helped establish a virtuous cycle, where the agriculture sector is able to enjoy greater returns, allowing for further vertical and horizontal expansion, thus enabling further growth. This has significantly boosted the realization of the diversification and commercialization targets set by the 7FYP. There are hopes that this positive trend incentivizes large-scale investment in the sector, allowing the supply side to benefit from both internal and external economies of scale, thus further strengthening agricultural growth.

**Figure 2.1: Agriculture and Crop Growth: Actual and 7FYP Targets (Percent)**



Source: Bangladesh Bureau of Statistics (BBS).

During the 7FYP, the annual average growth rate of the agriculture sector (3.7 percent) exceeded that of the 6FYP implementation period (3.6 percent). Apart from the crop and horticulture subsector, all components of the agriculture sector grew faster during the 7<sup>th</sup> Plan compared to the 6<sup>th</sup> Plan. The animal farming subsector grew at an average of 3.4 percent per year compared to 3.2 percent in the 6<sup>th</sup> Plan, forest and related services grew at 6.4 percent compared to 4.6 percent, and the fishing subsector grew at 6.2 percent against 5.8 percent in 6FYP.

**Table 2.1: Growth Rate of Agriculture Subcomponents during 7FYP**

Year	A. Agriculture and Forestry	i) Crops & Horticulture	ii) Animal Farming	iii) Forest & Related Services	B. Fishing	Total Agriculture (A+B)
Growth Rates (%)						
2015-16	1.79	0.88	3.19	5.12	6.10	2.79
2016-17	1.96	0.96	3.31	5.6	6.23	2.97
2017-18	3.47	3.06	3.4	5.51	6.37	4.19
2018-19	3.15	1.96	3.54	8.34	6.21	3.92
2019-20	4.10	3.47	3.56	7.36	6.02	4.59
Average of 7FYP (FY2016-FY2020)	2.90	2.07	3.40	6.39	6.19	3.69
Percent of GDP (%)						
2015-16	11.7	8.35	1.66	1.69	3.65	15.35
2016-17	11.12	7.86	1.6	1.66	3.61	14.74
2017-18	10.67	7.51	1.53	1.62	3.56	14.23
2018-19	10.15	7.06	1.47	1.62	3.49	13.65
2019-20	10.17	7.03	1.46	1.68	3.56	13.74
Average of 7FYP (FY2016-FY2020)	10.76	7.56	1.54	1.65	3.57	14.34

Source: Bangladesh Bureau of Statistics (BBS).

During the 7FYP, the crops and horticulture subsector registered an average annual growth rate of 2.9 percent. Efficient utilisation of limited land, availability of high-quality seeds, use of technologies in production, and access to credit contributed to the growth rate. During the 7FYP, on-farm water management, including irrigation infrastructure, expanded. The Government also invested in farm mechanisation, further propelling the growth rate. Yet, despite growth and development in the sector, there is still untapped potential in the agriculture sector. Consequently, future policy decisions should contend with taking advantage of the strong momentum, increasing yields and productivity, with further strengthening the sector.

The animal farming subsector has expanded significantly in the 7FYP timeframe as well. It is a crucial sector as it provides protein for consumption, generates employment, and sustains the lives and livelihoods of large swaths of the rural poor. The 7<sup>th</sup> five-year Plan advocated for sustainable improvements in milk, meat, and egg production and strengthened farmers' income generation, nutrition, and employment opportunities. In this regard, milk, meat, and egg production have increased significantly, with meat reaching self-sufficiency. The production of eggs has increased from under 11 billion in FY15 to 17.5 billion in FY20, and meat rose from 6.15 million metric tonnes (MT) in FY15 to 7.51 million MT in FY20.

The fisheries subsector saw remarkable success as well. The country received self-sufficiency in the production of fish and was one the leading producers of fish from inland waterbodies, along with being a global leader in aquaculture and marine fish production. This sector had increased more than five-fold since 1990 and recorded an average growth of 6.2 percent during the 7FYP. It was the fastest growing among the agriculture subsectors. Pond aquaculture using hatchery fishing and conversion of fishponds by

raising embankments around low-lying lands have been noted as key drivers of the growth in this sector. The subsequent national plans should hence look to capitalise on this growth, investing in combating the degradation of natural resources while boosting conservation and sustainable management efforts.

The forest subsector was the second fastest growing component in the agriculture sector during the 7FYP, growing at 6.4 percent each year on average. The 7<sup>th</sup> Plan looked to ramp up conservation and protection efforts for forest ecosystems for biodiversity and overall environmental stability while expanding afforestation programmes to combat poverty and generate employment. The Government has been successful in this regard, with total forest land increasing substantially in the 7FYP timeframe. Social forestry, coastal afforestation, plantation, and biodiversity conservation efforts were undertaken during this time. A Forest Policy Act was also enacted, along with the Bangladesh Delta Plan, in order to sustain the momentum.

Consistent with the stylised facts of structural transformation in developing economies, Bangladesh's share of agriculture in GDP has been on a secular decline. During the 7<sup>th</sup> Plan, the share of agriculture in GDP contracted by 2.26 percentage points to reach 13.74 percent in FY20 from the base year value of 16 percent in FY15. It is worth mentioning that at the end period of the 7FYP (FY20), the growth rate of the agriculture sector was 4.6 percent, which is higher than the GDP growth rate of 3.5 percent. This contributed to slightly increasing the agriculture sector's share in GDP from 13.65 percent in FY19.

### **2.3 Production and Diversification**

The 6<sup>th</sup> and 7<sup>th</sup> FYP strongly emphasised achieving and maintaining self-sufficiency in the production of rice and meeting the population's nutritional needs by supplying an appropriate and broad array of meals while ensuring environmental sustainability and farm-level profitability. For crops, Bangladesh has already met the production targets outlined in the Perspective Plan of Bangladesh 2010–2021 for rice, pulses, and maize, while it marginally lacked behind the target for wheat and potatoes. Rice production was targeted to be 36.8 million MT in FY21. Bangladesh surpassed the target, and the overall rice production stood at 37.6 million MT. Despite a drop until FY17 due to unfavourable weather, Boro rice production increased to 20.18 million MT in FY20. Aman and Aus rice production also increased substantially. Wheat production fell gradually until FY18 before rising slightly in the final two years. Production of vegetables also grew significantly in this timeframe, from 14.35 million MT in FY2016 to 18.45 million MT in FY20.

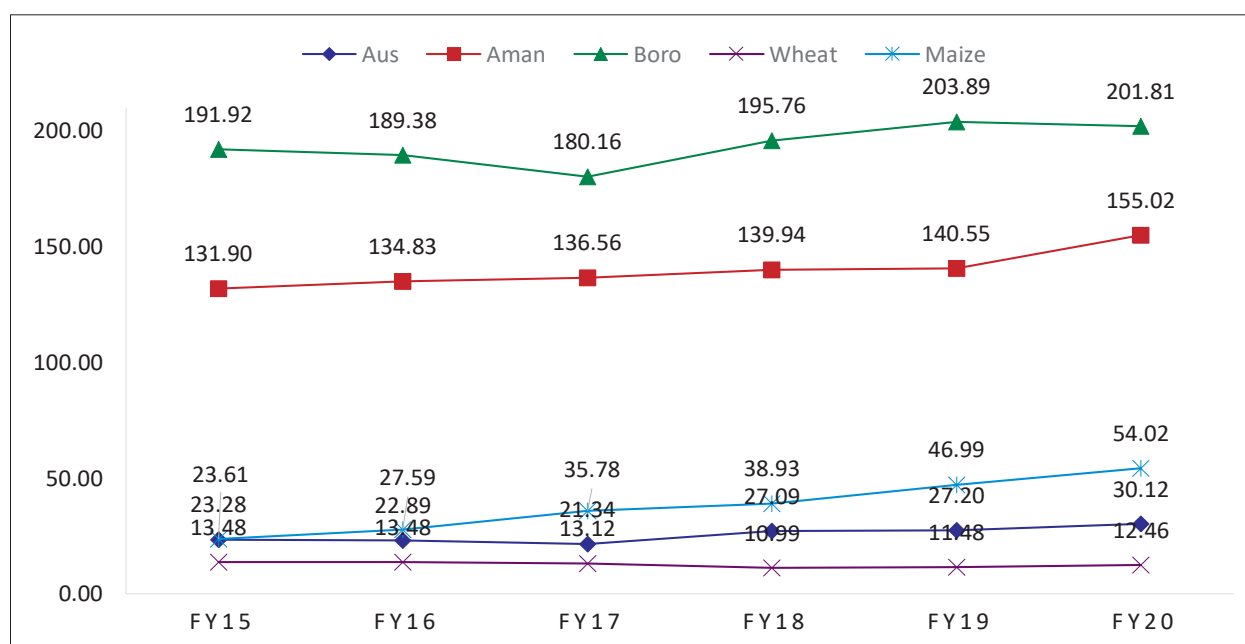
Bangladesh performed favourably in terms of increasing yield, maintaining growth in yield rate of 2.634 percent until 2018 (8<sup>th</sup> FYP). Notably, Aus grew at 3.205 percent per annum, Boro at 2.071 percent, and Aman at 1.893 percent (Figure 2.2). Overall, the productivity of rice, potato, pulses, maize, vegetables, and jute increased during the 7FYP timeframe (Table 2.2). This is a good sign given the Government's intention to bolster the amount of crop produced for every unit of land and may result from the concerted efforts to increase yield, including farm mechanisation and provision of various subsidies. This is a good step towards ensuring a strong and modern agriculture sector, and these gains should be further bolstered in the subsequent national plans.

**Table 2.2: Production Targets and Achievements of Selected Crops during FY16-FY21 (Million MT)**

Crop	FY16		FY17		FY18		FY19		FY20		FY21		FY21 Target
	Production (lakh MT)	Productivity (T/hectare)	Production (lakh MT)	Productivity (T/hectare)	Production (lakh MT)	Productivity (T/hectare)	Production (lakh MT)	Productivity (T/hectare)	Production (lakh MT)	Productivity (T/hectare)	Production (lakh MT)	Productivity (T/hectare)	Production (lakh MT)
Rice	34.71	3.05	33.80	3.07	36.28	3.12	36.39	3.16	36.60	3.21	37.61	3.21	36.81
Wheat	1.39	0.31	1.31	0.32	1.10	0.31	1.15	0.35	1.25	0.38	1.01	0.31	1.40
Potato	9.48	19.94	10.21	20.43	9.74	20.47	9.66	20.63	9.61	20.83	9.89	21.10	10.34
Oil Seeds	0.93	2.04	0.98	2.02	1.03	2.27	0.95	2.16	0.97	2.03	1.00	2.00	0.52
Pulses	0.38	1.02	0.39	1.07	0.39	1.07	0.38	1.08	0.40	1.12	0.43	1.16	0.31
Maize	2.27	6.78	2.45	6.29	3.03	*	3.57	8.02	4.02	8.52	4.12	8.58	1.85
Vegetables	3.06	6.44	13.42	26.85	12.91	27.13	13.52	28.88	13.56	29.39	14.62	31.20	n.a
Jute	7.56	11.15	8.25	11.18	8.90	11.74	8.58	11.45	8.05	11.85	7.73	11.33	n.a

Note: Million MT. Bale for jute.

Source: Ministry of Agriculture and PP2021

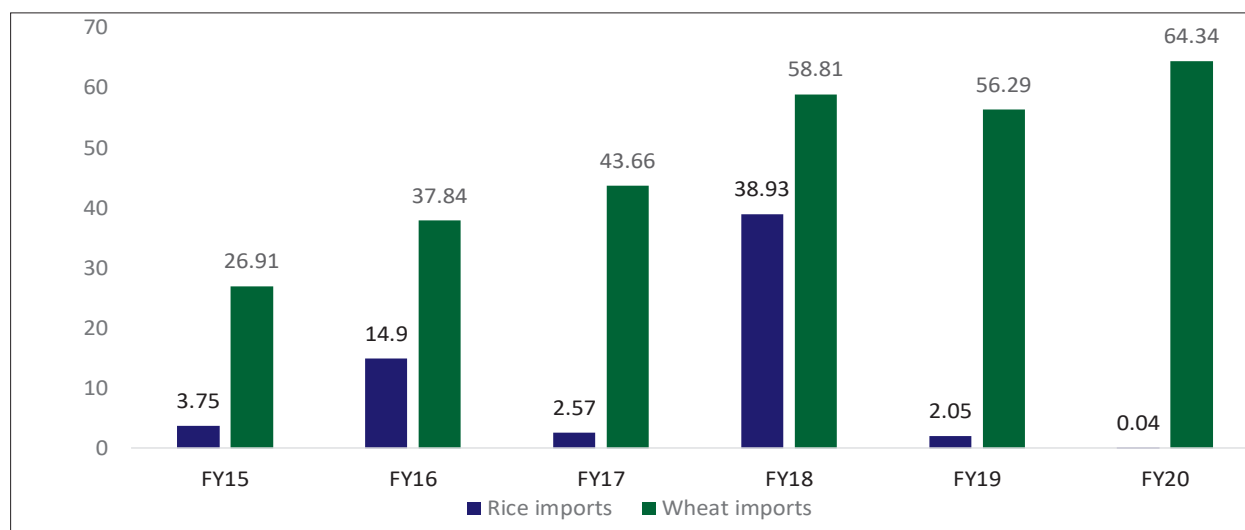
**Figure 2.2: Rice and Wheat Production during 7FYP (Lakh Metric Tonnes)**

Source: Bangladesh Bureau of Statistics (BBS).

The 7<sup>th</sup> Plan aims to ensure food security for the country's 160 million people. To ensure food security, Bangladesh mostly relies on domestic production and, to a small extent, on imports. Imports of rice and wheat can be used as an indicator of food security and for the country's self-sufficiency in serving its large population. Regarding rice, Bangladesh's outlay was considerably low during the 7FYP timeframe, except for in FY18, when 38.93 lakh tonnes were imported, as opposed to 1.33 lakh tonnes in the preceding year (Figure 2.3). This was due to three separate instances of flooding that severely damaged productivity to the extent of between 12-20 lakh tonnes of Boro rice. The Government had to import huge amounts of rice to ensure food security. In the following years, rice imports substantially declined, and at the end-period

of 7FYP, Bangladesh imported just 4000 tonnes of rice. The reduction in rice imports was due to high domestic production and yield. It also signifies that Bangladesh has the sufficient domestic capacity to feed its large population. While rice imports exhibited a mostly downward trend during the 7FYP, wheat imports had the opposite trajectory. This may result from changing consumption patterns in Bangladesh's population, necessitating wheat import to meet domestic demand.

**Figure 2.3: Rice and Wheat Imports During 7FYP, in Lakh Metric Tonnes**



Source: Food Planning and Monitoring Unit, Ministry of Food

Realising the need to diversify agricultural output, the Government of Bangladesh has taken initiatives to expand the sector portfolio. Developing new, improved varieties and increasing the availability of improved seeds are key elements to boost production and productivity. Several rice and non-rice improved varieties have been released on a regular basis by the research institutes under National Agricultural Research System (NARS) and Bangladesh's leading agricultural universities, such as Bangladesh Agriculture University (BAU). While some newly released varieties can tolerate climate stress (draught or salinity), some have superior quality, such as fine grain with aroma, and some are nutrition-enriched (zinc-enriched or green super rice). An annual average of 9.5 new varieties of paddy were developed during the 7FYP timeframe, with 13 coming in FY20. The average number of new varieties for other crops was 27.

The rational use of irrigation water is important for the sustainability of the agricultural system. In the FYP and related policy documents, surface water irrigation is being increasingly emphasised. The percentage of the cropped area under irrigation has increased slightly from 48.60 percent to 49.07 percent in FY20. Surface water irrigation also increased significantly from 21.10 percent in FY15 to 26.60 percent in FY18. The Government's various initiatives, e.g., the establishment of power pumps, construction of irrigation structures and pipelines, the introduction of alternate wetting and drying (AWD) methods, and rehabilitation of out-of-order deep tube wells, contributed to the expansion of irrigation areas.

Increasing fisheries and livestock production in a sustainable way by improving technological adoption, animal health, and resilient management practices are key elements for agricultural diversification and improving nutrition security. There was also a sustained increase in the annual quantity of fish production, averaging at a respectable 4.64 percent during the 7FYP timeframe. In regard to livestock development, there was also a persistent upward trend, with the figures consistently reaching above 6 percent. These trends exemplify the commitment towards diversifying the agricultural sector, which is a welcome move; the efforts therein should be sustained in the subsequent FYPs and national strategies.

**Table 2.3: Achievements of Some of the Diversification-Related 7FYP Objectives and Targets**

Proxy indicators	FY15	FY16	FY17	FY18	FY19	FY20	Average of FY16-FY20
<i>No. of improved new varieties</i>							
Paddy	9	10	6	11	8	13	9.5
Other crops	32	28	33	19	20	30	27
Annual change in improved rice, wheat, and maize seeds production	14.60 percent	-0.30 percent	15.60 percent	10.10 percent	-1.00 percent	-2.50 percent	6.08 percent
<i>Indicators related to sustainable agriculture</i>							
percent of the cropped area under irrigation	48.60 percent	48.24 percent	49.19 percent	49.28 percent	48.83 percent	49.07 percent	48.87 percent
Surface water irrigation area as percent of total irrigation area	21.10 percent	21.10 percent	*	26.60 percent	*	*	-
<i>Indicators related to fisheries and aquaculture development</i>							
Annual change in the quantity of fish production	*	5.20 percent	6.70 percent	3.50 percent	2.50 percent	5.30 percent	4.64 percent
<i>Indicators related to livestock development with a focus on poultry and dairy production</i>							
Annual change in artificial insemination	9.28 percent	6.27 percent	6.20 percent	4.85 percent	7.36 percent	7.58 percent	6.92 percent

\*= Data not available

Source: FPMU Food Security Monitoring Report 2017 and 2021, Ministry of Food and FAOSTAT.

The government has also undertaken a two-step approach towards insulating the sector from climate shocks. The first stage involves immediate support measures such as emergency relief and climate mitigation. Beyond cash transfers, in some instances, the government goes so far as to provide seeds in order to allow farmers a quick recovery. The second step includes long-term projects to build resilience, such as climate-sensitive development projects. These are implemented with the assistance of various agencies, such as the Local Government Engineering Department, Water Development Board and Bangladesh Agricultural Research Council. This has allowed the government to address critical issues such as salinity, flood management, and river erosion, in order to ensure sustainable agriculture growth. These efforts can further explain the strong and resilient performance of the agriculture sector during the 7FYP timeframe.

## 2.4 Agriculture Exports

In connection with Bangladesh's growing integration with the globalised world, the 7FYP set out to diversify the export portfolio. One salient target was to increase agriculture and fishery product exports. Bangladesh's export earnings from agricultural products have depicted a positive trend over the past two decades, from less than \$60 million in FY90 to \$1.3 billion in FY20. During the 7FYP, agriculture exports grew from \$1.15 billion in FY15 to \$1.4 billion in FY 2019, then declined slightly to \$1.3 billion due to the Covid-19-induced global health and economic crisis. The share of agriculture in total exports stood at 3.9 percent, increasing from 3.7 percent. Particular products, such as mangoes and specific spices and spice mixes, have shown potential to perform extremely well, particularly in European markets.

**Table 2.4: Share and Growth of Agriculture Exports, FY2015-FY2020**

	FY15	FY16	FY17	FY18	FY19	FY20
Total agriculture exports (billion \$)	1.15	1.13	1.08	1.18	1.41	1.32
Overall exports (billion \$)	31.08	34.11	34.66	36.67	40.54	33.67
Share of agriculture in total exports	3.70	3.32	3.10	3.22	3.48	3.91
Share in Total Agriculture Exports (%)						
Product	FY15	FY16	FY17	FY18	FY19	FY20
(1) Frozen & Live Fish (Chapter 01-03)	49.22	47.34	48.76	43.01	35.51	34.60
a) Live fish (0301)	0.24	0.81	0.75	0.74	1.24	0.87
b) Frozen fish (0300, 0302, 0303)	3.89	3.93	4.08	4.93	4.53	5.71
c) Shrimps (0306 Excl. 030614, 030624)	43.50	39.63	41.31	34.57	25.62	25.23
d) Crabs (030614, 030624)	0.66	2.10	1.69	1.47	3.05	1.89
e) Others	0.92	0.86	0.93	1.30	1.06	0.91
(2) Agricultural Products (04-24)	50.78	52.66	51.24	56.99	64.49	65.40
a) Tea (0902)	0.23	0.16	0.41	0.23	0.20	0.24
b) Vegetables (07)	8.95	9.22	7.51	6.60	7.07	12.44
c) Tobacco (24)	5.93	4.86	4.32	4.77	4.49	6.10
d) Cut Flower & Foliage (06)	0.98	0.42	0.01	0.01	0.38	0.00
e) Fruits (08)	3.33	1.79	0.25	0.19	0.02	0.04
f) Spices (0910)	2.01	2.57	3.24	3.63	2.93	2.52
g) Dry Food (19)	8.17	8.49	10.15	17.03	16.11	14.69
h) Others	21.18	25.17	25.35	24.53	33.28	29.36
Year-on-Year Growth Rate (%)						
Product	FY15	FY16	FY17	FY18	FY19	FY20
Total agricultural exports (Chapter 1-24)	-	-1.93	-4.61	9.50	19.22	-6.47
(1) Frozen & Live Fish (Chapter 01-03)	-	-5.68	-1.74	-3.42	-1.58	-8.84
a) Live fish (0301)	-	225.68	-11.94	8.45	100.80	-34.80
b) Frozen fish (0300, 0302, 0303)	-	-1.00	-1.01	32.38	9.45	17.99
c) Shrimps (0306 Excl. 030614, 030624)	-	-10.66	-0.56	-8.37	-11.64	-7.89
d) Crabs (030614, 030624)	-	211.16	-23.23	-4.92	147.01	-42.12
e) Others	-	-7.83	2.77	52.49	-2.09	-20.41
(2) Agricultural Products (04-24)	-	1.71	-7.20	21.79	34.92	-5.16
a) Tea (0902)	-	-30.50	144.88	-38.03	1.81	10.64
b) Vegetables (07)	-	1.07	-22.34	-3.76	27.83	64.53
c) Tobacco (24)	-	-19.68	-15.21	20.96	12.31	26.89
d) Cut Flower & Foliage (06)	-	-58.36	-98.31	12.50	5877.78	-99.44
e) Fruits (08)	-	-47.44	-86.70	-16.73	-85.27	48.48
f) Spices (0910)	-	25.04	20.26	22.80	-3.75	-19.44
g) Dry Food (19)	-	1.90	14.13	83.71	12.77	-14.70
h) Others	-	16.55	-3.91	5.93	61.76	-17.47

Source: Export Promotion Bureau (EPB) of Bangladesh.



## 2.5 Impact of the Covid-19 Pandemic

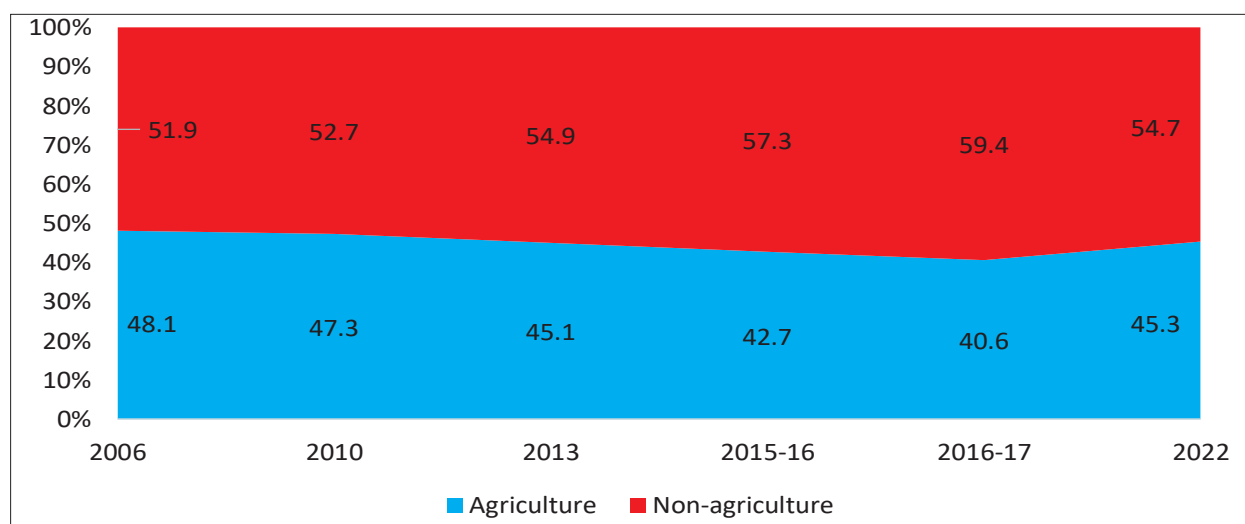
The unprecedented Covid-19 pandemic significantly impacted Bangladesh's overall growth trajectory in FY20. This is exemplified by manufacturing and service growth falling from 12.7 percent and 6.8 percent, respectively, in FY19 to 3.3 percent and 4.2 percent in FY20. Yet, the agriculture sector remained robust and registered stronger growth than in previous years. This is a testament to the fact that the agriculture sector is relatively well-insulated from external shock. This had a profound impact on Bangladesh's resilience, as the resilience of these sectors helped the country prevent food crises and mitigated concerns about importing rice and wheat, freeing up crucial fiscal space. However, there were still significant impacts felt in the sector. Social security provisions, including those available from previous years and introduced as emergency assistance in the wake of the Covid pandemic, proved crucial in this regard. The public procurement and distribution system also proved integral to maintaining stability and ensuring food security during the 7FYP timeframe. In the future, Bangladesh should build on this performance and strengthen the insulation from large-scale shocks to further negate the impacts of exogenous factors. Moreover, while Bangladesh's Government was quick and effective with many of its responses, including providing financial support to farmers, the longer-term effects of the Covid pandemic may need broader policy solutions to mitigate in the near future.

## 2.6 Agriculture and Employment

As a developing economy, a significant portion of Bangladesh's workforce has historically been involved with primary sector activity. Yet, as Bangladesh undergoes structural transformation - economic activities are shifting from agriculture towards manufacturing and services, the agriculture sector comprises the largest share of employment. According to the provisional report of the labour force survey 2022, the agriculture sector accounted for 45.3 percent of total employment, while the sector contributed less than 12 percent to GDP in FY2022. The sector employed 32.2 million people in 2022. This will be much higher if the indirect contribution to employment is considered.

Surprisingly, after a secular decline of agricultural employment in total employment, it reversed in 2022. The share of agriculture in total employment declined from 48.1 percent in 2006 to 40.6 percent in 2016-17, then increased to 45.3 percent in 2022 (Figure 2.4). It should be accountable for the loss of employment amid covid-19. The rise in the overall price and high inflation, causing the increase in the cost of living, may force more people, especially women, to involve in agriculture. The overall labour productivity in agriculture is low compared to other sectors; the additional employment in this sector could imply a further decline in productivity. Concerted efforts should be made for productivity in both the intensive and extensive margins; the sustained slide in agricultural employment should be arrested to ensure that the sector is robust. Productivity should also be increased by leveraging technologies and upskilling workers.

**Figure 2.4: Share of Employment by Sector, 2006-2022**



Source: Labour Force Survey, BBS (various years).

## 2.7 Progress on Food Security during the 7FYP

To ensure food security and nutrition for the citizens, the 7FYP focused on improving food availability and utilisation. This indicates that the Government prioritised domestic production and imports (progress to which has been aforementioned) and the consumption of macronutrients in the country. Bangladesh has made remarkable progress in domestic food production over last few decades. As such, food availability, measured by kilocalories (kcal) available per day per capita, has increased, and so has food utilisation, measured by the amount of consumption compared to the desirable levels. Policies have also been enacted to sustain further food security, particularly the Food and Nutrition Security Policy enacted in 2020.

### 2.7.1 Food Availability during the 7FYP

Food availability saw a marked increase in the 6th FYP, and this progress was continued in the 7<sup>th</sup> FYP timespan. Bangladesh achieved self-sufficiency in foodgrains production (Table 2.5). Total domestic production of foodgrains increased from 36 million MT in 2014-15 to 40.7 million MT in 2021-22 (Table 2.6). During the 7FYP, per capita availability of foodgrains grew from the baseline value of 634 grams per person per day in 2014-15 to 687 grams in 2019-20. Similarly, the aggregate production and per capita availability of non-food grains increased substantially (Table 2.7). Importantly, the proportion of rice in the total food per capita intake has decreased, signifying that other crops are taking up a higher proportion of the Bangladeshi diet.

**Table 2.5: Foodgrains (Rice and Wheat) Availability and Requirement in Bangladesh**

	2004-05	2009-10	2014-15	2019-2020	2021-22
Net foodgrain requirement	24,949	26,717	29,354	23,674	24,013
Gross foodgrain production	26,133	33,158	36,058	37,633	40,707
Net foodgrain production	23,520	29,210	31,691	33,086	35,785
Foodgrain surplus/deficit	-1,429	2,492	2,337	9,412	11,772

Source: FPMU: Database on Food Situation, Ministry of Food.

**Table 2.6: Foodgrains (Rice and Wheat) Production and Availability in Bangladesh**

Year	Domestic Production (Gross) ('000 MT)	Net Domestic Production ('000 MT)	Private Imports ('000 MT)	Public Distribution ('000 MT)	Domestic Procurement ('000 MT)	Net Domestic Availability ('000 MT)	Per Capita Availability (Gram/Per Day)
1996-97	20,336	18,302	237	1,392	615	19,316	430
1997-98	20,665	18,599	1,135	1,620	617	20,737	454
1998-99	21,813	19,632	3,480	2,134	753	24,493	528
1999-00	24,907	22,416	1,234	1,901	967	24,584	522
2000-01	26,759	24,082	1,063	1,774	1088	25,831	540
2001-02	25,905	23,315	1,289	1,463	1053	25,014	515
2002-03	26,694	24,026	2,966	1,435	947	27,480	558
2003-04	27,442	24,698	2,480	987	843	27,322	544
2004-05	26,133	23,520	2,980	1,367	899	26,968	529
2005-06	27,266	24,539	2,265	1,245	945	27,104	524
2006-07	28,055	24,666	2,209	1,480	1,140	27,215	523
2007-08	29,775	26,177	2,916	1,560	267	30,386	576
2008-09	32,166	28,281	2,217	2,160	762	31,895	596
2009-10	33,158	29,210	2,900	1,962	792	33,280	614
2010-11	34,513	30,342	3,108	2,293	463	35,280	643
2011-12	34,869	30,655	1,239	2,095	1,426	32,563	588
2012-13	35,088	30,840	1,418	2,086	1,410	32,934	583
2013-14	35,657	31,339	2,137	2,220	1,438	34,258	599
2014-15	36,058	31,691	4,940	1,839	1,675	36,795	634
2015-16	36,058	31,691	4,206	2,064	1,232	36,730	626
2016-17	35,114	30,862	5,431	2,241	1,383	37,150	626
2017-18	37,376	32,858	8,383	2,110	1,429	41,677	698
2018-19	37,408	32,888	5,290	2,594	2,415	38,349	635
2019-20	37,633	33,086	5,607	2,777	1,872	43,989	687
2020-21	40,943	35,991	5,650	2,452	1,403	51,174	834
2021-22	40,707	35,785	3,771	2,886	1,540	40,545	653

Note: 1. Net production is estimated after 10 percent deduction from gross production (12 percent after 2006-07) for seed, feed, waste etc.

2. Population figures are obtained from the BBS projection.

Source: FPMU: Database on Food Situation, Ministry of Food.

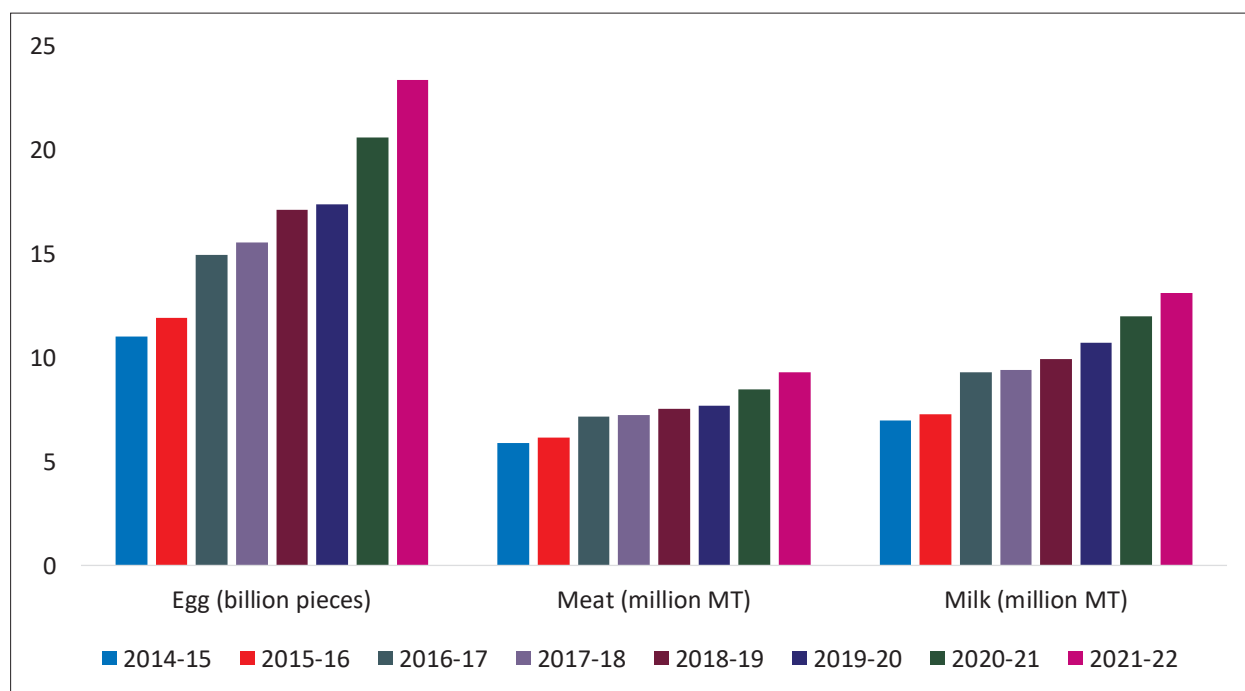
**Table 2.7: Availability of Food during Various Time Periods (Kcal/Day/Capita)**

Items	2004-05	2010-11	2017-18
Food grains (rice and wheat)	495	638	634
Potato	108	153	168
Pulses	10	13	7
Oilseed	10	15	16
Vegetables	35	57	70
Fruits	68	65	78

Source: BBS, DLS, DOF

During the 7FYP, Bangladesh produced record numbers of eggs and milk, which helped ensure food security and healthy diets. During the 7<sup>th</sup> plan period, Bangladesh achieved self-sufficiency in meat and egg production (Table 2.8). Meat production reached 7.7 million MT in 2019-20 from 5.86 million MT in 2014-15 (Figure 2.5, Table 2.8). Milk production during this time increased from 6.97 million MT to 10.7 million MT (an increment of 53 percent) while production of eggs grew by 58 percent. With increasing production, per capita availability of milk, meat, and egg rose to 175.6 milliliter/person/day, 126.2 gram/person/day and 104.2 piece/person/year, respectively, in 2019-20 (Table 2.8).

**Figure 2.5: Production of Eggs, Milk, and Meat in Bangladesh (FY15-FY22)**



Source: Department of Livestock Services (DLS), Ministry of Fisheries and Livestock (MoFL).

**Table 2.8: Demand, Production, Deficiency and Availability of Milk, Meat and Eggs**

Item	FY15				FY20			
	Demand	Production	Deficiency	Availability	Demand	Production	Deficiency	Availability
Milk (million MT)	14.48 (250 ml/day/head)	6.97	7.51	122 (ml/day/head)	15.2 (250 ml/day/head)	10.68	-4.522	175.63 (ml/day/head)
Meat (million MT)	6.95 (120 gm/day/head)	5.86	1.09	102.62 (gm/day/head)	7.3 (120 gm/day/head)	7.674	0.377	126.20 (gm/day/head)
Egg (million pieces)	16,504.8 (104 nos./year/head)	10,995.2	5,509.6	70.26 (nos./year/head)	17,326.4 (104 number/year/head)	17,364.3	37.9	104.23 (numbers/year/head)

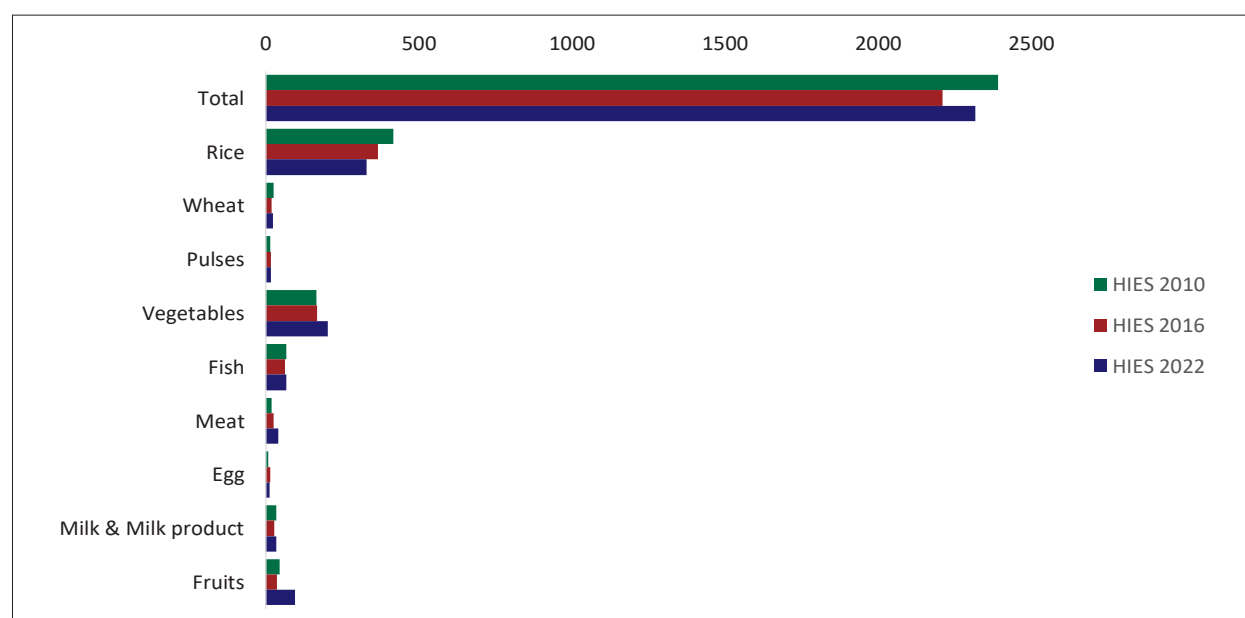
Source: Department of Livestock Services (DLS), Ministry of Fisheries and Livestock (MoFL).

### 2.7.2 Food Consumption during the 7FYP

Actual consumption of food serves as the most reliable indicator of both the availability and accessibility of food. In the context of Bangladesh, the per capita food intake has witnessed a notable increase during the 7<sup>th</sup> Five-Year Plan (7FYP) compared to previous years, signifying positive progress. To illustrate this trend, Figure 2.6 presents a comparative analysis of total food intake data obtained from the Household Expenditure and Income Survey (HEIS) 2010, 2016, and 2022.

Although there was an overall decrease in food consumption between 2010 and 2016, a significant positive shift occurred in 2022, with a remarkable 8.26 percent increase in total food consumption. This translated to an average of 2,383 kilocalories per capita per day in 2022. What's particularly encouraging is that this upward trend in food intake was accompanied by an increase in the consumption of essential food groups such as meat, fish, fruits, and vegetables. This shift in dietary patterns indicates an enhancement in the qualitative aspect of the Bangladeshi diet. While there was a slight decrease in rice consumption, the consumption of wheat and pulses experienced slight increases during the same period.

**Figure 2.6: Changes in Various Crop Intake in Bangladesh, 2010-2022 (Kcal/Day/Capita)**



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

The HIES 2022 report reveals that Bangladesh has made considerable progress towards achieving the desirable calorific intake per capita per day. Despite falling short of the target in every HIES survey since 1991, the recorded figure of 2393 kilocalories in 2022 represents the closest the country has come to reaching the desired level. This notable advancement marks a substantial improvement from the HIES 2016 findings, which displayed a significant deviation between the desired and actual calorific intake levels.

When comparing the actual consumption data with the data on desirable dietary patterns, it becomes evident that there exists a noticeable gap for proteins. This gap highlights the need to increase the supply and consumption of nutrient-dense foods, which are crucial for bridging the nutrient gap. In order to achieve this objective, it is essential for policies to address and enhance both the nutrient density and diet quality, ultimately promoting greater dietary diversity among the population. Efforts should be directed towards improving the nutrient density of available food sources. This involves ensuring that foods are not only abundant but also rich in essential nutrients such as vitamins, minerals, and proteins. This approach is vital for combating micronutrient deficiencies and sustaining the positive trends in food security in Bangladesh.

**Table 2.9: Per Capita Calorie and Protein Intake for Bangladeshi Households**

Survey Years	Calorie Intake (Kcal/Capita/Day)	Protein Intake (Gram/Capita/Day)
2022	2393	-
2016	2210	64
2010	2318	66
2005	2239	63
2000	2240	63
1995-96	2244	65
1991-92	2266	63

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

## 2.8 Resource Allocation for Agriculture and Food Security

Bangladesh's commitment to food security has also translated onto its budgetary allocation. In FY20, the share of the agricultural budget was 5.4 percent of total public spending. Since FY15, the allocation for the agriculture sector increased by 78 percent from Tk 15,923 crore to Tk 28,350 crore in FY20 (Table 2.10). Notably, the allocation for the agriculture sector grew by 25.8 percent in FY19 – this may have been a knock-on effect of the higher imports in the previous fiscal year. It should also be noted that the development budget has increased at a faster rate than the revenue budget. This implies that the focus has been placed on capital expenditures which will give longer-term returns, as opposed to revenue expenditures which are more geared toward pre-existing and current affairs. Going forward, a more consistent path for investing in agriculture should be taken, especially given the Covid-19 pandemic and subsequent economic shock.

**Table 2.10: Resource Allocation for Agriculture and Food Security during 7FYP**

FY	Total Budget (Crore tk.)	Percent Increase in Total Budget	Agriculture Budget				Allocation of Agriculture in Total Budget (%)
			Revenue (Crore tk.)	Development (Crore tk.)	Total Budget (Crore tk.)	Percent Increase in Total Budget	
2014-15	250,506	-	11,551	4,372	15,923	-	6.36
2015-16	295,100	17.80	12,254	5,954	18,208	14.35	6.17
2016-17	340,605	15.42	12,848	6,683	19,531	7.27	5.73
2017-18	400,266	17.52	12,593	7,567	20,160	3.22	4.78
2018-19	442,541	10.56	15,484	9,870	25,354	25.76	5.73
2019-20	523,190	18.22	17,003	11,347	28,350	11.82	5.42

Source: Ministry of Finance (MoF).

## 2.9 Policy Measures Taken for Agriculture and Food Security during 7FYP

During the 7FYP, the Government of Bangladesh implemented different policies and actions to increase agricultural productivity and improve food security. Bangladesh enacted the National Agriculture Policy in 2018. The National Agriculture Policy 2018 aims to ensure safe, profitable agriculture and sustainable food and nutrition security. It seeks to ensure food security while also improving the livelihoods of those employed in the agriculture sector. The major focus of the policy includes:

- increasing availability of food and modernising and developing agricultural research, and adopting and implementing food production plans,
- increasing farmers' capabilities and incomes while helping increase agricultural production and ensuring marketing facilities of agricultural commodities while obtaining fair prices
- creating sustainable agricultural production systems by increasing productivity, reducing the use of physical labour, creating new sectors of commercialisation, and ensuring proper use of water resources.
- The Food and Nutrition Security Policy was also enacted in 2020 to further ensure the requisite food and nutritional security in line with the SDG targets set for 2030.
- It looks to work on all dimensions of food security, including availability, utilisation, accessibility, and stability.
- The policy further advocates strengthened governance, coordination, capacity, and partnerships to improve policy implementation. In order to do so, it takes a whole of society approach, focusing on all possible elements, i.e., the environment, people, inputs, processes, infrastructure, institutions, markets, and trade. It was designed as an evolution of the second country investment plan for nutrition-sensitive food systems (2016-2020).

The OMS-2015 policy is also undergoing reform. The intention is to adapt the policy in order to make it more responsive to current market challenges. Multiple policies have also been undertaken under the purview of the Ministry of Food, including Food Safety (Labeling) Regulations and the Use of Food Additives Regulations. These are intended to ensure that the food available to consumers complies with safety guidelines.

A large-scale initiative to strengthen farm mechanisation has also been undertaken. In order to empower capital inputs in the agricultural production process, the Government has incentivised the use of various machinery, including power tillers, rice transplanters, seeder machines, irrigation pumps and sprayers, reapers, and threshers. Restrictions on these imports have been relaxed, and subsidies are provided for farmers on machinery purchases. Combined with applied research and complementary policies for increasing agricultural productivity, the Government aims that these mechanisms will lead to massive gains in agricultural output in the forthcoming years.

In order to augment the efforts for food security, the Government has also continued and strengthened the safety net to ensure the availability and utilisation of food. Programmes that use various mechanisms to provide food to the vulnerable include open market sales, vulnerable group feeding, vulnerable group development, employment generation programme for the poorest, test relief, work for food, food-friendly programme, and school feeding programme. These programmes are part of the Government's public food distribution system (PFDS). A public procurement system is in place, which allows the Government to stabilise prices and for farmers to get fair returns. These programmes have seen a substantial increase in nominal allocation during the 7FYP.

Beyond these major policy instruments, other policies such as the National Forest Act, the National Strategy for Adolescent Health, and the National Action Plan for Nutrition all work towards strengthening the agriculture sector and ensuring food security for the population. In line with the objectives of Digital (and the subsequent Smart) Bangladesh, technology-based inputs have been strongly subsidized and training has been provided. By integrating these initiatives with the broader policy framework, methods such as the Smart Card system for reducing information asymmetry amongst farmers have helped create a more vibrant agriculture sector. Machineries that are or have been introduced include modern tillers, tractors, and others that contribute towards precision agriculture.



## 2.10 Challenges in Agriculture and Food Security

Amid remarkable structural transformation, it is imperative that proper attention is given to ensuring that the agriculture sector remains robust. This is in conjunction with the low productivity of agricultural labour. While more than 45 percent of employment is involved in agriculture, the sector contributes to less than 12 percent in GDP. Recently, the rising employment in the low-productive agriculture sector is a major concern for Bangladesh. Additional employment in this sector means the average labour productivity would be even lower. In this respect, policy instruments should be designed to expand irrigated, cropped land and maximise their output while ensuring that the agriculture sector is a viable career path for Bangladesh's working-age population. Measures should also be devised cognizant of and addressing the large scale of informality in the agriculture sector. These are integral to ensuring that food security remains stable, and Bangladesh sustains self-sufficiency in food production.

There are multiple dimensions of land usage in agricultural production. There is significant land loss due to increasing salinity, flooding, and river erosion. Rapid urbanisation as part of Bangladesh's development journey may minimise the amount of arable land available for the agriculture sector. In this regard, development projects and goals should be set, keeping in mind the potential loss of land as an additional opportunity cost.

Climate change issues and their impact on agricultural production should also be a priority area for the Government in the coming years. These factors affect productivity, as salinity can affect yield, and climate-based disasters can significantly hamper the total output of the agriculture sector, especially if they occur during the harvesting season. This has been seen in the case of flooding in FY17. Climate disasters could lead the affected population into poverty and food insecurity, especially in rural and hard-to-reach areas. To this end, climate-sensitive policies have provisions for the agriculture sector. For example, the Delta Plan 2100, Mujib Prosperity Plan and Integrated Pest Management Policy are all positive steps towards enabling a climate-sensitive and environment-friendly agriculture process. Ensuring effective implementation of these policies, alongside taking complementary initiatives, is integral to ensuring the sustainable agricultural growth.

Fertilisers also act as a key agricultural input. The Government rightly subsidizes fertiliser usage to ensure agricultural productivity. Subsidies are provided for agricultural machinery and other inputs. Despite price shocks and global macroeconomic trends, these subsidies should be given the utmost importance. Further, social protections are available in certain cases for farmers and agriculture sector workers to protect them from shocks and to stabilise their year-on-year incomes. These initiatives should be bolstered in order further to augment the prospects of agriculture in the country.

Additionally, concerns regarding dietary diversity and the quality of the food produced need to be addressed. These are critical issues, not only for building a healthy and productive workforce, but quality control is integral to maximising the export potential of agricultural outputs. In order to do so, regulatory and implementation frameworks need to be addressed while also continuing the research on newer and better crop varieties. This would also enhance the growth of the agriculture sector tremendously. Failing to ensure this can harm the consumers' health; mere negligence of calorific requirements from food may lead to consumption-related illnesses such as obesity, stroke, and heart disease. As such, strong political commitment amongst regulatory bodies should also be a priority for food security.

Food safety has also been a concern for Bangladesh during the 7FYP, and the Ministry of Food has undertaken various initiatives to ensure that the food that consumers purchase is healthy and non-toxic. To this end, the Bangladesh Food Safety Authority has been working diligently. Yet, there is a need for increased capacity amongst all the stakeholders, including producers, consumers, food business, and testing agencies. To this end, a higher degree of resource mobilization would allow capacity building initiatives to be undertaken, in order to ensure that the food being produced is healthy and safe.

Finally, the potential for commercialisation in the agriculture sector will not be fully realised until there is strong infrastructural and logistic support for the sector. This includes undertaking projects to maximise efficiency gains in getting the commodity from the producers to the final consumers, such as building more effective bridges and roads in hard-to-reach areas. It also includes minimising unnecessary costs, such as the additional markup charged by various wholesalers and transporters. Unnecessary red tape should also be minimised for the export sector, and proper information should be disseminated amongst the business community in order to empower them to take advantage of the various preferential market access in place to boost agricultural product exports.

## 2.11 Conclusion and Way Forward

Bangladesh achieved a lower-middle-income country status by 2015 and aspires to achieve an upper-middle-income country status by 2031 and high-income status by 2041. In this journey, the agricultural sector is critical for accelerating GDP growth, ensuring food and nutrition security, and the livelihood of those earning their livelihood from agriculture. The 7<sup>th</sup> Five-Year Plan (7FYP) in Bangladesh has demonstrated a strong commitment to agriculture and food security, resulting in significant progress towards Vision 2041. The biggest achievement during the 7FYP timeframe was the achievement of food self-sufficiency in various crops, meaning that the country does not need to import these food items in order to meet domestic demand. Rice production surpassed the targets, and vegetable production witnessed significant growth. Productivity improvements have also been achieved in various crops, contributing to food availability and per capita consumption. The 5-year span also saw significant progress through the publication of various policies and legislation in order to strengthen the agriculture sector and the food security situation in the country.

The 7FYP prioritized sustainable agricultural production, infrastructure development, research and extension systems, and supply chain development, with a focus on creating local and export market opportunities for farmers. The agriculture sector exceeded growth targets, supported by improved infrastructure and market access. Investments in farm mechanization and water management have further propelled agricultural growth.

Diversification of agricultural production has been a key focus of the 7FYP, leading to increased agricultural exports. While there has been steady growth in agricultural exports, there is still potential for further expansion, particularly in markets such as Europe. The government's efforts to diversify the agricultural sector, develop improved crop varieties, and enhance irrigation systems have been instrumental in achieving sustainable growth. The sector has shown resilience in the face of climate shocks, with measures in place to build resilience and provide immediate support. Food availability has improved, with self-sufficiency in foodgrains, meat, and egg production. However, challenges remain in achieving desired levels of total food consumption and compensating for the decrease in rice consumption.

Budgetary allocation for the agricultural sector has increased, indicating the government's commitment to agriculture and food security. However, consistent investment in agriculture is crucial, particularly in light of the economic impact of the Covid-19 pandemic. Continued support to the sector, augmented by strategic policies and long-term planning, will be essential to sustain and further enhance the achievements made during the 7FYP. Addressing challenges, promoting diversification, and ensuring equitable access to resources and markets will contribute to the long-term growth and resilience of the agricultural sector and ensuring food security in Bangladesh.

In this context, increasing production is not enough; instead, the production portfolio needs to be diversified, particularly to ensure nutrition security and increasing farm income. A transformation of the country's agriculture sector towards commercialisation and a sustainable production system is urgently needed. Modern and innovative technologies should be adopted, and their feasibilities should be explored, with effective training and upskilling strategies in place for farmers.

### **Developing Climate-Sensitive Production Processes**

Farmers in Bangladesh are acutely aware of the impacts of climate change. Various climate-related factors, such as unusual behaviour in temperature, salinity, floods, river erosion, etc., have consistently been detrimental to agricultural output, leading to lower production. The salinity level of groundwater along with the surface water, will rise rapidly due to the sea level rise as a direct impact of climate change. Policies intended to mitigate some of the adverse effects of these climate-related factors should be strengthened. Moreover, developing varieties of crops that are resilient to salinity, drought, and extreme weather changes will also be crucial to securing higher production in agriculture. Technologies that adapt to climate, along with low resource-consuming farming, are also avenues that should be explored to counter climate change's effects. The Department for Agriculture Extension has been advocating for agriculture-based climate forecasts alongside the national weather forecasts in order to scientifically predict output ex ante to shocks. Innovations such as these would help ensure a stable level of output for crops and, in turn, would further strengthen the food security position of the country. The Government has also undertaken the Delta Development Plan 2100, Mujib Climate Prosperity Plan, and Perspective Plan 2021-41. There are specific sections and strategies for tackling climate change and protecting agricultural productivity. Effective implementation of these policies will be critical for higher agricultural production and food security.

### **Ensuring a Healthy and Balanced Diet**

As aforementioned, while substantial food security has been ensured in the country, the calorific content of food consumption is still far from desirable levels. For example, while Bangladeshis receive enough protein in their diet and are able to sustain themselves, they are still below the desirable levels of calorific intake. In order to ensure productivity, a healthy and balanced diet should be available for the population. While the current diet per capita is not unhealthy, subtle changes can be made to make it more balanced, thus making the population more productive. This means shifting away from food that is consumed over the desirable levels and increasing food intake that is not consumed in healthy amounts. In this regard, both demand and supply side measures should be taken. On the demand side, consumption-shifting strategies and behaviour change programmes should be undertaken, whereas on the supply side, the production of beneficial and under-consumed crops should be increased. This can be ensured by providing subsidies and low-cost seeds for these crops.

### **Efficient use of Land and Further Investing in Productive Capacities**

Bangladesh's Government has recently undertaken a policy to leave no land fallow or uncultivated in a bid to increase usage of the productive factor. This has been a timely and crucial policy for further increasing the output of the agriculture sector. Yet, as Bangladesh's agricultural yield is still lower than contemporary economies, investments should also be made in increasing the productivity of the agriculture sector. In other words, the Government needs to facilitate higher productivity at both the extensive (amount of land used) and intensive (yield per acre) margins. In order to ensure this, research initiatives by institutions such as the Bangladesh Rice Research Institute (BRRI) and the Bangladesh Agriculture Research Institute (BARI) should be encouraged and facilitated. Further, the usage of modern technologies should be incentivised, along with providing sufficient support to the labour force to leverage the productive capacity of these tools fully. This means allowing subsidies and other benefits for the usage of modern technologies and undertaking capacity-building programmes at the grassroots level to maximise the utilisation of technology will be important.

### **Developing Proper Infrastructure for the Agriculture Sector**

A well-functioning market that facilitates competition can be conducive to supporting the healthy growth of the agriculture value chain. The marketing of agricultural commodities is often hampered by poor transport and inadequate market infrastructure, pushing up transaction costs and price volatility. Improved market infrastructure can reduce the cost of food and uncertainty of supply and improve the food security of

poor and non-poor households. Although there has been a substantial expansion of road communication over the past years, existing roads, railways, and waterways, particularly in rural areas, are insufficient, which negatively impacts the growth of perishable high-value products. Because of underdeveloped market infrastructure, the root-level farmers and households cannot capture the highest rent, and a major part of the revenue goes to the middlemen. Therefore, market mechanisms will be developed in a way so that rules and regulations will be enacted to ensure that farmers are getting real benefits for their sweat-toiling agricultural products.

Recently, the exports of agro-processed goods have increased, resulting in increasing demand for cool chambers and vans. Moreover, semi-perishable commodities, e.g., cabbage, cauliflower, carrot, potato, milk, fruits, etc., can be stored in cool chamber/storage and also can be transported in the domestic market through cool van, which ultimately can ensure fair prices to the producers and can help maintain the demand-supply balance in the market for all seasons. So, with a view to minimise establishment costs, multipurpose cold storage will be installed instead of traditional cold storage.

### **Agriculture Subsidies**

Bangladesh currently provides subsidies for a host of productive agricultural activities, including the purchase of fertilisers and specialised machinery. These initiatives allow for producers, who generally do not have sufficient working capital to invest in these inputs, to produce at optimal levels. These subsidies are hence crucial to ensuring food security in the country. Thus, even amidst shrinking fiscal space in the wake of the Covid pandemic and subsequent macroeconomic crisis, these subsidies were not slashed. These expenditures should be prioritised and updated to ensure that the supply side uses productive machinery and is up to the mark.

### **Increasing Investment in Agriculture**

The agriculture sector is characterised by high informality in labour employment. Due to the high informality, low productivity, and low productivity of the agriculture sector, there is a lack of investment in this sector as private sector actors prefer to invest in the industrial or service sector. Investing in this sector is necessary to make it more productive. Private sector actors should be encouraged to invest in the agricultural sector and find innovative and technology-based interventions to increase productivity and returns from the sector. Effective training, combined with the aforementioned infrastructural developments, should be undertaken to strengthen the agriculture sector's appeal.

#### **Increasing agricultural exports**

The share of agriculture in total exports remains low – just 3.9 percent. However, the sector holds the potential to be a source of export growth, diversification, and employment generation. Export diversification policies towards the agriculture sector can include support measures for producers at various stages of production. Quality control for domestic consumption purposes can also positively impact export performance. Improving storage facilities and strengthening Sanitary and Phytosanitary (SPS) measures are also important for export. Bangladesh can enhance its competitiveness and expand exports in the global market by taking a comprehensive approach that encompasses both diversification and quality control. Efforts should be taken in order to ensure proper standardisation, certification, and regulation of agricultural products. Doing so would ensure that domestically-produced crop is able to compete with their competitors in the international market. It would also boost productivity by reducing waste due to factors such as contamination. Finally, the viability of alternative solutions, such as strengthening provisions for contract farming, should be explored.



**EMPLOYMENT, POVERTY  
AND REGIONAL DISPARITY**

**CHAPTER**

**3**





## A. Employment

### 3.1 Introduction

Since her independence, the development experience of Bangladesh has been quite impressive with consistent increase in economic growth and successes in poverty reduction and human development. In the context of employment, the composition and pattern of the work force along with the types of jobs have gradually changed. As a result, on one hand we observe an increase in a relatively educated and skilled work force, while on the other hand due to gradual transformation in the mode of production, we experience a changed structure of demand for jobs. Despite an overall improvement in the employment scenario of the country, there are a number of challenges in the labor market including those of unemployment, low level of participation of females in the labor market, high degree of informality, along with the concern of the quality of jobs.

The five-year plans of the country have emphasized the importance of employment generation and in this connection, both in the 7<sup>th</sup> as well as in the 8<sup>th</sup> five year plan a wide range of strategies and policies have been discussed. This chapter mainly focuses on the time period of 7<sup>th</sup> FYP (2016-2020) and attempted to evaluate the progress of the key indicators in light of the pre-existing challenges of the economy. Though there exists limited evidence due to lack of data, it is argued that the COVID-19 pandemic have exacerbated such challenges. In this context, it is crucial to evaluate the existing scenario of the labor market of Bangladesh and to re-examine the policies and strategies.

### 3.2 Targets and Proposed Strategies of Employment Generation

The employment strategies of the 7FYP are primarily concentrated on employment generation through services sector with a focus on job creation in the rural region. The 7FYP in this regard has considered strategies to deal with the long-term and short-term employment related issues. Table 3.1 depicts a snapshot of 7FYP employment targets with baseline.

According to the BBS's labour force survey, there were a total of 70.8 million people employed in 2022, up from 58.07 million in 2013 (Table 3.1). The labour force participation rate (LFPR) increased to 61.0 percent in 2022 from 57.1 percent in 2013. The impressive progress in the labour force participation rate is mainly accountable to women's labour force participation, which grew from 33.5 percent in the base year (2013) to 36.3 percent in 2016-17 and then further rising to 42.7 percent in 2022. Between 2013 and 2022, the number of employed women workers rose by 7.7 million (LFS 2022).

**Table 3.1: Employment Performance during the 7FYP**

	2013	2015-16	2016-17	2022
Employment (Million)				
Total labour force	60.7	62.1	63.5	73.41
Total employment	58.07	59.53	60.82	70.78
Agriculture	26.2	25.4	24.7	32.2
Industry	12.1	12.2	12.4	12.05
Manufacturing employment (million)	9.5	8.6	8.8	-
Other industry	2.6	3.6	3.6	-
Services	19.8	22	23.7	26.65

Note: Provisional report of the labour force survey 2022 has been used.  
Source: Labour Force Survey (various years), BBS.

As for the strategies for employment generation as outlined in the 7FYP, the following are the key ones:

- The 7FYP has emphasized strategies to increase the growth rate, especially in the manufacturing and services sector.
- It has attached importance to the expansion of RMG exports and emphasized export diversification.
- The 7FYP considered migration and remittance inflows as important tools.
- The Plan has provided steps towards increasing youth employment. In particular, it emphasized adopting the National Youth Policy 2017, strengthening the implementation of technical and vocational education, adopting and implementing a number of skills upgradation projects such as STEP and SEIP, and strengthening the implementation of ICT.<sup>6</sup>

### 3.3 Performance in terms of Employment Generation

According to various available data<sup>7</sup>, total employment increased from 60.82 million in 2016-17 to 70.78 million in FY2022. Labor force participation rate increased compared to the previous plan period in 2013 (57.1 percent). Furthermore, compared to 2016-17, LFPR increased from 58.2 percent to 61 percent in 2022 whereas female labor force participation rate increased from 36.3 percent to 42.68 percent during this time period. On the other hand, the 7FYP projection showed employment generation of 1.9 million in 2016 to 2.5 million in 2020 domestically. The annual rate of growth of employment was projected using an employment elasticity of 0.45, which was 0.3 percent in reality, according to LFS 2016-17. The plan targeted 2.6 million additional employments per year, considering both home and abroad (Table 3.2).

**Table 3.2: Employment Target and Achievements during the 7FYP**

	Target (FY2015-FY2020)	Achievement (FY2015-FY2020)
Employment generation (million) <sup>8</sup>	10.9	8.0
Migrant work (million)	2	3.7
Additional employment (million) <sup>9</sup>	12.9	11.7
Additional Labour force (million)	9.9	8.0
Excess employment (million)	3	3.7

Source: Seventh Five Year Plan, Labour Force Surveys, BMET data as reported in Bangladesh Bank.

The 7<sup>th</sup> Plan of Bangladesh aimed to increase employment in the manufacturing sector from 15.4 percent to 20 percent between FY2015 and FY2020. The goal was to create decent jobs for the significant number of underemployed individuals and new entrants to the labor force. According to the Labour Force Survey 2016–17, manufacturing employment accounted for 14.4 percent of all jobs, which increased to 15.5 percent in 2019. As of preparing this report, the provisional report of the labor force survey in 2022 does not provide specific information on manufacturing employment.

<sup>6</sup> 8FYP, 2021

<sup>7</sup> LFS 2013, LFS 2016-2017, LFS 2022 Provisional report; World Bank open data and ILO modelled estimate for 2020

<sup>8</sup> Employment generation and additional labour force have been calculated by comparing LFS 2013, 2015-16, and taking simple yearly average.

<sup>9</sup> Additional employment comprises new overseas employment plus new domestic employment. Excess employment is the number of jobs created (in home and abroad) over and above the number of new entrants to the labour force.

Regardless, the actual employment generation has been lower than projected, as shown by the unemployment and underemployment rate during this time period. The unemployment rate hovered around 4.2 percent to 4.3 percent during the time period 2013 to 2017. However, in 2022, unemployment rate lowered to 3.6 percent which shows a progress in the right direction. This fall in unemployment rate has been observed in both rural and urban areas with the unemployment rate of the former for 2022 was found to be 3.4% and the rate for the latter being 4.2%. The actual figures show 1.29 million employment generation in 2017, where a larger overseas employment has offset the lower domestic employment generation, resulting in higher excess employment (0.82 million). The trend continued for the rest of the plan period, except in 2020, where projected employment generation is only 1.4 million<sup>10</sup>. In 2020 the country experienced the pandemic which caused this lower level of employment generation.

Also, employment generation needs to be inspected from various other aspects. For instance, the sectoral contribution to employment shows a decrease in employment from agriculture, which is conducive with the structural transformation phase that the country is going through. The employment shares of services sector grew rapidly compared to the previous FYP. Although employment in industry sector increased, the growth rate of employment is rather modest (Table 3.3). However, in 2022 share of agriculture has risen to 45.33 percent and share of services grew to 39.3 percent. The 7<sup>th</sup> Plan aims to create good jobs for the large pool of under-employed and new labor force entrants by increasing the share of employment in the manufacturing sector from 15.4 percent to 20 percent between FY2015 to FY2019. However, in FY2017, share of employment in manufacturing was 14.4 percent, which increased to 15.5 percent during FY2019, being lower than the target. This slow growth in manufacturing sector rises question of the actual state of the structural transformation, and whether this is bringing the employment growth previously perceived.

**Table 3.3: Sectoral Contribution to Employment (Percent)**

	FY2013	FY2017	FY2019	FY2022
Agriculture	45.1	40.6	38.2	45.33
Industry	20.8	20.4	21.6	20.3
Manufacturing	16.4	14.4	15.5	-
Other industry	4.4	6		-
Services	34.1	39	40.1	39.3

Note: Provisional report of the labour force survey 2022 has been used.

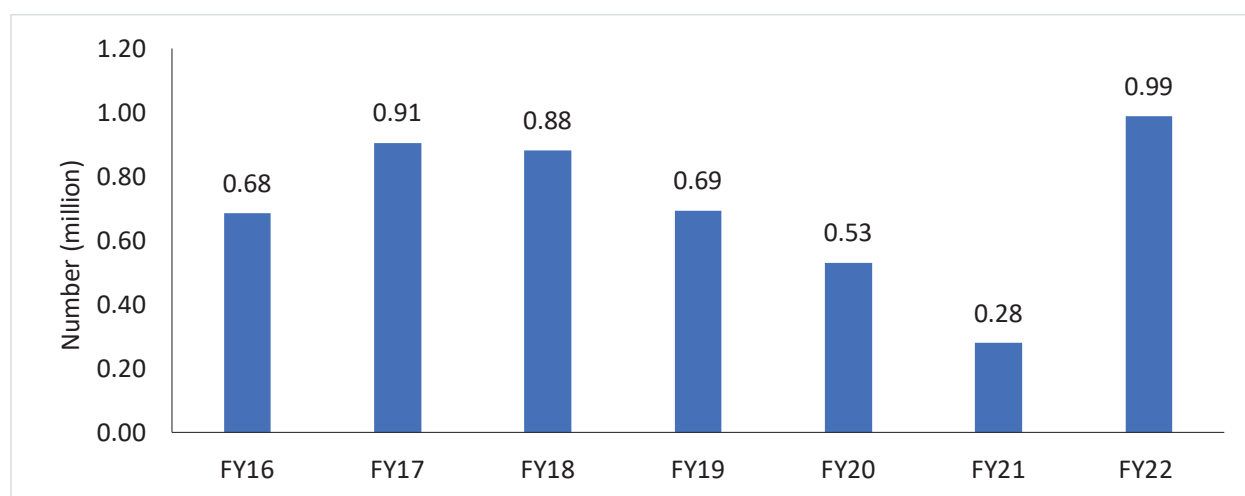
Source: Labour Force Survey (various years), BBS.

Another important indicator of quality of employment is the level of formalization in the economy. The economy of Bangladesh is largely informal. Almost 85 percent of employment comes from the informal sector (LFS 2016-17). Due to the unavailability of the latest LFS report (LFS 2019) during the preparation of this report, the updated scenario of formality could not be observed.

On the other hand, the country has shown considerable performance in migration, which provided a higher outflow of migrant workers than targeted during the plan period. Thus, as compared with the planned annual average migrant labour outflow of 0.4 million, actual outflow was 0.7 million. However, during the last two years of the plan period, the number of migrant workers decreased due to the COVID-19 pandemic. The trend was similar to the one observed worldwide. Moreover, the corresponding national budgets provided support for returnee migrants. The country restored its strong performance in migration as the pandemic started to end in 2022 (Figure 3.1). In 2022, the growth has been 253.42%, when the number of migrant workers increased to 0.99 million.

<sup>10</sup> GED estimation based on the assumption that 1% GDP Growth creates employment for 0.25 million.

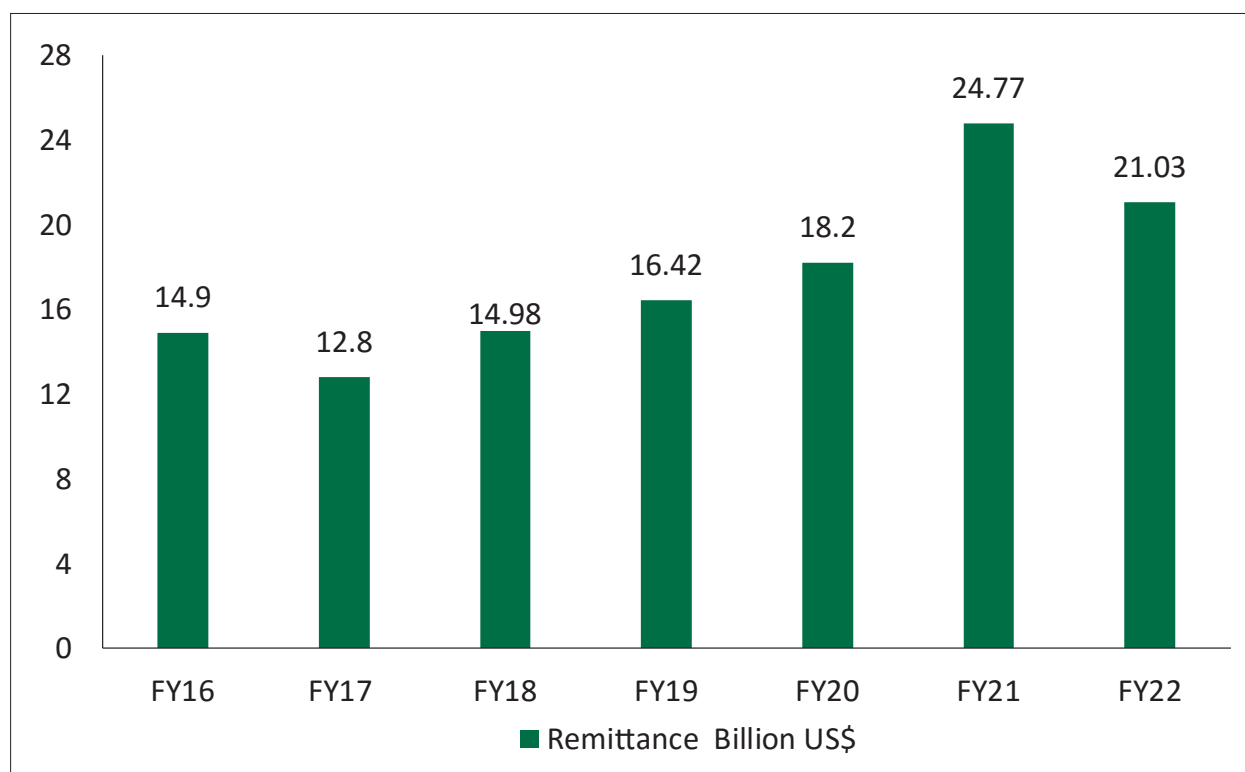
**Figure 3.1: Number of Persons Left for Abroad on Employment**



Source: BMET

Remittance earnings increased modestly during this plan period, especially during the last three years of 7FYP (Figure 3.2). The increase in remittance earning continues after 7FYP. Such inflow of remittance happened owing to the improved banking services, special incentive, and last but not the least, partially due to the pandemic. The pandemic induced remittance occurred due to the migrants coming back, and comparatively lesser extent of hundi business due to the strict pandemic related policies.

**Figure 3.2: Wage Earner's Remittance Inflow during 7FYP**



Source: BMET

According to LFS 2016-17, youth unemployment rate was 10.7 percent, which was higher than the national average (4.2 percent). Another major concern, the youth NEET (Not in Employment, Education or Training) rate was 29.8 percent. During the Plan period, several employment strategies were targeted towards youth unemployment and underemployment issues. However, during the pandemic period which consisted during the last year of the Plan period, these two numbers might have increased for short-term.

### 3.4 Challenges in Generating Employment

- While the economy continues to generate employment, the pace of employment generation still falls behind the proposed level as outlined in the 7FYP.
- Apart from the quantitative goals, there exists the concern over decent job, especially with the high degree of informality of the labor market of Bangladesh.
- Given the present structure of the work force, youth NEET remains to be a major concern. With a short period of time of our demographic dividend window, utilizing the youth work force remains a critical area to consider.

### 3.5 Conclusion and Way Forward

In order to attain the development goals of the country, it is extremely crucial to have timely availability of data of the labor market, preferably on an annual basis. Due to the problem of applicability of the conventional data of unemployment, the BBS should also publish data of alternative definitions of unemployment based on hours of work, weekly earnings, desire of additional work etc. for effective policy formulation.

The 7FYP envisioned that all the additional labour force will be employed, including much of the under-employed. In order to do so, the long-term focus should be on enhancing the job creating capacity of GDP growth. The plan envisaged further to create “good” jobs for the underemployed and new entrants by increasing employment share in manufacturing to 20 percent from 15 percent. Effective implementation of the planned SEZs can facilitate towards realizing this goal. The Plan reiterates the importance of raising total factor productivity through adoption of better technology and efficiency improvements. Increasing efficiency can be achieved through improved education and the health sector.

Enhancing the quality of the labour force has been a priority for Plan documents, including the 7FYP. In particular, the declining importance of routine intensive tasks and challenges of both the fourth industrial revolution (4IR) and increased automation requires productivity enhancement of the labour force. To mitigate these issues, increased importance in TVET education can raise the skill level, and eventually, the productivity of the labour force. With increased automation of industries and importance of 4IR related technologies, greater concentration is needed in updating the existing curriculum of training programs, providing skill training for the trainers, introducing 4IR related sophisticated skills in education and training, and more importantly to deal with the challenges of skill mismatch. The average productivity of all sectors, especially agriculture, has to grow to provide better returns to labour. Adoption of better technology in this sector along with enhanced capacity level of the relevant regulatory bodies and service providers can mitigate this issue in the long run. Last but not the least, 7FYP emphasized on the importance of relevant policy and institutional reforms to increase the quantity and quality of employment. This issue is still relevant as we approach the next FYP.

## B. Poverty Reduction

### 3.6 Objectives, and Strategies of the 7<sup>th</sup> Five-Year Plan for Reduction of Poverty

Bangladesh has been winning her fight against poverty. On the basis of her success in poverty reduction, Bangladesh has emerged as a role model for developing nations, having met the MDG poverty reduction goals a decade ago. Even during COVID 19 Pandemic Bangladesh has been able to safeguard live and livelihood through poverty reducing strategies and stimulus packages. Moreover, inclusive economic growth strategy backed by social protection transfer, Bangladesh continue to attain impressive outcomes on the poverty front. For instance, the headcount poverty rate dropped from 56.7 percent in 1991–92 to 18.7 percent in 2022 (Preliminary Report, HIES 2022), a remarkable achievement that is attributable to the appropriate policies of the government. Bangladesh is also on her path to eradicate the curse of extreme poverty soon -possibly by the end of the 8FYP. The 7<sup>th</sup> FYP strategy for poverty reduction, in accordance with the SDGs, emphasized the significance of paying special attention to the extreme poor and those who are particularly vulnerable.

Job creation through economic growth and structural change, a continued emphasis on service exports (i.e. mainly workers abroad) to increase remittances, the expansion of micro-credit, the transformation of the rural economy by lowering transaction costs of trading with the urban economy, through ensuring greater ICT penetration in the rural areas, and a continued emphasis on food productivity and agricultural diversification are all central to the 7FYP's strategies for alleviating poverty. Extreme poverty is characterized by a high degree of susceptibility to unforeseen health crises. The government's health financing plan takes into account the needs of the poor and the marginalized by including them in health insurance. The implementation of this health financing plan is crucial to the success of reducing the vulnerability of the extremely poor.

### 3.7 Poverty Projections and Targets for the 7FYP

Household Income and Expenditure Surveys (HIES) provide information to measure the extent of poverty in Bangladesh. Since the latest HIES data available during the preparation of 7FYP was of 2010 and the baseline was FY15, the poverty rates were estimated (or calculated) using HIES 2010 data.

**Table 3.4: Poverty Reduction Targets during the 7<sup>th</sup> FYP**

	FY2010	FY2015	FY2020
Incidence of Poverty	31.5	24.8	18.6
Incidence of Extreme Poverty	17.6	12.9	8.9

Source: 7FYP Projections, GED

Table 3.4 captures the goals of the 7<sup>th</sup> Five-Year Plan (7FYP) for poverty reduction. In 2010, the poverty incidence stood at 31.5%. The 7FYP projected a reduction to 24.8% by 2015 and further down to 18.6% by 2020. Similarly, the extreme poverty incidence in 2010 was 17.6%, with a projected decrease to 12.9% in 2015 and 8.9% in 2020.

#### 3.7.1 Approaches to the Reduction of Poverty

***Increased employment opportunities through economic growth and structural transitions.*** The goal of the 7FYP was to increase GDP growth from the 6 percent trajectory of the Sixth Plan to the 7 percent trajectory or higher to achieve 8 percent growth by the end of the Seventh Plan. The 7FYP intended to maintain the preceding five plans' emphasis on food productivity and food security, as well as on increasing



remittance earnings, as a means of reducing poverty both directly through increased consumption and indirectly through the financing of a variety of services and business enterprises in rural areas that have created non-farm jobs.

Another strategy was to increase the availability of microcredit, as empirical research indicates that microcredit expands the consumption and asset base of the extreme poor. These programs have received substantial financial and regulatory support from the government. In the same direction as the Sixth Plan, a rise in non-farm rural employment in trade, construction, transportation, and other services was considered to be possible thanks to a focus on increasing food productivity, diversifying agriculture, receiving remittances and microcredits, and utilizing information and communication technology.

### **3.7.2 Additional Strategies to Combat Extreme Poverty**

1. Numerous and diverse micro successes in specialized livelihood programs such as Economic Empowerment of the Poorest (EEP), Chars Livelihoods Programme (CLP), etc. have supported the battle against extreme poverty by providing money or assets to extremely poor individuals. By replicating Micro-Successes on a larger scale - and modifying them as necessary - these programs to End Extreme Poverty were intended to be implemented by the end of the 7<sup>th</sup> Five Year Plan Period.

Specifically, the Ashrayan project in Bangladesh has been highly successful in its aim to reduce extreme poverty. It has effectively improved living conditions and empowered beneficiaries by providing housing, healthcare, education, and livelihood support to underprivileged populations. The government's strategy for the Ashrayan Project under the 7FYP focused on further poverty reduction through strategic interventions, community empowerment, and long-term development plans. The government aimed to increase local population involvement, strengthen relationships with key stakeholders, introduce innovative forms of social protection, and ensure universal access to basic services.

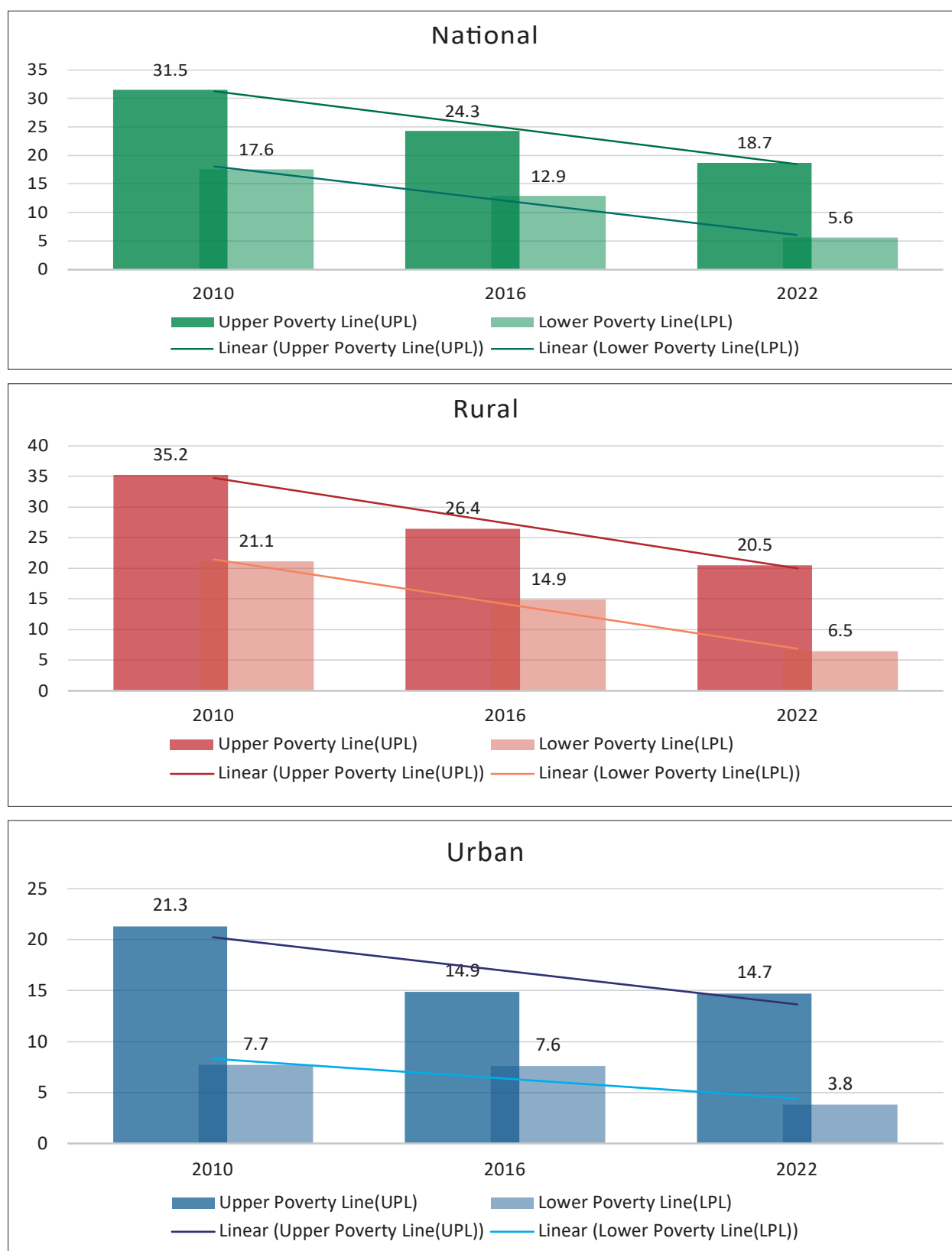
2. The 7FYP recognized and emphasized the importance of both asset generation and preventing asset erosion as a measure to extreme poverty reduction. The plan highlighted that preventing shocks and reducing risks for the poor, especially the poorest, were crucial policy priorities for achieving faster poverty reduction in Bangladesh. Support packages for reducing extreme poverty, as proposed under 7FYP, included the replication of effectively targeted livelihood programs, the development of human capital for the extreme poor, and the expansion and inclusion of social security programs for the extreme poor.

### **3.8 Progress with Poverty Reduction during 7<sup>th</sup> FYP**

The main challenge to assessing progress in poverty reduction during the 7FYP was the unavailability of HIES for 2020 (i.e. final year of the 7FYP). Indeed, HIES which was scheduled to be completed in 2020 has finally been completed in 2022. Preliminary results of HIES 2022 have just been reported. In the absence of the latest HIES, BBS estimated poverty rates for 2017, 2018 and 2019 by extrapolating the growth elasticity of poverty found for the period 2010 to 2016. This presumes the current consumption-GDP nexus and the income distribution patterns observed for 2016. As shown in Figure 3.3, poverty decreased over the four years of the 7FYP. According to the BBS extrapolation, both the overall rate of poverty and the rate of severe poverty decreased significantly. Overall, the findings are consistent with the 7FYP poverty reduction goals. Based on these estimations, it may be argued that the 7FYP's first four years of work to alleviate poverty were largely successful and on track. Preliminary results of HIES 2022 suggest that the poverty rate declined to 18.7 percent in 2022 – exactly the 18.7 percent rate targeted for the last year (i.e. 2020) of the 7FYP.



**Figure 3.3: Reduction in Poverty during the Seventh Plan Period**



Data Source: HIES, 2010, 2016, 2022.

Figure 3.3 illustrates the encouraging trend of poverty reduction during the 7FYP in Bangladesh, from 2016 to 2022, significant progress has been made in reducing poverty nationwide. The national poverty rate, measured by the upper poverty line, has experienced a notable decline from 24.3% to 18.7%. This trend of poverty reduction is even more pronounced when considering the lower poverty line, which saw a remarkable reduction from 12.9% to 5.6%. Similar progress has been observed in rural areas, where historically higher poverty rates have significantly improved. The rural poverty rate based on the upper poverty line dropped from 26.4% to 20.5%, and the lower poverty line witnessed a notable decrease from 14.9% to 6.5%. Notably, even in urban areas, where poverty rates were relatively lower, there has been a notable progress in poverty reduction. The urban poverty rate, measured by the upper poverty line, declined from 18.9% to 14.7%, while the lower poverty line decreased from 7.6% to 3.8%.

One key limitation of the assessment of progress on the poverty front is the inability to shed light on two other important aspects of poverty – the poverty gap and the severity of poverty. The measures of poverty gap and poverty severity provide complementary information on the incidence of poverty. The Foster, Grear and Thorbecke (FGT) method is generally used to estimate poverty gaps and severity. The Poverty Gap (PG) estimates the depth of poverty in the population. It measures the extent to which individuals fall below the poverty line (the poverty gaps) as a proportion of the poverty line. Thus, the sum of these poverty gaps gives the minimum cost of eliminating poverty if transfers were perfectly targeted. The measure, however, does not reflect changes in inequality among the poor. On the other hand, the Squared Poverty Gap (SPG) measures the severity of the poverty. However, the poverty gap and severity data of HIES 2022 confirm that the conjectures that improvements in both poverty gap and severity improvement during the 7FYP are correct.

Table 3.5 shows the trends in the poverty gap and severity during the tenure of 7FYP. When measured against the upper poverty level, the poverty gap was calculated to be 3.8 percent in 2022 and 5.0 percent in 2016, down from 6.5 percent in 2010. This represents a decrease of 1.2 percentage points when compared to the year 2016. On the other hand, when using the lower poverty line, it has been calculated that the poverty gap was 0.9 percent in the year 2016. It follows that the rate fell by 1.4 percentage points between 2016 and 2022, as a direct consequence of this.

**Table 3.5: Trends in Poverty Gap and Severity**

Upper Poverty Gap						Lower Poverty Gap					
Poverty Gap			Severity			Poverty Gap			Severity		
2010	2016	2022*	2010	2016	2022*	2010	2016	2022*	2010	2016	2022*
6.5	5.0	3.8	2.0	1.5	1.2	3.1	2.3	0.9	0.8	0.6	0.2

Note: \*we use the latest data of HIES 2022 for end-line review since the next of HIES 2016 is HIES 2022.

Source: HIES 2010, 2016, 2022

All of these reductions in the poverty gap indicate that the typical consumption or income level of poor people, that is, people living below the poverty lines has improved during the period of 2016 to 2022; specifically, it indicates that the number of people living in poverty has decreased. Similar to the situation with the poverty gap, the severity of poverty has decreased from 2016 to 2022. Using the upper poverty threshold, the severity decreased from 1.5 percent in 2016 to 1.2 percent in 2022. It has decreased for the extremely poor from 0.6 percent in 2016 to 0.2 percent in 2022.

### 3.9 Challenges Faced in Poverty Reduction during 7FYP

#### 1. COVID- 19:

The COVID-19 pandemic posed one of the greatest obstacles to reducing poverty during the 7FYP. Due to low resilience and vulnerability to income/consumption shocks, poverty has been argued to increase significantly in Bangladesh (as in most other countries) – even if temporally.

#### 2. Inequality:

Inequality in income or consumption distribution is a deterrent to the fight against poverty. According to the HIES 2022 preliminary report, both income and consumption inequality worsened between 2016 and 2022. Under a rising inequality situation, the full impact of economic growth on poverty reduction is being compromised in Bangladesh.

#### 3. Stagnant Private Investment:

Growth impacts on poverty reduction in the case of Bangladesh have been well recognized. Private sector and private sector investments are key drivers of growth in Bangladesh. Lackluster private sector investment was a concern on the poverty reduction path in the 7FYP. However, the government recognizes the problem and has started taking steps to improve the private sector's investment climate. The creation of BIDA and the subsequent passage of the “one stop service” statute is a sensible move toward the goal of increasing private sector investment from both domestic and international sources.

### 3.10 Prospects and Way Forward:

**Boosting Private Sector Investment for Poverty Reduction:** Land acquisition, energy shortage, trade logistics, contract enforcement, and tax concerns are just some of the obstacles that investors have pointed out that need to be addressed in order to improve the investment climate. More efforts are needed to improve the investment climate to attract private investment to spur further growth.

**Reduce Inequality to Translate Full Growth Impact on Poverty Reduction:** When economic growth is not broad-based or inclusive (or inequality enhancing), fiscal redistribution can be a very effective instrument to improve inequality. The fiscal redistribution strategy includes mobilizing adequate revenue (i.e. at least above 15 percent of GDP) and revenue redistribution through social sector spending (i.e. on health, education and social protection) as well as identified pro-poor sectors or interventions.

**Adoption of Shock Responsive Social Protection System:** Given that resilience is poor among citizens of Bangladesh, Bangladesh may also contemplate to adaptive and shock-responsive social protection system – which would enable the system to respond to needs at the quickest possible time by vertical and horizontal expansion of the social protection system.

## C. Reducing Regional Disparities

### 3.11 Objectives, Targets and Strategies of the 7<sup>th</sup> Five-Year Plan for Regional Disparity

The primary objective of the 7FYP for reducing regional disparity was to address the remaining education gap, which is a fundamental development challenge and a crucial factor in reducing inequality over the longer term. It was also intended to give special attention to closing the gap between the rich and the poor in access to these basic services, with a focus on the bottom 20 percent where the gap is the largest. Some of the strategies for the development of lagging regions in the Seventh Plan were as follows:

1. **Establishment of a Contingency Fund for Lagging Regions:** To reduce regional disparity, the Annual Development Programme (ADP) should create a fund for infrastructure development, technical education, and economic access to lagging areas. The additional fund was intended to represent a reasonable proportion of ADP expenditures above and beyond the regular ADP

allocations and spending. Institutes of technology and vocational training could assist lagging regions acquire skills. The fund may be earmarked for traditional lagging areas such as Rangpur, Rajshahi, Khulna, and Barisal.

2. **Reducing Infrastructure Discrepancy:** Some measures were taken to enhance infrastructure in lagging districts in order to create new business opportunities. To increase economic activity, the transport system between Dhaka and Chittagong and lagging regions would be enhanced. The Padma Bridge would open up new opportunities for the southwestern region, constituting an additional essential strategy for enhancing the economic activity of lagging regions via their transportation systems. Road transport between and within districts would increase economic mobility in lagging regions. The excessive use of Mongla Port would be addressed. A near-Mongla port export-oriented industrial zone would be evaluated for international use. Because the expansion of the manufacturing sector necessitates it, electricity supply would be prioritized in lagging areas.
3. **Manufacturing Opportunities in Lagging Districts:** Government assistance is required, at least initially, to promote manufacturing activity in lagging districts because private investment is less likely to be located there. The industrial policy would offer tax breaks, reduced interest rates, and other incentives to encourage investment in lagging regions. Special economic zones would prioritize lagging regions. By establishing these zones in districts with inadequate infrastructure, entrepreneurs can benefit from economies of scale. To expedite investment in an industrial park, special incentives for prospective investors would be issued simultaneously. SMEs would be aided by low-cost financing.
4. **Fostering Growth in Rural areas through Expanding Agriculture and other Rural Economic Activities:** In lagging regions, agro-processing and non-agricultural economic activities were prioritized. Loan and subsidy programs for agriculture would prioritize rural areas of lagging districts. By offering low-interest loans to MFIs that distribute funds in impoverished districts, microfinance institutions would be encouraged to operate in poverty-stricken regions. Environmentally vulnerable regions, such as cyclone-prone littoral areas, landlocked and other flood-prone regions, and disaster-prone regions, were targeted with microfinance. In lagging districts, training and funding would increase non-agricultural economic activity. Partnerships between the government and MFIs/NGOs were deemed advantageous. It was intended to strengthen the Union and Upazila Parishads in order to implement government development programs.

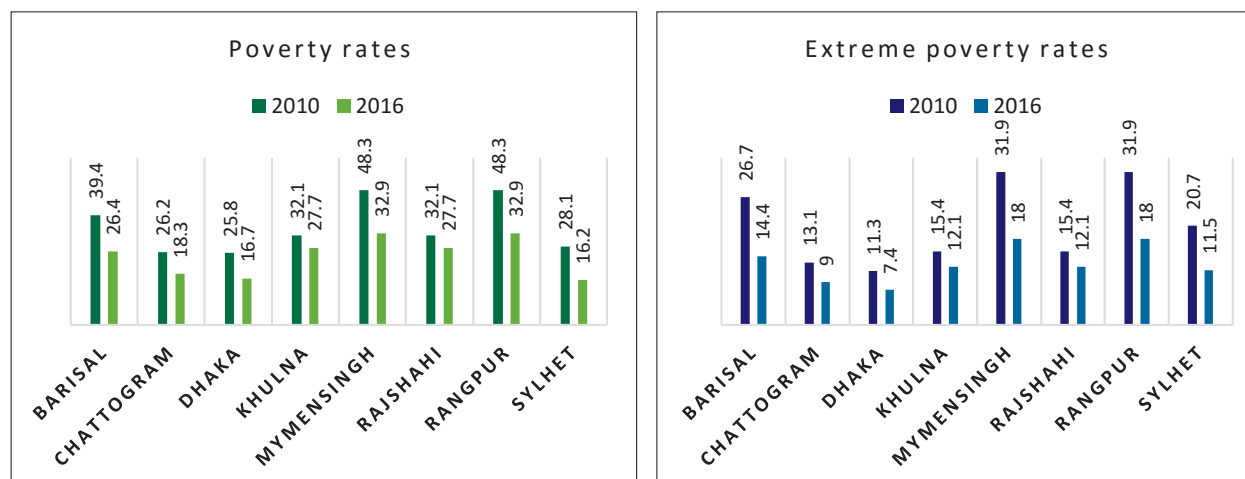
### 3.12 Progress in Regional Disparity Reduction under 7<sup>th</sup> Five-Year Plan

The government of Bangladesh has made notable achievements in reducing regional disparities and promoting equality among districts during the tenure of 7FYP. By implementing specific policies and development initiatives, significant progress has been made in narrowing the gap between underdeveloped and more advanced districts. The government has placed a strong emphasis on improving healthcare, education, and infrastructure in lagging districts, ensuring that essential services are accessible across the entire country. Through the expansion of social protection programs, with a particular focus on lagging districts, vulnerable communities have received crucial support. Moreover, targeted investments in irrigation, flood control, and waterlogging measures have addressed the unique challenges faced by these districts, leading to improved agricultural productivity and enhanced livelihoods. By fostering collaborations with non-governmental organizations (NGOs) and community-based groups, the government has further strengthened local service delivery, including the implementation of social security programs, thus contributing to the ongoing efforts to reduce regional disparities. Here are some specific performances in reducing regional disparity.

In terms of Poverty:

Although HIES 2022 preliminary report is available, it did not contain detail poverty assessment by divisions or regions. Hence due to non-availability of regional level poverty data for 2022, the poverty comparison is still referring to HIES 2016 and HIES 2010. It must ensure that poverty reduction occurs throughout the country so that no region/district is left behind. In other words, all regions must benefit from development efforts with significant reductions in extreme and moderate poverty. Additionally, this has significant implications for income inequality.

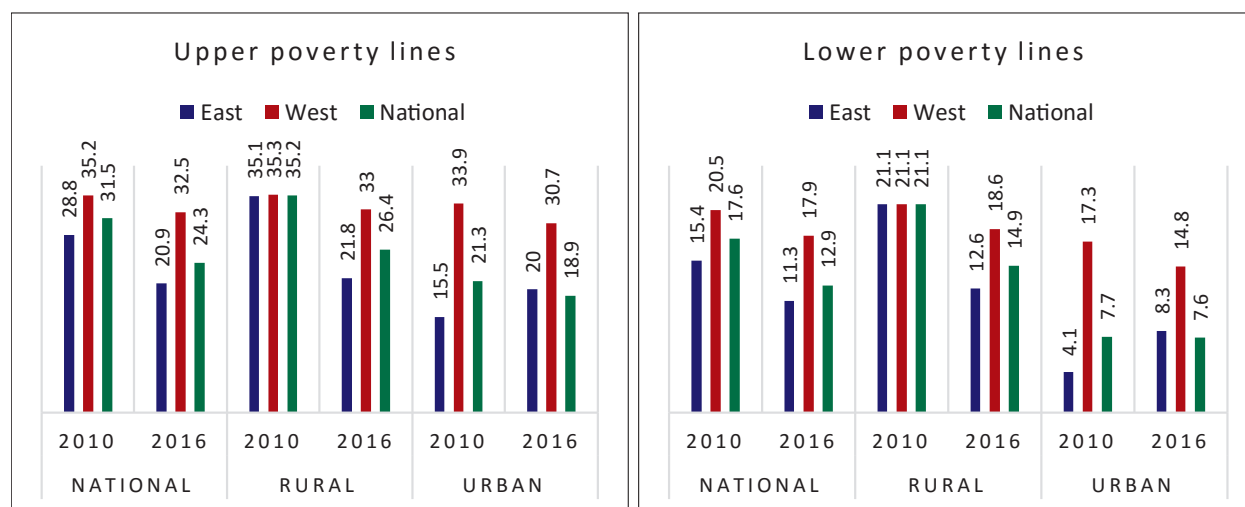
**Figure 3.4: Distribution of Poverty Incidence by Divisions (Percent)**



Data Source: World Bank Poverty Assessment 2019, Volume 2. Estimates based on HIES 2016.

The significant decreases in poverty in Khulna, Rangpur, Mymensingh, and Barisal between 2010 and 2016 were encouraging (Figure 3.4). During the lean agricultural months, Rangpur particularly experienced episodes of starvation and deprivation. Rangpur has successfully reduced the incidence of extreme poverty by more than 60 percent. In Mymensingh, Barisal, and Khulna, there have been similarly remarkable reductions in extreme poverty. These underperforming areas frequently rely more on agriculture and informal activities, and they also frequently experience natural catastrophes and the effects of climate change. In Bangladesh, the Dhaka, Chattogram, and Sylhet divisions typically have lower rates of poverty than the western divisions i.e., Khulna, Barisal, and Rajshahi.

**Figure 3.5: Region Wise Indicator of Poverty (HCR) by CBN Method (Percent)**



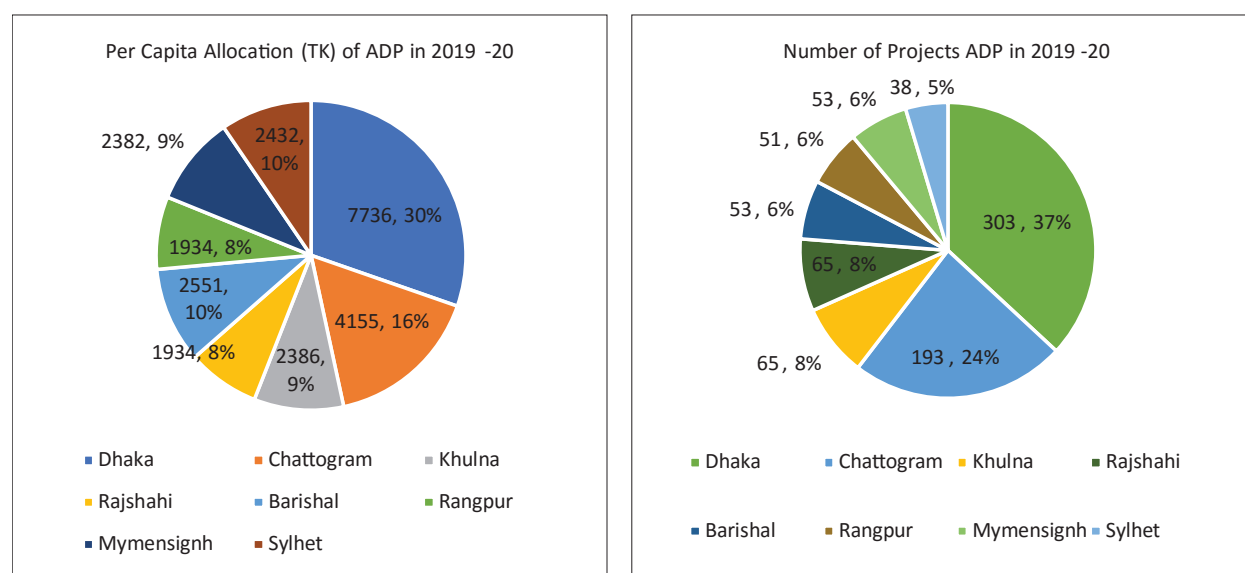
Data Source: HIES 2010 and 2016.

The slower rate of poverty reduction in Bangladesh's "Western" region compared to their "Eastern" region is another worrisome development. 2010 saw a 3.7 percentage point increase in the "western" region's poverty rate compared to the national average rate of 31.5 percent. However, the "eastern" region's poverty rate was 2.7 percentage points lower than the national average. In 2016, the condition deteriorated: 2016, the poverty rate in the "western" region was 8.2 percentage points higher than the national average rate of 24.3 percent, while it was 3.4 percentage points lower in the "eastern" area. Whether there is mild or severe poverty (Figure 3.5), the trend is the same. Before the release of the HIES 2010 poverty report, there was a definite split between the "western" and "eastern" regions of Bangladesh based on their poverty profiles. The poverty gap between the "western" and "eastern" regions narrowed considerably in 2010, indicating an improved economic environment in the former, which resulted in increased work and earnings. The 'Western' region's poverty may have decreased as a result of the expansion of the social safety net as well. However, the gap appears to be resurfacing according to HIES 2016 poverty statistics. The slower rate of poverty reduction in the "western" region compared to the "eastern" region in 2016 may be an indication of deteriorating growth and employment opportunities.

### In Terms of Allocation of Annual Development Programme and Implementation:

Figure 3.6 depicts the distribution of ADP across eight divisions in terms of per capita allocation (TK) and the total number of projects in 2019-2020. The per capita ADP allocations for the Dhaka division for the fiscal year 2019-20 was 30 percent of the total ADP allocation, whereas Chattogram's per capita allocations account was 16 percent. Similarly, the majority of ADP projects are centered in the Dhaka and Chattogram divisions. Even though, according to the Bangladesh Bureau of Statistics, five of the ten most poverty-ridden districts are in the Rangpur division, ADP allocations to Rangpur for the same period are just 8 percent. Bandarban and Khagrachhari are among the 10 most impoverished districts, according to the BBS, even though Chattogram received the second-highest ADP allocation for the fiscal year 2019-20 and the two previous years.

**Figure 3.6: Allocation of ADP Across Regions**

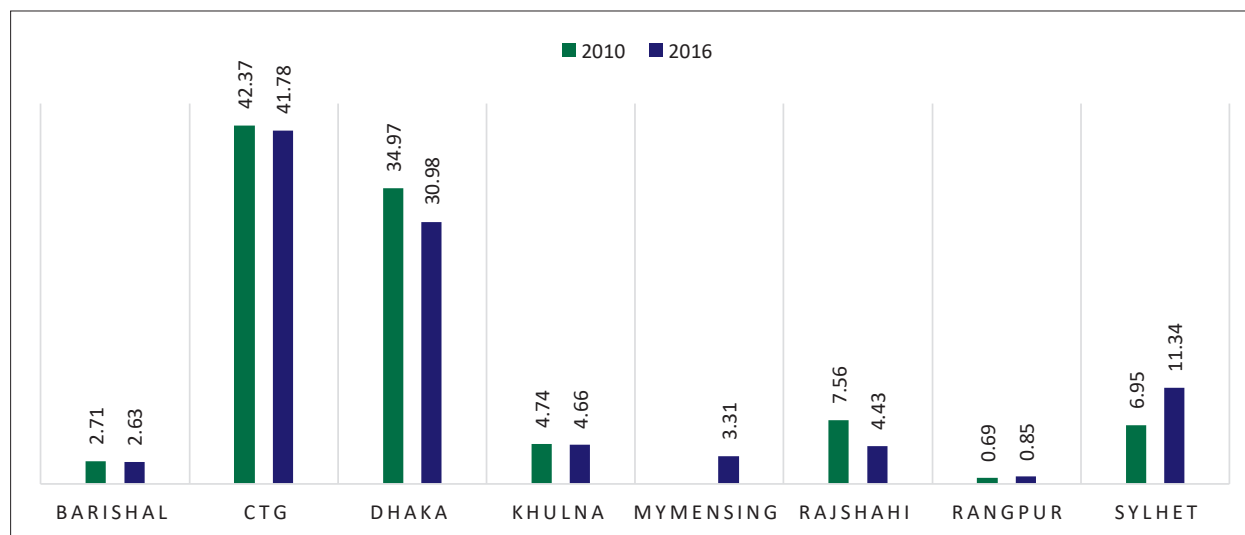


Source: Implementation Monitoring and Evaluation Division (IMED), 2019

### In Terms of the Distribution of Remittance Across Divisions:

Figure 3.7 shows that the distribution of total Remittance (amount) inflow is also highly concentrated in Dhaka and Chattogram divisions.

**Figure 3.7: Percentage of Total Remittance (Amount) Across Divisions**



Source: HIES 2010, 2016

### 3.13 Recommendations

#### 1. SEZs for regional inclusivity:

BEZA “aims to establish economic zones in all potential areas of Bangladesh including backward and underdeveloped regions” (BEZA, 2016, p. 16), where lagging regions should be prioritized. Given the 7FYP’s goals in the context, identifying lagging districts and prioritizing SEZ development in those regions should be easy. BEZA also wants SEZs to create \$40 billion in exports, a good portion of this should come from lagging areas. Such an objective would highlight SEZs’ significance in developing lagging regions and necessitate developing a clear SEZ development strategy to address regional inclusivity and promote regional development.

If SEZs in lagging regions are properly connected to economic corridors, they will integrate into regional economies. Most cross-country studies indicate that the location of a zone is a crucial success element; hence, SEZs in lagging regions would mitigate or eliminate geographical disadvantages, while economic corridors would connect economic activities across regions to increase their density. So, developing SEZs in lagging regions to enhance regional integration should be tied to the establishment of economic corridors in Bangladesh like other successful countries.

Water, power, telecommunications, and transport are essential for an SEZ, but ensuring their availability and reliability can be difficult. The availability of serviced industrial land infrastructure and a somewhat steady electricity supply is more important than Bangladesh’s fiscal and non-fiscal incentives for SEZ development in lagging regions. It is crucial to give entrepreneurs equitable access to utilities. In lagging regions, most businesses are MSMEs, several of these are competitive and have the potential for expansion if their costs of doing business can be reduced by SEZ infrastructure and connection. Since these large-scale procedures may require additional labor, ensuring fair access to SEZs is important.



## **2. Regional Development Planning as a Tool to Reduce Poverty and Regional Disparity:**

In order to alleviate poverty, income disparities, and regional disparities regional planning in its fundamental viewpoint tends to be more responsive in a country like Bangladesh. Planning for regional development, which involves the design and placement of infrastructure and other factors throughout a broad region, may lessen poverty further. The planning zones may include different towns, cities, or even portions of multiple states or regions, with each having its own “Urban Planning” office or “Planning Commission” to implement various development plans and projects. The development plan in Bangladesh places equality and social justice at the forefront of growth. While poverty has decreased by more than a third in Bangladesh, regional development planning could assist the country in meeting the majority of the Sustainable Development Goals.

## **3. Resource Redistribution Policy for Reducing Regional Disparity:**

Access to improved education and healthcare should be a primary goal for the government, especially in lagging region. Although a robust social security system is one weapon for more equitable distribution of wealth and development across regions, it should be redistributed according to priority in lagging regions.

## **4. Operationalisation of the Lagging Region Fund:**

In the 7FYP plan GoB intend to create the lagging region fund to allocate funds to the lagging regions on a priority basis. However, it transpired that not much progress has been made to create the fund. Since, the creation of the lagging region fund is important for their development GoB may create fund amounting between 1 and 2 billion BDT. This may be implemented by a specialize body specialized in regional development.



**ENERGY AND  
INFRASTRUCTURE**

**CHAPTER**

**4**



## 4.1 Introduction

Infrastructure and power are critical drivers of economic development, and their importance cannot be overstated. Infrastructure development, which includes investments in roads, railways, ports, airports, and other transportation systems, can contribute significantly to economic growth by reducing transportation costs, improving connectivity, and increasing productivity. The development of infrastructure lowers the cost of doing business and improves the business environment attracting investment from both domestic and foreign sources. Additionally, infrastructure development is essential for firms to increase their competitiveness and achieve export success. Better infrastructure can lead to improved supply chain management, which can reduce lead times and enable firms to respond more quickly to changes in market conditions. Consequently, reliable and affordable access to electricity is vital for a country's economic development.

Despite many challenges, Bangladesh has made significant progress in developing its infrastructure and power sectors in recent years. The Government has prioritized infrastructure development and launched several initiatives to improve transport infrastructure and increase power generation capacity. Access to reliable and affordable power has been a challenge, but the Government has taken significant steps to address this issue by investing in power infrastructure and increasing power generation capacity.

The 7<sup>th</sup> Five Year Plan (FYP) laid out a comprehensive strategy to address the country's infrastructure challenges, specifically those in the power, energy, and transport sectors, focusing on leveraging public-private partnerships.

This chapter provides an in-depth analysis of the notable advancements Bangladesh has achieved in expanding and enhancing the quality of its infrastructure under the 7<sup>th</sup> FYP. It also accentuates the obstacles that the country must overcome to enhance its external competitiveness and overall productivity. The chapter also sheds light on the path that Bangladesh must take to improve its infrastructure and achieve its development goals.

## 4.2 Bangladesh's Position on the World Stage

The World Economic Forum publishes an annual report known as the Global Competitiveness Report (GCR), which examines 12 broad factors determining a country's competitiveness in the global market. Infrastructure quality is an essential factor for a country's global competitiveness. The Global Competitiveness Index (GCI) rankings were halted in 2020 due to the COVID-19 pandemic, but the 2019 Global Competitiveness Rankings (GCR) revealed that Bangladesh has improved in its overall infrastructure ranking since 2015. The report shows that Bangladesh ranked 114 out of 141 countries in 2019, compared to 130 out of 144 countries in 2015. However, Bangladesh still lags behind many other developing neighboring economies. This emphasizes the major difficulty that Bangladesh must overcome to ensure better infrastructure and power supply compared to neighboring countries to maintain and increase its competitiveness in the international market and improve productivity in all areas of its economy.

**Table 4.1: Comparison of Overall Infrastructure Ranking Amount Selected Countries in 2015 & 2019**

Country	Country's Overall Infrastructure Ranking	
	FY15 (Base Year) *	FY19**
Bangladesh	130	114
India	90	70
China	64	36
Cambodia	109	106
Pakistan	113	105
Sri Lanka	37	61
Thailand	76	71
Vietnam	112	77

Source: World Economic Forum, the Global Competitiveness Report 2015 and 2019

\* out of 144 countries; \*\* out of 141 countries

### 4.3 Power & Energy Sector Progress during 7FYP

The power and energy sector has been a crucial infrastructure development component in the sixth and seventh Five Year Plan (FYP) periods. This sector has played a key role in propelling Bangladesh's rapid economic growth.

#### 4.3.1 Electricity Installed Capacity and Generation

Table 4.3 shows that the energy and power sector perform well during the last five fiscal years. The total installed generation capacity has increased from the base year capacity of 13,540 MW to 23,548 MW at the end of the fiscal year 2020 (inclusive of public, IPP, captive, import, and renewable energy). Bangladesh has addressed the deficit between the demand and supply of power by making significant public investments and adopting several innovative arrangements to engage the private sector, such as private Independent Power Producers (IPPs). This is evident from the significant increase in installed capacity, as shown in table 4.2. In FY20, the total system loss resulting from the transmission and distribution of electricity has been reduced to 11 percent from 13.54 percent in the fiscal year 2015. This means that the target of 12 percent, set for FY20, has been successfully achieved. Furthermore, in FY20, access to electricity increased and reached 97 percent, higher than the targeted value of 96 percent. The 7<sup>th</sup> Plan aimed to achieve a per capita electricity generation of 514 kWh by FY20, but the actual value achieved falls slightly short at 512 kWh. Despite this, the difference between the targeted and achieved values is negligible, indicating that the efforts to attain this objective have primarily been successful.

Table 4.4 illustrates installed capacity by ownership targets and achievements over the plan period. Both the public and private sectors exceeded their set targets by a significant margin. The total installed capacity exceeded targets by an average of approximately 600 percent. This indicates that both sectors have achieved much greater capacity than originally planned suggesting remarkable success.

**Table 4.2: Installed Capacity by Wwnership Targets & Achievements during 7<sup>th</sup> Plan**

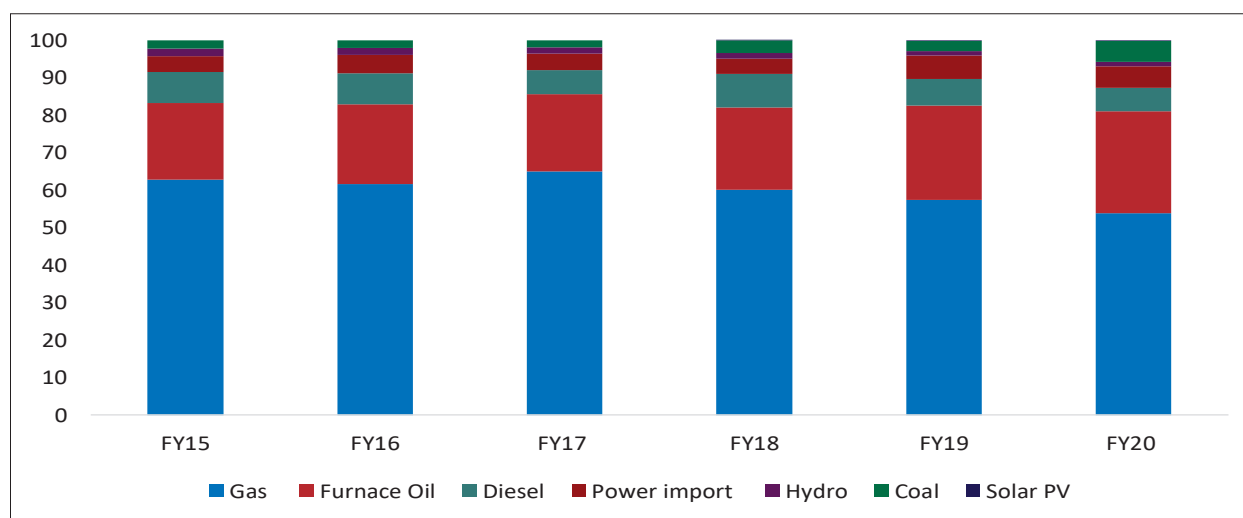
FY	Public Sector (MW)		Private Sector (MW)		Total (MW)	
	Target	Achievement	Target	Achievement	Target	Achievement
2016	937	6,512	334	5002.00	1271	11514
2017	2,599	8,845	738	6197.00	3337	15042
2018	1,076	9,507	867	8043.00	1943	17550
2019	1,320	9,507	1716	8043.00	3036	17550
2020	1,750	10,339	1247	8633.00	2997	18972

Source: Power Division, GoB.

### 4.3.2 Fuel Mix and Primary Fuel Supplies

The power sector in Bangladesh heavily relies on natural gas. However, the 7<sup>th</sup> FYP outlined a significant shift in power generation sources towards imported coal and LNG from domestic natural gas. The 7<sup>th</sup> FYP period has witnessed progress in diversifying primary energy sources by constructing large coal-fired power plants and importing LNG. The Plan predicted that the dependence on gas and liquid fuel would continue until FY18, after which a significant transformation in power generation was planned to implement in FY19. Despite the Government's best efforts, this objective was not attained by FY20. In the fiscal year 2014-15, a significant proportion of Bangladesh's installed capacity for power generation used gas, amounting to 62.8 percent, while 20.4 percent relied on furnace oil and 8.3 percent on diesel. A further 4.3 percent used imported fuel, as indicated in Figure 4.1. However, by the end of the fiscal year 2020, the share of installed capacity based on gas decreased to 53.86 percent, while furnace oil increased to 27.18 percent. During this period, the share of installed capacity based on diesel fell to 6.33 percent, while imports increased to 5.69 percent. As predicted, there was also a significant increase in coal-based installed capacity, which rose from 1.8 percent in FY15 to 5.62 percent in FY20. Meanwhile, the contribution of hydro installed capacity stood at around 1.13 percent after five years. Solar PV has also been introduced as a fuel source, accounting for 0.19 percent of the installed capacity as of FY20.

**Figure 4.1: Installed Capacity by Fuel Type**



Source: MTBF, Bangladesh Power Development Board.

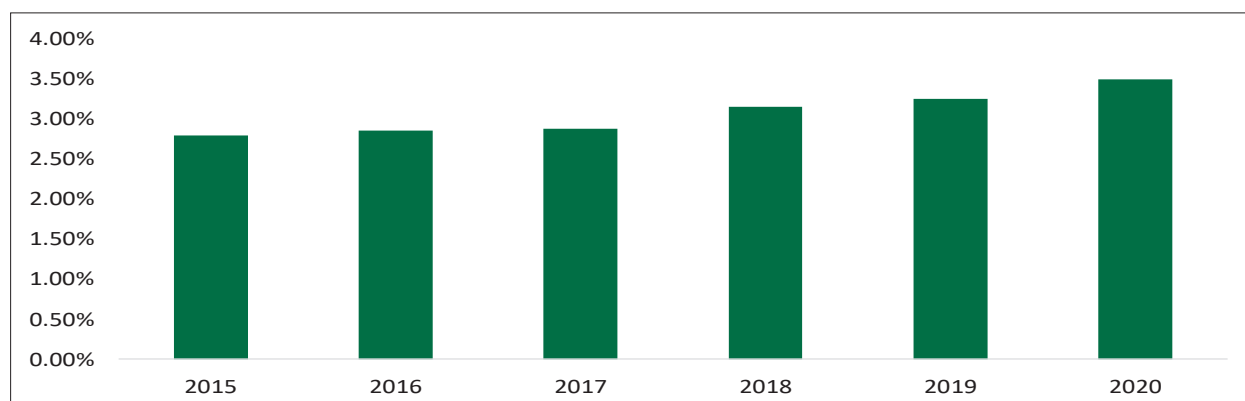
### 4.3.3 Use of Renewable Energy

In the 7<sup>th</sup> Plan, it was targeted to increase the percentage of renewable energy, including hydropower, to 10 percent by FY20. However, the percentage of electricity generation from renewable sources in 2019-20 hovered around 3 percent. Figure 4.2 shows the share of renewable energy in total final energy consumption. The data portrays a noticeable upward trend in the proportion of renewable energy. Despite significant progress over the past five years, Bangladesh did not achieve its goal of generating 10 percent of its energy from renewable sources by 2020. The country fell short of its objective due to a combination of factors, including inadequate resources and proper planning. Additionally, there is a lack of research and development and technical expertise in the sector. Two wind power projects at Feni and Kutubdia have not been operational due to technical difficulties. Moreover, Bangladesh's limited land availability has impeded the development of renewable energy, particularly solar energy capacity, which requires about three acres of land to set up a 1-megawatt electricity production facility. Furthermore, Bangladesh faces other constraints, such as limited sunlight, lower wind speed, and reluctance of implementing agencies, which



have hindered the country's progress in renewable energy. Table 4.2 shows the contribution of renewable energy in Bangladesh. The total installed capacity of renewable energy in June 2019 was 650.15 MW. Solar energy comprised the majority, contributing to 64 percent of renewable energy, followed by hydropower, with approximately 35 percent. However, wind energy, biogas, and biomass were underdeveloped and did not significantly contribute to the overall percentage of renewable energy.

**Figure 4.2: Renewable Energy Share in Total Final Energy Consumption**



Source: Sustainable and Renewable Energy Development Authority (SREDA)

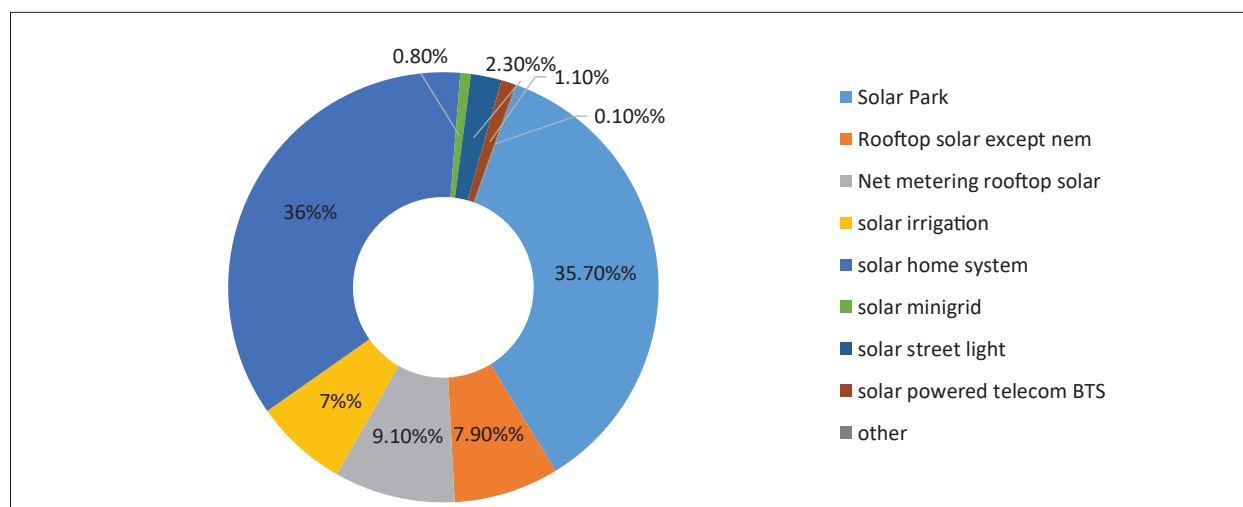
Table 4.3 provides a comprehensive overview of the renewable energy sources and technologies used in the country as of 2023. Solar energy is the most extensively used renewable energy source. The distribution of solar technologies is illustrated. Wind energy contributes to the country's renewable energy mix, with 3 wind projects having a total generation capacity of 2.9 MWp. Moreover, one hydro project with a capacity of 230 MWp has been implemented. Additionally, there are 7 biogases to electricity systems, generating 0.69 MWp, and 87536 biogas plants. Finally, the country has one biomass electricity system with a capacity of 0.4 MWp.

**Table 4.3: Renewable Energy Progress and Contribution Till 2023**

SL.	RE Source	Technology	Number	Off-grid MWp	On-grid MWp	Total MWp
1	Solar	Solar park	9	0	261	261
		Rooftop solar except NEM	197	18.228	39.923	58.151
		Net metering rooftop solar	1803	0	59.382	59.382
		Solar irrigation	2782	49.246	1.874	51.12
		Solar home system	6037689	263.793	0	263.793
		Solar minigrid	28	5.805	0	5.805
		Solar microgrid	0	0	0	0
		Solar nanogrid	2	0.001	0	0.001
		Solar charging station	14	0.266	0.016	0.282
		Solar street light	296861	17.065	0	17.065
		Solar powered telecom BTS	1933	8.06	0	8.06
		Solar drinking water system	82	0.095	0	0.095
2	Wind	All wind projects	3	2	0.9	2.9
3	Hydro	All hydro projects	1	0	230	230
4	Biogas	Biogas to electricity	7	0.69	0	0.69
		Biogas plant	87536	0	0	0
5	Biomass	Biomass to electricity	1	0.4	0	0.4
Total			6428948	365.649	593.095	958.744

Source: Sustainable and Renewable Energy Development Authority (SREDA).

**Figure 4.3: Share of Solar Technologies**



Source: Sustainable and Renewable Energy Development Authority (SREDA).

A summary of the performance of the different indicators under the Plan is presented in Table 4.4. While the overall performance was satisfactory, the renewable energy contribution to total electricity generation in FY20 was inadequate. However, targets for other indicators were met in FY19 and FY20. In the five years under the 7<sup>th</sup> Plan, significant progress was made in using renewable energy for electricity generation in Bangladesh. However, the rate of increase in electricity generation using renewable energy could not match that of coal-based electricity production. As a result, the contribution of renewable energy to the overall electricity production mix has remained relatively low from the base year.

**Table 4.4: Progress With the DRF Targets for Power, and Energy during the 7FYP**

	Base (FY15)	FY16		FY17		FY18		FY19		FY20	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Electricity Installed Generation Capacity (MW)	13,540	14,943	14,565	16,399	13555	19249	18,753	20649	22,051	23000	23,548
Access to electricity (% of households)	72 percent	80 percent	76 percent	85 percent	80 percent	90 percent	90 percent	94 percent	94 percent	96 percent	97 percent
Per capita generation of electricity (kWh)	371	398	407	425	407	454	464	483	510	514	512
Share of renewable energy to the total electricity generation (%) (including hydro)	3.6	5	3.1	6	3	7	3	8	3	10	3
system loss (%)	13.54	-	13.1	-	12.19	-	12	-	12	12	11

Source: Power Division, Bangladesh Power Development Board.

#### 4.3.4 Rural Electrification (distribution) Expansion Plan

The Government is making efforts to provide rural electrification as well as to reduce regional disparities in power distribution and consumption through Bangladesh Rural Electrification Board (BREB). More than 90 percent of the population is estimated to be covered by rural electrification under the 7<sup>th</sup> FYP. Performance indicators of the activities of the 7<sup>th</sup> FYP have been highlighted in Table 4.5. The data reveals that the electric distribution line has been expanded to approximately 244,544 km, which surpassed the planned target of 150,000 km. Over the course of the 7<sup>th</sup> FYP, a total of 407 sub-stations have been upgraded. There is some gap in achieving construction and upgradation of sub-station, a target of 480 versus and actual achievement of 407. However, the number of new consumers connected to the grid was 16,411,504, exceeding the planned target by two folds. The Plan also exceeded the target for village electrification, reaching 165,973 in the first four years. Furthermore, 38,321 km of the distribution system underwent rehabilitation and strengthening. These indicate that the Government attained significant progress in electrifying rural areas of Bangladesh.

**Table 4.5: 7<sup>th</sup> Plan Rural Electrification Distribution Plan (BREB)**

Activities Targets	Target (FY16-FY20)	Achievement (FY16-FY20)
Expansion/up-gradation of electric distribution line (Km)	150,000	244,544
Construction/Up-gradation of sub-station (No.)	480	407
New consumer connection (No.)	7,000,000	16,411,504
Village electrification (No.)	30,000	165,973
Switching station construction (No.)	40	-
River crossing tower construction (Set)	40	-
Replacement of Overloaded Distribution transformer (No.)	190,000	-
Replacement of electromechanical/digital meter by pre-paid meter (No.)	7,500,000	-
Rehabilitation and Intensification of Distribution System (Km)	25,000	38,321

Source: Bangladesh Economic Review; Rural Electrification Board; 7<sup>th</sup> Plan.

#### 4.3.5 Urban Distribution Targets

The power distribution companies in urban areas have implemented various initiatives to ensure the efficient distribution of electricity in these areas. Table 4.6 shows that urban power distribution entities i.e., Bangladesh Power Development Board (BPDB), Dhaka Power Distribution Company (DPDC), Dhaka Electricity Supply Company (DESCO), and West Zone Power Distribution Company (WZPDC), performance over the past five years.

According to the data, BPDB has expanded its electric distribution line by 5,312 km, falling short of the target of 14,200 km. It is noteworthy that Rajshahi and Rangpur Zone were handed over to North Eastern Electric Supply Company (NESCO) in 2017. In contrast, DPDC expanded 1,031 km of the electric distribution line, falling short of the target by 719 km, while DESCO exceeded its target by constructing 1,120 km of the distribution line. WZPDC constructed around 1,634 km of electric distribution line, missing its target of 2,301 km.

The 7<sup>th</sup> FYP had set a target of 1,400,000 new consumers to be connected; however, BPDB fell short by connecting only 490,777 new consumers. Similarly, DPDC connected 326,304 new consumers, and DESCO connected 292,375 new consumers, missing their targets by 99,696 and 133,625, respectively. WZPDC, on the other hand, connected around 439,804 new consumers. Furthermore, BPDB, DPDC, DESCO, and WZPDC reduced their system distribution loss to 8.99 percent, 9 percent, 7.24 percent, and 9.57 percent, respectively.

Additionally, BPDB installed the highest number of pre-paid meters, i.e., 3,256,000, followed by DPDC with 498,103 pre-paid meters, DESCO with 303,060 pre-paid meters, and WZPDC with 217,219 pre-paid meters.

**Table 4.6: Power Distribution Targets for Urban Centers for the 7<sup>th</sup> Plan (FY16-FY20)**

Distribution Activity	Bangladesh Power Development Board		Dhaka Power Distribution Company		Dhaka Electric Supply Company		West Zone Power Distribution Company	
	(FY16-FY20)		(FY16-FY20)		(FY16-FY20)		(FY16-FY20)	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target
Expansion/ construction of electric distribution line (Km)	5312	14,200	1031	1750	1,119.54	1050	1634	2,301(new) 2,317 (renovation)
Construction/ Modernization of sub-station (No.)	34	115	-	60	-	37	-	34
New consumer connection (No.)	4,90,777	14,00,000	3,26,304	4,26,000	2,92,375	4,26,000	4,39,804	6,00,000
Pre-paid meter (No.) *	32,56,000	39,00,000	4,98,103	12,00,000	3,03,060	10,50,000	2,17,219	11,31,000
System Loss (percent) ** (Distribution)	8.99	9.8	9	9	7.24	8	9.57	9.5
Customer service (call Centre) (No.)	-	57	-	1	-	1	-	446

Source: Power Division, Ministry of Power, Energy and Mineral Resources

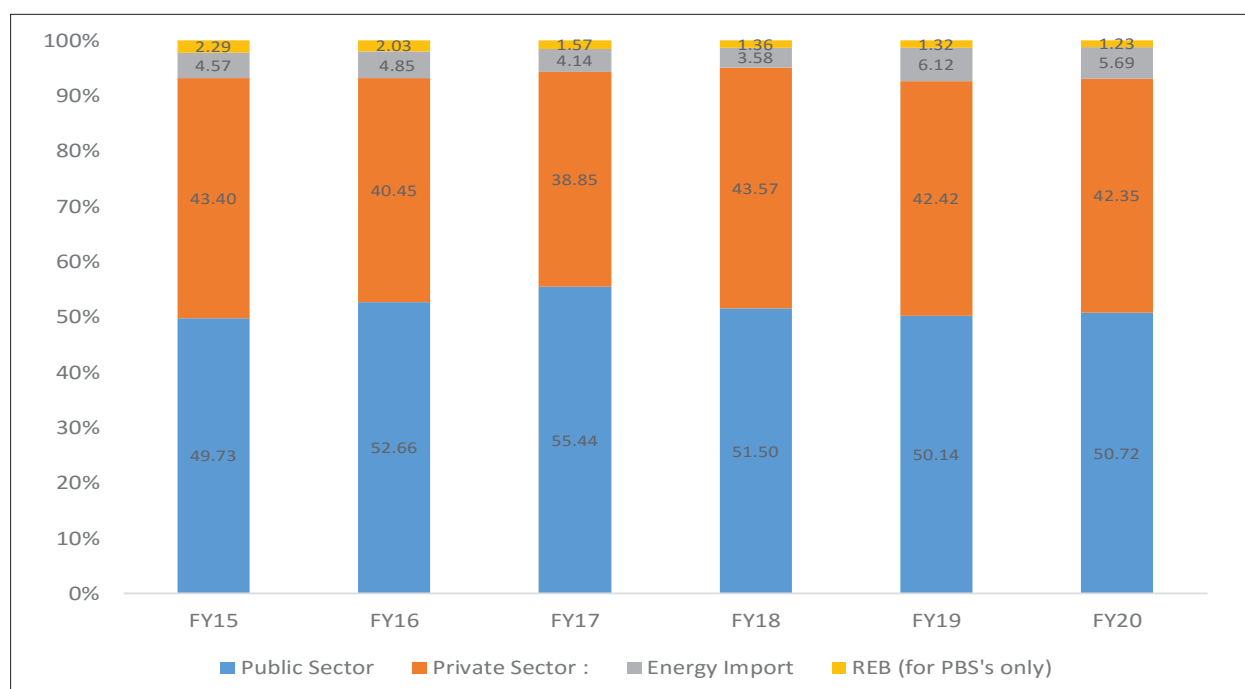
\* as of June 2020

\*\* indicates data for FY20

#### 4.3.6 Mobilization of Private Investment in Power Generation

In light of the financial constraints in the public sector, the 7<sup>th</sup> FYP sought to increase power generation from the private sector by a substantial amount. Figure 4.4 shows that the share of private sources in total installed generation capacity has dropped slightly over the past five years. The private sector contribution to total electricity generation (excluding imported energy) has decreased from 43.45 percent in FY15 to 42.35 percent in FY20. Meanwhile, the public sector share has increased from 49.73 percent to 50.72 percent. It should be noted that the contribution of individual power producers (IPPs) has increased by almost 60 percent since FY15.

**Figure 4.4: Installed Capacity by Ownership Excluding Captive Power (MW)**



Source: Bangladesh Power Development Board, Annual reports.

### 4.3.7 Power and Energy Sector Policies

The 7<sup>th</sup> plan discussed several strategies that were built upon the lessons learned during the implementation of the 6<sup>th</sup> Plan.

#### Supply of Primary Energy

In the 7<sup>th</sup> Plan, the strategy for primary energy supply is the most critical strategic issue. Under the 7<sup>th</sup> plan, it was recommended that the long-pending national energy policy be finalized and adopted. However, it has yet to be adopted by the government as of 2020.

#### Gas Allocation Policy

It was stated in the 7<sup>th</sup> plan that to maximize Bangladesh's limited domestic reserves, a clear gas allocation policy must be established. A "Gas Allocation Policy" was recommended to direct fuel allocation to users within a given sector that is more energy-efficient. For example, within the Power Sector, higher energy-efficient combined cycle power plants should enjoy higher priority of gas supply over efficiency-deteriorated aged gas power plants, because lower efficiency means more gas consumption to produce one unit of electricity.

The following policies have been drafted in accordance with this strategy:

- (1) The Natural Gas Allocation Policy 2019 was drafted
- (2) The Private LNG Import Policy-2019 was drafted

The two policies address, among other things, the following issues:

- Allocation of natural gas on a priority basis to consumers considering their contribution to the overall economy.

- Gas connections to industries with efficient equipment located inside special economic zones will be given priority under the draft.
- Ensuring the efficient use of natural gas, which is currently blended with expensive re-gasified LNG (liquefied natural gas).
- The electricity sector, including captive power plants, will be limited to consuming no more than 50 percent of the country's overall natural gas output.
- The government will introduce the use of modern metering in natural gas production, transmission, and distribution, along with LNG imports.
- An annual calendar will be developed to consider the demand for LNG imports and natural gas production.
- The government will encourage the private sector to import LNG alongside the government, as per the policy.

### **Domestic Gas Exploration Policy**

Another strategy outlined in the 7<sup>th</sup> plan pertains to the exploration and development of untapped gas resources within the country. The cost associated with such exploration and development is lower compared to that of LNG imports. Consequently, the 7<sup>th</sup> plan emphasizes that Bangladesh should prioritize its efforts on the exploration and development of its natural gas reserves, with subsequent consideration given to LNG imports to ensure a consistent supply of natural gas. As of 2020, no new exploration and development initiatives have been undertaken by the country. However, recognizing the importance of this matter, the government has taken steps to encourage new exploration and development programs in 2021.

### **Domestic Coal Utilization Policy**

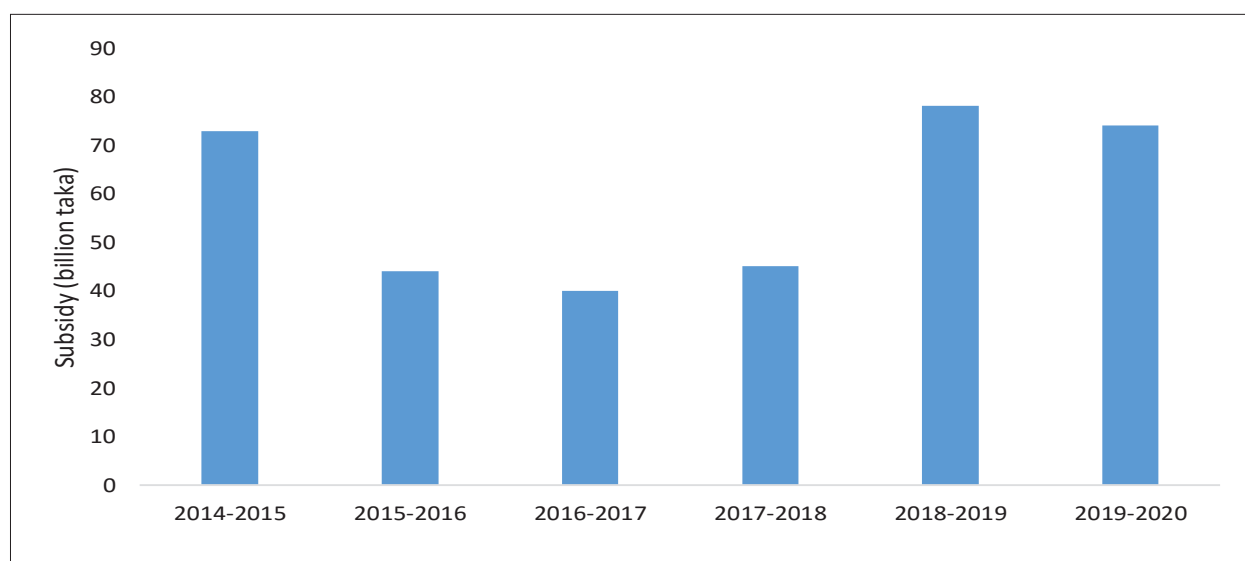
A similar policy, which was outlined in the 7<sup>th</sup> plan and suggested the use of high-quality domestic coal produced from Barapukuria to produce higher value-added products, was not adopted.

### **Energy Pricing Policies**

In the year 2003-2004, the formation of the Bangladesh Energy Regulatory Commission (BERC) led to accountability and transparency in the power tariff-setting mechanism for power and energy. As a result of established BERC guidelines, electricity tariffs are now adjusted more equitably and frequently. Despite this, a significant disparity exists between the average cost of electricity production and the average bulk supply tariff. The primary cause of the elevated average cost of power generation can be attributed to the escalating dependence on rental power and the rising proportion of fuel oil utilized in electricity production.

The average bulk electricity supply cost has decreased from TK. 6.27/kWh in FY 2015 to TK. 6.09/kWh in FY20, a decrease of 2.8 percent. While the average cost per unit purchase from rental decreased over the five years, from 8.9 tk/kWh in FY15 to 8.34 tk/kWh in FY20. The average cost per unit purchase from IPPs increased over the period of the 7<sup>th</sup> FYP. In FY15, unit cost stood at 6.32 tk/kWh, which increased to 7 tk/kWh in FY20. BPDB continued to receive budgetary support from Government over the five years due to losses incurred between bulk supply costs and bulk supply tariffs, as illustrated in Figure 4.5. Consequently, there was a rise in the budgetary support for electricity, from Taka 44 billion in the financial year (FY) 2016 to Taka 74 billion in FY20. While the recent reduction in global fuel oil prices may offer some respite for the budget, there remains a level of uncertainty surrounding international oil prices, which means that electricity pricing and subsidies could persist as significant policy challenges.

**Figure 4.5: Power Sector Budgetary Support (Billion Taka)**



Source: Bangladesh power development board, annual reports.

#### **4.4 Transport Sector Progress during 7FYP**

Achieving GDP growth targets and improved living standards requires a robust and efficient transport network. Therefore, improving the transport system was a key strategic objective of the 7<sup>th</sup> Plan. The vision for the transport sector was to create an efficient, sustainable, safe, and regionally balanced transportation system where different modes of transport complement each other, interface appropriately, and provide healthy competition to each other wherever possible. To achieve this vision, the Plan emphasized the introduction of modern technology, development of the two seaports with smooth transport links to Dhaka, the establishment of effective railway linkages between the east and west zones of the country, integration of road, rail, and inland water transport, and participation in global and regional transport connectivity initiatives to develop land route links between South Asia and East Asia through Bangladesh.

The 7<sup>th</sup> FYP prioritized transformational transport infrastructure projects to modernize the Bangladesh transport network to improve the mobility of goods and services, facilitate international trade, reduce costs, and enhance competitiveness. These projects are capital intensive, multi-year, and require intense supervision to avoid cost over-runs and delays. The Plan sought to introduce Mass Rapid Transit (MRT) starting with the capital city, Dhaka, and its adjoining areas, with a targeted completion of MRT Line-6 in December 2022, which was achieved. The Plan aimed to combine ADP allocations with a strong public-private-partnership (PPP) effort due to resource constraints and high investment costs.

To improve resource mobilization, the Plan intended to introduce user charges and fees for various public transport services, including road tolls, port fees, and inland water and rail fares. The Plan recognized the importance of transport, especially air transport, for tourism and focused on improving inter-district airline connectivity. The Plan aimed to improve the inter-modal transport balance with greater emphasis on rail and inland waterways, which are low-cost and environmentally friendly.

Overall, the objectives and strategies of the 7FYP for the transport sector were sound, focusing on inter-modal transport coordination, development of national highways, inter-city and regional connectivity,



lowering the cost of trade logistics, and improving transport network asset maintenance. The Plan also emphasized the importance of environmental sustainability and improving incentives for private sector participation in transport sector service and infrastructure development.

#### 4.4.1 Roads, Highways, and Bridges

The Road Transport and Highways Division (RTHD) aimed to construct 300 kilometers of four-lane roads by the end of the 7<sup>th</sup> FYP. The performance figures are reported in Table 4.7. In five years, a total of 393 kilometers of new four-lane roads has been constructed under the RTHD. Additionally, 350 kilometers of roads other than four lanes have been constructed, surpassing the target set in the 7<sup>th</sup> Plan. Over the five years of the 7<sup>th</sup> FYP, 4,925 kilometers of roads have been improved or rehabilitated, almost twice as many as planned in the 7<sup>th</sup> FYP. Moreover, 7,580 meters of flyover/overpass and 24,254 meters of bridges/ culverts were constructed between FY16-FY20. Both indicators exceeded the set targets stated in the 7<sup>th</sup> FYP.

**Table 4.7: Roads and Highways Objectives and Performance for the Seventh Plan**

Physical Activities	7 <sup>th</sup> FYP Targets (FY16-FY20)	Achievements (FY16-FY20)
Construction of 4 lane roads (kilometer)	300	393
Construction of roads other than 4 lane (kilometer)	340	350
Improvement/ Rehabilitation of roads(kilometer)	2,500	4925
Construction of Flyover/Overpass (meter)	7,000	7580
Construction of bridges/culverts (meter)	14,800	24254
Reconstruction of bridges/culverts (meter)	6,800	6830

Sources: Road Transport and Highways Division and 7<sup>th</sup> FYP.

In addition to the reconstruction and rehabilitation of roads and bridges, the 7<sup>th</sup> FYP emphasized the construction of the Padma Bridge at Mawa-Janjira Point, Bangladesh's largest infrastructure development project. Although the 6.15 km long bridge was initially scheduled to be completed in 2018 as per the 7<sup>th</sup> Plan, it was inaugurated on 25 June 2022. The conversion of key national highways into four-lane highways was also among the top priorities of the 7<sup>th</sup> FYP. The Dhaka-Chittagong 4-lane Highway and the Dhaka-Mymensingh 4-lane Highway have been completed and are currently in use.

Several initiatives have been taken to construct a multi-lane tunnel under the Karnaphuli River, which will be 3.40 kilometers long with a 4.89-kilometer approach road and 800 meters of bridges. The tunnel will connect Chittagong city, port, and the western side of the river to its eastern side and link the Asian Highway to the Dhaka-Chittagong-Cox's Bazar Highway. As of December 2021, the project's overall physical progress was 77.50 percent, projected to be completed by the end of 2022. Although the roadwork has been finished, the electro-mechanical work on the tunnel is still underway. The traffic system outside the tunnel is expected to be completed by December 2023. According to the project director, as of November 25, 2022, 94 percent of the construction work on the Karnaphuli tunnel project had been completed.

#### 4.4.2 The Railway Sector

The enhancement of railway communication was given great importance in the 7<sup>th</sup> FYP. The Railway investment program was guided by the Railway Master Plan 2010-2030, which was approved in 2004 and updated in 2017. Furthermore, the Plan was influenced by the National Integrated Multimodal Transport Policy (NIMTP) 2013. A total of 230 projects costing TK 5537 billion were initiated under the development

plan, which included the construction of new railway lines, procurement of rolling stock for passenger and freight, and rehabilitation of existing railway stations and signaling systems. The implementation of the development plan has led to significant enhancements in the overall performance of Bangladesh Railway in terms of both passenger and freight service delivery.

The performance of the railway in carrying goods and passengers has been reported in Table 4.8. The indicator, passenger-kilometers, is regarded as the best measure for passenger traffic, and freight tons-kilometers is the measure of freight carried by railway. The table shows an increasing trend from FY16 till FY20 in passenger kilometers carried, with a sharp increase in FY20. Passenger kilometers have increased from 8,711.37 million in FY 2015 to 99577.68 million in FY20, almost 11 times the number in FY15. On the other hand, kilometers of freight carried by railway grew slower over the years. It increased from the base year value of 693.84 (ton-kilometers) million to 1002.04 (ton-kilometers) million in FY20.

**Table 4.8: Performance of Bangladesh Railway**

Fiscal Year	Passenger Km (Million)	Freight Ton Km (Million)
FY15	8711.36	693.84
FY16	9167.18	675.09
FY17	10040.66	1052.67
FY18	12993.91	1236.5
FY19	14334.76	913.48
FY20	99577.68	1002.04

Source: Bangladesh Economic review, Ministry of Railway.

Despite some improvements, the Bangladesh Railway is still facing significant challenges. The main constraints include a scarcity of rail tracks, rolling stock, and safety equipment, as well as a lack of compatibility between the broad and meter gauge systems and operational inefficiencies. Additionally, the poor quality of services provided by the railway has led to a lack of passenger interest. Every year, the railway suffers from a large deficit, which must be addressed by making rail travel more appealing to both passengers and freight shippers in order to ensure that rail transport becomes a viable and sustainable option for Bangladesh.

Table 4.9 presents a summary of the objectives outlined in the 7<sup>th</sup> FYP and the progress made in the five-year timeframe. It demonstrates that although the Government attempted to achieve the predetermined objectives, it ultimately fell short of its target. Since 2016, Bangladesh has constructed only 169.33 kilometers of new railway lines and undertaken around 252.938 kilometers of dual gauge double tracking. Within the five years under the Plan, 111.33 kilometers of railway lines were rehabilitated, and 183 Km of rail bridges were constructed. In addition, 31 station buildings were built, while 25 pre-existing stations underwent rehabilitation. Moreover, in the first two years of the 7<sup>th</sup> Plan, 80 locomotives were acquired, and an agreement was reached to acquire 140 locomotives in FY 19. By FY20 six relief cranes were procured, and 293 passenger coaches were purchased. Additionally, 172 passenger coaches were rehabilitated during the same period.

**Table 4.9 Seventh Plan Railway Targets and Performance**

Performance Indicators	7 <sup>th</sup> FYP Target	Progress (FY16-FY20)
Expansion of railway network to expand rail operations	Undertake construction of 856 kilometers of new rail track.	169.33 km railway line
Double tracking of important sections and gauge unification to overcome operational bottlenecks	undertake dual gauge double tracking of 1110 kilometer	252.938 kilometer <sup>11</sup>
Rehabilitate/upgrade existing rails for improved speed and safety	Undertake rehabilitation of 725 km of existing rail track	111.33 kilometers
Construction of railway bridges and other infrastructure for operational improvement	Undertake rail bridge construction, level crossing gates, and other infrastructure improvement.	183 km rail bridges
Procure new locomotives to improve service quality	Purchase 100 new locomotives, 1 locomotive simulator and 4 relief cranes	Procured purchase of 80 locomotives; 6 relief cranes
Procure new coaches for passenger comfort.	Purchase 1120 passenger coaches and rehabilitate 624 coaches.	293 passenger coaches, 172 passenger coaches were rehabilitated.
Upgrade railway workshops and maintenance	Procure modern maintenance equipment	--
Improve rail speed and safety	Upgrade rail signal for 81 stations	Modernization of Signaling System at 90 stations; Rehabilitation of Signaling System at 9 stations

Source: Ministry of Railways and Bangladesh Railway, annual reports; Bangladesh Economic Review, Mid-term budget framework and 7<sup>th</sup> FYP.

#### 4.4.3 Inland Water Transport

Inland Water Transport (IWT) is recognized as an energy-efficient, environmentally friendly, and cost-effective mode of transportation, but its potential has not been fully realized. The road sector has received most of the attention, hindering the growth of IWT. Bangladesh has an extensive network of waterways, including rivers and canals, spanning over 14,000 km. However, only about 5,968 km of the waterways remain navigable during the monsoon season, and 3,865 km are navigable during the dry season. Despite this limitation, the water transport network plays a significant role in the inland movement of goods and passengers, as well as the transportation of import and export items through the ports of Chittagong and Mongla. Riverboats are the only mode of transport for many rural populations during the monsoon season when roads become impassable. Country boats provide around 50 percent of total employment in the transport sector and are the primary mode of transportation in areas with less-developed road networks. However, most of these waterways suffer from navigational hazards, such as shallow water, narrow channels during dry weather, siltation, and bank erosion. The absence of proper surface road links to facilitate the smooth transit of cargo also constrains infrastructure. The Government recognized the high potential of IWT and completed an Inland Water Transport Master Plan (IWTMP) in 2009, which identified major constraints and made recommendations on reforms and investments. The 7<sup>th</sup> FYP aimed to push forward these reforms by emphasizing five key elements: the development of new waterways, the navigability of existing channels, operations and maintenance, the establishment of landing stations and river ports for bulk cargo and containers, digitization of services related to the IWT system, and facilitating maritime education and training. However, progress has been mixed due to inadequate resources, high-cost dredging operations, institutional weakness, and inadequate inter-agency coordination.

<sup>11</sup> Information obtained from MTBF 2019. Data for 2020 are not available.

Table 4.10 shows the achievements under the 7<sup>th</sup> Plan. Over the course of five years, the hydrographic survey successfully covered 12,057.99 sq km of inland waterways, exceeding the initial target by two-fold. In addition, the survey also achieved 4650 sq km of coastal waters, surpassing the set target of 1000 sq km under the 7<sup>th</sup> FYP. Despite falling short of the set target by 1951.37 lakh, 1648.63 lakh m<sup>3</sup> of dredging was undertaken, and 45 dredgers were procured by February 2020. During the fiscal year 2016-17, the construction of 8 river ports was achieved, and four additional river ports were constructed and upgraded in 2021. Furthermore, modernization efforts were carried out on two river ports, namely the Dhaka River Port and Barisal River Port, in 2019. In terms of pontoons, 771 were procured in the first four years of the plans, surpassing the set target. Moreover, during the five years, 940 pontoons were repaired and reconstructed.

**Table 4.10: Inland Water Development Programme in the Seventh Plan**

Performance Indicators	Targets (by FY20)	FY16-20
Development of new waterways and maintaining navigability of existing channels	Hydrographic Survey in 6000 sq km of inland waterways & in 1000sq km of coastal waters	Hydrographic Survey in 12057.99 sq km of inland waterways & in 4650 sq km of coastal waters
Operation, maintenance and establishment of landing stations and river ports for bulk cargo and container	Dredging of 3600 lakh m <sup>3</sup>	1648.63 lakh m <sup>3</sup>
	Procurement of 30 nos. dredger;	45
	Procurement of different no. of service vessels.	-
	Construction of 10 nos. River Port	8
	Construction of 2 nos. Container Terminal (ICT)	-
	Procurement of different size such as 5 nos. (large), 45 nos. (medium), 50 nos. (small), 35 nos. (special type) of Pontoon	771
	reconstruction of Pontoon	940 (repaired)

Source: Bangladesh Economic Review, Ministry of shipping, BIWTA annual report.

#### 4.4.4 Ports

Ports are critical to facilitate international trade, and Chittagong Port plays a vital role in handling 95 percent of Bangladesh's seaborne imports and exports. The 7<sup>th</sup> Five-Year Plan (FYP) aims to enhance the operational capacity and efficiency of Chittagong Port, in accordance with international best practices. Table 4.11 presents data that indicates a significant improvement in Chittagong Port's cargo and vessel handling performance. Between FY15 and FY20, the total cargo handled rose from 61.73 million tons to 101.56 million tons, while the number of vessels handled increased from 2,566 to 3,764. The number of containers handled was 18.67 million tons in the base year. By FY20 it was 3004142 (Tues). The turn-around time of vessels, which is one of the key performance indicators for ports, was reduced from 4.45 days in FY15 to 2.86 days in FY20, in line with international standards.

**Table 4.11: Chittagong Port Performance under 7<sup>th</sup> Plan**

Indicators	FY15	FY16	FY17	FY18	FY19	FY20
Turn Around Time of Vessels (days)	4.45	4.7	2.83	2.68	2.88	2.86
Cargo handled including inland and ICD (million tons)	61.73	71.16	73.17	85.04	98.24	101.56
Vessels handled (nos.)	2566	2875	3092	3664	3699	3764
Container handled (Tues)	1,867,062	2,189,481	2,419,481	2,705,909	2,919,023	3,004,142

Source: Chittagong Port Authority.

**Table 4.12: Mongla Port Performance under the 7<sup>th</sup> Plan**

Indicators	FY16	FY17	FY18	FY19	FY20
Cargo handled (million metric ton)	5.796	7.512	9.716	11.315	11.036
Vessels handled (nos.)	482	623	784	912	903
Container handled (Tue)	41953	26952	42989	57735	59476

Source: Mongla port authority, annual report

The Mongla Port Authority (MPA) operates the Mongla Port, the second largest port in Bangladesh. It is regarded as the most environmentally friendly seaport in the country due to its location adjacent to the Sundarbans, the world's largest mangrove forest. Mongla Port has been serving as an international seaport since 1950 and has considerable underutilized capacity, as well as the potential to provide a faster turn-around time. The port also has the capability to facilitate trade between the north-west region of Bangladesh, Nepal, Bhutan, and areas adjacent to the Indian border. While recognizing Mongla Port's potential to serve as an alternative shipping route to the heavily congested Chittagong Port, efforts were made during the 7<sup>th</sup> FYP to expand the traffic through this port. During the 7FYP, a total of 45.375 million metric tons of cargo were handled, i.e., cargo handling grew at an average pace of 20 percent per year with a drop of 3 percent between FY19 and FY20, from 5.8 million metric tons in FY16 to 11.03 million metric tons in FY20. Table 4.12 shows the performance of the port under the Plan. Moreover, the total number of vessels handled reached around 3704, with around 2,29,105 tonnes of containers being handled during the period. A significant dredging project was undertaken to address maritime issues and increase the water depth of the outer bar of the Passur River, allowing vessels with drafts over 10 meters to berth at the port. This investment allowed for the rapid expansion of port activities,

The Payra Port Act 2013 established the third seaport of Bangladesh, situated on the bank of the Ramnabad Channel in Kalapara, a sub-district of Patuakhali. Its primary objective under the 7<sup>th</sup> FYP is project implementation, which will be achieved through a phased approach. Limited-scale operational activities of Payra Sea Port commenced on August 13, 2016, with the development of some basic infrastructure and the transfer of goods via inland waterways using sing barges. The Payra Port Authority has already constructed a Service Yard comprising an RCC Service Jetty, several Supporting Buildings, a Water Treatment Plant, and a Warehouse, which is spread over 48 acres of land connected by a four-lane road to the National Highway. Currently, 6,500 acres of land are being acquired for the development of core port infrastructure, of which 3,100 acres have already been acquired. It is anticipated that by 2023, Payra Port will become fully operational as an international seaport, with the completion of the capital dredging project and the construction of at least three terminals, 12 berths, and a channel depth of 10.5 m. The "Traffic Forecast Study Report" by Royal Haskonning DHV forecasts an increase in total cargo volumes at Para Port from 11.1 million MT in 2021 to 33.6 million MT in 2025. As per the long-term Plan, it is expected that by 2035, Payra Port will be able to function with at least 14.0m CD through a second phase of capital dredging and handle about 89.8 million MT cargos and 5.1 million TEUs containers.

#### 4.4.5 Air Transport

Over the last twenty years, there has been a substantial increase in the demand for air services in Bangladesh for multiple factors, including a rise in per capita income, worker service exports, and tourism expansion. The Civil Aviation Authority of Bangladesh (CAAB) serves as the regulatory body for all aviation-related activities and manages all airfields, allied facilities, and air navigation facilities. Currently, the CAAB operates three international airports, seven domestic airports, and two Short Take-Off and Landing (STOL) ports, with eight of these airports being operational (three international and five domestic). However, two domestic airports and two STOL ports are not in operation due to insufficient passenger traffic. Hazrat

Shahajalal International Airport (HSIA) in Dhaka is the busiest airport in Bangladesh, accounting for 80 percent of total air traffic flow. However, with a current capacity of 8 million passengers annually, it has already reached the saturation point, and its existing terminal and runway cannot accommodate Code F Aircraft (A380, B747-8F). Thus, expanding and upgrading HSIA is necessary to cater to the increasing demand for air travel. The 7<sup>th</sup> FYP aimed to enhance the operational capabilities of existing facilities and establish new airports. Although progress has been made in expanding and upgrading facilities at HSIA, Chittagong, and Sylhet airports, there have been delays in converting Cox's Bazar domestic terminal to an international terminal and constructing a new airport in the Southern region of Bangladesh. The Ministry of Civil Aviation and Tourism is confronted with several constraints, such as procurement problems, project implementation capacity constraints, and financing challenges. Despite the increased service capacity of the national air carrier, Bangladesh Biman, lags behind major competitors like Qatar Airways, Emirates, and Thai Airways, resulting in lower earnings than its potential.

#### 4.5 Major Infrastructure Development Projects

Several priority projects have been implemented under the 7<sup>th</sup> FYP. The progress status of selected priority projects is summarized in Table 4.13.

**Table 4.13: Progress of Major Infrastructure Project**

Projects	Completion Target	Status (Signed/Work in Progress/Completed)
Dhaka-Chittagong 4-lane highway	2016	Completed in 2016
Padma Bridge	2018	Completed in 2022
Dhaka Elevated Expressway	2020 (revised)	On-going
Rooppur Nuclear Power Plant Project	2024	On-going
Rampal Coal Power Project	2021 (rescheduled)	On-going
Matarbari Coal Power Project	2023 (revised)	On-going
MRT-6 project	2020 (first phase) 2021 (complete) (revised)	Completed in 2022
Third Terminal of Hazrat Shahjalal International	2019	On-going
Karnaphuli Tunnel	December 2023	On-going
BRT lane (elevated section)	2023	On-going
Dhaka-Ashulia Elevated Expressway	2026	On-going
Payra Deep-sea Port	2023 (rescheduled)	On - going

Source: Bangladesh Bridge Authority, Road Transport and Highways Division.



**Dhaka-Chittagong 4-Lane Highway:** The 4 – lane of Dhaka - Chittagong National Highway Project was sponsored by the Ministry of Communications and executed by the Roads and Highways Department. The project was launched in 2006 and completed in 2016, per the 7<sup>th</sup> Plan.

The Government of Bangladesh decided to improve road communication between the capital city, Dhaka, and the commercial port city of Chittagong, to reduce travel time and improve road safety. To achieve this goal, the Government aimed to upgrade the National Highway into a 4-lane highway. Improvement of this strategic corridor was expected to provide significant economic and social benefits to the southeastern region, particularly by generating employment, creating improved facilities for trade and commerce, promoting social integration and tourism, and thus contributing to economic development and poverty reduction in the country.

**Padma Bridge:** The Padma Bridge, Bangladesh’s largest infrastructure project, was scheduled to be inaugurated by the end of 2018 but was not completed until mid-2022. The project was implemented with funding from domestic sources. The cost of the project was reported to have tripled due to implementation delays and other reasons, including land acquisition.

**Dhaka Elevated Expressway:** The Bangladesh Bridge Authority is implementing the Expressway project under the Ministry of Road Transport and Bridges to enhance traffic capacity in and around Dhaka City through improved connectivity between the northern, central, southern, and southeastern parts of the city. The primary objective of the project is to alleviate existing road congestion. Therefore, access and distribution to the Expressway will be designed to prevent additional traffic build-up on the existing facilities. Although the project was initially scheduled to be completed in 2020, the current completion date has been pushed back to late 2023. Despite facing some delays, notable progress has been made, and the Government has announced plans to launch the Dhaka airport-Banani section of the Dhaka Elevated Expressway in December 2023. Although work on the rest of the bridge has been slower due to ongoing major projects, such as the Metro Rail project and Bangladesh railway, the overall progress of the project has surpassed 50 percent.

**Rooppur Nuclear Power Plant Project:** The Rooppur Nuclear Power Plant project is paramount for low-cost power supply. After conducting feasibility studies based on geological, geophysical, and meteorological data of the Rooppur site, the Bangladesh Atomic Energy Commission (BAEC) has completed the First Concrete Pouring (FCD) of Unit 1 and Unit 2 of the Rooppur plant. Despite a delay in completing the project due to the COVID-19 pandemic, it is expected that Unit 1 will generate 1200 MW of power, and Unit 2 will produce another 1200 MW, contributing a total of 2400 MW of nuclear power to the national grid by 2024. The Rooppur nuclear project is anticipated to be a more cost-effective and eco-friendlier source of electricity. It will use the latest generation 3+ Russian VVER 1200 reactor, which meets all international safety requirements.

**Rampal Coal Power Project:** In 2010, Bangladesh and India launched the construction of the Rampal Power Plant, a coal-fired thermal power plant, through the Bangladesh-India Friendship Power Company (Pvt) Limited. Subsequently, on January 29, 2012, the Bangladesh Power Development Board and India’s NTPC Ltd signed an agreement to formalize the project. The first unit of the 1,320MW Rampal Power Plant has begun supplying 620-630 megawatts of electricity to the national grid on a trial basis through the Mongla-Mawa-Aminbazar gridline, and it is ready to begin commercial production, according to the Bangladesh Power Development Board spokesperson. In September 2022, Prime Minister Sheikh Hasina and her Indian counterpart Narendra Modi virtually inaugurated the first unit of the plant, marking a significant milestone in the project’s development.



**Matarbari Coal Power Project:** The Matarbari coal-fired power plant is a significant project developed in Maheshkhali in Cox's Bazar district of Bangladesh by the Coal Power Generation Company Bangladesh (CPGCBL), a state-owned enterprise of the People's Republic of Bangladesh. The 1.2 GW power project was proposed in September 2011 and granted environmental approval in October 2013. In January 2018, the ground-breaking ceremony for the project took place, with the plant expected to begin operations by 2024. It is expected to account for 10 percent of the total generation capacity of Bangladesh. The project, which JICA is funding, involves building a coal-fired power plant with the capacity to generate 1,200 MW of power and affiliated facilities over a period of seven years. The consortium of Sumitomo, Toshiba, and IHI from Japan is implementing the project, with POSCO E&C subcontracted to construct a major part of the plant. Despite the challenges posed by the COVID-19 pandemic, the construction of the coal-powered plant began in March 2020 and proceeded without delay. As of February 2023, the construction of the coal-fired power plant has seen 95.9 percent completion. The first unit of the plant is anticipated to start commercial production in January 2024, with the second unit following in July of the same year. The Matarbari coal-fired power plant project is expected to improve the electricity supply in the region, thus supporting the economic development of Bangladesh and the well-being of the Bangladeshi people.

**MRT-6 Project:** After a decade of encountering various obstacles, the much-anticipated Mass Rapid Transit Line 6 (MRT Line 6) project is finally becoming a reality in Bangladesh. The country's first overhead electric train is scheduled to be launched in December 2022. The frequent changes in the MRT Line 6 route design proved to be the primary challenges in initiating the project. Furthermore, the COVID-19 pandemic also presented substantial challenges that the authorities had to overcome to implement the Tk 33,472 crore project. Although the project received approval in December 2012, its physical works did not begin until mid-2016 due to the authorities' need to complete detailed designs and other preparatory tasks. The construction work of MRT Line 6 was eventually inaugurated by the honorable Prime Minister Sheikh Hasina on June 26, 2016. Managing traffic during the construction phase was another major concern for the project authorities. The MRT-6 line interconnects six important areas of the city: Kamalapur, Motijheel, Dhaka University, Farmgate, Mirpur, and Uttara, which have become significant neighborhoods in the capital.

**The Third Terminal of Hazrat Shahjalal International Airport:** The ongoing mega project of constructing the third terminal at Hazrat Shahjalal International Airport in Dhaka is a significant undertaking in Bangladesh. This project commenced in 2019 and is expected to be operational by October 2023. The anticipated new terminal will serve a crucial role in the country's trade and commerce while providing world-class amenities to both local and international travelers. A feasibility study conducted by the Civil Aviation Authority of Bangladesh (CAAB) in 2014 showed that the airport could cater to 8 million passengers annually. However, the study also projected an increase in passenger traffic to 140 million by 2025 and a further rise to 250 million by 2035. As a result, the existing airport is being expanded to cope with the additional passenger load. The upcoming terminal is expected to tackle the challenges presented by the surge in passenger traffic and enhance the overall travel experience for passengers.

**Karnaphuli Tunnel:** The implementation of the 3.40 km long tunnel under the river Karnaphuli is currently underway at the cost of Tk. 8,446.46 crore. The primary purpose of this project is to connect the west part of Chattogram city to the east part, reduce traffic congestion, and ease direct road communication

among Dhaka, Chattogram, and Cox'sbazar. The tunnel will also facilitate the transportation of goods from the Chattogram seaport and the proposed deep seaport. It is expected to contribute 0.166 percent to the national GDP growth. The Honorable Prime Minister inaugurated the Tunnel Boring Machine (TBM) on 24 February 2019, and the casting of all 19,616 tunnel segments has already been completed. Its construction is expected to be completed by December 2023.

**BRT Lane (Elevated Section):** Under the 'Sustainable Urban Transport Project' in Bangladesh, efforts have been made to improve the transportation system by constructing a 20-kilometer-long Bus Rapid Transit (BRT) lane that will connect Gazipur to the Hazrat Shah Jalal (R) International Airport. As part of the project, the Bangladesh Bridge Authority (BBA) has been entrusted with the responsibility of implementing the 4.5-kilometer-long elevated section of the BRT lane. The construction of the elevated section has already commenced, and as of February 2020, the progress of the implementation work stands at 27 percent. The implementation of the elevated section of the BRT lane is expected to improve the efficiency and effectiveness of the transportation system, particularly in the urban areas of Bangladesh.

**Dhaka-Ashulia Elevated Expressway:** On 24 October 2017, the Bangladesh government approved a project to construct a 24-kilometer-long Dhaka-Ashulia Elevated Expressway connecting Hazrat Shah Jalal (R) International Airport to EPZ through Ashulia. The project is estimated to cost Tk. 16,901.32 crore, and a commercial agreement was signed with a Chinese government-nominated company on 29 November 2017. The land acquisition process for the project is currently underway. Once completed, the expressway will connect the Asian Highway Network and almost all National Highways, reducing traffic congestion in the Abdullahpur-Ashulia-Baipail-Chandra corridor that connects Dhaka city with 30 other districts. To this end, the project is expected to significantly impact regional transportation infrastructure and the economy as a whole. Construction work commenced after the loan agreement was signed with the China EXIM Bank in 2021. It is anticipated that the project will be completed by 2026.

#### 4.6 Financing Strategy and Resource Allocation for Energy and Infrastructure

As power, energy, and transportation infrastructure are important factors in facilitating private investment and economic development, the Government responded positively to the 7<sup>th</sup> FYP targets by making large infrastructure allocations as well as financing large infrastructure projects through Public-Private Partnerships (PPP).

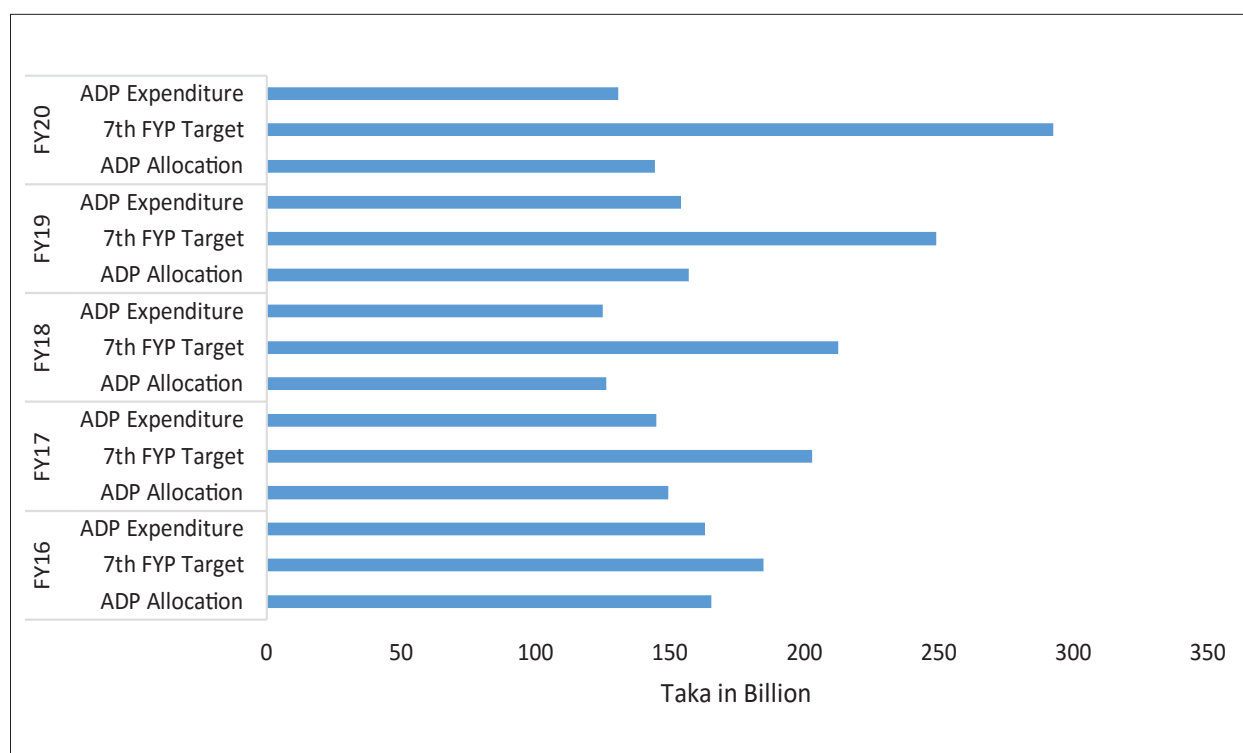
##### ADP Allocation

The ADP allocation and expenditure for infrastructure have been adjusted in line with the 7<sup>th</sup> FYP. Within the infrastructure category, the allocation as well as expenditure for power and energy had a decreasing trend until fiscal year 2018-19. It went down again for fiscal 2020. In energy and power sector, much of the investment went to the Power Division due to the installation of new plants to generate power and installing transmission and distribution network. The total ADP expenditure in transport infrastructure has increased from Tk. 184.36 billion in FY16 to Tk. 278.3 billion in FY20. Much of the expenditure was incurred in roads and railways, mainly due to the large projects including Padma Bridge, 4-lanes road infrastructure, and construction of new rail network.

**Table 4.14: ADP/Seventh Plan Allocation and Actual ADP Expenditure for Infrastructure Related Ministries/Divisions (TK Billion)**

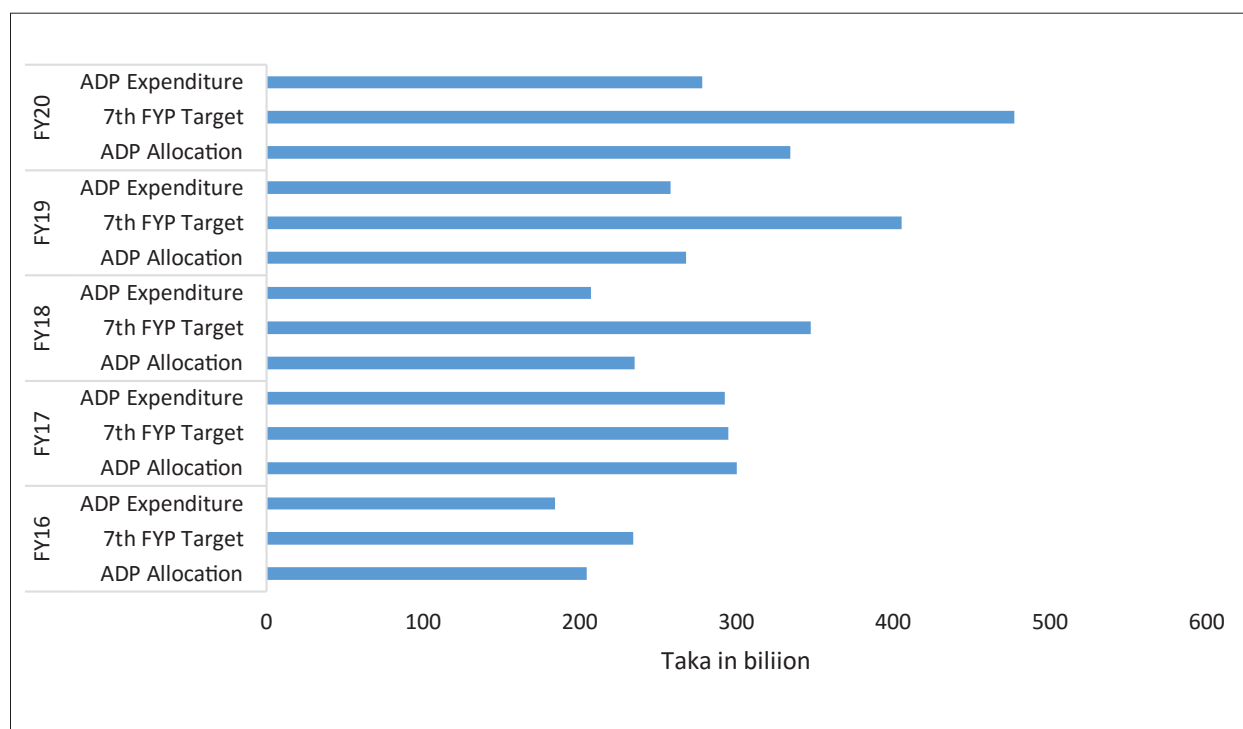
Ministry	FY16			FY17			FY18			FY19			FY20		
	ADP Allocation	7 <sup>th</sup> FYP Target	ADP Expenditure	ADP Allocation	7 <sup>th</sup> FYP Target	ADP Expenditure	ADP Allocation	7 <sup>th</sup> FYP Target	ADP Expenditure	ADP Allocation	7 <sup>th</sup> FYP Target	ADP Expenditure	ADP Allocation	7 <sup>th</sup> FYP Target	ADP Expenditure
Energy & Mineral Resources Division	10.68	19.9	10.54	19.11	34.5	10.68	9.16	41.1	8.66	8.91	48.2	8.85	11.21	56.6	6.27
Power Division	154.76	164.9	152.57	130.4	168.5	134.21	117.30	171.5	116.45	148.22	201	145.29	133.28	235.9	124.59
Total power and energy	165.44	184.8	163.11	149.51	203	144.89	126.46	212.6	125.11	157.13	249.2	154.14	144.49	292.5	130.86
Road Transport and Highways Division (RTHD)	63.49	56.8	65.07	81.61	69.2	94.03	111.74	82.3	111.134	139.88	96.5	139.57	176.42	113.2	158.167
Bridges Division	62.53	89.2	52.66	92.58	127.7	65.27	51.09	151.4	30.813	49.06	177.5	48.39	58.02	208.3	57.873
Total Ministry of Road Transport and Bridges	126.02	146	117.73	174.19	196.9	159.3	162.83	233.7	141.94	188.95	274	187.96	234.45	321.5	216.04
Ministry of Railways	46	56.5	39.50	91	63.8	92.78	41.16	76.0	40.107	29.13	89.1	21.91	28.27	104.5	19.392
Ministry of Shipping	16	10.8	11.15	15	11.3	17.08	18.02	13.5	17.42	29.543	15.8	29.46	50.965	18.5	25.646
Ministry of Civil Aviation and Tourism	2.45	3.3	2.35	4.89	4.2	4.73	5.3171	5.3	2.555	8.71	6.4	8.070	8.0439	7.7	6.703
Posts and Telecommunications Division	14	17.7	13.63	15	18.7	18.61	7.7937	19.1	5.051	11.45	20.2	10.472	12.70	25.3	10.517
Total Transport and Communication	204.47	234.3	184.36	300.08	294.9	292.5	235.13	347.6	207.08	267.79	405.5	257.8	334.44	477.5	278.3
Grand Total	369.91	419.1	347.47	449.59	497.9	437.39	361.59	560.2	332.19	424.92	654.7	412.02	478.93	770	409.16

**Figure 4.6: Allocation and Actual ADP Expenditure for Power and Energy**



Source: Planning division, Ministry of Finance and 7<sup>th</sup> FYP

**Figure 4.7: Allocation and Actual ADP Expenditure for Power and Energy**



Source: Planning division, Ministry of Finance and 7<sup>th</sup> FYP

## 4.7 Conclusions and Way Forward

The 7<sup>th</sup> FYP recognized the vital role of efficient transport network and uninterrupted electricity supply in growth and development of the . The plan clearly demonstrated the government's commitment to energy and infrastructure development in Bangladesh, setting specific targets and strategies for progress. These strategies included improving the efficiency of distribution lines, focusing on rural areas, introducing incentives for private sector participation, identifying and allocating resources to transport infrastructure projects. While some targets were not fully achieved, overall, significant advancements have been made.

One notable accomplishment is the expansion of electric distribution lines, surpassing the target, and connecting new consumers to the grid, resulting in a remarkable increase in electricity access to 97%. This success can be attributed to the careful implementation of strategies outlined in the 7<sup>th</sup> FYP.

In terms of infrastructure, Bangladesh has made significant strides with several transformational transport projects currently underway, some of them are about to complete. The strategies in 7<sup>th</sup> FYP has proved its effectiveness with the timely and successful completion of Mass Rapid Transit Line-6 in Dhaka implying the government's commitment to modernizing the transport system. This along with the other infrastructural projects Bangladesh has in the pipeline can revolutionize the country's transportation network.

However, the achievements made by the country did not come without obstacles. Bureaucratic hurdles, lack of coordination between government agencies, underutilization of the ADP budget, and inadequate project management capacity among others have contributed to project delays. Additionally, an unfavorable regulatory environment has posed further obstacles to achieving targets. For example, Bangladesh fell short of its goal of generating 10 percent of its energy from renewable sources by 2020. This was due to a combination of factors, including inadequate resources and proper planning.

Furthermore, external factors such as the global outbreak of the COVID-19 virus at the end of FY19, as well as the Russia - Ukraine war and its effect on global energy prices, all acted as obstacles and slowed down the government's progress.

Nevertheless, there is optimism that all unmet targets can be realized by implementing policy reforms outlined in this end review, as well as those proposed in the forthcoming 8<sup>th</sup> five-year plan. By addressing the challenges identified and ensuring effective coordination, project management, and regulatory improvements, Bangladesh can enhance its energy and infrastructure development efforts.

The government's commitment and progress in the energy and infrastructure sectors lay a strong foundation for future advancements. Continued adherence to strategic planning, policy reforms, and effective implementation will contribute to the realization of long-term goals and drive sustainable development across the country. Certain areas still require additional measures to ensure that the unmet targets are achieved promptly. Moreover, these measures can help establish the foundation to support the objectives outlined in the 8<sup>th</sup> Five-Year Plan, which is already underway. The following are a few recommended steps that can be taken to accomplish the targets under these plans.

## **Improve Project Implementation**

One of the key challenges in achieving infrastructure development targets is the slow implementation of projects. Many infrastructure projects in Bangladesh have faced delays due to a range of factors including bureaucratic red tape, lack of coordination between government agencies, low utilization of the ADP budget, and inadequate project management capacity. The Government can focus on improving project implementation by strengthening project management capacity, improving coordination between agencies, and streamlining approval processes.

## **Enhance Regulatory Environment**

The creation of a more favorable regulatory environment for infrastructure development in Bangladesh is extremely essential. This entails the establishment of explicit and transparent regulations that provide certainty and predictability to investors and other stakeholders. To enhance the regulatory environment, Bangladesh should prioritize the establishment of clear and transparent regulations consistent with international best practices and standards. It is also crucial to ensure fair and consistent enforcement of regulations.

Moreover, improving the quality of procurement processes is another crucial aspect of enhancing the regulatory environment. This can be achieved by adopting standardized procurement procedures that are transparent, competitive, and efficient. The Government must guarantee that procurement processes are conducted fairly and transparently and that procurement rules are consistently applied across all infrastructure projects.

Lastly, creating an enabling environment for foreign investment to foster infrastructure development in Bangladesh is critical. This can be achieved by simplifying procedures for foreign investors to register and establish businesses in the country and providing incentives and protections to encourage foreign investment in infrastructure projects. The Government can also establish special economic zones or investment incentives for foreign investors in the infrastructure sector.

## **Develop a Monitoring and Evaluation System**

Bangladesh should establish a robust monitoring and evaluation system for infrastructure development. This would help to track progress toward achieving infrastructure development targets and identify areas for improvement.

Developing a monitoring and evaluation system for infrastructure development is critical to ensure that the projects are implemented effectively and efficiently. A robust monitoring and evaluation system can help the Government to track progress toward achieving infrastructure development targets and identify areas that require improvement. By regularly monitoring the progress of projects, the Government can identify delays, bottlenecks, and other implementation challenges and take corrective action to ensure that the projects are delivered on time and within budget.

The monitoring and evaluation system should be designed to assess the performance of infrastructure projects in terms of their cost-effectiveness, quality, and impact on the economy and society. The system should involve regular data collection, analysis, and reporting to provide insights into the progress of infrastructure development projects. It should also include a mechanism for feedback and stakeholder engagement, to ensure that the views and concerns of all stakeholders are taken into account.



To establish a robust monitoring and evaluation system, the Government can consider setting up an independent body responsible for monitoring and evaluating infrastructure projects. This body could work closely with government agencies responsible for implementing the projects and could have the power to investigate and report on the performance of infrastructure projects. The system should be transparent, and the findings of the monitoring and evaluation process should be made public to ensure accountability and promote public confidence in the infrastructure development process.

### **Reduce fuel Wastage by Prioritizing Power Plants that Exhibit high Levels of Efficiency**

Many power plants in Bangladesh suffer from low energy efficiency, which leads to burning excessive fuel and producing inadequate electricity. This places stress on the country's fuel supplies, most of which it imports. Additionally, some power plants are unable to operate continuously due to low plant factors. Another significant issue is the captive power plant sector, which consists of outdated and highly fuel-inefficient plants imported from abroad. As a result, when there are power cuts, more captive power plants are used, exacerbating energy wastage. In Bangladesh, captive power plants are commonly used by industries to meet their electricity needs, but the old and inefficient plants are contributing to the energy wastage issue. There are some power plants in the country that have good thermal efficiency, but they are either closed or partially operational. To reduce fuel wastage in power generation, it is necessary to prioritize these plants with high energy efficiency. Additionally, the Government should establish regulations to require industries to meet minimum energy efficiency standards for their captive power plants.

### **Proper Planning and Independent Oversight for Efficient Transmission and Distribution of Electricity**

Efficient transmission and distribution (T&D) of electricity are crucial for the sustainable development of a country's energy sector. To ensure better T&D of electricity across the country, an independent body should be established to oversee and regulate the process. Proper planning is required to ensure that power distribution and transmission systems are well-linked with each of the power generation plants. The Government must also take immediate steps to provide full independence to the National Load Dispatch Centre (NLDC), which plays a central role in monitoring and controlling the flow of electricity across the country's transmission network. A unified T&D infrastructure will be required where the NLDC will maintain the criteria of the power plant's T&D process in a harmonious way. Additionally, Bangladesh has higher T&D losses compared to other developing countries, and special attention will be required to bring these losses down. Therefore, it is important for the Government to prioritize the development of an effective and efficient T&D process to ensure a reliable and affordable supply of electricity to its citizens.

### **Increase Efforts to Generate Energy from Renewable Sources**

Based on the findings in this report, it has been identified that the share of renewable sources in total electricity generation remains low despite the Government's best efforts. However, to address the growing energy demand and the adverse environmental impact caused by traditional fuels, it is essential to shift toward renewable energy sources. In this regard, providing tax incentives and subsidies to encourage investment in renewable energy projects is a crucial step that the Government can take. Additionally, the Government can implement stricter policies that require a certain percentage of energy to be generated from renewable sources, thus creating a market for renewable energy and driving innovation in the sector. Moreover, it is suggested that the Government should initiate a gradual process of eliminating petroleum-based power plants. Investment in new petroleum-based plants should not be considered. Instead, suitable sites that are currently being used for coal-fired power plants could be repurposed for the development of renewable energy (RE)-based power plants.



Furthermore, while the Russian-Ukraine conflict has mainly caused geopolitical tensions, it has also had a significant impact on the energy markets, leading to a rise in fuel prices globally. The recent tensions have increased concerns about the reliability of energy supplies, leading to an increase in fuel prices. This situation further highlights the importance of moving towards renewable energy sources, which are not subject to geopolitical tensions and fluctuations in fuel prices.

### **Improve the Capacity of Port Authorities**

The development of ports is an essential component of a country's economic growth. In Bangladesh, there remains significant scope for improvement in the capacity of port authorities. One key area that requires attention is the training and education of existing workers to improve their productivity. The Government can provide regular training and professional development opportunities to port workers, including operating new equipment and technologies and safety procedures and protocols. To compete in the global market, Bangladesh needs to invest in modern equipment and technologies to increase the efficiency of its ports.

### **Change the Model of Having a Single Buyer to the Implementation of a Wholesale Electricity Market**

The BPDB acts as a single buyer that purchases power from different sources and sells it to various distribution companies and zones. The Government of Bangladesh introduced liquid fuel-run plants in 2009 to address power shortages, and instead of passing the full cost to customers, it made annual budgetary transfers to BPDB. However, due to a shortage of natural gas and inadequate gas allocation for power generation, the use of liquid fuel-based plants kept increasing. The current bulk supply tariff set by BPDB is below the average generation cost, leading to significant losses and limiting the company's ability to invest in meeting future demand growth and modernizing the grid. To address this situation, the electricity sector must gradually reduce subsidies and make customers face the actual cost of electricity to encourage efficient use and improve the financial situation. Additionally, the sector should move towards a multi-buyer/competitive pool model and establish a wholesale market to promote competition and attract private investment to reduce the cost of generation.



# **TRADE AND INDUSTRIALISATION**

**CHAPTER**

**5**



## 5.1 Introduction

During the 7FYP Plan period, the industrial and economic services faced a very unique phenomenon - the pandemic. The pandemic impacted both industries and trade. The review of the 7FYP took into account the global contexts and challenges while also discussing the country-specific context. In Bangladesh, the discussion on industrialisation is mainly focused on import-substituting and export-orienting industries. During the 7FYP and the previous FYP, the manufacturing sector, led by RMG was the major contributor to export growth. However, the export diversification front has not seen much progress during this time period. The period experienced globalisation, industrial sophistication, technological improvement, and production integration. In the context of globalisation and increasing trade openness, a higher level of competitiveness along with a diversified export basket is mandatory. Also, the Plan envisioned transforming the nation's manufacturing sector into a more vibrant, dynamic and competitive sector coping with emerging challenges.

The 7FYP reiterated the importance of SME development with export orientation. Among the strategies recommended included, identifying areas of comparative advantage, creating an enabling environment for private investment, differentiated and hassle-free indirect tax system, easier access to imported inputs, targeting public expenditure towards augmenting demand, access to financing facilities, cluster-based SME development programme, women entrepreneurship development programme, and last but not the least, human resource development.

The 7FYP recommended addressing constraints at the borders, behind the borders and beyond the borders while laying out the strategies for diversification and export-led growth. While discussing the Global Value Chains (GVCs), the Plan recommended vigorously looking for opportunities to integrate with Asian production networks and value chains, during the 7FYP period. Efficient containerisation, efficient land ports, information and communication technology, and export processing zones or special economic zones, along with various other issues were to be prioritized during the Plan period. While discussing FDI, the Plan recommended putting in place market economy institutions and a sound legal framework; building an advanced and integrated infrastructure, particularly transport and ports; removing complexity in land entitlements and mutations, and developing a quality workforce, along with several other priority areas. The Plan strategized to make EPB more effective as a Trade Promotion Organisations (TPO) in the next five years. The Plan also strategized to address various constraints to accelerate manufacturing growth.

## 5.2 Sectoral Growth and Trends

The industrialisation strategy leading towards structural transformation and economic transformation mentioned in the 7FYP emphasized manufacturing sector development with export-led growth. Consistent with the previous plan documents, the strategy also moved forward with a vision to increase non-farm activities in the rural areas. As a result, the country steadily moved towards industrialisation, with an increasing industry sector growth rate from 7 percent in the nineties to 8.8 percent during the previous Plan period, - the 6FYP. The manufacturing sector growth rate increased to 9.3 percent, among which large-scale enterprises grew at a 9.7 percent rate, according to National Accounts Statistics of BBS. During the 7FYP Plan period, the growth of the manufacturing sector was 11.5 percent, whereas the service sector grew at 6.5 percent.

A detailed analysis of the manufacturing sector shows that the growth rate of large industries, and SMEs, along with cottage industries were modestly increasing with an overall industry sector growth rate of 12.3 percent in FY2019. However, due to the onset of the pandemic, the growth rate decreased to 1.68 percent in FY2020 (Table 5.1). This was a global phenomenon, which slowly changed again after FY2020.

**Table 5.1: Volume and Growth Rate of the Manufacturing Sector**  
(At constant prices of 2015-16)

(In Crore Tk.)

Type of Industry	2015-16	2016-17	2017-18	2018-19	2019-20
Cottage Industry	72127 (-)	78829 (9.29)	84700 (7.45)	96704 (14.17)	100257 (3.67)
Small, Medium and Micro Industry	129108 (-)	142102 (10.06)	157882 (11.10)	174632 (10.61)	179325 (2.69)
Large Industry	221152 (-)	231388 (11.08)	257016 (12.79)	289885 (0.41)	291072 (10.61)
Total	422387 (-)	452319 (7.09)	499598 (10.45)	561220 (12.33)	570654 (1.68)

Source: BBS, various years.

Note: Figures in parentheses indicate rate of growth.

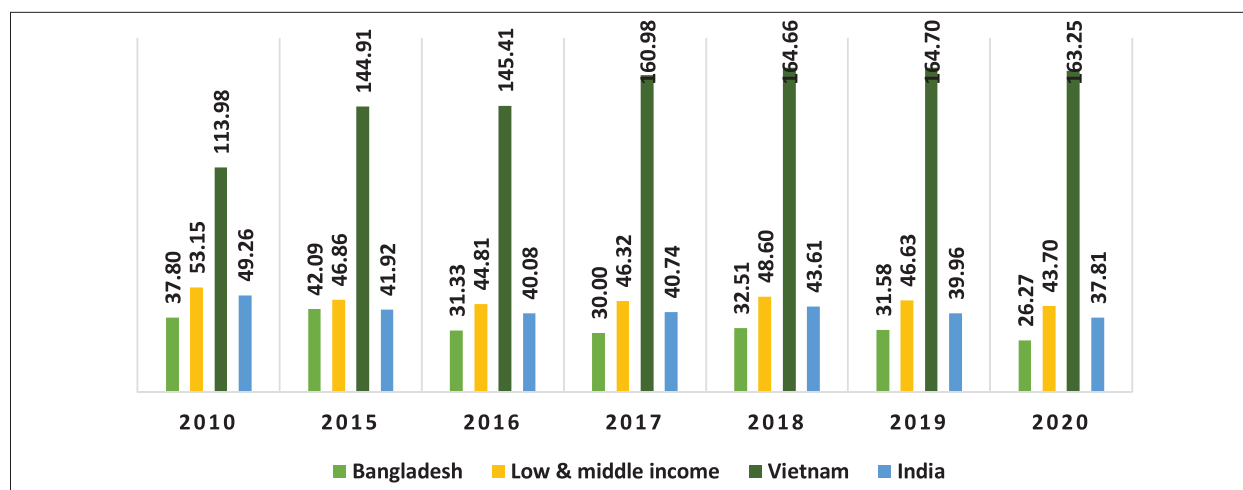
The growth in the non-crop agriculture subsector was 48.1 percent in FY2019 from 44.9 percent in FY2015, showing modest progress in diversification within the agriculture sector. The diversification process of both the agriculture and industry sector shows that this subsector of the Plan document experienced comparatively better performance. The development resource allocation during the Plan period also increased steadily, according to the 7<sup>th</sup> Plan projection, with the sector total allocation increasing from 21 billion BDT to 47.7 billion BDT. 7FYP integrated the targets of SDGs. One of the indicators of SDG9 was Proportion of medium and high-tech industry value added in total value added. For effective industrialisation, more expenditures are required in medium and high-tech goods, which control factory output. In 2016 the value was 12.79 percent which became 11.27 percent in 2020 (NAW, BBS, SID).

### 5.3 Progress in Trade Performance during 7FYP

Except for some minor changes to taxes and customs procedures in the first decade of the 21st century, the trade policy remained mostly unchanged over the period. Since the beginning of the 1990s, when Bangladesh underwent a period of drastic liberalisation, the country's economy has benefited greatly from free trade. Despite the fact that tariff liberalisation and export-led manufacturing, particularly the expansion of the RMG sector, became the primary growth strategy in the late 1990s, a fundamental contradiction has developed between trade and industrial policies. Thanks to the free trade environment, they enjoyed and the Special Bonded Warehouse facility that guaranteed inputs at international rates, the RMG industry stayed mainly outside the scope of the tariff regime. Compared to exports in other sectors, RMG exports were unaffected and continued to grow by double digits throughout the end of the 6FYP.

Figure 5.1 depicts the changes in Bangladesh's Trade as a percentage of GDP, an indicator of trade openness, compared to India and Vietnam, and low-income and middle-income countries.

**Figure 5.1: Trade (Percent of GDP)**



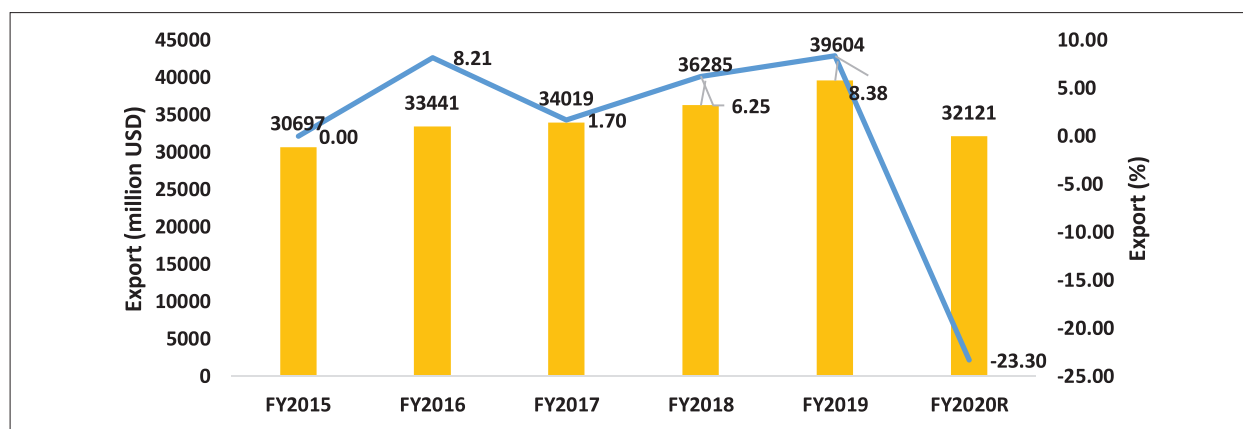
Data Source: WDI, World Bank

In 2010, Vietnam and India's total volume of trade accounted for approximately 113.98 and 49.26 percent, respectively, of their GDP, whereas Bangladesh's corresponding figure was only 37.80 percent. During a period of stagnant global trade, Vietnam's trade has increased to 164 percent of GDP in 2018 from 113.97 percent in 2010, while this figure for Bangladesh was 32.51 percent in 2018. Due to the direct impact of COVID-19, Bangladesh's trade-to-GDP ratio decreased to 26.27 percent in 2020. Vietnam's extraordinary achievements in trade liberalisation and integration with the world's largest trading blocs have been made possible by the elimination of both tariff and non-tariff barriers, as well as by the country's fulfilment of its obligations under numerous regional and global trade agreements.

### 5.3.1 Export Performance

Bangladesh's exports have increased dramatically over the past 40 years due to the country's extensive export-promotion efforts and its easy access to markets in the European Union and the United States. As can be shown in Figure 5.2, exports from Bangladesh climbed from US\$ 30697 million in 2015 to US\$ 36285 million in 2018 (a 6.25 percent rise over the base year). Despite facing many obstacles, RMG still managed to grow at a respectable 7.5 percent rate in the first four years of the 7FYP, but non-RMG export did not grow as expected during this time period.

**Figure 5.2: Export (Million USD)**

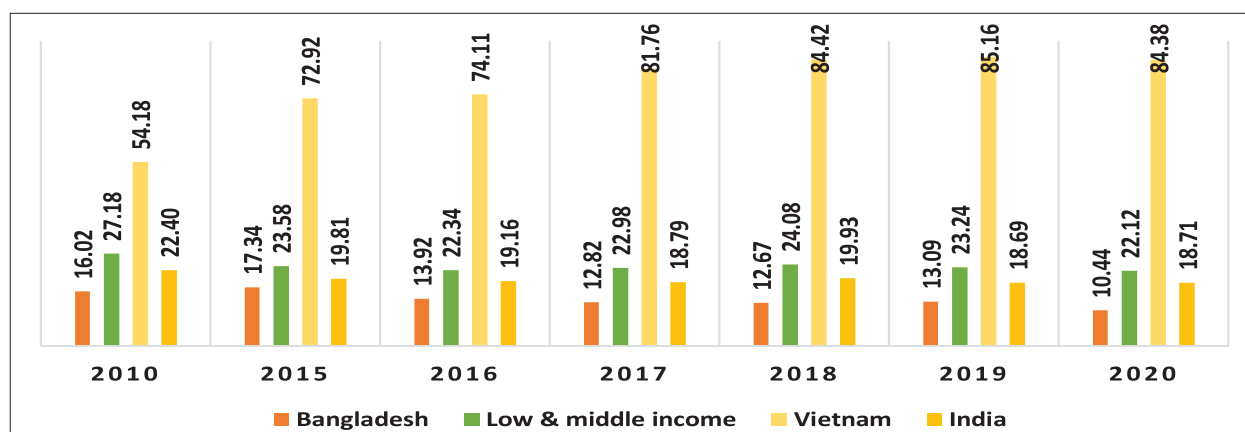


Data Source: Bangladesh Bank



Bangladesh's export-to-GDP ratio (export-orientation ratio) has increased significantly from 5.7 percent in 1972 (WDI, World Bank) to 10.44 percent in 2020 (Figure 5.3) owing to the rapid increase in export earnings. Figure 5.3 shows that the export-to-GDP ratio in Bangladesh decreased from 16.02 percent in 2010 to 13.09 percent in 2019. This figure for Bangladesh is also lower than that of Vietnam, India and other low-income and middle-income countries. Vietnam's exports as a percentage of GDP increased from 54.18 percent in 2010 to 84.38 percent in 2020, while India's exports as a percentage of GDP decreased from 22.40 to 18.7 over the same period.

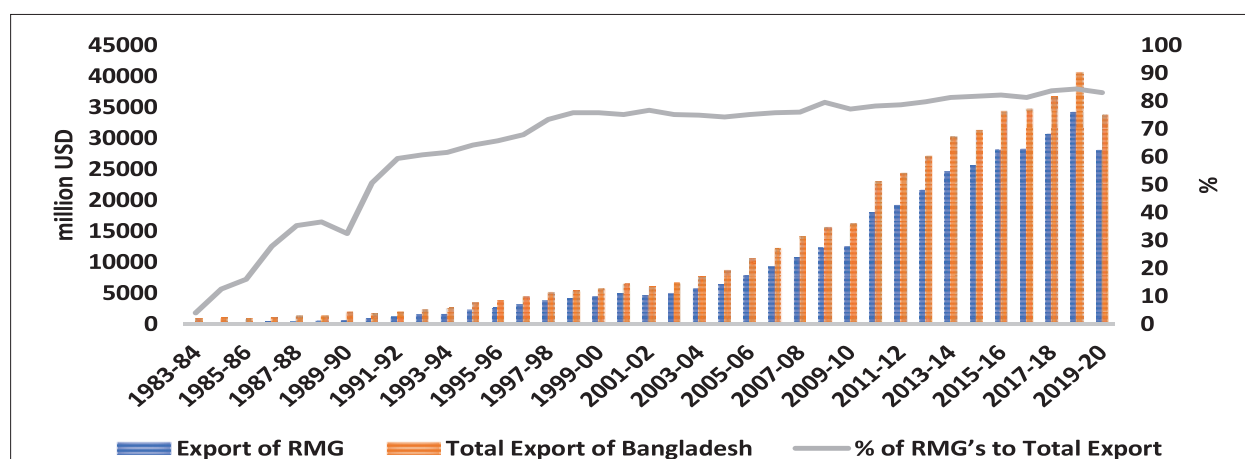
**Figure 5.3: Exports of Goods and Services (Percent of GDP)**



Source: WDI, World Bank

However, the export growth is predominantly driven by the rapid growth of the ready-made garment sector alone. Since the early 1990s, the composition of Bangladesh's exports has shifted significantly towards the RMG sector, as shown in Figure 5.4. During the specified time frame, the garment sector has expanded to a \$6 billion industry. Throughout the period, it has increased the viability of other export sectors and contributed to the country's overall economic growth. By the year 2020, the RMG sector accounted for approximately 83 percent of the country's total export revenues, up from 3.89 percent in 1983-1984<sup>12</sup>. Figure 5.4 illustrates that the RMG sector of Bangladesh earned approximately \$624.16 million in fiscal year 1989-1990, \$12496.72 million in fiscal year 2009-2010 which finally stood at \$30614.76 million in fiscal year 2017-2018.

**Figure 5.4: Total Export and Export of RMG**



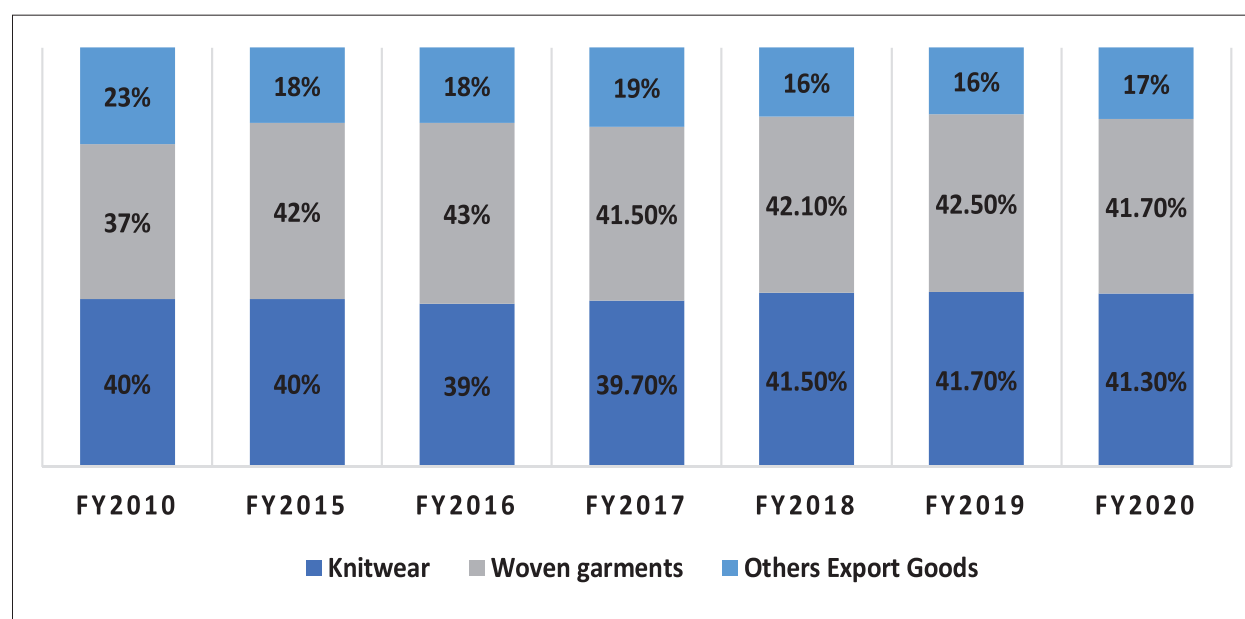
Source: BGMEA

<sup>12</sup> Source: Bangladesh Bank

### 5.3.2 Export Diversification

In 2010, woven and knit-RMG items accounted for more than 77 percent of total export revenues; by 2015, this percentage had increased to 83 percent, while the amount of all other sectors decreased as shown in Figure 5.5. Prior to 2004, the Multi-Fibre Arrangement (MFA) quotas dominated the international trade regime for textiles and garments, which significantly contributed to the expansion of Bangladesh's RMG exports.

**Figure 5.5: Evolving Composition of Export Basket of Bangladesh**



Source: Bangladesh Bank

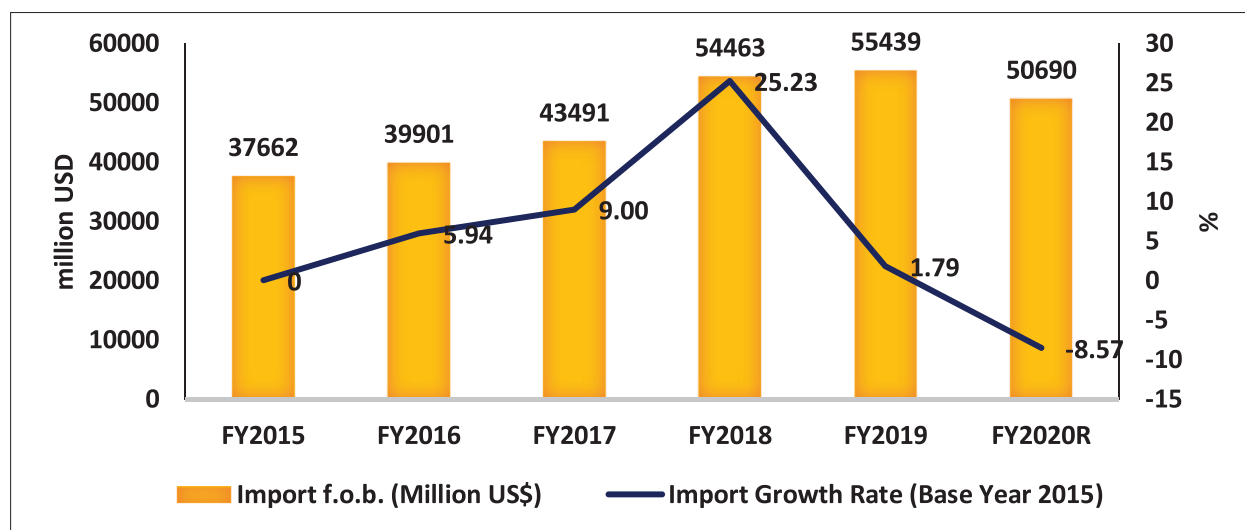
Due to the quota system, developing countries such as Bangladesh, which had never exported garments and textiles before, were guaranteed a position in global market. The fact that these products were able to be imported with duty-free scheme into the EU has aided the growth of Bangladesh's RMG industry. However, as Bangladesh's RMG industry has grown, the country's exports have become more concentrated which made Bangladesh vulnerable to shocks to the RMG sector. It is concerning that despite Bangladesh's extraordinary growth, its export base and markets have remained concentrated though well-diversified exports are more resilient against unforeseen shocks. Also, Bangladesh's export-oriented industries have underperformed. Bangladesh has not been able to diversify its exports despite government modifications and incentives.

### 5.3.3 Import Performance

Since the 1990s, Bangladesh's imports have increased significantly due to its liberal import policies. In 1972, total imports of products and services were only \$864 million<sup>13</sup>, while in 2019 they reached \$55439 million (Figure 5.6). In analysing the performance of imports during the 7FYP, Figure 6 reveals that total imports of goods and services were \$37662 million in 2015, \$54463 million in 2018, and \$50690 million in 2020.

<sup>13</sup> Data Source: Bangladesh Bank

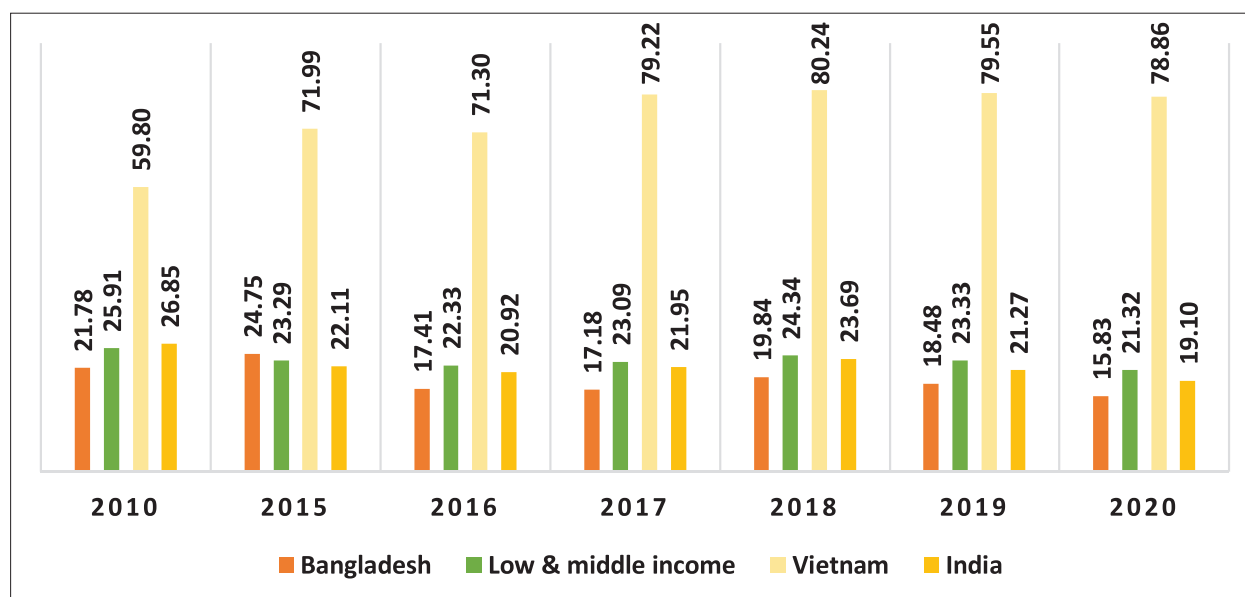
**Figure 5.6: Import Performance of Bangladesh during 7FYP in Terms of Imports F.O.B in Million USD**



Source: Bangladesh Bank

Imports can be reported as a percentage of GDP so that their size can be evaluated in relation to the scale of the economy and openness of the economy in terms of international trade can be assessed. Figure 5.7 illustrates the surge in imports that resulted in a rising import penetration ratio, defined as the proportion of total imports to Bangladesh's GDP, over the course of the 7FYP. In the early 1970s, the average import penetration ratio (import to GDP ratio) was only about 12 percent, but by 2018 it had risen to approximately 20 percent. Figure 5.7 indicates that this percentage was 24.75 percent in 2015, but has declined to approximately 18.5 percent in 2019. Bangladesh's figure is also lower than those of India, Vietnam, and other low- and middle-income countries. Vietnam's imports increased from 59.80 percent of GDP in 2010 to 78.86 percent of GDP in 2020.

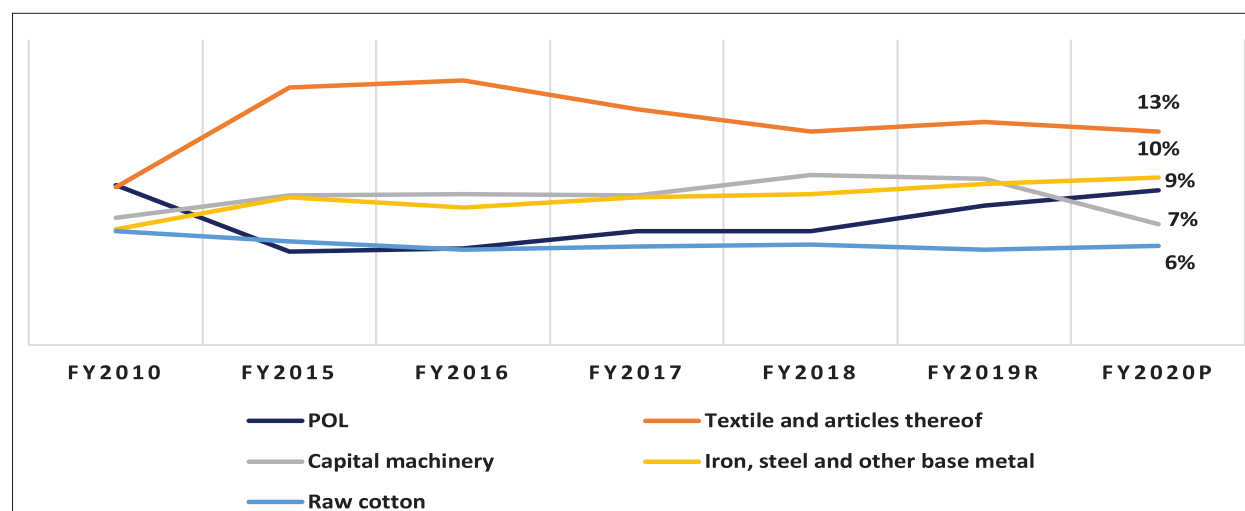
**Figure 5.7: Import to GDP Ratio (Imports of Goods and Services Percent of GDP)**



Source: WDI, World Bank

Machinery and equipment, chemicals, iron and steel, textiles, consumables, petroleum products, and cement make up the majority of Bangladesh's imports. In contrast to the early 1970s, when food imports dominated imports, industrial raw materials and machinery now dominate imports<sup>14</sup>. Figure 5.8 depicts the breakdown of Bangladesh's imports into five broad categories over the course of the 7FYP. Throughout the specified period, the two most prevalent import categories have been "Textile and articles thereof" and "Capital machinery." After 1995, the preponderance of "Capital machinery" (i.e., its percentage share) decreased from the second largest import of the country.

**Figure 5.8: Share of Major Import Goods in Import Basket**

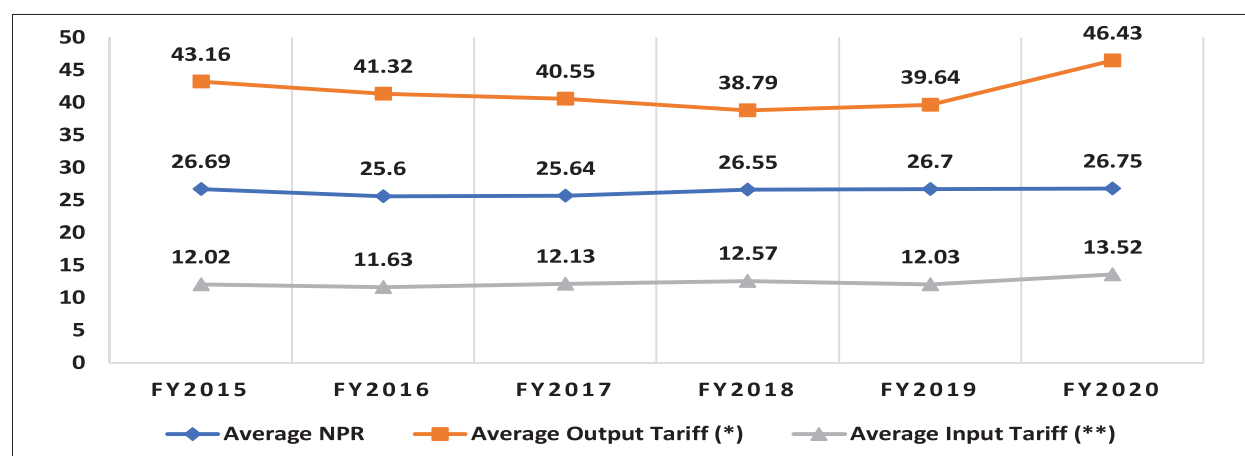


Source: Bangladesh Bank

### 5.3.4 Trade (Tariff) Liberation

From 1972 to 1980, restrictive import policies dominated the trade policy regime. Under Import Policy Orders (IPOs), certain items were permitted, prohibited, or required special authorisation while all imports required licenses except a few.

**Figure 5.9: Average Protection Rate**



Notes: NPR=Nominal Protection Rates; (\*) Output tariffs refer to NPR on mainly consumer goods; (\*\*) Input tariffs refer to NPR on basic raw materials, intermediate and capital goods.

Data Source: BBS; GED estimates based on NBR data

14 Source: Bangladesh Bank

The liberalisation of imports had begun in the early 1980s. In terms of customs duties, the 1990s was a regime of rapid tariff liberalisation. Table 5.2 also shows that total rate of protection decreased substantially from 73.6 percent in 1991-92 to 26.75 percent in 2020. However, the average nominal and effective protection levels remained almost unchanged during the 1990s despite the liberalisation of trade and tariffs. This was due to the compensatory creation of para-tariffs in the form of Regulatory Duties (RD) and Supplementary Duties (SD). In particular, the rate of nominal protection and the difference between output and input tariffs remained largely unchanged (Figure 5.9). While average tariffs were decreasing, it was owing mostly to lower input tariffs while higher output tariffs that ensured that effective rates of protection remained considerable. However, the emergence of para-tariffs in the 1990s and their increasing incidence in recent years, as shown by the rising trend in Table 5.2, continue to pose formidable obstacles to tariff liberalisation in Bangladesh.

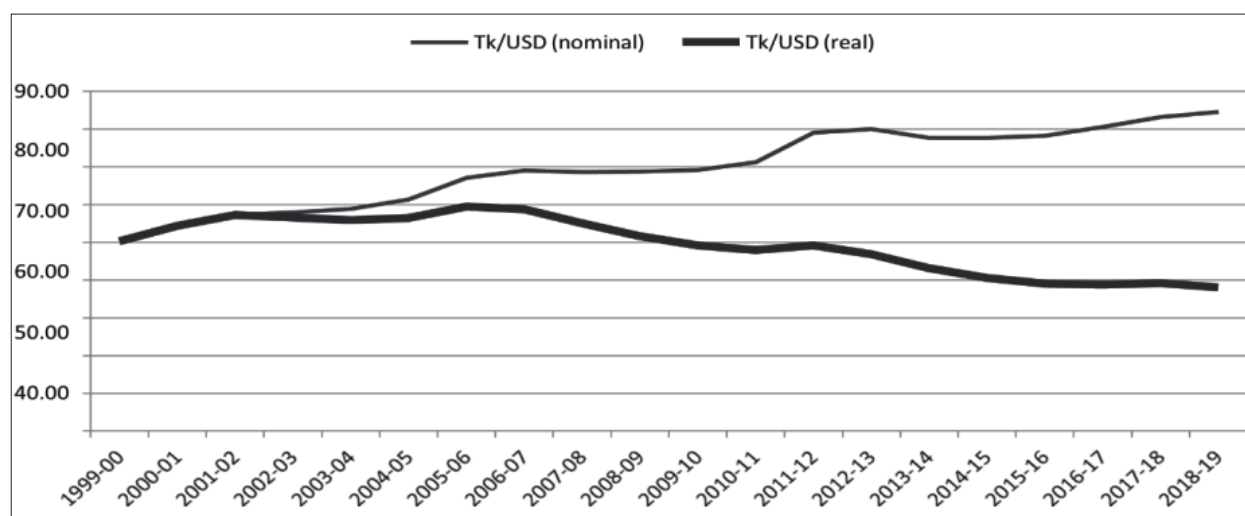
**Table 5.2: Average Custom-Duties and Para-Tariffs in Bangladesh**

Year	Customs Duties	Para-Tariffs	Total Protection Rate
1991-92	70.6	3.0	73.6
2001-02	21.1	7.1	28.2
2011-12	13.6	12.9	26.5
2013-14	13.2	14.1	27.3
2015	11.82	14.87	26.69
2016	10.72	14.88	25.6
2019	8.64	18.06	26.7
2020	10.99	15.76	26.75

Source: World Bank, BBS

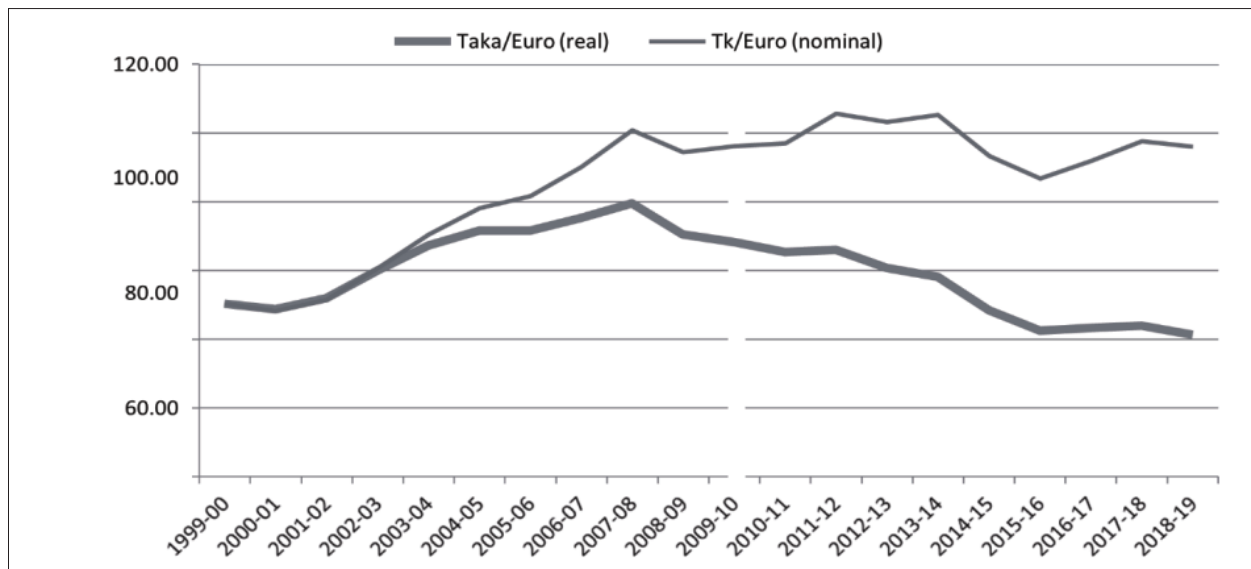
Even though Bangladesh has historically managed its exchange rate flexibly to strike a balance between export incentives, price stability, and investment predictability, the exchange rate has been appreciating in real terms for the majority of the 7FYP, which has negatively impacted exports. (Figure 5.10a & Figure 5.10b).

**Figure 5.10a: Trends in the Nominal and Real Exchange Rate Between the Bangladeshi Taka and the US Dollar**



Source: Bangladesh Bank

**Figure 5.10b: Trends in the Nominal and Real Exchange Rate Between the Bangladeshi Taka and the Euro**



Source: Bangladesh Bank

The substantial anti-export bias of trade protection and the appreciation of the real exchange rate, which led to a substantial loss in export competitiveness, rendered ineffective cash subsidies and other fiscal incentives for export growth and diversification. Finally, BOP sustainability and macroeconomic stability depend on exchange rate stability, making it an important policy target for 8FYP.





**EDUCATION  
SECTOR**

**CHAPTER**

**6**



## 6.1 Introduction

In the context of the socioeconomic development of a nation, the importance of quality education cannot be overstated. The direct impact of education can be observed as a factor of production in terms of economic growth, whereas quality education can contribute towards an individual's human capital development. In addition to its contribution to economic growth, investing in education can be crucial for skill formation and can act as a key driver of inclusive growth through the reduction of poverty and inequality. Over time, investing in education has demonstrated crucial implications across generations- making education interventions an effective policy tool globally. Allocation of essential resources and their effective implementation in education is, therefore, extremely crucial for sustainable development.

As for Bangladesh, during the Sixth and Seventh Five Year Plans, it achieved remarkable success in accelerating growth, reducing poverty, and improving the condition of human development. It can be argued that the associated education and training sector strategies and policies played a significant role in attaining these results. In this context, the PP2021 and the National Education Policy 2010 (NEP) guided these strategies and policies. The five-year plans emphasized providing appropriate education and training to a large segment of the population, expanding coverage in both urban and rural areas, to both males and females. This plan also stresses improving educational quality, increasing access to technical and vocational education, and addressing dropout rates.

In the case of the education sector, the country has made remarkable progress in providing education to its citizens in recent years. The literacy rate has increased significantly- from 58.6 percent in 2014 to as high as 75.6 percent in 2021, as has the proportion of the workforce with secondary, higher secondary, and tertiary education. The proportion of the population without any formal education has been dropped. In particular, the country has been able to reduce the gender gap in education- for example, in primary education gender parity has been attained, with commendable progress of girls' education at the secondary level. Increased education has expanded economic opportunities for women in particular, enabling them to join the workforce and contribute to economic progress. Challenges still remain in the front of tertiary education of women. Besides, equity in primary enrollment between those who are poor and those who are not has also improved over time.

Notwithstanding these advancements, the absolute gap between the poor and the non-poor still remains a challenge to be dealt with. Despite significant advancements in the field of education, obstacles remain that prevent human capital from being formed. The poor and vulnerable group have a lower enrollment rate due to economic constraints, especially at the secondary school level. Women's access to education is hampered not only by economic factors but also by bias based on gender. Gender parity in completion rates for primary and secondary school has been reached, however there are still scope of improvement in lowering the for higher levels of education. Vocational and Technical Education (VTE) programs play a crucial role in fostering a more skilled labor force. Unskilled laborers and self-employed people may benefit greatly from VTE programs like Technical and Vocational Education Training (TVET) and apprenticeships.

Progress in the education sector to some extent can be linked to increased investment in education infrastructure over the years- which can be observed through the increased number of educational institutes in recent years. There has been a particular advancement in case of infrastructural development of tertiary institutes -there are currently 2 foreign universities, 31 specialized colleges, 43 public universities, 103 private universities, and 2 special institutions, all of which can be argued to be contributing to the skill development of the workforce. However, given the relatively low level of endowment of skills of the workforce with increased challenges of automation and 4IR, the importance of skill development through quality education and training programs is greater than ever before. In addition, with a view to utilize the youth bulge of population and to deal with the existing mismatch in the demand and supply of skill, forward looking and pragmatic strategies and policies and effective implementation of the same is critical.

## 6.2 Education Sub-Sectoral Goals, Strategies and Targets

Recent years have seen record numbers of children enroll in and graduate from primary school, suggesting that the majority of illiterate people actually belong to older age groups. The illiteracy rate is lower in urban (22%), compared to the rural of the country (29%). Although enrollment is low at the pre-primary level, it is on the rise. However, recent years have seen gender parity in primary school enrollment and graduation, suggesting that the reading gap between the sexes will continue to shrink. Secondary school gender equality is also attained. High school students' interest in studying science has declined in recent years. The more well-known Qawmi part that fall within the madrasa stream are completely autonomous institutions. In 2021, the gender parity index (SDG indicator 4.5.1) for secondary level (6-10), higher secondary level (11-12), and tertiary level was 1.21, 1.01, and 0.80, respectively.<sup>15</sup> Participation in vocational examination (SSC) and the percentage of students who passed the examination showed an upward trend. The pass rate increased from 68% in 1999 to 72.70% in 2020 and then to 88.49% in 2021. Girls performed better than boys, with a passage rate of 76.67 percent in 2019, 77.4 percent in 2020, and 88.48 percent in 2021. The statistics on the number of students who took the HSC exam and the percentage of those who passed indicate a steady increase. In nearly all three disciplines, the number of students who sat for the HSC examination increased. The pass rate increased from 30% (31% of females) in 1990 to 71.85% (74.84%) in 2019 and in 2020, due to the COVID-19 Pandemic, the HSC & equivalent examinees were evaluated based on their previous public examination results, and all passed the HSC examination. In 2021, a total of 1115605 students took the HSC examination, of which 106242 students (545529 females) passed; the overall pass rate was 95.57% (girls 96.66%). Participation in the Dakhil, Alim, Fazil, and Kamil examinations of madrasah streams increased steadily, as did their pass rates. In 2021, the pass rate for Dakhil was 93.22 percent and the pass rate for Alim is 95.49 percent.<sup>16</sup>

## 6.3 Primary Education

With a view to achieve the integrated and holistic objective of enhancing human capital to meet the growing demands of skilled workforce, in the five-year plans, especially that of the 7<sup>th</sup> Five Year Plan, the GoB has taken a wide range of initiatives for both primary education as well as higher levels of education<sup>17</sup>.

### 6.3.1 Objectives and Strategies for Primary Education

The education sector goals of the 7<sup>th</sup> FYP emphasizes on quality improvement measures in the context of academic curricula and pedagogy, which includes implementing the Each Child Learn Programme (The primary focus of PEDP III is the Each Child Learns (ECL) initiative. Its goal is to enhance classroom instruction and student development) at a national level, expanding in-service training for teachers, conducting school- and classroom-based assessments, providing quality textbooks to all children in all types of schools, introducing ICT at all of the schools and providing quality textbooks to all children. It also acknowledges the important role of ensuring participation and reducing the disparity which implies increasing support for inclusive education, engaging all schools in social mobilization, providing assistance during emergency and providing stipends to all of the primary school children, ensuring decentralization and establishing effective planning and management of the overall structure<sup>18</sup>.

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15 8<sup>th</sup> Five Year Plan

16 BANBEIS 2021

17 7<sup>th</sup> Five Year Plan

18 8<sup>th</sup> Five Year Plan

### 6.3.2 Progress in Primary Education

Primary education in Bangladesh ranges from grade 1 to grade 5. Over the 6FYP and 7FYP, most of the key indicators in primary education have registered a continued improvement<sup>19</sup>. PEDP II (Primary Education Development Programme) has made significant contributions to improving and expanding access to primary education in Bangladesh. It addresses many issues associated with primary education, such as improving facilities and teaching methods, and reaching nearly all children, male and female, in the target population. From July of 2003 to June of 2011, the project was in operation. According to the most current data available (as reported by PCR of IMED), it was found that 94.18% of financial targets were met, while 98% of physical targets were met. The actual cost of the project came out to be 390108.79 lakh taka while the budgeted amount was 400008.96 lakh taka, for a financial progress of 97.52% and a physical progress of 98%. According to the study findings, 303 new classrooms have been built because of the PEDP-II (an increase of 8%). Tube wells were installed under PEDP II in 16 schools. About 92% of the 120 schools that have tube wells are actually using them. Twenty schools had restrooms built by PEDP-II. Approximately 125 of the 134 schools that now have access to toilets and actually use them.<sup>20</sup>

The 7<sup>th</sup> Five year plan has aimed to grow the enrolment in primary sector to 100 percent sustaining that rate over time. Since 2014, the net enrolment rate in primary education has varied widely within the range of 97.7 and 97.9 percent (Figure 6.1). This pattern was evident for both boy and girl children, which have stagnated at around 97 percent and 99 percent, respectively, compared to the PP2021 goal of 100 percent enrolment by FY2021. Though the gross enrolment rate has decreased in 2020 from 2018 by 10 percentage points, the net enrolment rate has changed marginally during this period (Table 6.1). Minimum proficiency in reading Bangla is achieved by 25.9 percent of the students when it is tested on Grade 2 and 3 students. Math-solving proficiency is achieved by 13 percent of students in grades 2 and 3.

**Table 6.1: Progress in Indicators Regarding Primary Education**

Indicators	2016	2018	2020	2021
Gross enrollment rate	112.1	114.23	104.90	105.72
Net enrollment rate	97.96	97.85	97.81	97.42
Completion Rate (Grade I-V) (percent)	80.8	81.4	82.80	85.85
Dropout rate	19.2	18.60	17.20	14.15
Teacher Student Ratio	34	37	34	35

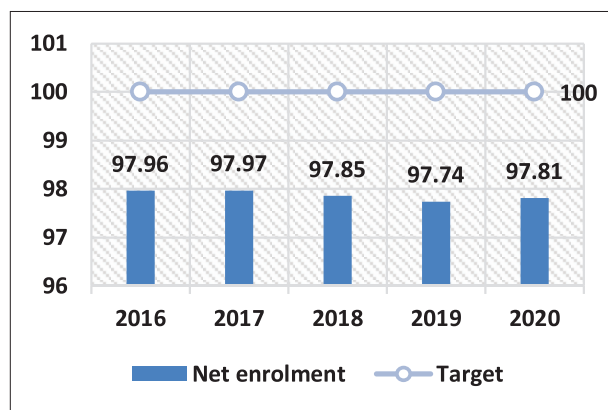
Source: BANBEIS, 2021

Due to various proactive and prompt actions taken by the government during pandemic period, the completion rate in primary school is found to be gradually increasing. The dropout rate has declined significantly from 17.20 in 2020 to 14.15 in 2021 as well. The annual dropout rate has gradually decreased from as high of 50 percent in 2006 to less than 18 percent in 2020. Using 2015 as the base year, the rate of decline in the dropout rate indicates that the rate has been decreasing at a decreasing rate (Figure 6.2 and 6.3).

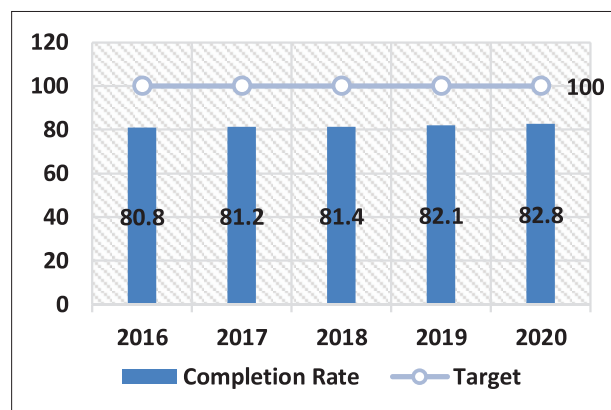
<sup>19</sup> 8<sup>th</sup> Five Year Plan

<sup>20</sup> Impact Evaluation Study of Second Primary Education Development Programme (PEDP-II)

**Figure 6.1: Net Enrollment Rate**

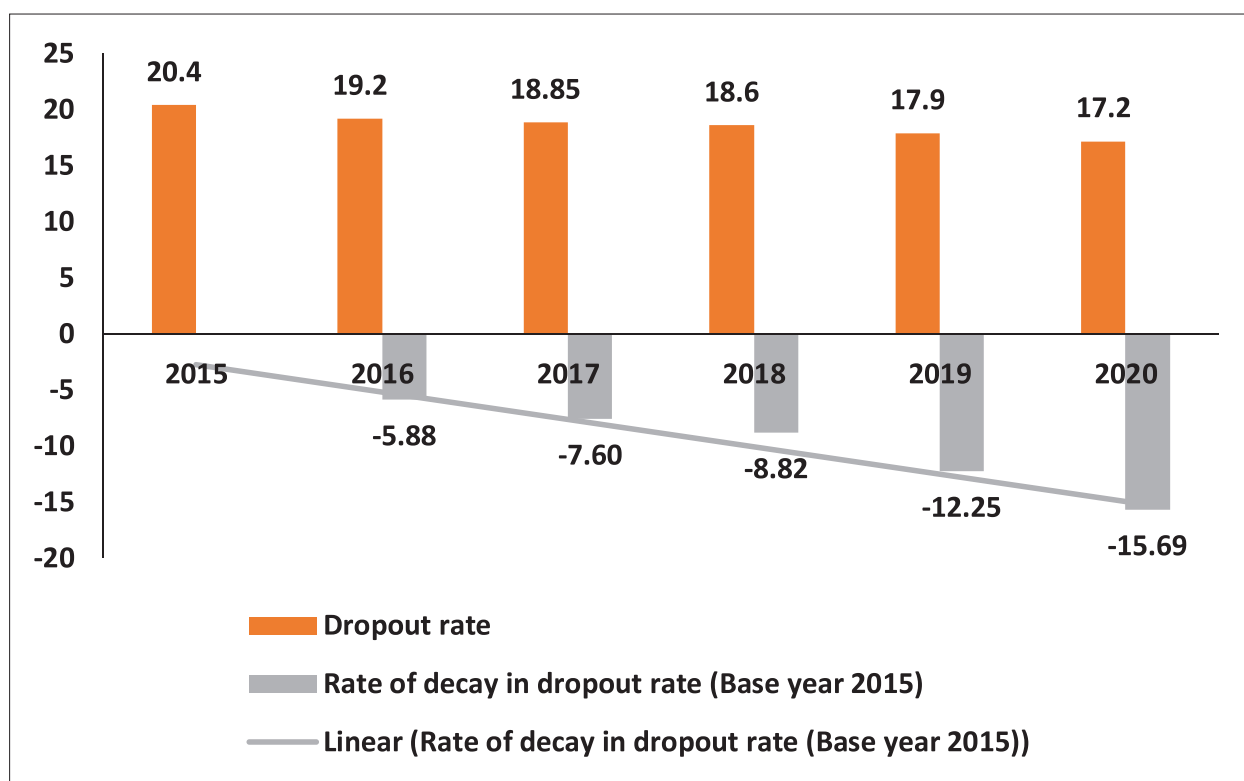


**Figure 6.2: Completion Rate**



Source: BANBIES 2021

**Figure 6.3: Trend of Dropout Rate Over the 7<sup>th</sup> FYP**



Source: BANBEIS, 2021

Another success story in the sector has been the reduction of the student-teacher ratio, which decreased from 50 in 2012 to 34 in 2020. Furthermore, 34 percent of primary schools have modified their infrastructure and materials to accommodate students with disabilities.

Another important factor that has been prioritized in the five year plan was raising the number of teachers. The number of teachers in government primary schools has steadily risen from 215000 in 2012 to 359 095 in 2021, an increase of 67 percent. The number of primary schools has increased during this period as well<sup>21</sup>.

21 8<sup>th</sup> Five Year Plan

The number of primary schools stood at 118891 in 2021, which includes government, non-government, madrasa, and non-governmental organization (NGO) schools. The primary education coefficient of efficiency rose from 62.30 percent in 2010 to 85.30 percent in 2021 as a result of greater student access, retention, and survival. Over time, in certain areas, e.g. teachers training, textbook updating, IT access, laptop distribution etc. significant progress can be observed. PEDP-IV, initiated in July 2018, improved institutional administration and provided quality primary education to all Bangladeshi children. PEDP-IV foresees all eligible children attending pre-primary and elementary school and obtaining the required skills and knowledge. Their families would be incentivized to keep them in school. To realize this vision, 40 million students received 350 million textbooks in December 2019. This annual event has given students 2.2 billion 621 books since 2009. Around three million pupils in 15,700 primary schools receive midday meals with at least 30 percent calories and 50 percent micronutrients under the National School Lunch Policy. PEDP-III taught 60,000 principals leadership. 35,000 instructors and 400 officers teach ICT in 1,139 primary education management field offices using Internet-connected computers. Approximately 50 primary teacher training institutes have advanced IT labs (PTI). 8,925 classrooms at 5,432 public elementary schools received laptops, multimedia projectors, sound systems, and modems.

### 6.3.3 Challenges in the Primary Education Sector

While much has been accomplished throughout the 7FYP, there are still obstacles to overcome. The government's goal of providing an education to all of its population requires eradicating the dropout rate, which is currently high (at over 20%, and the rate is greater for females than boys). Both students and faculty have a high rate of absences. According to the 2019 Annual Sector Performance Report (ASPR), the annual school contact hours for grades 3 and 5 were set at 791 hours, which is significantly lower than the norm in many developing countries. The recommended amount of time spent in primary school is one thousand hours, according to international standards.

In 2018, 97 percent of all students who took the Primary Education Completion Exam (PECE) passed. In 2010, that number was only 92 percent. The National Assessment of Educational Progress (NAEP) reveals, however, that elementary school kids are not learning very much. According to the NSA, fifth graders have significantly fewer learning abilities in mathematics and Bangla than third graders. Students' average Bangla proficiency drops dramatically from 70% in grade 3 to 25% in grade 5. Third-graders' math scores have been steadily declining since 2011 and 2013, when they were at a high of 58% and 50%, respectively. In 2015 and 2017, they were at 41%. Grade 5 students' math performance drops even further, from a high of 33% in 2011 to a low of 10% in 2015. In comparison to other South and West Asian countries, Bangladesh lags behind in achieving gender equality (Table 6.2). The gender gap in Bangladesh is still not reflected in international indicators. Several other South Asian countries, e.g. India, Bhutan, Nepal, Sri Lanka, and the Maldives in this context have been able to attain parity in education sector.

**Table 6.2: Gender Parity Index of Different Asian Countries**

Countries	Year	Gender Parity Index	Remarks ( $0.97 \leq \text{Parity} \leq 1.03$ )
Brazil	2019	0.96	Disparity against boys
China	2020	1.01	Parity
Egypt	2019	1.01	Parity
Mexico	2019	1.01	Parity
Bangladesh	2020	1.07	Disparity against girls
India	2019	1.02	Parity
Pakistan	2019	0.88	Disparity against boys
Bhutan	2019	1.02	Parity
Maldives	2019	1.03	Parity
Nepal	2019	1.02	Parity
Sri Lanka	2019	1	Parity

Source: BANBEIS 2021



As reported by MICS 2019, reading and numeracy skills are taken into account when evaluating the quality of education for students aged 7 to 14. Two indicators are used to evaluate reading abilities, while three are used to evaluate math skills. Indicators for reading include inability to correctly comprehend 90 percent of words in a story and inability to demonstrate fundamental reading skills. For numeracy, the indicators are ‘not being able to comprehend numbers’, ‘not being able to discriminate between numbers,’ and ‘not being able to recognize and complete patterns. In this regard, the results are not auspicious. More than one-third of children were unable to correctly decipher words from a story, and more than half lacked fundamental reading skills. More than one-third of the children were unable to complete the number reading and number discrimination tasks, and roughly two-thirds were unable to complete the pattern recognition task. This indicates that the average level of competence of the children is quite low, and as a result, the quality of education is of great concern<sup>22</sup>.

### 6.3.4 Way Forward

To improve the primary education sector, some policies are needed to be taken.

Despite programs such as stipend distribution, school meals, and free textbook distribution, the primary education dropout rate is still nearly 20%. More policies should be developed to provide greater incentives for families to retain their children in school, particularly girls. In addition, regular meetings between parents and teachers should be held to discuss the performance and progress of students, inform parents about the current system and their children’s future career path, and debate viable future options.

Priority should be given to make advancements in educational quality. This includes updated curriculum and pedagogy, enhanced physical facilities, teaching professionals, curriculum, books and supplies, and parental participation in the education of their children. Strong emphasis will be focused on ICT-related topics.

A greater emphasis should be placed on the development of instruments to accurately quantify the learning-outcomes of students, with a focus on competency and comprehension rather than simply the ability to pass an exam<sup>23</sup>. Moreover, upgrading of the curriculum should be given more emphasize to include modules about basic moral, safety, and awareness issues of day-to-day lives (such as daily health care, climate change, environmental pollution, etc.) at the primary, and perhaps all levels that will in turn develop social responsibility of the future generation.

## 6.4 Secondary Education

### 6.4.1 Objectives and Strategies for Secondary Education

For the secondary education, there are three main strategies are to provide infrastructural, ICT, and equipment support for educational institutions, to support the teachers financially and to provide them training and to provide financial facilities including stipends, scholarships and other subventions for students. These strategies can be divided into two specific types of goals: quantitative and qualitative goals. The qualitative goals are mainly building or renovating classrooms and laboratories to provide the students with a spacious and healthy environment for studying and also to construct separate latrines for girls with sanitary napkins and cleaning supplies. A number of specific targets have been considered, which include, the introduction of information and communication technologies (ICT) for education, the provision of computers to prepare the students for the modern job market, enhancement of teachers’ capacities to promote quality teaching, and the provision of computer-trained and subject-based teachers. All these steps are meant to encourage students in education and to modernize the environment of education.

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The quantitative goals are more emphasized on increasing the importance of stipends and other types of financial aid to encourage the poor to enroll in education. According to the Perspective Plan, the government aims to reach a hundred percent enrollment rate by the end of the 7<sup>th</sup> FYP period. In this context, the GoB has taken the necessary steps to improve the speaking and listening skills of the students. To keep families from employing their children, the government has been offering monetary incentives in the form of stipends on a regular basis and also emphasizes to raise awareness of female education and as part of this, plans to support female students financially. Regardless of gender, age, physical or financial ability, ethnicity, autism, disability, or HIV status, the GoB targets that all children must receive an appropriate, relevant, affordable, and effective education.<sup>24</sup>

### 6.4.2 Progress in Secondary Education

The demand for secondary education has increased in parallel with the expansion of primary education across the country and the steady rise in completion rates (Table 6.3). Secondary enrollment rates for both boys and girls have increased in recent years. The net enrolment and the completion rate have also been raised over time.

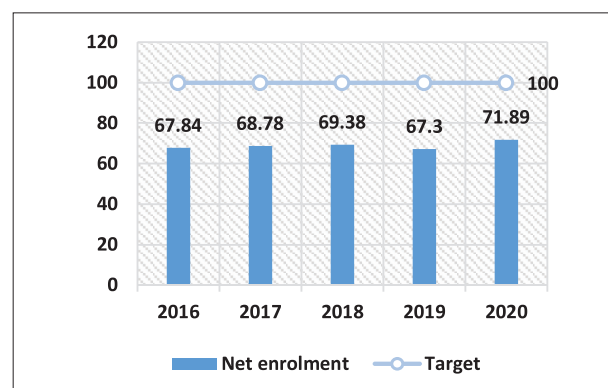
**Table 6.3: Progress in Indicators Regarding Secondary Education**

Indicators	2016	2018	2020
Net enrollment rate	67.84	69.38	71.89
Dropout rate	38.30	37.62	35.76
Completion rate (percent)	61.70	62.38	64.24
Teacher-student ratio	1:42	1:45	1:41

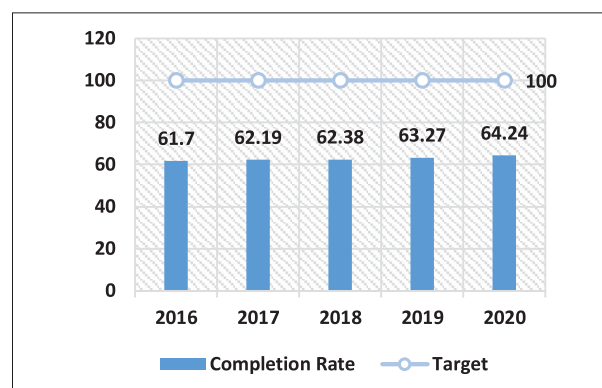
Source: BANBEIS 2021

However, compared to primary education, the enrolment and completion rate is still quite lower. While the net enrolment rate in the primary section is about 97 percent, the engagement of students in secondary education is around 70 percent (Figure 6.4 and 6.5).

**Figure 6.4: Net Enrolment Rate in Secondary Education**



**Figure 6.5: Completion Rate in Secondary Education**



Source: BANBEIS 2021

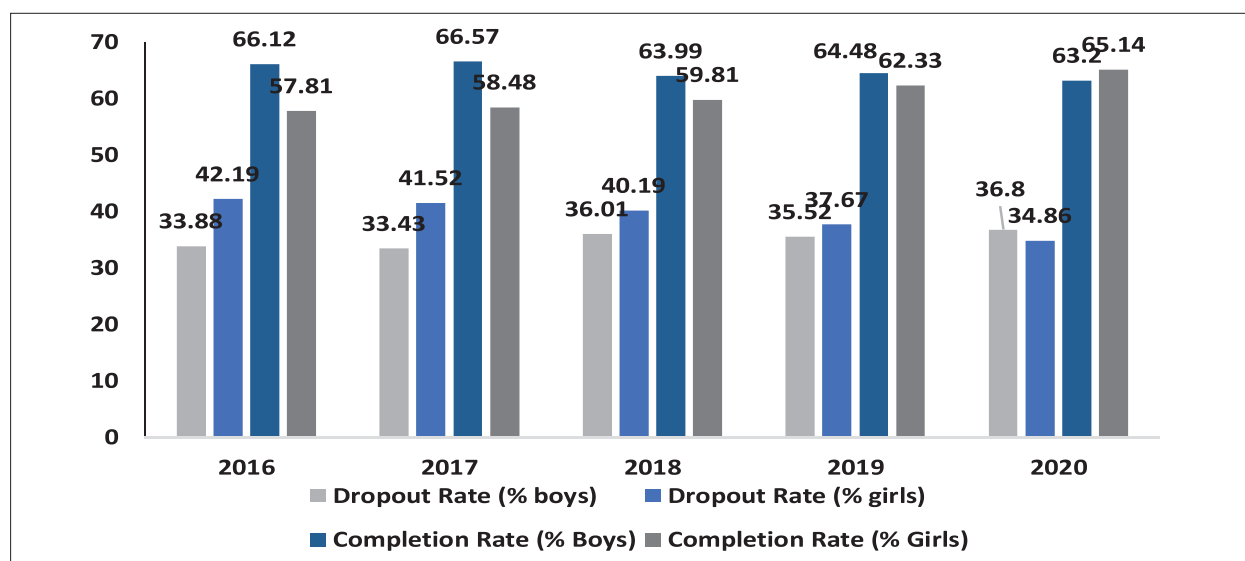
In 2019, there were more than 20,000 secondary schools educating 10.3 million students with the help of 246,845 teachers. With 5.6 million (54.41 percent) of the 10.5 million enrolled students being female, gender parity has been attained<sup>25</sup>. This ratio has climbed gradually during the past decade. Less than forty percent

<sup>24</sup> 7<sup>th</sup> Five Year Plan

<sup>25</sup> BANBEIS 2021

of girls were enrolled in secondary education around the turn of the millennium. Currently, enrollment has reached 70 percent, which is greater than the enrollment rate for male students. Nonetheless, the rate of secondary education completion is low, hovering around 64 percent, and is significantly higher for boys than for girls. In 21.77 percent of institutions, secondary schools have adopted infrastructure and supplies for students with impairments. Girls' dropout rate has declined over time, while boys' rate has increased. In recent years, the rate of secondary education completion is higher among females than among boys (Figure 6.6).

**Figure 6.6: Dropout and Completion Rate by Gender Over Time**



Source: BANBEIS 2021

In recent years, the number of teachers has not increased at the same rate as the number of students and institutions, which is a troubling trend. The average number of students per school has increased from 413 in 2012 to 500 in 2019. From 2012 to 2019, the number of teachers per institution remained constant at 12, while the number of students per teacher climbed from 34 to 44. Nonetheless, certain initiatives, such as the Teaching Quality Improvement in Secondary Education Project, have worked to increase the quality of secondary school instructors. This project trained nearly 220,000 secondary school teachers (98 percent of the total) (8<sup>th</sup> FYP). Around 80.06 percent of primary school teachers have the minimum required level of education. The rate is 63.80 percent in lower secondary and 61.33 in upper secondary education (APSC, DPE, MoPME 2020).

There are now ICT courses in secondary education, as well as computer facilities and training for teachers on how to use them. Two projects have been initiated by the Ministries of Education (MoE) and Primary and Secondary Education (MoPME): Multimedia Classroom (MMC) and Teacher-led Digital Content Creation. The Ministry of Education and the Ministry of Petroleum and Minerals are engaged in a massive continuing effort to digitize classrooms. These programs aim to build 20,500 secondary-level MMCs, each with an internet-connected classroom, a laptop, and a multimedia device. By 2019, 94.86 percent of secondary schools had access to electricity; the goal is to attain 100 percent by 2025.

According to the Annual Education Survey 2021, 98.42 percent of all institutions have electricity, with 90.01 percent of junior secondary schools, 99.49 percent of secondary schools, and 99.86 percent of schools and colleges having power. 77.58 percent of institutions had multimedia capabilities. This percentage was 21.94 percent in elementary schools, 84.04 percent in secondary schools, and 94.23 percent in schools and colleges. 43.41 percent of junior secondary schools, 92.69 percent of secondary schools, 97.75 percent of

schools and colleges, and 87.36 percent of all institutions have computer facilities. Notwithstanding the requirement for computer education in secondary schools, 80.20 percent of all institutions reportedly have a computer teacher. This percentage was 38.33 percent in elementary schools, 85.39 percent in secondary schools, and 88.88 percent in schools and universities. In 2021, 82.65 percent of institutions were found to have internet access. Also, 97.85 percent of the institutions have safe drinking water facilities, and 96.3 percent have separate bathrooms for female students.

As per BES, BANBEIS and MoE (2020), 96.6 percent of secondary schools have access to electricity, 18.76 percent have access to the internet and around 76.85 percent have computers for pedagogical purposes. 18.76 percent of the schools have adapted infrastructure and materials for students with disabilities, 97.48 percent have access to basic drinking water, and 96.59 percent have access to single-sex basic sanitation

### 6.4.3 Challenges in the Secondary Education

One of the main challenges facing the education sector is the low secondary enrollment rate. In 2020, the net enrollment rate and completion rate were 71% and 64%, respectively. The secondary level's minimal enrollment in science subjects is an even greater obstacle. In order to accomplish its development goals, the country will require a large number of science graduates in the coming years. However, current trends suggest a movement in the opposite direction.

There is a perception that science subjects are more challenging, which is likely accurate and may explain why students are reluctant to study them. A severe issue is the dearth of qualified science educators.

According to a recent study, 36.8% of teachers purchase test questions from associations and 14.4% from the open market. Approximately 37% of instructors use guidebooks in the classroom. 33% of mathematics instructors and 23% of science teachers have been found to use unauthorized guidebooks. In essence, the dearth of qualified science teachers, the perceived difficulty, and the lack of relevance to the job market may contribute to the low proportion of science students in Bangladesh's higher secondary education.

Similar to the situation with primary education, enrollment increases without a corresponding decline in attrition rates. Gross enrollment rates for impoverished and non-poor students are 24% and 76%, respectively, indicating significant inequity, which is another obstacle.<sup>26</sup>

### 6.4.4 Way Forward

The Ministry of Education is in the process of reforming the examination and grading system for student learning. Emphasis is placed on evaluating students' acquisition of course material, as opposed to memorization. In order to ensure the quality, validity, and dependability of the examination and assessment system in Bangladesh, the National Examination and Assessment Centre (NEAC) will shortly be established as an independent institution. Already, initiatives have been initiated to establish the organization. The National Examination and Assessment Centre Act of 2020 is in the process.

The low number of students taking scientific courses in SSC and HSC does not align with the government's growth and development goals. This issue should be addressed by training science instructors, identifying high-potential students at a young age, and funneling them into science streams. Regular correspondence should be provided between institutions and students/parents to discuss future plans and career aspirations, as well as additional remedial support for students who are struggling.

The Father of the Nation, Bangabandhu Sheikh Mujibur Rahman established the Dr. Qudrat-i-Khuda education commission in 1972. In 1974, the commission recommended implementing a single-track curriculum for all secondary students. At this age (13+), it is difficult for a ninth-grader to choose his future education. This places him under a great deal of stress, which can hinder his mental and physical

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development. In addition, all secondary students must receive an equal and equitable education. This is one of SDG-4's objectives. All secondary-level students must study science, commerce, and the arts equally in order to produce a workforce capable of meeting the challenges of the impending 4IR. In light of these factors, the government has decided to implement a uni-track curriculum instead of a multi-group curriculum through grade ten.

During the COVID19 pandemic, ICT-based learning systems proved to be highly effective emergency instruments for conducting classroom activities remotely. On the premise of this lesson, the Ministry of Education has launched initiatives to construct permanent ICT-based learning infrastructure that would aid in minimizing student losses in the event of a natural disaster. In order to expedite the incorporation of ICT into the educational system, the Government's a2i project and the Ministry of Education have taken a number of measures. Shikhok Batayan is an outstanding illustration of such initiative. There are 245,049 total contents and 953 model contents. By 2021, the government intends to involve 900,000 educators in this initiative. The 8FYP will employ a framework to ensure that all elementary and secondary schools provide at least one hour of instruction in using these web contents on school grounds.<sup>27</sup>

Disparity is another issue that should be address secondary level. The gross enrolment for poor and non-poor at the secondary level are 24% and 76% respectively, indicating high inequity in this level. The most likely cause for this is that struggling poor secondary students particularly boys are employed in family farms/businesses by their parents who see no return in continuing the education of their child. The girls on the other hand are sent to perform paid/unpaid household work. Child marriage, is another problem that should be given urgent attention. Generous stipends to students and financial incentives to parents will be provided under the 8FYP to reduce this disparity<sup>28</sup>.

## **6.5 Non-Formal Education**

### **6.5.1 Objectives and Strategies for Non-Formal Education**

The importance of Non-Formal Education (NFE), especially literacy and continuing education for adults and youths that includes life and livelihood skills have been emphasized by the GoB as well. The 7<sup>th</sup> FYP in this regard sought to end illiteracy. In this context, the main goals are to eliminate illiteracy by providing basic literacy. The target is to provide 32.5 million illiterate teens and adults with basic literacy. Secondly another target to establish a community-based network of learning centers to create scope for ICT-based continuing and lifelong learning. The target in this regard is to establish a minimum of one learning center in each of the unions and also in certain urban areas, with a total target of 5052 establishments. Under the plan of extending opportunities for effective skill training, 5 million graduates of the Basic Literacy Project were targeted to be skilled in different trades/occupations. Moreover, the plan includes the establishment of an NFE Board.

### **6.5.2 Progress in Non-Formal Education**

Ever since independence in 1971, the government has been implementing Literacy/ Non-Formal Education (NFE) programs in various forms. The government's commitment to combating adult illiteracy prompted it to launch a major non-formal education program focusing on basic literacy in the 1990s.<sup>29</sup> The government adopted the NFE Policy in 2006 to reduce illiteracy, provide need-based continuing education, promote equivalency between formal and non-formal education, ensure community ownership, and ensure the sustainability of NFE programs. Bangladesh has continued to improve adult literacy rates, increasing from 58.6 percent in 2010 to around 75 percent in 2022 (Figure 6.7).

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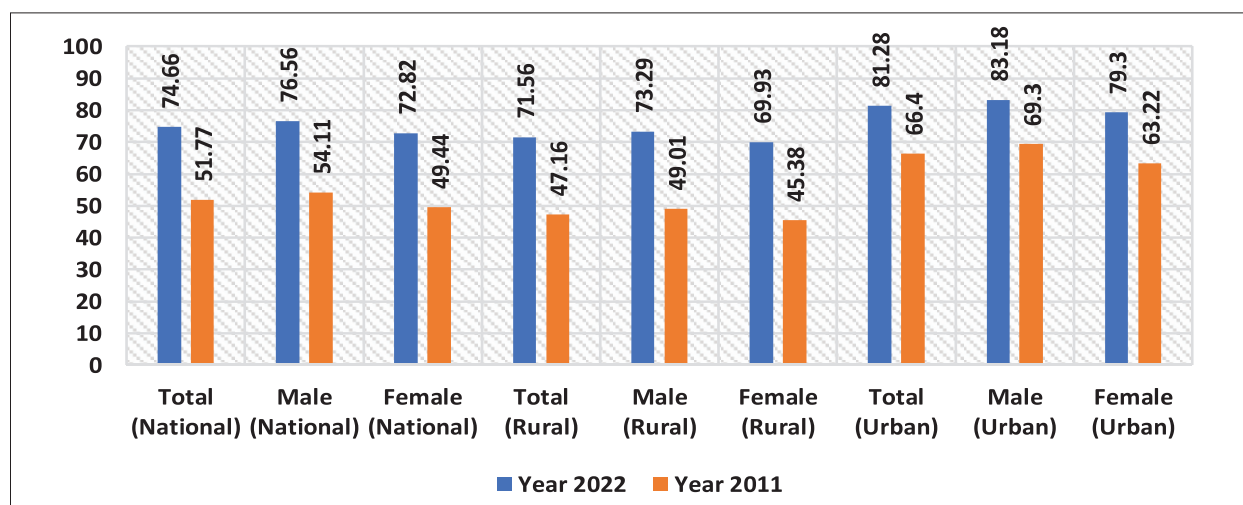
27 8<sup>th</sup> Five Year Plan

28 8<sup>th</sup> Five Year Plan

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Figure 6.7 illustrates the literacy rate of the 7-and-older population by gender and by location. In 2022, the literacy rate for both sexes (male and female) is estimated to be 74.66% at the national level, 71.56% in rural areas, and 81.28% in urban areas. In 2022, the male rate is 76.56%, while the female rate is 72.82%. But in every sphere, the literacy rate has been increased in the last ten years. It is a noteworthy success for Bangladesh considering the constraints arisen due to the pandemic and global shocks.

**Figure 6.7: Literacy Rate of Year 2011 and 2022**



Raising adult literacy rates for both men and women has been a slow but steady process. In 2014, the Non-Formal Education Act (NFEA) was enacted to provide a legal framework for meeting adult and non-formal education obligations. The BoNFE has been implementing the Basic Literacy Project (64 Districts) since 2014, to provide transformative basic literacy skills to 4.5 million people aged 15 to 45. There are 39,331 continuing education centers across the country, with 78,621 teachers (equal numbers of male and female students and teachers) and 1,967 supervisors. Approximately 2.4 million students have passed through the centers so far. 1.4 percent of youth and adults have ICT skills. But around 4.1 percent of people in urban areas are skilled in ICT while the rate is only 0.6 percent for the rural areas. Around 4.6 percent of the women have used computers, 71.4 percent have owned a mobile phone and 14.2 percent of women have used the internet.<sup>30</sup>

### 6.5.3 Challenges in Non-Formal Education

Despite this progress, there remains a considerable amount of still to be done. There is a considerable literacy gap between rural and urban areas, with the average rural literacy rate being only 66%. Approximately 37 percent of adult women in rural areas are illiterate, a situation that is exacerbated by the lack of access to education. In addition, there are concerns about the limited scope of the literacy attained. The BoNFE has been an essential institutional change that has played an important role in advancing the cause of NFE at the institutional level. To achieve the objective of lifelong learning, BoNFE's capabilities require substantial enhancement. Coordination, accountability, transparency, participation of the populace, and a monitoring mechanism are essential. To mitigate the aforementioned challenges at various levels of education, attention must be paid to multifaceted and multilayered governance.<sup>31</sup>

### 6.5.4 Way Forward

The primary objective of the current policies should be to attain an adult literacy rate of 100 percent for both men and women by the end of the plan. The strategies should emphasize providing fundamental

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literacy skills in order to move toward the global concept of lifelong learning, which has been incorporated into the education goals and targets of the SDGs. This can be accomplished by connecting literacy to the development of fundamental skills and opportunities for lifelong learning, and by envisioning learning provisions, facilities, and resources that complement and supplement the formal education system. Non-formal education and lifelong learning must emphasize the widespread use of ICT resources for organized lifelong learning, such as through a nationwide network of community learning centres, and the expansion of self-learning opportunities. A lifelong learning strategy would support and promote the population's literacy level, non-formal and informal livelihood and life skills development, and ICT-based access to information and self-learning tools and resources in a coordinated manner.<sup>32</sup>

## **6.6 Madrasah Education**

### **6.6.1 Objectives and Strategies for Madrasah Education**

The Plan emphasizes that the non-government madrasas should have a friendly learning environment. As for its infrastructure, the Education Engineering Department (EED) would develop educational institution infrastructure through several projects, which includes academic buildings for non-government madrasas. For as high as 6000 non-government madrasas, a wide range of infrastructure improvement initiatives have been proposed and prioritized. It is expected that, such initiatives would greatly improve learning in madrasas and will close the gap between them and other educational systems.

In order to incorporate different modalities of digitalization, increased access to ICT in madrasas has been encouraged. In this connection, teachers in madrasas would receive training in using ICT related technologies to supplement their lessons. Multimedia equipment should also be installed in classrooms at madrasas. During the plan period, electronic filing is scheduled to be implemented by the Madrasa Education Board.

### **6.6.2 Progress in Madrasah Education**

The seventh five-year plan has prioritized making the madrasah sector more developed and comparable to the general education system. Madrasah education is a subsector of Bangladesh's education sector. This subsector serves over 3,99 million students, including Ebtidayee, and is therefore also substantial. This is commonly referred to as the religious stream, which is distinct from the general stream. The total number of institutions providing post-primary madrasah education increased from 7820 in 2002 to 9291 by 2021. Ebtedayee madrasah offers the equivalent of primary education, while post-primary madrasah encompasses Dakhil, Alim, Fazil, and Kamil, which are equivalent to the general stream's secondary, higher secondary, bachelor's degree, and master's degree programs.

In 2018, there were approximately 9,200 Aliya madrasas and 14,000 Qawmi madrasas in Bangladesh, with rural areas housing 86 percent of all madrasas. They serve 3.1 and 3.8 percent of school-age children, respectively<sup>33</sup>. Aliyah madrasa has five educational levels: Ebtedayee (primary equivalence; grades 1–5), Dakhil (grades 6–SSC), Alim (equivalent to higher secondary), Fazil (equivalent to BA degrees), and Kamil (equivalent to master's degree). Dakhil and Alim are studying arts, muzabbid, science, and business. Only religious subjects such as Tafasir, Hadith, Arabic, and Fiqh are covered by Fazil and Kamil. The Junior Dakhil Certificate (JDC) Examination, which is equivalent to grade 8 JSC examinations in Bangladesh, was introduced in the country in 2010. The number of institutions for Kamil is still not significant. According to the divisional distribution of madrasahs, Dhaka had 13.08%, Chattogram had 17.74%, Rajshahi had 16.26%, Rangpur had 15.27%, Khulna had 12.70%, Barishal had 12.51%, Sylhet had 4.31%, and Mymensingh had 8.14%.

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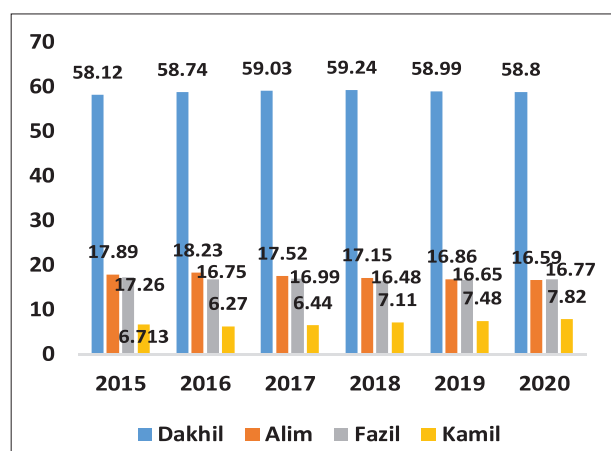
<sup>32</sup> 8<sup>th</sup> Five Year Plan

<sup>33</sup> 8<sup>th</sup> Five Year Plan

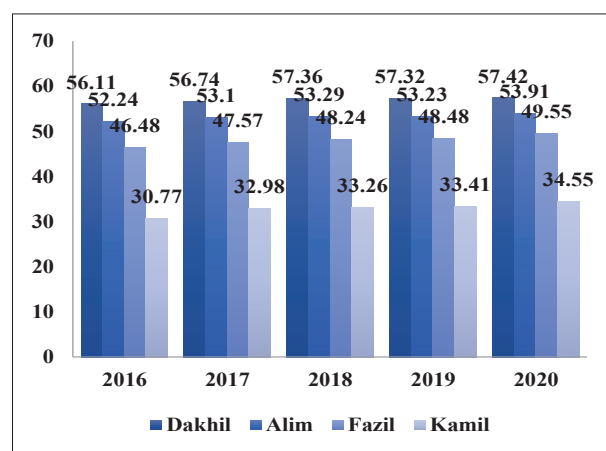
In 6544 Dakhil Madrasahs, there were a total of 1400204 students; more than 59.48 percent were female (Figure 6.8 and 6.9). In 2021, 9291 madrasah provided education from Dakhil to kamil. Madrasahs are entirely privately administered. Dakhil, Alim, and Fazil are managed privately. Just three of the 259 Kamil madrasah were government-run. 99.97 percent of the 9291 madrasahs were privately run. Of 9291 madrasahs, 70.43 percent were Dakhil, 15.05 percent were Alim, 11.73 percent were Fazil and 2.79 percent were Kamil. The average number of students per school is 214. There were 110901 teachers and 2,657,252 students in total; the average number of teachers and students per institution was 12 and 286, respectively. The student-teacher ratio was 1:24.

There were 1398 Alim Madrasah with a total of 460793 students and 20583 instructors. The ratio of female students to female professors was 55.46 percent to 17.8 percent. The average number of students per college was 330, while the average number of teachers per institution was 15. The student to teacher ratio was 1:22. In 2021, there were 1090 Fazil madrasahs with 525597 students and 19544 teachers; 50.16 percent of the students were female. 17.68 percent of teachers were women.

**Figure 6.8: Percentage of Students in Madrasah Education**



**Figure 6.9: Percentage of Female Students in Madrasah Education**



Source: BANBEIS 2021

The average number of students per institution was 214, while the average number of teachers was 10 in Dakhil Madrasah. In 2021, there were 259 Kamil madrasah with 270658 students and 5973 instructors. Female student comprised 33.42 percent of total enrolment. Female educators made up 18.75 percent of the total. The average number of students per institution was 1,030, and the average number of teachers was 23, for a teacher-student ratio of 1:45 (Table 6.4).

**Table 6.4: Number of Madrasah by Management and Various Ratios**

Type of Madrasah	Management	No. of Madrasah	TSR	SPI	TPI
Dakhil	Private	6544	22	214	10
Alim	Private	1398	22	330	15
Fazil	Private	1090	27	482	18
Kamil	Private	256	45	1030	23
	Public	3	88	2292	26
	Total	259	45	1045	23
Total	Private	9288	24	285	12
	Public	3	88	2292	26
	Total	9291	24	286	12

NB: TSR= Teacher Student Ratio, SPI = Student per Institution, TPI = Teacher per Institution  
Source: BANBEIS 2021



But the data shows that from Dakhil to the higher education level the number of both total and female students has sharply decreased. At the Dakhil level, the primary equivalent accounts for nearly 60 percent of all enrolments. The most advanced level, Kamil, has the lowest enrollment rate. In terms of student-teacher, student-institution, and teacher-institution ratios, the Dakhil level has the lowest ratios and the Kamil level has the highest ratios.

At the end of 2019, an initiative was launched to provide ICT training to 19,200 madrasa teachers and special communicative Arabic courses to 9,600 teachers. Furthermore, smart classrooms were to be established in 560 senior madrasas, and approximately 120,000 students were to be trained in basic ICT, computer training, and Internet use. Qawmi madrasa has been the most unexplored area in Bangladesh's educational system. Qawmi madrasas are not registered and are mostly supported by private donations. Qawmi madrasa differs from Aliya in terms of education and curriculum. There are six levels of education, with a typical completion time of 7-8 years. Children in primary school are taught to read Arabic, Urdu, and Persian. Bengali, Mathematics, and English are taught in a hurried manner. After finishing primary school, students learn more about the Quran, Hadith, Islamic Jurisprudence, and Islamic History. Science is infrequently taught in a general stream and Aliya students. Perhaps most significantly, the government announced in 2017 that Dawra degrees from Qawmi madrasas would be officially granted the status of a master's equivalent degree in order to reduce the disparity faced by madrasa students in the job market. Initially, no changes to the Dawra curriculum were required.

### 6.6.3 Challenges

According to research, there is a significant difference in learning outcomes between public school and madrasa students, and girls in this stream have lower achievement rates than boys. Another significant issue is that the Qawmi stream, which is more popular than the Aliya stream, is managed independently and without government input. This raises concerns about the frequency with which their curriculum and teaching methods are reviewed and updated. Fund management and transparency are also a concern, particularly for the Qawmi stream, which relies primarily on private donations and does not disclose its accounting records.

Self-selection bias is prevalent in madrasah enrollment, with a disproportionate number of poor and rural families opting to enroll their children in madrasahs as opposed to public institutions. Since the learning outcomes and employability of madrasa graduates are significantly lower than those of graduates from the general stream, the return on education for the former is potentially lower. Therefore, the presence of the madrasa-stream with its current pedagogical structure could perpetuate a cycle of destitution. The arrival of the fourth industrial revolution will only exacerbate the current state of affairs<sup>34</sup>.

Moreover, the continued existence of a madrasa-stream in its current format has been a question for discussion and there have been calls for reforms. In addition to perpetuating a vicious poverty-cycle among the poorest families sending their children to school, the structural and pedagogical differences between the general and madrasa-stream of education is creating/maintaining artificial strata in society, in terms of both income and culture<sup>35</sup>.

Changes to the curriculum and pedagogy will not be fruitful unless accompanied by enhanced teacher training. Only 23% of the instructors at Aliya madrasa are trained. Among 113,368 instructors, only 19.66% are NTRCA-certified. As changes are made to the curriculum and new subjects are emphasized, the current instructors should receive the necessary training to teach the new material. In addition, the stream requires more female instructors, as only 12.7% of its teachers are female and 55.24 % of its students are female. More resources should be allocated to encourage, train, and ultimately recruit additional female madrasa teachers.

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Many students who are struggling in secondary education will have higher earnings if they switch to the TVET stream, according to studies. It is probable that the TVET stream can also assist a substantial number of madrasa students. The government should implement technical education at the Dakhil and Alim levels to make this a reality. Madrasah-TVET partnerships can play catalytic roles in the transformation of madrasa pedagogical architecture.

The availability of a computer and a multimedia device in Aliya madrasas, the implementation of ICT-based education, and the introduction of programming courses should be implemented. All of these measures will increase the quality of graduates from madrasahs and narrow the learning gap between madrasah and general graduates.<sup>36</sup>

## **6.7 Higher Education**

### **6.7.1 Objectives and Strategies for Higher Education**

The government has developed specific policies and strategies in the context of higher education. Since education and research are the primary goals of universities, the largest share of funding will be allotted for the projects that will improve their physical facilities. The GoB acknowledges that there should be more educational institutes, especially in the fields of science and technology. Changing and updating curricula in response to public demand has also been considered. In light of the dynamic national and international higher education landscape, a new function for the University Grants Commission would be conceived. The main goals for such purposes are raising the percentage of adults with a college degree from 12 percent to 20 percent, improvements to the quality and standards of universities, along with a quantitative expansion but without any trade off with the quality, consolidation and strengthening of existing universities, attaching attention to quality, selectivity, and excellence, providing proper access to computer and internet facilities, attaching high priority to science and technology, business administration, and teachers training, integration of enrolment among various disciplines, increased focus on research and training, introduction of use of online education or e-learning, expansion and development of libraries and laboratories, strengthening of the University Grants Commission and construction of an accreditation council.

Moreover, at six divisional levels, various scientific facilities like planetariums would be built and modern equipment is going to be utilized in these facilities. It is expected that the exhibition of scientific exhibits would increase public awareness of science and technology and would contribute to the development of a science-enthusiast society. These facilities would also act as sources of recreation for the young people while learning and exploring about science and technology.

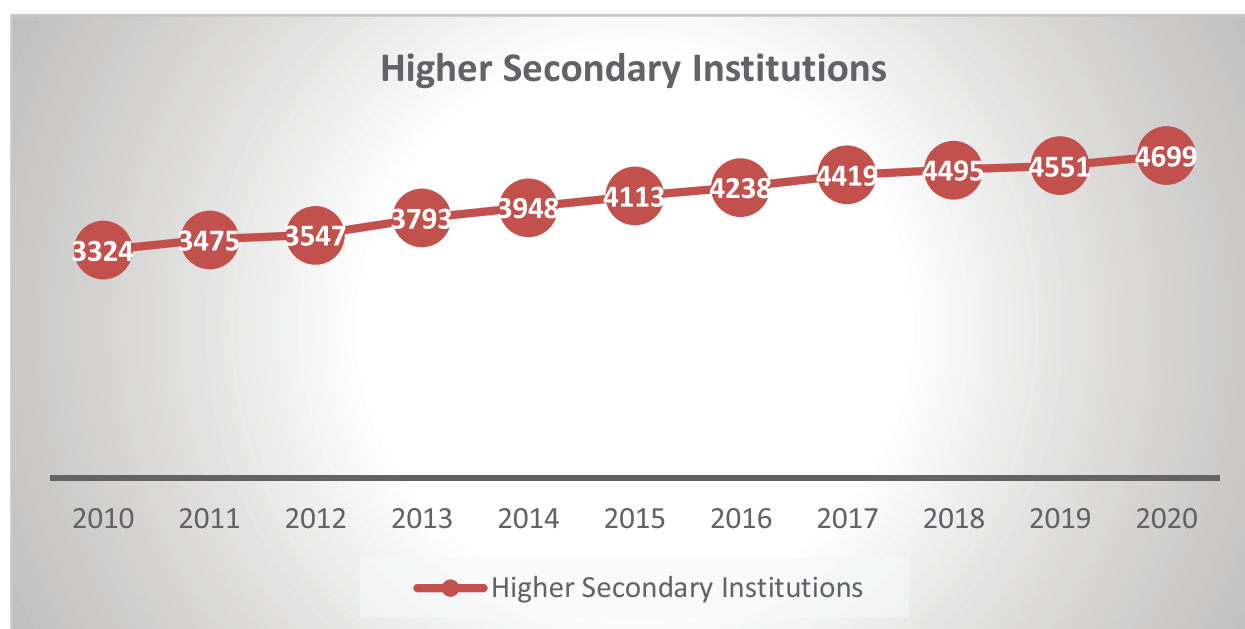
### **6.7.2 Progress in Higher Education**

College education includes institutions that provide postsecondary education. Intermediate Colleges, Degree (Pass) Colleges, Degree (Honors) Colleges, and Masters' Colleges are the four types of colleges. The total number of institutions involved in college education is growing (Figure 6.11).

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**Figure 6.10: Number of Institutions Associated with Higher Secondary Education**



Source: BANBEIS 2021

From 2018 to 2020, the completion rate in college education has decreased while the dropout rate has risen. The net enrolment rate is fairly stable over time. But the teacher-student ratio has become a major concern as the rate is constantly following an upward trend (Table 6.5).

**Table 6.5: Progress in Higher Secondary Education**

Indicators	2016	2018	2020
Net enrollment rate	36.51	35.43	36.40
Completion rate (percent)	79.92	80.37	78.84
Dropout rate	20.08	19.63	21.16
Teacher-student ratio	1:32	1:35	1:36

Source: BANBEIS 2021

According to the Annual Education Survey (AES) 2021, there were 160 universities in Bangladesh, with 50 (31 percent) being public and 110 (69 percent) being private<sup>37</sup>. There were 1233529 students in total. The average number of students per university was 7710, with 18030 in public universities and 3018 in private universities. 36.30 percent of all students were female. In public university, this percentage was 38.71 percent and in private university this percentage was 29.74 percent. The gender parity index in both public and private universities was 0.57, with 0.63 in public and 0.42 in private. The rate of increase in the number of students is faster than the rate of increase in universities, indicating that the increase in students is the result of both increased opportunities and increased demand for higher education. The number of tertiary colleges increased during this period, as did the number of master's degree-granting colleges. This progress has been greatly aided by the government's policy of allowing private tertiary education supply, as evidenced by the increase in the number of private universities during the relevant period. To maintain the sector's positive trend, the government has adopted the Strategic Plan for Higher Education in Bangladesh: 2017-2031 (BANBEIS, 2021).

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The 7FYP aimed to close the enrollment gap between men and women, poor and non-poor, and urban and rural populations. The government has taken a number of steps to align the curriculum of higher education with the demands and expectations of the twenty-first century. The Accreditation Council Bill was passed in parliament in 2017, establishing an independent council to evaluate programs at both public and private universities. The bill makes extensive monitoring of academic activities at universities possible and it has been already operationalized. The Higher Education Quality Enhancement Project (HEQEP), funded by the World Bank and implemented by the University Grants Commission, aims to improve the quality and relevance of higher education institutions in Bangladesh by i) encouraging university innovation, ii) demanding greater accountability from university authorities, and iii) instituting capacity development for higher education institutions and the sector as a whole. Between 2009 and 2018, the project focused on industry-university collaborative research and included four major points: promoting academic innovation in teaching, learning, and research; institutional capacity building at the University Grants Commission (UGC) and universities; connectivity capacity building for research centers and universities; and project management.

### 6.7.3 Challenges

Despite this progress, the total coverage of tertiary education remains very limited. Only 12.1 percent of Bangladeshis have a higher education. This figure is 8.7 percent for females and 15.5 percent for males. Higher education is held by 19.9 percent of people in urban areas and 8.8 percent of people in rural areas. Furthermore, female students make up only 26 percent of total students at public and private universities. As a result, large disparities exist across gender and socioeconomic groups. Engineering universities, medical colleges, dental colleges, law colleges, art colleges, and other professional institutions provide education related to a specific profession. From 242 in 2009 to 425 in 2018, the number of professional institutes increased. In 2010, there were 48 medical colleges (18 public, 30 private), but by 2018, there were 111 (37 public, 74 private). During the 2010-2018 period, the number of dental colleges increased from 11 (1 public and 10 private) to 35 (9 public and 26 private). During this time, only three Textile Technology Colleges were established (an increase from 8 to 11). The number of Leather Technology Colleges remained constant at one. During this time, the number of students per teacher in all public institutes decreased significantly, from 12 to 6. The primary challenges in higher education are education quality, limited enrollment, and labor market relevance. In the context of the fourth industrial revolution, STEM graduates are essential for the country's current level of development. Approximately 45 percent (26 percent) of pupils in the tertiary sector (universities) are female, making gender equality one of the most significant challenges. The net enrollment rate is also low, at less than 20%.

Although enrollment in tertiary education has increased in recent years, a significant portion of this increase is attributable to an increase in enrollment in humanities and social science disciplines. When all tertiary institutions are considered, STEM enrollment as a proportion of higher education enrollment is only 21%. The graduates' the ability and job readiness are below par. Research conducted by Tracer on university and college graduates indicates that students lack marketable skills and employment readiness. A recent study of graduates from universities funded by the University Grants Commission revealed that 38.6% of graduates are unemployed, while 34% find employment within two to three years of graduation. The absence of industry-academic collaboration is an additional challenge for labor market relevance. This results in a disconnection between what is taught and what is expected in the workplace. According to studies, increasing enrollment (and completion) without considering industry linkages will only create a pool of highly educated but potentially unemployable graduates.<sup>38</sup>

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#### **6.7.4 Way Forward**

The quality of higher/tertiary education is of crucial significance to the country's current development process and goals. The number of secondary school students pursuing science subjects is notably low. At the advanced level, a substantial number of science students migrate to business/commerce/social science streams, exacerbating the problem. Rarely does reverse migration occur from arts subjects to science subjects. Scholarships, career counseling, and dissemination of information through the media should be utilized to encourage a greater number of students (and parents) to pursue STEM subjects. Since tougher curricula necessitate better teachers, additional resources will be allocated to the training and education of teachers in STEM disciplines.

The public-private partnership (PPP) plays a crucial role in the development of a market-driven skills system and professional skills that meet the needs of industries. Both the NEP 2010 and the NSDP 2011 assert that PPPs are essential for the establishment and administration of new TVET institutions. There are currently hundreds of large and small NGOs that offer brief, non-accredited training courses lasting between four and six months. Their enrollment capacities are limited due to institutional restrictions. Government policies have already been implemented to strengthen the partnership between GOs and NGOs.

Gender equality is achieved at the primary and secondary levels, but not at the tertiary/higher levels or in the TVET sector. In universities, male students outnumber female students by nearly a 3:1 ratio. In 2011, the government adopted a National Women's Development Policy (NWDP) to guarantee equal rights for men and women. However, social prejudice against women impedes the policy's implementation, and the female labor force participation rate is significantly lower than the male rate (36 percent versus 82 percent). Establishing public universities for women, as well as providing generous scholarships and other forms of financing, will assist in reducing and eventually eliminating the gender gap.

In order to increase competition, internationally renowned universities may be permitted to establish campuses in Bangladesh. Universities can offer a student exchange program, visiting professors from foreign universities, shared/joint courses, and degree programs. These collaborations will enhance the management and performance of local university administrations and faculty. Some Middle Eastern nations, Malaysia, and China have been reaping the benefits of this endeavor for a very long time. Universities with a STEM focus should be prioritized.

The research and publication of faculty members must be given a high priority. In this regard, both quantity and quality of publications should be emphasized. In addition to other objective evaluations, salary increases, promotions, and tenure should be tied to research and publication output.

In order to improve skills, post-graduate colleges affiliated with National University must implement a variety of skill-based programs. This endeavor will undoubtedly increase the employability of university graduates nationwide.

### **6.8 Skill Development (Technical and Vocational Education and Training)**

#### **6.8.1 Objectives and Strategies for Skill Development**

The main elements of the skills development strategy for the Seventh Plan are properly implementing the vision and mission of the National Skills Development Policy (NSDP 2011), preparing educated, qualified and skilled manpower for the greater economic development of the country, creating more diversity in technical and vocational education programs to meet the needs of the workforce in the areas of emerging technologies (such as fish production, leather, textile, mechatronics, mining & mine survey, instrumentation

& process control, construction, environmental, garments design & pattern making, electro-medical, etc.) including the IT sector, prioritizing greater participation of women in TVET to ensure gender equity, improving the existing TVET Institutions to meet the challenge of the fast-changing economy in the rural setting for poverty alleviation and to reduce rural-urban migration and enhancing private sector involvement and initiative in the delivery of technical and vocational education programs.

The National Skills Development Policy also identified key target groups and ensured decent work and lifelong learning. By 2020, 40 percent more women must be covered under the study of TVET. Underprivileged students, particularly women, must receive stipends and other financial aid to encourage enrollment, retention, and completion. 4 new women-only Polytechnic Institutes have to be built in 4 divisional HQs. Each divisional headquarters in Barisal, Sylhet, and Rangpur must have a women's polytechnic. Women's technical colleges must be offered in seven divisions.

### 6.8.2 Progress in TVET

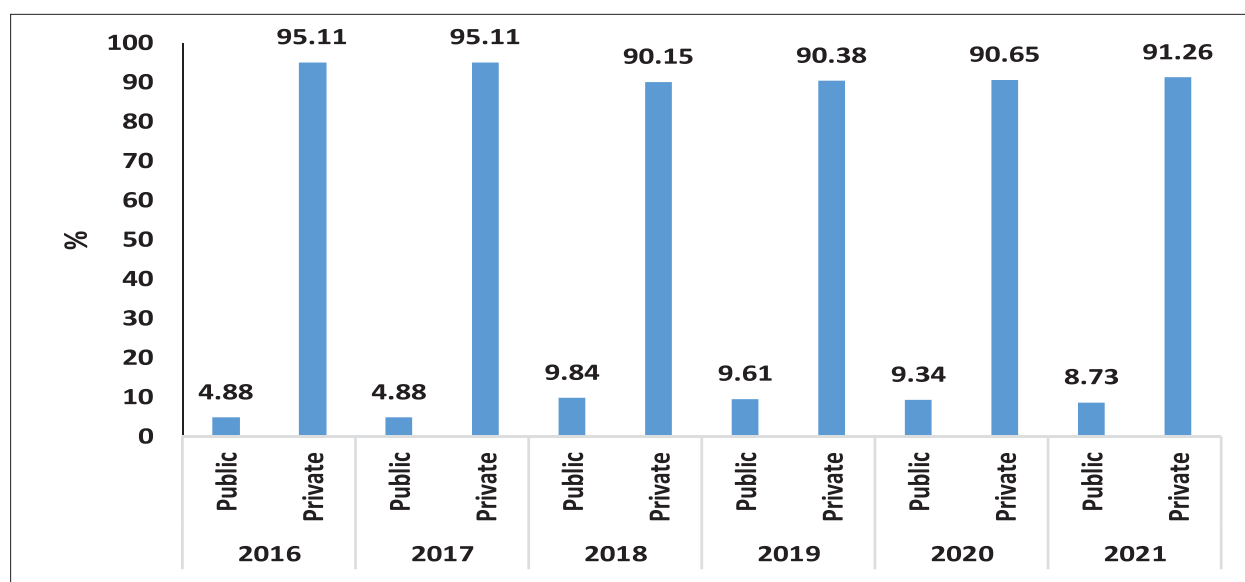
The perspective plan (2010-2021) and the 7<sup>th</sup> Five Year Plan highlight the importance of TVET expansion and modernization in developing a skilled workforce. One sub-goal of SDG-4 is to ensure that all women and men have equal access to affordable and high-quality technical, vocational, and tertiary education, including university. According to the LFS 2016-17, Bangladesh has 41.25 million working-age youth (between the ages of 15 and 29). Youth unemployment is the highest among all age groups in the labor force. Young people account for 79.6 percent of total unemployment in the country, with a 10.7 percent unemployment rate. Furthermore, nearly 30 percent of the youth population was NEET (not in employment, education, or training) in 2017. In this age group, 97.8 percent of males and 98.7 percent of females did not have access to training. Those who received training were mostly given two-week courses. This subsector is diversified, serving over 1164880 students and involving numerous stakeholders. Polytechnics, Technical schools and colleges, Glass and ceramics, Graphic Arts, Survey Institutes, TTC, Textile institutes, Textile vocational, Agricultural training institute, Marine Technology, SSC Vocational (independent), HSC Vocational/ BM (independent), Medical Technology, Medical Assistant Training School (MATS), SSC Vocational (attached), and HSC business management were among the institutions involved (attached). This is a rapidly expanding sub-sector, with 1416 institutions in 2001, 2317 in 2003, 5790 in 2015, 6885 in 2018, 7259 in 2020, and 7761 in 2021. But the number of privately managed institution are still not significant. The number of TVET institutions over the last five years has increased for both public and private institutions. Between 2016 and 2020, the number of public TVET institutions more than doubled. But still, the number of public institutions is lower in this area<sup>39</sup>. Most of the schools and polytechnic institutes under vocational education are private. Though the number of public institutions is increasing in number, in recent years there has been a drop (Figure 6.12). After 2018, the increase in the number of TVET institutions becomes stagnant. In spite of reducing the number of public institutions, a slight raise in the number of private institutions have kept the balance.

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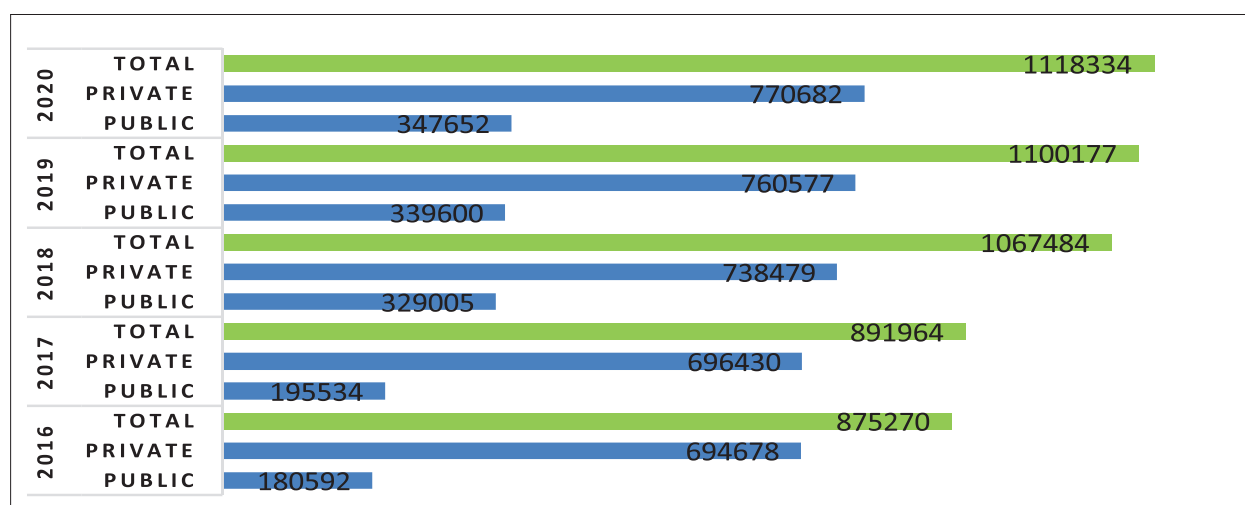
**Figure 6.11: Number of TVET Institutions**



Source: BANBEIS 2021

The rate of TVET enrollment increased from 1 percent in 2009 to 16 percent in 2018. In 2001, there were 131481 students, 875270 in 2016, 1067484 in 2018, and 1118334 in 2020 (Figure 6.13). The number of students in both public and private institutions of TVET has also increased in the last five years of the 7<sup>th</sup> five-year plan.

**Figure 6.12: Number of Students in TVET Education**



Source: BANBEIS 2021

To improve the TVET system and address sector issues, the government implemented the National Education Policy (2010) and the National Skills Development Policy (2011). To address the skills gap, the government launched the TVET Reform Project from 2008 to 2015, as well as the National Skills Development Project 2011 (NSDP 2011) and the Skills for Training for Employment Program (STEP). The government has also significantly increased the institutional arrangement for skill development. These institutional reforms are expected to result in a significant shift in the delivery of skills in Bangladesh.

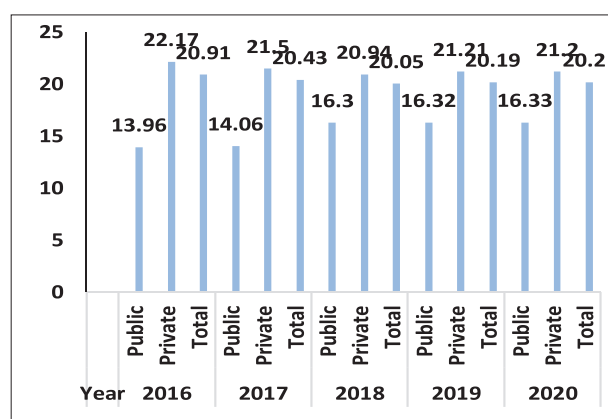


The Skill Enhancement and Innovation Program (SEIP) is a government-led and Asian Development Bank-funded project to improve workforce capabilities. Many people have been trained and employed thanks to SEIP, and those people have largely stayed in their jobs. It's a multi-phase initiative that kicked off in 2014 and is scheduled to run through 2024. The project's expected outcome is a rise in employment in priority industries as a result of the development of new and better skills. Delivering market-responsive, inclusive skills training; strengthening the quality assurance system; bolstering the institutions; and ensuring an effective program administration and governance structure is the four main components/outputs of the project.

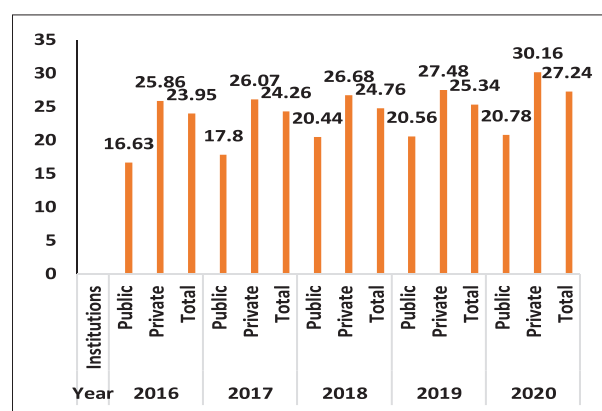
### 6.8.3 Challenges

The student-to-teacher ratio fell slightly from 22:1 to 21:1. However, according to NEP 2010, this ratio should be around 12:1. Low female participation is a major issue in the TVET sector. As previously discussed, the absolute size of TVET enrollment has increased rapidly in the last decade. This applies to both male and female enrolment. However, female enrollment growth has been comparable to male enrollment growth. As a result, in the last ten years, the gender-mix ratio has remained stable at around 27 percent of female students (Figure 6.14 and Figure 6.15). This reflects a gender imbalance that must be addressed. To achieve SDG target 4.3 of gender equality, all women and men must have equal access to TVET and university by 2030.

**Figure 6.13: Percentage of Female Teachers in TVET**



**Figure 6.14: Percentage of Female Students in TVET**



Source: BANBEIS 2021

Despite its significance, a legal framework for industry-academia collaboration is being hampered by institutional rigidities and a lack of incentives. To counteract this, there is a need of implementing financial incentives for businesses, stipends for students, and recognition for TVET colleges that successfully place their students in companies. According to the 2013 Labour Law, businesses with at least 50 employees are required to have 10% of their workforce be apprentices. The 8FYP will incentivize businesses to comply with this law.

### 6.8.4 Way Forward

The technical stream would be of higher quality if external stakeholders were more involved in devising the curriculum and implementing innovative new teaching methods. In order to accomplish this, madrasah education should be streamlined and brought under the control of the national education authority. While this should facilitate accreditation by increasing the number of science, mathematics, and ICT-related courses, graduates' employability must be ensured.

The low implementation of TVET in Bangladesh is a major barrier to enrollment. The first step would be to begin offering TVET classes in primary schools. One way to increase TVET's societal acceptance is to show students and their families how to get from a TVET program to a good job. Around the age of 16, many students in wealthy countries, including Switzerland, drop out of school entirely to begin vocational education programmes, in which one-third of the country's businesses actively engage. Students can make more informed choices about their futures when they have an early and direct awareness of the demands of the labor market.

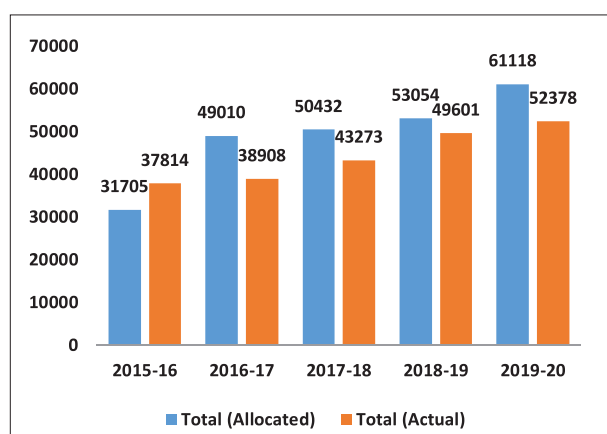
Midway through their secondary school, all students should be exposed to both technical and higher education possibilities so that they can make an informed choice based on their relevant and practical experiences when the time comes. Here we see the complementary nature of TVET and secondary education in action. Students in Bangladesh would benefit from an internship or apprenticeship similar to these in order to acquire practical knowledge in areas such as information technology and other trades. This will strengthen the connection between businesses, educational institutions, and students. They will be able to notice gaps in skills and make necessary course adjustments with more ease if they are in constant contact with one another. Students and their parents will develop a newfound appreciation for the importance of transferable talents above formal schooling as a means to professional success.<sup>40</sup>

## 6.9 Budgetary Allocation

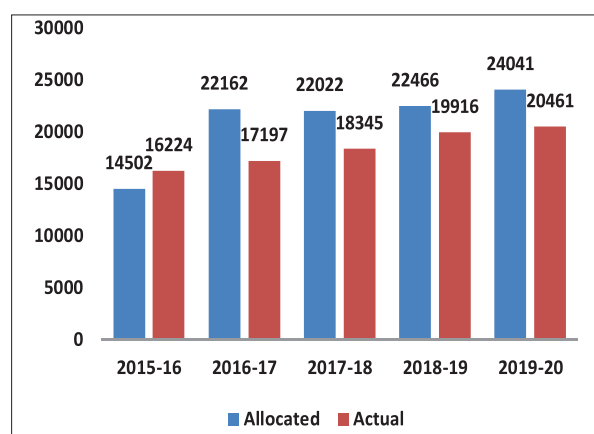
Over time, the budgetary allocation for the education sector has not increased significantly. Most notably, there is an enormous difference between the planned and actual amounts almost every year (Figure 6.16 and 6.17). The challenges with achieving the goals of the seventh five-year plan can be answered by comparing the allocation and the actual budget. Instead of improving the system's quality, the majority of the education money is allocated to the management and procedural areas (Figure 6.18 and 6.19).

NB: These allocation and actual amount of budget are the summation of development and non-development expenditures. Here the allocation in science and technology is omitted with a view to showing the actual gaps in the education budget.

**Figure 6.15: Total Budget in Education**

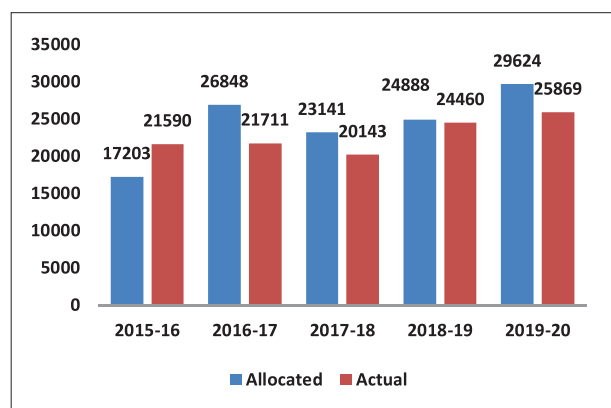


**Figure 6.16: Allocated and Actual Budget in Primary and Mass Education**

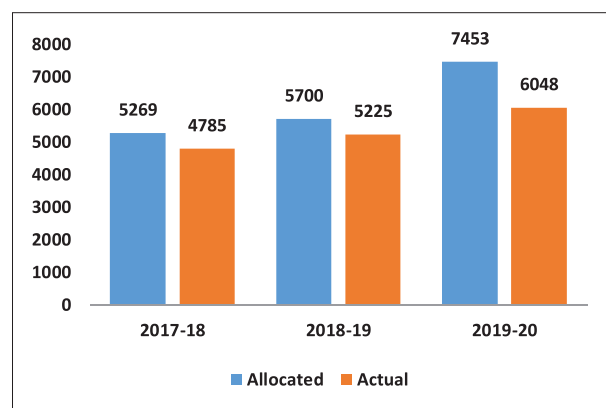


40 8<sup>th</sup> Five Year Plan

**Figure 6.17: Allocated and Actual Budget in Secondary and Higher Education**



**Figure 6.18: Allocated and Actual Budget in Technical and Madrasah Education**



Source: Ministry of Finance.

In terms of primary and mass education, despite the fact that the planned budget exhibits an increasing trend in absolute terms, the actual budget has demonstrated a rather slow and stagnant pace of growth throughout the years. Although the secondary and upper secondary sectors have a greater allocation, their actual budgets are substantially smaller, particularly in the most recent year. The budget for madrasa education and technical education is smaller in both the actual and allocation sectors.

## 6.10 Challenges in Implementation

- Budgetary allocation in the education sector is still very low. In 1980, the country allocated only 0.98 percent of its GDP to this sector. Though UNESCO recommends allocating at least 6 percent of the GDP and 20 percent of budget to allocate in education sector, the rate still hovers around 1.8-2 percent. In the recent budget for 2022-2023, the government in fact reduced the allocation by around 13 percent (from 2.08 percent to 1.83 percent).
- Though the primary education sector of Bangladesh has marked a significant improvement but the growth of enrollment in secondary and tertiary education is not satisfactory. The main challenges in higher education are quality of education, low rate of enrollment, and mismatch with the labor market. In addition, in the context of the fourth industrial revolution, STEM graduates are critical for economic growth and development.
- In case of gender parity there are challenges to deal with- approximately 45 percent (26 percent) of students in the tertiary sector (universities) are female with low net enrolment rate (less than 20 percent). In addition, though female enrolment in tertiary education has increased in recent years, a large portion of this increase can be attributed to an increase in enrolment in humanities and social science disciplines.
- In case of madrasa enrollment, there is a self-selection bias, with a disproportionate number of poor and rural families sending their children to madrasas instead of general schools. The learning outcomes and employability of madrasa graduates in many cases are lower than those of general-stream graduates. As a result, the presence of the madrasa-stream, with its current pedagogical structure, may perpetuate a poverty-cycle. The fourth industrial revolution might exacerbate the situation.
- There has been important progress in the context of technical and vocational training. However, lower rate of participation of females in this context is a major issue in the TVET sector. To achieve SDG target 4.3 of gender equality, all women and men must have equal access to TVET

and university by 2030 (8<sup>th</sup> FYP). However, for both of the sexes, the absolute size of TVET enrollment has increased rapidly and as a result, over the last decade, the gender-mix ratio has remained stable.

- As for the universal education system, a lot need to be done while focusing more on the marginalized and left behind communities. In addition, for certain geographical regions, progress is lagging behind and the key challenge is to work on those areas.
- Regarding school attendance, data from the 2016-17 and 2010 HIES indicate that, despite progress, there is still a significant gap in school attendance among the poor across all school-going age groups, from primary (6-11 years) to secondary (12-18 years) to higher secondary and tertiary education (19-24 years). The percentage of impoverished children who are not in school rises with increasing levels of education, with the greatest disparity at the secondary and tertiary levels. The percentage of impoverished students attending school has increased at all levels of education between 2010 and 2016, which is a positive development. Nevertheless, the gap between the wealthy and the impoverished remains stubbornly wide. In addition to quality concerns at the aggregate level, there are disparities in the quality of education received by children from the impoverished and wealthiest families. According to the data, children from the poorest families are more than twice as likely to not receive a quality education (based on basic reading and math tests) as children from the wealthiest families. For relatively more complex tests (i.e., foundational skills for reading and pattern recognition and completion in numeracy), there are still disparities (poorest children are approximately 1.5 times more likely to not complete the tasks compared to the richest children), but the magnitude is less pronounced than for the simpler tests.

## 6.11 Conclusion and Way Forward

During the Seventh Plan, the government allocated resources to improving human capital through the development of the education sector in order to accomplish targeted growth through a more productive labor force. The goals and objectives for education as a whole have been distributed among the numerous levels of education. The government is focused on increasing secondary, tertiary, and vocational and technical education enrollment rates. The quality and learning have been elevated. To ensure that the workforce is endowed with the necessary skills, numerous training programs and other capacity-building activities have been implemented. But many more challenges are still existing. The budgetary allocation in education is quite lower, around only 2 percent of the GDP despite the fact that UNESCO recommends allocating around 4-6 percent of the GDP in the education sector. It is essential to conduct a comprehensive analysis with the aim of increasing education budget allocations. In this circumstance, the government must devise a plan for gradual implementation over time. The government must also develop a plan to increase the public education budget's share of the GDP to at least 4 percent and eventually 6 percent (or 20 percent of the overall budget). The education budget should be dealt with considering the targets of the Sustainable Development Goals (SDGs) and 8FYP objectives.

Bangladesh is doing considerably well in achieving the SDGs regarding the completion and enrolment in primary education, though the country is lagging behind in the targets in higher education. Higher Secondary (11-12) and tertiary participation rates have also increased. In 2021, the gender parity index (SDG indicator 4.5.1) for secondary level (6-10), higher secondary level (11-12), and tertiary level were 1.21, 1.01, and 0.80, respectively; this was also significantly increased, indicating a high enrolment rate of girls in secondary and higher secondary level education compared to boys in secondary and higher secondary level education (BANBEIS, 2021). The country has also done well in achieving a high adult literacy rate, Proportion of schools with access to basic services and facilities and proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being.

The dropout ratio from primary to higher studies has an increasing trend. The first step in addressing the dropout problem would be to make aware every family of the significance of education; they must realize that education is the most valuable investment in life. Making education more affordable can also be an effective step. The government has already taken many steps for this purpose such as distributing free textbooks to students at the beginning of the year and granting stipends. But the implementation of the stipends and other social protection programs is not proper. Also warning signals of student disengagement, failing grades, poor attendance, and other warning signs which are closely associated with dropping out must be recognized and addressed proactively.

Various incentive programmes should be initiated, and employment opportunities should be guaranteed for vocational training graduates in order to boost workforce quality. Funding from the government can be increased and guaranteed. One of the primary aims of the change is to ensure that TVET is available to everyone, including but not limited to children, women, rural populations, persons with impairments, and people with weak reading and numeracy skills. In order to do so, improvements must concentrate on both policy-related and material obstacles like hostile transit networks and low educational standards. The pandemic has unveiled the loopholes in the e-learning system of Bangladesh. Reducing the value-added tax (VAT) and internet usage fees to is a way to make e-learning accessible to all. The government also needs to make sure that high-speed internet is available everywhere in the country and that the infrastructure for digital learning is established. Additionally, the startups using the e-learning system ought to receive particular incentives and funding. There is also a need to provide access to demand-driven and vocational education through online platforms. Bangladesh ranks 102nd on the Global Innovation Index for 2022, which is disappointing. Bangladesh's education system falls far short of the global average in terms of educational quality, and none of our higher education institutions are ranked among the finest in the world. The government has increased its support for the quantitative development of education in recent years, but university research infrastructure and quality assurance have received relatively less attention. This has a negative effect on the nation's research and innovation output. In addition, a large number of studies are conducted annually in Bangladesh by various think tanks, NGOs, and universities; however, the majority of these studies do not satisfy the criteria for publication in reputable scientific journals. The budget in the R&D sector along with the overall budget must be increased. To enhance the overall level of education, it should ensure that the quality of the teachers is adequate. If the education level of teachers is quite low, there is a good possibility that the education levels of schoolchildren will also suffer because these teachers will not be able to instruct sufficiently advanced material.



**HEALTH, NUTRITION  
AND POPULATION**

**CHAPTER**

**7**





## 7.1 Introduction

The significance of a healthy society for the advancement of a nation is needless to mention. A healthy and well-nourished workforce, on the one hand, can contribute to economic growth and development, while on the other hand, is itself a key indicator of the development progress of a country. The MDGs and SDGs both emphasize the importance of universal health coverage for long-term health and human development. As for Bangladesh, the country has made remarkable progress over time with a significant improvement in life expectancy and a reduction in child and maternal morbidity. In addition, the country has performed well in the case of contraceptive use and family planning and in child immunization campaigns. Therefore, the country is committed to attaining SDG-3, aiming to ensure healthy lives and promoting the well-being of people of all ages.

However, there exists a wide range of challenges in attaining the core goals of the health sector, including those related to health service delivery and health sector governance. For example, though government hospitals provide health care at a low cost, their quality is often argued to be substandard while private hospitals with relatively efficient service delivery mechanisms are out of reach for the middle and lower-income groups. Challenges also remain in the context of high out-of-pocket expenditures relating to low budgetary allocation, lack of trained and efficient human resources etc. The COVID-19 pandemic in recent times has highlighted the importance of human health for national development and welfare. This global phenomenon has also highlighted the necessity for a stronger healthcare system, as well as the necessity for Universal Healthcare, which can be funded through a combination of public and private health insurance schemes.

In this connection, the 7<sup>th</sup> Five Year Plan targets ensuring access and utilization of HNP services for every citizen of the country, reducing the total fertility rate (TFR), ensuring adolescent and reproductive health care, and strengthening community support and involvement to obtain better results in the implementation of programs. The plan also includes the target to improve the nutritional status of children and women, to take effective measures to promote alternative medicines and to improve the quality of care, to meet challenges of emerging, re-emerging and non-communicable diseases, health hazards due to climate change and emergency response to the catastrophe, to enhance national capacity for pre-service education (SBA/nursing, paramedics, midwifery), to provide in-service training and better management of human resources, to improve the quality of hospitals and maternity services and to make these accessible, especially to women, children and poor.

The 7<sup>th</sup> plan also incorporates the targets of improving service delivery and utilizing the health network, with wider access to health services, improving healthcare services provided by the private sector, strengthening the service of delivery and newborn care, tackling communicable and non-communicable diseases. Providing equal access to health services is also one of the core targets of the Plan while improving services like mental health.

On the population front, the key challenge is to effectively utilize the youth population of the country in particular. As for the targets related to nutrition, the 7<sup>th</sup> FYP has the goal of impeding factors related to nutrition and strengthening the enabling environment for scaling up nutrition.

With a view to attaining the targets of the health sector, the government has launched the Health, Population, and Nutrition Sector Programme (2017-2022) to achieve the SDGs and universal health coverage. In addition, the Health Care Financing Strategy (2012-2032) has been adopted to reduce out-of-pocket expenditure by more than fifty percent. SDG3 specifically relates to good health and well-being, while SDG2 refers to nutritional improvement. The MoHFW is in charge of implementing 20 indicators out of 27 indicators under SDG3 and two nutrition-related indicators under SDG2. MoHFW has been working to meet the SDG targets by implementing the SDG Action Plan. MoHFW held Divisional level workshops

focusing on SDG-related activities to improve stakeholders' knowledge and understanding of key concepts and principles, as well as targets and indicators of health-related SDGs, which were aligned with field-level program activities.

## **7.2 Targets as Outlined in the 7<sup>th</sup> FYP**

To achieve universal health coverage (UHC), Bangladesh has aimed to achieve several goals that are in line with the key objectives outlined in the proposed Sustainable Development Goals (SDG) framework<sup>41</sup>. The human development strategy prioritizes nutrition, health, and population control. Vision 2021 envisions Bangladesh as a middle-income nation with low poverty, and optimal health. To achieve UHC in the HNP sector, the government has set several goals and targets. The other targets that are related to service delivery are wider access to health services, making the regulatory mechanism more effective, improving childbirth and newborn care controlling communicable and non-communicable diseases, lowering the burden of tobacco use, equality access to healthcare services, environmental concerns, tribal health, autism, mental health, geriatric care, and health education.

### **7.2.1 Governance and Health Sector Management**

The 7<sup>th</sup> FYP has taken into account the health sector's shortcomings in governance and management in addition to service delivery difficulties. The goals related to this sector are constructing a national health workforce strategy and HR action plan to ensure enough qualified workers, improving data reliability and efficiency, reinforcing the Directorate General of Drug Administration to produce and distribute high-quality drugs, encouraging their prudent use, and eliminate harmful or ineffective drugs, increasing public sector involvement in health while taking steps to increase development partner assistance and decreasing the out-of-pocket expenses through advance payment programs with healthcare coverage, bolstering the stewardship role, powers, and responsibilities by examining the number, scope, and effectiveness of the existing regulatory mechanisms, as well as by establishing and implementing appropriate rules to guarantee the provision of high-quality, equitable public health services and a gradual transition from service delivery to stewardship and regulation for universal health coverage, establishing a coordinated surveillance system to direct program strategies and effectiveness.

### **7.2.2 Nutrition Program of the 7<sup>th</sup> FYP**

HNP spending prioritizes health, which is associated with lacking nutritional issues. This subsector faces institutional constraints, micronutrient deficits, public awareness, maternal undernutrition, acute malnutrition, and dietary diversity. The 7<sup>th</sup> FYP has the target to improve nutrition support and removed nutrition barriers, construct a Nutrition Strategy, properly address Child and Maternal Malnutrition aspects, and improve the institutional capacity through a new operational plan for National Nutrition Services (NNS).

### **7.2.3 Population Programme in the 7<sup>th</sup> FYP**

By the end of the plan's implementation phase, the government wants to reduce the fertility rate to 2.0. In addition to the TFR aim, the population sub-sector has the following secondary targets:

- Raising the prevalence of contraception from 62.4 percent to 75 percent,
- Reducing the 12 percent unmet demand for FP supplies among eligible couples to 10 percent,
- Decreasing the rate of discontinuation of contraceptives from 30 percent to 20 percent,
- Raising the use of contraceptives to stop population growth by providing services and contraceptive methods to people at no cost and using door-to-door delivery whenever necessary,

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41 7<sup>th</sup> Five Year Plan

- Enhancing family planning and population services,
- Raising awareness of the roles each relevant ministry plays in population management, with the MoHFW serving as the lead Ministry.

## 7.2.4 Progresses in 7<sup>th</sup> FYP Targets

There has been significant progress in terms of improving health outcomes. Some noteworthy achievements in improving the HNP service delivery in Bangladesh include the formulation and implementation of national health, nutrition, and population policies, as well as maternal, neonatal, and child health strategies. It is also noteworthy that the MoHFW has strengthened health MIS through digitalization and has fiduciary capacity. Improvements in procurement, budget planning, sector coordination and management, fund absorption capacity, monitoring, and supportive development of overall socio-economic conditions have reduced NMR, IMR, U-5MR, MMR, TFR, malnutrition, stunting, under-weight, and so on, as well as increased life expectancy at birth, laying the groundwork for a healthier population.

Based on the outcomes, a monitoring and evaluation framework for the HNP sector has been designed in line with the strategies envisioned in Bangladesh's 7<sup>th</sup> Five-Year Plan. The HNP sector's current performance status in comparison to the goals outlined in the 7<sup>th</sup> Five-Year Plan is provided below (Figure 7.1, 7.2, 7.3, 7.4, 7.5 & 7.6).

Figure 7.1: Life Expectancy at Birth

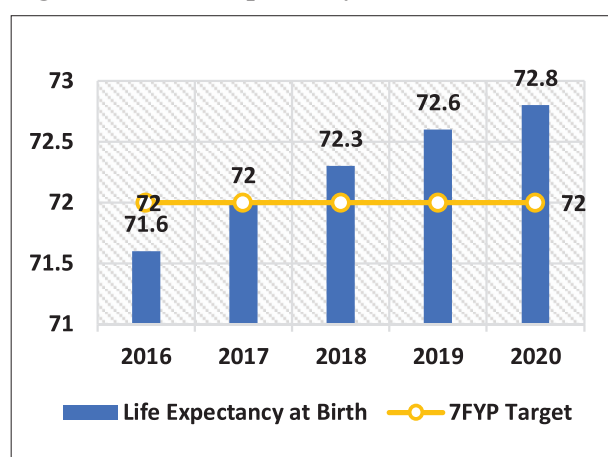


Figure 7.2: Total Fertility Rate

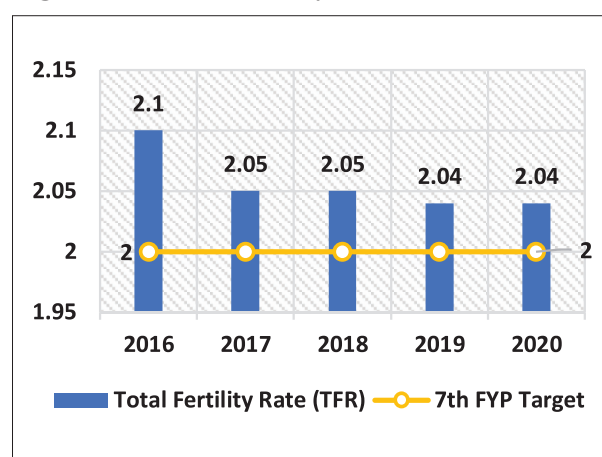


Figure 7.3: Under 5 Mortality Rate

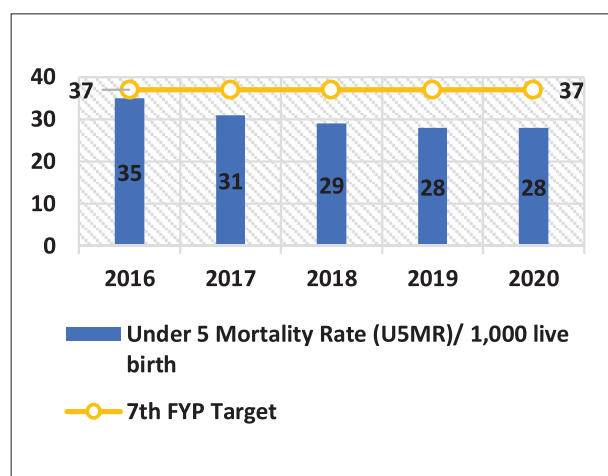
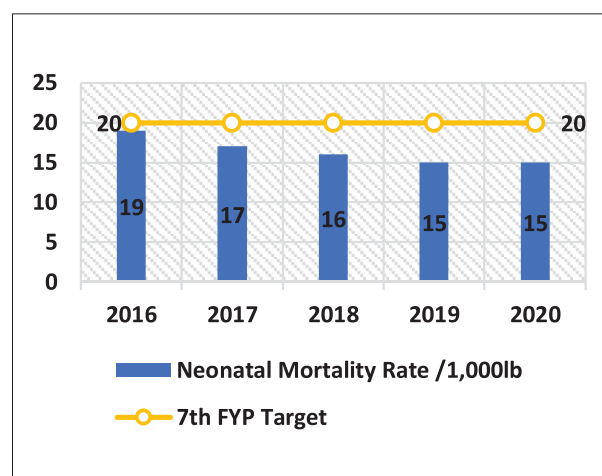
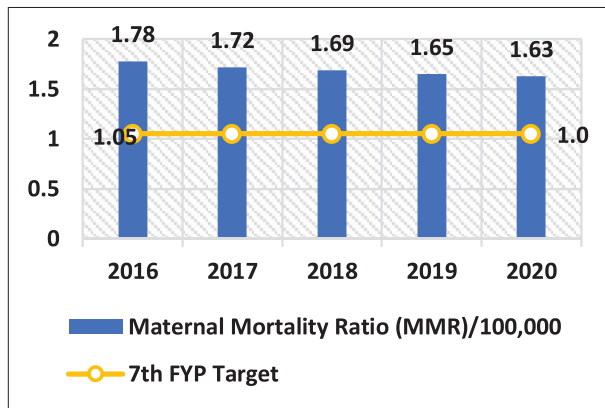


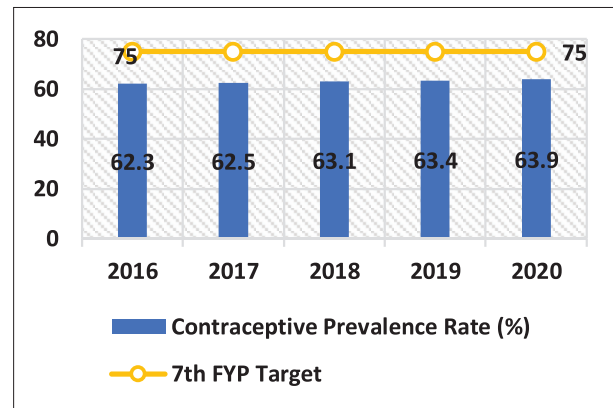
Figure 7.4: Neonatal Mortality Rate



**Figure 7.5: Maternal Mortality Ratio**



**Figure 7.6: Contraceptive Prevalence Rate**

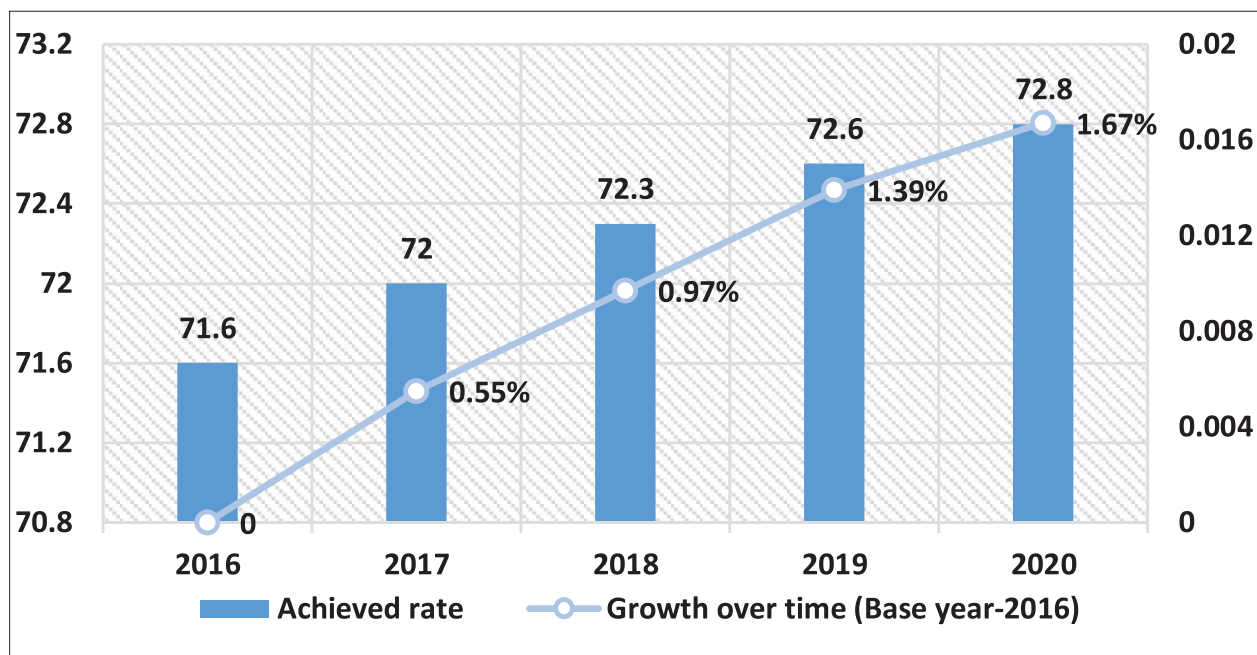


Source: Ministry of Health and Family Welfare and 8<sup>th</sup> FYP

Almost all the indicators have achieved the targets except the maternal mortality ratio and contraceptive prevalence rate. Bangladesh has achieved applaudable success in reducing the under-five mortality rate in the last decades. Neonatal mortality has followed the same trend as well.

Life expectancy at birth has increased almost at an increasing rate over time. Figure 7.7 shows the trend and growth of life expectancy during the period of the seventh five-year plan. Holding 2016 as the base year, it can be seen that the life expectancy at birth has a positive rate of growth over time.

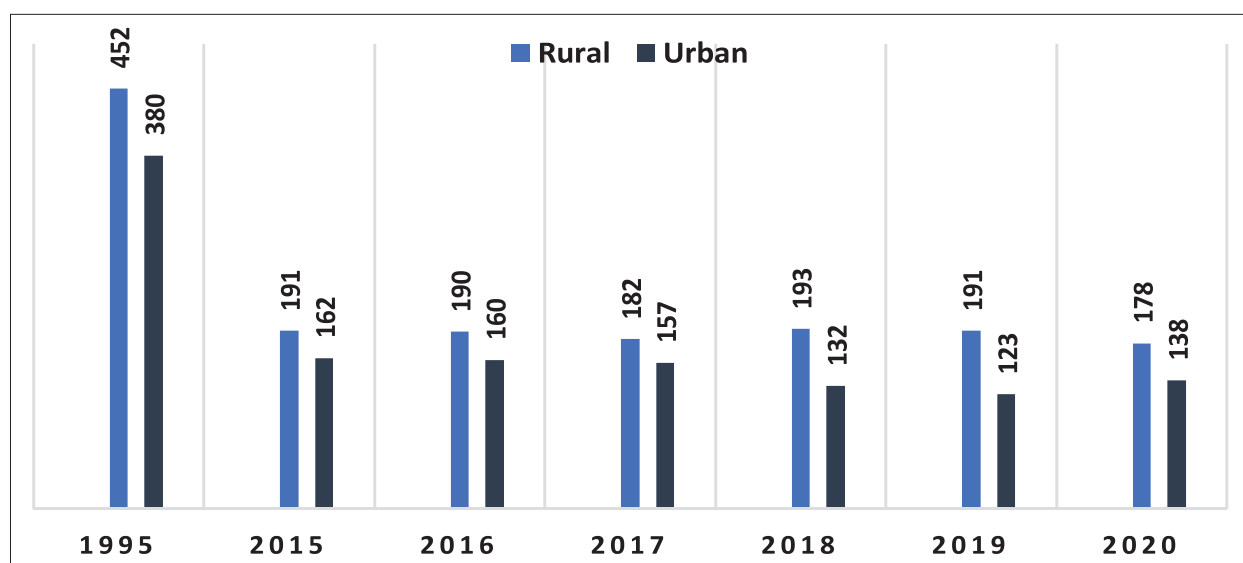
**Figure 7.7: Trend of Life Expectancy at Birth Over Time**



Source: Ministry of Health and Family Welfare

Despite the fact that the 7<sup>th</sup> FYP's goal for maternal mortality was not met, the indicator has shown a positive trend over time (Figure 7.8). Over time, the national maternal mortality rate has decreased. Rural areas have a higher mortality rate than urban areas do. Yet, in recent years, the urban mortality rate has remained stagnant or even risen.

**Figure 7.8: Region-Wise Trend of Maternal Mortality Rate**



The proportion of underweight among children under five is around 22 percent. The percentage is almost close to the target of 20. The proportion of children under five who are exclusively breastfed has met the target successfully. But the under indicators are still lagging and much attention is needed there (Table 7.1).

**Table 7.1: Progress in Health Indicators**

SI No	Indicators	7FYP Target	Progress up to 2020
1	The proportion of underweight among U-5 children ( percent)	20	21.9
2	The proportion of stunting among U5 children ( percent)	25	30.8
3	The proportion of children fully vaccinated by 12 months ( percent)	95	85.6
4	The proportion of children under 5 months who are exclusively breastfed (%)	65	65
5	Percentage of Unmet need for family planning	10	12

Source: NIPORT, 2020

Bangladesh's regular immunization schedule, which targets 3.8 million children and 6 million women annually, includes vaccines for 10 diseases. In Bangladesh, vaccinations prevent over 200,000 deaths annually. Bangladesh is still lagging in fulfilling the targets related to the indicators. Despite a high vaccination rate, inequality still exists. Remote districts and rural-urban regions experience significant differences. Only 86 percent of the children are fully vaccinated by 12 months whereas the target was 95 percent (Table 7.1).

Promoting an enabling policy environment and cultivating a socio-cultural movement that sees the reduction of maternal mortality and morbidity as a fundamental women's right and a crucial national development issue. Bangladesh has successfully increased the proportion of birth by medically trained providers from 42 percent in 2016 to 52.7 percent in 2020, though the target is 65 percent. But increasing the rate in this sector is a commendable success for a developing country like Bangladesh. The experience in this sector demonstrates that reducing maternal and neonatal mortality and morbidity is both a result of and an entry point for key strategic women's rights issues such as equity, disparity, and violence. Therefore, strategies and interventions must emphasize enhancing a woman's status, dignity, and self-esteem. Bangladesh has taken National Strategy for Maternal Health 2019-2030 to improve the maternal healthcare system of Bangladesh. The strategy has targeted many improvements in this purpose.

There may be as many as 300,000 children with autism in Bangladesh, according to estimates by the Autistic Children's Welfare Foundation. The SDG target of 28 deaths per 1,000 live births was already met by the under-five mortality rate, which steadily decreased from 36 per 1,000 live births in 2015 to 28 in 2020 (SVRS, 2020). Similarly, the neonatal mortality rate (NMR) dropped from 20 per 1,000 live births in 2015 to 15 per 1,000 in 2020, meeting the SDG target of 2025. As per the table, the effect and contamination of HIV are pretty low in Bangladesh (<0.01 for all ages and 0.015 for adults between 15-49 years per 1,000 uninfected populations, UNAIDS). Contamination of other diseases like tuberculosis, Malaria and Hepatitis B is comparatively low. HSD is implementing an anti-tobacco program based on the WHO-FCTC and the Bangladeshi Tobacco Control Law. The prevalence of tobacco usage among people aged 15 and older has fallen, according to the Global Adult Tobacco Survey (GATS) 2018, from 43.3% in 2009 to 35.3% in 2017, with 46.0% of males and 25.2% of women. There are ongoing campaigns to raise public awareness about the dangers of tobacco use. The Medical Education and Family Welfare Division (MEFWD) held division-level workshops focusing on SDG-related activities in order to increase the knowledge and comprehension of stakeholders regarding the key concepts, principles, targets, and indicators of the health-related SDGs, and to match these with field-level program activities.

On the contrary, Kalaazar, Lymphatic Filariasis, and Dengue are just a few of the Neglected Tropical Diseases (NTDs) that are rampant in Bangladesh. There have been negative changes as the indicator “number of persons requiring interventions against NTD” has risen from around 50 million to around 56.33 million (World Health Statistics, WHO, 2016; WHO 2020). It needs to be reduced to 35.0 million by 2030, and efforts are underway to do so through things like promoting clinical management, active community engagement, and integrated vector control. The majority of illnesses and deaths in the world today are caused by NCDs (non-communicable diseases). In 2016, these leading causes of death combined to account for 21.6 percent of all deaths. Since then, things have not gotten better (World Health Statistics, WHO, 2020). Also, the number of people killed in car accidents has steadily risen over the years.<sup>42</sup>

Among a nationally representative sample of Bangladeshi residents, 18.7% of adults and 12.6% of children met criteria for a mental condition in a door-to-door prevalence survey conducted in 2018-2019. According to the data presented, just 7.7% of individuals with mental problems receive care, creating a “treatment gap” of 92.3%. Because mental health care is not routinely recorded in the health information system, estimates of treatment coverage for specific disorders cannot be derived from the survey results alone. According to UNAIDS' 2018 report, Bangladesh has an extremely low prevalence of HIV/AIDS (0.01 for all ages and 0.015 for individuals between 15 and 49 years). From 225 per 100,000 people in 2015 (WHO, 2015), the incidence rate of tuberculosis (TB) has decreased to 221 in 2019 (WHO, 2019). Basic TB control services have been maintained by Bangladesh's National TB Program (NTP) and its partners, with reasonable case detection and excellent treatment outcomes.<sup>43</sup>

### 7.2.5 Progress in the HPNSP

The Ministry of Health and Family Welfare (MOHFW), GoB, has been implementing the Health Population and Nutrition Sector Development Program (HPNSDP) for a period of five years, from July 2011 to June 2016, with the goal of accelerating the progress of the health, population, and nutrition (HPN) sector and addressing its challenges. This program will run for a total of five years, from July 2011 to June 2016. The HPNSDP is the third sector-wide program for overall development of the health, population, and nutrition subsectors, following the HPSP (1998-2003) and the HNPSP (2003-2011). Priority of the program is to increase demand for and access to and utilization of HPN services in order to reduce morbidity and mortality, slow population growth, and improve nutritional status, particularly among women and children. In March 2017, the government approved the 4<sup>th</sup> Health, Population, and Nutrition Sector Programme (4<sup>th</sup> HPNSP) to be implemented from January 2017 through June 2022 at a total cost of USD 14.7 billion, of

42 8<sup>th</sup> Five Year Plan and SDGs Bangladesh Progress Report 2020

43 Bangladesh WHO Special Initiative for Mental Health Situational Assessment



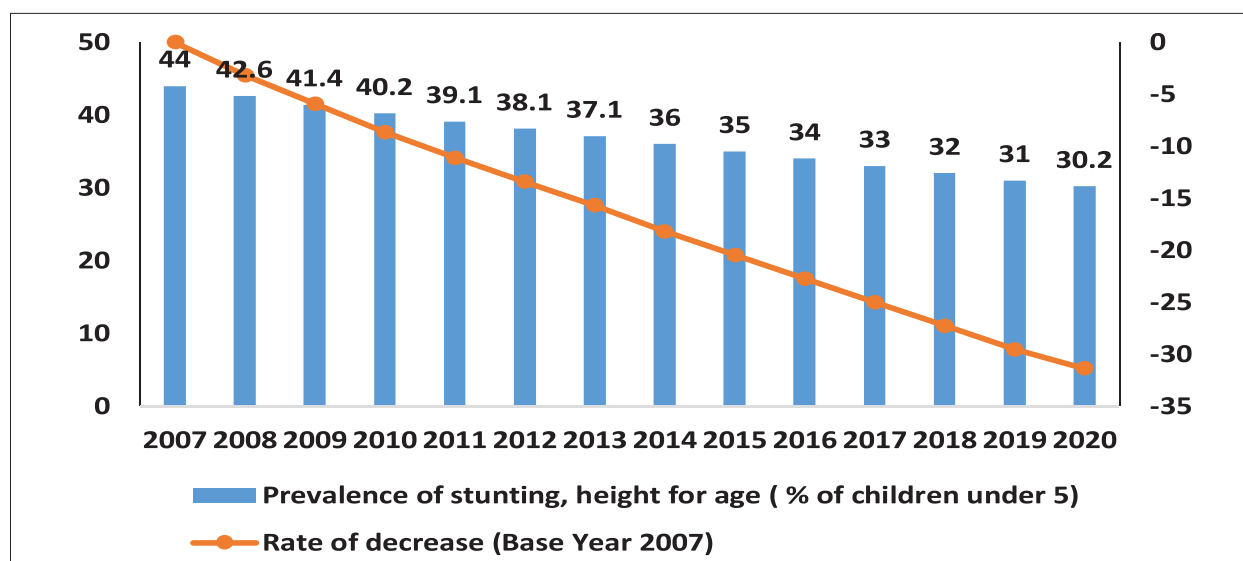
which 84 percent will come from government funds.<sup>44</sup> Out of the total of 29 operation plans (OPs) available through the current 4<sup>th</sup> HPNSP, 19 deal with hospital services management (HSD). To ensure the health and well-being of all people in Bangladesh, this project seeks to expand access to high-quality healthcare that is distributed fairly. During January 2017–June 2019, GOB was scheduled to receive US\$ 275.99 million for achieving results, but only US\$ 140.19 million was actually received, representing an achievement rate of 51%. This rate is noteworthy given that the funding mechanism is novel to both MoHFW implementers and IMED with regard to the verification of DLIs. It was therefore recommended in the 4<sup>th</sup> HPNSP's Mid-Term Review in 2020 that EPI platforms incorporate Growth Monitoring and Promotion (GMP).

The World Bank (WB) is funding the 4<sup>th</sup> HPNSP using a results-based financing method called Investment Project Financing (IPF) with Disbursement-Linked Indicators (DLIs)<sup>45</sup>. The World Bank and other DPs must meet targets for 16 Disbursement-Linked Indicators (DLIs) to release US\$ 588.45 million in yearly disbursements. The disbursement for accomplishing the results was scheduled to be US\$ 275.99 million between January 2017 and June 2019, but GoB received US\$ 140.19 million, representing an achievement rate of 51 percent. Reaching this percentage is notable, although low because the funding modality is new to IMED (Implementation Monitoring and Evaluation Division) in terms of DLI verification and to the MoHFW implementers. To close the disbursement gap, all the participants—concerned LDs, MOHFW, IMED, and the WB—should contribute accordingly.

## 7.2.6 Nutritional Issues

There has been a lot of positive development between 2007 and 2019. Specifically, the percentage of children who are stunted (low height for their age) has decreased from 43 percent in 2007 to 28 percent in 2019 (MICS, 2019). Additionally, the percentage of children who are underweight (low weight for their age) has decreased from 41 percent to 22.6 percent, and wasting has decreased from 17 percent to 9.8 percent (Figure 7.9). In 2018, 86 percent of children aged 12-23 months had received all recommended vaccinations based on both vaccination records and the mother's statements. In Bangladesh, 95 percent or more of the population has received the BCG vaccine, three doses of the pentavalent vaccine, and three doses of the polio vaccine.

**Figure 7.9: Trend of Stunting**



Source: World Bank

44 Ministry of Health and Family Welfare

45 8<sup>th</sup> Five Year Plan

Furthermore, consumption of a Minimum Acceptable Diet (MAD) climbed from 21.2 percent to 34.1 percent and Minimum Dietary Diversity (MDD) increased from 24.25 percent to 37.5 percent over the same period. The Exclusive Breastfeeding Rate increased from 55 percent in 2014 to 65 percent in 2017. Children that have ever breastfed are highly prevalent (98.5 percent). Yet, only a small percentage of children were breastfed within an hour of birth (46.6 percent) in 2019.

### 7.2.7 Progresses in Approaches to Universal Health Care (UHC)

Bangladesh has made it a top priority for at least the past three decades to ensure that its public health services are readily available to everyone who needs them. Health for All (HFA), Primary Healthcare (PHC), the Essential Service Package (ESP), etc., have all contributed to this goal. All people should have access to the most important health and nutrition services, and the ESP is a symbol of the government's dedication to this goal. As a top-priority intervention for PHC delivery, it is being rolled out from community clinics (CCs) to district hospitals. The provision of CC-based services at people's homes is a step toward achieving UHC. The CCs are also helping to reduce the disparity between rural areas' rich and poor in terms of health outcomes. The World Health Organization projected that by 2020, Bangladesh would have achieved a Universal Health Coverage (UHC) index score of 53 percent, up from 50 percent in 2017.

Government has assigned some significant roles to various ministries in order to develop the health sector. Ministry of education, health and family welfare have been working on integration of nutrition and hygiene education in the curriculum, including school vegetable gardens and culinary demonstrations and Health and Nutrition Days in the school calendar on a regular basis, ensuring that all girls complete secondary school. Promoting and protecting healthy eating habits among children in areas where school nutrition programs exist. Local Govt., Rural Development, Coops, ministry Health & Family Welfare, Ministry of Water Resources have the responsibility of contributing to higher hand-washing and hygiene rates, ensuring the availability of potable water, enhancing access to sanitary facilities in various contexts and prioritizing women's access to water for agriculture and fisheries. Ministry of Women and Children Affairs, Health and Family Welfare, Ministry of Primary and Mass Education Emphasizing the empowerment of women to make decisions about their own and their children's wellbeing, highlighting child marriage/early pregnancy and childbearing and their detrimental effects on nutrition, and ensuring that a 6-month fully paid maternity leave is implemented in all sectors, protecting, promoting, and monitoring rights and non-discrimination: the right to adequate food and to be able to feed oneself with dignity; and all other –related rights (employment, children's rights, etc.). Securing ownership, access, and management rights to land and other productive resources for poor or marginalized groups (e.g., ethnic minorities, emergency-affected populations), protecting forests, promoting forest-derived foods to benefit poor/women, restoring or enhancing natural resources, pro-poor, efficient and integrated management of water resources, including and control for negative impacts, such as water-borne diseases, risk mitigation, and management of enhancing nutrition surveillance and early warning systems are the assigned role the ministry of environment and forests Chittagong hill tracks. Moreover, to strengthen household/community resilience, especially in times of emergency, increase collaboration with other sectors, implement collaborative programming, and include nutrition-relevant indicators in monitoring and evaluation systems, the ministry is still working.

## 7.3 Population and Development

The 2022 census revealed remarkable progress in population management. The population growth rate has decreased and reached 1.22 percent in 2022 from 1.37 percent in 2015 (SVRS, 2019) . Moreover, unmet requirements, which was 12 percent, have decreased (BDHS, 2017-18). Unmet need for family planning among currently married women age 15–49 declined from 12 percent in 2017–18 to 10 percent in 2022. By using a modern approach, 77.4 percent of women of reproductive age (Aged 15-49 years) now have their demand for FP satisfied, up from 72.6 percent (SVRS, 2014; MICS, 2019). MEFWD is working hard to increase this to 100 percent by 2030 (MICS 2019). The rate of antenatal care has gone up from

31.2 percent in 2014 to 88 percent, and the rate of postnatal care has gone up from 33.9 percent in 2014 to 55 percent in 2022. In the past two years, 65 percent of births occurred in health care facilities, but only 55 percent of mothers reported receiving PNC from a medically trained provider within two days of their most recent birth. And only 78% of mothers with institutional births received PNC from a medically trained provider within the first two days after giving birth. Popularization of lengthy permanent methods, increased use of contraceptives, clinical contraception, maternal, child, and reproductive health services, BCC for awareness-raising, and other activities are some of the notable FP initiatives. Family planning has been shown to reduce maternal mortality by 30 percent, neonatal mortality by 20 percent, unintended pregnancies by over 66 percent, and abortion by 40 percent.

The infant mortality rate significantly decreased to 21. Women of reproductive age (15-49 years) who met their need for family planning and used any modern method report that they are satisfied with the method = 62.32 percent (2020). The incidence of maternal mortality was also reduced; however, this achievement was very small in comparison to other fields. The proportion of children in the population decreased to 35 percent due to the shifting population dynamics, and the dependency ratio sharply decreased to 67 percent. Sample survey results demonstrate that since the previous Census, population management has continued to advance (Table 7.2).

**Table 7.2: Trend of Population Over Time**

Indicator name/time	1974	1981	1991	2001	2011	2022
Population Size	71,479,071	87,119,965	106,314,992	124,355,263	144,043,697	165,158,616
Population Change		15,640,894	19,195,027	18,040,271	19,688,434	21,114,919
Population growth (percent)		21.88	22.03	16.97	15.83	14.66
Average annual increase		2,212,291	1,919,503	1,804,027	1,941,660	1,876,882
Average annual growth rate		2.84*	2.01	1.58	1.46	1.22

Source: Census 2022

The annual average growth rate of the population has decreased during the period of the 7<sup>th</sup> five-year plan. The population growth rate has also been decreasing over time which is a good sign given the worldwide food insecurity. The other indicators have also shown satisfying trends through the years. The other indicators have also shown tremendous results over time. The dependency ratio has almost been halved from the rate existing at the time of independence (Table 7.3).

**Table 7.3: Trend in Population Indicators**

Population Indicators	1974	2011	2019
Total fertility rate (TFR)	6.9	2.1	2.0
Life expectancy	46.2	69.0	72.6
Infant mortality rate (per 000 live births)	139	39.0	21
Maternal mortality rate (per 1,00,000 live births)	750	239	165
Share of 0-14 age group ( percent)	48.1	35.4	28.5
Dependency rate ( percent)	100.0	67.2	51.0

Source: Preliminary Report on Population and Housing Census 2022

To strengthen, modernize, and speed up the development programs related to nursing education and services, and to make nurses more effective in carrying out their responsibilities, the government reorganized and upgraded the Directorate of Nursing Service into the Directorate General of Nursing & Midwifery (DGNM) on 6 November 2016. The Bangladesh Nursing & Midwifery Council has replaced the Nursing Council as

well (BNMC). One Director General and one Additional Director General are among the 77 new roles added to the DGNM. There are 3,000 new posts created for midwives. 38 public nursing institutions now offer a 3-year diploma program in midwifery. 36,197 program managers, service providers, and field personnel received in-service training provided by NIRPORT in 2018-19. In addition to completing the Bangladesh Health Facility Survey, 2017 and Bangladesh Demographic and Health Survey, 2017-18, NIPORT has created a Digital Registration System to connect it to a Training Management System.

## 7.4 Demographic Dividend

The demographic dividend is the potential for increased economic growth brought on by changes in the age structure of a population, particularly when the proportion of people who are working-age (15 to 64) is higher than that of people who are not (14 and younger, and 65 and older) (UNFPA). Bangladesh's population structure is currently "young" in terms of age, but over the next few decades, it will mature quickly. When 14 percent of the population is 65 years of age or older, society is said to be in an "aged" stage (Table 7.4).

**Table 7.4: Scenario of the Demographic Dividend in Bangladesh<sup>46</sup>**

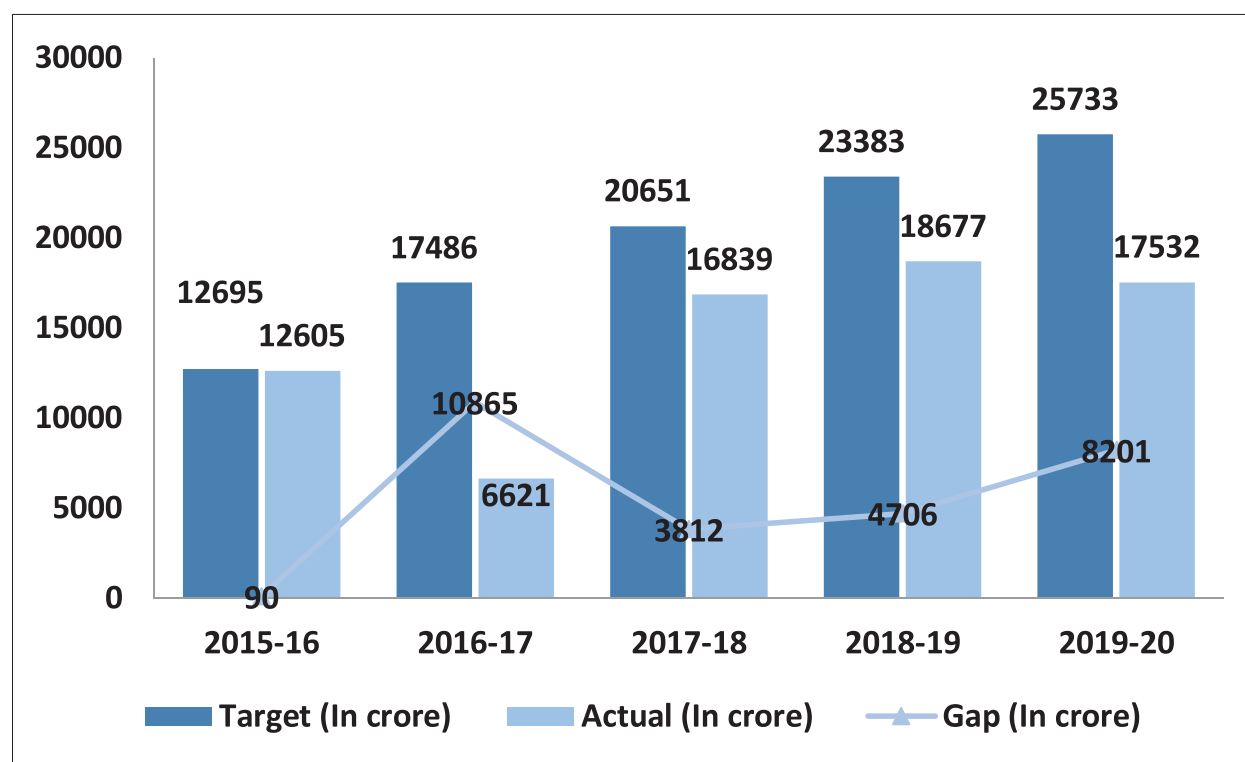
Demographic Window:	Bangladesh is passing through a demographic transition period. The most recent census figures show that this change in demographics has also taken place: in 2022, 65.53 percent of the population was considered to be of working age, compared to 60.62 percent in 2011. The dependence ratio, which is the proportion of people aged 15 to 64 who are working to those aged 0 to 14 and 65 and older, has significantly decreased from 73.00 in 2011 to 52.64 in 2022. The 2022 census revealed a significant and intriguing result: the gender ratio fell to 98.00, with 50 percent of the population being female. Concerning the youth population, it was discovered that as many as 16.76 percent of females (and 24.67 percent of males) were between the ages of 15 and 24 (and 15 and 29), compared to 14.77 percent for males and 16.76 percent of females (21.23 percent within 15-29 years). It is expected that in 2040, Bangladesh's demographic window of opportunity will be closed.
Quality of labor force:	It is noteworthy that, in terms of the "quality" of our youth, as many as 8.79 percent of those between the ages of 15 and 29 have never attended school, and just 5.9 percent have completed university education (Labour Force Survey 2016-17). Over two-thirds (74.66 percent) of people over the age of seven have basic literacy skills, according to the census's preliminary findings. Despite the literacy rate being found to be 51.77 percent in the 2011 census, this statistic demonstrates substantial growth over time but also highlights our failure to fully benefit from demographic transformation. The census data, however, paints a more optimistic picture of the population's expansion and use of technology: 37.01 percent of adults were discovered to have recently used the internet, while 72.31 percent of adults (86.72 percent of men and 58.83 percent of women) were found to use mobile phones (46.53 percent male and 28.09 percent female).
Absorption of the existing resources	The labour force participation rate is around 61 percent. Around 25.76 percent of males and 74.22 percent of females aged above 15 are not in the labor force respectively. Only 45.8 percent of males and 25 percent of females (both groups aged above 15) are employed. Among them, urban female employment is quite lower, around 4 percent. In urban areas, only 22.59 percent of females have participated in the labour force. The youth labour force participation rate is approximately 27 million at the national level, where only 13 million males and 13 million females are participating in the labour force (LFS, 2022).

<sup>46</sup> Compiled from various years of LFS data

## 7.5 Budgetary Allocation in the Health Sector

The budgetary allotment for the health sector has continuously been less than 6 percent of the overall budget during the last ten years. It is recommended by WHO that the budgetary allocation in health might be as high as 15 percent to guarantee that everyone can receive high-quality service. During the Plan period, the budgetary allocation trend was unchanged up until the pandemic. Hence, the health sector received 5.78 percent of the overall budget for FY 2020–21 (Figure 7.10).

**Figure 7.10: Budgetary Allocation in Health**



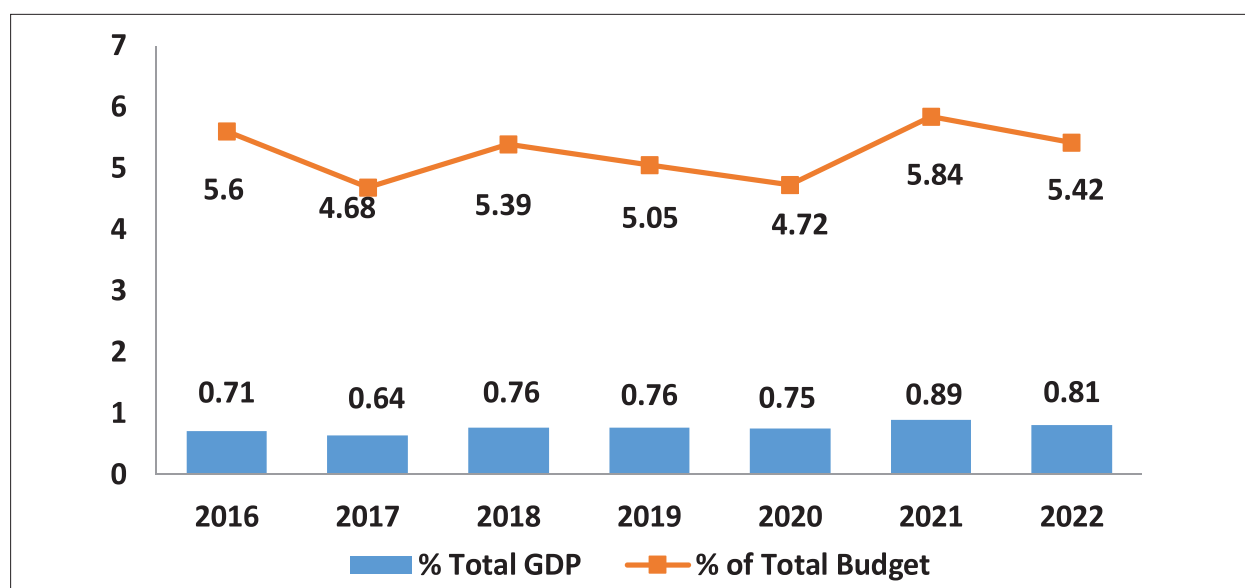
NB: these numbers are operating and development expenditures (excluding loans & advances, domestic & foreign debt, food account operations and adjustment expenditures)

Along with the low allocation in the health and welfare sector, the figure implies that there are many implementation issues. For instance, in FY 2017, the gap between the proposed budget and the actual one is quite large. And the gap has widened in the last period of the five-year plan which is very alarming. The failure in the implementation of this lower allocation can easily portray the reasons for not achieving some of the health indicator targets.

## 7.6 Key Challenges

**Lower budgetary allocation:** Even after the pandemic, the health sector has been underfunded in the national budget over the years. Less than 1 percent of GDP and just about 5 percent of the entire budget are set aside for the health sector. The growth in budgetary allocation of the health sector is quite stable but does not increase over time (Figure 7.11). Especially during the pandemic, the health sector required more allocation, but the figure shows a little change in the amount. Without raising the allocation in the health sector, it is impossible to build a productive workforce for a nation.

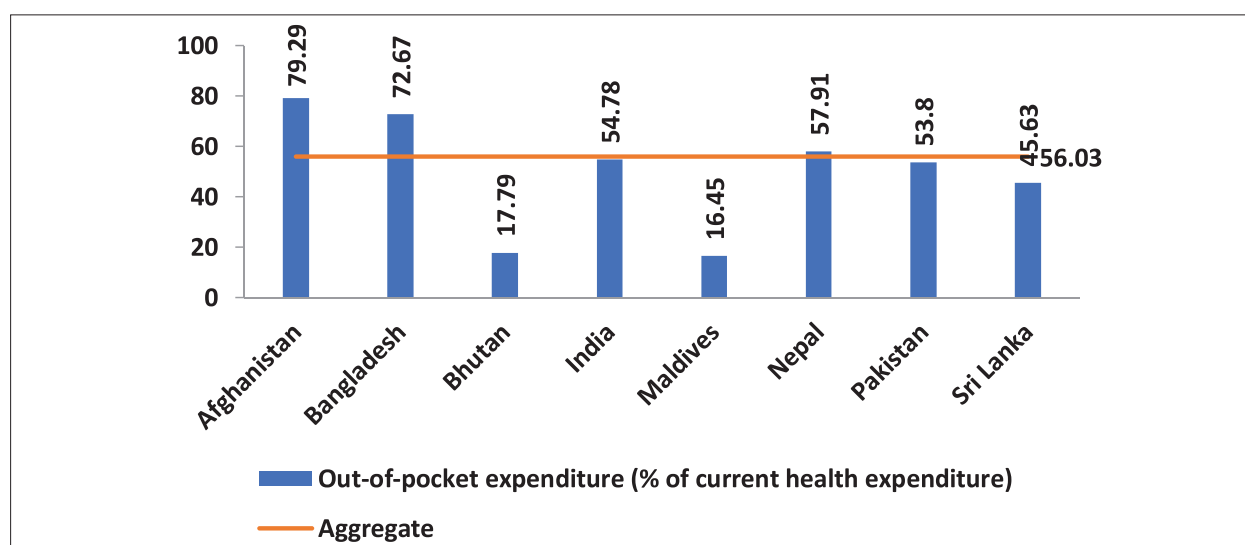
**Figure 7.11: Budgetary Allocations in the Health Sector**



The primary care sector is being neglected in favor of expanding the tertiary care sector, which includes hospitals and intensive care units, in the current budget. About 25 percent of Bangladesh's healthcare budget goes toward primary care, 39 percent toward secondary care, and 36 percent toward tertiary care.

**High Out-of-Pocket Expenditure:** The percentage of health care costs that Bangladeshi families has to pay is known as out-of-pocket spending, and it is both high and rising. The government pays for only around 23 percent of a person's total health care costs. Bangladesh has the second highest out-of-pocket expenditure in the South Asian region (Figure 7.12). Even India, Pakistan and Nepal bear around 50 percent of the health expenses. Even before receiving primary care, a patient must wait for an extended period of time. Out-of-pocket spending as a percentage of total household consumption that exceeds 10 percent (lower threshold) or 25 percent (upper threshold) is considered hazardous under the Sustainable Development Goals (SDG) monitoring framework.

**Figure 7.12: Out-of-Pocket Expenditure in South Asian Countries**



Source: World Bank



**Increasing Non-Communicable Diseases:** Non-communicable diseases like diabetes, cardiovascular diseases, and cancer, which are now the main causes of morbidity and mortality, are a reason for rising concern in Bangladesh. They are also connected to bad eating habits and overeating because of changes in lifestyle and an increase in the use of foods heavy in salt, sugar, and fat. As people grow older and develop geriatric diseases, infectious diseases like TB, Dengue, Chikungunya, Hepatitis B and C, COVID-19, etc. spread, as well as new and re-emerging diseases. Moreover, treating severe and acute malnutrition, and dealing with the health effects of geo-climatic disasters, a number of new health challenges are also emerging.

**Lack of Coordination:** Bringing uniformity to urban health services in the municipal corporation regions, managing the private sector clinics and diagnostic centers to maintain their service quality, and the lack of human resources at all phases of the health services are additional unique issues.

**Inequality in the Health Sector:** Over time, inequality has been ingrained in the system. They opted to receive care in modern, high-tech private hospitals despite the high out-of-pocket costs. Higher income people steer clear of government hospitals due to their bad administration, corruption, and difficult access. Public hospitals are bound to treat everyone. The patients' preference for traditional healers like kabiraj, peer, hakim, and fakirs over certified doctors and educated NGO health workers is a significant patient behavior due to lack of awareness. The speeches of these fakirs and kabiraj have a tendency to readily entrap rural residents who lack education. Also, because of their low incomes and increased inequality, residents of rural areas cannot afford to visit urban public hospitals or private clinics. They consequently choose the conventional therapy provided by the local quacks. Lack of coordination across the ministries in the areas of health service delivery, and coverage issues constituted significant obstacles to ensuring the urban poor's access to high-quality healthcare.

**High prevalence of child marriage:** The prevalence of child marriage (below 18 for girls) continues to be high, which raises the teenage fertility rate. Contrary to Asian countries, adoption of modern contraceptive methods is still low, and development has been inconsistent between districts, rural areas, urban areas, income categories, and age groups. Maternal mortality rates are still high. The percentage of skilled professionals present during childbirth is among the lowest in the world at only 59 percent (MICS, 2019).

## 7.7 Conclusion and Way Forward

During the Seventh Plan, the government intended to significantly enhance human capital in order to accelerate the nation towards a higher rate of growth. In the HNP sector, service delivery has been improved, and efforts have been made to combat severe malnutrition and limit population growth. Overall, there has been significant improvement in health outcomes. The formulation and implementation of national health, nutrition, and population policies, as well as maternal, neonatal, and child health strategies, etc., are landmark achievements in Bangladesh's improvement of HPN service delivery. Community-based health care service provision increased impoverished women's access to health care. Notable is the strengthening of health MIS through digitalization and MoHFW's fiscal capacity. Moreover, improvements in procurement, budget planning, sector coordination and management, fund absorption capacity, monitoring, and supportive development of overall socio-economic conditions have contributed to reductions in NMR, IMR, U-5MR, MMR, TFR, malnutrition, stunting, under-weight, etc., and have resulted in an increase in life expectancy at birth, thereby laying the foundation for a healthier population and a prosperous society<sup>47</sup>.

But there are still some challenges prevailing in this sector. With the advent of COVID-19, the inherent vulnerability of the Bangladeshi public health system became more apparent. It has revealed the deplorable condition of the district and upazila-level government-run health facilities. In order to attain the targets of the health sector of the 7<sup>th</sup> Plan, higher budgetary resources are required, especially to address the shortages of

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47 8<sup>th</sup> Five Year Plan



qualified human resources, medical supplies, and equipment. In this connection, if the budgetary allocation is increased to provide more funds for private and public health centres, household health expenditures are expected to decrease to some extent. The introduction of the health insurance program can mitigate this issue but implementing social health insurance in Bangladesh, would not be an easy task.

Though the intensity of non-communicable diseases has increased recently in Bangladesh, the scope of treatment is rather limited. The provision of services for conventional and non-conventional NCDs, including those related to mental health, gender-based violence, suicide, and injuries is crucial. Strengthening the capacity for surveillance of non-communicable diseases is a necessary step in this context. Besides, to lower the NCDs, the laws related to tobacco and the excessive use of harmful drugs must be strengthened and properly implemented too. Moreover, a crucial obstacle to health-related research and analysis is the lack of frequent data on key indicators of health as there is no integrated dataset for the Bangladeshi health system. Over the years, the health sector of Bangladesh has conducted a number of national and local level surveys and carried out different research activities, but it has not yet adopted a standardized method to collect and manage health-related data from all health facilities on a regular basis. Access to accurate and up-to-date health information is necessary for the development of an efficient healthcare system. In order to support efficient decision-making and facilitate prompt action, it is necessary to organize, analyze, and consistently disseminate raw data. Steps should be taken to encourage having babies in hospitals through novel techniques that make use of the mass and electronic media on individual, group, and national levels. Trained providers at the CC level, as well as NGOs when possible and appropriate, must offer preconception and pregnancy-related services. High-MMR areas and the economically, geographically, and socially disadvantaged must be given priority. We will create and implement strategies to increase the efficiency of referrals. Given the high rates of cesarean sections in private clinics, there is a pressing need to tighten oversight in this sector. Essential newborn care services, including those for preventing and treating asphyxia, infections in newborns, and caring for babies delivered prematurely or with low birth weight should be promoted.

**WATER, SANITATION  
AND HYGIENE**

**CHAPTER**

**8**



## 8.1 Introduction

Access to safe drinking water and basic sanitation and hygiene facilities is crucial for protecting public health, particularly in low-income and densely populated countries like Bangladesh. The Government of Bangladesh has duly recognised this and has taken numerous initiatives to improve the water, sanitation, and hygiene (WASH) sector during the period of the Millennium Development Goals (MDGs) and the 7<sup>th</sup> Five Year Plan (7FYP) (Table 8.1).

The government formulated the “National Policy for Safe Water Supply and Sanitation” in 1998, and the efforts continued, resulting in the formulation of the revised Water Supply and Sanitation national strategy in 2014 and another update in 2021. To further strengthen the sector, the government adopted the Water Supply and Sanitation Sector Development Plan (FY 2011-25). Building on the past initiatives and activities undertaken during 7FYP, Bangladesh has shown a strong commitment to achieving SDG 6 by 2030, which includes ensuring universal access to safe water, sanitation, and hygiene facilities. The actions taken during the 7<sup>th</sup> Five Year Plan (7FYP) period are aligned with this commitment and aimed to contribute towards achieving the SDG 6 targets.

**Table 8.1: Various Policies and Strategies Adopted to Improve the WASH Sector**

Sl.	Content	Name of Policy/Plan/Strategy Document
1	e. Water Supply Strategy f. Urban Water Supply	<ul style="list-style-type: none"> <li>National Policy for Safe Water Supply and Sanitation 1998</li> <li>National Strategy for Water and Sanitation Hard-to-Reach Areas of Bangladesh 2012</li> <li>National Strategy for Water and Sanitation Hard-to-Reach Areas of Bangladesh 2014</li> <li>Country Strategy Plan: 2011-2016</li> <li>National Strategy for Water Supply and Sanitation (Revised and Updated Edition 2021)</li> <li>Pro-Poor Strategy for Water and Sanitation Sector in Bangladesh (Revised in June 2020)</li> </ul>
2	Arsenic Mitigation	National Policy for Arsenic Mitigation 2004
3	Sanitation Strategy a. Rural Sanitation b. Urban Sanitation	National Sanitation Strategy 2005 National Health Policy 2011
4	Water Supply and Sanitation Sector	Sector Development Plan (FY2011-2025) for Water and Sanitation Sector in Bangladesh
5	Hygiene	The National Hygiene Strategy 2012

Source: Authors' compilation based on various sources.

Several key agencies, including the Department of Public Health Engineering (DPHE), the Local Government Engineering Department (LGED), and the Water Supply & Sewerage Authority (WASA), have played an important role in ensuring these improvements. They have been instrumental in managing safe drinking water and sanitation across the country. However, rapid urbanisation and fast-evolving climate change situation have resulted in an increasing demand for water supply and sanitation services, presenting new challenges for the WASH sector.

This chapter focuses on evaluating the WASH sector during the 7FYP period, with a particular emphasis on the progress made toward achieving the targets set in the plan. The evaluation examines the achievements, challenges, and lessons learned during the plan's implementation and provides recommendations for future policy interventions. The chapter also sheds light on the status of WASH services in Bangladesh and their

impact on the health and well-being of its population. The insights and recommendations presented in this chapter can inform future policy interventions and contribute to achieving the Sustainable Development Goals (SDGs) related to WASH in Bangladesh.

## 8.2 Progress with Ensuring Safe Water

### 8.2.1 Safe Water Supply

During the 7FYP period, the country continued to progress in ensuring access to safe drinking water. At the national level, more than 98 percent of the population has access to safe drinking water, increasing from 97.7 percent in 2015 (Table 8.2). Disaggregated data indicate that the corresponding numbers for the urban areas increased from 99.1 percent in 2015 to 99.7 percent in 2020, while in rural areas it grew from 97 percent to 97.4 percent, showing marginal improvement. However, the 7FYP target of reaching 100 percent population with access to safe drinking water has not been achieved.

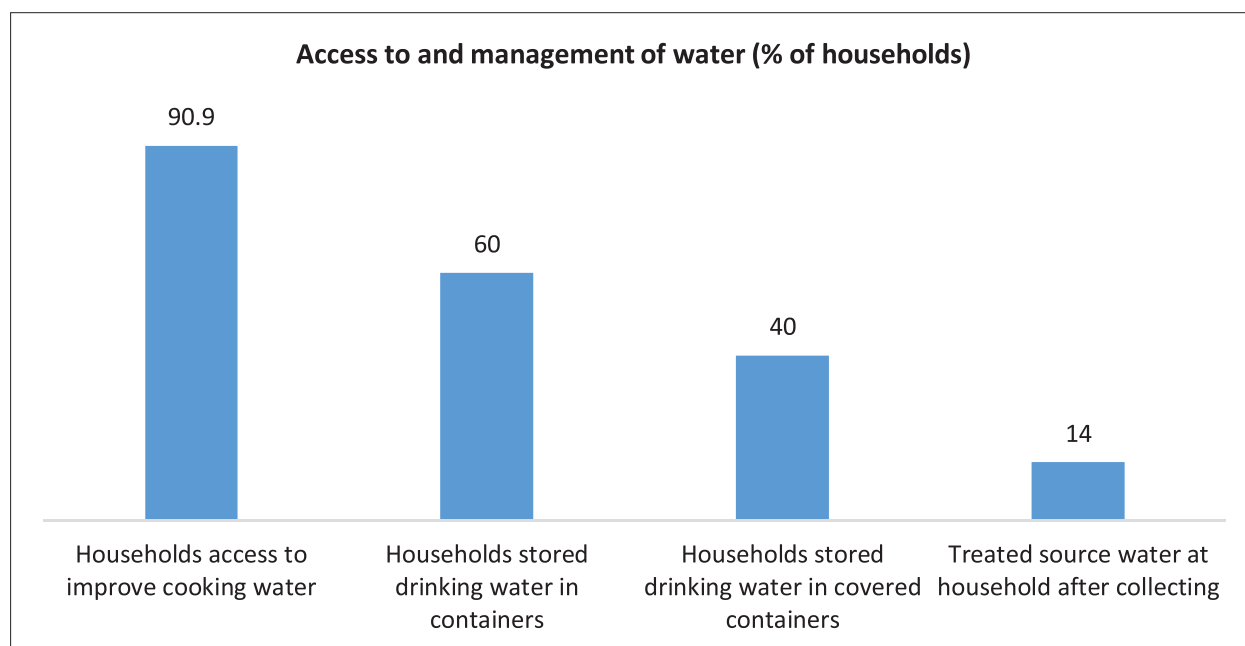
**Table 8.2: Access to Safe Drinking Water**

	2015	2020	7 <sup>th</sup> Plan target
National	97.7	98.3	100
Urban	99.1	99.7	100
Rural	97	97.4	100

Source: Bangladesh Sample Vital Statistics (SRVS) 2015 and 2020, BBS.

The National Hygiene Survey 2018 reveals that households' access to improved cooking water stands at about 91 percent, implying improved access to water resources in households (Figure 8.1). The survey further indicates the practice of households in storing water: about 60 percent of households store drinking water in containers, whereas about 40 percent of households use covered containers to store water, indicating a need for improving the hygiene practices of the households (Figure 8.1).

**Figure 8.1: Percentage of the Population with Access to Water in Households and its Management**



Source: National Hygiene Survey 2018, BBS.

Further disaggregated data obtained from Bangladesh Multiple Indicator Cluster Survey (MICS) provides granular details of households' access to water (Table 8.3). In 2019, about 48 percent of households had improved drinking water sources free of E.coli and available when needed.

The MICS data shows households' access to source water with varying arsenic concentrations has improved. Specifically, the percentage of households using source water with over 50 ppb arsenic concentration decreased slightly from 12.5 percent during 2012-2013 to 11.8 percent in 2019, while the percentage of households using source water with over 10 ppb arsenic concentration showed a significant improvement, decreasing from 25.5 percent in 2012-13 to 18.6 percent in 2019.

The MICS data from 2013 and 2019 also demonstrate a significant improvement in the share of the household population using drinking water with over 50 ppb arsenic concentration and over 10 ppb arsenic concentration. In 2019, these shares decreased from 12.4 percent and 24.8 percent to 10.6 percent and 16.7 percent, respectively (Table 8.3).

Access to drinking water from improved sources within a yard, dwelling, plot, or within 30 minutes of round trip collection time is essential for understanding water conditions in the country. Currently, about 98 percent of households have access to drinking water in close proximity, indicating that many people have regular access to improved sources of water.

**Table 8.3: Indicators on Water (MICS 2013, 2019)**

Indicators	2012-13	2019
a) Percentage of household members with an improved drinking water source on premises, whose source water was tested and free of E. coli and available when needed	-	47.9
b) Percentage of households using source water containing:		
a. over 50 ppb Arsenic concentration	a) 12.5	a) 11.8
b. over 10 ppb Arsenic concentration	b) 25.5	b) 18.6
c) Percentage of household population using drinking water with:		
a. over 50 ppb Arsenic concentration	a) 12.4	a) 10.6
b. over 10 ppb Arsenic concentration	b) 24.8	b) 16.7
d) Household members with a water source that is available when needed ( per cent)	-	96.9
e) Household members using improved sources of drinking water either in their dwelling/yard/plot or within 30 minutes round trip collection time ( per cent)	77.1	98.0
f) Percentage of household members with an improved drinking water source located on premises, free of E. coli, available when needed and <=10ppb arsenic.	-	39.1

Source: Multiple Indicator Cluster Survey (MICS) 2013 and 2019, BBS.

### Box 8.1: Programmes to Improve Supply of Safe Drinking Water to Rural and Semi-Urban Communities

To improve the supply of safe drinking water to rural and semi-urban communities, the Country Investment Plan (CIP) emphasised the following programmes:

- Development of sewage treatment plants in Khulna and other port cities
- Development of a sewerage master plan for all main mega cities of the country
- Design and implementation of sewage collection and treatment in towns, Paurashavas, and wards
- Improvement of existing sewerage system of Chittagong and Dhaka
- Rehabilitation of existing sewers of both urban and rural areas
- Design and implementation of septic tank systems to improve the water condition of all cities
- Design, construction, and rehabilitation of storm-water drainage canals in Paurashavas and urban areas considering climate change and variability
- Installation of pumping stations in all main cities for storm-water drainage; and
- Improvement of fecal sludge management infrastructure, including fecal sludge treatment plants in all cities served by on-site systems (e.g., pit latrines)

Source: Mid-term Implementation Review of 7<sup>th</sup> FYP.

### 8.2.2 Rural Water Supply

The water supply system in rural areas differs from urban areas in terms of the source of water, treatment, and distribution. In the first half of the nineties, safe water supply activities were severely hampered due to the presence of arsenic in the groundwater of the regions, leading to a decrease in safe water supply coverage. Between 2016 and 2020, the water supply system in rural areas underwent significant changes by implementing various projects that established 602,330 arsenic-free safe water sources. Despite these initiatives, 26 percent of drinking water sources across the nation still have naturally occurring levels of arsenic above the threshold that the WHO defines as dangerous, with the divisions of Sylhet and Chittagong being the most affected.

Given the above situation, the present government has undertaken different measures to improve the water supply condition of rural areas in Bangladesh. During this period, 122,577 water sources were set up under various ongoing projects, and 491 piped water supply schemes were established to improve water supply in many villages in rural areas. As per DPHE Annual Report data (2015-2020), the government is also implementing 44 development projects. After the completion of these projects, water supply coverage in rural areas is expected to increase from 87 percent to 93 percent.

### 8.2.3 Urban Water Supply

In 1990, approximately 81 out of every 100 people living in urban areas in Bangladesh had access to improved water sources. By 2015, this number had increased significantly to cover approximately 99 out of every 100 people, with about 38 percent of them having access to piped water (Table 8.4). Nonetheless, the majority of urban residents (around 60 percent) still rely on tube wells as their primary source of drinking water, according to the Bangladesh Bureau of Statistics HIES 2016 data.



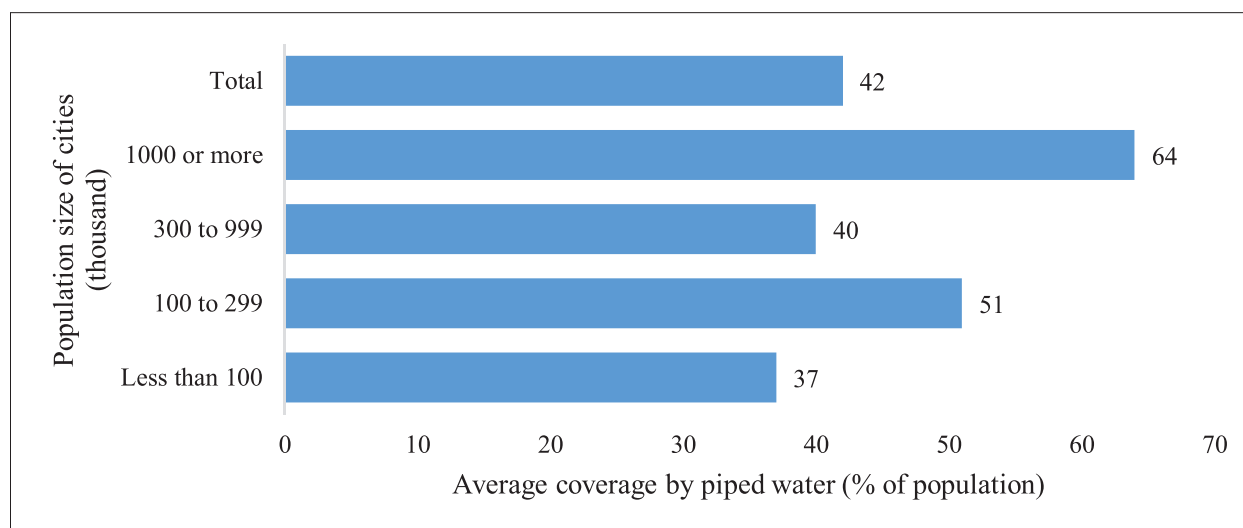
**Table 8.4: Water Supply Coverage**

Year	Total Improved (Percent)	Piped Onto Premised (Percent)	Other Improved (Percent)	Other Unimproved (Percent)	Surface Water (Percent)
1990	81	23	58	17	2
1995	82	25	57	16	2
2000	83	27	56	26	1
2005	84	29	55	15	1
2010	85	31	54	15	0
2015	99	38	61	01	0

Source: JMP (Joint Monitoring Program), 2014 and 2017, WHO & UNICEF, Progress of Drinking Water & Sanitation.

While the percentage of urban residents with access to improved water has improved over time, this does not mean that everyone in urban areas has equal access to these water sources. Data on piped water coverage in 7 city corporations and 31 Paurashavas (urban local government bodies) grouped by population size indicates stark disparity (Figure 8.2). Cities with a population of one million or more have an average piped water coverage of 64 percent, while Paurashavas with less than 100,000 people have an average coverage of only 37 percent. Thus, the supply of piped water at the Paurashava level is unsatisfactory.

The water supply situation is also unsatisfactory in slums and squatter settlements. Although government services are intended to benefit the poor the most, this is not always the case, as the quantity of water the poor receive is often insufficient and falls far below the government's basic service level standard for water supply of 20 litres per capita per day (GED, 2020). With groundwater extraction levels becoming unsustainable, particularly in urban areas where pollution infiltration is also a concern, there is an urgent need for improved surface water management and groundwater monitoring.

**Figure 8.2: Average Coverage by Piped Water (Percent of Population)**

Source: 8<sup>th</sup> Five-Year Plan.

The government is implementing various projects to improve water supply coverage in urban areas. Water supply systems have been implemented through pipelines in 154 municipalities of the country. However, before 2020, water supply implementation activities were only underway in four city corporations and 137 municipalities. A master plan was completed between 2017-2018 to set the trajectory for the improvement of water supply and sanitation systems in 154 municipalities of the country.

Significant progress has been made in this regard between 2016-2020, with 30 percent of municipal areas having water supply coverage through pipelines, while the rest (70 percent) are served through point sources.

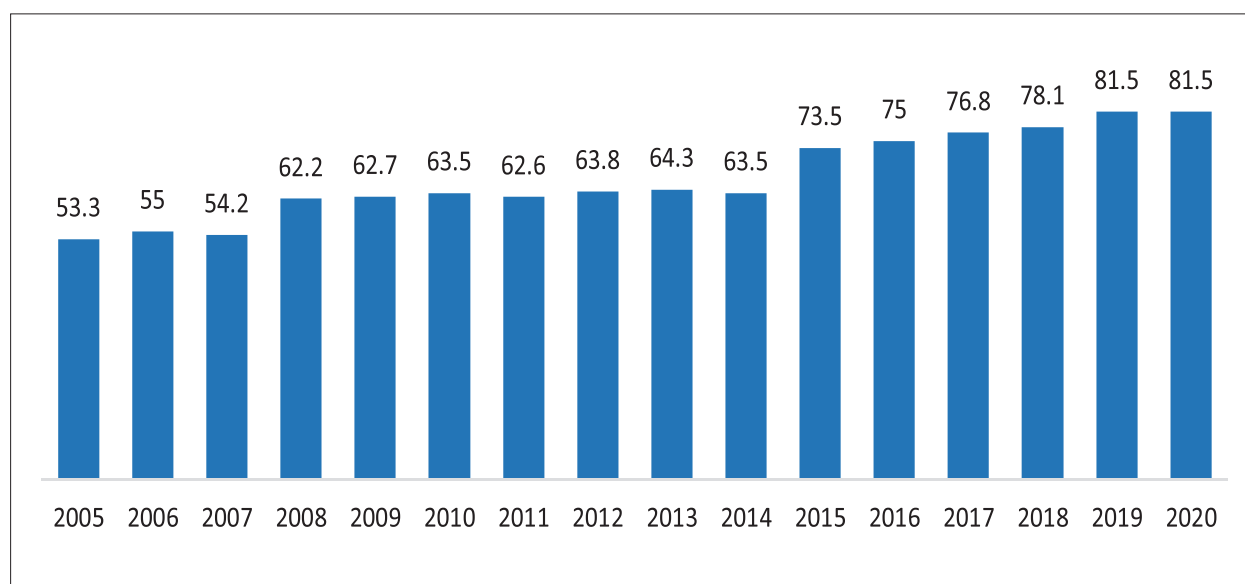
### 8.3 Progress with Sanitation

During the 7FYP implementation period, Bangladesh built on the initiatives taken during the 6FYP period and continued to improve sanitation conditions, focusing on achieving SDG 6 (Box 6.2). Progress in ensuring improved sanitary latrines for its population has been remarkable: during 2005-2020, access to improved sanitary latrine increased from just above 50 percent to more than 80 percent (Figure 8.3). It is worth noting that during 2005-2020, open defecation declined from more than 9 percent to just 1.3 percent in 2020.

However, there remain differences in access to sanitary latrines between urban and rural areas of the country. In 2020, 91.2 percent of the population in urban areas had access to sanitary latrines, while only 73.5 percent of the population in rural areas had access. It is evident that, while urban areas were close to achieving the 7FYP targets, rural areas were behind the targets.

According to DPHE data, between 2016 and 2020 about 1.5 lakh small-scale sanitary latrines were built in the country through various projects. During the same time, 1500 public toilets /community latrines, 2000 shared latrines, and 50 three-storied toilets have been constructed. While these initiatives have helped improve the sanitation condition, the marked difference between rural-urban areas needs to be tackled in the upcoming years.

**Figure 8.3: Percent of Population with Access to a Sanitary Latrine**



Source: Bangladesh Sample Vital Statistics (SRVS) 2020, BBS.

**Table 8.5: Percent of Population with Access to Sanitary Latrines**

	2015	2020	7FYP Target
National	73.5	81.5	-
Urban	85.8	91.2	100
Rural	65.4	73.5	95

Source: Bangladesh Sample Vital Statistics (SRVS) 2015 and 2020, BBS.

### Box 8.2: Bangladesh's Efforts to Improve Sanitation and Achieve SDG 6

Water has been seen as a conduit to overarching development objectives. However, better managed water resources have the potential to generate synergies, instead of trade-offs. Bangladesh's Hon'ble Prime Minister was a member of the United Nations and World Bank High-Level Panel on Water (HLPW), which prioritized valuing water as a foremost action toward sustainable water resources management.

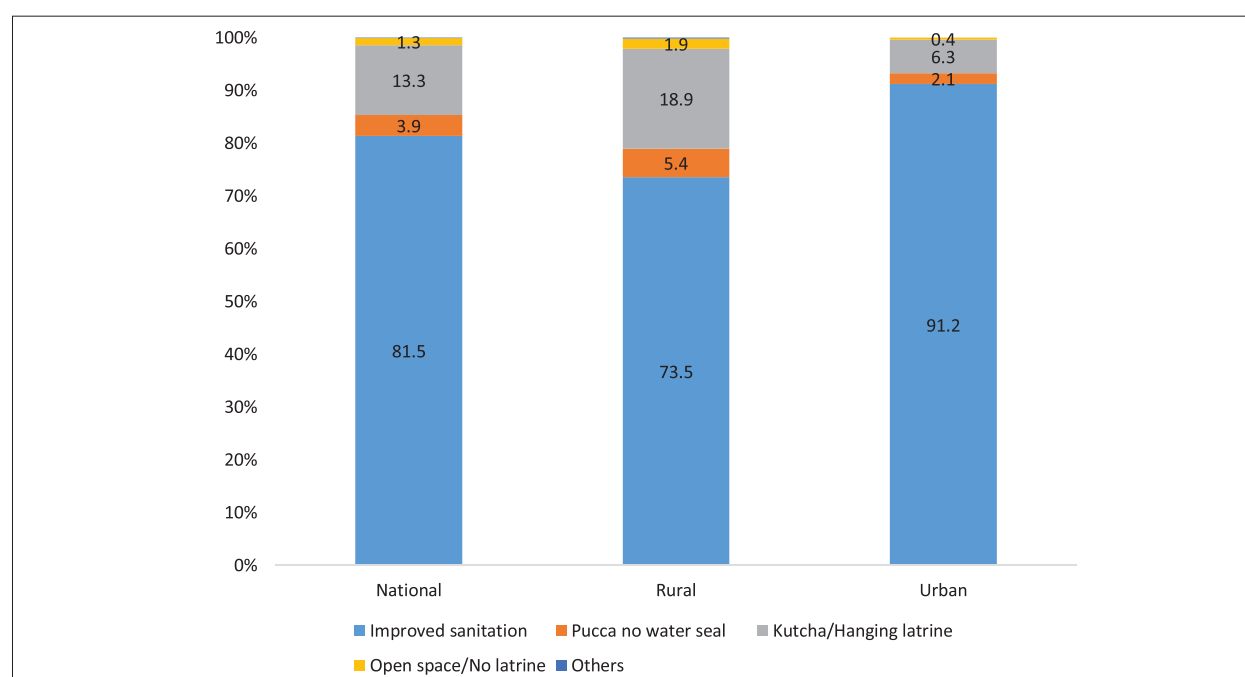
In the water and sanitation sector in Bangladesh, progress has been made in the coverage of water and sanitation facilities, but in hygiene promotion, the progress is relatively slow. The qualities of water and sanitation facilities also need improvements. The key achievement in sanitation has been the shift from open defecation to "fixed point defecation", but not all use "improved sanitation facility". In water, the transition from traditional sources (such as ponds and canals) to piped or improved sources (mostly tube wells and piped water) has been considered a significant achievement.

To achieve universal and equitable access to safe and affordable drinking water for all by 2030, the Government of Bangladesh has been implementing several strategies. The government has adopted Sector Development Plan for Water Supply and Sanitation Sector in Bangladesh (FY 2011-25) and a national policy on water, water supply, sewerage, and environmental protection rules and enacted the Water Act to facilitate the implementation of SDG6.

Source: SDG Progress Report 2022.

Bangladesh Sample Vital Statistics (SRVS) 2020 data indicate that about 82 percent of the population has access to improved sanitation nationally (Figure 8.4). However, there are marked differences between the rural and urban populations in accessing improved sanitation. In urban areas, 91.2 percent of the population has access to improved sanitation, but only 73.5 percent of the rural areas have access to improved sanitation. Disaggregated data on access to different types of toilet facilities reveal that, in rural areas, about 19 percent of the rural population use kutcha/hanging latrines, while the corresponding figure for urban areas is just about 6 percent (Figure 8.4). Despite achieving remarkable progress in reducing open defecation, still, about 2 percent of the rural population defecates in open spaces. The corresponding figure for the urban population is 0.4 percent. Going beyond the 7FYP period, eliminating open defecation will remain an important task.

**Figure 8.4: Percentage of Population with Different Types of Toilet Facilities, 2020**



Source: Bangladesh Sample Vital Statistics (SRVS) 2020, BBS.

It needs to be pointed out that inadequate WASH conditions disproportionately affect low-income households in Bangladesh. Lower-income households tend to have a higher prevalence of inadequate WASH conditions, such as limited access to safe drinking water and sanitation facilities, compared to those in the highest income brackets. Low-income households are more likely to practice open defecation, which can contribute to the spread of disease and environmental pollution. Also, low-income households in urban areas of Bangladesh are more likely to rely on unsafe water sources, such as private vendors or untreated surface water, than high-income households.

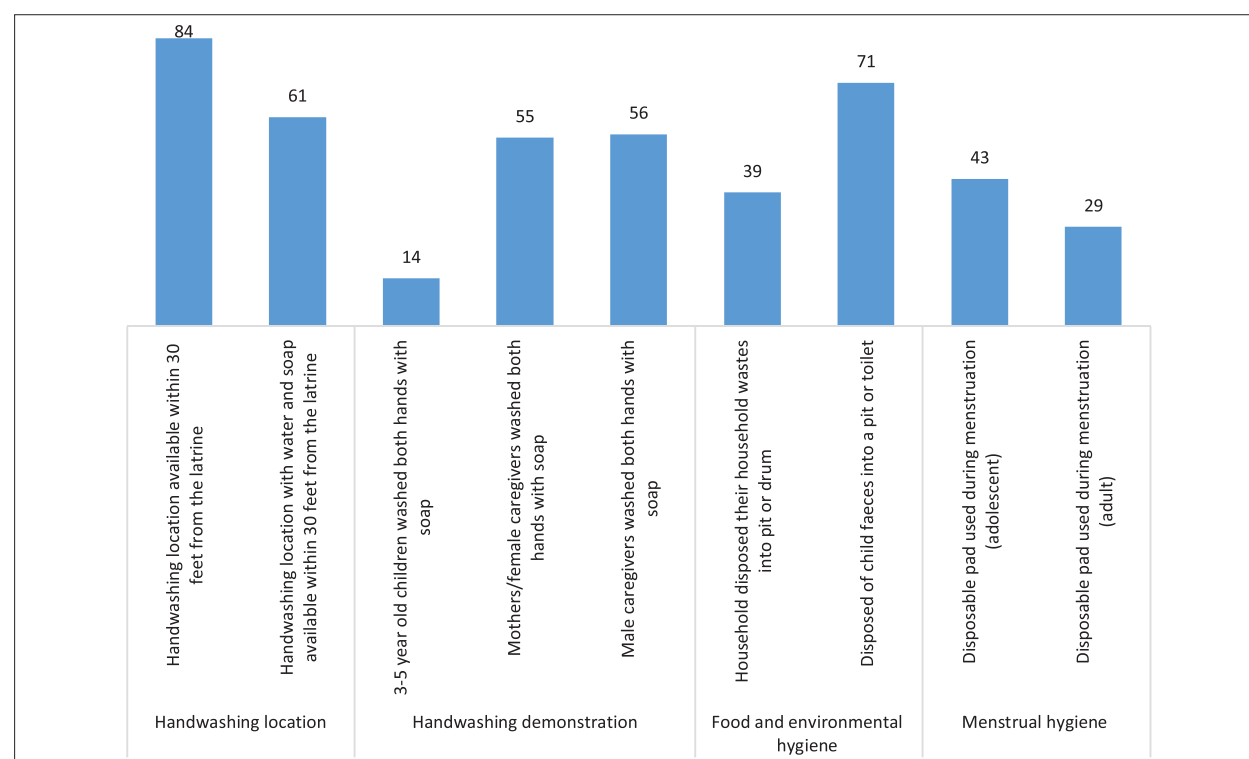
## 8.4 Progress with Hygiene Facilities

Over the past few years, Bangladesh has made considerable progress in improving its hygiene situation. The availability of menstrual hygiene materials has increased, and more households now have access to a designated place for handwashing with soap or other cleaning agents.

The National Hygiene Survey 2018 data reveals that handwashing locations are now available within 30 feet of the latrine for 84 percent of the population, indicating that people have easier access to handwashing facilities (Figure 8.5). Additionally, 61 percent of the population have access to a handwashing location with water and soap available within 30 feet, allowing them to maintain basic hygiene. MICS 2019 data shows that households with a specific place for handwashing with soap or other cleaning agents increased from about 59 percent in 2013 to nearly 75 percent in 2019. It has been found that 71 percent of the population properly disposes of child feces into a toilet or pit. However, household waste disposal practices need significant improvement, as about 40 percent of the population use pit or drum for waste disposal.

Although the menstrual hygiene situation is improving, only 29 percent of adults and 43 percent of adolescents use disposable pads during their menstrual cycle (Figure 6.5). This shows the pressing need to improve menstrual hygiene in the coming days.

**Figure 8.5: The State of Hygiene Situation in Bangladesh (Percent of Households)**



Source: National Hygiene Survey 2018, BBS.

### Box 8.3: Major Activities of the Government to Oversee Hygiene Situation

Bangladesh has made remarkable progress in achieving water and sanitation goals set by the government. Hygienic behaviour is also an area where the Government of Bangladesh is working on in order to improve hygiene practices of the people of the country. The specific activities that the Government of Bangladesh is overseeing to monitor the progress of hygiene condition of the nation are as follows:

#### Major Activities

- Development and expansion of safe drinking water and sanitation facilities in the rural and urban areas of the country
- Accelerate implementation and execution of safe drinking water supply and sanitation activities in rural areas with the assistance of Union Parishads of the country
- Construction, development, and expansion of the city's water supply and sanitation infrastructure with the help of City Corporation
- Provide technical support to the city's water supply and sanitation infrastructure with the help of City Corporation
- Provide technical assistance to local organisations (for instance NGOs) for the development and maintenance of water supply and sanitation systems
- Arrange periodic training and orientation programs for the departmental staff and agencies responsible for public health and hygiene issues
- Provide emergency water supply and sanitation facilities during natural disasters including flood, cyclone etc.
- Monitoring and testing the water quality of the whole country
- Undertaking of collaborative initiatives with the private sector for promoting the use of soaps, sanitary pads, ORS, water storage tanks and pipes, toilet papers, handwashing buckets water purification devices etc
- Finding all the safe drinking water sources of the country
- Encouraging the public about safe water, sanitary latrines, as well as the use of environmental sanitation
- Arranging or inventing new technologies in arsenic-affected areas to ensure safe drinking water for all
- Ensure potential use of social organisations and educational institutions to promote safe water drinking, sanitation, and hygiene in the country
- Ensure research and development (R&D) at a very low cost for the expansion of water supply and environmental sanitation system
- Accelerate sustainable technology exploration process for the expansion of safe water supply and sanitation system
- Ensure data management of the water supply and sanitation sectors of the country through establishing info centres and by modernising and enriching the system completely
- Ensure safe piped water supply and sanitation in urban slums through WASAs or Paurashava authorities
- Take preventive steps to ensure a safe water supply and implement the water safety plan (WSP) in all the water supply systems of the country
- Provide local government, private entrepreneurs, government agencies and CBOs (Community-Based Organisations) with training, technical advice, and information for smooth water supply and sanitation facilities.

Source: Midterm evaluation of the 7FYP and the 8<sup>th</sup> Five Year Plan.

## 8.5 Emerging Issues Affecting the WASH Situation

Water, sanitation, and hygiene (WASH) issues in Bangladesh are diverse and vary depending on the geographical region, socio-economic realities, and contexts. Emerging climate change situations adversely affect the climate hotspots and residents' WASH-seeking behaviour. In addition, the advent of the COVID-19 pandemic has disrupted many ongoing efforts to improve the WASH situation in the country. Although the pandemic has weathered down as of undertaking this evaluation, early evidence suggests that COVID-induced containment measures have adversely affected the WASH situation in climate hotspots and urban slum areas, particularly. The consequences of the Ukraine-Russia war are being channeled through soaring inflation and rising living costs, which heavily affect low-income households. Some key emerging issues are noted below:

**WASH Issues in Hard-to-reach Climate Hotspots:** Hard-to-reach climate hotspots, such as coastal regions, hilly areas, haors, and chars, face significant challenges in accessing WASH services. The onslaught of the COVID-19 pandemic has also disrupted the supply chains for WASH materials and services in hard-to-reach areas, leading to further challenges in maintaining and upgrading WASH infrastructure. Some area-specific issues include the following:

**Coastal Areas:** According to the National Strategy for Water and Sanitation in Hard-to-Reach Areas 2011, coastal areas account for the second highest number of hard-to-reach unions in the extreme category, only behind hilly areas. The coastal areas of Bangladesh are prone to natural disasters such as cyclones, floods, and storm surges, which can cause widespread damage to WASH infrastructure and lead to water contamination and sanitation issues. Salinity intrusion is also a major issue in coastal areas, making water sources unfit for human consumption. Additionally, poverty and limited access to resources exacerbate WASH challenges in coastal areas. The World Bank's Bangladesh WASH Poverty Diagnostic (BWPD) study reveals that around 2.5 million people in the southwest coastal region are already suffering from shortages in drinking water. By 2050, water scarcity could affect up to 5.2 million poor and 3.2 million extremely poor people in the region.

**Hill Tracts:** The hill tracts of Bangladesh are home to indigenous communities, who often face discrimination and marginalisation in accessing WASH services. Inadequate access to safe water and sanitation facilities and limited knowledge about hygiene practices are some of the key WASH challenges in the hill tracts. Deforestation and soil erosion also exacerbate WASH challenges in the hill tracts.

**Char Areas:** Char areas, which are riverine islands formed by sedimentation, are characterised by extreme poverty and limited access to WASH services. Inadequate access to safe drinking water, lack of proper sanitation facilities, and limited hygiene knowledge are key WASH challenges in char areas. Additionally, natural disasters such as floods and erosion further exacerbate WASH challenges in char areas.

**Urban Slum Areas:** Urban slum areas in Bangladesh are characterised by overcrowding, lack of infrastructure, waterlogging, and poor living conditions. Inadequate access to safe water, poor sanitation facilities, limited hygiene knowledge, waste management issues, and climate change impacts are some of the key WASH challenges in urban slum areas (Biswas et al., 2019; Alam et al., 2018). Additionally, the pandemic has led to an increase in waste generation and management issues in urban slum areas.

**Post-COVID Realities Affecting the Economic Situation and Resultant WASH-seeking Behaviour:** During the pandemic, increased awareness of handwashing and access to soap were reported. Although the pandemic has subsided, many households are still coping with the economic hardship triggered by the pandemic and the Ukraine-Russia war. As a result, future policy responses would require evidence-based answers to some indicative policy questions, which include:

- How has WASH-seeking behaviour changed across different income-groups?
- How are women, girls, and children particularly affected?



- How can the government ensure the safety of WASH workers and the continuation of WASH services during future pandemics or similar crisis situations?
- How can the government improve access to safe and affordable WASH services for vulnerable communities such as low-income groups, women, children, and people with disabilities?
- How can the government prioritise the allocation of resources to address the emerging WASH challenges in the post-COVID scenario, such as the impact of climate change on WASH services, the increasing demand for WASH services in urban slums, and the persistent WASH challenges in hard-to-reach areas?
- How can the government leverage innovative technologies and digital solutions to improve the efficiency and effectiveness of WASH service delivery in Bangladesh?

**Disparities Between Different Regions and Households may be Escalated:** In light of the post-COVID situation and resultant consequences of the Ukraine-Russia war, there is apprehension that the regional disparities in various WASH indicators may exacerbate in the coming days. Prior to COVID, MICS 2019 data indicated that only 31.6 percent of people in Sylhet Division had access to E. coli-free water, compared to 71.8 percent in Rangpur Division. MICS 2019 data also show that poor households are less likely to have drinking water on their premises and thus have to spend more time collecting water from outside sources. They are also 10 times more likely to use unimproved sanitation than those who are well off.

**Implementation of WASH Interventions in the Aftermath of COVID-19:** The final stage of the 7FYP implementation period coincided with the onslaught of the COVID-19 pandemic. While Bangladesh has shown impressive resilience against the pandemic impacts, improving the WASH situation will be important to build on the successes and propel further development momentum. To counter COVID-19 impacts, Local Government Division (LGD) has formulated a specialised strategy paper titled ‘Response to COVID-19 Outbreak through Water, Sanitation, and Hygiene (WASH) Interventions- Bangladesh Strategy Paper 2020-203’.<sup>48</sup> This was indeed a welcome initiative. This WASH strategy aims to address immediate, mid-term, and long-term responses of the WASH sector to protect all from COVID-19 impacts, irrespective of their class, religion, and economic status. The strategy paper notes that implementing the outlined interventions would require \$890 million in financial support, of which GoB contributes \$290 million and the rest \$592 million is required from other sources. Although the pandemic has been weathered down, it needs to assess whether proper mobilisation of the funds and implementation of outlined WASH responses have been taking place. Also, it may be the case that some prioritisation and allocation of the financial resources outlined in the strategy paper are required in light of the evolving circumstances.

## 8.6 Conclusion and Way Forward

The evaluation of the Water, Sanitation, and Hygiene (WASH) sector during the 7<sup>th</sup> Five Year Plan (7FYP) period highlights significant progress in ensuring access to safe drinking water, improving sanitation conditions, and promoting hygiene practices in Bangladesh. While commendable achievements have been made, challenges and emerging issues need to be addressed to further enhance the WASH situation in the country.

In terms of safe water supply, Bangladesh has made remarkable strides, with over 98 percent of the population having access to safe drinking water by the end of the 7FYP period. Although the target of reaching 100 percent access was not fully achieved, the overall progress is commendable. Notably, urban areas experienced higher improvement, with 99.7 percent having access to safe drinking water. However, efforts should continue to bridge the slight disparity between rural and urban areas.

Improvements in sanitation conditions have also been notable, with access to improved sanitary latrines increasing from just above 50 percent to over 80 percent during the 7FYP period. Open defecation has

<sup>48</sup> <https://www.psb.gov.bd/policies/covidse.pdf>



significantly reduced from over 9 percent to 1.3 percent. Nevertheless, disparities between urban and rural areas remain, indicating the need for continued focus on improving sanitation facilities in rural communities.

Hygiene practices have seen considerable advancements as well. Access to handwashing locations near latrines has increased, and a significant proportion of the population has access to handwashing facilities with water and soap. Proper disposal of child feces into a toilet or pit is practiced by 71 percent of the population. However, there is room for improvement in household waste disposal practices and menstrual hygiene, necessitating further efforts to enhance these aspects of hygiene.

The WASH sector faces several emerging challenges that need to be addressed. Climate change impacts, particularly in climate hotspots, coastal areas, and hill tracts, pose challenges in ensuring access to safe water and sanitation due to natural disasters, water contamination, and salinity intrusion. Urban slums face specific challenges, including overcrowding, poor infrastructure, and waste management issues. The COVID-19 pandemic has further disrupted ongoing WASH efforts and exacerbated economic conditions, requiring targeted interventions to adapt to changes in WASH-seeking behavior and ensure the continuity of services for vulnerable communities.

Building upon the progress made during 7FYP period, there is still much work to be done to achieve SDG 6 and ensure that all citizens have access to safe and sustainable WASH services. Indeed, the 8<sup>th</sup> FYP also recognises some of the emerging challenges. These challenges have resulted in significant health risks, particularly for vulnerable groups such as children, women, and those living in poverty and hard-to-reach areas. Addressing these challenges would require a coordinated and comprehensive approach that involves collaboration among different stakeholders, innovative approaches to service delivery, and increased investments in the WASH sector. Specific policy recommendations are provided below:

**Aligning Various National Commitments for the WASH Sector:** As mentioned earlier, Bangladesh has adopted ‘Response to COVID-19 Outbreak through Water, Sanitation, and Hygiene (WASH) Interventions-Bangladesh Strategy Paper 2020-203’ that aims to undertake various immediate, mid-term and long-term responses. At the same time, the country is also implementing the 8<sup>th</sup> Five Year Plan, Perspective Plan 2041, and Bangladesh Delta Plan 2100. In addition, many policy commitments are also interlinked with SDG 6 which focuses on ensuring clean water and sanitation for all. It is therefore important to undertake a thorough assessment of the WASH commitments included in these documents and strategies accordingly so that duplication of activities is avoided and the line of responsibilities to implement the actions is well defined.

**Mobilising the Resources Outlined in the Bangladesh Strategy Paper 2020-23 for WASH Interventions in Response to the COVID-19 Outbreak:** The strategy paper has already outlined various medium-to-long-term activities that must be undertaken nationwide. The paper also mentions the associated funding requirements. Mobilising the \$890 million financial support should remain in policy focus. Of these, \$290 million is expected to be spent by GoB while the rest \$592 million is required from other sources. The Local Government Division should assess the progress made and pursue the necessary mobilisation of funds. Timely implementation of the priority activities identified across medium and long-term responses should greatly boost the WASH sector.

**Need for Climate-resilient WASH Policies and Interventions for Hard-to-reach Climate Hotspots:** Although the country has adopted two WASH strategies for hard-to-reach areas, these are not updated and do not reflect the severity of the climate emergency. Inhabitants of these climate hotspots need special attention as these areas are often disproportionately affected by climate change and public health emergencies like the COVID-19 pandemic. Their needs are often region-specific and often demand customised WASH interventions. As Bangladesh remains one of the most climate-vulnerable countries, these areas are expected to be at risk of recurring natural disasters and climate change impacts. Therefore, GoB should consider adopting climate-resilient WASH policies for coastal areas, hill tracts, and char areas. In addition, lessons

learned from current GoB initiatives in these areas should be reflected while adopting the policies, which should also help scale up any ongoing interventions.

**Addressing Regional Disparity in Access to WASH Services for Inclusive Growth:** Despite significant advancements in various WASH indicators, regional disparities in accessing WASH services persist, posing challenges to the overall well-being and development of communities. For instance, according to the MICS 2019 data, only about 32 percent of people in Sylhet Division have access to E. coli-free water, while in Rangpur Division, this figure stands at a much higher 72 percent. Such disparities have far-reaching consequences on the health, education, and income levels of households, hindering the country's goal of achieving inclusive growth.

In order to bridge this spatial gap and ensure equitable access to WASH services, it is imperative to adopt a well-coordinated approach to identify the underserved and unserved areas and implement targeted policies and interventions to eliminate the regional disparities. By prioritizing these areas and taking necessary policy actions, the GoB can work towards closing the gap and ensuring that all communities have equal access to clean water, improved sanitation, and hygienic practices. This will not only improve the overall well-being of individuals but also contribute to the country's sustainable development goals.

**Addressing the Disparities in Piped Water Coverage Between Different Urban Areas, Regulating Groundwater Extraction, and Providing Better Water:** Given the stark disparity across urban areas in piped water coverage, GoB should prioritise investment in water supply infrastructure in Paurashavas and slum areas. This could be achieved through a combination of public and private sector financing and support from development partners.

In addition, there is a need to improve surface water management and groundwater monitoring, particularly in urban areas where pollution infiltration is a concern. The government should consider developing policies and strategies prioritising the sustainable management of water resources, including stricter regulations on groundwater extraction and better water quality monitoring.

Finally, community engagement and participation should be prioritised in the planning and implementation of water supply projects, particularly in slum areas. Community-based approaches can help ensure that the water supply infrastructure meets the needs and preferences of residents and can help build trust and ownership of the system in the community.

**Proper Implementation of Community Water Points and Sanitation Blocks for Urban Slum Areas:** In order to address the WASH challenges faced by urban slum communities, the 8<sup>th</sup> Five-Year Plan recommended establishing community water points and sanitation blocks, which will be maintained by community-based organisations. The GoB can consider collaborating with development partners to implement this activity across the urban slum areas. Construction of these facilities and their efficient operation will allow urban slum communities, including (women, children, and people with disabilities will) to have proper access to WASH services.

**Improve Menstrual Hygiene Conditions:** As reflected in the National Hygiene Survey 2018, 50 percent of adolescent girls and 64 percent of women use old clothes for menstrual hygiene management. The use of disposable pads was more likely among adolescents (43 percent) than women (29 percent). Hence, improving menstrual hygiene condition should be seriously considered. Since FY2019-20, the government has offered VAT exemption facilities on locally produced sanitary napkins to promote menstrual hygiene. Still, sanitary pads are quite expensive in the local market, hindering the affordability of ordinary women from using such pads.

The government can consider collaborating with the business community and development partners to address this challenge. To do so, the government can consider providing access to low-cost menstrual

products such as menstrual cups, reusable cloth pads, and eco-friendly disposable pads. Furthermore, government bodies such as the Department of Public Health Engineering (DPHE) and the Ministry of Health and Family Welfare (MoHFW) can collaborate with local NGOs and private sector companies to ensure the availability and affordability of such products in rural and urban areas alike.

**Undertaking WASH-specific Education and Awareness Programs:** To address the critical need for behavioral change in hand hygiene, sanitation, and safe water practices, the government, through its agencies like the Department of Public Health Engineering (DPHE), should undertake targeted education and awareness programs. These initiatives can be designed to specifically target different segments of the population and promote sustainable WASH practices.

For instance, DPHE can collaborate with various development partners working on WASH issues, to integrate public awareness campaigns into its programs, utilizing various media platforms to reach a wider audience. These campaigns can emphasize the importance of clean water, proper sanitation, and hygiene practices, showcasing real-life examples of individuals or communities benefiting from adopting these behaviors.

Furthermore, it is also important to evaluate the current curriculum to assess the inclusion of hygiene education in schools. Collaborating with educational institutions, age-appropriate materials and resources can be developed that teachers can use to educate students about good hygiene practices. This may involve the creation of interactive and engaging educational materials, training workshops for teachers to enhance their knowledge and teaching methodologies, and establishing partnerships with relevant stakeholders, such as NGOs or WASH experts, to provide additional support and expertise.

To make the implementation more concrete, the government can consider piloting these initiatives in selected schools or communities and monitor the impact through measurable indicators. For example, it could track improvements in handwashing rates, reduction in waterborne diseases, or changes in students' knowledge and attitudes towards hygiene. These successful case studies can serve as evidence and encourage the scaling-up of education and awareness programs to a broader population. Many development partners are working on WASH issues for a long time. Partnerships with DPs could be explored to undertake these initiatives.

**Ensuring the Timely Implementation of WASH-related Commitments Outlined in the 8<sup>th</sup> Five-Year Plan:** The 8FYP duly recognises undertaking several interventions to reduce the vulnerabilities of hard-to-reach areas. The GoB should closely monitor and ensure the timely implementation of these commitments. Such interventions are outlined in the table below:

**Table 8.6: WASH Interventions Outlined in 8<sup>th</sup> Five Year Plan**

Areas	8FYP Actions
<b>Coastal Areas</b>	<ul style="list-style-type: none"> <li>Constructing drinking water and sanitation infrastructure on raised platforms.</li> <li>Constructing desalination plants and rainwater harvesting systems for community water supply</li> <li>Using tube wells with appropriate treatment units for arsenic and iron, and pond sand filters to treat water from pond surface for smaller scale use</li> </ul>
<b>Char Areas</b>	<ul style="list-style-type: none"> <li>Constructing housing and WASH structures on raised platforms.</li> <li>Using appropriate technologies, including rainwater harvesting and community-level arsenic/iron removal units for groundwater</li> </ul>
<b>Hill tracts</b>	<ul style="list-style-type: none"> <li>Installing individual or community rainwater harvesting systems with adequate storage to meet drinking water needs</li> </ul>

Source: 8<sup>th</sup> Five Year Plan.

**Strengthening the Capacity of the Relevant Institutions:** While significant progress across a range of WASH indicators, rampant urbanisation, and a rapidly evolving climate situation is putting serious pressure on the relevant institutions. Capacity building of the relevant institutions, including DPHE, LGED, WASA, and other ministries, departments, and agencies administering WASH interventions, will require, amongst others, employing adequate and skilled manpower and their appropriate training and ensuring sufficient resources. To identify the capacity improvement areas, a comprehensive capacity assessment of DPHE, LGED, and WASA can be undertaken with a focus on implementing WASH interventions.

**Enhancing Partnerships with Development Partners to Introduce and Implement Innovative and Cutting-edge WASH Solutions:** Many development partners have been implementing a wide range of WASH interventions and projects nationwide. The government can consider strengthening the partnership with development partners to develop innovative solutions tailored to the specific context of the communities they serve and provide support for piloting and scaling up successful interventions. Development partners can help by providing financial resources, technical assistance, and capacity-building support to strengthen the government's institutional capacity for WASH service delivery. They can also support research and innovation to develop and test new WASH technologies and approaches that are context-specific and responsive to the needs of communities. In addition, the government can promote public-private partnerships in the WASH sector to leverage private sector expertise, innovation, and resources to complement its efforts in delivering quality WASH services to all.



**URBAN  
DEVELOPMENT**

**CHAPTER**

**9**





## 9.1 Introduction

In recent years, Bangladesh has experienced a rapid increase in its urban population, as more and more people move from rural areas to urban centers. This phenomenon is attributed to a variety of factors, including economic growth, industrialisation, migration from rural areas, and natural disasters. Economic growth has been a key driver of urbanisation, with people flocking to cities like Dhaka and Chittagong in search of better job prospects and higher salaries. The garment industry, in particular, has been a major contributor to this trend. Additionally, the growth of factories and manufacturing facilities in urban areas has created more employment opportunities, which has also fueled urbanisation. Poor living conditions and a lack of job opportunities in rural areas have also led to migration to urban areas. Furthermore, natural disasters such as river erosion floods, and cyclones in coastal areas have forced people to move to cities in search of better living conditions and employment opportunities. The urban areas of Bangladesh offer more opportunities for education and employment, leading to a significant migration of the population.

According to the World Bank's World Development Indicators, the percentage of Bangladesh's total population living in urban areas increased from 35.08 percent in 2016 to 38.95 percent in 2021, with urban population growth occurring at a rate of 3.14 percent per year. The MDGs Bangladesh Progress Report 2015 projects that the urban population will reach 60 million by 2051. Rapid urbanisation has led to significant challenges. Cities like Dhaka and Chittagong are experiencing population growth that is causing problems such as overcrowding, traffic congestion, and a shortage of housing. The government is struggling to keep up with the demands of the rapidly growing urban population, which is resulting in a strain on infrastructure and services. Additionally, urbanisation has led to an increase in pollution and environmental degradation due to the rise in vehicles, industries, and construction activities in urban areas, which is negatively impacting people's health. With approximately 33 percent of the urban population living in slums, the SDGs aim to improve the living conditions of slum dwellers and provide access to safe, affordable housing and basic services for all by 2030. In line with these objectives, the 7<sup>th</sup> Five-Year Plan aimed to pursue comprehensive and inclusive urban development planning.

## 9.2 Review of Urbanisation Strategy under the 7<sup>th</sup> Plan

The 7<sup>th</sup> FYP urbanisation strategy focuses on ensuring well-balanced urbanization while facilitating economic development, employment generation, reduction of inequality and poverty eradication. The core goals and targets highlighted in the 7<sup>th</sup> FYP regarding urban development include:

- Infrastructural investment and civic facilities in peri-urban growth centres especially around Special Economic Zones
- Inclusive housing and other civic services for urban inhabitants including for people living in informal settlements and slums
- Inclusive urban planning based on sustainable land use planning and zoning
- Increased productivity, access to finance, and policy support for urban micro-small and medium enterprises.

The baseline values of the performance indicators identified in the 7<sup>th</sup> FYP to monitor the progress of implementing urbanization strategies against their 2020 targets are given in Table 9.1. The current status of these performance indicators is not yet available.

**Table 9.1: Performance Indicators for the Urban Sector**

Performance Indicator	Baseline (Year)	Target by 2020	Achievement
Percentage of urban population living in slums	33 (2015)	25	A preliminary report of the census 2022 reports about 1.5 % of the population live in slums or are floating. This information needs to verify with the forthcoming HIES 2022 report.
Percentage of urban population having access to (a) public health service (b) safe drinking water (c) sanitation facilities	a) 87 b) 78 c) 80 (2015)	a) 100 b) 100 c) 100	a) 73 (DHS-17-18) b) 75 (DHS-17-18) c) 90.7 % (MICS-19)
Percentage of urban solid waste regularly collected	63.2 (2015)	75	Not available

### 9.2.1 Urban Governance Strategies and Outcomes

The 7<sup>th</sup> FYP prioritises urban governance by emphasizing increased accountability, transparency, responsiveness, and inclusiveness in urban governance bodies. The plan recognises the importance of close collaboration between the public and private sectors in urban development planning. Environmental degradation in urban areas is one of the major challenges of rapid urbanisation. To address this, relevant city corporations have launched a number of urban resilience projects aimed at reducing pollution in the air, water, and soil through improved solid waste management. The government's Local Government Division has prioritised institutional capacity building in urban institutions. Greater efforts, however, are required to mobilise resources for efficient urban project implementation and increase local revenue generation in order to successfully finance urban infrastructure projects.

Many cities in Bangladesh are vulnerable to natural disasters such as floods, earthquakes, and heavy rains, and rapid urbanisation increases the risk of drainage systems failing. Decentralizing institutional power and increasing transparency are essential for municipalities to improve their capacity for better drainage and waste management systems. As a prerequisite for effective urban governance, the 7<sup>th</sup> FYP has identified increased transparency through the implementation of anti-corruption policies and e-tendering systems.

Several LGED projects have taken the initiative to establish town-level coordination committees in municipalities to promote urban governance. This is a step in the institutionalisation process. Government transfers remain the primary source of funding for city corporations and municipalities, while internal resource mobilisation efforts have generally lagged. There are currently no notable examples of good practice in this area.

Through various project interventions, LGED has developed several software programs for tax billing and collection, water billing, and other purposes. Municipal employees have been trained on how to use these software systems. However, there is still much room for improvement in areas such as taxation, transparency, and office automation. LGED is in charge of training the vast majority of municipal employees. LGED trains approximately 5,000 staff members each year with a revenue budget of approximately Tk. 1.20 crore and a project budget of approximately Tk. 2.5 crore.

Development plans are essential for developing municipalities in a comprehensive and sustainable manner. Local Government Division and Local Government Engineering Department have created development

plans for 256 municipalities, while RAJUK and other authorities have created plans for six additional municipalities. However, 67 municipalities out of 329 are still waiting for development plans.

### 9.2.2 Urban Housing Strategies

The government's goal in the 7<sup>th</sup> Five Year Plan was to create an efficiently regulated housing market with fewer administrative constraints and improved functionality. The following major strategies were established: 1. Facilitate the efficient operation of the land market; 2. Develop an efficient housing market; 3. Improve the mechanism for financing housing; 4. Provide basic infrastructure and services; and 5. Support the development of appropriate building materials and technologies.

The Ministry of Housing and Public Works was in charge of this sector, with the Public Works Department (PWD) taking the lead in managing the construction sector. In addition, several other agencies under the Ministry of Local Government, Rural Development, and Cooperatives, such as the Urban Development Directorate (UDD), National Housing Authority (NHA), RAJUK, CDA, RDA, KDA, the Department of Public Health Engineering (DPHE), and the Local Government Engineering Department (LGED), acted as associate agencies to design and implement schemes to ensure urban development.

The 7<sup>th</sup> FYP's target was to build 7000 flats and develop 5,000 plots by the year 2020 (Table 9.2). It is very encouraging that actual implementation has far exceeded the set target. By 2020, there were 9,869 flats and 7,165 plots have been developed, which is more than 40 % of the target. The National Housing Authority successfully completed 15 projects during the seventh five-year plan period throughout Bangladesh, including 7 flat projects with 849 flats and 8 plot projects with 1605 plots, all of which have been turned over to their respective allottees. Now, the authority is working on 14 flat projects, 14 plot projects, and two commercial space building projects with a total of 7098 flats and 2045 plots to alleviate the housing problem and provide affordable housing solutions for everyone (NHA annual report 2020-2021).

Through providing physical and social infrastructure, the Public Works Department (PWD) contributes significantly to the growth, security, and international relations of the country. Its principal duties include developing and maintaining government structures as well as Important Point Installations (KPIs). The PWD has completed nine projects and distributed 3012 flats, resulting in a 2.8 % increase in residential amenities, in order to improve the living conditions of government employees in Dhaka city. In Dhaka, Narayanganj, Chittagong, and Noakhali, the department is currently building 9734 apartments over 17 projects.

In addition to building new flats and plots, the 7<sup>th</sup> FYP also aimed to ensure the strengthening of earthquake-vulnerable buildings, especially public buildings. In the 7<sup>th</sup> FYP, it was planned to retrofit two public buildings: the 10-storied Betar Bhavan and the Meteorological Department. This target has successfully been achieved at the end of the 7<sup>th</sup> FYP implementation.

In order to maintain sustainable urban growth, the PWD prioritises energy-efficient structures and incorporates solar panels, Sewerage Treatment Plants (STPs), and rainwater collection systems in newly constructed buildings. The PWD has also safeguarded an additional 210 acres of land in Chittagong City and built two contemporary parks totaling 12 acres. The PWD has constructed and upgraded auditoriums, office spaces measuring about 2.51 lac square feet, and other infrastructure during this time. More than 15 million square meters worth of government housing and office space have also been renovated, maintained, and repaired by the department.

To protect the waterbodies in urban areas and to develop more such resources, the 7<sup>th</sup> FYP targeted digging 100 feet of Khal along both sides of Purbachol link road. At the end of the 7<sup>th</sup> FYP, not only the targeted Kuril-Purbachol 100 feet Khal has been created but the additional 71-kilometer lake along with a 22.39-kilometer walkway has been constructed under the duration of the 7<sup>th</sup> FYP. This is a commendable

achievement. Similarly, the 7<sup>th</sup> FYP has also been very successful in ensuring access to safe, affordable, and sustainable transport systems for all by developing an integrated and balanced transportation system taking into consideration the needs of the road system, non-motorised transport, public passenger transport, mass transit facilities, and road safety. The target in the 7<sup>th</sup> FYP in this regard was 220.34 kilometers of road, but the achievement is 490.35 kilometers of road, which is more than double the target.

**Table 9.2: Performance Indicators for Housing, Transportation, Utilities, and Sustainability.**

Performance Indicators	FY16 (Baseline)	FY20 (Target)	FY20 (Actual)	Area/Project
Promote activities for clean and green cities (open space/park in Acres)	210	220	220	Dhaka, Chattogram
Encourage earthquake-vulnerable building retrofitting for major cities	1	2	2	10 storied Betar Bhaban, Meteorological Department
Provide housing for all		7000 (Flats) 5000 (Plots)	9869 (Flats) 7165 (Plots)	
Development and maintenance of the major lake and Khal		100 Feet Khal along both sides of Purbachol link road	Kuril-Purbachol 100 feet Khal and 71 km lake along with 22.39 km walkway	
Provide access to safe, affordable, and sustainable transport systems for all (km)	76.31	220.34	490.35	
Ensure access for all to adequate, safe and affordable basic services including water, sanitation, public health and waste management	78+22	85.68+65.91	76+45.90+4366+27	
Provide the Urban Poor with access to income, employment, housing, and basic services and improve the condition of the slums/informal settlements (%)	33+3268+20	32+3000+15	30+700+14	
Prepare and implement environmentally-sound urban Planning and management (sq km per million people)	0.70	0.65	0.52	

Source: The Ministry of Housing and Public Works, The Government of Bangladesh.

However, there are some indicators on which the 7<sup>th</sup> FYP's performance was not as successful. In case of ensuring access for all to adequate, safe, and affordable basic services, including water, sanitation, public health, and waste management, the 7<sup>th</sup> FYP targets were 85.68 percent and 65.91 percent population, especially in urban areas, will have access to safe water and sanitation, respectively. But, at the end of the 7<sup>th</sup> FYP, about 76 % of the population have access to safe and affordable water while about 46 % have access to sanitation. Analogously, plans for helping the urban poor by ensuring access to income, employment, housing, and basic services have fallen short. The 7<sup>th</sup> FYP was not very successful in improving the condition of the slums and informal settlements and to some extent, it failed to integrate these settlements with the wider urban areas. However, it has made good progress in the right direction, and now much more has

to be done in the 8<sup>th</sup> FYP. In addition, the target of implementing environmentally-sound urban planning and management incorporating environmental, climate change, and disaster risk reduction policies and standards was 0.65 square kilometers for one million population. However, it fell to 0.52 square kilometers for one million people. This is due to the increasing pressure of the population in urban areas.

The government has streamlined information and services for its employees during the plan period using an e-management system, which includes housing allocation in Dhaka. There were 1,249,205 square feet of new construction, and 23 million square meters of government buildings needed maintenance. In addition, the government built two environmentally friendly sewage treatment facilities and finished five projects including rainwater collection. Furthermore, the government developed 250 structural plans, preserved 650 acres of park and playground, built 20 km of internal connecting roads, and built a 60 KW solar panel for renewable energy. These efforts were made in addition to implementing a project to create human resources to ensure the security of vulnerable buildings.

In line with the Ministry of Housing & Public Works' vision and mission statement, the Urban Development Directorate (UDD) has developed master plans for divisional towns, district towns, and upazilas, encompassing paurashava and surrounding rural areas. By the year 2020, the UDD had created 28 master plans, including 3 divisional towns, 4 district towns, 19 paurashavas, and 25 upazilas, which have brought a total population of 72,58,014 under-planned areas. Therefore, the UDD's master plan has covered an area of 9881.45 sq km, which accounts for 6.70 percent of Bangladesh's total area.

Bangladesh's Department of Architecture has created framework designs for significant national infrastructure projects for a variety of ministries and departments. These initiatives consist of creating homes for judges in 32 districts, the National Board of Revenue Office Building, an IT Village at Korail Mauza, and different infrastructure initiatives that are accessible to people with disabilities. In addition, the department has given over 400 different types of architectural drawings to various ministries, departments, and directorates in accordance with their distinct needs.

The Dhaka Metropolitan Development Plan Area has formulated the Detailed Area Plan (2016-2035) and introduced Transit Oriented Development (TOD) in the DAP (2016-2035). RAJUK has handed over 17,000 residential plots and 1,101 lease dead registrations during this period. In addition, RAJUK has delivered 4,366 flats in Uttara and constructed a 10-story building with 27 flats in the Gulshan area. RAJUK has also completed 462.42 km of road network, 60 bridges, 2 flyovers, 4 overpasses, 2 U-loops, 71 km of lake, 22.39 km of walkway, 10 main sewerage diversion lines, and other beautification and social work under the Purbachal, Uttara 3rd Phase, Jhilmil, Hatirjheel, and Gulshan-Banani-Baridhara lake development projects. Furthermore, the Uttara Lake development, Kuril Purbachal 100 feet Khal, and Madani Avenue to Balu River Road construction have been completed.

The development authorities for the Chittagong, Khulna, and Rajshahi divisions have taken steps to accelerate the implementation of certain area and structural plans. Chattogram Development Authority (CDA) has allotted 3180 plots in residential areas and built about 50 km of new roads. CDA also constructed several flyovers including the 1100-meter-long Kadamtali flyover, 1331.60-meter-long Bahadderhat Flyover, and 6.18 Kilo Meter Muradpur Flyover. Additionally, a new over-bridge was constructed adjacent to Dewanhat Junction. CDA also completed construction of 24 flats for mid-level officers at Mehedibag Officers Quarters.

Khulna Development Authority facilitated quick land clearance and developed 730 residential and commercial plots, with 500 already allotted to individuals. Additionally, they reconstructed a 7.52 km road in Shiromoni industrial area and completed the land acquisition for the "Widening & improvement of Khulna shipyard road" project. RDA added 8.50 km of roads, drains, and a 1.00 km four-lane overpass, reducing city congestion and improving communication. They also developed two planned residential areas and distributed 493 residential plots.



The Rajshahi Metropolitan Development Plan, 2004-2024 was revised and achieved its goal. Cox's Bazar Development Authority is leading the development efforts in the city, having installed visually attractive sculptures and LED lights to improve aesthetics and safety. They have also undertaken a Greening project, planting around 10,000 saplings of different types in various locations. Additionally, conservation projects have been implemented, including the installation of fences to safeguard biodiversities such as red crabs, turtles, dolphins, and sea creepers.

Six research projects related to house building materials and technology innovation have been completed by Housing and Building Research Institute during the plan period until 2018. The institute also produced 30,000 alternative bricks and other construction materials. Additionally, 2,300 construction workers from earthquake-prone districts received awareness-building training. The Research and Awareness Building Project also constructed disaster-proof infrastructure objects in various locations across the country. Earthquake exhibitions were organised for the first time, and firefighting guidelines were published to raise awareness among the people.

### **9.2.3 Local Government Division (Ministry of Local Government, Rural Development and Cooperatives): Recent Achievements**

Several rules and regulations have been put in place to increase the effectiveness of the local government system, encourage conformity to the law, and ensure transparency and accountability. Rules have also been devised to improve Pourashavas' performance. Many training sessions have been given to 80,922 elected officials at all levels in order to further strengthen the operation of local government institutions.

### **9.2.4 WATER**

During the plan period up to 2018, Dhaka WASA constructed a water treatment plant with a refining capacity of 22.50 crore litres of water per day, increasing its production capacity to 242 crore litres per day. Additionally, 1366.16 km of water pipelines were constructed and rehabilitated, 226 deep tube wells were installed and replaced, and 11 km of storm waterline were constructed and rehabilitated. The water system loss was also reduced from 40 % to 22 %.

Chattogram WASA installed 45 deep tube wells and constructed 14 water tanks during the same period. To ensure water quality, they tested 1860 samples at consumer points and 360 samples at deep tube well points. Due to increased water lifting and pipeline expansion, 6974 new dwellers were provided with water supply connections. They also reduced non-revenue water from 24 % to 16-17 %, installed 148 km of new water pipeline, and constructed two underground and one surface water reservoir.

Khulna WASA completed the construction of a water treatment plant to improve the water supply in the city. This plant produces 6.75 MLD of safe water and supplies it to city dwellers. They also provided 25 km of water lines and 5000 new connections and introduced the 'Flow Meter' for water bill collection. In the Rajshahi WASA area, they installed 115 km of water supply pipeline, 26 deep tube wells, and 28 tube wells with motor pumps. Additionally, they acquired 2 mounted water tankers and 20 mobile generators.

### **9.2.5 City Corporations**

Up to 2018, the Dhaka South and North City Corporation underwent a substantial era of development. Flyover construction, the development of 682.25 km of roads, the excavation of 5618 km of drains, the building of 420 km of footpaths, the construction of 14 foot over bridges, the installation of 13 intersection traffic signals, 48 signal intersection solar panel timer countdown, and the installation of auto signals were all included in this. A Girl's College, 10 sweeper quarters, 15 community centers, a maternity center, and a temple were all built, in addition to the installation of 11,787 LED lights and the construction of several facilities.

Chattogram City Corporation completed the development of 490 km of roads and 34 km of drains, as well as maintenance of 30 km of drains. Additionally, 400 km of road lights were installed and maintained, and 35 schools, sweeper's colony, 9 matrisadan, 77 bridges and culverts, and 33 schools were constructed. Rajshahi City Corporation completed the construction and development of 290 km of roads, 85.24 km of drains, 24.4 km of footpaths, 76 km of drains, and 3 modern markets. Additionally, 25 km of road lights were installed to improve public safety.

Khulna City Corporation completed the construction and development of 145 km of roads, 328.60 km of drains, the installation of 130,000 energy-saving lamps, the construction of a sanitary landfill, the beautification of the city and fountains, and the construction of 8 ward offices. To improve the sanitation situation, 790 sanitary latrines were also constructed up to 2018.

The Sylhet City Corporation built 79 km of roads, 83 km of drains, 11 km of canals, and 7.5 km of pathways during the planning period that ended in 2018. 100 load centers and 17 km of street lighting were also erected. To enhance the city's educational infrastructure, they also built 4 schools. During the plan period up to 2018, Barisal City Corporation erected 10 ward offices, repaired and developed 45 km of roads, and built 26 cross drains and 28 km of drains. To ameliorate the sanitation condition, they also built 1280 sanitary latrines in slum neighborhoods.

Narayanganj City Corporation constructed 93.48 km of roads, repaired and developed 21.50 km of roads, constructed 69.24 km of drains, 135.97 km of road lights, and 19.68 km of footpaths. They also constructed 3 multi-storied markets cum apartments and some commercial markets, and distributed Tk. 132.12 lakh as microcredit to benefit marginalised people.

Cumilla City Corporation constructed 55.00 km of roads, 36 km of drains, and 9.5 km of footpaths, and developed 4 markets. They also procured 6 garbage trucks and re-excavated 18 km of canals. Furthermore, they installed 44 fountains, 39 streetlights, and garden lights as part of the city's beautification, and created gardens beside the roads.

Gazipur City Corporation constructed 18 km of drains and 80 km of roads over the past three years, in addition to installing 28 deep tube wells, 50 km of pipelines, and 10,000 road lights. They also constructed a 65-meter culvert, 1 school, 1 mosque, and 2 graveyards. Rangpur City Corporation repaired and developed 161.00 km of roads, constructed 51 km of CC roads, and 18.00 km of drains.

Since the 1990s, LGED has gotten involved in infrastructure construction to help local governments better manage their budgets and organise their services. Urban infrastructure services like water supply, drainage, sanitisation, urban highways, and markets are among the projects that the LGED has implemented. In order to increase the capabilities of urban LGIs, the LGED has also carried out projects and programs. Almost 50 million people in nine city corporations and 328 municipalities have directly benefited from these measures, which have improved the urban economy, environment, and standard of living. The whole urban environment has grown more quickly as a result.

### **9.2.6 Urban Transportation Strategies**

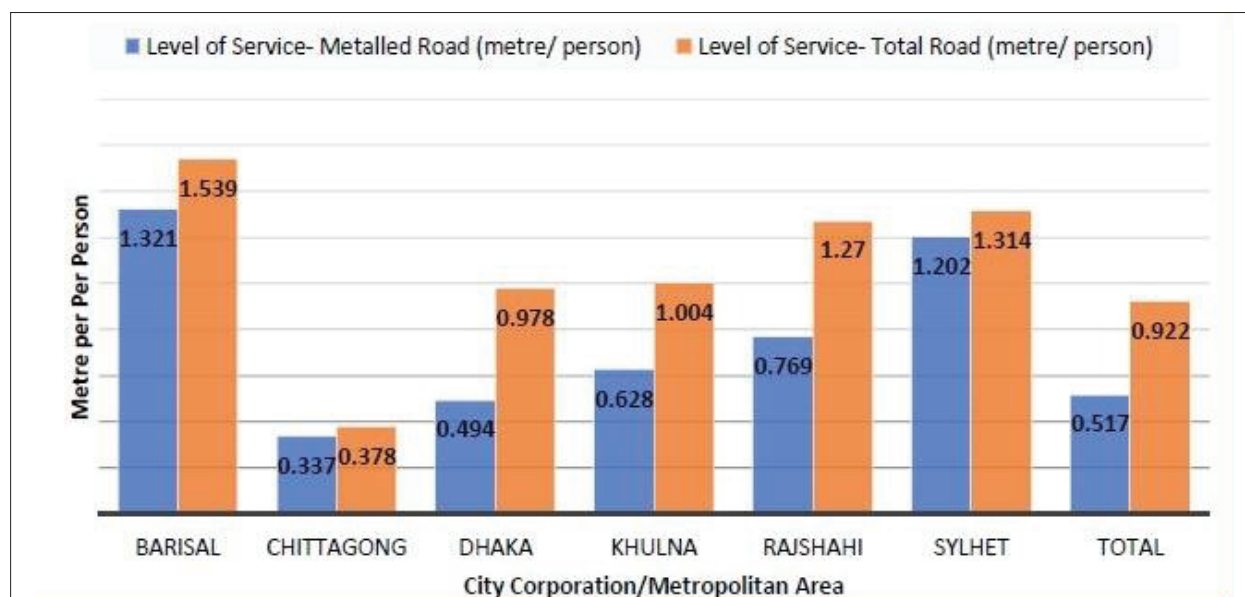
The development of the transportation sector was given great importance within the urbanisation initiatives. The 7<sup>th</sup> Five Year Plan provided a framework for this sector, which included the following strategies: 1) developing public transport alternatives, 2) focusing on Non-Motorised transport modes (NMT), 3) strengthening linkages with cities and towns around metropolitan areas, 4) coordinating development of land use and transportation, 5) making better use of existing road infrastructure, 6) reforming existing institutions, and 7) prioritising infrastructure projects.



The Road Transport and Highways Division, along with other agencies such as the Bangladesh Road Transport Authority (BRTA), Bangladesh Road Transport Corporation (BRTC), Dhaka Transport Co-ordination Authority (DTCA), and Dhaka Mass Transit Company Limited, is responsible for administering the road and transport sector of Bangladesh.

The Municipal Governance Support Project (MGSP), which received backing from the World Bank, has demonstrated successful instances of inclusive infrastructure in 26 municipalities. The project encompassed various urban infrastructures such as roads, drains, medians, and footpaths. The roads were constructed with a minimum width of 6 meters to accommodate current and future traffic requirements.

**Figure 9.1: Level of Services of Roads in Six City Corporations**



Source: City Corporations and RAJUK, 2019

Bangladesh has been experiencing irregular rainfall patterns, resulting from climate change. This has led to floods in some municipalities and water logging in a significant number of others, particularly during the monsoon season. The consequences of water logging include damage to properties and roads, in addition to the suffering of the people. To address this issue, a good practice response has been implemented, which involves the construction of drainage systems based on a drainage master plan that considers the entire network from start to outfall. Furthermore, in municipalities where urban roads remain waterlogged during monsoons, they are being constructed with concrete or block materials. Although this solution is effective, it is not sustainable in some municipalities due to defective construction practices or a lack of technical knowledge among municipal staff. Therefore, it is crucial to conduct research to identify weaknesses in the design and construction methods of concrete and block roads.

The Dhaka Mass Rapid Transit Development Project (DMRTDP) has begun construction of Line-6 from Uttara 3rd phase to Bangladesh Bank, with consultants appointed for detail design work, construction supervision, procurement support, institutional development, and resettlement assistance. Various surveys along the route alignment have been completed, and the detail design work has been finalised. The detailed design work of the Bus Rapid Transit (BRT) line from Hazrat Shahjalal (R) International Airport to Jhilmil via Mohakhali-Ramna-Gulistan has also been completed.

The Dhaka Integrated Traffic Management Project (DITMP) project tenure finally ended in June 2022, and its cost reached Tk 520 million from Tk 363 million. In the last three years, the BRTA has issued 9,73,547

digital registration certificates and 17,21,200 fitness certificates for motor vehicles, while 73 thousand professional drivers of motor vehicles have been provided with skill and awareness building training on safety measures. The aim is to introduce an integrated ticketing system across different modes of public transport, with a clearing house established and piloting for the smart card “Rapid Pass” completed. Over the past three years, the BRTA has issued 9,73,547 digital registration certificates and 17,21,200 fitness certificates for motor vehicles. Moreover, 73 thousand professional drivers have received training on safety measures to enhance their skills and awareness.

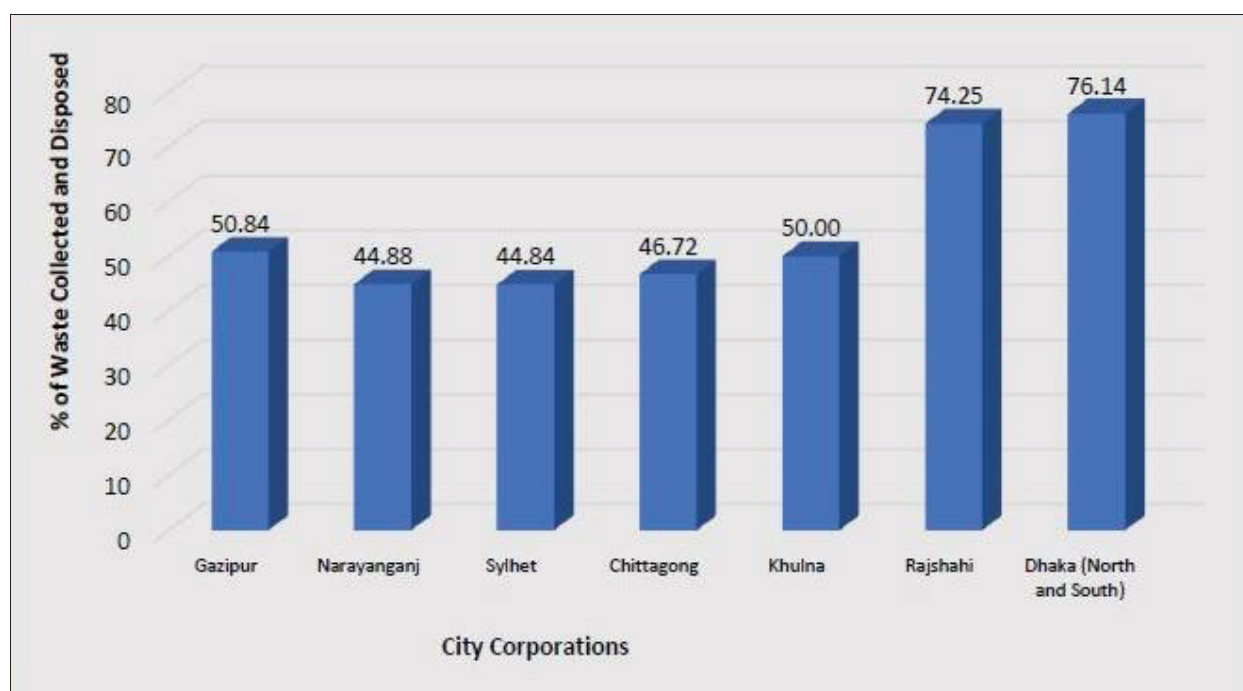
### 9.2.7 Addressing Traffic Congestion Problems of Dhaka

The government implemented flyover projects and is building a metro rail to address transport problems in Dhaka. Seven flyovers spanning 29 km have been built at a cost of Tk 4,000 crore. The government also plans to complete 6 MRT lines and 1 BRT line by 2035 at a cost of US\$23.2 Billion. MRT Line-6, costing Tk 22,000 crore, started in 2016 and was set to open to the public in December 2022. This will be a major breakthrough in Dhaka’s transportation, easing traffic congestion.

### 9.2.8 Waste Management

The total solution technique, a more rational and environmentally sound strategy, is taking the role of conventional solid waste management, which involves gathering and burying waste in landfill dumps. A controlled landfill cell, compost plant, biogas plant, transfer station, and fecal sludge management are all included in this method’s integrated waste management system. In order to provide four municipalities with a comprehensive waste management solution, LGED has carried out three initiatives. Three other municipalities will have a complete solid waste management solution by June 2021. An integrated waste management plant is currently running in Jashore. A similar idea has been applied by development partners to a number of projects in the pipeline.

**Figure 9.2: Waste Collection Efficiency of City Corporations**



Source: CEGIS: Baseline Survey on Waste Generation 2013; BIGD State of Cities: Solid Waste Management in Dhaka City, 2015; Khulna City Corporation, 2020

### 9.3 Strategies for Reduction of Urban Poverty and Outcomes

According to HIES data, poverty rates decreased in both urban and rural areas from 2016 to 2022. However, the reduction was more significant in rural areas than in urban areas. The HIES 2022 preliminary report indicates that urban poverty decreased from 18.9 % in 2016 to 14.7 % in 2022, while rural poverty declined from 26.4 % in 2016 to 20.5 % in 2022. The decrease in rural poverty was 1.7 percentage point higher than that in urban poverty, possibly due to greater poverty reduction efforts in rural areas compared to urban areas. Based on a lower poverty line, the national poverty rate is estimated to be 5.6 % in 2022 (compared to 12.9 % in 2016), with urban poverty at 3.8 % and rural poverty at 6.5 %. These figures represent a 3.8 percentage point reduction in urban extreme poverty and an 8.4 percentage point reduction in rural extreme poverty. So, in terms of extreme poverty reduction, the performance was substantially better in rural areas compared to urban areas.

Despite not being classified as “poor” in official statistics, a significant portion of the urban population still experiences severe deprivations due to insufficient assets and limited access to basic services. Therefore, assessing urban poverty solely based on income or calorie intake does not provide a complete understanding of the extent to which the urban poor can access basic infrastructure and services such as housing, water, sanitation, drainage, waste management, and healthcare. This presents an increasing challenge that requires recognition and attention, and calls for the development of appropriate strategic interventions.

The 7<sup>th</sup> FYP emphasises the importance of implementing a comprehensive urban poverty reduction strategy for sustainable economic growth in the country. To achieve this objective, specific strategies have been proposed in the 7<sup>th</sup> FYP, which include: (i) facilitating access to land and housing, (ii) establishing special zones for the urban poor, (iii) upgrading urban slums, (iv) increasing low-income housing loans, (v) increasing rental housing options, (vi) ensuring access to infrastructure and services, (vii) ensuring access to assets, (viii) supporting informal sector activities, (ix) providing access to credit, (x) providing training and capacity building, (xi) supporting home-based income-generating activities, (xii) providing land for businesses, and (xiii) providing social protection.

To achieve these objectives by 2020, the Local Government Division has initiated specific projects, such as constructing, rehabilitating, and maintaining 2,580 km of roads and footpaths, 420 km of drains, and 1,115 community sanitary latrines in urban areas under the Urban Infrastructure Improvement Projects. These projects aim to create employment opportunities for poor people.

According to the Bangladesh Demographic and Health Survey 2017-18, almost all of Bangladesh’s population (98 %) has access to an improved source of drinking water. In urban areas, the most common source of drinking water is a tube well or borehole (73 %), followed by water piped into the dwelling (23 %), and a public tap or standpipe (2 %). On the other hand, in rural areas, a tube well or borehole is practically the only source of drinking water (97 %).

According to the Bangladesh Demographic and Health Survey 2017-18, improved sanitation facilities are available in 65 % of households, with 75 % of urban households and 62 % of rural households having access to them. However, the proportion of the population with basic sanitation remains unchanged since 2014 at 47 %.

The Local Government Division has prioritised enhancing women’s involvement in infrastructure development projects with the aim of increasing their participation in income-generating activities. Such initiatives can contribute to reducing the incidence of urban poverty in the country.

## 9.4 Emerging new Challenges of Urban Areas

The rapid growth in urbanisation in Bangladesh is also giving rise to new challenges, including greater demand for infrastructure and public transportation, air and water pollution, and the need for affordable housing. We discuss some strategies that can be implemented to tackle these urban challenges in Bangladesh.

Firstly, increasing demand for infrastructure is one of the major challenges facing urban areas in Bangladesh. To address this challenge, the government needs to prioritise infrastructure development. This includes greater investment in roads, bridges, water supply systems, sewage systems, and solid waste management systems. The government can work with private investors to finance infrastructure development projects and can also seek assistance from international organisations. Moreover, the government can implement a public-private partnership model to ensure sustainable financing and maintenance of infrastructure projects. This model can bring in private sector expertise and funding while ensuring that the government maintains control over the infrastructure projects. By prioritising infrastructure development, urban areas in Bangladesh can become more efficient and attractive to businesses and residents.

Secondly, poor public transportation is another major problem facing urban areas in Bangladesh. Currently, a number of projects are underway, which upon completion, can improve the public transportation system. However, to address this challenge adequately, the government needs to invest in public transportation infrastructure such as bus and commuter train systems. Mega project metro rail in Dhaka city is not likely to meet the demand for public transportation sufficiently. The government can also work with private transportation companies to provide affordable and efficient transportation options for residents. In addition, the government can promote alternative transportation modes such as cycling and walking by creating dedicated lanes and paths for these modes of transportation. This will not only reduce traffic congestion but also promote a healthier lifestyle for residents. By improving public transportation options, urban areas in Bangladesh can become more accessible and sustainable.

Thirdly, air and water pollution are major concerns in urban areas in Bangladesh. To address this challenge, the government needs to implement policies and regulations to control pollution. This includes enforcing emission standards for vehicles and factories, implementing wastewater treatment systems, and promoting renewable energy sources. The government can also raise awareness among citizens about the importance of reducing pollution and encourage them to take action to reduce their own carbon footprint. Additionally, the government can collaborate with international organisations to access funding and expertise for pollution control programs. By implementing policies and regulations to control pollution, urban areas in Bangladesh can become healthier and more sustainable.

Finally, a lack of affordable housing is a major challenge facing urban areas in Bangladesh. To address this challenge, the government can implement policies to encourage the private sector to invest in affordable housing. This can include providing tax incentives for developers to build affordable housing units and creating regulatory frameworks to ensure that affordable housing units are available for low-income families. Moreover, the government can work with international organisations to access funding and expertise for affordable housing projects. In addition, the government can provide subsidies for low-income families to help them access affordable housing. By increasing the availability of affordable housing, urban areas in Bangladesh can become more equitable and inclusive.

Another critical challenge for urban areas of Bangladesh is to ensure adequate jobs for a huge unskilled and semi-skilled labor force living in urban areas. In recent years, Bangladesh has experienced a steady increase in the number of urban micro, small, and medium enterprises (MSMEs) due to its growing population and the desire of individuals to be self-employed. These enterprises have immense potential to provide decent employment opportunities to the growing urban population. However, these enterprises face several challenges, including limited access to finance, low productivity, and a lack of policy support.

## 9.5 Conclusion and Way Forward

Bangladesh has experienced rapid urbanisation in recent years, driven by several factors, including economic growth, industrialisation, and migration. This urbanisation has led to a number of challenges, including overcrowding, traffic congestion, and a shortage of housing. The government has taken some steps to address these challenges, such as building new housing and infrastructure, but more needs to be done.

In order to manage urbanisation effectively, Bangladesh needs to develop a comprehensive urban development plan that takes into account the needs of all citizens. This plan should include strategies for addressing the challenges of urbanisation, such as providing affordable housing, improving transportation, and managing environmental impacts. By developing a comprehensive urban development plan, Bangladesh can ensure that urbanisation benefits all citizens and contributes to the country's overall development.

In addition to the challenges mentioned above, Bangladesh is also facing the challenge of providing adequate jobs for a huge unskilled and semi-skilled labor force living in urban areas. In recent years, Bangladesh has experienced a steady increase in the number of urban micro, small, and medium enterprises (MSMEs) due to its growing population and the desire of individuals to be self-employed. These enterprises have immense potential to provide decent employment opportunities to the growing urban population. However, these enterprises face several challenges, including limited access to finance, low productivity, and a lack of policy support. To address these challenges, the government can implement a number of strategies.

**Access to Technology and Training:** It is important to address the issue of productivity. One way to increase productivity is to provide MSMEs with access to technology and training. Technology can help MSMEs automate processes, streamline production, and improve quality. In addition, training can help MSMEs improve their business skills, such as accounting, marketing, and management. The government can work with training institutions to provide MSMEs with relevant training programs. Moreover, the government can collaborate with technology providers to create platforms that provide access to affordable technology solutions that are tailored to the needs of MSMEs.

**Access to Finance and Training on Financial Literacy:** Access to finance is critical for MSMEs to grow and expand their businesses. One approach to increase access to finance for MSMEs is to provide them with financial literacy training. MSMEs need to understand financial concepts such as cash flow management, credit, and debt management, and how to prepare financial statements. With better financial literacy, MSMEs will be more capable of managing their finances and accessing finance when needed.

The government can work with financial institutions to create loan products that are specifically designed for MSMEs. These loan products could have lower interest rates and more flexible repayment terms compared to traditional loans. The government could also create a credit guarantee fund to provide guarantees to MSMEs that are seeking loans. These guarantees can help MSMEs overcome the collateral requirement that is often a barrier to accessing finance. By addressing the issue of access to finance, MSMEs will have the necessary resources to invest in their businesses, expand their operations, and increase their productivity.

**Policy Support for Businesses:** policy support is essential to enable MSMEs to operate and grow their businesses. The government can provide policy support through various means such as creating an enabling environment for MSMEs, reducing bureaucratic barriers, and facilitating market access. One way to create an enabling environment for MSMEs is to simplify the regulatory framework for starting and operating businesses. For example, the government can reduce the number of permits and licenses that are required to start and operate a business. Moreover, the government can reduce bureaucratic barriers by streamlining the registration process for MSMEs. The government can also implement measures to reduce corruption, which is often a barrier to doing business in Bangladesh. By reducing bureaucratic barriers, MSMEs can focus on their businesses, increase their productivity, and contribute to the economy.



By implementing these strategies, the government can help to increase productivity, access to finance, and policy support for urban MSMEs in Bangladesh. This will help to create more jobs and opportunities for the growing urban population and contribute to the country's overall development. In conclusion, Bangladesh is facing a few challenges as a result of rapid urbanisation. However, by developing a comprehensive urban development plan and implementing strategies to support MSMEs, the government can ensure that urbanisation is a positive force for the country's development.

**Addressing Urban Poverty:** The current poverty reduction strategies and activities are not well suited to tackle poverty in urban areas. Not only the income poverty not improving at the expected rate, but multidimensional poverty is stagnant over time in urban areas. So, an integrated poverty reduction strategy based on a life cycle approach must be designed to address poverty in urban areas. We provide the following policy recommendations in this regard.

**Expand Social Safety net Programs to Urban Areas.** Currently, social safety net programs are mostly rural-based, which leaves urban poor households without access to essential benefits. A universal safety net program that covers all eligible households regardless of location would be most effective in reducing urban poverty.

**Implement Nutrition-sensitive Interventions to Reduce Stunting Among Urban Children.** Stunting is a major problem among urban children, and it can have long-term consequences for their health and development. Nutrition-sensitive interventions such as providing fortified foods and improving access to clean water and sanitation can help to reduce stunting and improve the health and well-being of urban children.

**Address Gender-based Deprivation and Violence in Urban Areas.** Gender-based deprivation and violence are major problems in urban areas, and they disproportionately affect women and girls. Policies and programs that address these issues are essential to improving the lives of urban women and girls.

**Expand Access to Essential Services in Slums and Newly added Urban Areas.** Slum and newly added urban areas often lack access to essential services such as education, health care, and sanitation. Expanding access to these services is essential to improving the quality of life for urban poor households.

**Create more Job Opportunities for the Urban Poor.** The urban poor are often employed in low-paying, informal jobs. Creating more high-paying, formal jobs would help to reduce urban poverty and improve the quality of life for urban poor households.

**Enact a Minimum wage Law that Covers all Sectors.** Currently, only the garment sector has a minimum wage law in Bangladesh. Enacting a minimum wage law that covers all sectors would help to ensure that all workers are paid a fair wage.

**Ensure Basic Amenities for all Urban Households.** Basic amenities such as education, health care, and clean water are essential for improving the quality of life for all households, including urban poor households. Ensuring that all urban households have access to these amenities is essential to reducing urban poverty.





**ENVIRONMENTAL  
PROTECTION, CLIMATE  
CHANGE AND DISASTER  
MANAGEMENT**

**CHAPTER**

**10**



## 10.1 Introduction

Rapid climate change is causing concern throughout the world. There is consistent evidence of global warming based on trends in global temperatures, sea level rise, upper-ocean heat content, land-based ice melt, arctic sea ice, and seasonal permafrost thaw depth. According to the Intergovernmental Panel on Climate Change, the majority of the global warming recorded over the last 50 years is attributed to human activities, which have caused serious and potentially permanent changes to our planet's geological, biological, and ecological systems (IPCC, 2003). Large-scale environmental risks to human health, such as extreme weather, ozone depletion, biodiversity loss, stress on food production systems, and the global spread of infectious diseases, have emerged as a result of these changes.

Bangladesh is one of the world's largest deltas and one of the most disaster-prone countries because of its location, flat, low-lying topography, high population density, poverty, illiteracy, lack of institutional infrastructure, etc. In other words, despite the fact that the country's economic situation is currently improving in terms of the global economy, Bangladesh's physical, sociological, and socioeconomic conditions are quite typical of any disaster-prone nations. Further, the adverse effects of climate change, including changes in temperature, sea level rise, cyclones and storm surges, saline intrusion, intense monsoon downpours, etc., have significantly impaired the country's overall economic growth prospects.

With a score of 16.40 out of 181 countries, the Global Risk Report 2020 ranked Bangladesh as the 13th most vulnerable nation to natural disasters and third in Asia's highest risk category. According to the Global Climate Risk Index 2020 published by the German environmental research institute Germanwatch at COP-25, Bangladesh's vulnerability to climate-related disasters has not decreased and the country ranked seventh among nations most susceptible to extreme weather conditions while ranking third among nations most affected by natural disasters. Bangladesh has also been ranked as the seventh most vulnerable country out of 181 countries on the Climate Risk Index in 2020. In addition, the country ranked poorly in the 2020 Environmental Performance Index (EPI), standing at 162nd rank out of 180 countries.

According to a recent World Bank projection, Bangladesh is expected to lose one-third of its agricultural GDP by 2050, resulting in more than 13 million people becoming climate migrants (World Bank, 2022). Rapid migration to urban areas will lead to hasty and carbon-intensive urbanization and a reduction in living standards. A former joint study by the Government of Bangladesh and the World Bank in 2010 found that climate-related disasters resulted in annual GDP loss between 0.5 to 1 percent due to damages to infrastructure, forgone production, and livelihoods. Therefore, even though environmental conservation measures appear to be economically onerous in the near term, quick long-term expansion in the absence of environmental protection is not a wise choice. Ecosystem degradations such as soil erosion, flooding, loss of land fertility, and health risks brought on by air, water, and soil pollution may result in the loss the capital stock. In reality, macro-level forecasts made in the Bangladesh Delta Plan 2100 (BDP 2100) indicated that the cumulative consequences of moderate climate change may result in an annual average loss of GDP growth of around 1.3 percent until FY41 (2041). The time pathways for GDP growth in the scenarios of unchecked environmental deterioration (referred to as Business-As-Usual or BAU) and adoption of the BDP 2100, among other environmental protection measures, reveal a significant cost associated with environmental neglect. The overall difference between the two scenarios' per-capita income widens with time. The difference might reach as much as 27 percent by FY41 meaning that poverty rates will also be significantly impacted.

Environmental protection, climate change adaptation and mitigation, and efficient disaster management are critical for Bangladesh for sustaining inclusive growth. As such, the country must balance its growth and social development strategies with a renewed focus on the environment, climate, and economic structure. This will address the issues of unsustainability, vulnerability to pollution and environmental degradation, as well as ecosystem and disaster risks due to climate change. It is necessary to develop a plan that is more

targeted and results-oriented which incorporates components of legislation, rules, incentives, investments, and capacity building. Over the past decades, Bangladesh has demonstrated considerable achievements in building up national-level scientific knowledge and taking government-level initiatives on the concerns of environmental sustainability.

## 10.2 Environmental Protection, Climate Change and Disaster Management: 7FYP Targets

The main objectives of the 7<sup>th</sup> Five-Year Plan related to climate change, environment, and disaster management can be summarized as follows:

- Environmental sustainability and good governance: The 7<sup>th</sup> FYP aims to establish an appropriate environment management system for sustainable development and enhance enforcement for pollution control. It also focuses on enhancing the preservation and conservation of natural resources.
- Eradicating poverty and ensuring food security: The plan promotes sustainable environment management to improve livelihoods and develop climate-smart food systems. It emphasizes inclusive decision-making and community participation in environmental management. The plan also encourages multiple land use technologies, such as agro-forestry, to increase productivity and alleviate poverty.
- Addressing environmental health: The 7FYP aims to build capacity in environmental health through public and private sectors. It emphasizes the establishment of proper waste management systems for good environmental health.
- Sustainable and efficient cities: The plan focuses on promoting cleaner and greener cities, environment-friendly interventions, and strengthening the capability of public and private sectors to manage environmental concerns. It emphasizes monitoring and prevention of environmental hazards, restoration of natural resources, and the adoption of low-emissions mass transport options.
- Rural development and agricultural land preservation: The 7<sup>th</sup> FYP aims to preserve and develop the natural resource base and biodiversity in rural areas. It emphasizes public awareness and participation in environmental activities, the conservation of watersheds and soil, and the promotion of environmentally friendly agricultural practices.
- Wetland and water management: The plan focuses on preserving and developing natural wetlands and water bodies, conserving ecosystems and biodiversity, and mitigating the impacts of salinity intrusion. It also aims to maintain groundwater levels during the dry season.
- Air and water quality: The 7FYP emphasizes monitoring, controlling, and preventing environmental pollution related to air, water, and soil. It promotes the implementation of emission, effluent, and waste management strategies, as well as the introduction of low-sulfur diesel and energy-efficient technologies.
- Forest conservation and biodiversity protection: The 7<sup>th</sup> Plan aims to increase tree coverage and restore and protect native forests. It focuses on strengthening forestry extension activities, involving local communities, and conserving the Sundarbans mangrove forest. It also highlights the importance of inclusive management of protected areas and the prevention of forest land conversion.
- Biodiversity conservation: The plan emphasizes the conservation and protection of ecosystems to safeguard biodiversity and environmental stability. It promotes cooperation with regional and international institutions to address biodiversity challenges.
- Low carbon strategy and climate change adaptation: The plan aims to meet energy demands through a low-carbon strategy, conserving non-renewable resources, and promoting renewable energy generation. It also focuses on reducing potential economic losses from climate change through education, research, climate-proofing of structures, and the implementation of Bangladesh Delta Plan 2100 strategies.

These objectives reflect the government's commitment to sustainable development, poverty alleviation, and environmental protection in the face of climate change and natural disasters.

### 10.3 Overall Environment and Climate Change Related Progress under the 7<sup>th</sup> FYP

The environmental goals under the 7FYP are widely varied and long-term in nature which require continuous efforts. Table 10.1 shows the progress made against targets under the 7<sup>th</sup> Plan. It shows that substantial progress has been made during the 7FYP in several indicators. The consumption of ozone-depleting Hydrochlorofluorocarbons (HCFCs) has been reduced substantially from 64.89 Ozone Depleting Potential (ODP) tonnes in 2014 to 46.6 ODP tonnes in 2020, against the target of 47.20 tonnes. Furthermore, the percentage of land covered by forestry (with more than 70 percent density) has increased by 4.3 percentage points from the base year to stand at 17.45 percent in FY19. The percentage of protected marine areas has outperformed the target. During the 7<sup>th</sup> Plan implementation period, the percentage of protected forest area increased by one percentage points. However, CO2 emissions and air pollution in urban areas remain high and need more attention in the coming years.

**Table 10.1: Performance Indicators for Environment and Forest Ministry/Sector**

Specific Sectoral Performance Indicators	FY 2014	Base Year	7 <sup>th</sup> FYP Actual vs Target	
		FY15	FY20 (Target)	FY20 (Actual)
Consumption of ozone depleting HCFCs (in Ozone Depleting Potential – ODP tonnes)	64.89	65.34	47.20	46.53
Percentage of land covered by forestry with more than 70 percent tree density	-	13.14	20	17.45 (FY19)*
CO2 emissions (tonnes per capita)	-	0.34	0.38	0.62 (2020)
Percentage of (a) coastal and (b) marine areas that are protected	(a) 1.28 (b) 0.00	-	(a) 5.00 (b) 1.34	(a) - (b) 2.05 (2020)
Percentage of wetland and natural sanctuaries maintained	0.012	1.51	2.35	-
Percentage of forests that are protected	1.81	2.06	5	3.06 (2020)
Mean urban air pollution of particulate matter (a) PM10 in µg/m <sup>3</sup> , (b) PM2.5 in µg/m <sup>3</sup>	(a) 130.90 (b) 78	(b) 89.393	(a) 105 (b) 73	(a) 145 (2017)* (b) 86 (2018)*

Note: “\*” represents latest available data.

Source: MoEFCC, and 7<sup>th</sup> FYP

#### 10.3.1 Environment and Climate Change under the 7<sup>th</sup> FYP

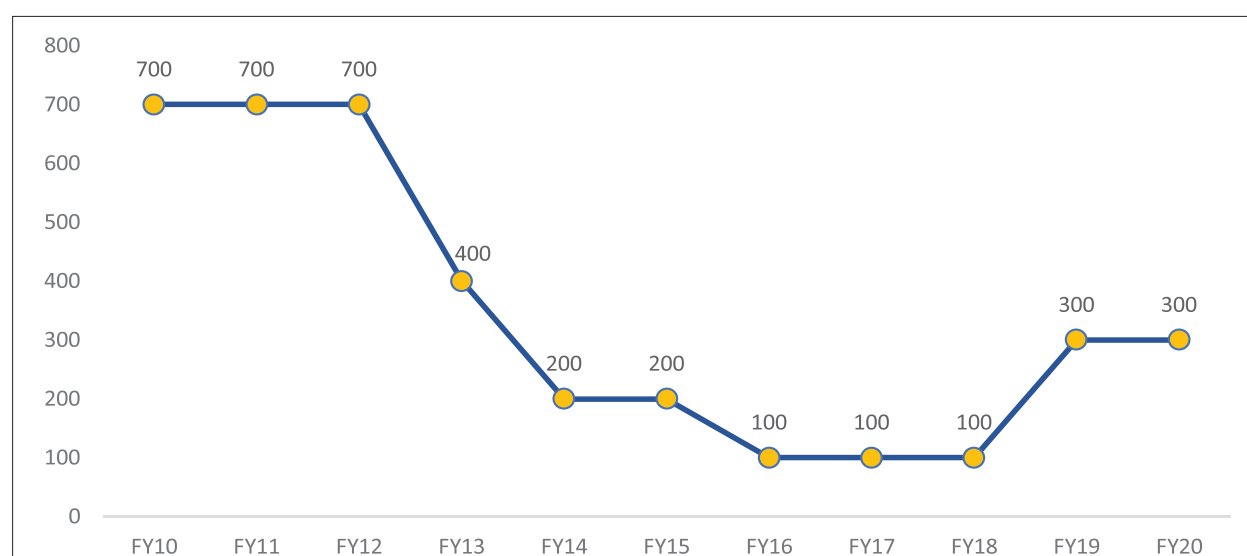
Despite the country's best efforts to limit GHG emissions, global climate change proceeds unabated. Climate change is inevitable and people are compelled to live with it. This necessitates improving adaptation and building resilience. Adaptation implies going along with existing resources, but resilience entails acquiring new resources and maybe emerging stronger from the conflict. While the most vulnerable people are the ones who are most at risk from climate change, they are also the ones who have contributed the least to it.

Bangladesh is the first nation among those vulnerable to climate change to release a national strategy with a specific goal in mind to cope with climate-induced challenges. In order to better prepare Bangladesh for the difficulties associated with climate change, the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) identified 44 programmes under six thematic areas that call for proactive action by the GoB. The thematic areas cover food security, social protection and health; comprehensive disaster management; infrastructure; mitigation and low carbon development; research and knowledge management; capacity building and institutional strengthening..

### i) Climate Change Adaptation (CCA)

After realising the risks and shortcomings of international climate adaptation financing from both multilateral and bilateral sources, the government established Bangladesh Climate Change Trust Fund (BCCTF) under the Ministry of Environment, Forest and Climate Change (MoEFCC) to finance adaptation projects from its own resources. The Climate Change Trust Act 2010 was passed to give the BCCTF a legal foundation. The objective of the BCCTF was to finance projects which improve climate resilience of the nation in key sectors as identified in the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). The other objective was to reduce the gestation period of the adaptation projects. A Board of Trustees (BoT) is aided by a technical committee which recommends projects from ministries and departments. Between 2009-10 and the FY20, a total of Tk 3,800 crore has been allocated to BCCTF (Figure 10.1). The financial support to BCCTF decreased at the beginning of the 7<sup>th</sup> plan period compared to the previous years. It remained stable for the first three years before increasing towards the end.

**Figure 10.1: Amount Allocated by GoB to BCCTF.**



Source: BCCTF.

Out of the allocated Tk 3,800 crore to BCCTF till FY20, a total of 727 projects under BCCTF have been approved, of which 669 belong to five government ministries/divisions while the remaining 58 are being implemented by other ministries and different research organization, public universities and different NGOs under the supervision of Palli Karma Sahayak Foundation (PKSF). During the period of the 7<sup>th</sup> FYP, the BCCTF has funded 78 projects to address climate change impacts.

**Table 10.2: Projects and Allocation from BCCTF in FY20**

SL.	Implementing Ministries	Total Estimated Allocation (Taka Crore)	Approved projects (in Number)	Percent of Total Allocation
1	MoWR	1,043.77	132	31.38
2	MoLGRD&C	1,312.96	441	39.48
3	MoEFCC	415.15	68	12.48
4	MoA	135.55	20	4.08
5	MoDMR	125.52	8	3.77
6	Other Ministries	292.8	58	8.80
<b>Total Allocation</b>		<b>3,325.75</b>	<b>727</b>	<b>100.00</b>

Source: BCCTF, MoEFCC.

During the 7<sup>th</sup> Plan, the government undertook several capacity development activities for climate change adaptation. Key measures related to capacity building include the formulation of an established a legal framework for conducting Environmental Impact Assessments (EIA) for development projects. The EIA process helps identify and mitigate potential environmental impacts before approving new projects. The government has emphasised the importance of training and education to build capacity in environmental management. As a result, institutions, such as the Bangladesh Forest Department, Bangladesh University of Engineering and Technology (BUET), and Bangladesh Agricultural University (BAU), offer degree programs and training courses in environmental science and management. The government has also supported research and development activities to generate knowledge and innovative solutions for environmental challenges. Academic institutions, research organizations, and non-governmental organizations (NGOs) play an active role in conducting research and promoting sustainable environmental practices.

The Climate Fiscal Framework (CFF) 2020 has been developed to promote an enabling environment, so that the government can more effectively access international climate finance and establish national funds for climate change. It will also routinely track climate-related allocation and expenditures and identify areas of institutional weakness and skills gaps, and on that basis recommend further institutional development and capacity building in the Planning Commission and the Finance Division, aiming to develop long-term expenditure plans in accordance with BCCSAP, NAPA, NAP, NAMA, Country Investment Plan for Environment, Forestry and Climate Change (CIP-EFCC) for 2016-2020, Implementation Roadmap for Nationally Determined Contribution (NDC), Bangladesh Delta Plan (BDP) 2100, and other climate change policy and planning documents (MoF, 2020). The CFF has raised the demand for a strong monitoring mechanism to utilise its full benefit.

The implementation of the Bangladesh Climate Change Strategy And Action Plan (BCCSAP) is mainly financed through government's own resources and external support that were available from the development partners as well as the specific international funds created for the purpose of immediate actions such as strengthening disaster management, research and knowledge management, capacity building and public awareness programmes, and urgent investments such as cyclone shelters and selected drainage programmes. Up to December 2019, US\$453 million has been allocated to implement BCCSAP programmes through Bangladesh Climate Change Trust Fund. In addition, allocation has been made through ADP for implementation of BCCSAP projects (MoF, 2020).

## ii) Climate Change Resilience

In April 2016, Bangladesh signed the Paris Agreement (PA) on climate change which will empower all countries to act to prevent average global temperatures rising above 2 degrees Celsius and help countries reap the many opportunities that arise from a necessary global transformation to clean and sustainable development. It will ensure the implementation of the NDC implementation roadmap, which covers the time period 2016-2025, with a particular focus on the period up to 2020. The NDC Industry Sector Action Plan looks at ways in which the industrial sector might be impacted by climate change and what the sector can do to strengthen its resilience and reduce its vulnerability to climate change. The NDC adaptation and resilience areas are food, agriculture, forestry, water, infrastructure and disaster risk management.<sup>49</sup>

As part of climate change resilience ensuring actions during the 7<sup>th</sup> FYP period, 16.4 kilometers of coastal sea dyke (2016) and 4,847 usable cyclone shelters have been constructed in the cyclone-affected areas (2020).

For Agriculture management and irrigation system-related infrastructure as of 2020, the number of solar-operated irrigation pumps increased to 3,245, 2014.8 km of canals and 3,112 km of ponds were re-excavated, 747 submerged weirs were constructed, 532 LLPs were installed, and 489 dug wells were built.

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49 <https://climatepromise.undp.org/what-we-do/where-we-work/bangladesh>



Furthermore, as part of its green banking initiative, Bangladesh Bank (BB) has introduced green financing to promote climate change resilience. This can play a significant role in facilitating the transition towards resource-efficient and low-carbon industries. Bangladesh Bank is providing facilities to establish green industry and green economy in Bangladesh (Nabi et al. 2016). Under green banking scheme BB has enlarged the product line from 6 to 47 and differentiates these products into 10 categories which are: (a) solid waste management, (b) energy efficiency, (c) fire burnt brick, (d) non-fire block brick, (e) liquid waste management, (f) alternative energy, (g) recycling & recyclable product, (h) renewable energy, (i) green industry (j) miscellaneous (Nabi et al. 2016).

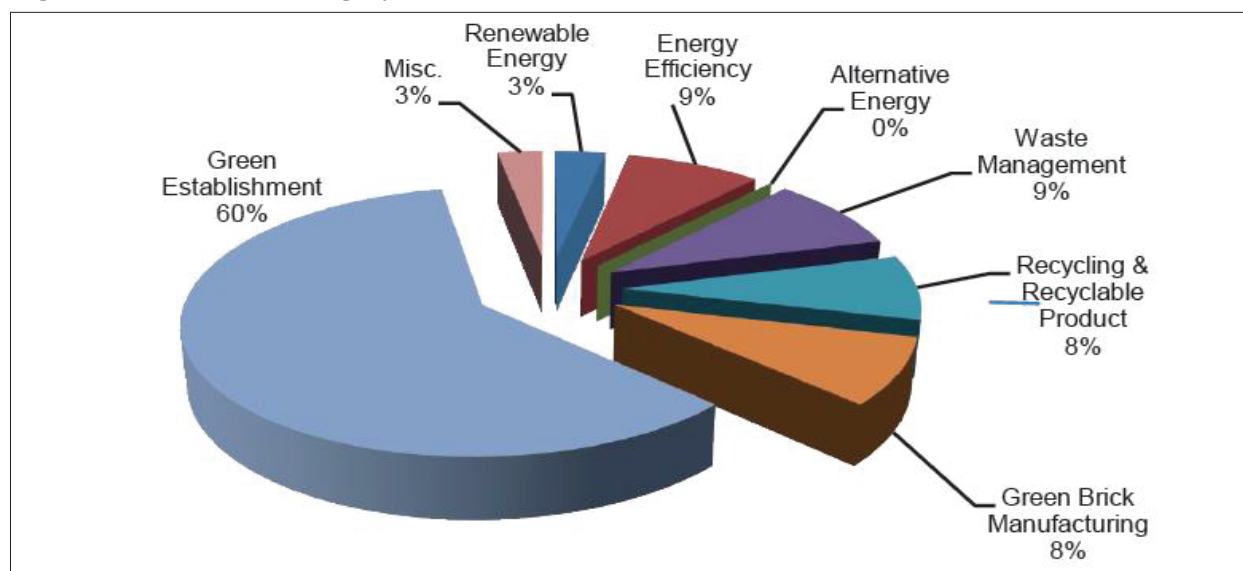
Category-wise amounts of green finance by banks and FIs are given in Table 10.3 and the percentage in Figure 10.2 respectively. The cumulative amount refinanced under the scheme up to June, 2020 stood at BDT 4,687.1 million. In FY20, the total disbursement under the Bangladesh Bank's refinance was BDT 568.5 million.

**Table 10.3: Disbursement Trend of Bangladesh Bank Refinance Scheme for Green Product/Initiatives (in Million Tk)**

Category of Green Finance/ Sector	FY16	FY17	FY18	FY19	FY20
Bio gas	84.8	46.6	10.5	4.56	1.24
Solar Home System (SHS)	114.7	35.3	0	0.19	0.45
Solar irrigation pump	0.6	0	0	0	0
Solar assembly plant	16.3	0	0	0	0
Solar mini grid	10	0	0	0	0
Effluent Treatment Plant (ETP)	58	179.6	60	108.44	132.5
HHK technology in brick kiln	177.8	10	0	5	100
Vermicompost	1.6	1.3	0	0.79	1.26
Green industry	400	0	500	152.33	198.7
Safe working Environment	35.7	55.3	81.97	39.96	88.1
Organic manure from slurry	0.2	0.1	0	0	0
Paper waste recycling	20	20	0	0	0
Energy efficient technology	0	0.6	13	10	46.29
<b>Total</b>	<b>919.7</b>	<b>348.8</b>	<b>665.47</b>	<b>321.27</b>	<b>568.54</b>

Source: Sustainable Finance Department (SFD), Bangladesh Bank.

**Figure 10.2: Share of Category-wise Green Finance in FY20**



Source: SFD, BB

Local community involvement in climate change resilience has been prioritised in both the National Adaptation Action Plan (NAPA) and the Bangladesh Climate Change Strategy and Action Plan (BCCAP). In order to increase species diversity in the coastal forest and improve socioeconomic benefits to local communities, Bangladesh launched the Integrating Community-based Adaptation into Afforestation and Reforestation Programme (ICBAAR) in 2017. The programme was supported by the MoEFCC and implemented through the Bangladesh Forest Department (BFD) in collaboration with seven other government ministries and departments (UNDP, 2021). From 2017 to March 2021, the project has been providing climate-resilient, innovative and ecosystem-based diversified livelihood support to 8,600 coastal, poor and forest-dependent households to adapt to climate change. The project makes a conscious effort to empower women and their involvement in advancing resilience in coastal areas, of which over 52 percent are women.

### iii) Climate Change Mitigation (CCM)

Bangladesh submitted its Nationally Determined Contribution (NDC) in 2015 setting the mitigation goal as “to protect the population, enhance their adaptive capacity and livelihood options, and to protect the overall development of the country in its stride for economic progress and wellbeing of the people” (MoEFCC, 2015). The NDC commitments have been updated in August 2021. Following Intergovernmental Panel on Climate Change (IPCC) recommendations and stakeholder input, the mitigation scenario analysis and assessment of attainable but ambitious unconditional and conditional GHG reduction actions by 2030 for the NDC update has been completed. Only those mitigating actions that would be executed based on present local-level capabilities and funded by internal resources were taken into consideration for the unconditional portion of the NDC. The implementation of the conditional emission reduction is dependent upon international financial and technological help. The updated contributions, both unconditional and conditional, are shown in the sections that follow.

In the updated NDC (2021), Bangladesh intends to unconditionally reduce its greenhouse gas emission by 6.73 percent (increased from 5 percent in INDC 2015) from the business-as-usual scenario by 2030 in energy, industrial processes and product use (IPPU), agriculture, forestry and other land use (AFOLU) and waste.<sup>50</sup> The country increased its unconditional emissions reduction target from 12 MtCO<sub>2</sub>e to 27.56

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<https://climatepromise.undp.org/what-we-do/where-we-work/bangladesh>

MtCO<sub>2</sub>e by 2030 compared to business as usual (Table 10.4). Subject to technology and know-how transfer and finance and investment support from the international community, Bangladesh has committed an additional 15.12 percent (increased from 10 percent in INDCs) reduction of GHG emissions. This means altogether 21.85 percent of the emission (89.47 million tonnes of CO<sub>2</sub> equivalent) will be reduced from the business-as-usual scenario in 2030.

**Table 10.4: GHG Emission Reduction Scenario.**

UNFCCC Sector	Sub-Sector	GHG Emission Scenario		GHG Reduction by Mitigation (2030)							
		BAU 2030		Unconditional			Conditional			Combined	
		MtCO <sub>2</sub> e	In percent	MtCO <sub>2</sub> e	Reduction MtCO <sub>2</sub> e	In percent	MtCO <sub>2</sub> e	Reduction MtCO <sub>2</sub> e	In percent	Reduction MtCO <sub>2</sub> e	In percent
Energy	Power	95.14	23.24	87.13	8.01	29.06	51.4	35.73	57.72	43.74	48.9
	Transport	36.28	8.86	32.89	3.39	12.30	26.56	6.33	10.23	9.72	10.86
	Industry (energy)	101.99	24.91	95.33	6.66	24.17	94.31	1.02	1.65	7.68	8.58
	Other energy sub sectors:										
	Households	30.41	7.43	28.78	1.63	5.91	24.77	4.01	6.46	5.64	6.3
	Commercial	3.35	0.82	2.94	0.41	1.49	2.51	0.43	0.69	0.84	0.94
	Agriculture	10.16	2.48	9.37	0.89	2.87	10.13	0.03	0.05	0.82	0.92
	Brick Kilns	23.98	5.86	20.7	3.28	11.90	12.82	7.88	12.73	11.16	12.47
	Fugitive	8.31	2.03	8.31			4.03	4.28	6.91	4.28	4.78
	F Gases	2.92	0.71	0.78	2.14	7.76	0.03	0.75	1.21	2.89	3.23
Total Energy		312.54	76.34	286.23	26.31	95.46	226.56	59.71	96.46	85.98	96.1
IPPU	Cement and Fertilizer	10.97	2.68	10.97			10.97				
AFOLU	Agriculture and Livestock	54.64	13.35	54	0.64	2.32	53.6	0.4	0.65	1.04	1.16
	Forestry	0.37	0.09	0.37			0.37				
Total AFOLU		55.01	13.44	54.37	0.64	2.32	53.97	0.4	0.65	1.68	1.16
Waste	MSW and wastewater	30.89	7.55	30.28	0.61	2.21	28.44	1.84	2.97	2.45	2.74
Total Emission		409.41		381.85			319.94				
Total Reduction					27.56	6.73		61.9	15.12	89.47	21.85
Note: INDC (2015) proposed 12 MtCO <sub>2</sub> e (5 percent) reduction in unconditional and a further 24 MtCO <sub>2</sub> e (10 percent) reduction in conditional scenario											
Note: NDC (2020) proposed 27.56 MtCO <sub>2</sub> e (6.73 percent) reduction in unconditional and an additional 61.91 MtCO <sub>2</sub> e (15.12 percent) reduction in conditional scenario.											

Source: NDC Report 2021, MoEFCC.

Although the revised incremental commitment in percentage change terms is marginal (i.e., 1.73 percentage points), the absolute amount of reduction would be significant—due to incorporation of additional sectors and the revision of base year from 2011 to 2012 to set BAU scenario in 2030. The unconditional target of GHG emission reduction in the updated NDCs more than doubled to 27.56 MtCO<sub>2</sub>e from 12 MtCO<sub>2</sub>e. The same for conditional commitment increased from 24 MtCO<sub>2</sub>e to 61.91 MtCO<sub>2</sub>e. Of the total reduction commitments in the revised NDCs, 96 percent would be in the energy sector, 2 percent from the waste and the remaining from the AFOLU and IPPU sectors. Bangladesh's updated NDC commitments are moderately ambitious and more proactive cuts from AFULU and IPPU sectors could be possible.

According to revised commitments, Bangladesh, using its own domestic resources, will produce 911.8 MW of renewable energy. Subject to receiving technical and financial support, an additional 4115.3 MW will be added. Moreover, Bangladesh, unconditionally, commits to achieving 5 percent improvement in fuel efficiency in the transport sector, 10 percent modal shift of passenger-km, 10 percent efficiency in the industry subsector, 5 percent and 12 percent reduction in emission in household and commercial buildings, respectively, increase tree coverage to 24 percent of total land, etc. Under conditional commitments, these targets will increase by 2-3 times for most sectors.

The United Nations Framework Convention on Climate Change Parties created the effective method known as REDD+ to reduce emissions from deforestation and forest degradation. (UNFCCC). By providing incentives for developing nations to lower emissions from forested areas and investing in low-carbon pathways to sustainable development, it generates a monetary value for the carbon contained in forests. Developing nations would be compensated for their activities depending on their results. The Government of Bangladesh (GoB) joined the UN-REDD Program as a partner nation in August 2010. Bangladesh established the National REDD+ Steering Committee, created the REDD+ Readiness Roadmap, among other important steps, and carried out two projects, the UN-REDD National Programme and Strengthening National Forest Inventory (referred as NFI project) and Satellite Land Monitoring in Support of REDD+ in Bangladesh.

Bangladesh submitted the National Adaptation Programme of Action (NAPA) in 2005 which has been revised in 2009. However, the primary vehicle for taking forward adaptation policy and implementation will be the National Adaptation Plan (NAP) process, which will implement the adaptation element of the NDC.

The Ministry of Environment, Forest and Climate Change formulated the National Adaptation Plan (NAP) with financial support from the Green Climate Fund (GCF). Bangladesh submitted the NAP to the United Nations Framework Convention on Climate Change (UNFCCC) on October, 2022. The NAP aims to achieve six specific goals: i) ensuring protection against climate change and disasters; ii) developing climate-resilient agriculture; iii) building climate-smart cities; iv) protecting nature for adaptation; v) integrating adaptation into planning; and vi) ensuring capacity-building and innovation in adaptation. The NAP implementation will seek to realize these six goals through 23 broad-scale strategies and 28 outcomes encompassing diverse aspects of safeguarding against climate-induced disasters. It will develop climate-resilient agriculture, infrastructure and other socioeconomic sectors through implementing inclusive and ecosystem-based adaptation, improved governance, enhanced climate finance and transformative capacity-building, and innovation.

The NAP considered 11 climate stress areas in devising 113 interventions based on developed adaptation pathways and sectoral adaptation requirements. These interventions are aligned with the global Sustainable Development Goals (SDGs) and 52 climate adaptation projects of the Bangladesh Delta Plan 2100 (BDP2100). They ensure the inclusion of women and people with diverse gender identities, the elderly, persons with disabilities, youth, ethnic communities and other socially disadvantaged groups throughout the NAP process. The implementation of these 113 major interventions will require more than Tk 20 trillion (about \$230 billion).

Additionally, the Nationally Appropriate Mitigation Action (NAMA) Facility is a multi-donor initiative that supports the implementation of NAMAs that trigger transformative change in the direction of a low-carbon development route. NAMAs are considered to be voluntary climate change mitigation measures by emerging economies and developing countries to be embedded in their national development plans. By moving countries towards a low-carbon development trajectory, NAMAs have the potential to significantly contribute to global efforts to reduce greenhouse gas (GHG) emissions. Bangladesh has submitted a NAMA Support Project (NSP) proposal for funds.

To ensure an effective strategy on mitigation and low carbon development (LCD), the 7<sup>th</sup> Plan envisaged to undertake several activities. A short description of the progress on these activities are provided below:

**Enhance understanding on LCD:** The government of Bangladesh developed the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), a thorough document on climate change, for adaptation and Low Carbon Development (LCD). The institutional reason for Bangladesh's adoption of the LCD strategy is based on the nation's current and potential vulnerabilities as well as the growing threat posed by climate change. The Department of Environment (DoE) prepared thorough training modules on three Rio Conventions in May 2019. The modules were developed through a series of reviews and consultations, and a brief discussion of LCD—which stands for economic development with little output of GHG emissions—was included in the reviews (DoE, 2019).

DoE has completed this project titled 'National Capacity Development for implementing Rio Conventions through Environmental Governance' within the 7FYP tenure, where training of Trainers was developed and integrated as a module to Bangladesh Public Administration Training Centre, for building awareness of the Administrative officials as well as different stakeholders who work at the community level (GED, 2020).

**Improve Capacity in Analysing Available Opportunities:** According to a review of capacity needs assessment jointly done by FAO-UNDP-UNEP in 2016, alongside awareness raising at a national level, key gaps lying with local level officials capacity building as well as involvement of the local political commitment for REDD+ scheme development,<sup>51</sup> social and environmental safeguards. The assessment suggested the concerned agencies to REDD+ to pay attention to awareness raising for actors' based at local level, and especially the communities that live in and around the forests to involve them at the REDD+ scheme development as well as to collect the data related with forest resources extraction by them to be used GHG emission estimation. As a result, The Bangladesh Forest Information System (BFIS) was developed in 2018 by the Bangladesh Forest Department (BFD) under the MoEFCC with the technical assistance from the Food and Agriculture Organization of the United Nations (FAO) and funding from the UN-REDD programme and USAID. The improvement of BFIS is an on-going process. Currently, several of the modules are under development by Sustainable Forest and Livelihoods (SUFAL) project of BFD. The BFIS is managed by the Resources Information Management System Unit of BFD.

**Enhance capacity of energy saving sectors:** The Ministry of Labour on behalf of the Bangladesh government and BGMEA are also promoting the United States Green Building Council (USGBC) developed green building certification programme Leadership in Energy and Environmental Design (LEED), which is used worldwide. More RMG factories are now opting for the LEED certification for ensuring energy efficiency and as of February 2023, Bangladesh has 187 LEED certified green factories, all but four of which are in the garment sector. Among these LEED certified garment factories, 63 are platinum rated, 110 gold rated, and 10 are silver rated. As of 2021, Bangladesh's textile and apparel industry set a benchmark of sustainability by reaching 150 LEED-certified Green factories. Of them, 44 are platinum-rated, 93 gold-rated and 9 are silver-rated.

51 Reducing Emissions from Deforestation and forest Degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks (REDD+) is a climate change mitigation solution developed by Parties to the United Nations Framework Convention on Climate Change (UNFCCC).



The Bangladesh government honoured 15 readymade garments (RMG) factories with the Green Factory Award for their extraordinary contribution to saving the environment and creating jobs. The Ministry of Labour and Employment has decided to offer the awards in six categories to green factories in appreciation of their efforts to keep carbon emissions low, tackle global warming and address the impact of climate change locally and globally.

**Improvement in Coordination and Communication Among Institutions:** The Government of Bangladesh has launched a number of initiatives to raise employee wages, with a focus on institutional capacity building for technical and vocational education and ICT education nationwide to develop a skilled labour force for both domestic and international markets (GED, 2020).

The Department of Environment (DoE) has included a project idea into the World Bank Funded proposed project titled ‘Bangladesh Environmental and Sustainable Transformation (BEST)’ into its preparation/feasibility phase, for stocktaking and updating the environment and climate curricula at primary, secondary and tertiary level. After the feasibility phase, Climate Change related curricula will be integrated into the textbook and institutionalized at the primary and secondary level and where feasible into tertiary levels under the implementation phase of this BEST project.

**Ensuring Investment in Research and Innovation:** Climate Change issues have been integrated into the National Secondary Curriculum under Bangladesh Studies subject. Department of Agricultural Extension (DAE) along with its projects operational partner as Bangladesh Agricultural Research Institute (BARI), Bangladesh Rice Research Institute (BRRI), Bangladesh Jute Research Institute (BJRI), and Bangladesh Sugarcane Research Institute (BSRI) have been implementing ‘Agro Meteorological Information System Development’ Project during the period from July 2016-June 2021 to strengthen the capacity of the Government of Bangladesh to deliver reliable weather, water, and climate information services and improves access to such services by priority sectors and communities.

### 10.3.2 Environmental Protection and Climate Related Strategies during 7<sup>th</sup> FYP

The Ministry of Environment, Forest and Climate Change (MoEFCC) is responsible for managing GoB environmental policies, rules, and regulations. The National Environmental Council (NEC), a cross-sector organisation led by the MoEFCC, was established as part of the Five-Year Plan, which was started by the Planning Commission. The MoEFCC undertakes all climate change relevant projects out of which afforestation in five Coastal Districts of Bangladesh, Char Development and Settlement Project-4, Integrating community-based adaptation into Afforestation and Reforestation in Bangladesh and Climate Resilient Ecosystem and Livelihoods (CREL) belong to the category of “Strongly Relevant” criterion of climate dimension.

Bangladesh is facing significant environmental problems brought on by both the imprecise process that drives economic development in the early phases of development and the wider changes in the climate brought on by rising greenhouse gas emissions. Additionally, the government prepared a number of crucial strategic plans and regulations to improve economic planning harmony in order to address these issues. Following the more general goals of the Perspective Plan 2010-2021, a National Strategy for Sustainable Development (NSDS) 2010-2021 was formally adopted in 2013. During FY16 to FY20 (7FYP tenure), an impressive list of environmental laws, regulations and plans covered a wide range of environmental issues including forest degradation, air pollution, water pollution, bio-diversity loss, wildlife conservation, energy efficiency and conservation, climate investment, forest investment, climate fiscal frame etc. Environmental concerns in areas like land degradation, sustainable fisheries management, management of water resources, waste management, and disaster risk reduction are also addressed by additional laws, regulations, and programmes related to agriculture, land, water, fisheries, and disaster management. The Government has also undertaken specific measures during the 7FYP to improve the state of environmental management, which are as follows (Table 10.5):

**Table 10.5: Environmental Protection and Climate Change Laws, Regulations and Plans during the 7FYP**

SL. No.	Laws /Regulations	Year
1	National Perspectives Plan	2010–2021
2	National Sustainable Development Strategy	2010-2020
3	Integrated Resources Management Plans for the Sundarbans	2010-2020
4	Medium-Term Budgetary Framework	2013-18
5	National Aquaculture Development Strategy and Action Plan	2013–2020
6	Energy Efficiency and Conservation Master Plan	2015
7	National draft Forest Policy	2015
8	Wildlife Conservation Master Plan	2015-2035
9	Nationally Determined Contribution (NDC)	2015
10	Ecologically Critical Areas (ECAs) Management Rules	2016
11	Bangladesh Country Investment Plan for Environment, Forestry and Climate Change (EFCC CIP)	2016-2021
12	National Biodiversity Strategy and Action Plan (NBSAP) - updated	2016-2021
13	Bangladesh Vulture Conservation Action Plan	2016-2025
14	Bangladesh Biodiversity Act	2017
15	Forest Investment Plan (FIP)	2017-2022
16	Forestry Master Plan (FMP) - updated	2017-2036
17	National Environment Policy	2018
18	Revised Biosafety Guidelines of Bangladesh	2018
19	Bangladesh Tiger Action Plan	2018-2027
20	Bangladesh Elephant Conservation Action Plan	2018-2027
21	National Adaptation Plan (NAP)	2019
22	National Biodiversity Assessment and Programme of Action	2020
23	National Oil and Chemical Spill Contingency Plan (NOSOP)	2020
24	Climate Fiscal Framework - updated	2020
25	Bangladesh Delta Plan (BDP)	2100

Source: MoEFCC

Additionally, to facilitate environmental protection and address climate change, the government established a number of plans and policies during the 7FYP. The notable policies are as follows:

**Ecologically Critical Areas (ECAs) Management Rules 2016:** In order to stop the ongoing degradation, the government has designated 13 ecologically fragile and degraded areas with substantial biodiversity as ECAs. The Bangladeshi government has issued the Ecologically Critical Areas Management Rules 2016 in order to manage these ecosystems properly and develop them.

**Bangladesh Country Investment Plan for Environment, Forestry and Climate Change (EFCC CIP):** The Bangladesh Country Investment Plan for Environment, Forestry and Climate Change (EFCC CIP) is a cross-sectoral and whole-of-government investment framework for mobilizing and delivering effective, coordinated, sustainable and country-driven investment programmes in environmental protection; sustainable forest management; climate-change adaptation and mitigation; and environmental governance. The EFCC CIP lays out priority investment areas organized in four pillars, 14 programmes and 43 sub-programmes. At least 77 Government of Bangladesh (GoB) agencies (ministries/ divisions/departments) will implement various EFCC investment programmes.<sup>52</sup>

<sup>52</sup> <http://nda.erd.gov.bd/en/c/publication/bangladesh-country-investment-plan-for-environment-forestry-and-climate-change-2016-2021>



**National Biodiversity Strategy and Action Plan (NBSAP), 2016-2021:** The revised NBSAP was created in 2016 to guarantee that the country's rich biodiversity is maintained and utilised responsibly. The country's Biological Diversity Act and well-considered implementation measures and strategies are reflected in the NBSAP.

**Bangladesh Biological Diversity Act, 2017:** The government approved the Bangladesh Biological Diversity Act in 2017 to fulfil both our country's commitment to protecting biodiversity and the three objectives of the United Nations Convention on Biological Diversity. The Act would support conservation efforts at every level of local government, right down to the grass roots, by establishing biodiversity committees, a biodiversity registry, and a biodiversity fund to be established by the government.

**National Environment Policy, 2018:** The National Environment Policy 2018, a revision of the Environment Policy 1992, was announced by the government in order to promote sustainable development and integrate environmental concerns into all aspects of the country's growth. The environmental activities outlined in all other policies will be guided by this policy, which will be seen as an integrated strategy for the preservation and enhancement of the environment.

**NDC Implementation Roadmap and Action Plan, 2018:** The Paris Agreement (PA) was approved by COP21 in 2015, and 191 Parties have since signed and ratified it. The only objective is to alter the direction of the fight against climate change, fostering a path for sustainable development by keeping global warming to 1.5 to 2 degrees Celsius over pre-industrial levels. The Nationally Determined Contributions (NDCs), formerly known as Intended Nationally Determined Contributions (INDCs) to the ratification of the PA, are one of its main components. On September 25, 2015, Bangladesh submitted their INDC to the UNFCCC for three sectors (Power, Industry and Transport). The NDC Implementation Strategy and Action Plan was then created by Bangladesh in 2018.

**Biosafety Policy of Bangladesh:** A development project on implementation of the National Biosafety Framework (NBF) has been taken to enhance the capacity on biosafety at various levels. A GMO detection laboratory has already been established in the Department of Environment to support the regulatory system. As a party to the Cartagena Protocol on Biosafety, Government of Bangladesh intends to fulfil the commitments under that international agreement, including the use of risk assessment to inform decision making on the use of GMOs, and supporting efforts to ensure public awareness on biosafety.

**Formulation of National Oil and Chemical Spill Contingency Plan (NOSCOP):** The coastal belt hosts significant commercial activity and hazards due to ship-breaking and the presence of oil, petroleum, and chemical processing industries. These activities may result in spillage, necessitating the development of a National Oil and Chemical Spill Contingency Plan (NOSCOP) in both Bangla and English. This plan aims to combat water pollution in inland, coastal, and marine waters.

**Improved Management in Wildlife Conservation and Protection:** In order to further the protection of wildlife in Bangladesh, the government has created the Wildlife Conservation Master Plan 2015–2035 apart from the Wildlife (conservation and security) Act of 2012. Bangladesh has developed action plans for tiger conservation (2018–2027), elephant conservation (2018–2027), and vulture conservation (2016–2025). Many initiatives are being carried out to address the plans for the protection and conservation of wildlife.

**Adoption of the Bangladesh Delta Plan 2100:** Bangladesh Delta Plan 2100 documents the broad and long-term development strategies which the country can adopt as it gravitates toward the end of the 21st century. The strategies aim to ensure food and water security, economic progress and environmental sustainability while reducing the threats of natural disasters and developing resilience to climate change by putting forward a set of forward-looking integrated strategies. In some sense, the Delta Plan 2100 is a techno-economic plan which covers both technical and economic issues, and it evaluates the needs of

mobilizing resources for an effective investment programme till 2030. It also harnesses an approach of Adaptive Delta Management (ADM) by having a strong focus on the issues associated with climate change, such as rise in global temperature and sea levels, erratic patterns of rainfall, etc.

**NAP, BCCSAP, CIP, NDC, FIP and FMP:** With assistance from the GCF-UNDP and under the direction of the MoEFCC, the Government has started the process to create the National Adaptation Plan (NAP) in 2019. Besides, MoEFCC has also prepared Climate Investment Plan in 2017 with support from FAO.

**Climate Fiscal Framework (CFF), 2020:** The Government has also operationalized the Climate Fiscal Framework (CFF) in 2020, developed by the Ministry of Finance, which provides the principles and tools for climate fiscal policy-making (CFP), helping to identify the demand and supply sides of climate fiscal funds (expenditures vis-à-vis revenue or finance, respectively), and to ensure that CFP is transparent and sustainable in the long term. It is also essential to note that under the 7<sup>th</sup> Plan period, the Office of the Comptroller and Auditor General (OCAG), for the first time, conducted two pilot performance audits using climate lens with technical support from the Inclusive Budgeting and Financing for Climate Resilience (IBFCR) project of Finance Division.

CFF 2020 aims to promote an updateable country system to (i) cost and prioritise climate actions; (ii) access international and national sources for climate finance; (iii) deliver climate finances; (iv) track climate expenditures; and (v) make climate finance and expenditure accountable.

**Forest Investment Plan (FIP) (2017-2022)** has been developed to identify the future investment opportunities to increase forest cover, reduce deforestation and forest degradation, improve livelihoods of the forest dependent people through the implementation of participatory/social forestry. An updated Forestry Master Plan (FMP) has been developed for the period of 2017-2036 after the completion of previous FMP in 2015 to address the upcoming and on-going challenges related to anthropogenic issues and climate change.

### 10.3.3 Major Initiatives, Measures and Activities for Environmental Protection and Climate Change

**Improved Institutional Capacity:** The institutional capability of the Department of Environment has been improved. The Department's eight divisional offices are situated in Dhaka, Chittagong, Khulna, Rajshahi, Barishal, Sylhet, Mymensingh, and Rangpur. The main office is in Dhaka.

**Activities to Mitigate River Bank Erosion:** The Government has undertaken plans during 7FYP to increase navigability of rivers, dredging of 510 km of rivers by 2022 to prevent river erosion and ensure water supply during the lean season, digging and re-excavation of 4,883 km of irrigation canals, construction and repair of 200 irrigation structures to extend irrigation facilities, construction of 3 barrages and rubber dams, construction of 250 km flood protection and coastal embankment to reduce flood, salinity and water logging, renovation of 1,040 km flood protection embankments and coastal embankments, construction and renovation of 590 flood protection and drainage infrastructure, excavation and re-excavation of 1,325 km drainage canals, and conservation work of 195 km border river banks and 6 cross-dams.

**Improved Management to Control Water Pollution:** In order to control water pollution, the Government has banned the use, production and marketing of polyethylene shopping bags and made it mandatory for the industries to set up Effluent Treatment Plants (ETPs) to treat their waste before discharging them to water bodies. The tannery industries operating in Hazaribagh have been relocated to the tannery industrial estate in Savar, which will dispose the liquid wastes through a common ETP.

**Activities to Reduce Land Degradation:** Bangladesh National Action Program (NAP) for combating Desertification, Land Degradation and Drought (DLDD), 2015-2024 has been formulated.

**Improved Coastal Afforestation:** In 2016, the Forest Department conducted a study to identify the potential newly accreted char land and suitable barren lands. The purpose of this study was to map out areas that could be brought under afforestation activity with the aim of establishing a green belt along the coastal region.

**Established Forest and Carbon Inventories:** Bangladesh Forest Department (BFD) conducted National Forest Inventory (NFI) during 2016-19 to identify the status of forest and tree resources, carbon and biomass stock, dependency of local people on trees and forests etc. According to the latest available information of BFD, between FY19 total forest land was 25,75,196 hectares which was 17.45 percent of total area of the country.<sup>53</sup> To reduce the carbon emission from forestry sector, Bangladesh formulated Bangladesh National REDD+ Strategy (BNRS) and established National Forest Monitoring System (NFMS) for periodical monitoring of tree and forest cover using satellite imagery. Bangladesh Forest Information System (BFIS) has been established to support the dissemination of information and data to the stakeholders.

**Improved Co-Management in Protected Areas:** Protected Area Management Rules has been formulated in 2017. Forest Department has implemented co-management in 22 protected areas to conserve the wildlife and biodiversity involving the forest dependent communities.

**Improved Management of Wetlands:** A 20-year Haor Development Master Plan and Database has been prepared for the development of the Haor areas. Under this, steps have been taken in the Haor areas to develop infrastructure, re-excavate rivers, canals, and Haors, and foster the socio-economic development of the people of the concerned areas.

**Improved Data Archiving:** The Service Level Agreement (SLA) was done in 2017 with Bangladesh Computer Council (BCC) for hosting the Bangladesh Forest Information System (BFIS) for data archiving and sharing the updated information with stakeholders. Several information modules were developed and hosted in the BFIS to support the assessment and monitoring the forest resources.

**Supporting Alternative Livelihood:** The Government has supported more than 10,000 families during the 7FYP to reduce their dependence on forests, which will result in lower illegal logging of timber and depletion of natural resources.

**Increased Commitment to Social Forestry:** The Government offered resources of social forestry to thousands of people through different social forestry schemes under the 7FYP. Additionally, encroached forest lands, depleted forest areas, vacant marginal land and road side areas were reforested during the plan period. The major components of these projects were to establish woodlot, agro-forestry and strip plantations throughout the country.

**Increased Commitment to Green Growth:** During the 7FYP, fiscal initiatives have been designed such as exemption from being charged 15 percent VAT on renewable energy equipment and materials used in the production of renewable energy. The Government has also developed a network of microcredit providers in remote rural areas to provide funding for the purchase of renewable energy equipment, and corporate income tax exemptions for renewable energy projects.

**Climate Fiscal Reforms:** Finance Division has introduced a climate dimension in its Medium-Term Budget Framework (MTBF) and issued strategic guidance through Budget Call Circular (BCC) to the line ministries to make their budget climate inclusive. As part of MTBF process, it has also developed a climate-inclusive macro-economic framework. In addition, over the last four years, the Finance Division has been publishing annual climate budget reports using its robust IT platform called iBAS++. Moreover, the Office of the Auditor General has incorporated climate performance audits into its audit protocol to promote greater accountability and transparency.

53 [https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/f2d8fabb\\_29c1\\_423a\\_9d37\\_cdb500260002/24.%20Chapter-15%20Eng-21.pdf](https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/f2d8fabb_29c1_423a_9d37_cdb500260002/24.%20Chapter-15%20Eng-21.pdf)

**Controlling Noise Pollution:** The Government has promulgated noise (Control) Rules, 2006 and implemented a program titled Integrated and Participatory Program to Control Noise pollution during 2015-2017. The program involves broadcasting a discussion program on television, as well as conducting a publicity campaign through public media and social media.

**Monitoring and Reducing Air Pollution:** The Department of Environment under the Ministry of Environment, Forest and Climate Change has been consistently monitoring the ambient air quality of the country through its 16 Continuous Air Monitoring Stations (CAMS) and 15 Compact CAMS installed across the country. Five criteria air pollutants are continuously monitored by these stations. To address the air pollution effectively, the Government of Bangladesh has taken necessary measures in terms of policy, legal and administrative instruments. The Government of Bangladesh enacted Brick Manufacturing and Kiln Installation Act, 2013 (Amended 2019). In November 2019, the government issued a gazette notification to enforce the mandatory use of block bricks.

**Implementation of Montreal Protocol on Ozone Depleting Substances (ODSs):** As per global commitments, Bangladesh achieved 100 percent phase-out of import and consumption of CFCs, Halons, Methyl Chloroform and Carbon Tetrachloride by 1 January 2010. As per another schedule, Bangladesh met 10 percent HCFC reduction target by 2015, 33 percent reduction target by 2018 and is committed to meet the target of 67.5 percent reduction by 2025. UN Environment (UNEP), International Ozone Secretariat and World Customs Organization jointly awarded Bangladesh with the certificate of appreciation in 2012, 2017 and 2019 for the outstanding success on implementation of the Montreal Protocol.

**Measures to Protect Natural Recourses:** Rice has been distributed through Vulnerable group feeding program (VGF) to more than 400,000 families who were dependent on fishing every year during the ban on catching mother Hilsas. Moreover, such support was also extended to more than 250,000 families dependent on fishing for four months every year during the ban on catching Jhatka-Hilsas. Measures were also taken to preserve aquatic forests and swamps, ecologically critical areas, etc. The Government has prepared a National Conservation Policy 2016-2031 which aims to ensure the sustainable use of natural resources.

**Expanding Special Economic Zones Improve Land Usage:** Bangladesh routinely loses agricultural land for non-agricultural use that hinders environmental management due to ad hoc industrialization in different regions. The introduction of Special Economic Zones (SEZ) has helped offer more structure to environmental management as it concentrates industrialization in few specific regions, allowing environmental regulators to monitor industrial pollution more accurately. So far, the Government has inaugurated eleven economic zones (EZs) that are ready for setting up factories, which are the: Mongla EZ at Mongla in Bagerhat district, Meghna EZ and Meghna Economic Industrial EZ at Sonargaon in Narayanganj, Abdul Monem EZ at Gazaria in Munshiganj, Bay EZ at Gazipur Sadar in Gazipur, Aman EZ at Sonargaon in Narayanganj, City EZ at Rupganj in Narayanganj, Kishoreganj EZ at Pakundia in Kishoreganj, East West SEZ at Keraniganj in Dhaka, Karnaphuli Dry Dock SEZ at Anwara in Chittagong, and Sreehatta EZ at Moulvibazar Sadar in Moulvibazar. In total, the Government plans to administer 51 state-owned SEZs and eleven privately owned EZs.

**Country Programme Framework for Green Climate Fund (Accessing International Finance for Climate Action):** The Economic Relations Division (ERD) as Bangladesh National Designated Authority to Green Climate Fund (GCF) developed a \$ 4 billion pipeline for GCF and mobilised almost 94.7 million with 4 projects from GCF.

Initially, the Disaster Response Framework (DRF) for climate change and environmental protection was not sufficiently designed as the 6th FYP pioneered the use of result-based monitoring and evaluation at a fairly late stage of the drafting process, and the DRF was a novel idea. The DRF has been relatively well-applied in the 7<sup>th</sup> FYP using the learnings from the 6th FYP. However, the lack of quantitative data to serve

as adequate benchmarks has been a significant restriction. As a result, only two specific indicators were added to the DRF, which was then very specifically defined. Table 10.6 represents major projects initiated or completed against each core target under the 7FYP, either led or co-led by the MoEFCC in association with other partner ministries.

**Table 10.6: Environment and Climate Change Related Major Initiatives during 7FYP.**

No.	Target	Projects and Policies Initiated or Completed
1	To attain good governance in environmental sustainability.	<ul style="list-style-type: none"> <li>Climate Finance Governance Improvement Project - the BCCSAP has been updated as part of the policy initiative.</li> <li>Bangladesh Environment Framework (2016-2030).</li> <li>National Capacity Development for implementing Rio Conventions through Environmental Governance.</li> <li>Agro-Meteorological Information System Development Project (July 2017-June 2021)</li> <li>Primary education development programme (July 2011 - December 2017)</li> <li>Enhancement of learning environment of selected madrasas in Bangladesh (2011-2016) Highlighting the initiatives and activities of PM's special contribution "Climate change Trust Fund" Project (March, 2017-June, 2018).</li> <li>Improved monitoring system on mitigation and adaptation initiatives projects.</li> <li>Community Based Adaptation in the Ecologically Critical Areas through Biodiversity Conservation and Social Protection (CBA-ECA) Project.</li> <li>Bangladesh Weather and Climate Service Regional project (to FY22)</li> <li>Strengthening the Metrological early Warning System.</li> <li>Nationwide Climate Vulnerability Assessment (CVA) on Agriculture, Water, Infrastructure &amp; Health Sectors covering the 64 districts and in selected hotspots (coastal, drought prone &amp; flood/flash flood prone areas) under Climate Finance Governance Project of MOEFCC.</li> <li>Preparation of NDC Implementation Roadmap along with Sectoral Action Plan on Power, Industry and Transport sector. (Individual and Institutional Capacity building is an integral part of the NDC Roadmap).</li> <li>Integrating Community Based Adaptation into Afforestation and Reforestation Programmes in Bangladesh.</li> <li>Presentation of weather Information and Early Warning at any Location of Bangladesh by Mobile Application (BMD).</li> <li>Bangladesh: Revision and Alignment of National Action Program (NAP) with UNCCD 10-years Strategic Plan and Framework.</li> </ul>
2	To eradicate extreme poverty and achieve national food security.	<ul style="list-style-type: none"> <li>Agricultural support for smallholder in South west region of Bangladesh (July, 2013-June, 2018)</li> <li>National Agriculture Technology Project-2nd phase, (DAE, BARI, BRRI, BINA, BSRI, BJRI (2015-2021).</li> <li>Establishment of Farmers Service Center and technology transfer at union level pilot project (July, 2016 to June, 2018).</li> <li>Environment friendly safe food production through GAP. (July14-June17)</li> </ul>



No.	Target	Projects and Policies Initiated or Completed
3	To address environmental health.	<ul style="list-style-type: none"> <li>Dissemination of developed technologies of BFRI to the end users.</li> <li>Design and development of bamboo composite furniture and popularization of technology (2015-20).</li> <li>Suitability of manufacturing medium density fiberboard (MDF) from rubber wood (<i>Hevea brasiliensis</i>) and hybrid acacia wood (2014-2020).</li> </ul>
4	To ensure cities are sustainable and more efficient, with development following appropriately structured plans.	<ul style="list-style-type: none"> <li>Climate Finance Governance Improvement Project -</li> </ul> <p>Development of country specific vulnerability indicators and mapping with National and sectoral vulnerability assessment in agriculture, health, water and infrastructure sector.</p>
5	To establish the quality of life for the rural people of all regions.	<ul style="list-style-type: none"> <li>Establishment of Farmers Service Center and technology transfer at union level pilot project (July, 2016 to June, 2018).</li> </ul>
6	To preserve agricultural land and to ensure production growth for food security with minimum environmental degradation.	<ul style="list-style-type: none"> <li>Agricultural support for smallholder in South west region of Bangladesh (July, 2013-June, 2018)</li> <li>National Agriculture Technology Project-2nd phase, (DAE, BARI, BRRI, BINA, BSRI, BJRI (2015-2021).</li> <li>Establishment of Farmers Service Center and technology transfer at union level pilot project (July, 2016 to June, 2018).</li> <li>Enhancement of crop production through improved on Farm Water Management Technologies. (DAE)</li> <li>Safe crop production through Integrated Pest Management (IPM) Approach. (July13-July18)</li> <li>Integrated Farm Management Component, Agricultural Growth and Employment Programme. (July13-June18)</li> </ul>
7	To hold water of wetlands including water bodies and rivers in dry season.	<ul style="list-style-type: none"> <li>Strengthening Monitoring and Enforcement in Meghna River for Dhaka Sustainable Water Supply (01/07/2015-30/06/2017).</li> <li>GIS-based Water quality Monitoring System.</li> <li>Blue Economy Action Plan.</li> </ul>
8	To meet national air and water quality standards.	<ul style="list-style-type: none"> <li>Clean Air and Sustainable Environment (CASE).</li> <li>Strengthening Institutional Capacity to reduce Short Lived Climate Pollution (SLCPs) - Period is missing.</li> <li>Barind Rain Water Conservation and Irrigation Project (March'2011- June'2018) (BMDA).</li> </ul>

No.	Target	Projects and Policies Initiated or Completed
9	To achieve tree cover over 20 percent of the land surface (with tree density > 70 percent) and ecologically healthy native forests are restored and protected in all public forest lands (about 16 percent of land).	<ul style="list-style-type: none"> <li>• Protection of Sundarbans Mangrove Forest, July 2016 to December 2020.</li> <li>• Bangladesh Climate Resilient Participatory Afforestation and Reforestation Project (2nd Revised), July 2012 to December 2016.</li> <li>• Plantation Establishment at Five Coastal Districts of Bangladesh, July 2015 to June 2018.</li> <li>• CDSP -4 (FD Component), January 2011 to December 2018.</li> <li>• UN REDD Bangladesh National Programme (July 2015 to June 2018)</li> <li>• Strengthening National Forest Inventory and Satellite Land Monitoring System in Support of REDD+ in Bangladesh (January 2015 to December 2018)</li> <li>• National Botanic Garden and Baldha Garden Conservation and Development Project, July 2016 to June 2019</li> <li>• CREL Project, July 2014 to June 2018</li> <li>• Establishment of Rangunia Rubber Estate in Chittagong Zone (1st Phase) Duration: July/2012- June/2017.</li> <li>• Pilot plant study and production of cement bonded particle board in small scale industry as an environment friendly durable materials ration. Duration: (July/2011 - June/2018)</li> <li>• Assessment of carbon sequestration in different forest and mangrove species (2012-2017).</li> <li>• Growth performance of bamboo and rattan in the coastal raised lands of Bangladesh (2016-2020).</li> <li>• Plantation techniques of some under storied mangrove associates inside Keora plantations in the coastal belt of Bangladesh (2016-2020).</li> <li>• Extension of dwarf Coconut tree plantation in coastal area. (January16-Dec18)</li> <li>• Eco-restoration in the Northern Region of Bangladesh, July 2015 to June 2019</li> <li>• Selection of drought resistant forest tree species with particular reference to northern region of Bangladesh.</li> <li>• Restoration of degraded Sal forest trough mixed plantation with Sal associates.</li> <li>• Floristic composition and regeneration status of PAs, village common forest in CHT.</li> <li>• Survey on Vascular Flora of Chittagong and the Chittagong Hill Tracts (01/07/2015-30/06/2017).</li> </ul>



No.	Target	Projects and Policies Initiated or Completed
10	To ensure no new extinctions of globally and nationally threatened species.	<ul style="list-style-type: none"> <li>Establishment of regional bamboo research and training center at Domar, Nilphamari (2017-2020).</li> </ul> <p>Artificial inoculation of agar wood (<i>Aquilaria malaccensis</i> Lam.) by Chemical Inducing Agent(s) (2014-2019).</p> <ul style="list-style-type: none"> <li>Production of nano composite from fibers of Acacia hybrid and simul (<i>Bombax ceiba</i>) tree species of Bangladesh (2013-2018).</li> <li>Bangabandhu Sheikh Mujib Safari Park, Gazipur (3rd Revised) March 2010 to December 2017.</li> <li>Bangabandhu Sheikh Mujib Safari Park, Cox's Bazar (1st Revised) July 2012 to June 2017.</li> <li>Establishment of Botanical Garden at Lalmai Hill, July 2015 to June 2018.</li> <li>Tiger Activity / Bengal Tiger Conservation Project, July 2014 to June 2018.</li> <li>National Botanic Garden and Baldha Garden Conservation and Development.</li> <li>Selection of salt tolerant fruit and medicinal tree species in the coastal areas of Bangladesh (2014-2018).</li> </ul> <p>Strengthening Regional Cooperation for Wildlife Protection (01/07/2011-31/12/2016).</p>
11	To meet energy demands of development through a low carbon strategy.	<ul style="list-style-type: none"> <li>Market Development Initiative for Bondhu Chula (ICS).</li> <li>Installation of 70,000 ICS in selected area of Bangladesh - Period is missing.</li> </ul>
12	To reduce potential economic losses due to Climate Change (particularly from floods, drought and salinity).	<ul style="list-style-type: none"> <li>Construction of Bridges/Culverts more or Less 15 meter-long on the Rural Roads. (01/01/2016-30/06/2019)</li> <li>Procurement of Saline Water Treatment Plant for Coastal Region (01/07/2013-31/12/2018).</li> <li>Procurement of Equipment for Search and Rescue Operation for Earthquake and Other Disaster (Phase-2) (01/07/2015-31/12/017).</li> <li>Urban Resilience Project DDM Part. (01/07/2015-30/06/2020).</li> <li>Construction of Multipurpose Cyclone Shelter in the coastal Belt and Cyclone Prone Areas (2nd Phase) (01/07/2013-30/06/2017).</li> <li>Construction of Herring Bone Bond (HBB) Road for sustainable Rural Earthen Roads. (01/07/2016-31/12/2018)</li> <li>Emergency Cyclone Recovery and Restoration Project (ECRRP): Disaster Risk Mitigation and Reduction-Revised (1/08/2008-31/12/2016)-</li> <li>Construction of Flood Shelters in the Flood Prone and River Erosion Areas (2nd Phase) (01/07/2015-31/12/017)</li> <li>Renovation and construction of MujibKella). (01/07/2017-30/06/2020).</li> <li>The Disaster Risk Management Enhancement Project (Component -2&amp; 3). (01/04/2017-30/06/2020).</li> <li>Construction of Flood Shelters in the Flood Prone and River Erosion Areas (2nd Phase) (01/07/2017-31/12/020).</li> <li>Construction of District Relief Godown cum Information Center (1/4/17-30/6/19).</li> <li>Construction of Upazilla Relief Godown cum Information Center (1/4/17-30/6/19).</li> <li>National Resilience Programme Project (1/5/17-31/12/20).</li> <li>Char Development and Settlement Project-4 (Jan11-Dec2016).</li> <li>Establishment of Wireless Broadband Network (December 2017).</li> </ul>

Source: GED and MoEFCC.

## 10.4 Disaster Management during the 7<sup>th</sup> FYP

### 10.4.1 Disaster Management Progress during the 7<sup>th</sup> Plan

Bangladesh remains one of the most disaster-prone countries in the world, experiencing storm surges, floods, tropical cyclones, and droughts. Between 1991 and 2018, Bangladesh faced 191 big disasters caused by climate change according to the report of Global Climate Risk Index 2020. The Government of Bangladesh estimated in 2015 that damages from five major natural disasters since 1998 amount to roughly 15 percent of GDP, and this loss is likely to increase unless policies and investments are made to manage the problem. Environmental risks brought on by economic activity and climate change have serious effects on public health as well. For example, rising temperatures breed new pests and disease vectors, while air pollution and health risks like malaria and dengue plus water borne diseases hinder health conditions. A wide view of the situation shows that credible economic success comes from proactive investments to control stress and potential disruption.

Bangladesh has taken many initiatives to go green during the tenure of the 7<sup>th</sup> FYP and has already attained a good degree of climate resilience, especially in mitigating and adapting to natural disasters. It has done so by mobilizing critical investments in climate resilient technologies and infrastructure while acknowledging the need for turning into a climate-resilient and environmentally sound country.

Moreover, Bangladesh's hydro-geological features substantially enhance its vulnerability to disasters and climate change, as 88 percent of the country consist of floodplain. Also, due to the Ganges-Brahmaputra-Meghna (GBM) river basin, this region drains over 92 percent of the monsoon rainfall runoff generated in the combined catchment are within a short span only of 4 and a half months (June to mid-October). During the peak of the monsoon, neap tides are high enough to penetrate coastal plains, and owing to an inverted funnel-shaped shoreline, and in the path of storms and surges from the Indian Ocean, the country remains vulnerable to cyclonic disasters.

The country is also exposed to severe natural hazards and more than 1 percent of its GDP is lost annually for disasters. Climate change is exacerbating the disaster intensity and frequency in the country in the form of temperature extremes, erratic rainfall, intensified and increased number of floods, drought-like situation, cyclone, salinity intrusion, etc. These climatic disasters not only lead to loss of lives and livelihood, it is consequently affecting economic development of the country.

The disaster relevant targets, specific objectives and project during 7FYP have been shown in Table 10.7. Some mentionable projects include - construction of multipurpose cyclone shelters in coastal areas and construction of flood shelter in flood prone areas across the country, which fall within the category of strong CC relevance. Similarly, Cyclone Preparedness Programme (CPP) belongs to the strongly relevant category, while employment scheme for extremely poor people project belongs to the significantly relevant category. Urban Resilience Project and Procurement of Rescue Equipment fall within the category of somewhat relevant. Together all these projects and programmes have been grouped under comprehensive disaster management.

**Table 10.7: National Legislations and Policies Related to Disaster Management during the 7<sup>th</sup> FYP**

Policy Document	Description
National Plan for Disaster Management, 2008-2015	Calls for comprehensively addressing DRR and CAA in all development plans, programmes, and policies through assessing climate change risk, emphasizing community-based programmes, building public awareness, improving early
National Disaster Management Policy 2015	Defines the national perspective on disaster risk reduction and emergency management, and to describe the strategic framework, and national principles of disaster management in Bangladesh.
National Plan for Disaster Management 2016-2020	Updates NPDM 2008-2015
Standing Order on Disasters, 2019	Works to make relevant persons understand and perform their duties and responsibilities regarding disaster management at all levels.

**Table 10.8: Performance Indicators for Disaster Management and Relief Ministry/Sector**

Objectives	Specific Sectoral Performance Indicators	Baseline Data (FY15)	7FYP Target (FY20)	Actual Data (FY20)
To reduce the risk of people, especially the poor and the disadvantaged, from the effects of natural, environmental and human induced hazards, to a manageable and acceptable humanitarian level, and to have in place an efficient emergency response system capable of handling large scale disasters	Number of usable cyclone shelters	3,847 (2014)	4,847	4,530 <sup>54</sup>
	No. of rural communities with disaster resilient habitats and community assets	18,700 (2015)	25,000	
	Increase the number of housing with disaster resilient habitats and community assets			70,000

Source: MoDMR.

#### 10.4.2 Major Initiatives, Measures and Activities for Disaster Management during the 7<sup>th</sup> Plan

The primary objective of disaster management during the 7FYP was to enhance reaction and capability by building on prior achievements and the numerous government-adopted methods. One of the main sub-goals of the “Vision 2021” is “Effective Disaster Management,” which emphasises on seasonal flood and drought mitigation, the establishment of an efficient early warning and evacuation mechanism, and the creation of a natural disaster insurance programme to cover the resulting property damage. Some specific activities that were under taken by the MoDMR during 7FYP include:

- Nearly 8 million rural labours were provided employment under the ‘Employment Generation Programme for the Poorest (EGPP)’, which helps to address the rural poverty.
- The Government distributed food grains to more than 2.1 million beneficiaries under the Humanitarian Assistance Programme, while thousands received CI Sheets to develop homes lost in natural disasters like storms.
- Under the Vulnerable Group Feeding (VGF) Programme, food grains have been distributed to more than 8 million beneficiaries.
- Winter clothes (blankets) have been distributed among large group of beneficiaries.

<sup>54</sup> [https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202211020942---National%20Adaptation%20Plan%20of%20Bangladesh%20\(2023-2050\).pdf](https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202211020942---National%20Adaptation%20Plan%20of%20Bangladesh%20(2023-2050).pdf)

- Under the FFW/ MFW Programmes, a wide array of projects has been implemented by more than 8 million rural labourers.
- Under the Test Relief (TR) Programme, a wide array of projects was implemented by more than 10 million rural labourers.
- In 6 Haor districts affected by flash floods, both food and income support were given to affected families.
- Among people affected by the hill slides, rice and CI sheets were distributed to rebuild their homes. More than 200,000 solar panels were installed across rural households and more than thirty thousand solar street lights in rural streets and hat-bazars have been installed.
- Four guidelines for Risk Reduction have been developed as of 2020 as mentioned in revised Standing Orders on Disaster (SoD).
- Development of a pro-poor climate change management strategy: A pro-poor Climate Change Management strategy has been implemented emphasising on adaptation, resilience building, disaster risk reduction, low carbon development, green technology and R&D.
- Mainstreaming climate change and disaster risk management agenda into national planning: In particular, the GoB is committed to promoting a whole of government approach to address climate change related risks. Local Government Division also mainstreamed climate change into 72 most climate vulnerable and their adaptive capacity against salinity, cyclone, flash flood and floods in coastal, haor and charlands. In addition, the Standing Order on Disaster is revised to address new risks including earthquake, urban disasters following the same principle of whole of society approach.

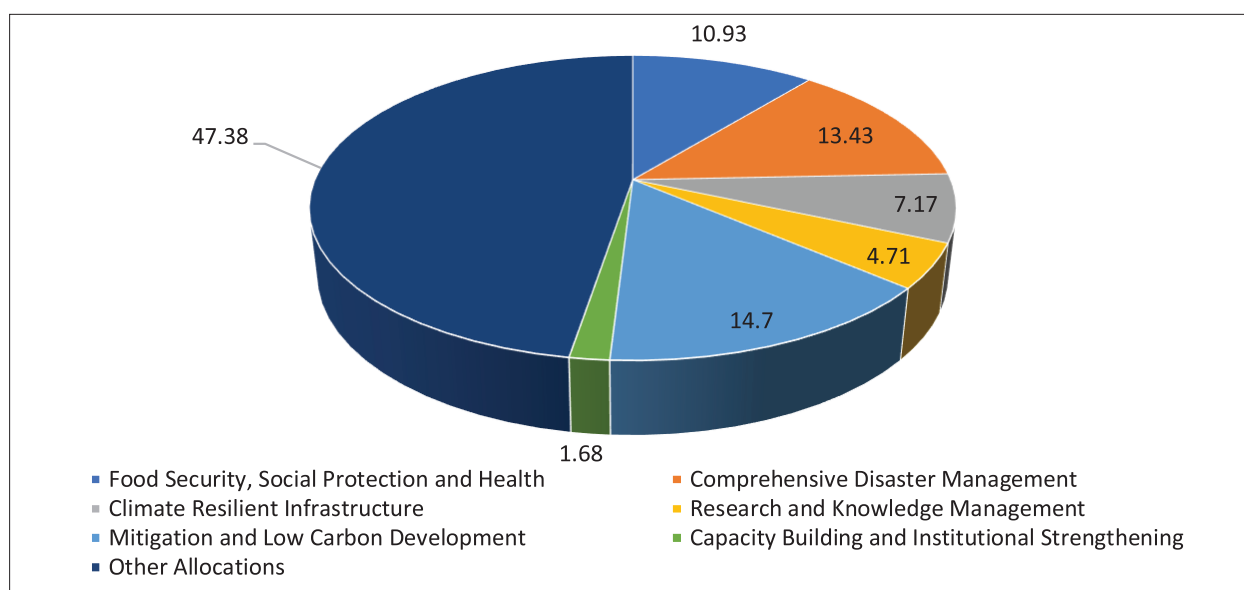
## 10.5 Development Resource Allocation in 7FYP

### 10.5.1 Climate Budget Implementation Status

This section of the chapter aims at reviewing the climate related budget allocation and expenditure trend of 25 Ministries/Divisions which have climate actions and priorities of varying scale covering mainly the 7FYP's period. The total budget allocation for these 25 Ministries/Divisions accounted for 50.20 percent of the national budget of FY20. The review was carried out using a comprehensive methodology developed bearing in mind the implications of climate change adaptation and mitigation in climate finance. In addition, trend of allocation in Bangladesh Climate Change Strategy and Action Plan (BCCSAP) thematic areas for the 25 ministries and specifically for the MoEFCC have also been discussed and represented with data tables.

Figure 10.3 illustrates percentage of CC allocation in different thematic areas in FY20. Out of the CC relevant allocation, comprehensive disaster management received the highest allocation of 13.43 percent of the ministry budget followed by food security, social protection and health with 10.93 percent receipt.

**Figure 10.3: Climate Relevance as Percent of MoEFCC Budget for FY20**



Source: Finance Division, Ministry of Finance

As per Table 10.9, the climate relevant allocation as percentage of total budget of 25 Ministries/Divisions for FY20 has declined to 6.83 percent of total budget as compared to last year's allocation of 7.80 percent. This may be due to the budget's significant provisions for preparedness and risk-reduction measures against the COVID19 pandemic and potential post-economic recovery.

**Table 10.9: Trend of Climate Relevance in Selected Ministry (25) Budget**

Budget Description	Annual Actual Expenditure (In Lakh Taka)			
	FY17	FY18	FY19	FY20
<b>Non-Development Budget/ Operating Budget</b>	<b>9,977,990.00</b>	<b>10,811,570.00</b>	<b>13,274,940.00</b>	<b>13,745,278.00</b>
<i>Climate relevant allocation</i>	570,280.00	6,655.70	880,400.00	796,854.00
<i>As percent of non-development</i>	5.7	6.20	6.60	5.80
<b>Development Budget</b>	<b>7,782,900.00</b>	<b>95,031.80</b>	<b>125,812.90</b>	<b>12,515,599.00</b>
<i>Climate relevant allocation</i>	577,640.00	7,673.30	11,332.90	995,496.00
<i>As percent of development budget</i>	7.4	8.10	9.00	7.95
<b>Total Budget</b>	<b>17,760,890</b>	<b>20,314,750</b>	<b>25,856,230</b>	<b>26,260,877</b>
<i>climate relevant allocation</i>	1,147,920	1,432,900	2,013,690	1,792,350
<i>As percent of total budget</i>	6.5	7.1	7.80	6.83

Source: Finance Division, Ministry of Finance

The primary reason behind the inadequate performance of environmental protection is the lack of financial resources. Even as late as FY20, the MoEFCC, the coordinating ministry in charge of overseeing the national environmental programmes, had barely spent any direct funds; the budgeted amount was just approximately 0.05 percent of GDP. The primary ministries' combined public spending on services connected to the environment, land use, and water make up around 0.39 percent of GDP. The ability of government institutions to support a wide range of actions for effective environmental management and carry out programmes for coping with climate change is severely constrained by the lack of resources.

## 10.6 Green Growth Strategy and Green Climate Fund

Bangladesh Bank (BB) has taken a number of rigorous initiatives to make its in house operational activities more environment friendly, energy efficient and technologically advanced. A revolving refinance scheme of BDT 2 billion was established in 2009 with a view to broaden finance for green products or initiatives at lower cost of fund which increased to 4 billion subsequently. Initially, 6 green products or initiatives were identified to extend the refinance facility under this scheme. Later on, considering the market demand and expert opinions from the technical advisory committee, time to time experts and stakeholders' consultations, BB has enhanced the eligible green products/initiatives for refinance under the scheme from 6 to 55 till FY20. Total amount of BDT 476.8 million has been utilized from climate risk fund by banks and NBFIs in FY20. This amount of money has been utilized as grant and no concessional loan.

Table 10.11 shows the total green finance in FY20 where Private Commercial Banks (PCBs) contributed the most with 65.78 percent contribution as share of the total bank's contribution. The total amount of disbursement as green finance during FY20 has been BDT 105.9 billion by Banks and BDT 5.3 billion by NBFIs.

**Table 10.10: Contribution of Different Types of Banks and FIs in Total Green Finance in FY20**

(in million Tk)

Types of Bank/FI	Category of Green Finance								Total
	Renewable Energy	Energy Efficiency	Alternative Energy	Waste Management	Recycling & Recyclable Product	Green Brick Manufacturing	Green Establishment	Misc.	
SOCBs (06)	7.48	0.00	0.00	660.05	290.85	363.25	579.85	7.43	1,908.91
DFIs (02)	8.33	0.00	0.00	0.01	0.00	0.00	0.00	1.49	9.83
PCBs (40)	1,979.41	6,398.37	10.08	8,878.87	8,298.55	8,402.90	3,2737.93	2,962.65	69,668.75
FCBs (09)	608.60	327.70	0.00	283.80	4.60	0.00	33,072.40	35.59	34,332.69
<b>Bank's Total</b>	<b>2,603.83</b>	<b>6,726.07</b>	<b>10.08</b>	<b>9,822.72</b>	<b>8,594.00</b>	<b>8,766.15</b>	<b>66,390.18</b>	<b>3,007.16</b>	<b>1,05,920.18</b>
FIs (33)	942.36	2,819.03	6.00	240.00	272.69	432.13	350.00	233.00	5,295.20
<b>Grand Total</b>	<b>3,546.19</b>	<b>9,545.09</b>	<b>16.08</b>	<b>10,062.72</b>	<b>8,866.69</b>	<b>9,198.28</b>	<b>66,740.18</b>	<b>3,240.16</b>	<b>1,11,215.39</b>

Source: Annual Report, Bangladesh Bank.

**Table 10.11: Contribution of Different Types of Banks and FIs in Total Green Finance (Percent)**

Type of Banks/FIs	FY14	FY15 (Base Year)	FY16	FY20
<b>SCBs</b>	1.2	0.9	0.6	1.72
<b>DFIs</b>	0.7	0.1	0.01	0.01
<b>PCBs</b>	72.8	78.6	80.4	62.64
<b>FCBs</b>	21.4	15.4	15.6	30.87
<b>NBFIs</b>	4	5.1	3.4	4.76
<b>Total</b>	100	100	100	100

Source: Annual Report, BB.

### 10.6.1 Policy Initiatives for Green Financing during 7FYP

During the 7FYP, several initiatives have been undertaken to promote green financing. These are as follows:

- In 2014, the minimum target of direct green finance was set at 5 percent of the total funded loan disbursement/investment from January 2016 onwards for all banks and FIs.



- In 2015, a GBCSRD circular (No. 04/2015), banks and financial institutions (FIs) were instructed to form Climate Risk Fund and allocate at least 10 percent of their Corporate Social Responsibility budget for this fund. This funding can be done in both ways-by providing grants or financing at a reduced rate of interest.
- In 2016, Banks and financial institutions were instructed to form Sustainable Finance Unit and Sustainable Finance Committee abolishing both Green Banking and CSR units.
- In 2017, a) Guidelines on Environmental and Social Risks Management (ESRM) for Banks and Financial Institutions in Bangladesh along with an Excel-based Risk Rating Model was issued to evaluate Environmental and Social Risks in the process of Credit Risk Management (SFD Circular No. 02); b) A comprehensive list of product/ initiatives of Green Finance has been circulated for banks and FIs (SFD Circular No. 04).
- In 2018, a new uniform reporting format of Quarterly Review Report on Green Banking Activities had been circulated for Banks & FIs to monitor green banking policy & other regulations and to ensure the quality & uniformity of data provided by Banks & FIs.
- In 2019, according to SFD Circular No. 01, investment by scheduled banks and FIs in any impact fund which is registered under the BSEC (Alternative Investment) Rules, 2015 and formed for environment friendly sectors/purposes having scopes of resource and energy efficiency, renewable energy, waste management and treatment, climate friendly transportation, women and child right protection etc. will be considered as green finance.

#### 10.6.2 Green Transformation Fund (GTF)

The latest step of Bangladesh bank in fostering sustainable finance is to create the Green Transformation Fund. In February 2016, BB announced its intention to create a new long-term refinancing window of USD 200 million naming Green Transformation Fund (GTF). Though initially the fund was available only for export-oriented textile, leather and jute sectors, it became available for all export-oriented sectors by June, 2019. The fund's initiatives include water use efficiency in wet processing, water conservation and management, waste management, resource efficiency and recycling, renewable energy and energy efficiency, heat and temperature management, air ventilation and circulation efficiency and work environment improvement initiatives (FE circular no. 02/2016). In April, 2020 Euro 200 million along with the existing USD 200 was introduced in GTF. The disbursement from GTF up to FY20 was USD 410.3 lac in 7 projects.

#### 10.7 Challenges and Implementation Gaps

Bangladesh is one of the most disaster-prone countries in the world and is particularly susceptible to the effects of climate change due to its geographic location. The country is low-lying and flat, with huge inland waterways that include some of the world's largest rivers. Since 80 percent of the year's precipitation falls during the monsoon season, flooding is a yearly occurrence. The populace is somewhat accustomed to dealing with the effects of the annual rain, but occasionally the flooding is so severe that it affects millions of homes. Bangladesh has to deal with tropical storms and cyclones, often amounting to two to three per year, in addition to flooding, droughts, and earthquakes.

Despite being rich in natural resources, Bangladesh faces several environmental challenges that threaten its sustainable development and the well-being of its population. The challenges are –

- **Climate Change:** Bangladesh is one of the most vulnerable countries in the world to the impacts of climate change. The country is located in the low-lying delta region and is prone to sea-level rise, cyclones, and tidal surges. These impacts result in severe flooding, loss of agricultural land, and displacement of people. The country is also facing the threat of drought, which is expected to increase in frequency and severity as a result of global warming.



- **Water Pollution:** Bangladesh has a high population density but inadequate water treatment facilities. This has resulted in widespread water pollution, affecting the quality of drinking water and causing waterborne diseases. The country is also facing the problem of arsenic contamination of groundwater, which is affecting millions of people.
- **Deforestation:** Bangladesh has a high demand for timber and fuelwood, which has led to widespread deforestation. The country has lost more than 70 percent of its forest cover, leading to soil erosion, loss of biodiversity, and increased vulnerability to natural disasters such as landslides and flash floods.
- **Air Pollution:** Bangladesh is facing a growing problem of air pollution, caused by emissions from vehicles, industries, and brick kilns. This is affecting the health of the population, particularly in urban areas, and contributing to climate change.
- **Soil Pollution:** Soil pollution is another challenge caused by the indiscriminate use of pesticides and fertilizers. This is affecting the quality of agricultural land and reducing the productivity of crops.
- **Plastic Pollution:** Bangladesh is facing a growing problem of plastic pollution, with plastic waste clogging rivers, blocking drainage systems, and contaminating soil and water. The country has limited capacity for waste management, which exacerbates the problem of plastic pollution.

Even though several policy measures have been initiated or amended during the 7<sup>th</sup> FYP, the abovementioned challenges remain concern due to the following implementation gaps such as:

### **Environmental Management**

The pricing policies of energy heavily subsidize carbon-emitting fossil fuels that have not only created tremendous budgetary burdens, but also contributed to air and water pollution resulting in significant amount of health expenditure. However, all these reforms must end up financing environmental management sufficiently.

### **Capacity Challenges for Climate Change Mitigation**

Lack of consistent archiving of data on mitigation, e.g. from NDC, National Communications, other reports etc. Lack of data, data not statistically robust, reliance on extrapolation and interpolation. Modelling capacity Lack of capacity on key modelling approaches, such as Marginal Abatement Cost Curves, the LEAP model etc.

### **Limited Technical Capacity**

There are limited local manufacturing facilities and capacity, as well as limited technical capacity to design, install, operate, manage and maintain renewable energy and energy efficiency services.

## **10.8 Conclusions and Way Forward**

Being highly vulnerable to climate change impacts such as sea-level rise, cyclones, tidal surges, and drought, Bangladesh's problems such as severe flooding, agricultural land loss, displacement, and increased risks etc. have been major challenges. Besides, inadequate water treatment facilities and Arsenic contamination of groundwater contribute to widespread water pollution. High demand for timber and fuelwood has led to extensive deforestation, resulting in soil erosion, biodiversity loss, and heightened vulnerability to natural disasters. Air pollution, primarily from vehicle, industrial, and brick kiln emissions, adversely affects public health and contributes to climate change. While soil pollution caused by indiscriminate pesticide and fertiliser use hampers agricultural land quality and crop productivity, increased plastic pollution along with plastic waste blocking rivers, have contributed to low waste management capacity compared to increased amount of problems.

Challenges persist due to implementation gaps. Energy pricing policies heavily subsidise carbon-emitting fossil fuels, leading to budgetary burdens and air and water pollution. Sufficient financing for environmental management is crucial. Inadequate data archiving and statistical robustness hamper climate change mitigation efforts. Insufficient modeling capacity, such as Marginal Abatement Cost Curves and the LEAP model, poses challenges. Limited local manufacturing, technical capacity, and expertise hinder the design, installation, operation, management, and maintenance of renewable energy and energy efficiency services. Addressing these issues and adequately financing environmental management are vital for Bangladesh to mitigate climate change impacts and address environmental challenges effectively.

However, the country has been actively engaged in various capacity building measures to address environmental management challenges. The government, in collaboration with international organizations and development partners, has implemented several initiatives to strengthen environmental management capacity across different sectors.

Bangladesh has formulated and implemented several environmental policies, laws, and regulations during the 7FYP to guide environmental management practices. The Ministry of Environment, Forest, and Climate Change (MoEFCC) is the primary government body responsible for overseeing environmental issues and implementing policies. Besides, the country has collaborated with international organisations and development partners to strengthen its capacity in environmental management. The country has participated in regional and international forums, sharing experiences, and learning from global best practices.

Given Bangladesh's vulnerability to climate change impacts, the government has focused on building capacity for climate change adaptation and mitigation. Efforts have been made to enhance understanding, planning, and implementation of climate change-related policies and projects. Capacity building efforts have also targeted local communities to raise awareness about environmental issues and promote sustainable practices. Community-based organisations, NGOs, and government initiatives have been instrumental in engaging communities and fostering environmental stewardship.

Bangladesh currently stands at the crossroads of accelerated economic growth while ensuring sustainability. It is time to minimize environmental damage and use its natural resources efficiently by adopting a sustainable growth path. The following section provides a set of policy recommendations for ensuring environmental health and mitigating climate change issues. These recommendations are in line with the 8FYP, BDP2100, and PP2041.

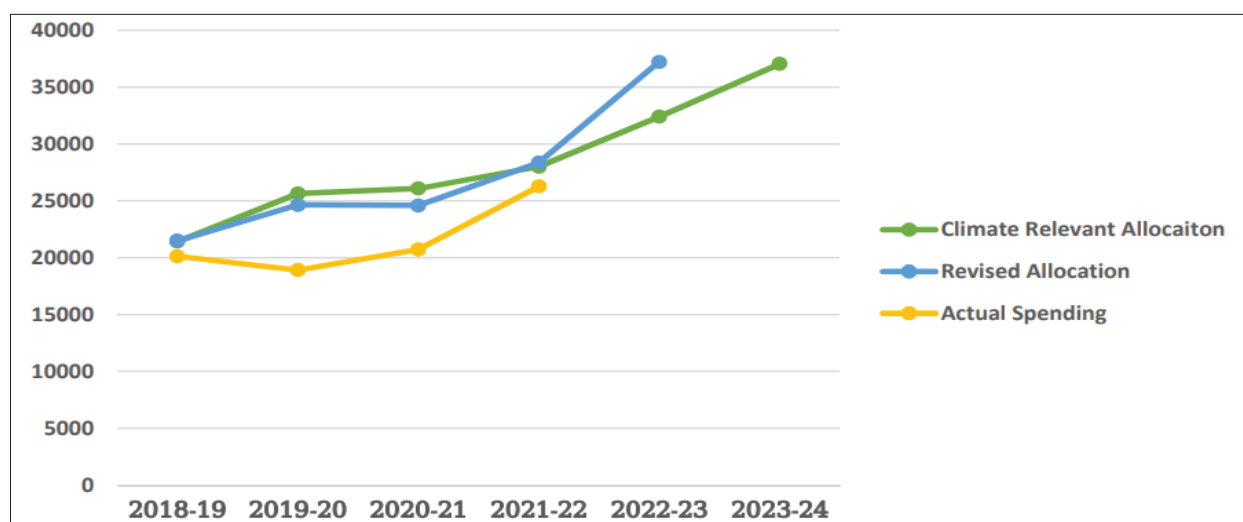
### **Fast Tracking Resource Mobilization for Climate Change Trust Fund**

To strengthen the Climate Change Trust Fund (CCTF), it has been proposed to mobilize Tk 8000 crore during the 8FYP period. Fast tracking the resource mobilization and proper utilization of resources will greatly help undertake the support programmes for adaptation and mitigation. In this context, the Bangladesh Climate Change Trust (BCCT) - the Government body that overlooks the utilization of the CCTF – should proactively explore international partnership with the leading organizations undertaking climate change adaptation and mitigation activities. Such partnerships will help draw lessons from the cross-country perspective and help generate innovative projects tailored to undertake effective measures against climate change.

### **Enhancing the Climate Budget Utilization Capacity**

From FY2019-20 to FY2023-24, there has been a 1.44-fold increase in climate allocation (Figure 10.4). The expenditure against climate-relevant allocation for Ministries/Divisions has shown positive progress, with the actual expenditure reaching 76.73 percent in FY2019-20 and further increasing to 92.64 percent in FY2021-22. This gap in allocation and actual spending needs to be carefully reviewed to find the utilization gaps. This can help undertake informed policy action to improve the budget utilization capacity of the relevant line ministries.

**Figure 10.4: Climate Relevant Allocation and Expenditure of 25 Ministries/Divisions (FY19-FY24)**



Source: Finance Division, Ministry of Finance

### Utilising the Green Climate Fund (GCF)

Currently, the GCF serves as the primary mechanism for mobilizing international climate finance. To access the Fund, member countries are required to designate a National Designated Authority (NDA) responsible for operating the Fund and supporting the National Implementation Entity (NIE) or Multilateral Implementation Entity (MIE). In Bangladesh, the Economic Relations Division (ERD) of the Ministry of Finance has been assigned as the NDA. Presently, only two national entities, namely the Infrastructure Development Company Limited (IDCOL) and Palli Karma Sahayak Foundation (PKSF), have been accredited as NIEs to collaborate with the GCF. As of April 2023, Bangladesh has secured financing for six projects, amounting to a total support of US\$ 553.01 million. Looking ahead to the 8<sup>th</sup> Five Year Plan (8FYP), it is advisable to take proactive measures to expedite the accreditation of additional NIEs, thereby expanding the country's access to GCF funding.

### Capitalising Most of the LDC-Specific Funds and Other Funds for Building Climate Resilience

There are several funds that support LDCs exclusively for climate adaptation and mitigations. When Bangladesh graduates from the group of least developed countries in 2026, the country would no longer be able to access the LDC-specific funds except in cases where the financing facility offers a temporary post-graduation transition period. For example, the Least Developed Countries Fund (LDCF), which was established in 2001 under the United Nations Framework Convention on Climate Change (UNFCCC), is used to address the needs of LDCs whose economic and geophysical characteristics make them especially vulnerable to the impact of global warming and climate change. Bangladesh will lose access to new funding from the LDCF once it graduates, but projects already approved by the LDCF Council prior to a country's graduation will continue to be supported with agreed LDCF resources until completion.. Bangladesh should utilise most of these resources to build climate resilience. It should seek additional funds from bilateral/ multilateral partners and international development organisations for investing in climate adaptation and mitigation.

### Institutional Capacity Building for the Implementing Agencies

All levels of government must focus on building institutional and policy capacity for sustainable water and land management, biodiversity preservation, climate resilient development, and disaster management, with a particular focus on local governments where the majority of the programmes will be implemented. The

government should start developing concrete measures to deliver the possibilities for mitigation identified by the aforementioned analysis. Understanding policy measures like feed-in tariffs, efficiency standards, green procurement, etc. would be necessary for this. In addition to having knowledge of these policy options both inside and outside of government, the government must seek out additional opportunities to broaden understanding of them through technical cooperation with other nations to exchange best practices and experiences and introduce pertinent training programmes. The MoEFCC should seek and introduce international support for a capacity building project to build understanding of key mitigation modelling techniques and methodologies among the officials of key sectoral ministries and agencies.

### **Promoting Renewable Energy**

It is important to prioritize the increase of renewable energy generation as part of its commitment to reducing CO<sub>2</sub> emissions. This is also emphasized in the 8<sup>th</sup> Five Year Plan (8FYP) which has set a target generate about 3700 MW of power from renewable energy. To achieve this, Bangladesh must explore and adopt new technologies that can effectively reduce costs and enhance the utilization of renewable energy options. Incentives should be provided to Independent Power Producers (IPPs) to encourage and facilitate their investments in renewable energy production. Additionally, Bangladesh should implement incentives for households to embrace and utilize renewable energy solutions. The expansion of the work program of the Infrastructure Development Company Limited (IDCOL) is essential in order to effectively promote and facilitate the adoption of renewable energy in various economic activities across the country.

### **Green Transformation of Major Sectors**

There is ample scope of driving green transformation of the manufacturing, industry, and agriculture sectors. The manufacturing and industry sectors are significant contributors to greenhouse gas emissions and environmental degradation. Encouraging sustainable manufacturing practices, including resource efficiency, waste reduction, and pollution control, is vital. Implementing cleaner production technologies, promoting circular economy principles, and adopting sustainable supply chain practices can minimize the sector's environmental impact. Furthermore, incentivizing the adoption of cleaner technologies and supporting research and development in eco-friendly manufacturing processes can drive the green transition.

The agriculture sector faces challenges related to climate change impacts and environmental sustainability. Promoting climate-smart agriculture practices, including efficient irrigation systems, agroforestry, and organic farming, can reduce emissions, enhance resilience, and protect natural resources. Emphasizing sustainable land management, promoting sustainable aquaculture, and reducing agrochemical usage are essential for the sector's green transition.

### **Pursuing Technology Transfer with Development Partners**

Given the current situation, Bangladesh has the opportunity to forge partnerships with developed countries to facilitate technology transfer and enhance its capacity in utilizing environmentally friendly technologies. Firstly, prioritizing capacity building initiatives tailored to the country's climate change context will strengthen technical skills and knowledge in environmentally friendly technologies. Training programs should focus on technology operation, maintenance, and system integration, equipping individuals and institutions with the necessary expertise to adopt and utilize these technologies. Secondly, forging partnerships with developed countries, international organizations, and research institutions will provide access to expertise and resources for technology transfer. Collaborative initiatives can facilitate the exchange of knowledge and best practices, enabling Bangladesh to acquire the required technologies and know-how to effectively address climate challenges. Furthermore, strengthening policy and regulatory frameworks will incentivize technology transfer and safeguard intellectual property rights. Aligning national policies with the objectives of climate funds, streamlining regulatory processes, and fostering an enabling environment for technology adoption will attract private sector involvement and spur innovation. Also, regular monitoring and evaluation

mechanisms are crucial to assess the impact and effectiveness of technology transfer and capacity building initiatives tied to climate funds. By monitoring the adoption and utilization of transferred technologies and evaluating capacity-building programs, Bangladesh can identify areas requiring additional support and make informed improvements.

### **Good Governance and Coordination for NDC Implementation**

The governance arrangements for driving forward and coordinating NDC implementation are set out in the NDC Implementation Roadmap. As explained in the NDC Implementation Roadmap, the aim is to include and integrate NAP implementation side by side with NDC implementation under one single framework. Good governance should be ensured in the NDC implementation Power Sector Working Group. Coordination for the policy response and working with all power sector stakeholders is necessary for this. Reporting to the NDC implementation technical committee should be properly monitored and liaison with the committee should be maintained. Most importantly, ensuring adequate capacity development for smooth NDC implementation should also be taken care of at the same time.

### **Disaster Risk Financing**

Till now, financing for disaster risk management has been largely focused on relief assistance through various social safety nets, and disaster risk reduction funding largely financed through international cooperation. Disaster risk finance can be an effective way of protecting livelihoods and development of the national and subnational governments, private sectors, and the vulnerable communities against natural disasters through implementation of sustainable financial protection policies. Therefore, there is an urgent need to develop relevant policies and strategies based on risk financing experiences in other regions of the world, paving way to have different disaster risk financing models and tools in place.

### **Increasing Energy Security and Industrial Efficiency**

The Energy Efficiency and Conservation Master Plan aims to reduce primary energy consumption per GDP for all sectors. A major contribution needs to come from industry – accounting for around 50 percent of primary energy consumption. Industries must be obliged to introduce an energy management system. Implementing low-interest government loans for energy-efficient manufacturing procedures will improve industrial energy efficiency, which will help to reduce energy consumption.

### **Prioritising National Biodiversity Strategy and Action Plan (NBSAP) Implementation Based on SDG Targets**

The NBSAP serves as a manual for managing the nation's biodiversity, and the Biological Diversity Act requires that it should be amended and updated on a regular basis. It is need important to align the future development projects and programmes with the NBSAP's 2016-2021 targets, which are also connected to the Sustainable Development Goals (SDG) targets.

### **Developing Database for Tracking Progress**

To preserve all data relevant to mitigation in one location, MoEFCC and DoE should start an electronic data archiving system. To identify the gaps and shortcomings and to assist in the development of more reliable data, the MoEFCC should look to foreign assistance for a thorough data analysis across all sectors (e.g., through primary data collection surveys).

### **Promoting Climate-Smart Trade and Investment**

In the context of climate change and disaster risk reduction, Bangladesh can promote climate-smart trade and investment by integrating climate considerations into its policies and strategies. This approach is crucial for building resilience, reducing vulnerability, and ensuring sustainable development. By encouraging climate-smart trade, Bangladesh can prioritize industries that adopt sustainable practices, reduce carbon emissions,

and promote environmental conservation. This includes supporting sectors such as renewable energy, eco-friendly agriculture, and sustainable manufacturing. Promoting these industries not only contributes to climate change mitigation but also enhances the country's competitiveness in international markets. In terms of investment, Bangladesh can attract climate-smart investments by providing incentives and creating a favorable business environment. This can involve offering tax benefits for renewable energy projects, establishing green investment funds, and streamlining regulatory processes for climate-resilient initiatives. Climate-smart investments can support the development of infrastructure, technologies, and practices that enhance disaster resilience and adaptation to climate change impacts.

**STRENGTHENING PUBLIC  
ADMINISTRATION, PUBLIC  
INSTITUTIONS AND  
GOVERNANCE**

**CHAPTER**

**11**





## 11.1 Introduction

Historical and comparative development experiences suggest that long-term developmental transformation from low-income or lower-middle-income country (LMIC) status to upper-middle-income country (UMIC) status and eventually high-income country (HIC) status has only been possible when policymakers formulated and invested in developing effective institutions within the economic and political spaces that allowed markets to function efficiently and the state to mobilize resources for delivering necessary public goods. Hence, it can be stated that UMICs' and HICs' governance and institutional structures are generally different from those of low-income and LMICs. The literature on institutional economics shows that better-performing economic and political institutions are crucial for long-term growth because they shape economic actors' incentives by rewarding efficiency, competitiveness, stability, and creativity in the economy.

Perspective Plan 2041 (PP2041) emphasizes the importance of institutional and governance improvements in addition to the maintenance of macroeconomic stability, the mobilization of sufficient resources for high-quality human capital and critical infrastructure, and the development of necessary manufacturing and service sectors to serve the global market. Hence, the Government has targeted key institutional and governance improvements under the 6th and 7<sup>th</sup> Five-year Plans to mobilize physical and human capital investments, foster innovation and technological advances, and organize production systems to achieve long-term rapid economic transformation. The Seventh Five Year Plan (7FYP) outlined a focused intervention to address current issues and designated key areas for institutional reforms. These areas included public management, judiciary, financial, and local government reforms. The 7FYP's slogan, "Accelerating Growth, Empowering Citizens," emphasized the freedoms of citizens. The "theory of change" of the 7FYP governance model asserts that improving and strengthening institutions would accelerate economic growth and poverty reduction, build assets and capabilities, empower the poor, and drive demand for better living standards and good governance.

The government's attempts to put into effect Vision 2021 and the accompanying PP2021 were continued with the adoption of the 7FYP in July 2015. This chapter provides an overview of the 7FYP's implementation with the goals of highlighting its major accomplishments and progress and identifying the areas of public administration, public institutions, and governance where implementation gaps and challenges have been identified.

## 11.2 Objectives, Targets and Strategies of 7FYP for Good Governance within Key Areas:

### 11.2.1 Key Area 1: Justice and Rule of Law

The main responsibilities of Judiciary are to ensure that all people could live safely under the rule of law, support human rights within the legal function, and apply the law fairly and equitably between individuals and the state. The 7FYP outlined practical steps to enhance institutional performance in the judiciary. Improving administrative procedures to halt growth of backlog cases in formal justice institutions, ensuring judicial independence, prioritizing the case of violence against women by local courts, scaling up and strengthening village courts through creating a national strategy and funding plan to increase access for the poor as a part of the improvement of informal legal institutions, enhancing National Legal Aid Services Organization (NLASO) capacity as a plan for engaging with NGOs and other government agencies to promote access to justice, etc. are all aspects of the improvement of formal justice institutions. It was widely agreed that modernizing the judicial system through digitization was necessary for the sake of public security, criminal accountability, crime reduction, and community building. It was also envisioned that a database would be created and used to store information on criminals, prisons, and other relevant topics.

### 11.2.2 Key Area 2: Public Sector Capacity: Administrative Capacity and Financial Management

- **Public Administration Capacity:** Reforming civil servants' performance evaluation with a focus on establishing clearer annual work objectives and performance on these objectives was viewed as crucial under the "Public Service Act 2018". Furthermore, ensuring improved service delivery to the people was also crucial.
- **Reform the Public Service Commission:** The government intended to maintain transparency in the appointment procedure, have budgetary autonomy, and ensure transparency in government's overall activities. Over the course of the 7FYP's time frame, the Government planned to take all necessary steps to establish the Annual Performance Agreement (APA) as a reliable institutional arrangement for raising the level of effectiveness and accountability throughout the public sector and among government employees. The main goal of APA was to implement a methodical procedure for controlling and observing function, behavior and work environment of various public sector organizations.
- **Public Financial Management:** Measures for enhancing the government's effectiveness in public financial management under 7FYP included concurrent enhancement of public investment management and financial management, the institutionalization of a more strategic and policy-based approach to budgeting in Medium Term Budgetary Framework (MTBF), transparency in budget execution and audit systems.

### 11.2.3 Key Area 3: Improving Economic Governance

Between 2009 and 2014, the financial sector in Bangladesh was confronted with some critical challenges including a major setback in the stock market and some large irregularities in the banking sector. Also, the country needed improvement in the tax-administration and institutional quality in the tax system to address the problems of tax-evasion. Therefore, under the 7FYP, the government intended to strengthen economic supervision in crucial areas such as the financial sector and the taxation sector.

## 11.3 Measures to Improve Governance within the Banking Sector

***Autonomy for Bangladesh Bank:*** The Government intended to evaluate Bangladesh Bank's autonomy and independence in 7FYP. To prevent financial irregularities, it was suggested that a fully autonomous regulator employ qualified personnel, acquire technology to enhance efficiency, and adopt prudential standards. Formulating and carrying out effective monetary policies require a competent and independent Central Bank. Under the plan for State Bank supervision, the government also intended to develop and implement a strategy for public bank supervision. Poorly performing public banks with substantial nonperforming loans endanger the stability of the banking sector. Also, it was intended that public banks would be entirely regulated by Bangladesh Bank and adhere to all prudential standards, including certification that their boards and top management are competent.

***Reducing Gross Non-Performing Loans (NPLs):*** Under the 7FYP, the gross nonperforming loans (NPLs) of the state-owned commercial banks (SCBs) were intended to be limited to 10%. In an effort to improve administration, the government intended to provide depositor insurance to nonbank financial institutions (NBFIs). To lessen the likelihood of NBFIs suffering a loss of the funds deposited with them, Bangladesh Bank planned to establish a more comprehensive investment-friendly policy for NBFIs, collaborate with banks, and simplify reporting to Bangladesh Bank to promote the growth of NBFIs. Also, the NBFIs would simplify their credit disbursement methods and concentrate on low-risk industrial sectors to lower the risks associated with their assets. In order to prevent tax evasion, the government outlined monitoring business portfolios to ensure that tax-favored financing and leasing arrangements are not combined within the same organization.

## 11.4 Measures to Improve Governance within the Capital Market

The 7FYP's goal was to improve capital market governance by upgrading accounting and auditing standards to boost market confidence, creating an independent Financial Reporting Council to adopt and monitor International Accounting Standards (IAS) and International Standards of Auditing, licensing accountants and auditors, and creating an audit committee to oversee companies' internal controls, accounting policies, and compliance with IAS. The government also planned to establish a strong Self-Regulatory Organization (SRO) to monitor and discipline its members to reduce Securities and Exchange Commission (SEC) involvement and a demutualized DSE to evaluate its capital improvement programme to determine if new investments are needed and delist obsolete shares and debentures.

## 11.5 Measures to Improve Governance for Reducing Tax Evasion

Since direct tax revenue has not met expectations and only 1.3 million people had been issued tax identification numbers (TINs), not all of whom file tax reports (7FYP), Policymakers agreed that massive voter registration campaigns could rapidly increase the number of people eligible to pay taxes. Bangladesh had a very low direct tax to GDP ratio, indicating widespread tax avoidance and evasion, due to flaws like the outdated direct tax law and codes, which needed significant revisions to accommodate ubiquitous taxation and an antiquated system that relied on paper and was organized by territorial or geographical administrative entities. In order to enhance the state of direct tax collection, the following activities were planned to be implemented during the 7FYP:

- The government planned to monitor the taxpayers' ownership of large physical and financial assets and income generation from those assets to broaden the taxpayer base.

Since Shadow Money circulates in the domestic economy, the tax department intended to identify the owners of such funds. In order to assist the tax administration in increasing revenue mobilization, the government planned to identify, approve, and implement best practices. In addition, the government intended to assist the tax administration in concentrating on income from service industries and self-employment, which are typically more difficult to tax. It was anticipated that during 7FYP time period, the direct tax to GDP ratio would increase to 5% by bringing a greater proportion of the eligible population within its tax net considering various factors. Those factors, such as the acquisition of urban land and real estate, untaxed or minimally taxed income generated by the rapidly expanding RMG sector, and the comparatively low tax impact on income from financial instruments, are considered as the primary sources of wealth accumulation in Bangladesh. In addition, some other important measures were planned to be implemented to ensure that other objectives are completed under the 7FYP. Some of those objectives were making the parliamentary process effective, right to Information (RTI)/ access to information, enhancing integrity through National Integrity Strategy (NIS) and controlling corruption, and strengthening the Election Commission (EC).

## 11.6 Public Order and Safety in 7FYP

With the 7FYP, the government aimed to maintain peace, protect citizens' lives and property, and enable them to live with greater freedom. The Ministry of Home Affairs (MoHA) made efforts to enhance the security of life and belongings for all citizens of Bangladesh. The ministry's responsibilities included domestic security, border security, safeguarding economic and business interests, narcotics control, and prisoner rehabilitation, all aligned with the government's long-term strategy and the objectives of the 7FYP. Each division within the MoHA was tasked with striving to achieve the ministry's goals.

## 11.7 Development Resource Allocation in the 7FYP

To enhance public administration, institutions, and governance, it was believed that strong political leadership, qualified public administration personnel, a suitable legal framework, and a variety of regulatory policies were required. During the plan period, public investments in public order and safety were necessary to maintain law and order and ensure economic growth. However, public administration capacity expansion, including law enforcement, requires financial resources. The majority of these resources were provided by the budget, but development funding was still required. During this plan, it was expected that development budget allocations would be allocated to ministries and sectors related to public administration capability, public institution quality, and effective governance. The proposed ADP allocations for 7FYP represent a greater increase than that observed between FY11 and FY15.

## 11.8 Progress with Governance Performances during the 7FYP

In order to evaluate progress in governance across several key areas, a set of twelve governance indicators has been customized to suit the circumstances of Bangladesh. These indicators are categorized into three broad dimensions: democratic governance, economic governance, and human rights and justice. Setting concrete goals for those indicators (i.e., what milestones must be achieved by 2020) was not always feasible, but it did help policymakers focus on the most pressing issues. Measures of governance success for the 7FYP are summarized in Table 11.1. In terms of democratic administration, the Election Commission consistently and promptly organizes elections in both rural and urban areas. The use of Electronic Voting Machines (EVMs) in different City Corporation elections has greatly increased electoral transparency by facilitating better election administration. Twenty-two women were directly elected to the Parliament of Bangladesh in the 11th National Election, the largest number of women to ever hold such a position in the nation. In addition, while it was only 2% in the 8<sup>th</sup> parliament, 6% in both the 9th and 10th parliaments, and now over 7% in the 11th parliament, direct participation of women has increased dramatically over the years (Table 11.1). The participation of women in policymaking may increase as a result of this increase. On that note, according to The Global Gender Gap Report, 2020 published by the World Economic Forum (WEF), Bangladesh came in at number seven out of 153 countries under the area of “political empowerment”. As a result of the Parliamentary Committees regularly debating and scrutinizing the policy issues, the National Parliament has seen a decline in the propensity to boycott the Parliament in both the 10th and 11th National Parliaments, improving the Parliament’s overall state of efficacy. The international community recognizes Bangladesh’s achievement in increasing female voter turnout.

Significant progress was made in terms of economic governance during the plan period. Upholding fiscal discipline, directing public investment toward core development objectives, launching the medium-term budgetary framework, improving public financial management, and introducing tax reforms are all necessary steps which were taken to some extent.<sup>55</sup> The consequences were, on the whole, positive.

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<sup>55</sup> See progress in economic governance under 7<sup>th</sup> Five Year Plan mentioned in the 8<sup>th</sup> Five Year Plan document.

**Table 11.1: Summary of Performances under Governance Indicators**

Governance indicators	Variables	Previous Year	Base-Line Year (2015)	Mid- Term Review	End-Line year (2020)	Source
Democratic Governance	Proportion of the Elected Representatives Female	2% 9th National Parliament (2009-2013)	6% 10th National Parliament (2014-2018)	7.33% 11th National Parliament	7.33% 11th National Parliament	Legislative Support Wing, Bangladesh Parliament Secretariat
	Numbers from Bills Passed per year	65 9th National Parliament (2009-2013)	(2014-2018)			Legislative Support Wing, Bangladesh Parliament Secretariat
	Average Parliamentary Attendance	69% 9th National Parliament (2009-2013)	10th National Parliament (2014-2018) (First Five Sessions)			Legislative Support Wing, Bangladesh Parliament Secretariat
	Gross Foreign Exchange Reserves	\$10.7 billion (2010)	\$25.0 billion (2015)	\$32.9 billion (2018)	\$36 billion (2020)	Bangladesh Bank
Economic Governance	% of Gross NPL in State-owned Commercial Banks (SCBs)	15.7 (2010)	21.5 (2015)	30.0 (2018)	20.9 (2020)	Bangladesh Bank
	Total Revenue (Tax and non-tax) (% of GDP)	10.9 (2010)	9.6 (2015)	9.6 (2018)	8.4 (2020)	Bangladesh Bank
	Overall Budget Deficit (% of GDP)	2.8 (2010)	3.7(2015)	4.64 (2018)	4.8 (2020)	Bangladesh Bank
	Government debt outstanding (% of GDP)	32.3 (2010)	27.7 (2015)	28.05 (2018)	31.68 (2020)	Bangladesh Bank
Justice and Human Rights	Weighted Average of National Disposal Rate	33.34 (2011)				Supreme Court Registry
	Case Disposal Rate (Criminal)	25.4049 (2011)	7.56 (2015)	8.83 (2018)	8.62 (2020) 29.2 (2019)	Annual Report, Supreme Court Of Bangladesh
	Case Disposal Rate (Civil)	6.05 (2011)	4.58 (2015)	4.03 (2018)	0.93 (2020) 3.95 (2019)	Annual Report, Supreme Court Of Bangladesh
	Case backlogs in the formal justice system (lower and upper judiciary)	1.8 million (2010)	2.9 million (2015)	3.5 million (2018)	3.7 million (2020)	Supreme Court Registry, MoLJPA



The total revenue collected by the government, including tax and non-tax revenue, went up while the budget deficit was kept below 5% of GDP, and the public debt was effectively managed (Table 11.1). However, total revenue (tax and non-tax) accounted for 10.9% of GDP in 2010 and 9.6% of GDP in 2015. This proportion reduced to 9.2% in 2018 and 8.2% in 2020 due to a low and declining tax/GDP ratio caused by the pandemic. While the overall budget deficit in 2020 stood for 4.8% of GDP, government debt outstanding corresponded to 31.68% of GDP.

In 2010 and 2015, SCBs accounted for 15.7% and 21.5% of the total banking sector, respectively; by 2018, this proportion had risen to 30% (Table 11.1). While the issue of NPLs in public banks is fundamentally a political economy problem, there were many associated management problems in Bangladesh, including an inadequate legal framework for banking control, weak banking supervision, inefficient management and overstaffing in public banks, and poor service standards in many banks, especially public banks. By 2020, however, owing to the improvement of the finance sector as measured by these indicators, this proportion had dropped to 20.9% (Table 11.1). The Government had to invest approximately 129 trillion Taka between FY2012 and FY2018 to recapitalize State-Owned Banks due to a secular increase in NPLs in both SCBs and the overall banking sector. In fact, the NPL targets for the entire banking sector were only met in FY2020 after the Bangladesh Bank permitted the large debtors to restructure more than 300 trillion Taka worth of credit by rescheduling their loans.<sup>56</sup>

The income tax net was widened in Bangladesh, addressing a crucial political-economy issue. According to Bangladesh Bank data, as the number of taxpayers increased, income tax revenues climbed from 2.9% of GDP in FY2010 to 3.6% of GDP in FY2015. While total foreign exchange reserves were \$10.7 billion in 2010, they have increased rapidly, with the exception of 2018, throughout the past several years, especially during the 7<sup>th</sup> Five Year Plan. Hence, Bangladesh's overall reserves peaked in 2020 at \$36 billion (Table 11.1).

The case disposal rates in Bangladesh have demonstrated a progress over the tenure of 7FYP, indicating the government's commitment to efficient and timely delivery of justice and a more effective and accessible justice system for the people of Bangladesh. Notably, the disposal rate for criminal cases has increased from 7.56 percent in 2015 to 29.2 percent in 2019 (Table 11.1), showcasing significant progress in resolving criminal cases. However, the civil case disposal rate has declined slightly, from 4.58 in 2015 to 3.95 in 2019 (Table 11.1). These figures highlight the ongoing efforts to streamline the judicial process and enhance the efficiency of handling both criminal and civil cases.

## **11.9 Institutional Performance under the 7<sup>th</sup> Plan**

### **11.9.1 World Governance Indicators (WGI)**

Many international frameworks exist for comparing institutional performance and governance across countries, but the “World Governance Indicators” stand out because they compare institutional performances along six important dimensions. These include control of corruption, government effectiveness, political stability and absence of violence/terrorism, regulatory quality, rule of law, and voice and accountability. Furthermore, these indicators are commonly used to evaluate the temporal and spatial shifts in institutional performance in the standard governance literature.

Even though there have been some positive developments in certain areas over the past decade, overall, the success of Bangladesh as measured by these indicators remains mixed. In fact, as shown in Table 11.2, Bangladesh's relative position has only moderately improved in three indicators, including “control of corruption,” “rule of law,” and “political stability and absence of violence/terrorism,” while remaining below par in other key areas like “voice and accountability,” “government effectiveness,” and “regulatory quality.” Nonetheless, for the indicator “Control of Corruption,” the ranking improved significantly from 2010 to 2015 but deteriorated in subsequent years.

<sup>56</sup> Source: Bangladesh Bank, 2020



**Table 11.2: World Bank’s World Governance Indicators (WGI) Ranking for Bangladesh**

Indicators Name/Percentile Rank	2010	Base-Line Year 2015	Mid-Term Year 2018	Actual Year 2020
Control of Corruption	14.76	22.12	17.31	17.31
Government Effectiveness	25.84	23.56	23.08	22.12
Political Stability and Absence of Violence/Terrorism	9.95	10.00	13.68	15.57
Regulatory Quality	20.57	17.31	18.75	16.35
Rule of Law	26.07	25.00	28.37	31.25
Voice and Accountability	36.97	30.54	27.05	26.57

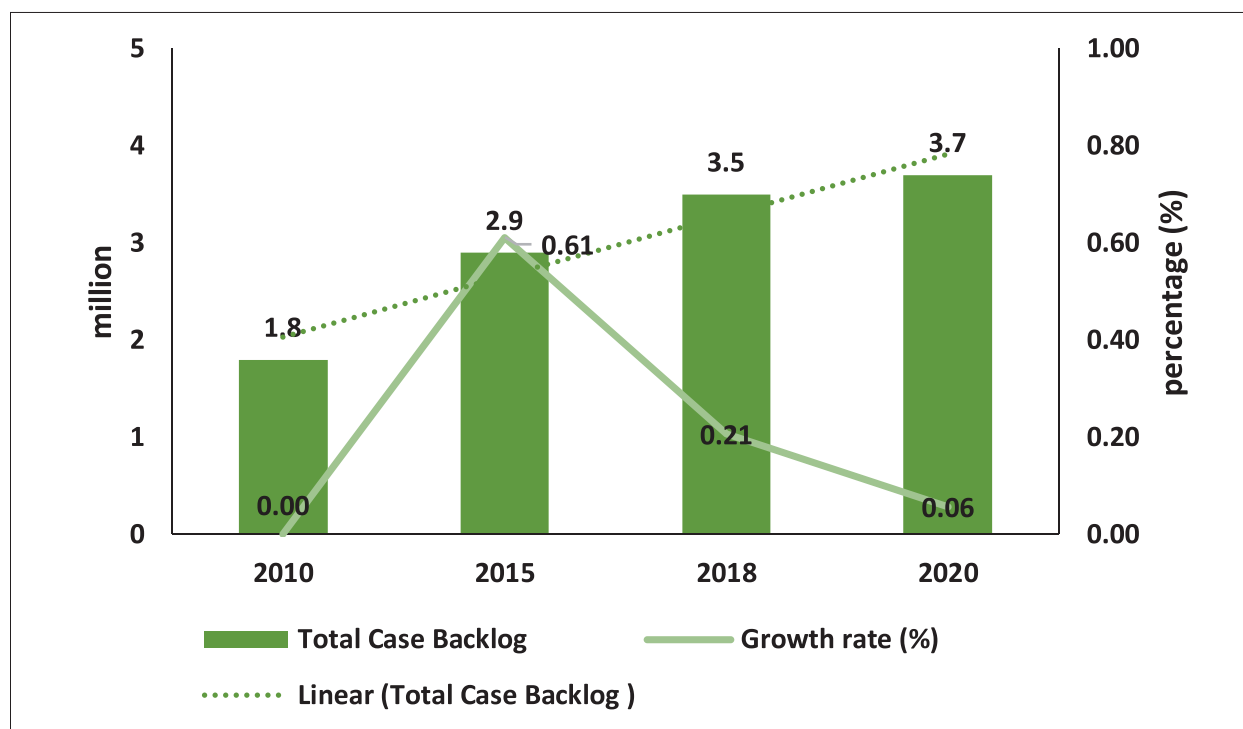
Source: WGI, World Bank, 2023

Note: A country’s percentile rank shows where it stands among all the countries covered by the aggregate indicator. The lowest rank is 0, and the highest rank is 100. The percentile ranks have been adjusted to account for how the countries in the WGI have performed over time.

### 11.9.2 Other Domestic Indicators of Institutional Performance

**Total Cases Backlog:** Objective indicators measuring specific institutional performance linked with the judicial capacity to keep a tolerable backlog of cases show a downward trend when comparing 2010 and 2020. Figure 11.1 shows that between 2010 and 2020, the number of cases backlog has more than doubled, reaching about 3.7 million. Compared to the 7FYP’s goal of reducing the case backlog to 3.3 million by 2020, it is evident that there has been a significant increase during this period. Around 1.1 million additional petitions were filed with the court between 2010 and 2015. This data is pertinent to both the 6FYP and the 7FYP, as it suggests only a modest shift in the case disposal rate, an area identified as needing improvement in both.

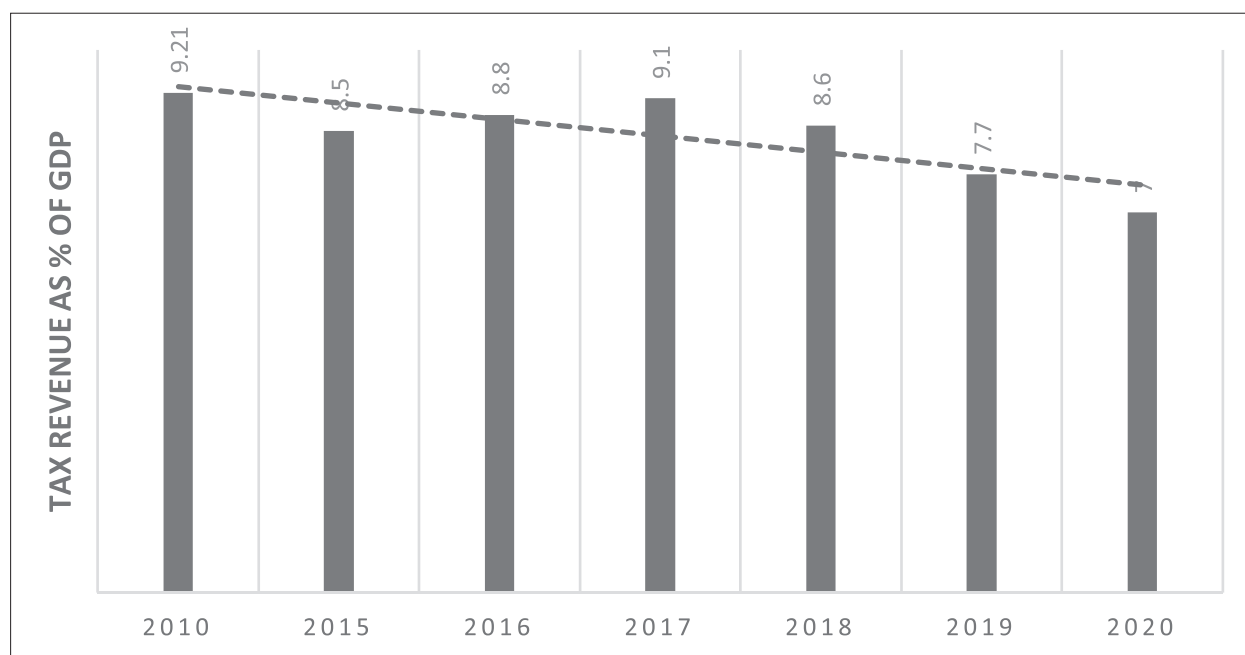
**Figure 11.1: Total Case Backlog (Million)**



Data Source: Supreme Court

**Tax to GDP Ratio (%):** Between 2010 and 2020, the trend of indicators measuring specific institutional performance connected with the fiscal capacity to mobilize resources looks challenging. Correspondingly, if we look at the trajectory of the tax-to-GDP ratio, we can see that both the 6FYP and the 7FYP wanted to raise it to more than 15%. However, it has fallen considerably from 9.21% in 2010 to 8.6% in 2018 and 7% in 2020 as shown in Figure 11.2, highlighting the critical importance of prioritizing major fiscal reforms to strengthen the government’s ability to mobilize resources and meet its developmental needs. The decline in the tax-GDP ratio of Bangladesh was mainly due to the COVID-19 pandemic. As a result of economic disruptions, business closures, and reduced profitability during COVID-19, leading to decreased tax contributions. The pandemic’s economic impact has presented financial difficulties for businesses, resulting in lower profitability and subsequently reduced tax payments. Additionally, the government implemented tax relief measures and exemptions to support those affected, which further affected tax revenue collection. Consequently, these measures and their impact on tax revenue have contributed to a decrease in the tax-GDP ratio. Moreover, policymakers remain committed to effectively addressing the challenges associated with banking sector governance. They recognize the importance of banking sector to the economy and are committed to implementing measures that enhance transparency, accountability, and overall governance in this sector.

**Figure 11.2: Tax to GDP Ratio (%)**



Data Source: Bangladesh Bank

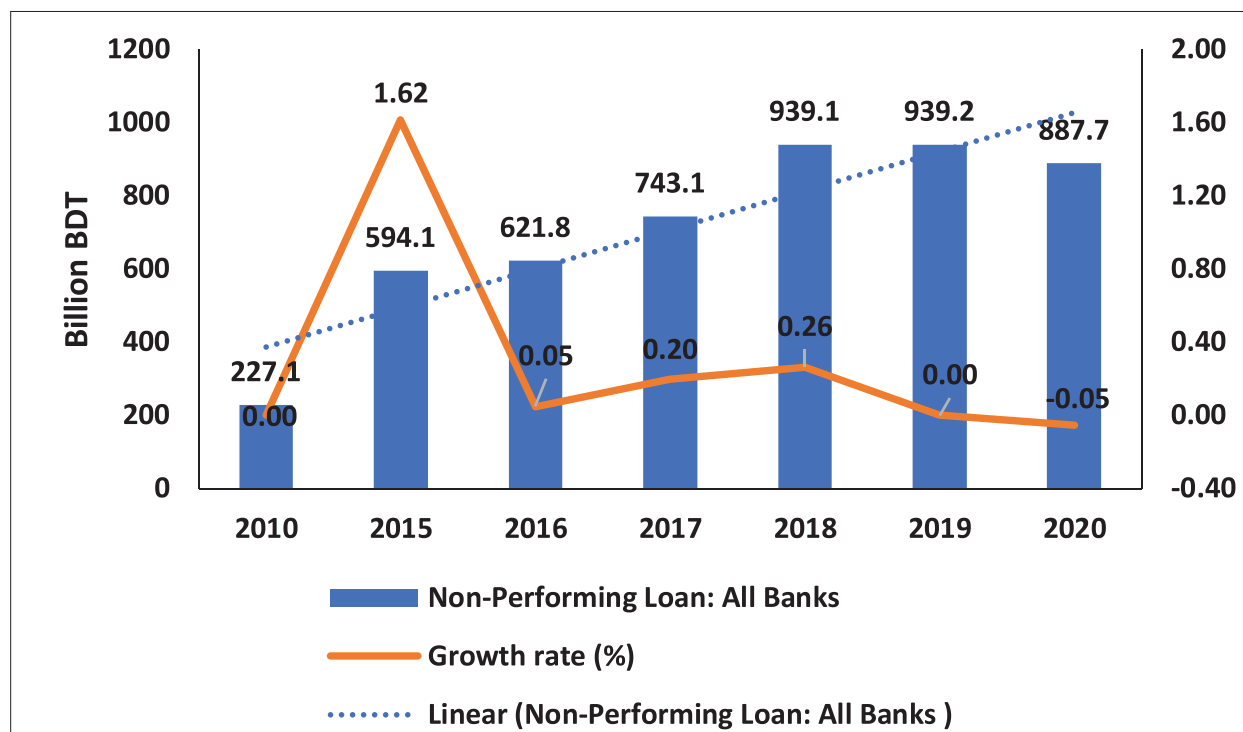
**Non-Performing Loan (NPLs):** Indicators tracking specific institutional performance related to the central bank’s regulatory capacity to contain nonperforming loans (NPLs) in state-owned commercial banks and the overall banking industry do not point to any improvement in the situation between 2010 and 2020. NPLs of all banks from 2010 to 2020 are depicted in Figure 11.3. As of 2018, total nonperforming loans at all banks totaled 939.1 billion Taka, up from 594.1 billion Taka in 2015 and 227.1 billion Taka in 2010. Total nonperforming loans in these banks reached 887.7 billion Taka at the end of 2020. The government spent 300 trillion Taka between 2012 and 2018 to recapitalize SCBs and the banking sector as NPLs rose.<sup>57</sup> The entire banking sector in Bangladesh reached its NPL targets for 2020 after the Bangladesh Bank permitted large borrowers to reschedule their loans. Nevertheless, the 8<sup>th</sup> Five-Year Plan (FYP) reflects a strong

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Source: Bangladesh Bank, 2020.

commitment to address financial oversight concerns through a focus on reducing NPLs and fortifying governance within the financial sector. The objective is to foster a more stable financial environment by enhancing overall functionality, enhancing oversight, efficiency, and accountability.

**Figure 11.3: Non-Performing Loan: All Banks**



Data Source: Bangladesh Bank

Reform efforts should also be prioritized in the FYP for the capital market., which has also experienced some turbulence during the 7FYP and there is a growing lack of confidence in the capital market. However, policymakers recognize that an efficient capital market is an instrumental mechanism for mobilizing long-term investments for the private sector, which makes them committed towards strong institutional reforms in the financial sector to improve the state of economic governance under the 8FYP.

### 11.10 Specific Achievement under the 7FYP<sup>58</sup>

**Access to Justice:** Legal aid is essential for those who cannot access justice due to insolvency, poverty, incapacity, etc. District Legal Aid Offices, Supreme Court Legal Aid Offices, two Labor Court Legal Aid Units, and a National Helpline Call Centre are now providing government legal aid following the establishment of The National Legal Aid Services Agency (NLASO). According to NLASO Annual Report, in 2019, 100,806 NLASO beneficiaries received federal legal assistance which exceeds the 2020 target of providing legal aid to 37,000 victims set by the 7FYP. Between 2009 and 2019, nearly half a million Bangladeshis received legal assistance; legal aid recipients numbered 82,000 in 2017-18 and 100,806 in 2018-19 (NLASO Annual Report 2018-19). Furthermore, 27 village tribunals handle cases expeditiously. The effective utilization of a national hotline has expanded outreach to a broader demographic, while village courts in 27 districts have demonstrated efficient handling of cases. The NLASO operates through District Legal Aid Offices and the hotline in 64 districts, with the government emphasizing the enhancement of ADR capabilities and public awareness. Notably, the 7FYP's objective of resolving 25,000 disputes annually through ADR by 2020 has been successfully achieved before the scheduled timeframe.

<sup>58</sup> Analyses done in this section are supported from the 8<sup>th</sup> Five Year Plan.

**Access to Law:** To ensure effective execution, all law enforcement agencies and the general public must have an understanding of applicable laws. To facilitate this, the Legislative and Parliamentary Affairs Division's website contains all updated statutes of laws of Bangladesh. There are 300 essential Bengali-English statutes posted on the website.

**Annual Performance Agreement (APA):** The “Annual Performance Agreement (APA)” was introduced in 2015 to improve government efficiency and accountability by emphasizing employee and public agency performance evaluation under the Civil Service Act, 2018. APA helps assure a systematic performance review of all ministries/divisions under the 7FYP. During the plan period, APA expanded to include over 17000 government offices and reached the Upazila level. In 2019, ministries/divisions achieved an average score of 86.5% in implementing the APA. All government agencies have reward systems for successful APA implementation. This has nurtured competition between state agencies in terms of performance. Throughout this period, APA has assisted public organizations in enhancing their financial management, transparency, and accountability.

**National Integrity Strategy (NIS):** As recognized by the United Nations, the National Integrity Strategy (NIS) was the government's plan to address institutional issues that contribute to corruption. The objectives of this strategy were to establish a fair and rational parliamentary debate, to guarantee a people-focused and accountable local government, and to foster an environment in which civil society can actively advocate for national integrity. Rather than relying solely on prosecution, it emphasized the need for an inclusive approach based on values, ethics, and integrity. By enabling citizens to demand transparency and accountability, the government intended to effectively combat corruption.

**Bringing Down the Rate of Violence Against Women (VAW):** The Multi-Sectoral Program on Violence Against Women (MSPVAW) under the Ministry of Women and Children Affairs (MoWCA) operates eight division-level One-stop Crisis Centres (OCCs) and 60 OCCs to provide VAW victims with information and recommendations. This initiative provides all services to women and children victims of violence in one spot. Since its founding, 16,804 victims have been treated at the OCCs, but only 3,747 took civil action against the perpetrators, meaning 78% did not. Since law and counselling services are scarce, OCCs appear to function in medical centres.

**Enhanced Capabilities in the Village Court:** Even though there is still a significant amount of work to be done, this informal organization is proving to be moderately effective in dispensing justice. From July 2017 to February 2020, a total of 176,122 cases were filed with the village courts in the project regions, of which 144,125 were resolved.

**A Better Functioning Case Coordination Committee:** Case Coordination Committees (CCCs) have been implemented at the district level, successfully convening key actors in the justice system on a consistent basis to handle local issues like prison overcrowding and case congestion.

**Greater Adoption of Medium-Term Budgetary Framework (MTBF):** To institutionalize strategy and policy-based budgeting the Medium-Term Budgetary Framework (MTBF) played a crucial role in generating Forward Baseline Estimates (FBEs) for ministry-wise expenditure. These estimates aimed to ensure that the fiscal deficit remained below 5% of GDP. The adoption of the MTBF during the 7FYP led to a more integrated and forward-looking budgeting approach. This shift from annual to multiyear budgeting enabled policymakers to align resource allocation with strategic goals, taking into account medium-term expenditure requirements and revenue projections. The MTBF promoted a unified approach to resource allocation by enhancing coordination between ministries and divisions. In addition, the increased use of MTBF improved budget transparency and accountability, fostering public confidence and facilitating a more accurate evaluation of budgetary performance. The adoption of MTBF during the 7FYP promoted comprehensive and effective budgeting practices that were consistent with the government's strategic goals.

**Improvement of the Transparency of Fiscal Records:** During the 7FYP, the Integrated Budget and Accounting System (IBAS++) was added to increase the accuracy of financial data, and data on public debt were routinely disseminated to promote fiscal transparency. With the assistance of the Office of the Comptroller and Auditor General of Bangladesh (OCAG) and the World Bank, the Ministry of Finance implemented the Integrated Financial Management Information System (IFMIS) for timely financial statement forecasts. Under the “Digital Bangladesh” program, the government digitized aid and debt management in an effort to increase transparency and accountability.

**The Public Investment Management (PIM) Agenda’s Actualization and Implementation:** During the 7FYP, the Planning Commission developed and evaluated new Public Investment Management (PIM) instruments. PIM instruments include the Ministry Assessment Format (MAF), the Sector Appraisal Format (SAF), the Sector Strategy Paper (SSP), and the Multi-Year Public Investment Plan (MYPIP). The MAF and SAF support the PIM reform agenda by ensuring that the Development Project Proposal (DPP) is extensively reviewed by the relevant Ministries/Divisions and Sector Divisions of the Planning Commission prior to project approval.

**Advancing Towards a Well-Functioning E-Governance:** E-governance enables citizens to interact with the government, shape government policy, and use online public services. In accordance with the 6FYP and 7FYP’s extensive e-Administration goals, the government has also posted all ministry-related content on public websites. To exchange information online, the government also created a national website containing information from all agencies and district e-Service centres. The government has installed 800 video conferencing systems in Ministries and Upazila offices and created Phase II of the National ICT Infrastructure Network for the Bangladesh Government. As a result of its success, the initiative has been expanded into its third phase, which will concentrate on people and offer increased bandwidth. The plan will also establish 100Gbps district networks and 10Gbps upazila networks. At the former Board of Investment (BoI), now the Bangladesh Investment Development Authority (BIDA), the government has implemented online registration and work permits for foreign citizens and investors, as well as an online tax calculator at the National Board of Revenue (NBR).

**E-Procurement:** In an effort to reduce corruption and increase competition for government contracts, the government has implemented online procurement tools to increase participation and transparency in the tendering process. The seventh plan intended to extend e-GP and e-procurement to all state institutions by 2020. Thus, the government encouraged agencies and organizations to utilize e-GP. According to CPTU data, e-GP use has increased exponentially over the past few years. By 2018, 458 organizations had adopted e-GPs which governs 55% of the purchasing. An impartial analysis of 7100 procurement packages from the Local Government Engineering Department (LGED), Bangladesh Water Development Board (BWDB), and the Roads and Highways Department revealed that the e-GP method reduced the price-to-cost ratio by 13% when compared to the paper system.

**Table 11.3: Trend of E-GP in Ministries, Divisions and Organizations**

Fiscal Years	Number of Ministries	Growth Rate	Number of Divisions	Growth Rate	Number of Organizations	Growth Rate
2012	5		4		4	
2013	5	0.00	4	0.00	5	25.00
2014	5	0.00	5	25.00	8	60.00
2015	11	120.00	9	80.00	32	300.00
2016	18	63.64	12	33.33	72	125.00
2017	33	83.33	18	50.00	300	316.67
2018	37	12.12	18	0.00	458	52.67

Source: CPTU 2019; 8<sup>th</sup> Five Year Plan

**Anti-Corruption Commission (ACC):** The Anti-Corruption Commission (ACC) created its own Five-Year Strategic Action Plan in 2016 during the 7FYP plan. In consultation with all parties, including civil society, lawmakers, officials, NGOs, businessmen, and media representatives, the Commission developed a Specific, Measurable, Achievable, Relevant, and Time-bound (SMART) Strategy (2017-2021) that was adopted to reduce corruption more systematically.

**Other initiatives:** E-Governance in land administration, information commission of Bangladesh, Grievance Redressal System (GRS), improving governance in urban local government, improving the effectiveness of local government and rural development, Department of Immigration and Passports (DIP), results-based monitoring and evaluation, expanding (UDCs) were some other steps taken during 7FYP in governance. The introduction and expansion of UDCs was a major step towards extending the reach of e-governance in Local Government Institutions (LGIs).

### 11.11 Key Institutional Governance Challenges

**Legislation and the Prevalence of Law:** The legislative and parliamentary affairs division of the Ministry of Law, Justice, and Parliamentary Affairs is assisting the government in achieving a consolidated legal structure, which is essential for sustainable growth. There is an insufficient number of legislative officials to complete the required volume of drafting. Legislative drafts must be accurate and flawless, which necessitates competent and capable legislative staff. Legislative officials must be competent in order to draft an error-free bill. Therefore, training should be provided at the national and international levels to increase expertise. To defend legal and constitutional rights, it is necessary to increase awareness and understanding among people about the law and constitution for law enforcement. Before 1987, all Bangladeshi laws were written in English which created some difficulties in understanding them. All English law should be translated into Bengali that require more translators.

**Justice and the Rule of Law:** All democratic countries acknowledge that the rule of law and an effective judiciary are essential to human well-being and provide markets with a dependable and productive output environment. The Government of Bangladesh recognizes the importance of rule of law and is committed to improving the substance law, equitable treatment of all individuals, access, and case resolution of the judiciary. The SDG16 of the Sustainable Development Goals (SDGs) is crucial for Bangladesh, requiring all officials to increase access to justice and establish accountable, effective, and inclusive institutions at all levels.

**Table 11.4: Case Load Against Each Judge by Types of Court in 2018**

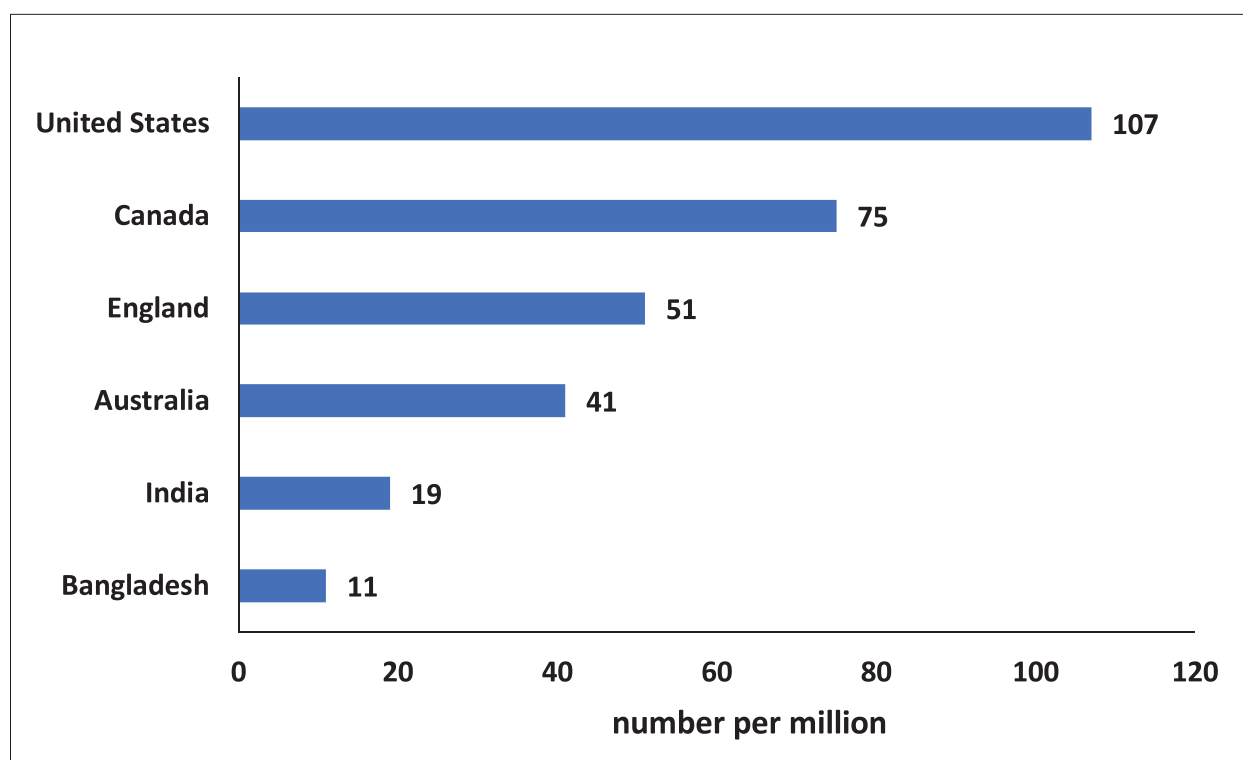
Type of Court	No. of Cases
1. Appellate Division	3143
2. High Court	5500
3. Lower Courts	1700

Source: Supreme Court of Bangladesh, 2019; 8<sup>th</sup> FYP

Nonetheless, achieving timely dispositions of cases has emerged as a top priority for the Judiciary. The total number of backlog cases in the supreme and lower courts was 1.8 million in 2010, 3 million in 2014, and between 3.3 and 3.8 million by 2020 (Figure 11.1). This prolongs civil and criminal proceedings. Current debates on creating an effective, accountable, and inclusive justice sector have highlighted a variety of factors that contribute to its underperformance, including a lack of judicial staff as shown in Table 11.4 and Figure 11.4, recruitment rules and incentives for better performance, and limited access to justice for the poor and marginalized. Specifically, Bangladesh has 11, India has 19, Australia has 41, England has 51, Canada has 75, and the United States has 107 justices per million people. This illustrates the lack of human capital in the legal sector of Bangladesh compared to other developed countries with excellent performance in good governance.



**Figure 11.4: Professional Judges Per Million Population**



Data Source: Supreme Court of Bangladesh (2019); 8<sup>th</sup> Five Year Plan

**Economic Governance:** Strong economic governance is necessary to preserve macroeconomic stability and economic development. In general, Bangladesh has maintained macroeconomic stability by controlling inflation, import coverage, foreign exchange reserves, and international loan obligations. Moreover, maintaining solid socioeconomic stability is essential because it helps countries avoid what is commonly referred to as the “middle income trap” that Argentina and other Latin American countries previously encountered. Furthermore, the government must manage issues of financial regulation. The Bangladesh Bank (BB) mandated that all commercial banks implement effective corporate governance in order to monitor fraudulent activities and protect depositors. In recent years, BB has also altered bank oversight procedures. As a result of global experiences, BB is emphasizing strengthening capital adequate structure, re-fixation of reserve structure, strengthening the risk management system, and modernizing bank information technology to permit rapid online data access.

**Table 11.5: Trend in Non-performing Loans as a Percent of Total Loans**

Type of Banks/Year	Non-Performing Loan as % of Total Loan Amount/Ratio of Gross NPLs to Total Loans by Types of Banks						
	2011	2015	2016	2017	2018	2019	2020
SCBs	11	22	25	27	30	24	23
DFIs	25	23	26	23	19	15	16
PCBs	3	5	5	5	6	6	6
FCBs	3	8	10	7	6	6	5
<b>Total</b>	<b>6</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>9</b>

Data Source: Banking Regulation and Policy Department (BRPD), Bangladesh Bank



In addition, Bangladesh has one of the lowest Tax-GDP ratios in the world, highlighting the need to strengthen its tax structure in order to reduce tax evasion and tax deception by economic actors. The NBR needs to undertake additional measures to increase revenues and broaden the tax base. As an incentive, the government maintained the same income tax rate and company tax rate. During the tenure of 7FYP, tax revenue increased, but the tax-to-GDP ratio decreased.

## 11.12 Conclusion and Way Forward

The development literature agrees unanimously that any country cannot make sustainable economic development without first establishing and maintaining strong governance that are able to effectively mobilize resources to invest in physical and human capital, enforce contracts, and maintain public order. Government efficiency can also be increased by strengthening its administrative structure. Thus, it is crucial to promote participation, accountability, and transparency in decision-making, and to strengthen the effectiveness of the public service commission (PSC) for enhancing administrative capacity. In addition, the government should make the Annual Performance Agreement (APA) effective in order to improve the level of accountability in line ministries and make them more accountable to the Cabinet, especially in order to enable a systematic process for managing and monitoring the activities and work environments of public sector organizations.

In order to improve the condition of rule of law and Justice in Bangladesh, it is necessary to ensure the effectiveness of formal and semi-formal judicial institutions, as well as access to justice. Several things should be taken into account while executing the 8<sup>th</sup> five-year plan to improve economic governance. Improving supervision of the banking sector, special measures for monitoring NBFIs, loan recovery and the efficacy of banking courts, and the management of the interest rate policy are required to increase the efficiency and accountability of the banking sector. There should be special efforts to strengthen public financial management. The tax-to-GDP ratio is an indication of the government's ability to mobilize resources for investing in human and physical capital and maintaining public order, which expedite long-term economic growth. In order to increase Bangladesh's tax-to-GDP ratio, the efficiency of its taxation systems is of the utmost importance.

Government efficiency can also be increased by strengthening its administrative structure. Thus, it is crucial to promote participation, accountability, and transparency in decision-making, and to strengthen the effectiveness of the public service commission (PSC) for enhancing administrative capacity. In addition, the government may make the Annual Performance Agreement (APA) more effective in order to improve the level of accountability in line ministries and make them more accountable to the Cabinet, especially in order to enable a systematic process for managing and monitoring the activities and work environments of public sector organizations.

Moreover, strengthening the planning and budgeting process, reinforcing the link between the development budget and revenue budget, enhancing transparency and participation in the budgetary process are also crucial for better Public Financial Management (PFM). In order to improve the effectiveness and accountability of the capital market, the government may reduce the information asymmetry gap and increase market confidence, thereby reducing the preference of citizens to invest more in the banking sector than in the capital market and increasing monitoring and surveillance. Finally, some additional indicators (i.e., SDG16 indicators) should be considered in addition to those already included in 7FYP to broaden the scope of Good Governance, which would acknowledge the need for peace, justice, and accountable institutions in achieving sustainable, transformative, and inclusive development.

**GENDER EQUALITY, INCOME  
INEQUALITY AND SOCIAL  
PROTECTION**

**CHAPTER**

**12**



## **A. Gender Equality and Women Empowerment**

### **12.1 Introduction**

The major objective of the Seventh Five-Year Plan (7FYP) was to provide equal rights and opportunities to both men and women in the country. To ensure gender equality, the 7FYP focused on implementing policies and initiatives that would enhance women's access to resources and opportunities, improve their capacities, and eliminate structural and institutional barriers. Additionally, the 7FYP aimed to eradicate the gender gap in postsecondary education and empower women in decision-making, building upon the significant advancements already made in achieving gender equality in primary and secondary education.

However, collective perceptions of women's paid and unpaid labour, inheritance and ownership, and mobility outside the home influence household labor division, gender equality, and empowerment of women in addition to social norms. These social norms restrict women's access to economic and social resources that would help them achieve gender equality. The gendered informal rules have differential effects on men, women, boys, and girls, leading to distinct outcomes for each gender group. Yet, economic shocks, school closures, and delays in reproductive health services induced by the COVID-19 pandemic put girls at risk for early marriage. ILO claims that the global female labor force participation rate is a little under 47%, whereas the male figure is 72%. This represents a variance of 25 percentage points, with certain places experiencing a more than 50 percentage point disparity. Despite increased global labor force participation, women continue to be overrepresented in hazardous occupations. In 2019, women comprised around 39% of the global labor force, but only 28.2% of managerial positions (UN, 2020). The disproportionate impact of the pandemic on women in the workforce, particularly female entrepreneurs, could overturn the global gender disparity in managerial positions.

In order to achieve gender equality, it is necessary to address inequalities in opportunities, discrimination in law and practice, unfair social norms and attitudes, women's and men's unequal labor market opportunities, unequal division of unpaid care and domestic work, women's limited control over assets and property, decision-making on sexual and reproductive issues, low political participation, and a lack of gender-responsive budgeting. Gender-responsive budgeting in Bangladesh produces gender budget reports to eliminate gender imbalance. Finally, gender equality can boost women's confidence by giving them more influence over their own lives, both at home and in the workplace, their right to make choices, and their ability to influence social change in order to improve social and economic order. Following SDG10 and PP2041, the government is also concerned with income inequality along with gender inequality. To assist low-income households, the government gives inclusive development and social security priority. Low-income neighborhoods have fewer employment and income opportunities, contributing to economic inequality.

In this chapter, we take a look at how far along the country is in achieving the Seventh FYP goals of lowering income inequality, protecting the most vulnerable members of society, and empowering women.

### **12.2 Objectives, Targets and Strategies of the 7<sup>th</sup> Five Year Plan (7FYP)**

Between 2001 and 2015, Bangladesh enhanced women's empowerment and gender equality by attaining the majority of the Millennium Development Goals (MDGs). The decrease in the gender gap in Bangladesh is positive due to its high political and social indicators. The Seventh Five Year Plan of the Bangladeshi government was aligned with the Sustainable Development Goals (SDGs) to prioritize more ambitious gender equality goals, demonstrating its commitment to achieving gender equality through decisive action.

The 7FYP's gender strategy focused on expanding women's access to resources and opportunities, strengthening their skills, and decreasing structural and institutional impediments to equal rights. The objective was "ensure women's advancement as self-reliant human beings and reduce discriminatory

barriers by taking both developmental and institutional measures”. The 7FYP’s main goals in this regard were to increase the female-to-male ratio in tertiary education from 70% to 100%, increase the ratio of literate women to men in the 20-24 age group from 86% to 100%, encourage female enrolment in technical and vocational education, reduce or maintain income inequality at 0.45%, and increase Social Protection spending to 2.3% of GDP. The 7<sup>th</sup> FYP’s implementation plan had four strategic objectives: improve women’s human skills, economic rewards, voice and agency, and enabling environment. The 7FYP outlines a variety of strategies for achieving these goals, including the following:

In order to improve access to opportunities for human development, the Sustainable Development Goals call for the provision of services such as lifecycle-based disease prevention and curative healthcare, equal access to nutrition, modern reproductive health and family planning services, women’s decision-making over reproductive health, a quality formal education, a marketable technical and vocation education including ICT, safe water and sanitation services, freedom from violence, and the abolition of child marriage.

The objective of gaining control and access to productive resources was to ensure that all employees, regardless of their short- or long-term employment, could have access to safe and respectful workplaces. This includes opportunities for gainful employment in both the public and private sectors, both domestically and internationally, as well as avenues for self-employment with high value addition, access to venture capital, and company growth. Additionally, 7FYP aimed to prevent sexual harassment and assault in both workplace and public spaces. It encompassed aspects such as trade and manufacturing (including land, seeds, fertilizers, and extension services), securing more land and productive assets, community involvement in decision-making regarding shared resources (such as water, land, and forests), and improving technology access and information dissemination, as well as energy availability.

Furthermore, the government planned to implement the goal of increasing participation and decision-making by ensuring the involvement of women in national and local politics, improving public participation skills, leadership in government, industry, and trade women’s representation quotas at all levels, and association and decision-making leadership. Also, it was designed to develop a favorable legal and regulatory environment by removing all discriminatory aspects in all laws and regulations, effectively implementing all laws to preserve women’s and girls’ rights, recognizing the rights of the female child, and holding law enforcers accountable.

### **12.3 Progress in Gender Equality and Women Empowerment during the 7<sup>th</sup> Five Year Plan**

Six important performance indicators related to gender and inequality are identified in the Development Results Framework (DRF) for tracking the implementation of the 7<sup>th</sup> FYP. Progress in these indicators relative to annual targets is presented in Table 12.1 for the years 2016–2020.

**Table 12.1: Progress in Gender and Inequality Indicators**

Performance Indicators	Baseline (Year)	Target by 2020	End-line Status	Source
Percentage of seats held by women at National Parliament	20 (2014)	33	20.63 (2019)	<a href="http://www.ipu.org/">http://www.ipu.org/</a>
Percentage of women aged 20-24 who were married before the age 18	65 (2011)	30	51.4 (2019)	MICS, BBS
The ratio of girls to boys in tertiary education	0.7 (2015)	1	0.72 (2018)	BANBEIS
Gender budget as percentage of total budget	27.7 (2014)	30	30.82 (2019*)	MoF
Percentage of female teachers at (a) primary (b) secondary (c) tertiary education	a) 57 b) 24 c) 20	a) 70 b) 35 c) 25	a) 62.25 b) 25.26 c) 26.69 (2018**)	BANBEIS
Percentage of female officers (class-1) employed in public sector	21 (2014)	25	New data not available	

The percentage of 20- to 24-year-old women who were married before the age of 18 decreased from 65 percent in 2011 to 51.4 percent in 2019, but it is still much over the target and a big issue. The Ministry of Women and Children Affairs (MoWCA) has initiated initiatives to prevent child marriage and enhance adolescent health by teaching children, parents, and community leaders about the hazards of dowry, eve teasing, and child marriage. The Child Marriage Prevention Act 2017 is an additional federal law that has been enacted. In the context of elementary and secondary education, Bangladesh has successfully achieved gender parity, aligning with the goals set during the MDG era. In terms of secondary education, girls have achieved a completion rate of 59.81 percent, slightly lower than the 63.99 percent rate for boys. Notably, the survival rate has shown improvement, increasing from 72.53 percent in 2017 to 62.38 percent in 2018. Over the past decade, there has been significant progress in enhancing girls' access to secondary education. Furthermore, in 2018, 47.38 percent of college students and 24.23 percent of college faculty members were female, indicating a higher representation of women in higher education. Girls also exhibit higher graduation rates, and efforts are being made to promote STEM education for women.

Revisions are being made to education in order to combat discrimination based on gender and health-related to sexuality and reproduction. Institutions of higher education provide potable water (97.41%) and separate bathrooms for women (95.5%). Teachers now get gender education. The percentage of female primary, intermediate, and postsecondary instructors has increased from the base year (Source: BANBEIS). Bangladesh must now demonstrate the same commitment to reducing gender disparity in higher education. In 2019, the female-to-male ratio in tertiary education was 0.72, a little rise but significantly below the goal. The ratio has not changed substantially; thus, there is room for exploring new avenues for more enrollment of women in college. Poverty, early marriage, violence against women, travel limitations, and the absence of female student hostels might be some major factors that contribute to low female enrolment in higher education.

In 2009, Bangladesh enacted Gender Responsive Budget, which integrates gender issues into the MTBF process and stresses how a ministry's objectives and actions advance women's rights. The gender budget report guarantees responsibility and openness for the advancement of women. The 7FYP gender budget goal for 2020 is 30% of the overall budget. In 2019, the gender budget represented 30.8 percent of the total budget. Numerous measures have been developed to protect and empower women. Under the Domestic Violence Act of 2010, the "Domestic Violence (Protection and Preservation) Rules, 2013" ensure equal rights and prohibit all forms of discrimination in public life and the government. In addition, the government has a National Women and Children Development Plan.

The government has also enacted some policies and acts for the betterment of women and children: Early Childhood Care and Development Policy, 2013, House-maid Protection Policy, 2015, Child Marriage Prevention Act, 2017. Policy, 2011, Children Act, 2013, Prevention and Suppression of Human Trafficking Act, 2012, Hindu Marriage Registration Act, 2012, Early Childhood Care and Development Policy, 2013, House-maid Protection Policy, 2015, Child Marriage Prevention Act, 2017. Additionally, the government and civil society organizations are executing the National Action Plans to Prevent Violence against Women and Children (2018-2030) and Child Marriage. The government continue to take measure to combat sexual harassment in public, academic, and social media settings.

**Table 12.2: Comparative Performance of South Asian Countries in the Overall GGGR Score**

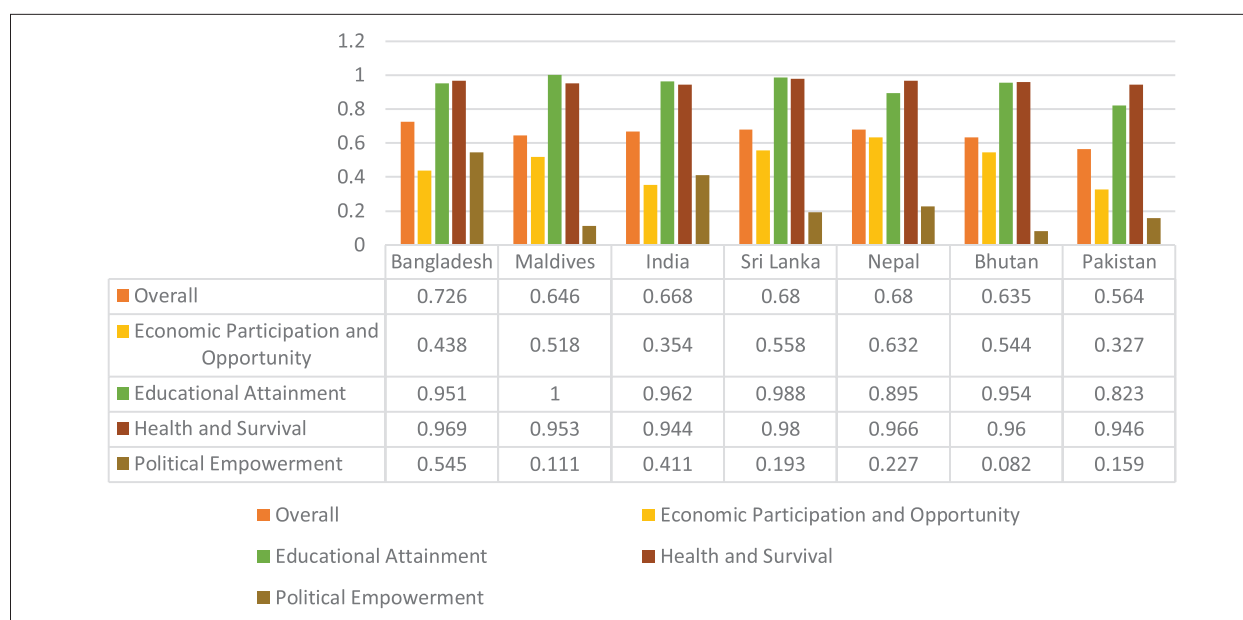
Country	Overall Score			
	2016	2017	2018	2020
<b>Bangladesh</b>	0.698	0.719	0.721	0.726
<b>Maldives</b>	0.65	0.669	0.662	0.646
<b>India</b>	0.683	0.669	0.665	0.668
<b>Sri Lanka</b>	0.673	0.669	0.676	0.68
<b>Nepal</b>	0.661	0.664	0.671	0.68
<b>Bhutan</b>	0.642	0.638	0.638	0.635
<b>Pakistan</b>	0.556	0.546	0.55	0.564

Source: The Global Gender Gap Report 2016, 2017, 2018 and 2020, World Economic Forum

Bangladesh's latest gender equality indicators demonstrate the government's strong commitment to eradicating gender disparity. According to The Global Gender Gap Report issued by the World Economic Forum, Bangladesh has dramatically closed the gender gap over the last year, placing first among South Asian nations for the fourth consecutive year in terms of gender parity. The Global Gender Gap Report (GGGR) rates nations according to their progress in reducing the gender gap in four thematic dimensions: (i) Economic participation and opportunity, (ii) Educational achievement, (iii) Health and survival, and (iv) Political empowerment. In 2020, Bangladesh placed first among seven South Asian countries with a score of 0.726. This has been made possible by timely steps taken by the government and appropriate government departments to enhance the status of women in the social, economic, and political arenas. Bangladesh has effectively eradicated gender imbalance in primary and secondary education and decreased it in university education. According to the Human Development Report 2020 (UNDP, 2020), Bangladesh is attempting to increase the proportion of women in the labor force from 34% to 82% by 2026. In addition, Bangladesh is in the top ten countries for political empowerment according to the Global Gender Gap Report 2020. (global rank 7<sup>th</sup> out of 153 countries in the world). Despite apparent growth in certain measures, economic and social sectors have vast room for development. Figure 12.1 compares the gender gap index scores of Bangladesh and other South Asian countries in these four indices over the recent years.



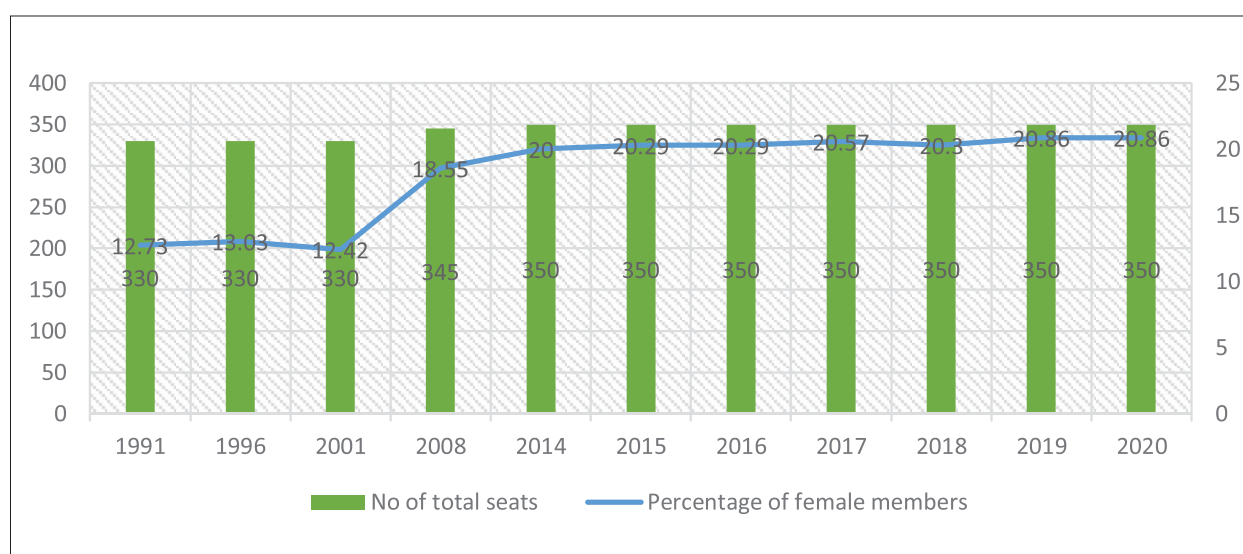
**Figure 12.1: Bangladesh's Performance in GGGR Subindices in 2020**



Source: The Global Gender Gap Report 2020, World Economic Forum

In 2020, Bangladesh ranked first in South Asia for just one of the four sub-indices (political empowerment; global ranking of 7) though. Bangladesh did higher than other South Asian nations on the educational attainment sub-index (global ranking of 120), with the exception of Maldives and Sri Lanka. Pakistan outperformed Bangladesh in the economic participation and opportunity sub-index. Although Bangladesh did better than Pakistan (global rating of 150), its worldwide ranking of 141 suggests that there is a great deal of opportunity for development in this field. Bangladesh has done an impressive progress in achieving the equitable involvement of women in the country's economic growth during the tenure of 7FYP with a female labor force participation rate of 42.67% in 2022 from 35.6% in 2015 (QLFS, 2022). Sri Lanka ranked better on the health and survival index than Bangladesh (global ranking 1).

**Figure 12.2: Percentage of Female Members out of Total Number of Seats in Parliament**



Data Source: Bangladesh Parliament Secretariat (BPS) and World Bank data

In 2016, women held 20.3 percent of parliamentary seats in Bangladesh, and this representation increased to 20.9 percent by 2020. Legal and constitutional provisions have been instrumental in promoting women's participation in the National Parliament and municipal governments. Notably, the number of reserved seats for women has been increased to 50 through the 14<sup>th</sup> Amendment. While the government has made significant progress towards achieving gender equality, further efforts are necessary to ensure the protection of women and children. Challenges such as child marriage, abandonment, dowry practices, and gender-based abuse that persist due to outdated social norms that favor boys over girls are taken into account by the government. In 2002, Bangladesh outlawed acid attacks and eventually introduced the death penalty for offenders. The government has been successful during 7FYP in reforming cultural norms via awareness campaigns and other initiatives to avoid detrimental behaviours that exacerbate the gender gap and improve women's abilities and surroundings.

## 12.4 Challenges

Despite impressive progress achieved towards gender parity, the unfinished agenda is still large. Some of the key challenges are discussed below.

1. The implementation capacity of GOB is a constraint (i.e. prevention, provision and protection) to address prevalence of gender-based violence both at home and outside. Despite efforts, GBV prevails with deleterious consequences on women's physical and mental wellbeing, their self-esteem and the children's wellbeing. Motivation, awareness and the implementation of laws to address them are great challenges.
2. In spite of all the actions in legal, social, economic and educational measures, child marriage is still pervasive. Implementation of the Action Plan for Prevention of Child Marriage is a challenge.
3. The pace of progress in the area of economic equality has been somewhat slow. Despite progress during the 8FYP (i.e. 2022), the women's labor force participation rate is still low by international norms
4. An inclusive financial system is necessary to enhance women's access and benefits from secure, saving, credit, insurance and payment services. A large number of women lack access to basic financial services and formal finance. Easier access to finance at a low interest is critical for women's economic emancipation. Due to fees, collateral, guarantee, cumbersome rules, and lack of financial literacy, formal financial market is not easily accessible by the poor and women.
5. Lack of gender responsive working environment including inadequate facilities of child care, transport, occupational health and safety discourage women from entering the job market. Women workers in the informal sector have no legal protection against abuse, discrimination, irregular employment, low wages, and long work hours. Although policy measures are in place and the Government has granted women 6 months' maternity leave, often this is not followed by the private sector or the NGOs.

## 12.5 Conclusion and Way Forward

- *Gender Based Violence:* Violence against women is a violation of human rights. GBV is still prevalent in Bangladesh. In this context, the GOB may formulate strategies in line with the 'whole system' approach. The whole system approach focuses on three important aspects, that is prevention, provision and protection. Some of the policy recommendations may include:

**Multisectoral approach:** A multisectoral approach should be considered. This approach should include the carrying out of law reform, including repeal or revision of discriminatory laws (if any); as well as the introduction of new laws.

**Strengthening capacity:** Strengthen capacity of all stakeholders/services providers dealing with VAWG with dedicated training programmes, digitisation of data and statistics, and better co-ordination of the work of different agencies involved in tackling VAWG.

**Empowering schools:** Another important intervention in this context may be to train some existing schoolteachers on how to deal with VAWG cases. Thereafter, the government may decide to employ dedicated school welfare personnel in each school or to serve a cluster of schools.

**Enhanced budget allocation:** Implementation of the above measures would require additional resources. The additional resources should in principle emanate from the federal budget. However, given that economic costs also affect the private sectors, they may also be encouraged to come forward to resources.

- *Care Services:* Both female labour force participation (FLFS) and female employment-to-population rate (FEPR) have been found low in Bangladesh. Among others, lack of provision of care services has been preventing women to participate in the labor force and labor market. Studies conducted by UN Women (2021) found significant employment impact of investing in care services. Adopting the SAM multiplier model, the studies found substantial employment impact of care services. The studies simulated additional employment impacts of 4 to 7 per cent of total employment (old and new).

No such study is available for Bangladesh. It thus proposed that GOB may undertake a comprehensive study to assess the feasibility of implementing a community based affordable care services (i.e. inclusive of child care – childcare and early learning and primary and secondary education; and health care and long-term elderly care)<sup>59</sup>. The study should include<sup>60</sup>:

- Design the care services for Bangladesh considering the country context;
- A forward-looking demand (or use) side estimation of the demand for care services by various economic groups in Bangladesh;
- A comprehensive assessment of the supply side of the care services cost components;
- Development of a business model focusing on revenue streams, scope of cross-subsidisation and benefit-cost ratios.

**Social Protection Measures:** Following measures may be considered:

- Women (including girls) focused social protection allocations must increase such that they account for around 50 per cent of the social protection budget allocation;
- Initiate a pilot project to assess the feasibility of introducing Temporary Basic Income for women (TBI-W) in Bangladesh as a shock responsive measure. TBI-W is a policy instrument – an unconditional cash transfer to identified women beneficiary for a specific time period that recognizes the disproportionate effect of the crisis on a group that faces persistent and cumulative vulnerabilities across several dimensions. ‘Beyond supporting women in securing their basic needs and compensating for their job and income losses, such an instrument might help boost women’s freedom of spending and economic independence, as well as balance the control of economic resources within the household.’<sup>61</sup> ‘Thus a TBI-W is an emergency measure of

59 UN Women explained the method and approach to type of exercise in <https://www.unwomen.org/en/digital-library/publications/2021/12/issue-paper-investing-in-free-universal-childcare-in-sub-saharan-africa>

60 Observing the inequality in care services provision and realizing the global approach with commitment, the Global Alliance for Care initiative has been launched by Women in Mexico (INMUJERES) and UN-Women 2021. For further details please refer to Acerca – ALIANZA GLOBAL POR LOS CUIDADOS ([forogeneracionigualdad.mx](http://forogeneracionigualdad.mx)).

61 María Montoya-Aguirre, Eduardo Ortiz-Juarez and Aroa Santiago, (2021), ‘Protecting Women’s Livelihoods in Times of Pandemic: Temporary Basic Income and the Road to Gender Equality,’ UNDP Global Policy Network Brief.

affirmative action that could start paving the road towards a public good that the whole society can benefit from: gender equality;

- Expand coverage of the social protection measures to household with children and marginalised groups through combination of programmes under the four pillars of social protection system – social assistance, social insurance; active labour market and care services;
- Adopt measures to improve women’s employability and women’s labour market conditions to enhance their eligibility and capacity to contribute to the contributory social security schemes (CSSA); and
- Actively address the barriers women face through the design and implementation of the CSSA and related laws.

**Additional Policy Measures:** In additions to above two measures other measures may also be considered for Bangladesh:

- Credit and interest rate measures should be re-assessed to find out scope for introduction of new measures and revamping of the existing measures;
- Affordable measures focusing on digital banking and marketing needs to be adopted for all women – especially for self-employed and micro/small entrepreneurs;
- Assess and design pathways to gradual transformation to a universal social protection for PWD through combination of programmes under the four pillars of social protection system – social assistance, social insurance; active labour market and care services; and
- Policy formulation and adoption requires in-depth monitoring by third party to identify implementation bottleneck in securing institutional finances (e.g. excessive paper works, documentations, collateral for loans etc.) to ensure 70 to 80 per cent effectiveness (i.e. implementation of policies) in the medium term and 80 to 90 effectiveness over the long term.

## **B. Reduction of Income Inequality**

### **12.6 7FYP Strategy for Reduction of Income Inequality**

A human development approach that focuses on closing the access gap for the poor was seen as a strong tool. The idea that helping the poor gain access to credit would help them accumulate assets and therefore reduce income inequality gained traction. Some specific strategies were taken for better income distribution.

#### **Land Redistribution**

The 7<sup>th</sup> Five Year Plan (7FYP) prioritized institutional, regulatory, and fiscal policy reforms to enhance land administration and the land market. These reforms also included the computerization of land records to facilitate the simplification of land transactions and registration, where registration fees were based on land/real estate market prices to increase non-NBR government revenue. These modifications would protect poor farmers from unscrupulous land speculators and discourage land transaction windfall advantages. A land transaction capital gain tax would discourage property speculation, stabilize land values, and create funds for social services.

#### **Fiscal Policies**

The 7FYP emphasized the importance of dynamic wealth redistribution and enhancing the human capital and earnings capabilities of the poor through policies, regulations, and institutions. It recognized access to quality education and healthcare as fundamental rights that require significant government attention. The plan highlighted the role of a robust social protection system in improving income distribution, drawing inspiration from successful approaches in advanced countries. Additionally, the plan emphasized the need

to invest in the human capital of the poor to enable them to secure higher-paying employment, contributing to both individual prosperity and overall GDP growth. Table 12.3 shows how was the policy implication of fiscal policies under the 7<sup>th</sup> strategy.

**Table 12.3: Seventh Plan Fiscal Reforms for Lowering Income Inequality (% of GDP)**

Reform Measures	Base Year Values FY2015	Increase Over 5 Years	End-Year Values FY2020
Increase spending on education	2.2	0.8	3.0
Increase spending on health	0.8	0.4	1.2
Increase spending on social protection	2.0	0.3	2.3
Increase spending on rural infrastructure	2.0	1.0	3.0
The total increase in social spending		2.5	
Financed by: Cutback on energy subsidy	2.0	(-) 1.0	1.0
: increase in personal income tax	1.0	2.5	3.5
: increase in value-added tax	4.2	1.8	6.0
: increase in local government revenues	0.2	0.5	0.7
<b>Total Financing</b>		<b>5.8</b>	

Source: 7FYP

The highest policy priority was to increase education and health spending to at least 3.0 and 1.2 percent of GDP, respectively. Another area where public expenditures needed to be increased was rural infrastructure, including rural roads, rural electricity, irrigation, and flood management. Increased expenditure of 1 percent of the gross domestic product on rural infrastructure was deemed beneficial. The third area in which public spending was planned to increase was social protection. During 8FYP, government's spending on social protection was expected ideally to increase to 2.3% of GDP from the current 2.0%. Set against the constrained public resources, increasing public expenditure on education, health, rural infrastructure, and social safety by an anticipated 2.5 percent of GDP could be challenging. Therefore, a strategy to mobilize this additional funding is within the scope of public policy. The funds saved by not spending on energy (by the elimination of energy subsidies) could be redirected to social service expenditures in the aforementioned priority areas. Increasing the tax-to-GDP ratio was another policy designed to facilitate the expansion of resources that would aid in the redistribution of wealth. This meant addressing tax loopholes that allow capital gains to evade taxes, taxing all personal income sources equally, and enhancing tax administration and compliance. Modernizing the VAT and increasing its productivity, which might add 1.8% to the GDP, was a specific program in this respect.

**Table 12.4: Target and Actual Inequality under the Seventh Plan**

Indicators	FY2010	FY2016	FY2020 (Target)	FY2020 (Actual)
Income inequality (Gini coefficient)	0.458	0.482	0.450	0.499

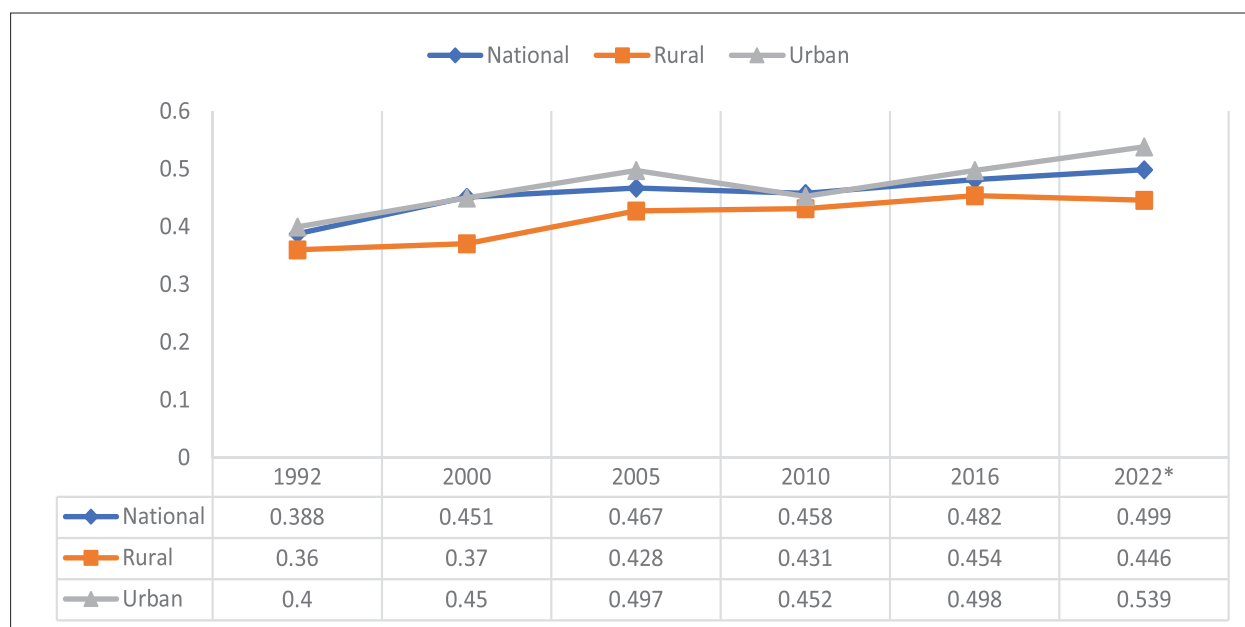
Source: Seventh Plan Projections and HIES 2010, 2016

The 7FYP aims to keep income inequality at a rate of 0.45 or lower. Since the early 1980s, Bangladesh has struggled to reduce income inequality. Human development strategy focusing on bridging the access gap for the underserved is one of the 7FYP's initiatives for lowering income disparity. The 7FYP acknowledges the need to make new efforts and provide a renewed commitment to halting Bangladesh's trend of widening wealth disparity.

## 12.7 Progress in Reducing Inequality during 7FYP

The Gini coefficient provides a numerical measure of inequality. According to HIES 2022, the income inequality gap between the richest and the rest of the population has widened from 0.483 in 2016 and 0.458 in 2010 to 0.499 in 2022 (Preliminary Report on HIES, 2022).

**Figure 12.3: Gini Coefficient (Income Inequality) over the 1992-2022 Period**



Source: various years of HIES; GED

Income inequality measured by the Gini coefficient is 0.446 in rural areas and 0.539 in urban areas in 2022. Figure 12.3 displays the progression of income inequality from 1992 to 2022. From 1992 to 2022, the national Gini went from 0.388 to 0.499, a jump of almost 31.3%; during the same period, rural Gini rose by nearly 23.8% and urban Gini rose by 34.75%. Estimates imply that the Gini coefficient in Bangladesh has been on the rise over the past half-century, with the rate of increase picking up speed in the 1990s. Also, the rate of increase in inequality was far higher in rural areas than in urban areas.

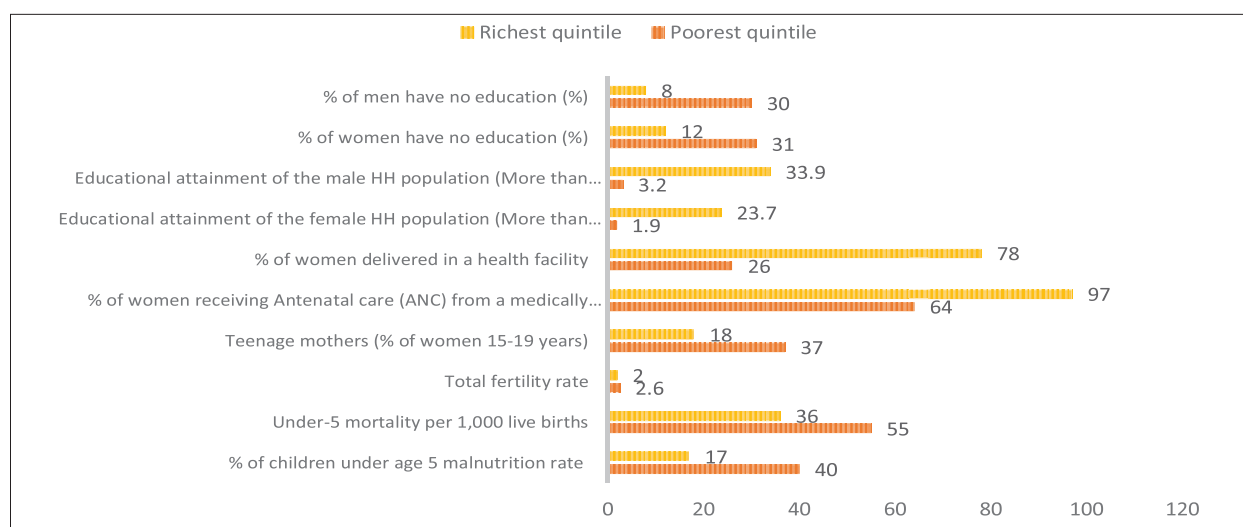
In Bangladesh, the Gini index of per capita real consumption revealed a little decline in inequality. According to the Gini index, throughout the first half of the decade, inequality in rural areas, where more than 70 percent of the population resides, increased and then decreased. From 2000 to 2010, there was a little increase in rural inequality. During the decade, urban inequality surpassed rural inequality. Even as urbanization grew, it continued to decline. Inequality in urban areas decreased between 2000 and 2010. Due to this urban consumption inequality decline, national consumption inequality dropped little.

## 12.8 Progress in Selected Social Indicators for Poorest and Richest Quintiles in Bangladesh

As seen in Figure 12.4, income and wealth are strongly connected with disparities in education, health, and other critical services. 40% of children under the age of 5 in the poorest quintile are malnourished (stunted), compared to 17% in the richest quintile, according to the most current BBS Demographic and Health Survey for 2017–18. Comparatively, in 2017–18, approximately 64% of the population in the lowest quintile received antenatal care (ANC) from a medically trained practitioner, compared to approximately 97% of the people in the richest quintile. While over 78% of women in the richest quintile gave birth in a medical facility, only 26% of women in the poorest quintile did the same.



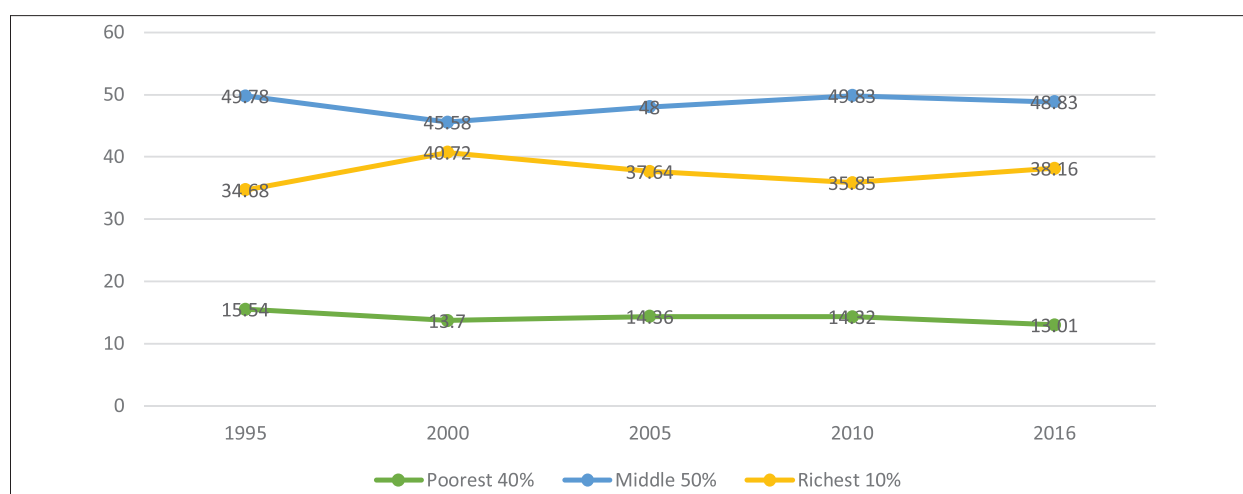
**Figure 12.4: Selected Social Indicators for Poorest and Richest Quintiles in Bangladesh**



Data Source: Demographic and Health Survey 2017-18, BBS

Figure 12.5 displays the change in the percentage of national income going to the bottom 40%, the middle 50%, and the top 10% over time. The data demonstrate that the middle 50% maintain a relatively stable income share, while the bottom 40% see their decline and the top 10% see their increase. The “severe” inequalities in Bangladesh are the most damaging to the country’s efforts to achieve inclusive and long-term economic growth. To promote equitable and sustainable economic growth, Bangladesh should focus on reducing income inequities.

**Figure 12.5: Share of Deciles in Total Household Income at the National Level, 1995-2016**



Source: various years of HIES; GED

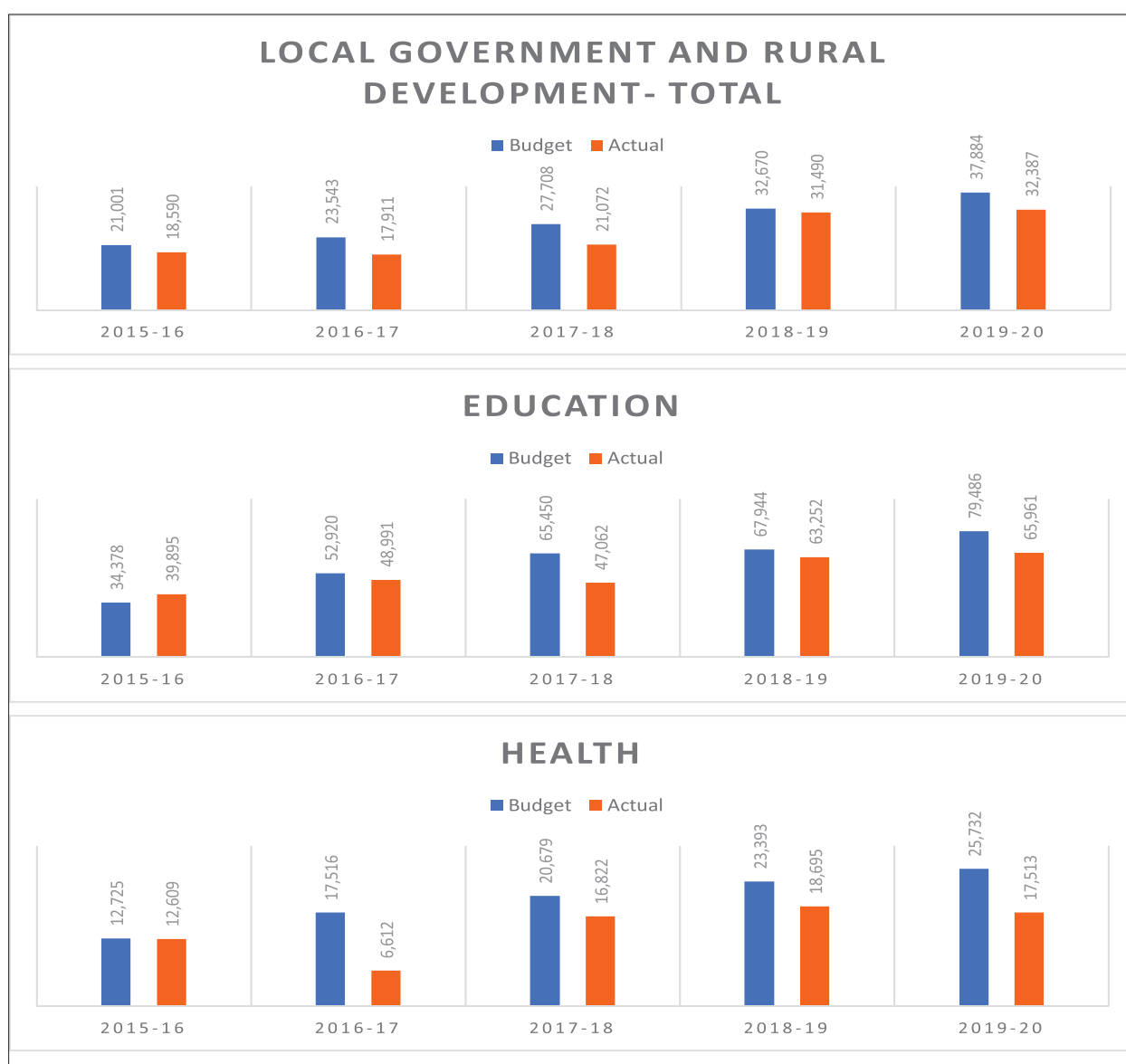
GED estimated, using the decile distribution of income to determine how income is distributed throughout the 10 decile groups in the country, that Decile-1 to Decile-5 share only 19.24% of the total income while comprising 50% of the population. Together, these shares accounted for 20.33% of total income in 2010. This indicates that the percentage of income earned by the bottom fifty percent of the population, or the bottom five deciles, is about the same in 2016 as it was in 2010. From 0.78 percent in 2010 to 0.23 percent in 2016, the income share of the bottom 5 percent of families has decreased. In 2010, just 24.61 percent of the income was distributed to the wealthiest 5 percent of households. In 2016, the percentage increased to 27.89%. From 2010, the statistics demonstrate a small increase in the concentration of income.



## 12.9 Progress in some Fiscal Reformation Policies Undertaken to Reduce Income Inequality under the 7<sup>th</sup> Five-Year Plan

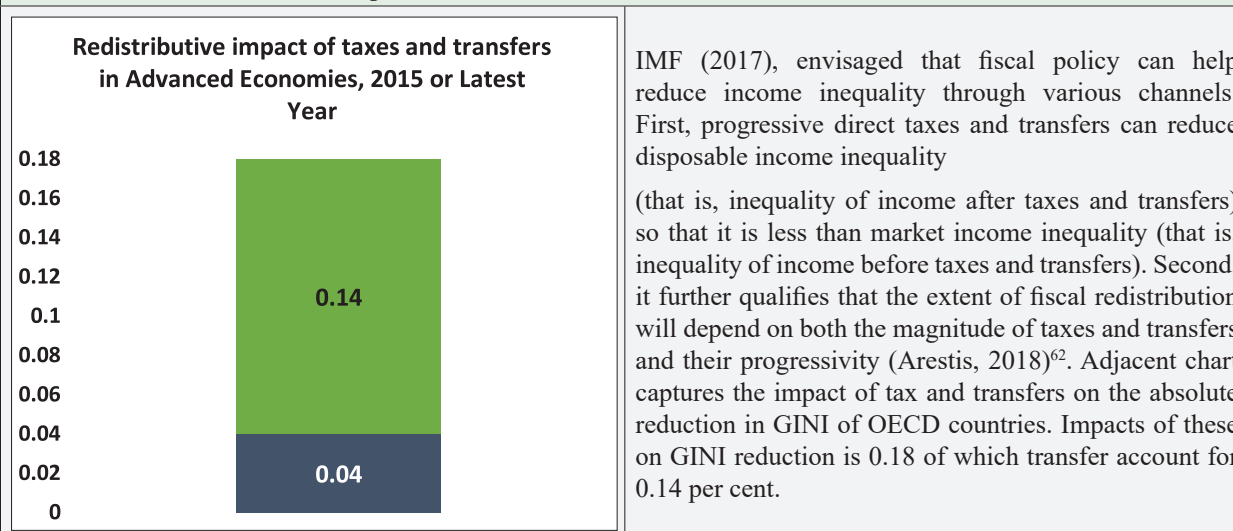
The use of resources in operating and developing the budget, i.e., actual expenditure and budget in local government and rural development, education, and health, is one of the fiscal reforms aimed at reducing income inequality. As shown in Figure 12.6, the budget for local government and rural development increased by 80.4% between 2015-16 and 2019-20, while actual expenditure increased by 74.21% over the same period. During the same period, the education budget increased by 131.21 percent, while actual expenditures in education increased by 65.34 percent. During the same period, the budget for health increased by 105.9 percent, while actual expenditures in health increased by 38.90 percent. While the budget allotted for health saw a rise of 105.9 percent total expenditures in health climbed by 38.90 percent during the same period.

**Figure 12.6: Use of Resources in Operating and Development of Budget in Different Targeted Fiscal Reforms for Lowering Income Inequality (BDT in Crore)**



Data Source: Budget data of various years, Ministry of Finance

### Box 12.1: Redistributive Impact of Taxes and Transfers in Advanced Economies, 2015 or Latest Year



Source: IMF 2015

IMF (2017), envisaged that fiscal policy can help reduce income inequality through various channels. First, progressive direct taxes and transfers can reduce disposable income inequality

(that is, inequality of income after taxes and transfers) so that it is less than market income inequality (that is, inequality of income before taxes and transfers). Second, it further qualifies that the extent of fiscal redistribution will depend on both the magnitude of taxes and transfers and their progressivity (Arestis, 2018)<sup>62</sup>. Adjacent chart captures the impact of tax and transfers on the absolute reduction in GINI of OECD countries. Impacts of these on GINI reduction is 0.18 of which transfer account for 0.14 per cent.

## 12.10 Conclusion and Way Forward

Since assets and human capacities have been historically unequally distributed, growth in a market economy favours those with better endowment. So, the long-term approach to income inequality must diminish this initial disparity. A strong human development plan would lessen the access gap for the poor. Increasing the poor's access to credit can help minimize the income gap. Social inclusion strategy can be enhanced by eliminating physical and social barriers.

In order further bolster the effort to reduce inequality, GoB may attach top priority to improving citizens' access to improved education and healthcare. Another important instrument for a more equitable distribution of income is a robust social security system. Some of the world's more progressive countries have used these strategies with success to limit and reduce income disparity. A well-designed personal income tax system that taxes all sources of income at a progressive rate is an essential component of fiscal policy as an instrument for reducing income inequality. This would enable increased public spending on social sectors like health, education, sanitation, water supply, and social protection. Additionally, the adoption of a contemporary property tax and its delegation to local governments can be a significant boost for the latter's fiscal autonomy and the former's financial resources. As the incidence of this tax and expenditure package is likely to be highly progressive, the fiscal policy package of reallocating expenditures, additional tax effort focused on personal income, VAT and local government revenues to finance the additional quantity to fund critical social programs can be a powerful instrument for improving income distribution. Better governance from the government, in addition to more efficient fiscal policy, can aid in more evenly dispersing money. Fair and well-designed wealth taxes could significantly contribute to reducing severe inequality due to the fact that wealth tends to grow across generations.

GoB may also set and enforce national living wages maintaining global standard. Low earnings are a consequence of both disempowerment and an imbalanced distribution of wealth, where the majority of resources are concentrated at the top. So, inequality can further be reduced by the implementation of policies that prioritize excluded people on a global scale. To promote equity and fairness, people of all ages, sexes, races and religions must encouragingly be included in the social and political sphere. Further, Policies that affect wealth and asset distribution can also address income inequality.

62 Arestis, Philip and Sawyer, Malcolm Inequality: Trends, Causes, Consequences, Relevant Policies, 2018

## C. Social Protection

### 12.11 Introduction

The National Social Security Strategy (NSSS), approved in 2015 is the blueprint for Bangladesh's social protection (SP) system. NSSS acknowledges the important roles of SP to smoothen consumption, tackle poverty, improve inequality and promote economic growth. Similarly, the Sustainable Development Goals give priority to strengthening the SP system. Each of the Sustainable Development Goals (SDGs) of No Poverty (SDG-1), Good Health and Well-Being (SDG-3), Gender Equality (SDG-5), Decent Work and Economic Growth (SDG-8), and Reduced Inequalities (SDG-10) has a significant connection to any country's social protection – as well in Bangladesh. Considering these virtues adequate attention has been placed on it in the 7FYP. Accordingly, ambitious targets have been set out in the 7FYP in line with the unfinished agenda outlined in the NSSS.

### 12.12 Targets in the 7<sup>th</sup> Five-Year Plan

There has been a remarkable shift in the last 25 years away from generalized food transfers and toward cash and public works programmes. The majority of social safety net programmes are run by government agencies, but non-government organizations play an important role as well, particularly in operating programmes that ensure sustainable graduation.

The main and long-term target of the 7<sup>th</sup> Five Year Plan regarding social security to create a National Social Security System (NSSS) that is inclusive for all worthy Bangladeshis, successfully combats and eliminates poverty and inequality, and supports employment and economic progress<sup>63</sup>.

The goal was to lay the groundwork for a progressive and inclusive system over the five years: Reforming the National Social Security System by ensuring more effective and efficient use of resources, strengthened delivery systems, and advancement toward a more inclusive form of Social Security that successfully addresses lifecycle risks while giving priority to the most vulnerable and underprivileged members of society. To prevent leakages and under-coverage, a change was needed from the existing discretionary strategy to a targeted universal one. Expanding the reach of essential programmes for the most vulnerable members of society—the mother and child, children, young adults, seniors, and individuals with disabilities—and the extremely/hard-core poor, supporting the most effective methods for the eradication of extreme/hardcore poverty would be a fundamental goal for the ensuing five-year plan period. Ensuring that the most vulnerable women have more opportunities to participate in the labour market and attain income stability, particularly as they become mothers, establishing a system of social insurance that enables individuals to invest in their social security and offers protection from the hazards of old age, disability, social exclusion, unemployment, and motherhood, extending the reach of social security programmes to cover socially excluded individuals as well as poor and vulnerable city dwellers (health, nutrition, and education), ensuring that the Social Security system facilitates a successful disaster response system, enhancing priority transfer delivery systems by putting in place cutting-edge management information systems and professional staff, raising beneficiary awareness of the social security programmes and inspiring potential contributors are all the medium term goal of the five-year plan. The 7FYP targets can be categorized as in two parts:

- I. Programmatic Reforms
- II. System Strengthening

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63 7<sup>th</sup> Five-Year Plan, General Economics Division

## **12.13 Programmatic Reforms**

### **12.13.1 Programme for Consolidation along the Life Risks**

By grouping the 130 plus SP programmes into a few priority programmes, the NSSS proposed the transition of the current system into a consolidated life cycle system. The five core life cycle programmes of NSSS are programmes for children, programmes for working age, a comprehensive pension system for the elderly, programmes for liberation of war veterans and programmes for people with disabilities. The consolidating life cycle programmes also include health insurance and human development supply side interventions, consolidating small programmes, consolidation of food transfer programmes, reducing risks and vulnerabilities from climate change, environmental degradation and disaster preparedness, old home and palliative care for senior citizens. The plan also incorporates many objectives to strengthen the National Social Security System through administrative reforms, increasing the role of local governments and NGOs, establishing a single registry management information system, strengthening Government to Person (G2P) payment systems that promote financial inclusivity and strengthening processes for selecting recipients of social security schemes.

### **12.13.2 Food Security and Public Food Management**

The National Food Policy Plan of Action (2008-2015) and the three objectives of the National Food Policy (NFP 2006) guided the 7FYP's food security strategy. With more than 300 action agendas, 26 important interventions areas have been identified, some of which have been given priority. The first target under food security was to ensure an adequate and stable supply of safe and nutritious food which also includes making food production efficient and sustainable, strengthening agricultural diversification, creating food market efficient, maintaining buffer stock, non-distortionary food grain market intervention for price stabilization, ensuring access to food, particularly for the poor and vulnerable groups. Enhancing purchasing power of people for increased food accessibility by agricultural disaster management, effective implementation of targeted food programmes, promoting agro-processing and small-scale rural enterprise and ensuring employment-generating income growth was also set as an objective of the plan.

### **12.13.3 Disaster Management**

Regulations, policies, plans, procedures, standing orders, and guidelines related to overall disaster risk mitigation and emergency response management, including relief rehabilitation, and safety net programmes, are developed, reviewed, and put into action. This also include programmes for disaster relief and risk reduction, as well as their planning and oversight.

Coordination of all disaster relief and management efforts, including emergency response planning and disaster risk mitigation, integration of disaster risk reduction across all levels of line ministries and agencies, as well as local governments, NGOs, CBOs, civil society and other stakeholders, implementation of the disaster-related projects and programmes started in response to the negative effects of climate change, safety net programmes including the Test Relief (TR), Vulnerable Group Feeding (VGF), Vulnerable Group Development (VGD), and Food For Works programme are approved, administered, and monitored.

Moreover, strategies for social inclusion were also considered such as policies for child health, food and nutrition, child education, access to water and sanitation, child empowerment, child protection, birth registration and child marriage, child labour, management and coordination, strategy for ethnic population, etc.

## 12.14 System Development

### **Establishing a Single Registry Management Information System:<sup>64</sup>**

In order to administer the Social Security system effectively, high-quality management information systems (MISs) are required. Accordingly, GoB had planned to develop a national Single Registry using the database of the national identity system and MISs that are special to the scheme in order to share information among departments. Together with other relevant Ministries/Divisions, the Statistics and Information Division would direct the construction of the Single Registry.

### **Strengthening Government to Person (G2P) Payment Systems that Promote Financial Inclusivity:**

An initiative to replace the old payment system with the Government to Person (G2P) payment system to promote financial inclusiveness, increase efficiency and reduce/stop leakages was another significant change that was proposed.

### **Strengthening Processes for Selecting Recipients of Social Security Schemes:**

Using the PMT scoring technique, the SID has been working to develop the Bangladesh Poverty Database (BPD). This was planned to be completed by 2016. A mix of PMT, local government assistance, and assistance from NGOs would be used to identify the poor and vulnerable people in light of the limitations of the PMT technique.

### **Coordinating Role of Agencies/Ministries for M&E:**

M&E activities were supposed to have three main parts. Implementing Ministries and Divisions should track the development of their individual programmes; IMED should be in charge of overall project/ Programme monitoring and assessment. Lastly, the GED's role would be to create a results framework using a matrix of precise indicators and assess the success of the NSSS deployment from a broad perspective. GED would also be in charge of overseeing the M&E framework's overall coordination and the distribution of the evaluation's findings. A crucial oversight function would be performed by the Central Monitoring Committee (CMC), which is led by the Cabinet Secretary. The CMC's responsibilities would include monitoring social security program performance, inter-ministerial collaboration, problem-solving, and crisis management.

### **Dissemination and Use of M&E Results:**

Beneficiaries, ministries/divisions, and NGOs need access to all information. Programme outcomes and eligibility requirements should be conveyed to the beneficiaries. By publishing monitoring data and evaluation outcomes on the implementing ministries/divisions' and Planning Commission's websites, this can be achieved. All evaluation reports would be shared with the Cabinet and the appropriate Parliamentary Standing Committee. GED would report to the Cabinet and then to the Parliamentary Standing Committee on how the evaluation reports were addressed.<sup>65</sup>

## 12.15 Implementation Challenges and Progress

Firstly, the table provides the overall picture of the social protections, especially conducted by the Ministry of Welfare (Table 12.5).

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<sup>64</sup> 7<sup>th</sup> Five Year Plan, General Economics Division

<sup>65</sup> 7<sup>th</sup> Five Year Plan, General Economics Division

**Table 12.5: Progress of the Performance Indicators (Ministry of Social Welfare)**

Sr.	Performance Indicators	FY 2014-2015 (Baseline)	Target (2020)	Implementation Status at the End of FY 2020-21
1	Expanded and inclusive social protection programmes for the extreme poor.	Interest free Micro Finance (Rural Social Service Program (50 crore taka as revolving fund).	50 crore taka as revolving fund	The Ministry of Social Welfare has allotted 75 crore takas to Rural Social Services (RSS) as a revolving fund.
		Development of backward community- Hijra, Bede, tea garden labor: Total Budget: 18.82 crore taka. Total beneficiary-27,905	Total beneficiary-67000	Total beneficiary of Hijra, Bede, Marginalized communities and Tea Worker Livelihood Development Program- 130042
		Financial support for poor patients (Cancer, kidney etc.) Budget: total 10 crore taka, Per Capita Amount-50,000taka Total Beneficiary-2000 person	Total Beneficiary-14000	a) Budget: 150 crore takas; b) Per Capita Amount-50,000 taka per person; c) Total Beneficiary- 30000
		Capitation grant for Non-government orphanages: Total Beneficiary- 63,000 orphans, Per Capita monthly Amount-1000 taka, Total Budget-758.60 crore taka	Beneficiary-95000	a) Total Beneficiary- 100000; b) Per Capita monthly Amount-2000 taka; c) Total Budget-240 crore Taka
2	Old Age Allowance for senior citizens who are aged 60 years and above and belong to the poor and vulnerable population	(1) Old Age Allowance: 27,22,500 a) Monthly Amount-400 taka; b) Total Budget-1306.80 crore taka. (2) Widow allowance: 10,12,000 a) Monthly Amount: 400 takas; b) Total Budget- 485.76 crore taka	1. Old Age Allowance: 4235000; 2. Widow allowance: 1530000	(1) Old Age Allowance: 4900000 a) Monthly Amount-500 taka; b) Budget-2940 crore taka. (2) Widow allowance: 2050000 a) Monthly Amount: 500 takas; b) Total Budget- 1230 crore taka
3	Explore possibilities to establish a National Social Insurance Scheme (NSIS) under the provision on Insurance.			The Ministry of Social Welfare will consider several options to facilitate the development of Private Voluntary Pension (PVP) in Bangladesh, such as developing a legal and regulatory framework, providing tax incentives, capacity building, awareness, and education campaigns, partnering with financial institutions, and developing PVP products and services with collaboration of Other relevant stakeholders in future.



Sr.	Performance Indicators	FY 2014-2015 (Baseline)	Target (2020)	Implementation Status at the End of FY 2020-21
4	Review options to facilitate the development of Private Voluntary Pension (PVP).			The Ministry of Social Welfare will develop a legal and regulatory framework in future under National Social Security Strategy (NSSS) with the previous collaboration of relevant stakeholders.
5	Disability benefit for working age population suffering from disability	Disability allowance: a) Total Budget: 240 crore takas; b) Per Capita Amount-400 taka; c) Total Beneficiary- 400000.	Beneficiary of Disability allowance: 1000,000 persons	a) Budget: 1620 crore taka; b) Per Capita Amount-750 taka; c) Total Beneficiary- 1800000.
6	Disability benefit for children suffering from disability	Disability student's stipend program: Total Budget: 25.60 crore taka; Total Beneficiary- 50000.	Beneficiary: 145000	a) Beneficiary: 100,000; b) Total Budget: 95.64 crore taka
7	Child grant for children of poor and vulnerable family up to age 4	-	-	Institutional Grant for Government Orphanage, Baby Home and Registered Non-Government Orphanage has been increased from 1000 taka to 2000 Taka Per month.
8	Expand the coverage of social security schemes to include the poor and vulnerable residents of urban areas	-	-	The Department of Social Services' urban community development initiative has invested 24 crores 53 lakh 99 thousand 489 taka in a revolving fund until the fiscal year 2020-21, benefiting 24 lakh 11 thousand 656 people in urban areas. This includes 6 lakh 73 thousand 585 individuals who benefited from interest-free micro-loans, 1 lakh 65 thousand 846 people who benefited from technical training and social activities, and 15 lakh 72 thousand 225 families.
9	Increase spending on Social Protection	2.0% (2015)	2.3%	3.01%

Source: Ministry of Social Welfare

### 12.15.1 Programme for Disabilities

According to a disability prevalence survey conducted in 2005 by Handicap International (HI) and the National Forum of Organizations Working with the Disabled (NFOWD), 5.6 percent of people in Bangladesh have a disability. According to the NSSS, approximately 8.9 percent of the population - 8 percent of males



and 9.3 percent of females - has some form of disability, with 1.5 percent being severely disabled. Presently, the Ministry of Social Welfare pays a monthly disability stipend of 700 Tk to more than 20 lakh disabled persons. The Institute for Autism and Blind Children, Socially Disabled Adolescent Girls, and promotion services for opportunities for girls with impairments are a few disability focused programmes in operation. According to the NSSS, the disability allowance must be changed by the principles of lifecycle-based social security systems. Over time the number of beneficiaries under the programmes has increased especially for the allowance for the financially insolvent disabled and service center for disabled people. In 2020-21, more than fifty percent disabled persons are under the coverage of the disabled allowance. 20.50 lakh persons are expected to receive 500-taka monthly allowances through the Widow and Husband, Deserted Women Allowance program in 2020–21.<sup>66</sup> The coverage of the programmes for the disabled persons has been increasing over time. Especially the allowances for the financially insolvent disabled have expanded in coverage during the 7FYP. But coverage of some programmes like grants for the disabled, welfare fund has been static (Table 12.6).

**Table 12.6: Trend of the Coverage of Social Protection Programme for Disabled People**

Programmes	Beneficiaries in Lakh (Revised Budget)						
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Allowances for the financially insolvent disabled	6	7.5	8.25	10	18	18	20.0
Stipend for disabled students	0.6	0.7	0.8	0.9	1	1	-
Grants for the schools for the disabled	0.25	0.25	0.35	0.33	0.35	0.4	0.11
Fund for the welfare of acid burnt women and disabled	0.3	0.3	0.3	0.33	0.33	0.33	
Institute of pediatric neuro disorder and autism in BSMMU	0.05	0.02	0.02	-	-	-	-
Trust for the protection of persons with neurodevelopmental disabilities	0	0	0	0	0	3.13	
Welfare trust for physical disabilities	0	0	0	0	0	0.07	0.09
Service and assistance center for disabled	1.04	3.07	3.07	3.76	3.47	2.5	12

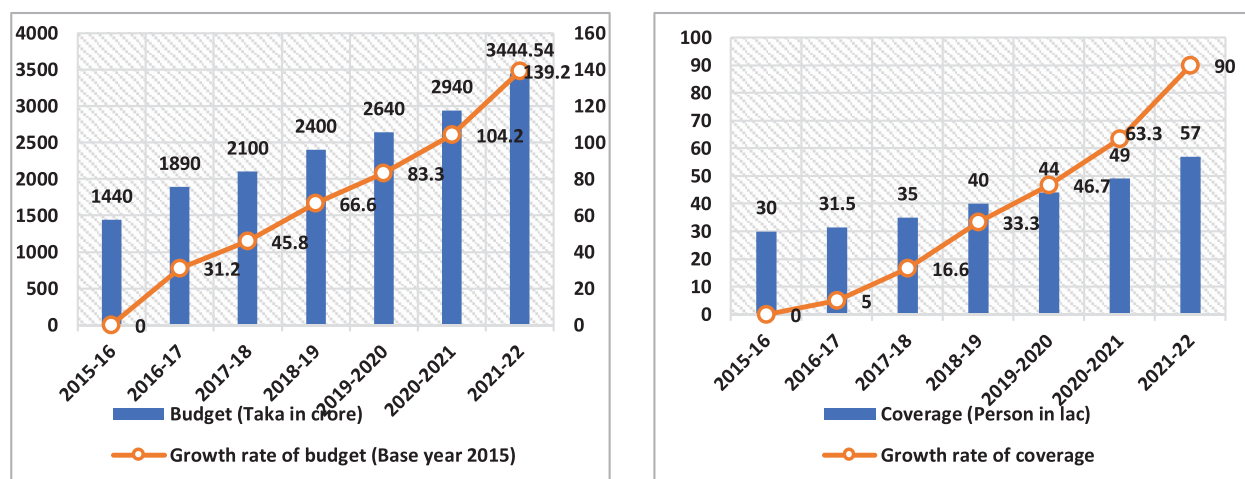
Source: Ministry of Finance

### 12.15.2 Programme for Elderly People

The Old Age Allowance (OAA) programme targets low-income households chosen from lists compiled by local-level administration. The line ministries' broad identification criteria for beneficiaries include indicators such as income level, asset or property ownership, disability status, household arrangements, demographic characteristics, etc. For instance, eligibility requirements for Old Age Allowance (OAA) include age (more than 65 for men and more than 62 for women), income (average annual income less than Tk. 3000), health conditions (infirm or handicapped), socioeconomic circumstances (freedom fighters, homeless, and landless), and social circumstances (widow, divorced, deserted). The old age allowance during the plan period has increased. Figure 12.7 suggests that both the coverage and the budgetary allocations have been increasing at an increasing rate.

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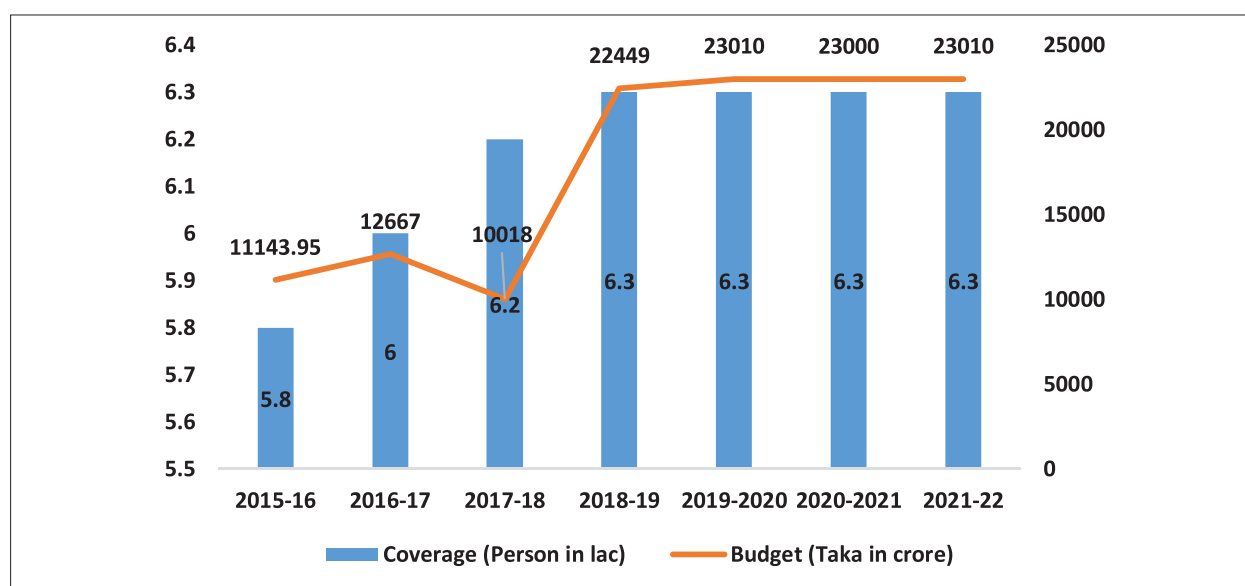
**Figure 12.7: Trend of the Coverage and Budgetary Allocation of Old Age Allowance**



Source: Ministry of Finance

Another programme for the elderly is pension for retired government employees and their families. The budgetary allocation was constant in the last three fiscal years during the 7<sup>th</sup> FYP (Figure 12.8).

**Figure 12.8: Trend of Coverage and Budgetary Allocation of Pension Scheme**



Source: Ministry of Finance

### Universal Pension Scheme

The government has decided to start a universal pension scheme for elderly people. The Universal Pension Management Bill was passed in January 2023. The programme is anticipated to help the elderly to cope with poverty, illness, incapacity, or unemployment by providing a monthly stipend. According to the national identity card, all citizens between the ages of 18 and 50, including Bangladeshis living abroad, are eligible for the benefit. The GoB wants to include private sector workers in the pension plan through the new law. An individual must pay a fixed amount of premium for at least 10 years in order to be eligible for the programme. The individual will begin to benefit from the system after turning 60 and continue to do so until death. Even though the idea of introducing the scheme was initiated during the 7<sup>th</sup> five-year plan,

the scheme got approval during the 8FYP. The recent government announcement to implement a universal pension scheme (UPS) in Bangladesh beginning from the 2022-23 fiscal year is a welcome and timely move.

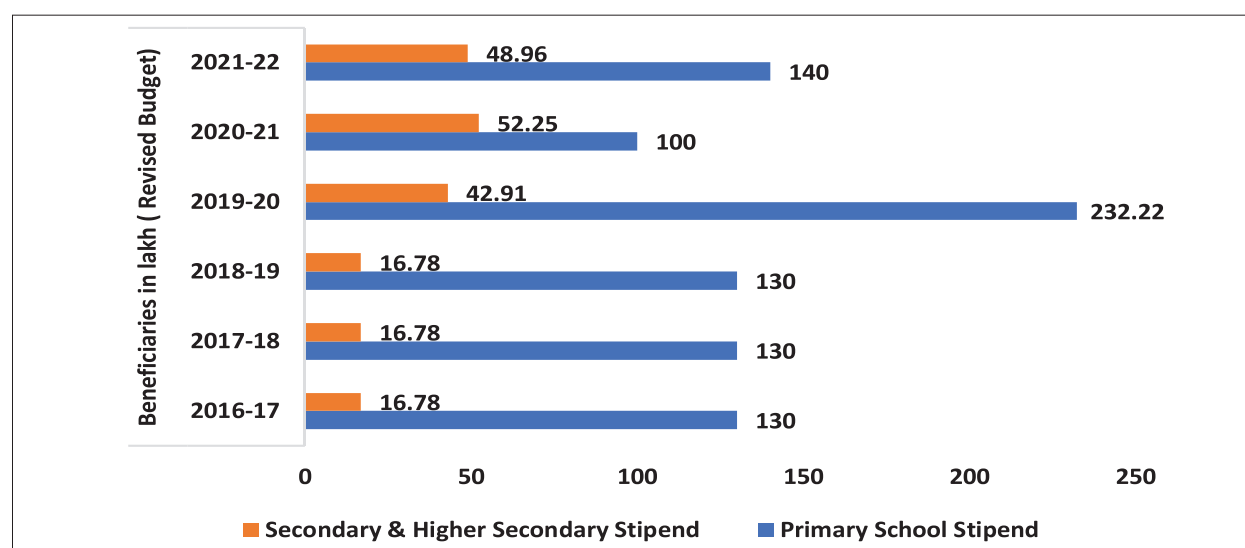
Moreover, the Ministry of Social Welfare would consider several options to facilitate the development of Private Voluntary Pension (PVP) under the National Social Security Strategy (NSSS) Framework in Bangladesh<sup>67</sup>. These include developing a legal and regulatory framework, providing tax incentives, capacity building, awareness, and education campaigns, partnering with financial institutions, and developing PVP products and services. These options can increase the demand for PVP and encourage more employers and employees to participate in PVP funds.

### 12.15.3 Programme for Children

The Bangladesh Shishu Academy (BSA) under MoWCA is implementing the Early Learning for Child Development (Phase III) programme. This first phase of the programme began in 2001 in partnership with UNICEF Bangladesh. It includes a variety of Early Childhood Care and Development (ECCD) activities, including training for parents and other caregivers, ECCD advocacy, child development centres, and pre-primary schools. Now, the initiative is being carried out in 16 Upazilas and 15 districts. It has been intended for kids between the ages of 3 and 8 years old. With a budget of Tk 19.6 crore, the programme aimed to assist 50,000 youngsters in FY2019–20. According to the prior project documentation, MoWCA ran almost 1400 pre-primary schools for more than 41,000 kids ages 5 and up, more than 500 child development centres for 16550 kids ages 4 and up, and 20 daycare centres for 400 kids ages 3 to 5 under the ELCD project. The project incorporates children with autism and other disabilities as significant components (MoWCA, 2017).<sup>68</sup>

There are primary and secondary stipend programmes provided for the welfare of the students (Table 12.9). But the budgetary allocation in the primary stipend programme has been reduced in recent years. Moreover, the allocation in the secondary stipend programme is much lower compared to the primary stipend programme. The allocation for stipend programmes in both primary and secondary education must be raised, especially in secondary education as the enrollment is lower in the latter.

**Figure 12.9: Budgetary Allocation Stipend Programmes for Children**



Source: Ministry of Finance

<sup>67</sup> Ministry of Social Welfare

<sup>68</sup> A Compendium of Social Protection Researches, General Economics Division, 2020.

The other child-related programmes and their coverages are provided in table 12.7. Maternal, neonatal, child and adolescent health/ national nutrition services and maternal, child, reproductive and adolescent health are the services related to child health and nutrition. The coverage of the programme with neonatal service is quite satisfactory. But the range of services related to reproductive health has been lower in the last year of the 7FYP. The programme covered a huge number of people during the plan.

The Reaching Out-of-School (ROSC) programme is an effort by the GoB to support impoverished children aged 8 to 14 who were either unable to enroll in primary school or were forced to leave because of other obligations to bring them education system. The beneficiaries under the programme have also been increasing in number. The coverage of the programmes such as street children rehabilitation programme, child development centre and establishment of child day care centre have remained constant over time. Some new programmes like Sheikh Russell Child Training and Rehabilitation Center, improvement of the work environment in the readymade garment sector/ elimination of risky child labour in Bangladesh and welfare facilities and skill development activities for workers are now launched which are praiseworthy initiatives.

**Table 12.7: Trend of the Coverage and Budgetary Allocation of Child Programmes**

Child Focused Programmes	Beneficiaries in Lakh (Revised Budget)					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Sheikh Russell Child Training and Rehabilitation Center	-	-	-	-	0.03	0.40
Street Children Rehabilitation Programme and CDC	0.02	0.02	0.02	0.02	0.02	0.02
Welfare Fund for the Oppressed Women and Children and Fund for the Welfare of Burnt and Disabled	-	-	-	0	0.33	0.06
Child protection and child welfare	-	0	0	-	1.5	1.24
H-Maternal, Neonatal, Child and Adolescent Health/ National Nutrition Services	400	400	656.32	614.87	688.22	473.77
H-Maternal, Child, Reproductive and Adolescent Health	203.17	577.83	654.02	685.69	332.12	332.12
Child Sensitive Social Protection in Bangladesh	0.01	-	-	1.5	0	1.55
Child Development Center	0.03	0.03	0.03	0.03	-	-
Reaching Out-of-School Children	4.03	5.48	5.57	7.61	-	-
Establishment of Hostel for Government Shishu Pariibar and the Visually Impaired Children	0.01	0.07	0.12	-	-	-
Early Learning for Child Development	-	0	0.5			
Establishment of 20 Child Daycare Center Project	0.06	0.06	0.06	-	-	-
Improvement of work environment in readymade garment sector/ elimination of risky child labor in Bangladesh and welfare facilities and skill development activities for workers	-	-	-	-	0.18	1.00
Services for Children at Risk	0.01	-	-	-	-	-
Enabling Environment for Child Right	-	0.09	-	-	-	-

Source: Ministry of Finance

In Bangladesh, providing a child grant to children of poor and vulnerable families up to the age of four can enhance their nutrition, health, and well-being. To design and implement effective programs that meet the needs of young children and their families, the Ministry of Social Welfare can offer financial transfers,

in-kind benefits, conditional transfers, targeted outreach, collaboration with other ministries, and other measures. The monthly Institutional Grant for Government Orphanages, Baby Homes, and Registered Non-Government Orphanages has been increased from 1,000 to 2,000 taka by the Ministry of Social Welfare.<sup>69</sup>

#### 12.15.4 Programme for Freedom Fighters:

In 2001, the Ministry of Liberation War Affairs was assigned the task with preparing and preserving lists of freedom fighters, providing honoraria and various benefits to freedom fighters and their dependents, preserving the history and memories of the great liberation war, and constructing monuments and war memorials. During the last five years, the GoB has allocated approximately Tk170 billion for the welfare of more than 200,000 freedom fighters resulting in the improvement of the living standard and the empowerment of women members of their families. There are many social safety programmes for the freedom fighters. But the coverage of the programme is still low. The coverage of the social protection programs for the freedom fighters is quite reasonable considering many constraints. The government has given more emphasis on the budgetary allocation for the allowances of the freedom fighters (Table 12.8). Programs like honorarium for the freedom fighters have been increased in the recent years. The government has taken the initiative of raising the allowance to 20000 BDT from 12000 BDT in the budget of 2021-22. At a cost of Tk 4,122 crore, the government has also begun building 30,000 “Bir Nibas” for the independence fighters. In addition, the procedure of issuing electronic identification cards and digital certificates has reached its conclusion, which would ensure the freedom fighters’ identities.

**Table 12.8: Coverage of Social Protection Programmes for the Freedom Fighters**

Programs	Coverage (Persons in Lac/Man Month)						
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Honorarium for Freedom Fighters	1.8	1.85	2	2	2	2	2
Honorarium & Medical Allowances for Injured Freedom Fighters	0.15	0.15	0.15	0.15	0.15	0.13	0.13
Ration for Shaheed Family and Injured Freedom Fighters	0.3	0.3	0.3	0.3	0.3	0.34	0.29
Construction of Residence for Landless & poor Freedom Fighters	0.29	0.29	0.29	-	0	0	0.08
Programs	Budgetary Allocation (Taka in Crore)						
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Honorarium for Freedom Fighters	1920.00	2196.06	3200.00	2996.15	3385.05	2880.00	4603.35
Honorarium & Medical Allowances for Injured Freedom Fighters	206.35	327.15	267.36	415.05	480.15	450.08	456.66
Ration for Shaheed Family and Injured Freedom Fighters	29.00	32.50	33.00	33.50	62	65.00	70.00
Construction of Residence for Landless & poor Freedom Fighters	75.00	55.00	56.68	-	100	0	481.90

Source: Ministry of Finance

Apart from these programs, the Ministry of Social Welfare conducts the Social Safety Net Program for Marginalized Communities which provides immediate aid and assistance to disaster-affected individuals, especially those living in extreme destitution. The program seeks to address the immediate requirements of the affected population and aid in their recovery. 130,042 individuals are aided by the Hijra, Bede, Marginalized Communities, and Tea Worker Livelihood Development Program. Financial Assistance for Cancer, Kidney, and Other Chronic Disease Patients program is also operated where patients with cancer,

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kidney and liver cirrhosis, incapacitated stroke, congenital heart disease, and thalassemia are eligible for financial assistance. The program aims to provide a one-time financial assistance of Tk 50,000, to aid and support the patient's family, and to restore the patient to a healthy and normal living. Affected patients across the nation can request for assistance online, and the district committee will compile a list of those who are truly ill and destitute. Also The Ministry of Social Welfare has been considering a number of methods to expand social security coverage to include poor and vulnerable urban residents. These include urban poverty-targeted programs, social assistance programs, universal coverage, public-private partnerships, community-based programs, and other measures to assure the participation of these populations in the development process. The Department of Social Services' urban community development program has invested 24 crores 53 lakh 99 thousand 489 taka in a revolving fund until the fiscal year 2020-21, benefiting 24 lakh 11 thousand 656 urban residents. This number includes 6 lakh 73 thousand 585 recipients of interest-free microloans, 1 lakh 65 thousand 846 recipients of technical training and participation in social activities, and 15 lakh 72 thousand 225 households.

### 12.15.5 Food-Related Programmes

The VGD programme<sup>70</sup>, run by the Ministry of Women and Children Affairs, is one of the most significant social security programmes ever put into place to improve Bangladeshi rural poor women's socioeconomic conditions. In 2016-17, the beneficiaries were only 120 people per month but in 2021-22, the number reached above 1 million yearly<sup>71</sup>. The budgetary allocation for the VGF group has declined though the number of beneficiaries has increased. Coverage of food-friendly and food assistance programmes has increased along with the budget in the respective sector while the opposite happens with the gratuitous relief (Table 12.9).

**Table 12.9: Trend of the Coverage and Budgetary Allocation of Food Programmes in FY2016-17 and FY2021-22**

Programme	Beneficiary (Lakh)-2016-17	Budget (Crore BDT) 2016-17	Beneficiary (Lakh)-2021-22	Budget (Crore BDT) 2021-22
Food Assistance in CTG-Hill Tracts Area	7.76 (Man Month)	255.79	2.32	347.55
Vulnerable Group Feeding (VGF)	56.63	1324.28	180	961.96
Food Friendly Programme	0.46	2021.28	62.5	2816.72
Open Market Sales (OMS)	97.06	617.76	53.95	1943.58
Food Subsidy	-	-	-	1584.58
Vulnerable Group Development (VGD)	120 (Man Month)	1191.85	10.4	1840.05
Gratuitous Relief (GR)	62.73	522.14	32	572.60
Food for Work	0	0	9.64	826.44
Work for Money	19.21 (Man Month)	1435.47	17.86	1500.00
Test Relief	17.57 (Man Month)	1281.32	3.69	1450.00

Source: Ministry of Finance

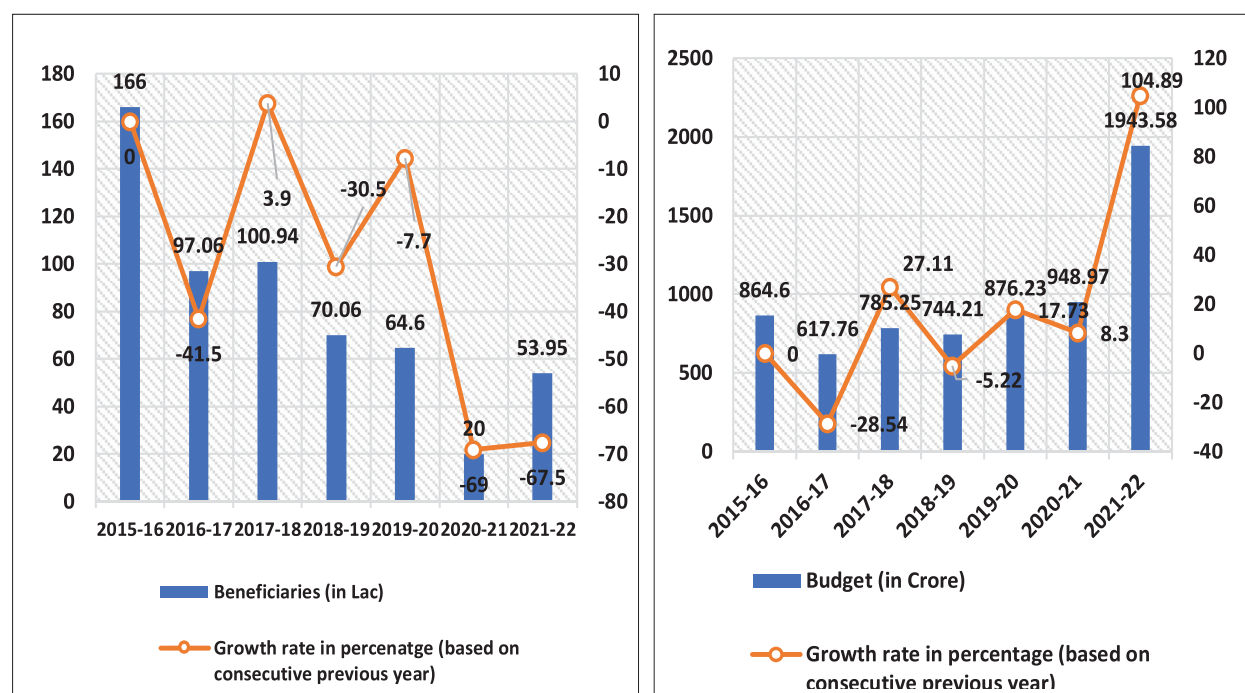
<sup>70</sup> It strives to raise the level of living for totally underprivileged families, especially for weak, poor mothers. The programmes' goals are to consistently raise the socioeconomic standing of Bangladesh's poor rural women so that they can successfully combat their current food insecurity, malnutrition, economic instability, and low social status and emerge from the depths of extreme poverty. For a cycle of 24 months, poor and vulnerable women receive monthly food aid of 30 kg of fortified rice packaged in a bag. Additionally, they receive a set of development services that include training, savings management, and micro-credit support.

<sup>71</sup> Action Plan for Implementation of National Social Security of Strategy of Bangladesh (2021-2026)



The Ministry of Food has been carrying out the OMS scheme. There are 8.67 million beneficiaries and a budget of Tk 972.0 crore for this programme in FY 2021-22. This programme is only being implemented in urban areas, and it is a part of the life cycle approach's Cluster on Food Security and Disaster Assistance and Covariate Risks. Under this programme, rice and flour are sold in order to make food accessible to the low-income households/individuals. The other objective is to stabilize the market prices<sup>72</sup>. Both the coverage and budgetary allocation were reduced during the plan period (Figure 12.10). The consecutive growth in both the number of beneficiaries and budgetary allocation has been decreasing at a decreasing rate. But an effective and adequate OMS is important under the present situation – especially during the moderate to high inflation period fueled by pandemic and Russia-Ukraine war. In addition, the government administers and distributes food grain through the Test Relief (TR) and Food for Work (FFW) programmes to reduce joblessness during the lean season and to develop rural infrastructure.

**Figure 12.10: Trend of the Coverage and Budgetary Allocation of OMS**



Source: Ministry of Finance

### 12.15.6 Disaster Management Programme

The Multipurpose Disaster Shelter Project (MDSP), which improves access to safe havens in the case of a natural disaster, benefits almost 14 million people in nine coastal regions. The Local Government Division is running the initiative. There are 0.03 lakh beneficiaries with a BDT 560 crore budget for this programme in the 2020–21 fiscal year.

A project titled “Enhancing Adaptive Capacities of Coastal Communities, especially Women, to cope with Climate Change Induced Salinity” has been initiated by GoB with assistance from the Green Climate Fund (GCF) and the United Nations Development Programme (UNDP). The project’s entire budget is 32.98 million dollars (Tk 27686.71 million), of which the GCF grant is USD 24.98 million, and the GoB contribution is 8 million dollars (Tk 6716 million).<sup>73</sup>

<sup>72</sup> Action Plan for Implementation of National Social Security of Strategy of Bangladesh (2021-2026)

<sup>73</sup> Action Plan for Implementation of National Social Security of Strategy of Bangladesh (2021-2026)



Various Relief Goods (Cloths, Blankets, Biscuits, Corrugated Iron Sheets, Tents, Baby Food, Cattle-Food, etc.) and Lump-Sum provisions for the development of special areas (except hill tracts) have witnessed increased coverage. The flood management and livelihood improvement project in haor area and Ashroyan Project -2 and 3 have very low coverage in the recent fiscal year. On the other hand, construction of flood-shelters in flood-Prone and river-erosion areas has increased coverage over time (Table 12.10).

**Table 12.10: Trends of the Coverage of Disaster Management Programmes**

Programme	Beneficiaries in Lakh (Revised Budget)					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Multipurpose Disaster Shelter Construction	0.8	1.17	0.34	0.57	1.92	-
Housing Support	2.6	2.84	2.96	2.96	2.65	1.83
Fund for Climate Change	4.5	4.5	4.5	4.5	4.3	3.52
Various Relief Goods (Cloths, Blankets, Biscuits, Corrugated Iron Sheets, Tents, Baby Food, Cattle-Food, etc.)	-	-	0	12.43	59.1	80.25
Guchhagram (Climate Victims Rehabilitation)	0.71	3.38	1.19	0.29	0.03	0.05
Coastal Climate Resilient Infrastructure Improvement	0.5	0.5	0.34	-	-	-
Project on increasing the capacity of adaptation to climate change to counter salinity of Coastal communities, especially women (Green Climate Fund)	-	-	-	-	0.29	0.29
Lump-Sum Provision for Development of Special Areas (Except Hill Tracts)	0.13	0.13	0.17	0.21	0.57	-
Ashroyan Project -2 and 3	0.23	10.65	12.84	10.65	0.78	0.63
Special Assistance for the development of Char, Haor, and under-development area	-	0.45	0.9	0.23	0.21	0.25
Skill Development and Earthquake Risk Management Fund	-	0	0.17	0.17	0.17	-
Construction of Flood-Shelter in Flood-Prone and River-Erosion Areas	-	0	0.25	1.34	5.17	1.75
Flood Management and Livelihood Improvement Project in Haor Area	-	0	0	10.18	0.12	0.19
Haor Infrastructure and livelihood Development	0.35	0.35	0.16	0.39	0.07	0.01
Relief Works (Flood, Drought, Cyclone and Others)	-	-	0	-	36	4.80
Block Allocation for Disaster Management	0	13.09	13.09	-	-	-
<b>Total</b>	<b>9.82</b>	<b>37.06</b>	<b>36.91</b>	<b>43.92</b>	<b>111.38</b>	<b>93.57</b>

Source: Ministry of Finance

### 12.15.7 Gender Specific Social Protection

The FY 2020–21 budget includes about twenty social security programmes with a particular focus on women, either directly or indirectly. The main programmes that specifically targets women are VGD and AWDDW; the other programmes have been considered minor. Programmes that target women tend to assume that women are the poorest within society and acknowledge that they have fewer opportunities.

Many women are served by current programmes, which boost consumption and revenue generation while supporting the advancement of gender equality in all spheres of life, including education, employment, income, and health<sup>74</sup>. The majority of programmes don't specifically aim to empower or protect women, yet many have had intended and unforeseen positive effects on women. Some of the social protection programmes for women are listed below.

**Table 12.11: Coverage and Budgetary Allocation in Women Related Programmes (FY2020-21)**

Programmes for Women	Beneficiaries (Persons in Lac)	Budget (Taka in Crore)
Assistance for Working Lactating Mothers	2.75	270.79
Maternity Allowance Programme for the Poor Lactating Mothers	7.7	753.97
Allowances for the Widow, Deserted and Destitute Women	20.5	1230
Micro-credit for Women Self-employment	0.34	6
Joyeeta Foundation	0.01	6.86
Women's Skill Based Training For Livelihood	0.26	7.99
Special Assistance Fund for Women Development and Women Entrepreneurs	0.25	125
Welfare Fund for the Oppressed Women and Children and Fund for the Welfare of Burnt and Disabled	0.33	6.82
Tattha Apa: Empowerment of women through information	0.29	90
Urban based marginal Women Development Project	0.11	15.85
Multi-Sectoral Programme to prevent violence against Women	11.05	27.4
Development programmes for the distressed and neglected women and children		53.47
Development of women entrepreneurs in economic empowerment at the grass root level		2.27

Source: Ministry of Finance

(NB: Many programs are not included in the budget of the fiscal year 2021-22)

Among all the programmes, allowance for widow, deserted, destitute women and multi-sectoral programme to prevent violence against women have higher coverage. The remaining programmes have low coverage as the number of beneficiaries is low. Especially the skill-enhancing programmes, only a few women are receiving the benefit although the budgetary allocation is higher.

The NSSS highlighted the necessity to address the needs of women and girls of different ages and has designated women as a group with particular requirements. The NSSS promotes the social empowerment of underprivileged groups, particularly women, in order to foster transformative social security. The NSSS does not go into greater detail on this, instead leaving it up to a separate strategy for gender-focused social security to come up with concrete solutions. The gender diagnostic study was conducted as a result, and it suggests including more elements in social security programmes and their delivery system that empower women.

The LGD is implementing Strengthening Women's Ability for Productive New Opportunities (SWAPNO), a social transfer programme designed for extremely poor women, with help from the SDG-F, UNDP, and ILO, among others. The goal is to support work, particularly self-employment, and improve the participant's employability in the future. They are extremely poor rural women. The first step is "pay for work" and building the human capital of the women participating in public works under the programme.

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As a “graduation plan,” the beneficiaries develop and run microenterprises and self-employment ventures to provide them with vocational skills training and job placement services so they can stop frequently relying on SSPs. The curriculum additionally emphasizes fostering connections with Small and Medium Businesses (SMEs) and Public-Private Partnerships (PPPs). With 65,000 primary beneficiaries, the initiative is currently being carried out in 1,030 unions across 106 Upazilas in 22 districts. The NSSS placed a special emphasis on extending the reach of SWAPNO due to its novel features that enable recipients to become independent women in rural areas (Compendium of NSSS Reforms in Bangladesh).<sup>75</sup>

## 12.16 System Development

### 12.16.1 Establishing a Single Registry Management Information System

Bangladesh still lack a robust single registry Management Information System (MIS). But progress has been made in some programmes. As per the Action Plan Phase II, A MIS for the Child Benefit Programme was created to record 100% of beneficiary information that was integrated with G2P for monthly payments. The VGD MIS has been created and put into use. The selection of one million beneficiaries for the 2021–2022 VGD cycle was done nationwide online, and the beneficiary database is easily accessible online. The Mother and Child Benefit Programme and the VGD Programme have 100% beneficiary lists that are accessible online through MIS. Using the G2P system and MCBP MIS, payments are generated. An MIS unit has been established at DWA in 2020 to support the operationalization of the MISs at the national level. For NID verification, duplication-checking, and payment purposes, these MISs are connected to the database of the Finance division. But more progress is needed in this sector. Generating a unique and single database for the social protection system still requires more effort from the relevant ministries and the commissions. The Action Plan Phase II already incorporates the target of implementing a nationwide Single Registry based on interoperable building scheme-specific MIS.<sup>76</sup>

### 12.16.2 Strengthening Government-to-Person (G2P) Payment Systems

The NSSS’s recommended option for sending money over digital channels using the G2P modality turned out to be a successful solution. The SSP’s 11 programmes are now covered by the EFT payment system, and the G2P disbursement arrangement will reach about 20 million beneficiaries. The system continues to operate as previously for the Government Service Pension. The sole difference is that it was formerly run under the Public Servants (Retirement) Act of 1974. The previous law from 1974 has been repealed, and the newly published Public Servant Act 2018 serves as the legal framework for a public pension. The majority of the public pension benefits are moved to G2P modalities. Through the use of mobile financial service providers, MoSW has been aiming to ensure Old Age Allowances, Allowances for Widows and Husband Deserted, Destitute Women, and Allowances for the Disabled within FY 2022-23. VGD and the Mother and Child Benefit Programme are currently conducted using the G2P system. Under the child benefit program, an MIS was designed to capture 100 percent of beneficiary information, which was then integrated with the G2P system for monthly payment. Vulnerable urban women are given money via digital transfers based on G2P. Through the G2P system, payments are generated utilizing MCBP MIS. Urban women in need receive cash via G2P-based digital transmission. The conventional mechanism for giving scholarships has been replaced with a computerized system. Beginning with the 2019–2020 fiscal year, students will receive their scholarships directly into their bank accounts via the G2P method. In the fiscal year 2020-2021, the Ministry of Finance allotted Tk 50 crore to the Department of Labour, Ministry of Labour and Employment to implement the Social Protection Programme for garment and leather industry workers. With the sanction of the PIC, financial assistance totaling Tk 5 crore 45 lakh 85 thousand has already been disbursed to 6065 beneficiaries on a G2P basis through the electronic MIS system.<sup>77</sup>

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### 12.16.3 Strengthening Processes for Selecting Recipients of Social Security Schemes

In order to reduce targeting errors, the GOB has been developing a universal dataset. Even the government is attempting to increase transparency by publishing beneficiary lists online. However, a key resource for these development ‘national household database (NHD)’ is still not operationalized.

### 12.16.4 Monitoring and Evaluation

According to the NSSS, there is basically no formal M&E system in place for social security programmes. The existing monitoring system is only concerned with the percentage of allocated funds that have been spent on each programme. There is no mechanism for systematically assessing how effectively the resources allocated to SSPs have been reducing poverty at the national level. This is also absent at the level of individual programmes. Evaluations of the impact of a few programs conducted independently at the request of development partners reveal varied results. In addition, virtually no digital MIS exists to fulfil the M&E requirement.

The IMED is currently tasked with conducting impact evaluations for the various programmes, but their scope is limited to development initiatives only. Nonetheless, the SFYP acknowledges that “while the IMED serves a useful purpose in monitoring the financial and physical implementation of projects, there is a significant gap in terms of results-based M&E.” The APA is expected to provide some mechanisms for effective M&E of social programs, but these mechanisms may not focus on each program in minute detail. In addition to the APA’s performance evaluation system, it is necessary to establish a mechanism for expressly monitoring and evaluating the social security programs against the NSSS vision and mission.

In most of the programmes, a well-defined monitoring and grievance resolution mechanism based on results has yet to be implemented. For example, in the VGD programme, the dashboard has not yet been created, despite the development of the program M&E Framework. A thorough monitoring and reporting mechanism is already included in the VGD implementation guidelines. Together with the monitoring and reporting tools, the guideline is being updated. In most child-related programmes, there is a need to develop coordination mechanisms and monitoring guidelines. In food and education-related programmes, the monitoring system requires digitalization and strengthening. Impact assessments should be carried out on a regular basis.<sup>78</sup>

## 12.17 Key Challenges

Despite improvements in the social protection front, the system is still beset with challenges. Some of key challenges are briefly highlighted.

**Imbalance Between SP Pillars:** Generally, a well-functioning SP system include three pillars – (i) social assistance (predominantly tax financed); (ii) social insurance (contributions from the beneficiaries); and (iii) active labour market programmes (regulations for employers and employees). Now a fourth pillar – social care has also been considered. Bangladesh SP system is heavily lopsided with most of the programmes are social assistance types. The social insurance, and active labour market programmes pillars are either underdeveloped or non-existent.

**Low Coverage for Children:** In Bangladesh, there is one child for every eight people who live in poverty; however, the children only receive 1.6% of social assistance (World Bank, 2021). In FY 2010, 3.5% of the overall social protection budget was spent on child focused SP programmes, according to a UNICEF study (2019). However, in 2016, only 2.4% of youngsters received 2.3% of the overall social protection budget. Apart from a few childcare facilities in metropolitan areas for female government workers, there is no programme to assist families and caregivers in their child-care tasks.

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78 Action Plan for Implementation of National Social Security of Strategy of Bangladesh (2021-2026)

**Lower Attention in Urban Areas:** In rural areas, 36% of the people are getting the SP benefit although 26% are poor. On the contrary, only 11% of urban people are getting the benefit while 19% of them are poor (World Bank Report, 2021). In terms of location-based allocation, the social security system allocation between FY14 and FY18 generally exhibits three patterns: In terms of social security programmes serving both rural and urban areas, 49% do so (including government pensions); (ii) 47% do so exclusively; and (iii) only 4% do so exclusively for urban areas.

**Inadequate Generosity:** In Bangladesh, average transfer to beneficiaries (also known as generosity) are low. In nominal terms, the estimated average transfer amount, which was BDT 332 per month in FY 2015, increased to approximately BDT 595 per month in FY 2019. The upper poverty limit for 2019 is estimated to be BDT 2,025 per person, per month. The estimated transfer amount of BDT 595 for 2019 represents only 31% of the requirements of a poor or vulnerable individual. Thus, when compared to national poverty thresholds, the transfer amount appears to have little effect on the beneficiaries' poverty status.

<sup>79</sup>The overall challenges faced by the ministries, especially by the Ministry of Social Welfare, are insufficient funding, limited coverage, and inadequate institutional capacity, a lack of knowledge, inefficient delivery systems, limited coordination, and climate change. Moreover, despite endeavors to expand the scope of social protection programs, a substantial number of vulnerable populations remain unprotected. Additionally, a dearth of trained personnel, inadequate infrastructure, and insufficient resources hindered the effectiveness and reach of the initiatives.

## 12.18 Social Protection and COVID-19

Bangladesh was making commendable progress on a variety of economic and social indicators when the pandemic struck, but the domestic economy has performed better than expected. On March 25, 2020, the first stimulus package was declared in response to the COVID 19 pandemic. Later, on 14 April 2020, the Honorable Prime Minister expanded on the government's economic recovery and restitution of livelihoods policies. It was subsequently broadened in June of 2021. In addition to expansionary fiscal and monetary policies, targeted fiscal, monetary, and financial programs were designed to mitigate the effects of the crisis and promote inclusive economic recovery. The policy emphasized increasing aggregate demand by increasing public expenditure, providing policy support to the private sector, draining excess liquidity from the banking system, injecting new liquidity into the market, and expanding social protection measures. Horizontal (increasing coverage) and vertical (increasing benefit amounts) expansions and two new programs, such as cash distribution to the needy, have been designed to bolster SPSs. To combat the deleterious impacts of COVID-19, GoB announced 28 stimulus packages involving about TK 1 trillion. Moreover, the other programmes were 3,200 billion taka stimulus programme for the underprivileged including 527 billion taka for unemployed people during COVID-19 lockdowns, 13,500 taka per month for two lakh expatriates, 2,700 billion taka for small and medium-sized businesses (SMEs), food aid for 1.25 million beneficiary households, free rice for 10 million people before Eid, and cash transfers of 2,500 taka to 5 million poor families through mobile financial service providers.<sup>80</sup> The initial programs taken by the government to combat the impact of pandemic are given below

- Humanitarian food aid distribution of 0.4 million metric tons of rice and 0.1 million metric tons of wheat;
- Launch of social safety net programs including BDT 12.0 billion in direct cash incentive, pay allowances for 0.7 million beneficiaries, and BDT 21.30 billion allocated for homeless people;
- Distribution of BDT 32 billion as low-interest credit for the poor farmers, migrant workers, trained youth, and unemployed youth.

<sup>79</sup> Ministry of Social Welfare

<sup>80</sup> A brief analysis of social protection program response to Covid-19 pandemic in Bangladesh



The entire amount allocated for BDT 7.50 billion (about USD 89 million) and BDT 1 billion (about USD 12 million) as special honoraria awarded to physicians, nurses, and other health professionals as well as for compensation in the event of their passing. In an effort to secure a sufficient supply of food throughout the coronavirus crisis, the government has allocated BDT 95.00 billion in subsidies for the agricultural sector. In terms of social protection, the government announced additional expenditures to combat the pandemic, including Tk.15 billion for the microcredit and marginal people's lifestyle development program and Tk.12 billion for the expansion of the old age and widow allowance program. In May 2021, the government issued a second round of cash assistance programs totaling Tk 9.3 billion for those who lost their employment during the protracted and ongoing lockdown. The government announced fiscal stimulus in the amount of Tk 390.7 billion (approximately \$4.6 billion) by the end of April 2021. This measure was not the only one adopted. The National Board of Revenue deferred import duties and taxes on medical supplies, including protective equipment and test instruments. In the upcoming fiscal year (FY) 2021-22, the distribution (in Taka) for health, agricultural, and social safety net programs will increase even further. Maintaining efficient targeting is a challenging endeavor. In an effort to play it safe, the government has decided to place 25 percent of the budget for development initiatives on hold. This will have an effect on lower-priority initiatives. The government has solicited support from donors for these budgets.<sup>81</sup>

The funds have been set aside for irrigation, mechanization, marketing of goods, and other agricultural necessities. Moreover, to minimize the losses in business and government sectors, the steps taken by the government are listed below (Table 12.12).

**Table 12.12: Stimulus Packages for Business and Industries**

Industries	Amount	Cost of Fund/Interest
Export-oriented industries	BDT 50 billion	2% in the form of service charge or fees
Industries and service sector as working capital loans	BDT 300 billion	4.5% by the beneficiary and 4.5% by the GoB as subsidy
Cottage, micro, small and medium enterprises as working capital loans	BDT 200 billion	4% by the beneficiary and 5% by the GoB as a subsidy
Raw materials imports under back-to-back LCs	BDT 127.5 billion	2%
Pre-shipment credit refinance scheme	BDT 50 billion	7%
The agriculture sector refinance scheme	BDT 50 billion	BB from banks: 1% and banks from customers: 4%
Refinance schemes for low-income professionals, farmers, micro businessmen	BDT 30 billion	BB from banks: 1%, banks from MCFIs: 3.5% and MCFIs from customers: 4%

Source: Bangladesh Bank

As a result of the COVID-19 outbreak, the manufacturing industries' quantitative index dropped from 445.58 in January 2020 to 282.6 in April 2020, but the main success is that the index has increased to 497.73 in March 2021. Quantum index of electricity decreased from 301.03 in March 2020 to 261.77 in April and reached 309.09 in March 2021. The mining quantity index decreased from 187.33 in January 2020 to 134.11 in March 2021. Industry and service sector activities are reviving thanks to the government and BB's ongoing sector-boosting policies.<sup>82</sup>

81 A brief analysis of social protection program response to COVID-19 pandemic in Bangladesh

82 Bangladesh Bank ([https://www.bb.org.bd/pub/special/covid19\\_06072021.pdf](https://www.bb.org.bd/pub/special/covid19_06072021.pdf))

## 12.19 Conclusion and Way Forward

Social protection is an important fiscal policy instrument to smoothen consumption, tackle poverty, improve inequality and stir economic growth. Considering these virtues adequate attention has been placed on it in the 7FYP. Accordingly, ambitious targets have been set out in the 7FYP in line with the unfinished agenda outlined in the NSSS. Progress with respect to beneficiary coverage increase and higher budgetary allocation has been satisfactory. However, progress of implementation of NSS still remain weak. COVID 19 experiences have also pointed to providing attention to emerging issues. GoB must implement the unfinished NSSS agenda with the 8FYP and within the period considered in the second implementation road map. While doing this, GoB must also take actions to make the system more harmonized with appropriate balancing of the three pillars of the social protection system – tax financed social assistance; contributory social insurance and active labour market programmes. Considering the importance of care services in enhancing labour force participation of women and inclusive development GoB should provide added attention to social care component. Furthermore, the apparent gaps in the demand and supply components in the aged-based (or life cycle programmes) programmes – especially for children, youth and working aged women must be narrowed within the 8FYP and within the period considered in the second implementation road map. Moreover, global experience during COVID 19 suggested a new SP instrument for women called Temporary Basic Income for women (TBI-W). TBI-W is a policy instrument – an unconditional cash transfer to identified women beneficiary for a specific time period that recognizes the disproportionate effect of the crisis on a group that faces persistent and cumulative vulnerabilities across several dimensions. ‘Beyond supporting women in securing their basic needs and compensating for their job and income losses, such an instrument might help boost women’s freedom of spending and economic independence, as well as balance the control of economic resources within the household.’<sup>83</sup> Thus a TBI-W is an emergency measure of affirmative action that could start paving the road towards a public good that the whole society can benefit from: gender equality. TBI-W is being piloted in a few number of Asian countries including Malaysia and Nepal. Following them GoB may also pilot it in Bangladesh. GoB must undertake new initiatives to improve the beneficiary selection. Given that NHD has failed to fulfil its promise, GoB must consider alternative selection approaches such geographical and community-based targeting. Although geographical targeting has been attempted for OAA and AWDDW programmes, large scale piloting with community-based targeting may be attempted to assess the effectiveness of the approach. Lastly, women’s participation if G2P is low due to lack of financial literacy and mobile phone ownership. GoB may act on both of these fronts to improve digital divide and inclusivity.

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83 María Montoya-Aguirre, Eduardo Ortiz-Juarez and Aroa Santiago, (2021), ‘Protecting Women’s Livelihoods in Times of Pandemic: Temporary Basic Income and the Road to Gender Equality,’ UNDP Global Policy Network Brief.



**ICT DEVELOPMENT AND  
PRIORITIES FOR BUILDING  
SMART BANGLADESH**

**CHAPTER**

**13**



## 13.1 Introduction

Integrating information and communication technology (ICT) in development activities has been recognised as essential for promoting sustainable economic growth and social progress. Bangladesh has been pursuing the adoption and utilisation of ICT to accelerate the pace of development since the early 2000s. In particular, the government of Bangladesh has been prioritising the development of ICT infrastructure, enhancing digital literacy, and promoting e-governance initiatives in its development plans.

The 7<sup>th</sup> Five Year Plan (7FYP) period (2016-2020) was a critical phase for Bangladesh's development, with a focus on achieving the Sustainable Development Goals (SDGs) by 2030. The plan identified ICT as a key enabler of development and emphasised the need to leverage ICT to increase productivity, create employment opportunities, and enhance the quality of life of citizens. During this period, the government of Bangladesh implemented various policies and initiatives to promote the adoption and utilisation of ICT. Notably, during the 7FYP period, Bangladesh adopted National ICT Policy 2018 (Box 13.1) that aimed to boost the nation's ICT competitiveness.

### Box 13.1: Key Goals of the National ICT Policy, 2018

The Government of Bangladesh, through the ICT Division, aspires to execute, among other things, the following:

- Implementation of ICT curriculum at all levels of education
- Critically reviewing the ICT curriculum every two years and revising, if necessary, as per market-based demand
- Enhancing the capacity of public institutions to fulfil the requirements of local and global markets in relation to ICT products and services
- Providing incentives for IT service providers, including 100 per cent corporate tax exemption till 2024
- Providing various incentives and financial support to product developers in the field of emerging technologies, including IoT, RPA, deep learning, AI, and Robotics

Source: National ICT Policy, 2018

The final phase of the 7<sup>th</sup> Five Year Plan in Bangladesh coincided with the outbreak of COVID-19, which disrupted economic activities, social interactions, and public services. The pandemic highlighted the crucial role of ICT in addressing the challenges posed by the crisis, and the government of Bangladesh responded by accelerating its digital transformation agenda. During this period, the government launched several digital initiatives, such as expanding e-governance services, adopting online education platforms, and introducing digital payment systems to facilitate remote work, learning, and service delivery. The COVID-19 pandemic has accelerated the pace of digital transformation in Bangladesh, providing a unique opportunity to leverage emerging technologies to promote sustainable development and build a Smart Bangladesh.

In December 2022, the Government of Bangladesh announced the vision to transform the country into a Smart Bangladesh by 2041, leveraging enhanced use of state-of-the-art technologies. To materialise this vision, it is important to reflect on the lessons learned during the 7FYP period and carefully assess the emerging developments triggered by the fourth industrial revolution (4IR).

This chapter aims to conduct an evaluation of the ICT and development activities during the 7<sup>th</sup> Five Year Plan period in Bangladesh. The evaluation will assess the progress made on various ICT-development nexuses along with the government's policies and initiatives to leverage ICT for development, social progress, and digital inclusion. The chapter will also explore the emerging issues affecting Bangladesh in the coming days. The findings of this evaluation are expected to provide useful insights and recommendations for policymakers and stakeholders to enhance the effectiveness of ICT in promoting sustainable development in Bangladesh.

## 13.2 Digital Economy of Bangladesh

### 13.2.1 Progress with Specific Performance Indicators under 7FYP Development Results Framework

Bangladesh's digital economy is experiencing a tremendous growth rate in recent years, mostly driven by its young population. Assessment of 7FYP Development Results Framework indicators show that the country has made notable progress in expanding the submarine cable network, increasing broadband connectivity, and internet penetration in Bangladesh during the 7FYP period (Table 13.1).

Expansion of submarine cable network (bandwidth Gbps): It indicates the capacity of the submarine cable network in terms of gigabits per second (Gbps). The baseline in FY15 was 30.57 Gbps, and the target for FY20 was set at 150.0 Gbps. The actual achievement in FY20 exceeded the target significantly, reaching 1103 Gbps.

Percentage of people with landline phone: This indicator measures the proportion of the population with access to landline telephones. The baseline in 2010 was 0.60%, and the target for FY20 was set at 1.11%. However, the actual figure for FY20 was 0.86%, indicating that the target was not fully achieved.

Percentage of people with broadband connection: This indicator represents the proportion of the population with access to broadband internet connections. The baseline in 2010 was 0.01%, and the target for FY20 was set at 0.1%. The actual figure for FY20 exceeded the target significantly, reaching 48.82%.

Internet users per 100 people population: This indicator measures the number of internet users per 100 people in the population. The baseline in March 2015 was 28.24 users per 100 people, and the target for FY20 was set at 40 users per 100 people. The actual figure for FY20 surpassed the target, reaching 60.34 users per 100 people.

**Table 13.1: Progress with Performance Indicators under 7FYP Development Results Framework**

Indicators	FY15 (Baseline)	FY20 (Target)	FY20 (Actual)
Expansion of submarine cable network (bandwidth Gbps)	30.57 (2014-15)	150.0	1103
Percentage of people with land phone	0.60 (2010)	1.11	0.86
Percentage of people with broadband connection	0.01 (2010)	0.1	48.82
Internet users per 100 people population	28.24 (Mar 2015)	40	60.34

Source: Posts and Telecommunications Division.

According to Bangladesh Telecommunication Regulatory Commission (BTRC), mobile phone subscribers reached 183 million, whereas internet users reached 125 million in FEB 2023. In January 2016, this number was 132 million and 56 million, respectively. This boom in internet use and mobile phone subscribers and internet users created new doors for the sub-sector of the digital economy, such as E-commerce, F-commerce, mobile financial services (MFS), startups, and outsourcing.

### 13.2.2 Contribution to GDP

During the 7FYP period, the ICT sector of Bangladesh experienced notable growth. The contribution of the IT sector to the GDP is 0.76 per cent, and the government plans to fetch \$5 billion in export earnings from this sector by 2025 (Ministry of Commerce, 2022). The domestic market size of the ICT sector was recorded at \$1.4 billion in FY21.

### 13.2.3 E-commerce and F-commerce Boom in Bangladesh

E-commerce, short for electronic commerce, is a key element of the digital economy that pertains to the buying and selling of digitally deliverable goods and services through online platforms. There are four main classifications of e-commerce: Business-to-business (B2B), Business-to-consumer (B2C), Consumer-to-consumer (C2C), and Business-to-government (B2G). The e-commerce market has witnessed significant competition and rapid expansion since the early 2000s, driven by the advent of advanced infrastructure for online transactions and payment systems. According to International Trade Administration, there are approximately 2,000 e-commerce sites and 50,000 Facebook pages currently operating in this domain, offering as many as 30,000 products on a daily basis (International trade administration, 2023).

Facebook has become the most popular social media platform in Bangladesh. Most businesses are taking advantage of establishing their presence on the platform. Entrepreneurs of small and medium-sized enterprises (SMEs) lacking the resources to operate their own e-commerce websites, find it convenient to utilise Facebook's platform to access millions of potential customers through the platform. F-commerce is experiencing a growing trend in Bangladesh, particularly among the female population. This industry in Bangladesh currently encompasses roughly three million small and medium-sized enterprises, of which half are owned and operated by women. According to Meta, the outbreak of the COVID-19 pandemic has resulted in a surge in F-commerce, with 70 per cent of women-owned businesses in Bangladesh launching Facebook pages since the beginning of the pandemic. F-commerce could be a potential solution for the country's unemployment. According to a study by BIGD, 99.18 per cent of female F-commerce entrepreneurs have a bachelor's degree or higher. Moreover, 57 per cent of the aforementioned entrepreneurs managed their F-commerce page as their primary occupation. Additionally, 38.52 per cent of these entrepreneurs reported that their businesses contributed to their family's income. A notable advantage of F-commerce is that customers in Bangladesh often feel more at ease purchasing products through Facebook, as they can interact directly with the seller and view their profile, which can help build trust in the transaction.

### 13.2.4 Growth of Mobile Financial Services

During the 7<sup>th</sup> FYP period, mobile financial services (MFS) in Bangladesh have experienced rapid growth, becoming an important part of the country's financial sector. As of 2021, Bangladesh has over 107 million active mobile financial service users, making it one of the largest MFS markets in the world. The dominant player in the Bangladeshi MFS market is bKash, a subsidiary of BRAC Bank, which controls over 80 per cent of the market share. Other notable players include Rocket, Nagad, and SureCash. MFS in Bangladesh is primarily used for person-to-person (P2P) transfers, bill payments, and mobile top-ups. However, the use cases are expanding as more merchants adopt mobile payments, and MFS providers offer a wider range of financial services such as savings, loans, and insurance.

MFS played a pivotal role in ensuring financial inclusion during the 7<sup>th</sup> FYP period. Mobile financial services have allowed for greater access to financial services for marginalised groups while reducing transaction costs. The growth of mobile phone usage and regulatory changes have facilitated the country's expansion of mobile financial services. Furthermore, the government has used MFS to deliver social security benefits, transferring payments directly to beneficiaries through either their bank or MFS accounts. In order to assist vulnerable populations during the pandemic, the government has used MFS. For instance, the government provided BDT 2,500(per individual) in financial assistance to five million families through four major mobile financial service companies. The government has also expanded the use of mobile financial services to distribute the stimulus package to garment workers. Bangladesh's remarkable achievement in mobile financial services for promoting financial inclusion is highlighted in the E-Government Survey 2022 (UN, 2022).

### 13.2.5 IT Startups

Over the past few years, the startup ecosystem in Bangladesh has experienced significant growth. Approximately 1,200 active startups are operating in various fields, including fintech, logistics, healthcare, tourism, agriculture, and education. The number of new firms emerging each year is over 200. Factors driving the country's startup ecosystem include economic growth, demographic dividend, increasing internet users, government initiatives, and access to capital. To support technology-based innovations and promote entrepreneurship culture, the government of Bangladesh sponsors through Startup Bangladesh Limited, a venture capital fund with an allocated capital of BDT 500 crores. The fund offers investments in pre-seed, seed, and growth-stage startups in the form of equity, convertible debt, grants, and in-kind support. According to a report, Bangladeshi startups raised \$415 million in 2021. The country's largest mobile financial service provider, Bkash, received funding of \$250 million among other startups at that time. Another e-commerce startup, ShopUp, raised \$63 million in 2022.

### 13.2.6 Employment in the ICT Sector

There is no concrete information on employment in the ICT sector. According to the ITITES Industry Statistics of Bangladesh 2019, the estimated full-time employment in the industry was 64,067 (Table 13.2). When 62,524 part-time workers were included, the total job in the registered companies was 126,591 (in 2018). The sector's employment growth has reportedly increased at an annual CAGR of 22.3 per cent.

**Table 13.2: Total Employment of IT-ITES Sector (2013-2018)**

Year	2013	2014	2015	2016	2017	2018	CAGR
Full-time Employment in the IT/ ITES Industry	23,392	28,615	35,003	42,817	52,375	64,067	22.32 per cent
Part-time Employment in the IT/ ITES Industry	22,829	27,925	34,159	41,785	51,113	62,524	22.32 per cent
Total Employment of the IT-ITES Industry	46,221	56,540	69,162	84,602	103,488	126,591	22.32 per cent

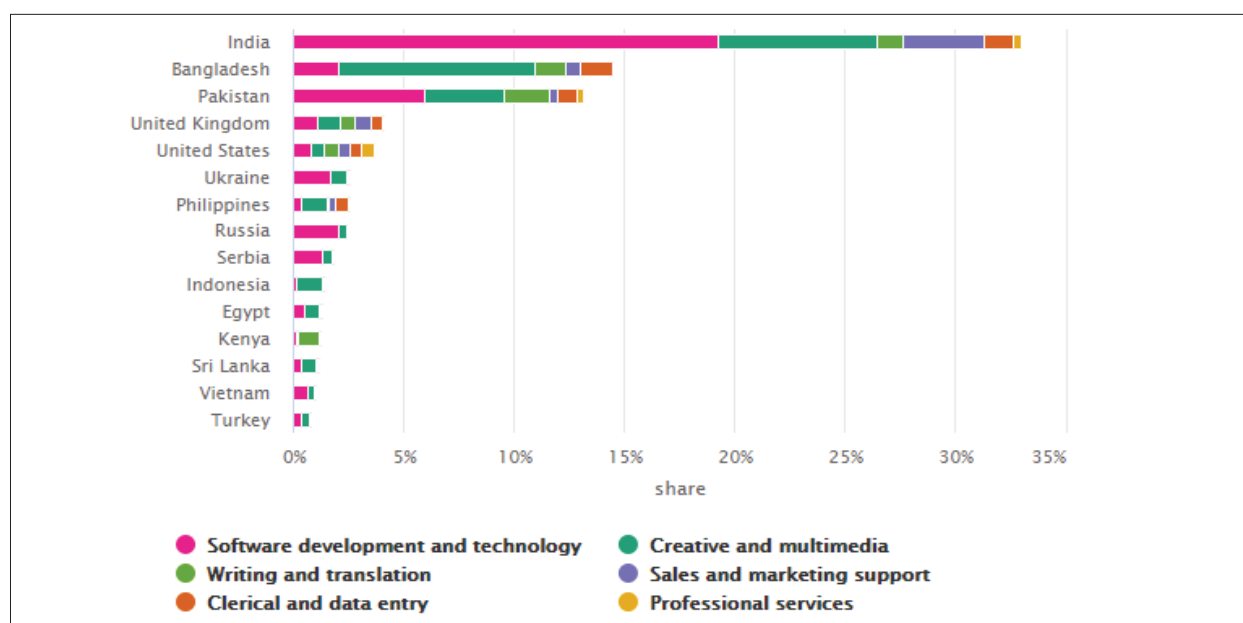
Note: Estimates are based on the revenue generated by 1755 BASIS, BACCO, and E-cab members. Revenue of non-members and other subsectors such as internet service providers, IT hardware companies, gig economy, and IT workers in manufacturing, finance, healthcare, government, etc., are not included.

Source: IT-ITES Industry Statistics of Bangladesh 2019.

However, this reported employment is only a partial picture. Many small companies operating in the sector are not registered members of any organisations that participate in the survey. Besides, many individuals are operating independently. According to a recent publication, current IT industry employment is estimated at over 0.3 million in 2020. BIDA estimates that there are 4,500 IT firms employing more than 0.75 million ICT professionals (BIDA, 2022).

In addition to formal and informal employment within the ICT/ITeS sector, a significant number of individuals in Bangladesh engage in freelance work. This trend is supported by various government initiatives, such as the digitalisation of Bangladesh, the ongoing development of ICT infrastructure, and public and private efforts to promote freelancing. As a result, the number of freelancers in the country is rapidly growing, with approximately 650,000 registered as such. Out of this number, approximately 500,000 are currently active participants in the global gig economy. The Online Labour Index (OLI) 2020, reported that Bangladesh is the second-largest supplier of online labour worldwide, comprising 15 per cent of the global online labour force, trailing only behind India. The share of female workers in the online gig workforce in Bangladesh was about 17 percent. As per OLI 2020 data, Bangladesh's share of the global online worker population has increased by 5 percentage points over the past five years. Bangladeshi online gig workers are primarily involved in creative and multimedia, and software development and technology (Figure 13.1).

**Figure 13.1: Major Suppliers of Global Online Labour**



Note: Clerical and data entry - customer service, data entry, transcription etc; creative and multimedia – animation, graphic design, photography; professional services – accounting, legal, project management; sales and marketing support – lead generation, posting ads, search engine optimisation; software development and technology – data science, game development, mobile application development etc.; writing and translation – article writing, copywriting, translation

Source: Online Labour Index 2020, Oxford Internet Institute (OII)

### 13.2.7 Skills Challenge in the ICT Sector

Bangladesh has a huge youth population, with around 47 percent of the population below the age of 25, with significant potential; however, it is underutilised owing to poor tertiary enrolment—only 5.3 per cent of those employed have a tertiary level of education. According to a recent Bangladesh Institute of Development Studies (BIDS) research, university graduates are needed in the IT sector as there is a high demand for programmers, system analysts, software engineers, quality assurance professionals, and graphic designers.

Employers point to two types of skill shortages: (i) there are not enough graduates with the specialised skills needed in high-growth sectors, and (ii) even if graduates have these skills, they are still unemployed due to a lack of English language, computer, communication, and problem-solving skills (Chowdhury, 2019).

According to industry resource persons, employee retention and brain drain are some of the major issues faced by the industry. They observe that the tendency to switch jobs is quite high among the employees, with several of them reporting freshers' tendency to switch jobs after the training period. The employers also remarked that the cream of the crop among university graduates and employees tends to go abroad for educational and professional purposes. Some industry stakeholders also pointed out that they cannot compete with the salaries offered by some foreign firms that provide the option of working from home for Bangladeshi recruits.

Industry stakeholders believe that the curriculum cannot be stagnant and has to be regularly updated in line with the needs and demands of the industry. They suggest that more practical training, imitating real-world industry projects, is required in universities.

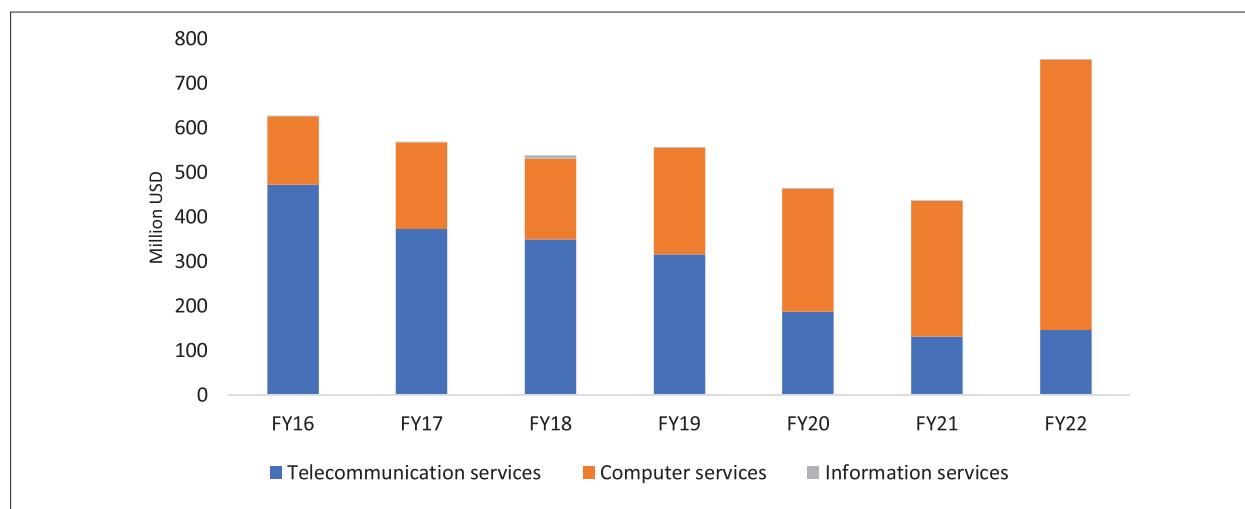
Regarding the source of skills among Bangladeshi employees, almost all the freshers receive on-the-job training after they are recruited, as they do not come with sufficient technical skills required in the industry. Other sources of training are government-supported training programmes and private training firms.



## ICT Exports of Bangladesh

The 7FYP period witnessed an erratic movement of ICT exports. However, after COVID-induced disruptions, ICT exports from Bangladesh reached a record high level in FY22, exporting around \$755 million after a decline since FY16 (Figure 13.2). Since FY16, the country has experienced an average export growth rate of 6 per cent in this sector. ICT export consists of three sub-sectors: telecommunication, computer, and information services. Telecommunication services mainly drive the ICT export till FY19. After that, computer service export was the main factor behind ICT export. Although the overall sector's growth rate was around 6 per cent, the computer services export grew at a rate of 29 per cent in the last six years.

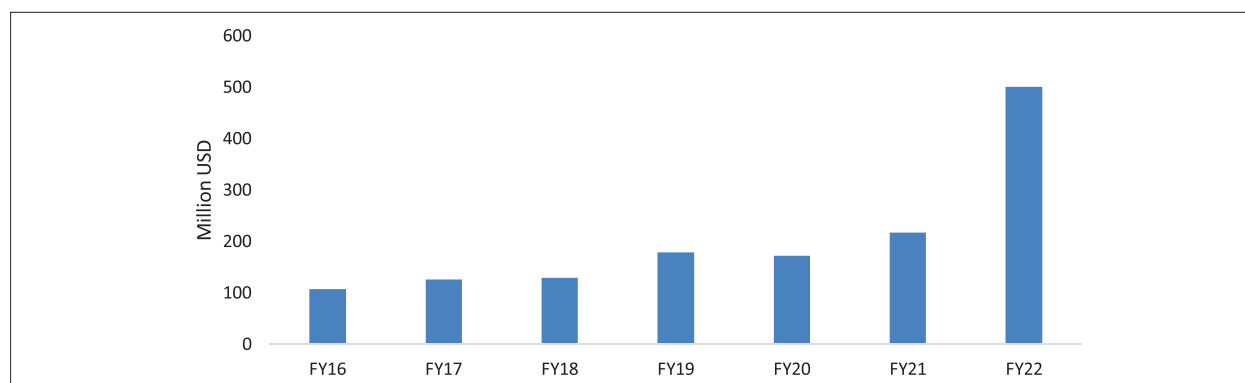
**Figure 13.2: ICT Exports Composition of Bangladesh**



Source: Bangladesh Bank, 2023

Computer services export is backed by business processed outsourcing (BPO) and is growing rapidly (Figure 13.3). The BPO industry, which began its journey in the late 2000s with around 300 employees, today employs more than 50,000 people across about 300 companies. BPO includes customer service, data processing, graphic design, animation, data entry and similar services. BPO's share in computer service export is more than 70 per cent on average. In the last six years, the average export earnings growth from BPO was around 35 per cent. The BPO industry is currently enjoying a 100 per cent tax exemption, a 50 per cent tax reduction for the first three years for foreign employees, an 80 per cent vat exemption for rental and utilities, and up to 10 per cent cash incentive on exports are significant incentives. According to Bangladesh's industry estimates, about 20,000 people join this sector annually.

**Figure 13.3: Trend of BPO Export**

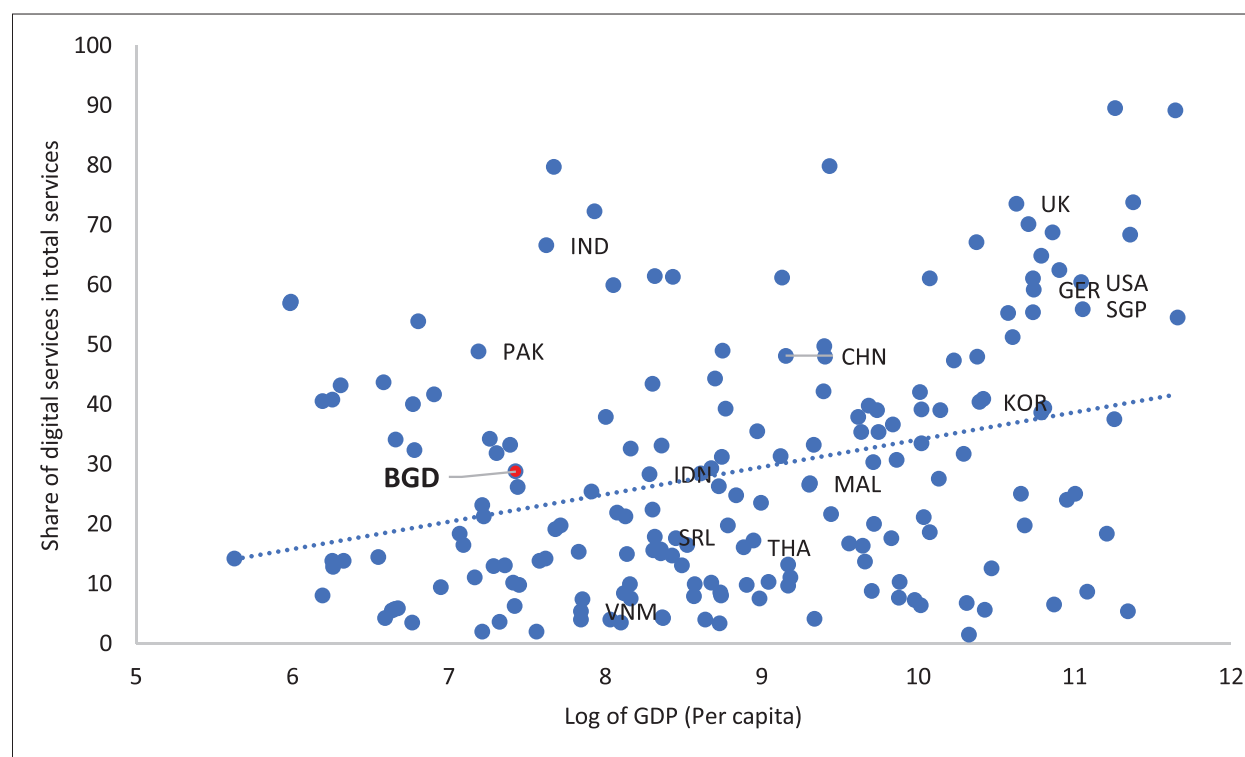


Source: Bangladesh Bank, 2023.

As the nation faces the formidable challenge of creating a minimum of 2 million job opportunities annually to accommodate new entrants into its labour force, the Business Process Outsourcing (BPO) sector possesses the potential to fulfil the country's employment needs. With the government's goal of increasing ICT export revenues to \$5 billion by 2025, the BPO industry has the potential to generate a significant portion of this revenue. The ICT Division is actively promoting the BPO sector to position Bangladesh as a leading offshore destination for international companies. Establishing a strong presence in the dynamic and expanding BPO market will require catering to the complex demands of global clients. In addition, newer digital technologies are transforming traditional operations. BPO models are being revitalised by incorporating intelligent workflows that integrate Artificial Intelligence (AI), big data, cloud computing, Internet of Things (IoT), machine learning, and automation to help firms and organisations carry out diverse and complex tasks more effectively. Domain-specific skills are emerging as key drivers of growth in the BPO market, which is witnessing a surge of new digital process models. (I-scoop, 2018).

It needs pointing out that there is a strong positive correlation (0.97) between IT-ITES services exports and GDP. Bangladesh's position regarding the share of IT-ITES services exports in total services is higher than expected based on its per capita GDP (Figure 13.4).

**Figure 13.4: Relationship Between Share of ICT Export and GDP**



Note: Countries are indicated as BGD – Bangladesh, BTN – Bhutan, CAM – Cambodia, CHN – China, GER – Germany, IDN – Indonesia, IND – India, KOR – Republic of Korea, MAL – Malaysia, PAK – Pakistan, SRL – Sri Lanka, THA – Thailand, UK – United Kingdom, USA – United States, and VNM – Vietnam.

Source: Author's presentation using UNCTADstat data.

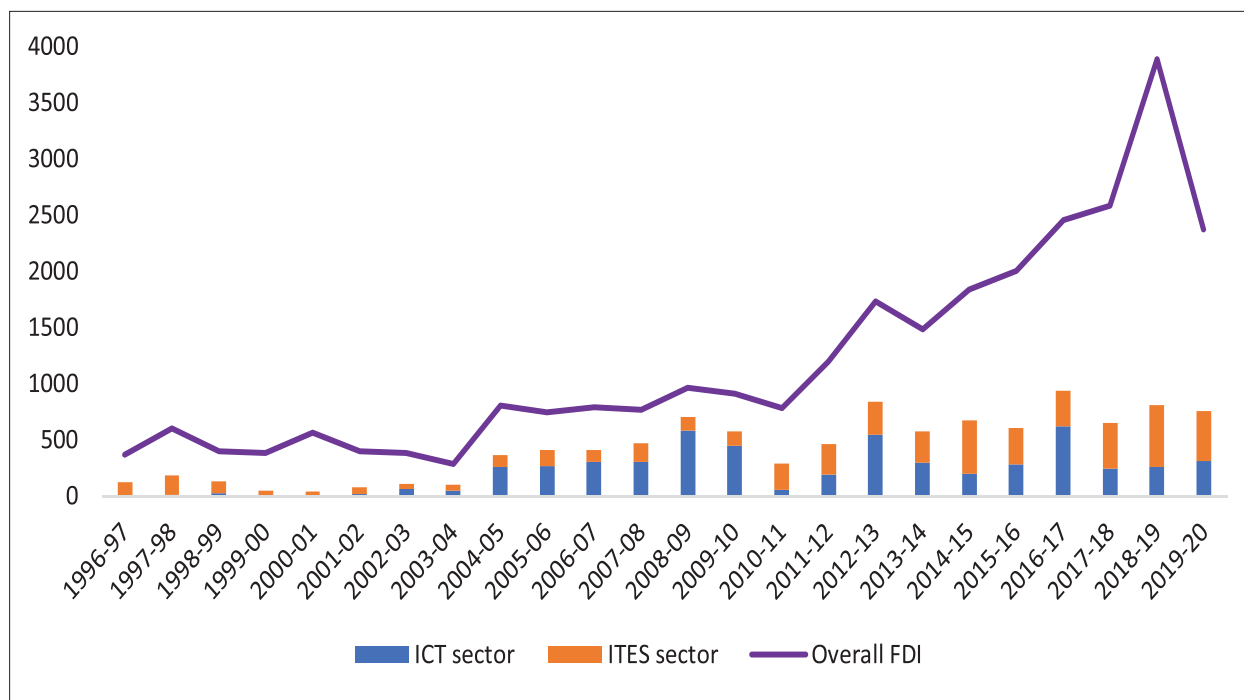
### 13.3 Investment in the ICT Sector

Due to the growing importance of the ICT sector, the government has taken initiatives to increase investment in this sector. Investment through FDI, government budget allocation, private investment and venture capital shaping the digital ecosystem of this country.

#### 13.3.1 Foreign Direct Investment

The government is taking several steps to attract FDI, such as offering incentives and creating a favourable investment environment. In the fiscal year 2019-20, Bangladesh received a net foreign direct investment (FDI) amounting to US\$2.37 billion, of which \$758 million was directed towards the ICT/ITeS industry (Figure 13.5). The ICT sector alone was able to attract \$311 million worth of investment during the same year, with a significant portion of this investment being attributed to telecommunication. This substantial investment can be attributed to the massive infrastructure development necessary to keep up with advancements in telecommunication and mobile internet technology. In FY20, the ICT/ITeS industry accounted for over 30 per cent of the total FDI in Bangladesh. The total FDI stock in the IT/ITeS sector has now accumulated to \$4.6 billion.

**Figure 13.5: Net FDI Inflow in Bangladesh**

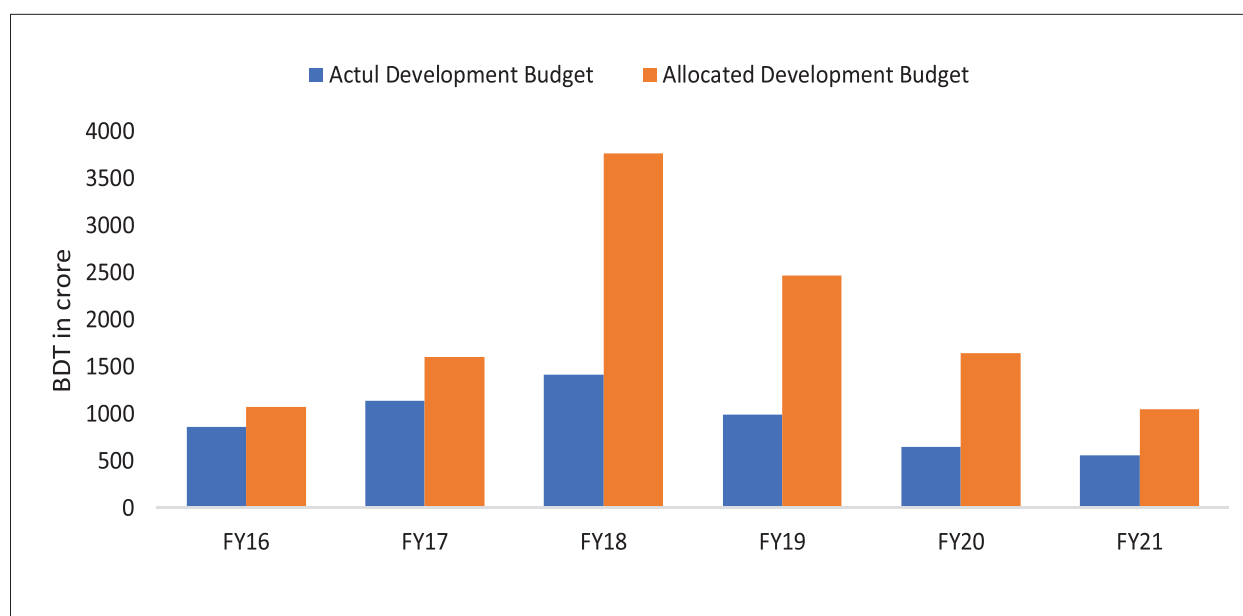


Source: Author Analysis using Bangladesh Bank data

#### 13.3.2 Government Investment

The government has allotted a massive development budget for the ICT sector after introducing the vision of digital Bangladesh. This sector's development budget rose from FY16 to FY18 (Figure 13.6). Although the allotted development budget in this sector increased, the actual spending declined over time. For instance, the allocated development budget in FY20 was Tk. 1,645 crore, but the actual expenditure was only Tk. 652 crore. This could be due to the implementation challenges indicating the lack of absorptive capacity of the budget.

**Figure 13.6: Actual and Allocated Development Budget of ICT Sector**



Source: Ministry of Finance.

### 13.4 ICT Infrastructure

The 7FYP period has witnessed remarkable progress in building the country's ICT infrastructure (Box 13.2). Investment's in ICT infrastructure is expected to boost Bangladesh's aspiration to transform into Smart Bangladesh by 2041.

Bangladesh's government has planned to establish a number of Hi-Tech parks to provide infrastructure and support for technology-based businesses to foster innovation and entrepreneurship. Currently, 28 Hi-Tech parks are planned to be set up in various parts of the country; some of them are already in operation. However, only four Hi-Tech parks are currently operational. These Hi-Tech parks aim to attract both local and foreign investments.

In terms of connectivity and coverage, according to ITU, 100 per cent population is covered by a mobile-cellular network, whereas 98 per cent population is covered by at least a 4G mobile network (ITU, 2022). In terms of mobile and fixed broadband subscriptions, among 100 inhabitants, 55 of them have active mobile broadband subscriptions. This number is 7 for fixed broadband.

The Bangladesh Computer Council (BCC) under the ICT Ministry manages two national data centres. The first National Data Centre (NDC) was inaugurated in 2010 and is certified as a Tier III data centre. The second NDC, built in partnership with ZTE, is the world's 7<sup>th</sup> largest data centre and is certified as a Tier IV data centre. According to officials, Bangladesh's firms are saving BDT 353 corer annually due to the establishment of data centres in Bangladesh (UNB, 2021). The second NDC was inaugurated in November 2019. In total, Bangladesh currently has 16 data centres.

### Box 13.2: Key Highlights of Improving ICT Infrastructure during 7FYP Period

During the 7FYP period, Bangladesh has made notable progress in building its ICT infrastructure. Some key highlights are noted below:

- **Progress in Tele Density:** Aligned to Vision 2021, a tele density of 70 per cent is achieved, while the target being 90 per cent during FY16-FY20.
- **Implementation of Optical Fiber Cable Network:** 1,000 union parishad and 290 Upazila have been brought under the development of Optical Fiber Cable Network.
- **Installation of 4G Network:** Wireless Broadband Network for Digital Bangladesh (4G, LTE) has been installed.
- **Installation of 300 km OFC Network:** A project for installing an OFC 300 km network, NGN (IMS) based Telecommunication Network for Digital Bangladesh was completed in 30 June 2017.
- **Launching Bangabandhu Satellite-1:** Country's first geostationary satellite, Bangabandhu Satellite-1 was launched in May 2018. The project was completed by BTRC at an amount of \$248 million with the facility to save satellite rent of \$14 million per year. Kuakata of Patuakhali district during 2017 has been established with Kuakata Cable Landing Station for its second submarine cable SEA-ME-WE-5, owned and operated by Bangladesh Submarine Cable Company Limited (BSCCL).
- **Upgradation of Access Network:** The project to upgrade the access network has been implemented in three locations of the country through a Multi-Dwelling Unit (MDU), Gigabit-capable Passive Optical Networks (GPON), IP Multimedia Subsystem Platform (IMS), and Access Gateway (AGW) of FTTX Technology.
- **Extending Coverage of Government's Mobile Operator:** Teletalk has built its infrastructure to provide its service in all districts and total of forty-eight upazilas. Teletalk provides 3G mobile services throughout the country.
- **Provision of Tower Sharing Facility:** Tower sharing license has been issued for four mobile phone operators. This aims to maximise the use of tower resources, and minimise the demand for electricity connection.
- **Hi-tech Parks:** Four hi-tech parks are established by the government to incubate startups during FY16-FY20. They are:
  - 1) Software Technology Park, Janata Tower
  - 2) Sheikh Kamal IT Training and Incubation Centre, Natore
  - 3) Sheikh Hasina Software Technology Park, Jashore
  - 4) Bangabandhu Hi-Tech City, Kaliakoir

Source: Authors' compilation based on various sources.

## 13.5 Progress with E-governance

The main aim of e-governance was to establish connectivity among the citizens and deal with the government, ensuring citizen participation in the government's policy-making and planning. The country has made remarkable progress in e-governance. It ranked 111th among 193 countries in 2022 on the E-Governance Development index, moving 8 notches up compared to the previous year (UN, 2022). According to the report, communication and collaboration have become smoother at county, municipal and rural local government levels through available tools on the national portal. The ICT division has implemented a project titled "National ICT Infra-Network for Bangladesh Government Phase-III" to facilitate the public service in building digital Bangladesh under the Bangladesh Computer Council (BCC). The project is the extension of "National ICT Infra-Network for Bangladesh Government Phase-II", which was successfully implemented and ended in June 2015. The third phase of the project commenced in January 2017 and aimed to provide high-speed internet services through 19,500 km of optical fibre cable to the country's rural areas and connect 2,600 unions within the network. Additionally, the project has completed providing data connectivity services to 1,000 offices of the Bangladesh Police, as well as VPN/MPLS services to 1,600 offices.

### 13.5.1 Government Initiative

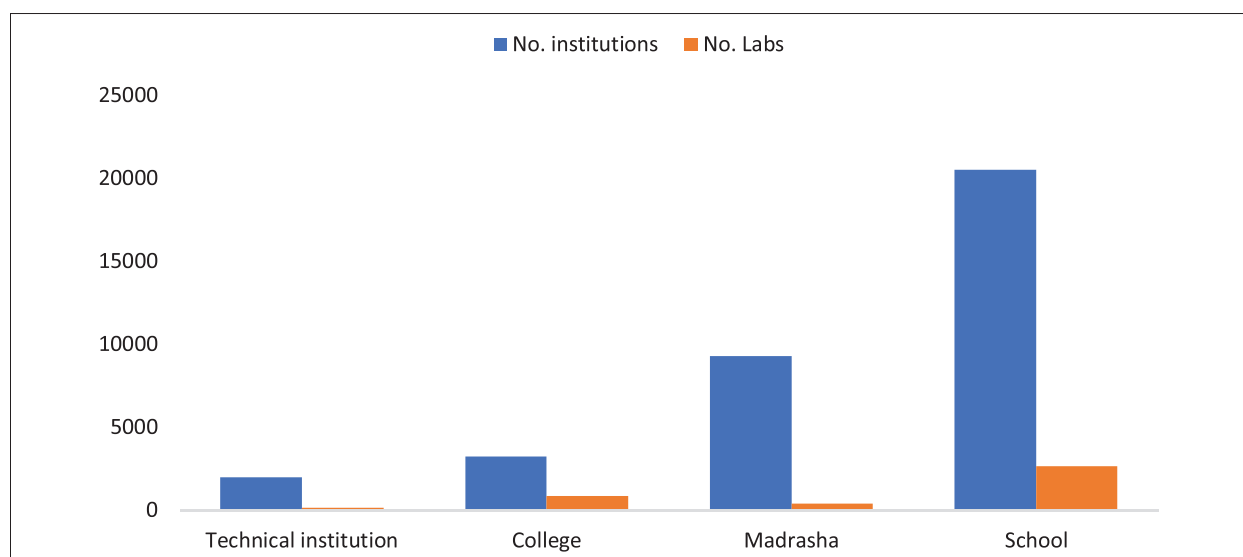
The vision of a Digital Bangladesh is a crucial component of the Bangladesh government's developmental agenda. As part of this vision, the government has approved the establishment of 28 IT and software parks and aims to build IT parks in all 64 districts of the country. In an effort to create a favourable investment climate, the government has been updating its policies to enhance the ease of doing business for potential investors and partners. These policy updates include the ICT Policy of 2018, as well as other measures like the Digital Security Act of 2018, Right to Information (RTI), Intellectual Property Rights (IPR), Broadband, Public-Private Partnership (PPP), and Alternative Investment. Apart from these governments offer various incentive to promote the overall ICT sector, such as export incentive and ERQ facilities for exporters.

Due to the importance of this sector, the government declared software, hardware, ITeS, BPO and freelancing as the most priority export sector in Export Policy 2021-2024. A 10 per cent cash incentive is offered for exporting hardware, software and ITeS. Also, a 4 per cent export subsidy is offered for individual-level freelancers for exports of these services earned through identified marker places. Additionally, 4 per cent export incentive is offered against export from Hi-Tech park. Until June 30, 2024, a tax holiday is applicable for income generated from software development, nationwide telecommunication transmission networks (NTTN), and ITeS providers/operators. Companies producing hardware products such as motherboards, casings, UPS, speakers, sound systems, power supplies, USB cables, CCTV, and pen drives are eligible for a 10-year tax holiday. This tax holiday only applies to companies that commence commercial production between July 1, 2021, and June 30, 2030. A partial tax exemption of 5 to 10 years applies for selected industries established between July 2019 and June 2024. These industries include computer hardware, automation and robotics design, manufacturing and nanotechnology-based products.

### 13.6 ICT and Education

In the modern education system, ICT has become an indispensable tool that has transformed educators' and learners' teaching and learning processes. The government has taken several initiatives to incorporate ICT in education. One of the initiatives is the Sheikh Russel Digital Labs project, which has established approximately 4,176 labs in educational institutions nationwide (Figure 13.7). Another project, the Sheikh Russel School of Future, aims to turn 300 schools into smart schools. Through the Learning Management System, around 1 million users have benefited from this project.

**Figure 13.7: No of Institution and Sheikh Russel Labs**



Source: Sheikh Russel Digital Lab

The She Power Project, which aims to promote sustainable development for women through ICT, has also been implemented in 21 districts across the country. This project has provided training, and internship opportunities for around 10,500 women in three modules, including Freelancer to Entrepreneur, IT service provider, and Women call centre agent. The candidates underwent five months of training, followed by three months of internships and 12 days of follow-up training under this project.

Although visible improvement has been observed in incorporating ICT in education, there is room for improvement. A significant number of institutions do not have modern lab facilities. Going beyond the 7FYP period, Bangladesh can learn from the various ICT initiatives taken during the COVID-19 pandemic (Box 13.3).

**Box 13.3: The Pandemic Offered Some key Areas to Improve ICT Usage in the Education Sector**

The Government of Bangladesh has used Information and Communication Technology (ICT) in the education sector in various ways during the COVID-19 pandemic to ensure continuity in education and minimise learning disruptions. Although the pandemic has subsided, the country can learn important lessons from the following initiatives:

- Introduction of Online Learning Platforms: The government has introduced several online learning platforms, such as Sangsad TV, Sikkha Batayon, and Amar Ghore Amar School, to deliver educational content to students.
- Broadcasting of Educational Programs: The government has been broadcasting educational programs on national television and radio channels to reach students who do not have access to the internet or smartphones.
- Digital Educational Content: The Ministry of Education has developed and distributed digital educational content, such as e-books and videos, to students through different online platforms.

Going forward, lessons learned from these initiatives can help Bangladesh build Smart Classrooms to materialise the SMART Bangladesh 2041 vision.

### 13.7 Progress with Policies and Regulatory Frameworks

During the 7FYP period, Bangladesh adopted numerous acts, policies, guidelines and strategies to materialise the Digital Bangladesh aspiration. Adoption and subsequent implementation of these policies will help Bangladesh sustain the development growth momentum. A snapshot of some notable policies pertaining to the ICT sector is noted below:

- National ICT Policy 2018
- National Blockchain Strategy
- National Strategy for Artificial Intelligence
- National Internet of Things Strategy
- National Strategy for Robotics
- Strategy to Promote Microprocessor Design Capacity in Bangladesh
- Policy for fellowship, scholarship and grants for research and Innovation in ICT Sector 2016
- Digital Security Act 2018
- Public Email Policy 2018
- National Digital Commerce Policy 2018
- Innovation Guideline Strategy & Policy
- Integrated Payment Policy



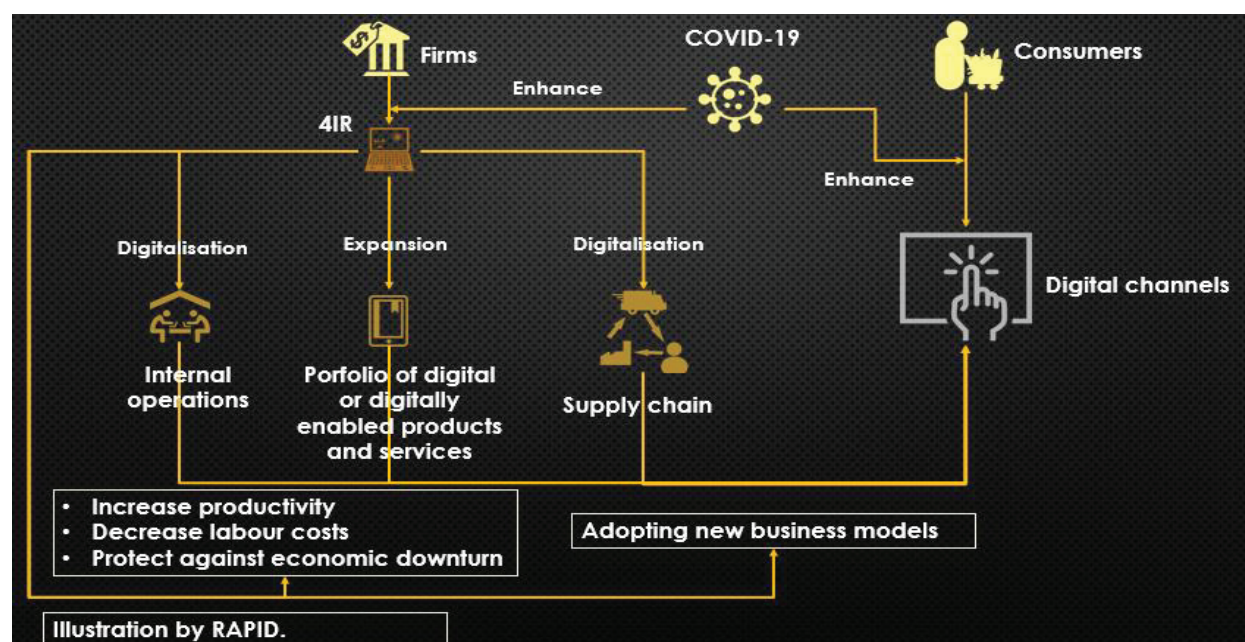
- 4IR-Based Future Skills Policy
- Community Radio Policy, 2017
- National Online Mass-Media Policy, 2017
- Digital Security Rules 2020

In addition to the above, with the increasing prominence of cyberspace, the Digital Security Agency (DSA) is a relatively new entity established by the Bangladesh Government to support its efforts to enhance cybersecurity in the country. The DSA was established in 2020 under the Digital Security Act 2018 to implement the provisions of the law and oversee the implementation of cybersecurity measures in Bangladesh. The agency coordinates the government's cybersecurity efforts and provides guidance and support to different stakeholders on cybersecurity matters. The establishment of the DSA is a significant step in the Bangladesh Government's efforts to enhance cybersecurity in the country. The agency is expected to play a critical role in coordinating and implementing cybersecurity measures across different economic sectors and promoting a cybersecurity culture in Bangladesh.

### 13.8 Emerging Issues Affecting the ICT-Development Nexus in Bangladesh

**Digital Transformation in the Aftermath of COVID-19:** The end of the 7FYP period coincided with the onslaught of the COVID-19 pandemic, which highlighted the importance of digital connectivity across almost every part of the economy. In light of the circumstances, Bangladesh has adopted a Post COVID-19 National ICT Roadmap (Box 13.4). The COVID-19 pandemic has accelerated digital transformation, both on consumer and firm levels. Consumers have substantially moved toward online channels, with companies and industries responding accordingly across Bangladesh (Figure 13.8). This digital transformation is expected to pace up with the global economies and businesses adopting various digital processes. According to the 2020 McKinsey Global Survey of executives, companies have augmented the digitalisation of their dealings with customers and supply-chain and of their internal operations by three to four years, with Microsoft's CEO remarking that they have seen two years' worth of digital transformation in just two months of 2020Q3 (January-March period) (Spataro, 2020).

**Figure 13.8: Digital Transformation, Enhanced by COVID-19**



#### Box 13.4: Key Points in the Post Covid-19 National ICT Roadmap

Bangladesh sees COVID-19 as a chance to advance ICT as an industry with “Made in Bangladesh” agenda. This roadmap has been developed for capitalising emerging opportunities in the ICT industry. The government has invested in ICT career camps in several districts; nurtured and encouraged IT startups; and is working to build a stable internet connection throughout the country. The government has also been working on the development of specialised industrial parks to aid the growth of the country’s high-tech sector. The Government of Bangladesh has implemented several plans to overcome the challenges and leverage new opportunities in the ICT Industry:

- ICT career camps have been established in 64 districts to reach over 80,000 Bangladeshi students.
- The establishment of High-tech Park Authority (BHTPA)
- BHTPA has provided free space, internet, and energy to 100+ selected local IT startups/IT entrepreneurs
- The government has also been working on establishing a high-tech incubator at CUET (Chittagong University of Engineering and Technology)
- Basic ICT Skills Transfer has established computer laboratories at 192 educational institutions, training around 8,000 teachers as master trainers and around 112,000 students
- To boost human resource development, the Bangladesh Hi-Tech Park Authority has provided several training programmes, such as IT training to 30,000 people in the 12 districts where the parks are being built.
- Bangladesh Computer Council (BCC) is implementing the “National ICT Infra-Network for Bangladesh Government Phase-II” also known as “Info-Sarkar” to provide optical fibre access to all 64 districts and 487 upazilas.
- Bangladesh National Digital Architecture (BNDA) project has created Bangladesh National Digital Architecture framework based on leading standards, techniques, and frameworks that are aligned and adapted to Bangladesh’s requirements and strategic objectives.

Source: Post COVID-19 National ICT Roadmap

**Using ICT to Build Smart Bangladesh by 2041:** The government has set an aspirational target to transform Digital Bangladesh into a ‘Smart Bangladesh’ by 2041. To materialise this vision, four key areas have been identified: Smart Citizens, Smart Economy, Smart Government, and Smart Society. To ensure the successful implementation of the Smart Bangladesh vision, it would require “harnessing emerging technologies, networks, and data to create tech-enabled solutions that contribute to nation-building.” This means in the coming days, Bangladesh is likely to see increased adoption of ICT-enabled services and transformation.

**Figure 13.9: Four Pillars of Smart Bangladesh 2041 Vision**

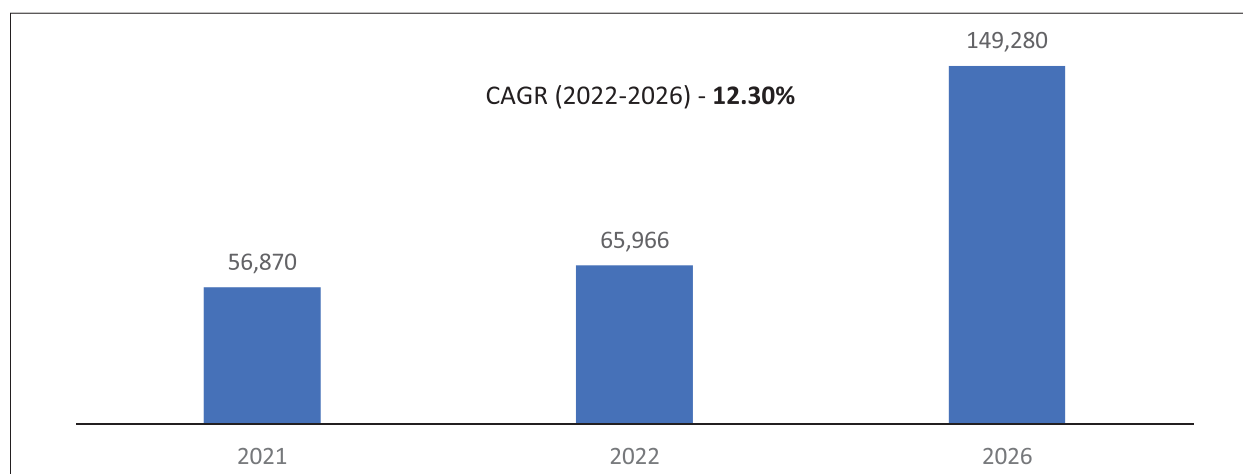


Source: Internet

**Growing E-commerce and F-commerce:** According to research conducted by Research and Markets, the e-commerce sector in Bangladesh is anticipated to reach about BDT 150,000 crore by 2026, with a compound annual growth rate (CAGR) of 12.30 per cent (Figure 13.10). The driving forces behind this growth are attributed to the convenience of online shopping and the ease of payment systems. The study estimated growth figures by considering both registered and non-registered online shops and social media-based pages. Currently, there are over 2,500 e-commerce platforms in Bangladesh, with small businesses accounting for 95 per cent of the total number. The Bangladesh Telecommunication Regulatory Commission (BTRC) reports approximately 50,000 social media pages selling products in the country. The Bangladesh government has issued a digital commerce policy as a guide for e-commerce websites to ensure consumer rights, which industry experts believe will help to sustain the momentum of e-commerce growth. However, there are still many unregistered e-commerce platforms that operate outside the official framework.

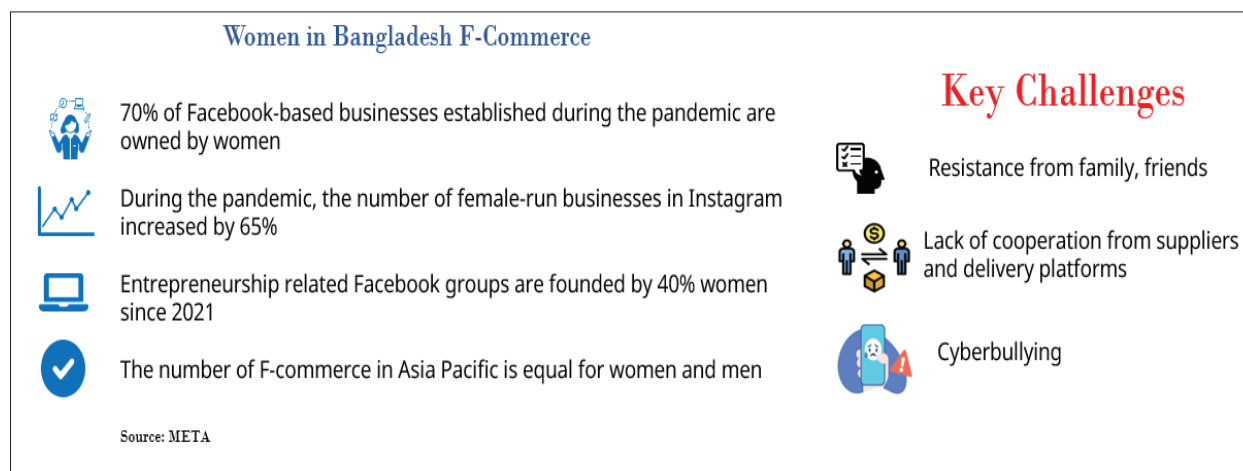
Also, as mentioned earlier, the country is witnessing a sharp rise in F-commerce activities (Figure 13.11). Many of these businesses are run by women. While the rise in e-commerce and F-commerce presents significant growth opportunities, consumer protection in this digital age has become a new challenge. At the same time, dealing with the informality of enterprises while supporting their growth will also remain a task at hand.

**Figure 13.10: Bangladesh's E-Commerce Market Growth Projections (Figures in Crore Taka)**



Source: Research And Markets

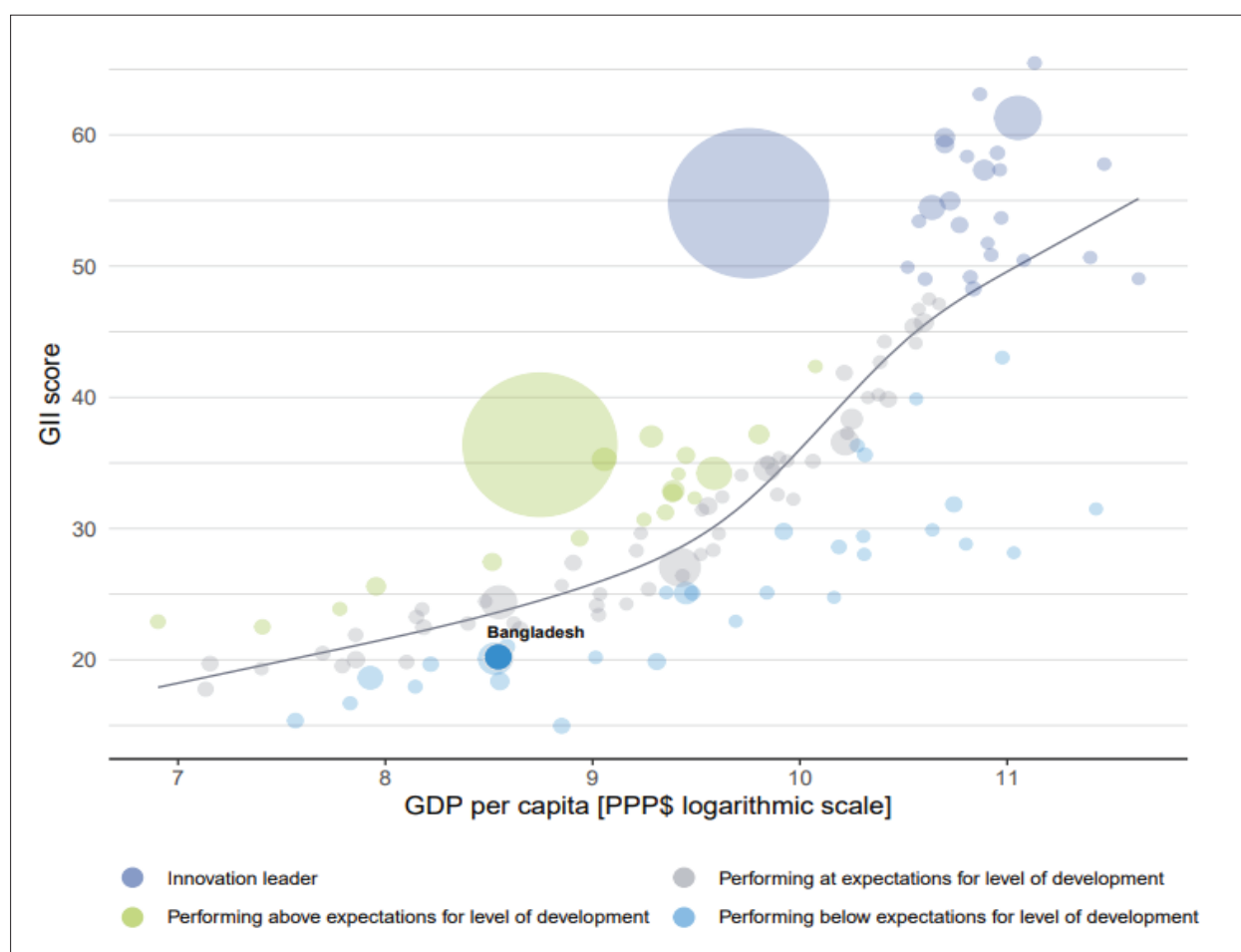
**Figure 13.11: Growing F-Commerce in Bangladesh and Challenges Faced by Women Entrepreneurs**



**Preparedness for 4<sup>th</sup> Industrial Revolution and Innovation Competency:** The Fourth Industrial Revolution (4IR) is transforming the global economy, and Bangladesh is no exception. As mentioned earlier, the government has been working on the Digital Bangladesh initiative to provide high-speed internet, digital services, and e-governance to the people. Also, the government has adopted various policies to prepare for the 4IR era. However, the country needs to focus on developing a skilled workforce, improving connectivity and infrastructure, and promoting innovation and research to stay competitive in the 4IR era. Going forward, ICT will remain one of the key enablers of the 4IR for various elements.

To make the most of the 4IR era, Bangladesh needs to proactively build an innovation-based economy that can drive the development. As per Global Innovation Index 2020, Bangladesh ranks 116th amongst 136 economies, implying the country's need to improve its innovation competency (Figure 13:12). Without fostering innovation, Bangladesh is likely to be underutilising its development potential.

**Figure 13:12: Positive Relationship Between Innovation and Development**



Source: Global Innovation Index 2020. Note: The bubble chart illustrates the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected, and those below are performing below expectations. Compared to GDP, Bangladesh's performance is below expectations for its level of development.



### 13.9 Conclusion and Way Forward

The ICT sector in Bangladesh has made remarkable progress during the 7FYP period, as evidenced by the significant achievements in expanding the submarine cable network, increasing broadband connectivity, and driving the digital economy. Bangladesh has witnessed a substantial increase in mobile phone subscribers, reaching an impressive 183 million, and internet users have soared to 125 million as of February 2023. This surge in connectivity has facilitated the growth of e-commerce and F-commerce, with approximately 2,000 e-commerce sites and 50,000 Facebook pages offering a diverse range of products to consumers. Furthermore, the mobile financial services (MFS) sector has experienced rapid growth, with over 107 million active users in 2021. This growth in MFS not only contributes to financial inclusion but also plays a vital role in delivering social security benefits to the population.

The ICT sector's contribution to the GDP stands at 0.76 percent, with the government aiming to reach \$5 billion in export earnings by 2025. The BPO industry has played a significant role in driving the ICT exports, with a remarkable average growth rate of 35 percent. Employment in the ICT sector has witnessed a substantial annual growth rate of 22.3 percent, with over 0.3 million individuals estimated to be employed in the industry. Bangladesh has also emerged as the second-largest supplier of online labor worldwide, reinforcing its position in the global digital marketplace.

The startup ecosystem in Bangladesh has flourished, with approximately 1,200 active startups operating across various sectors. These startups have attracted both local and international investments, raising a total of \$415 million in 2021. This growth has been facilitated by the support provided by Startup Bangladesh Limited, which has allocated a capital of BDT 500 crores to support technology-based businesses. Additionally, the government's efforts to attract foreign direct investment (FDI) have yielded positive results, with a net FDI of \$2.37 billion in 2019-20, of which \$758 million was directed towards the ICT sector. Investment in ICT infrastructure, including the establishment of Hi-Tech parks, has further enhanced connectivity and provided support for technology-based businesses.

While Bangladesh has achieved significant milestones in ICT development, there are some challenges that need to be addressed. Skill shortages and employee retention remain pressing concerns, as the demand for specialized skills exceeds the availability of graduates. Bridging this gap will require a focus on practical training and curriculum updates to align with industry requirements. Furthermore, ensuring consumer protection and dealing with the informality of enterprises in the rapidly growing e-commerce and F-commerce sectors present ongoing challenges.

To sustain the momentum and drive digital transformation, Bangladesh needs to prioritize skill development programs, enhance consumer protection mechanisms, promote the formalization of enterprises, and address cybersecurity concerns. Strengthening collaboration between the public and private sectors, academia, and civil society is crucial to foster innovation, create an enabling ecosystem for technology-based businesses, and position Bangladesh as a digital leader in the region.

By building upon the achievements of the 7FYP, adopting emerging technologies, and embracing innovation, Bangladesh can continue its journey towards a Smart Bangladesh. This will enable the country to respond to the challenges of the digital age effectively, capitalise on emerging opportunities, and ultimately achieve its vision of inclusive growth, economic prosperity, and sustainable development. Some specific way forward are outlined below:

#### **Deepening Policy Incentives Prior to LDC Graduation**

Bangladesh has been providing various incentives to boost ICT exports. After Bangladesh's LDC graduation in 2026, many of such incentives will have to be reviewed or withdrawn to comply with WTO standards. As Bangladesh seems to diversify exports and, at the same time, leverage ICT potential to drive growth, it is important to deepen the policy incentives prior to LDC graduation to boost competitiveness.

## **Bridging the Skills Gap and Upskilling the Workforce**

There is a serious skills mismatch in the ICT industry. Also, Bangladesh needs to upskill the workforce in light of the skills demanded by 4IR technologies and foster innovation. To address the skills challenge, prime importance should be given to industry-aligned training programmes on technical and soft skills, supplemented with high-quality managerial training for managers and executives to reduce the skills gap in the services outsourcing industry. Considering the immediate technical skills needs of the industry, training in Angular (TypeScript), ASP, C#, C/C++, Django (Python), Flutter (Dart), Go, HTML/CSS, Java, JavaScript, Laravel, MySQL, Node.js, PHP, and Python should be impactful, with emphasis to be put on Java and Python. Considering the upcoming market trends, training on technologies/programming languages for the 4IR areas (especially ML/AI, cloud computing, data science, and big data analytics), where the global clients seem to be focussing on, and several surveyed firms are either already operating or planning to move into, should be fruitful.

## **Developing Labour Market Responsive Curriculum**

To improve the alignment of university education with industry skill requirements, associations should work with universities and the accreditation council to update the course curriculum in universities by consulting the programmes in foreign universities that supply many employees to ICT sector. India is a good example for this exercise as their IT graduate employability is much higher than Thailand and Indonesia and could be the highest in Asia. Some countries are adopting another important approach to increase the supply of IT labour pool—reducing entry-level barriers for science and math students at universities to move into IT-based programmes after third or fourth year. Many of these undergraduate programmes now teach programming to students to improve their success in the job market. Many foreign universities take benefit from this practice and allow students of these programmes to move into IT-based programmes, mostly in graduate studies. Such practices could be promoted in Bangladesh. It is important to note that graduate employability in general science and math is lower in Bangladesh than IT graduates. The suggested practice in this regard, therefore, could also reduce unemployment among university graduates.

## **Urgently Investing in Digital Infrastructure**

Bangladesh's current effort to build digital infrastructure needs to be strengthened. Ensuring high-speed broadband at affordable cost and ICT facilities will be key to making the most of the 4IR technology and transforming the country to Smart Bangladesh. There are several key areas that the government of Bangladesh could prioritise to ensure that citizens have access to reliable and affordable digital services. Some of these areas include:

- **Broadband internet:** High-speed broadband internet is essential for enabling citizens to access online services, e-commerce, and digital platforms. Ensuring that affordable and reliable broadband internet is available in all parts of the country should be a priority.
- **Mobile networks:** With the majority of the population in Bangladesh owning a mobile phone, mobile networks are a critical component of the digital infrastructure. Ensuring that mobile networks are available in all parts of the country and that they offer reliable and affordable service is important.
- **Cloud computing:** Cloud computing can provide affordable and scalable computing power to businesses, allowing them to innovate and grow. Ensuring that businesses have access to cloud computing services can help to promote entrepreneurship and economic growth.
- **Data centres:** Data centres are essential for storing and processing data for businesses and government agencies. Ensuring that there are sufficient data centres in the country can help to support the growth of the digital economy.

- **Cybersecurity:** As more citizens and businesses rely on digital services, cybersecurity becomes increasingly important. Ensuring that there are sufficient cybersecurity measures in place to protect citizens' personal information and sensitive data should be a priority.

### **Proactively Seeking Foreign Direct Investment**

Given the need for building digital infrastructure and the sector's need, Bangladesh needs to proactively seek FDI. Foreign investments in the already-built IT parks can help connect with global firms. The government could also consider developing partnerships with foreign governments, academic institutions, and industry associations to promote the ICT sector and attract foreign investment. By establishing these partnerships, the government could tap into international networks and access new markets, which could help to attract foreign investors.

### **Exploring New Markets and Exporting High-Value-Added Services**

Bangladesh has a target to increase the export of ICT products to 5 billion. In order to achieve the targets, Bangladesh needs to explore new markets for ICT goods and services. Also, despite providing various incentives, Bangladesh's export of telecommunication services gradually declined in recent years. Thus, the government should collaborate with industry stakeholders to find the factors behind the declining exports.

Some of the ICT service export that Bangladesh currently export will be obsolete in future due to modern technological breakthroughs. One such service could be call centre agents. Many companies replace their call centre agents with AI powered chatbot. Thus, Bangladesh should focus on more complex and high-value-adding services. Some of such services could be data analytics, cybersecurity, software development, mobile application development, AI service, cloud computing. Government should prioritise the development of a skilled workforce to export services.

### **Enhancing ICT Usage in Education and Reducing the Digital Divide**

The COVID-19 pandemic has highlighted the importance of technology in education, and the government has launched several initiatives to promote e-learning in Bangladesh. However, there are challenges in terms of infrastructure, connectivity, and digital literacy. The country needs to invest more in ICT infrastructure, train teachers and students in digital skills, and promote the development of localised e-learning content to ensure equitable access to education.

### **Improving Productivity in Agriculture**

Agriculture is a critical sector in Bangladesh, and the government has been promoting the use of ICT to improve agricultural productivity, reduce post-harvest losses, and provide market information to farmers. However, there are challenges in terms of low digital literacy among farmers, inadequate connectivity in rural areas, and the need for localised content and services. The country needs to focus on developing ICT solutions that are accessible and affordable to smallholder farmers and improving digital literacy among them.

### **Enhancing Financial Inclusion**

Bangladesh has made significant progress in financial inclusion, with more people accessing formal financial services than ever before. However, there are still significant challenges, particularly in rural areas. The government and the private sector need to work together to develop innovative solutions to reach the unbanked population, such as mobile money and digital financial services. Additionally, there is a need to promote financial literacy among the population to ensure that they can use these services effectively.

### **Improving Absorptive and Implementation Capacity of ICT Budget**

The budget implementation rate of the ICT sector has been historically low. It could be due to the implementation challenge or limited options for spending. There needs to be a proper assessment to find out the factors behind the low implementation rate and take action thereby.



# Annex 1: Development Results Framework (DRF) for Monitoring the Seventh Five Year Plan (2016-2020)

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
<b>National Priority: Macroeconomic Stability and Economic Growth</b>													
<b>Outcome Statement: Conducive Macroeconomic Environment to Promote Growth, Supported by Trade and Private Sector Development</b>													
<b>Real Sector</b>													
Real GDP growth (%)	BBS_NAS	FD, MoP	6.50	7.00	7.11	7.20	7.28	7.40	7.86	7.60	8.15	8.00	3.51
Annual sectoral GDP growth rate (%)	BBS_NAS												
a) Agriculture	BBS_NAS	FD, MoP	3.04	3.21	2.79	3.28	2.88	3.34	4.19	3.39	3.92	3.49	4.59
b) Industry	BBS_NAS	FD, MoP	9.06	10.20	11.09	10.53	10.66	10.82	12.06	11.25	12.67	11.85	3.25
c) Service	BBS_NAS	FD, MoP	5.83	6.31	6.25	6.42	6.69	6.52	6.39	6.55	6.78	6.68	4.16
Investment (gross) as % of GDP	BBS_NAS	MoI, BOI, FD, BB	28.97	30.10	29.65	31.00	30.51	31.80	31.23	32.70	31.57	34.40	30.47
a) Private Investment	BBS_NAS	MoI, BOI, FD, BB	22.07	23.70	22.99	23.90	23.10	24.40	23.26	25.10	23.54	26.60	22.06
b) Public Investment	BBS_NAS	MoI, BOI, FD, BB	6.90	6.40	6.66	7.10	7.41	7.40	7.97	7.60	8.03	7.80	8.41
National savings (as % of GDP)	BBS_NAS	IRD; BB	29.01	29.10	30.77	29.70	29.64	30.20	27.42	30.70	29.50	32.10	28.67
FDI as % of GDP	BB_APR	BoI, FD, BB	0.80	1.20	0.58	1.80	1.07	2.20	1.20	2.50	1.63	3.00	1.00
Total Debt as percentage of GDP	BB_APR	BB; ERD	34.20	34.90	28.98	35.30	28.47	35.70	29.73	36.10	31.59	36.30	34.03
(a) External Debt as % of GDP	BB_APR	BB; ERD	12.90	12.80	13.20	12.50	12.80	12.10	13.90	11.70	14.70	11.20	15.50
<b>External Sector</b>													
(a) Exports and (b) Imports as % of GDP	BBS_NAS	EPB; MoC	15.80	15.70	16.65	15.60	15.04	15.70	14.80	15.90	15.32	16.20	11.99
(goods and services)	BBS_NAS	EPB; MoC	21.10	21.00	21.30	21.10	21.10	21.20	23.44	21.50	21.44	21.80	18.52
Remittance as % of GDP	BB_APR	BB, MoEWOE	8.00	8.00	5.63	8.00	5.11	7.90	4.66	7.80	4.67	7.60	4.87

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
<b>Fiscal Sector</b>													
Total Revenue (as % of GDP)	NBR; BB	NBR; BB	10.80	12.10	10.00	13.50	10.16	14.30	9.62	15.10	9.91	16.10	9.71
Tax Revenue (as % of GDP)	NBR; BB	NBR; BB	9.30	10.60	8.78	11.50	9.00	12.30	8.63	13.10	8.89	14.10	8.10
Government expenditure (as % of GDP)	BB; FD	BB; FD	15.80	17.20	13.83	18.50	13.57	19.30	14.30	20.10	15.41	21.10	15.34
Government budget deficit as % of GDP	BB; FD	FD	4.70	4.80	3.72	4.60	3.35	4.70	4.64	4.70	5.43	4.70	5.54
<b>Money &amp; Banking</b>													
Broad Money (M2) growth (% change)	BB; BBS - NAS	BB, FD	16.30	15.50	16.35	15.60	10.88	15.60	9.24	15.70	8.88	15.90	12.64
Private sector credit growth (% change)	BB; BBS - NAS	BB, FD	11.50	14.00	16.78	14.50	15.66	14.80	16.94	15.00	11.32	15.00	8.61
<b>Price</b>													
Average Annual CPI	BB; BBS - NAS	BB, SID	6.50	6.20	5.92	6.00	5.44	5.80	5.78	5.70	5.48	5.50	5.65
Inflation Rate	BB; BBS - NAS	BB, SID	a) 8.60	-	a) 4.91	-	a) 6.02	-	a) 7.13	-	a) 5.51	-	a) 5.52
a) Food inflation	BB; BBS - NAS	BB, SID	b) 5.45	-	b) 7.47	-	b) 4.57	-	b) 3.73	-	b) 5.42	-	b) 5.85
b) Non-food inflation	BB; BBS - NAS	BB, SID											
<b>National Priority: Poverty Reduction</b>													
<b>Outcome Statement: Reduction in Poverty and Inequality Across all Groups and Regions</b>													
<b>Incidence and Severity of Poverty and Inequality</b>													
Proportion of population living below national poverty line, differentiated by urban and rural	BBS_HIES	FD;BB; MoP;	National: 31.5 Rural: 35.2 Urban: 21.3 (HIES 2010)	22.1	24.3 (N) 26.4 (R) 18.9 (U)	20.7	-	19.3	-	18.0	-	16.6	18.7(N) 20.5 (R) 14.7(U) (HIES 2022)

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Proportion of population under national extreme poverty line (a) Rural and (b) Urban	BBS_HIES	GED; SID	Total: 17.6 Rural: 21.1 Urban: 7.7 (HIES 2010)	11.3	12.9 (N) 14.9 (R) 7.6 (U)	10.4	-	9.6	-	8.8	-	8.0	5.6 (N) 6.5 (R) 3.8 (U) (HIES 2022)
Degree of inequality (Gini coefficient), (a) consumption inequality (b) income inequality	BBS_HIES	GED; SID	a) 0.32 b) 0.45 (2010)	a) 0.31 b) 0.45	a) 0.324 b) 0.482	a) 0.31 b) 0.45	-	a) 0.31 b) 0.45	-	a) 0.30 b) 0.45	-	a) 0.30 b) 0.45	a) 0.334 b) 0.499 (HIES 2022)
<b>Poverty Reduction Strategy</b>													
Government spending on social protection (% of GDP)	FD	FD	2.02 (FY2015)	1.96	2.09	2.22	2.17	2.07	2.54	1.93	2.92	1.80	3.01
<b>National Priority: Employment Growth</b>													
<b>Outcome Statement: Increased Productive and Decent Employment Opportunities for Sustainable and Inclusive Growth</b>													
<b>Overall Employment</b>													
Percentage of (a) formal and (b) informal employment as a share of total employment by sex	BBS_LFS	MoLE, SID	a) 12.5 (M:14.5; F:7.7) b) 87.5 (M:85.5; F:92.3) (2010)	a) 13 87.0	a) 14.9 b) 85.1	a) 13.5 b) 86.5	-	a) 14.0 b) 86.0	-	a) 14.5 b) 85.5	-	a) 15 b) 85	-

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Employed persons aged over 15 years by broad economic sectors (%)	BBS_LFS_	MoLE, SID	a) 47.56 b) 15.52 c) 35.35 (2010)	a) 45.3 b) 15.9 c) 38.9	a) 40.6 b) 20.4 c) 39.0	a) 44.2 b) 16.7 c) 39.2	-	a) 43.4 b) 17.2 c) 39.4	-	a) 42.1 b) 18.4 c) 39.5	-	a) 40.8 b) 19.6 c) 39.6	a) 45.33 b) 17.02 c) 37.65 (LFS 2022)
a) Agriculture													
b) Industry													
c) Service													
<b>Overseas Employment</b>													
Percentage of overseas migration by type,													
a) Skilled migrant	BMET_	MoEWOE	a) 36.69 b) 17.10 c) 17.86 (2014)	a) 37.0 b) 18.0 c) 19.0	a) 42.08 b) 15.83 c) -	a) 37.2 b) 19.0 c) 23.0	a) 21.73 b) 7.78 c) -	a) 37.5 b) 20.0 c) 26.0	a) 43.25 b) 16.04 c) -	a) 38.0 b) 21.0 c) 28.0	a) 43.55 b) 20.36 c) -	a) 38.0 b) 22.0 c) 30.0	a) 29.23 b) 4.46 c) 12.21
b) Semi-skilled migrant													
c) Female migrant													
Agricultural sector GDP growth rate (%)													
a) Crop and horticulture	BBS, DAE, DLS,	MoA	a) 1.91 b) 2.83 c) 5.05 (FY 2014)	a) 1.47 b) 5.47 c) 4.73	a) 0.88 b) 3.19 c) 5.12	a) 1.42 b) 5.45 c) 4.87	a) 0.96 b) 3.31 c) 5.60	a) 1.42 b) 5.48 c) 5.02	a) 3.06 b) 3.40 c) 5.51	a) 1.41 b) 5.68 c) 5.17	a) 1.96 b) 3.54 c) 8.34	a) 1.40 b) 5.91 c) 5.33	a) 3.47 b) 3.56 c) 7.36
b) Animal Farming	DoF, BFD												
c) Forest and related services													
% of agriculture budget allocated in the agricultural research	BARC, BARI, BRRI, BJRI, BINA, BSRI, BIRTAN, CDB, SRDI	MoA	4.2 (2014-15)	4.83	-	5.55	-	6.38	-	7.33	-	8.43	-

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
<b>National Priority: Education</b>													
<b>Outcome Statement: Quality Education for all to Reduce Poverty and Increase Economic Growth</b>													
Net enrolment rate (%) by gender in (a) Primary (b) Secondary (c) Tertiary education	DPE_ APSCREPORT; BANBEIS_ Database	MoPME, MoE	(a)Total: 97.7 (Girls: 98.8 Boys: 96.6,) (2014)	(a)Total: 98.2 (Girls: 98.8; Boys: 97) (b)Total: 68.23, (Girls: 73.54; Boys: 62.90) (c)Total: 14.52, (Girls: 10.68; Boys: 17.10) (2014)	(a)Total: 97.96 (Girls: 98.82 Boys: 97.1) (b) Total: 67.84, (a) (Girls: 73.10 Boys: 63.85) (c) Total: 16.04 (Girls: 12.26 Boys: 17.3 0)	Total: 98.7 (Girls: 99.1 Boys: 98) (b) Total: 71.05 (Girls: 76.38 Boys: 65.65) (c) Total: 16.04 (Girls: 12.26 Boys: 17.3 0)	Total: 97.97 (Girls: 98.29 Boys: 97.66) (b) Total: 68.78 (Girls: 74.38 Boys: 63.59)	Total: 99.0 (Girls: 99.5 Boys: 99) (b) Total: 73.87 (Girls: 79.22 Boys: 68.41) (c) Total: 17.56 (Girls: 13.84 Boys: 17.50)	Total: 97.85.0 (Girls: 98.16 Boys: 97.55) (b) Total: 69.38 (Girls: 74.68 Boys: 64.47)	Total: 99.5 (Girls: 99.5 Boys: 99.5) (b) Total: 76.69 (Girls: 82.06 Boys: 71.17) (c) Total: 19.08 (Girls: 14.42 Boys: 17.70)	Total: 97.74 (Girls: 98.01 Boys: 97.65) (b) Total: 67.30 (Girls: 74.47 Boys: 60.11)	Total: 100 (Girls: 100 Boys: 100) (b) Total: 79.51 (Girls: 84.90 Boys: 73.92) (c) Total: 20.60 (Girls: 15.30 Boys: 1790)	Total: 97.81 (Girls: 98.25 Boys: 97.37) (b) Total: 71.89 (Girls: 80.62 Boys: 62.89)
			(a)Total: 79 (Boys: 75, Girls: 82) (2014)	(a)Total: 82 (Boys: 82, Girls: 82) (b) Total: 66.16 (Girls: 59.95, Boys: 74.91) (2014)	(a)Total: 80.8 (Boys: 77.7, Girls: 83.9) (b) Total: 61.70 (Girls: 57.81, Boys: 66.12) (2014)	(a)Total: 81.2 (Boys: 78.28, Girls: 84.08) (b) Total: 62.19 (Girls: 58.48, Boys: 66.57) (2014)	(a)Total: 83 (Boys: 83, Girls: 83) (b) Total: 69.53 (Girls: 63.07, Boys: 78.65)	(a)Total: 83 (Boys: 83, Girls: 83) (b) Total: 72.9 (Girls: 66.19, Boys: 82.38)	(a)Total: 81.4 (Boys: 78.56, Girls: 84.31) (b) Total: 62.38 (Girls: 59.81, Boys: 63.99)	(a)Total: 84 (Boys: 84, Girls: 84) (b) Total: 76.26 (Girls: 69.31, Boys: 86.12)	(a)Total: 82.10 (Boys: 80.80, Girls: 83.20) (b) Total: 79.63 (Girls: 72.43, Boys: 89.85)	(a)Total: 85 (Boys: 85, Girls: 85) (b) Total: 79.63 (Girls: 72.43, Boys: 89.85)	(a)Total: 82.80 (Boys: 81.00, Girls: 84.57) (b) Total: 64.24 (Girls: 65.14, Boys: 63.20)
			(a)Total: 79 (Boys: 75, Girls: 82) (2014)	(a)Total: 82 (Boys: 82, Girls: 82) (b) Total: 66.16 (Girls: 59.95, Boys: 74.91) (2014)	(a)Total: 80.8 (Boys: 77.7, Girls: 83.9) (b) Total: 61.70 (Girls: 57.81, Boys: 66.12) (2014)	(a)Total: 81.2 (Boys: 78.28, Girls: 84.08) (b) Total: 62.19 (Girls: 58.48, Boys: 66.57) (2014)	(a)Total: 83 (Boys: 83, Girls: 83) (b) Total: 69.53 (Girls: 63.07, Boys: 78.65)	(a)Total: 83 (Boys: 83, Girls: 83) (b) Total: 72.9 (Girls: 66.19, Boys: 82.38)	(a)Total: 81.4 (Boys: 78.56, Girls: 84.31) (b) Total: 62.38 (Girls: 59.81, Boys: 63.99)	(a)Total: 84 (Boys: 84, Girls: 84) (b) Total: 76.26 (Girls: 69.31, Boys: 86.12)	(a)Total: 82.10 (Boys: 80.80, Girls: 83.20) (b) Total: 79.63 (Girls: 72.43, Boys: 89.85)	(a)Total: 85 (Boys: 85, Girls: 85) (b) Total: 79.63 (Girls: 72.43, Boys: 89.85)	(a)Total: 82.80 (Boys: 81.00, Girls: 84.57) (b) Total: 64.24 (Girls: 65.14, Boys: 63.20)

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Number of enrolled children with disabilities (by gender)	DPE_APSC Report	MoPME	Total: 76,522 (Boys: 42,523, Girls: 33,999)	Total: 77,287 (Boys: 42,948, Girls: 34,339)	-	Total: 77,670 (Boys: 43,161, Girls: 34,509)	-	Total: 78,052 (Boys: 43,373, Girls: 34,679)	-	Total: 78,435 (Boys: 43,586, Girls: 34,849)	Total: 98311 (Boys: 54442, Girls: 43869)	Total: 80,000 (Boys: 45,000, Girls: 35,000)	-
Percentage of schools that meet the Student Teacher Ratio (STR) standard of 46:1 (%)	DPE_APSC Report	MoPME	62 (2014)	70	-	75	-	76	-	78	-	78	-
Number of students in TVET system by gender	BANBEIS Database	MoE	Total: 689663 (2014) (Girls: 27.43% Boys: 72.57%)	Total: 770172 (Girls: 27.87% Boys: 72.73%)	Total: 875270 (Girls: 23.95% Boys: 76.0%)	Total: 810915 (Girls: 27.93% Boys: 72.07%)	Total: 891964 (Girls: 24.26% Boys: 75.74%)	Total: 851659 (Girls: 27.99% Boys: 72.01%)	Total: 1067484 (Girls: 24.76% Boys: 75.24%)	Total: 892402 (Girls: 28.04% Boys: 71.96%)	Total: 1100177 (Girls: 25.34% Boys: 74.66%)	Total: 933146 (Girls: 28.08% Boys: 71.92%)	Total: 1118334 (Girls: 27.24% Boys: 72.76%)
Adult literacy rate (%) of 15+ yrs old population	BBS_SVRS Report	BNFE, MoPME	Total: 58.6 (2013) (Female: 55.4, Male: 62.9)	66.9	71.0	75.2	72.3	83.4	73.2	91.7	74.4	100	75.6 (SVRS 2020)
Literacy rate of 15-24 year-olds, women and men (%)	NIPORT_BDHS	MoE	Total: 86 (2014) (Women: 81.9, Men: 67.8)	88.8	-	91.6	-	94.4	-	97.2	-	100	-
Public education expenditure as % of GDP	MoE & FD	MoE & FD	2.18 (2014)	2.2	2.49	2.3	2.26	2.4	2.09	2.4	2.11	2.5	2.09

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
<b>National Priority: Health</b>													
<b>Outcome Statement : Sustainable Improvements in Health Including Reproductive Health, Family Planning, Particularly of Vulnerable Group</b>													
Proportion of births attended medically trained provider (%)	NIPORT _ BDHS	MoHFW	42.1 (2014)	50	-	54	-	58	59	62	-	65	70
Proportion of births in health facilities by wealth quintiles (ratio of lowest and highest quintiles)	NIPORT _ BDHS, DHS	MoHFW	1:4.6 (2014)	1:4.2	-	1:4	-	1:3.8	1:3.00	1:3.6	-	1:3.5	
Under-five Mortality Rate (per 1,000 live births)	NIPORT _ BDHS, BBS _ SVRS	MoHFW	46 (2014)	43	35	41.5	31	40	29	38.5	28	37	28
Infant Mortality Rate (per 1,000 live births)	NIPORT _ BDHS, BBS _ SVRS	MoHFW	38 (2014)	32	28	29	24	26	22	23	21	20	21
Maternal Mortality Ratio (per 100,000 live births)	NIPORT _ & MMEIG, BBS _ SVRS	MoHFW	170 (2013)	143	178	134	172	125	169	116	165	105	163
Total Fertility Rate (children per woman)	NIPORT _ BDHS, SVRS	MoHFW	2.3 (2014)	2.2	2.1	2.15	2.05	2.1	2.05	2.05	2.04	2.0	2.04
Life expectancy at birth, total (years)	NIPORT _ BDHS	MoHFW	70.1 (SVRS 2013)	70.2	71.6	70.6	72	71	72.3	71.4	72.6	72	72.8
Proportion of stunting among under-five children (%)	NIPORT _ BDHS	MoHFW	36.1 (2014)	32.1	-	30.1	-	28.1	-	26.1	-	25	24 (2022)
Proportion of children under 6 months who are exclusively breastfed (%)	NIPORT _ BDHS	MoHFW	55.3 (2014)	58	-	59.5	-	61	-	62.5	-	65	65

2005-06 Base year has been used for the GDP related indications to make comparable with the targets



Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Percentage of unmet need for family planning	NIPORT – BDHS	MoHFW	12% (2014)	11.6	-	11.2	-	10.8	12	10.4	-	10%	10 (2022)
Contraceptive Prevalence Rate (%)	NIPORT – BDHS	MoHFW	62.4 (2014)	66	62.3	68	62.5	70	63.1	72	63.4	75	63.9
HIV prevalence among population/ Maintain low prevalence of HIV	Sero-Servilance (SS), NAHP, DGHS	MoHFW	<1% (SS 2011)	<1%	-	<1%	-	<1%	0.015 (for adults) <0.01 (for all)	<1%	-	<1%	-
Proportion of children fully vaccinated by 12 months (%)	CES; BDHS; UESD	MoHFW	78 (BDHS 2014)	84	-	87	-	90	-	93	-	95	85.6
<b>National Priority: Water &amp; Sanitation</b>													
<b>Outcome Statement: Ensure Availability of Safe Drinking Water and Sanitation for all</b>													
Percentage of urban and rural population with access to safe drinking water (a. Urban, b. Rural)	BBS, SVRS, MICS – DPHE	LGD, MoLGRDC	Total: 98.5 a) 99.4 b) 98.2 (SVRS 2013)	98.8	98.0	99.1	98.0	99.4	98.0	99.7	a) 98.1	b) 100 c) 100 (SVRS 2020)	Total 98.30 U-99.50 R-97.40 (SVRS 2020)
Percentage of urban and rural population with access to sanitary latrines (a. Urban, b. Rural)	BBS, SVRS, MICS – DPHE	LGD, MoLGRDC	Total: 64.2 a) 59.7 b) 66.2 (SVRS 2013)	71.4	75	78.5	76.8	85.7	78.1	92.8	a) 81.5	b) 100 c) 95 (SVRS 2020)	Total 81.50 U-91.20 R-73.50 (SVRS 2020)
<b>National Priority: Transport and Communication</b>													
<b>Outcome Statement 6: Improved Infrastructure for Higher Economic Growth</b>													
Length of targeted four-lane road (km)	RHD	MoRTB	98 (2014)	377	413.42	389	426.79	459	470.51	519	500.57	556	584.54

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Share of RHD highway road network in good and fair condition (% of network)	RHD	MoRTB	76% (2014)	78%	-	79%	-	81%	-	83%	-	85%	-
Length of Metro Rail Transit (MRT) network (km)	DTCA	MoRTB	0 (2015)	0	0	0	0	0	0	10	0	20	MRT 1 30.6; (2022)
Upazila and Union Road network in good and fair condition	LGED	LGD, MoLGRDC	33% (2014)	43%	-	52%	-	62%	-	72%	-	80%	-
Length of targeted new railway network (km)	BR	MoR	2877 (2014)	2925.5	1,052 km	3076.5	1,090.43	3273.5	1,335.23 km	3543.3	2,955.53	3733.3	2,955.53 km.
Length of targeted new double railway network (km)	BR	MoR	0	7	-	182	-	540	-	901	-	1110.5	-
Length of navigable waterways (km)	BIWTA	BIWTA	4,000	4,200		4,500		4,850		5,250		5,750	5,968 km. mon soon period; 3,865 km during dry season

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
<b>National Priority: Power, Energy and Mineral Resources</b>													
<b>Outcome Statement: Ensure Sustainability in Production, Consumption and Use of Energy and Mineral Resources</b>													
Electricity Installed Generation Capacity (MW)	PD	PD, MoPEMR	13540 (FY 2015)	14943	14,565	16399	13555	19249	18,753	20649	22,051	23000	23,548
Access to electricity (% of households)	PD, BBS	PD, MoPEMR	72% (FY 2015)	80%	76 %	85%	80 %	90%	90 %	94%	94 %	96%	97 %
Per capita generation of electricity (kWh)	PD	PD, MoPEMR	371 (FY 2015)	398	407	425	407	454	464	483	510	514	512
Share of renewable energy to the total electricity generation (%) (including hydro)	PD	PD, MoPEMR	3.6 (FY 2015)	5	3.1	6	3	7	3	8	3	10	3
<b>National Priority: Gender and Inequality</b>													
<b>Outcome Statement: Achieve Gender Equality and Empower all Women and Girls</b>													
Percentage of seats held by women at National Parliament	PS	BP	20 (2014)	-	20.9	-	20.57	-	20.3	-	20.86	33	20.86
Percentage of women aged 20-24 who were married before age 18	BBS_BDHS	MoWCA	65 (2011)	50	-	45	-	40	59	35	-	30	51.4 (MICS 2019)
Ratio of girls to boys in tertiary education	BANBEIS	MoE	0.7	0.76	0.65	0.82	0.67	0.88	0.72	0.94	0.744	1.0	0.811
Gender budget as percentage of total budget	FD, MoWCA	FD, MoWCA	27.7 (FY 2014)	28.2	27.25 (2016-17)	28.6	27.99 (2017-18)	29.0	29.65 (2018-19)	29.5	30.8 (2019-20)	30	30.98 (2020-21)
Percentage of female teachers at (a) primary, (b) secondary (c) tertiary education	BANBEIS	MoE	a) 57 b) 24 c) 20	a) 59.6 b) 26.2 c) 21.0	-	a) 62.2 b) 28.2 c) 22.0	-	a) 64.8 b) 30.6 c) 23.0	a) 62.25 b) 25.26 c) 26.69	a) 67.4 b) 32.8 c) 24.0	-	a) 70 b) 35 c) 25	a) 64.41 b) 28.82

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Percentage of female officers (class-I) employed in public sector	MoPA	MoPA	21 (2014)	21.8	-	22.6	-	23.4	-	24.2	-	25	
<b>National Priority: Environment, Climate Change and Disaster Management</b>													
<b>Outcome Statement: The Environment is Preserved and Prevented from Degradation, and a Disaster Management Strategy Exists as Well as Ensuring Climate Change Adaptation and Mitigation</b>													
Consumption of ozone depleting H-CFCs (Ozone Depleting Potential (ODP) )	DoE	MoEF	64.89 (2013)	65.39	63.9	65.39	63.33	48.12	47.41	48.12	48.84	47.20	46.53
Percentage of land covered by forestry with 70% tree density	BFD	MoEF	13.20 (2013-14) 14.1 (2015)	13.40	-	13.60	-	14.00	-	14.50	-	15.00	14.5 (WB)
CO2 emissions (tonnes per capita)	DoE	MoEF	0.34	0.348	0.5 (WB)	0.356	0.5	0.364	0.5	0.372	0.5	0.38	0.62
Percentage of (a) coastal and (b) marine areas that are protected	DoF	MoEF	a) 1.22 (2013-14) b) 0.00 (2013-14)	a) 1.22 b) 1.34	-	a) 2.00 b) 1.34	a) - b) 2.05	a) 3.00 b) 1.34	-	a) 4.00 b) 1.34	-	a) 5.00 b) 1.34	a) - b) 2.05
Percentage of wetland and natural sanctuaries maintained	MoFL	MoFL	1.7 (2014-15)	1.85	-	1.95	-	2.10	-	2.20	-	2.35	-
Percentage of forests that are protected	BFD	MoEF	1.81 (2013-14)	1.90	-	2.00	-	3.00	-	4.00	-	5.00	3.06
Mean urban air pollution of particulate matter (a) PM10 in µg/m3 (b) PM2.5 in µg/m3	DoE	MoEF	a) 130.90 (2013) b) 78.00 (2013)	a) 125.0 b) 77.0	-	a) 120.0 b) 76.0	a) 145 b) 85	a) 115.0 b) 75.0	(a) --- b) 86	a) 110.0 b) 74.0	-	a) 105.0 b) 73.0	-

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
No. of usable cyclone shelters	DDM	MoDMR	3,847 (2014)	4,047	-	4,247	-	4,447	-	4,647	4,014	4,847	4,530
Number of rural communities with disaster resilient habitats and communities assets	DDM	MoDMR	18000 (2013)	19,400	-	20,800	-	22,200	-	23,600	-	25,000	-
<b>National Priority: Information and Communication Technology (ICT)</b>													
<b>Outcome Statement: Increased Access to Digital Communication Through Telephone and Broadband Services</b>													
Expansion of submarine cable network (bandwidth Gbps)	BSCCL	BTRC, MoPT& ICT	30.57 (2014-15)	50.0	-	70.0	-	100.0	-	120.0	-	150.0	1103
Percentage of people with phone (Land phone)	BTCL	BTCL	0.60 (2010)	0.91	-	0.97	-	1.02	-	1.06	-	1.11	0.86
Percentage of people with broadband connection	BTCL	BTRC	0.01 (2010)	0.03	-	0.05	-	0.06	-	0.08	-	0.1	48.82
Internet users per 100 people population	BTRC	BTRC	28.24 (Mar 2015)	30.6	-	32.9	-	35.3	-	37.6	-	40	60.34
<b>National Priority: Urban Development</b>													
<b>Outcome Statement: Reduced Urban Poverty and Improved Living Conditions Through Better City Governance and Service Improvements</b>													
Percentage of urban population living in slums	BBS	MoLGRD&C	33%	31.4	-	29.8	-	28.2	-	26.6	-	25%	-
Percentage of urban population having access to (a) public health service (b) safe drinking water (c) sanitation facilities	BBS; DGHS	MoHFW	a) 87 b) 78 c) 80	a) 89.6 b) 82.4 c) 84	-	a) 92.2 b) 86.8 c) 88	-	a) 94.8 b) 91.2 c) 92	-	a) 97.4 b) 95.6 c) 96	-	a) 100 b) 100 c) 100	a)- b) 98.30 c) 81.50

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Percentage of urban solid waste regularly collected	LGD, MoLGRD&C	MoLGRD&C	63.2%	65.5	-	68	-	70.2	-	72.6	-	75	-
<b>National Priority: Governance</b>													
<b>Outcome Statement: Promoting Inclusive, Transparent, Accountable and Effective Democratic Governance System &amp; Ensuring Justice for all</b>													
Ministry oversight hearings held by the Parliamentary Standing Committees regularly	Annual Parliament Secretariat report	Parliament Secretariat	13 (2014)	25	-	25	-	25	-	25	-	25	-
Weighted average national case disposal rate	MoLJPA, Supreme Court Registry	MoLJPA, Supreme Court Registry	32.24 (2012)	35.8	-	39.3	-	42.8	-	46.5	-	50	-
Number of access and usage of legal aid services by the poor and disadvantaged group compared to total litigants	Law and Justice Division, MoLJPA	Law and Justice Division, MoLJPA	22000	25000	-	27000	-	30000	-	33000	-	37000	-
Percentage of public institutions using e- procurement	CPTU, Annual Report	IMED	0 % (2014)	16	-	41	-	65	-	89	-	100	-
Number of queries attended to by the government institutions under right to information act	Information commission, Annual Report	Information Commission	8442 (2014)	7000	-	6000	-	5000	-	4500	-	4000	-

2005-06 Base year has been used for the GDP related indications to make comparable with the targets

Performance Indicators	Data Source (Name of Institutions & Reports)	Lead Ministry/ Division	Baseline (Year)	Target (FY16)	Achievement (FY16)	Target (FY17)	Achievement (FY17)	Target (FY18)	Achievement (FY18)	Target (FY19)	Achievement (FY19)	Target (FY20)	Achievement (FY20)
Number of cases settled per year under Alternative Dispute Resolution (ADR) compared to total cases	Law and Justice Division, MoLJPA	Law and Justice Division, MoLJPA	14,000 (2014)	17,000	-	19,000	-	21,000	-	23,000	-	25,000	-
<b>National Priority: International Cooperation and Partnership</b>													
<b>Outcome Statement: Strengthen International Cooperation and Partnership for Sustainable Development</b>													
Foreign assistance as percentage of ADP and budget support	ERD, MoF	ERD, MoF	39.86 %	-	-	-	-	-	-	-	-	34.42	36.48
Percentage of (a) concessional loan and (b) grants to total foreign assistance	ERD, MoF	ERD, MoF	(a) 77.93% (b) 22.07 %	-	-	-	-	-	-	-	-	a) 55% b) 5%	a) 63.34% b) 4.17%
Net foreign assistance received by Bangladesh, as percentage of OECD/ DAC donor's GNI	ERD	ERD	0.0022 (2014)	-	-	-	-	-	-	-	-	5500 million USD	6124 million USD

2005-06 Base year has been used for the GDP related indications to make comparable with the targets



## List of Notable Publications by General Economics Division (GED)

Bangladesh Planning Commission Since 2009

No.	Name of Publications
1	Policy Study on Financing Growth and Poverty Reduction: Policy Challenges and Options in Bangladesh (May 2009)
2	Policy Study on Responding to the Millennium Development Challenge Through Private Sectors Involvement in Bangladesh (May 2009)
3	Policy Study on The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh (May 2009)
4	Steps Towards Change: National Strategy for Accelerated Poverty Reduction II (Revised) FY 2009 -11 (December 2009)
5	Millennium Development Goals: Bangladesh Progress Report-2009 (2009)
6	Millennium Development Goals: Needs Assessment and Costing 2009-2015 Bangladesh (July 2009)
7	এমডিজি কর্ম-পরিকল্পনা (৫১ টি উপজেলা) (জানুয়ারি-জুন ২০১০)।
8	MDG Action Plan (51 Upazillas) (January 2011)
9	MDG Financing Strategy for Bangladesh (April 2011)
10	SAARC Development Goals: Bangladesh Progress Report-2011 (August 2011)
11	Background Papers of the Sixth Five Year Plan (Volume 1-4) (September 2011)
12	6 <sup>th</sup> Five Year Plan (FY 2011-FY 2015) (December 2011)
13	Millennium Development Goals: Bangladesh Progress Report-2011 (February 2012)
14	Perspective Plan of Bangladesh 2010-2021: Making Vision 2021 a Reality (April 2012)
15	Public Expenditure for Climate Change: Bangladesh Climate Public Expenditure and Institutional Review (October 2012)
16	Development of Results Framework for Private Sectors Development in Bangladesh (2012)
17	ষষ্ঠ পঞ্চবার্ষিক পরিকল্পনা (২০১১-১৫) বাংলা অনুবাদ (অক্টোবর ২০১২)।
18	Climate Fiscal Framework (October 2012)
19	Public Expenditure for Climate Change: Bangladesh CPEIR 2012.
20	First Implementation Review of the Sixth Five Year Plan -2012 (January 2013)
21	বাংলাদেশের প্রথম প্রেক্ষিত পরিকল্পনা ২০১০-২০২১ রূপকল্প ২০২১ বাস্তবে রূপায়ন (ফেব্রুয়ারি ২০১৩)।
22	National Sustainable Development Strategy (2010-2021) (May 2013)
23	জাতীয় টেকসই উন্নয়ন কৌশলপত্র (২০১০-২০২১) [ মূল ইংরেজি থেকে বাংলায় অনূদিত ] (মে-২০১৩)।
24	Millennium Development Goals: Bangladesh Progress Report-2012 (June 2013)
25	Post 2015 Development Agenda: Bangladesh Proposal to UN (June 2013)
26	National Policy Dialogue on Population Dynamics, Demographic Dividend, Ageing Population & Capacity Building of GED [UNFPA Supported GED Project Output1] (December 2013)
27	Capacity Building Strategy for Climate Mainstreaming: A Strategy for Public Sector Planning Professionals (2013)
28	Revealing Changes: An Impact Assessment of Training on Poverty-Environment Climate-Disaster Nexus (January 2014)
29	Towards Resilient Development: Scope for Mainstreaming Poverty, Environment, Climate Change and Disaster in Development Projects (January 2014)
30	An Indicator Framework for Inclusive and Resilient Development (January 2014)

No.	Name of Publications
31	Capacity Building Strategy for Climate Mainstreaming: A Strategy for Public Sector Planning Professionals (2013)
32	Revealing Changes: An Impact Assessment of Training on Poverty-Environment Climate-Disaster Nexus (January 2014)
33	Towards Resilient Development: Scope for Mainstreaming Poverty, Environment, Climate Change and Disaster in Development Projects (January 2014)
34	An Indicator Framework for Inclusive and Resilient Development (January 2014)
35	Manual of Instructions for Preparation of Development Project Proposal/Proforma Part-1 & Part 2 (March 2014)
36	SAARC Development Goals: Bangladesh Progress Report-2013 (June 2014)
37	The Mid Term-Implementation Review of the Sixth Five Year Plan 2014 (July 2014)
38	Millennium Development Goals: Bangladesh Progress Report 2013 (August 2014).
39	Population Management Issues: Monograph-2 (March 2015)
40	GED Policy Papers and Manuals (Volume 1-4) (June 2015)
41	National Social Security Strategy (NSSS) of Bangladesh (July 2015)
42	MDGs to Sustainable Development Transforming our World: SDG Agenda for Global Action (2015-2030)- A Brief for Bangladesh Delegation UNGA 70 <sup>th</sup> Session, 2015 (September 2015)
43	7 <sup>th</sup> Five Year Plan (2015/16-2019/20) (December 2015)
44	সপ্তম পঞ্চবার্ষিক পরিকল্পনা ২০১৫/১৬-২০১৯/২০ (ইংরেজি থেকে বাংলা অনূদিত) (অক্টোবর ২০১৬) ।
45	জাতীয় সামাজিক নিরাপত্তা কৌশলপত্র (অক্টোবর ২০১৬) ।
46	Population Management Issues: Monograph-3 (March 2016)
47	Bangladesh ICPD 1994-2014 Country Report (March 2016)
48	Policy Coherence: Mainstreaming SDGs into National Plan and Implementation (Prepared for Bangladesh Delegation to 71 <sup>st</sup> UNGA session, 2016) (September 2016)
49	Millennium Development Goals: End- period Stocktaking and Final Evaluation Report (2000-2015) (September 2016)
50	A Handbook on Mapping of Ministries by Targets in the implementation of SDGs aligning with 7 <sup>th</sup> Five Year Plan (2016-20) (September 2016)
51	Data Gap Analysis for Sustainable Development Goals (SDGs): Bangladesh Perspective (January 2017)
52	Environment and Climate Change Policy Gap Analysis in Haor Areas (February 2017)
53	Integration of Sustainable Development Goals into the 7 <sup>th</sup> Five Year Plan (February 2017)
54	Banking ATLAS (February 2017)
55	টেকসই উন্নয়ন অভীষ্ট, লক্ষ্যমাত্রা ও সূচকসমূহ (মূল ইংরেজি থেকে বাংলায় অনূদিত) (এপ্রিল ২০১৭) ।
56	EXPLORING THE EVIDENCE : Background Research Papers for Preparing the National Social Security Strategy of Bangladesh (June 2017)
57	Bangladesh Voluntary National Review (VNR) 2017 : Eradicating poverty and promoting prosperity in a changing world, (June 2017)
58	SDGs Financing Strategy: Bangladesh Perspective (June 2017)
59	A Training Handbook on Implementation of the 7 <sup>th</sup> Five Year Plan (June 2017)
60	7 <sup>th</sup> Five Year Plan (FY 2015/16-FY 2019/20): Background Papers Volume 01: Macro Economic Management & Poverty Issues (June 2017)

No.	Name of Publications
61	7 <sup>th</sup> Five Year Plan (FY 2015/16-FY 2019/20): Background Papers Volume 02: Socio-Economic Issues (June 2017)
62	7 <sup>th</sup> Five Year Plan (FY 2015/16-FY 2019/20): Background Papers Volume 03: Infrastructure, Manufacturing & Service Sector (June 2017)
63	7 <sup>th</sup> Five Year Plan (FY 2015/16-FY 2019/20): Background Papers Volume 04: Agriculture, Water & Climate Change (June 2017)
64	7 <sup>th</sup> Five Year Plan (FY 2015/16-FY 2019/20): Background Papers Volume 05: Governance, Gender & Urban Development (June 2017)
65	Education Sector Strategy and Actions for Implementation of the 7 <sup>th</sup> Five Year Plan (FY2016-20)
66	GED Policy Study: Effective Use of Human Resources for Inclusive Economic Growth and Income Distribution-An Application of National Transfer Accounts (February 2018)
67	Monitoring and Evaluation Framework of Sustainable Development Goals (SDGs): Bangladesh Perspective (March 2018)
68	National Action Plan of Ministries/Divisions by Targets for the implementation of Sustainable Development Goals (June 2018)
69	Bangladesh Delta Plan 2100: Baseline Studies: Volume 1: Water Resources Management (June 2018)
70	Bangladesh Delta Plan 2100: Baseline Studies: Volume 2: Disaster and Environmental Management (June 2018)
71	Bangladesh Delta Plan 2100: Baseline Studies: Volume 3: Land Use and Infrastructure Development (June 2018)
72	Bangladesh Delta Plan 2100: Baseline Studies: Volume 4: Agriculture, Food Security and Nutrition (June 2018)
73	Bangladesh Delta Plan 2100: Baseline Studies: Volume 5: Socio-economic Aspects of The Bangladesh (June 2018)
74	Bangladesh Delta Plan 2100: Baseline Studies: Volume 6: Governance and Institutional Development(June 2018)
75	Journey with SDGs, Bangladesh is Marching Forward (Prepared for 73 <sup>rd</sup> UNGA Session 2018) (September 2018)
76	এসডিজি অভিযাত্রা : এগিয়ে যাচ্ছে বাংলাদেশ (জাতিসংঘ সধারণ পরিষদের ৭৩তম অধিবেশনের জন্য প্রণীত) (সেপ্টেম্বর ২০১৮)
77	Bangladesh Delta Plan 2100 (Bangladesh in the 21 <sup>st</sup> Century) Volume 1: Strategy (October 2018)
78	Bangladesh Delta Plan 2100 (Bangladesh in the 21 <sup>st</sup> Century) Volume 2: Investment Plan (October 2018)
79	বাংলাদেশ ব-দ্বীপ পরিকল্পনা ২১০০: একুশ শতকের বাংলাদেশ (সংক্ষিপ্ত বাংলা সংস্করণ) (অক্টোবর ২০১৮)
80	Bangladesh Delta Plan 2100: Bangladesh in the 21 <sup>st</sup> Century (Abridged Version) (October 2018)
81	Synthesis Report on First National Conference on SDGs Implementation (November 2018)
82	Sustainable Development Goals: Bangladesh First Progress Report 2018 (December 2018)
83	টেকসই উন্নয়ন অভিষ্ট : বাংলাদেশ অগ্রগতি প্রতিবেদন ২০১৮ (ইংরেজি থেকে অনূদিত) (এপ্রিল ২০১৯)
84	Study on Employment, Productivity and Sectoral Investment in Bangladesh (May 2019)
85	Implementation Review of the Sixth Five Year Plan (FY 2011-FY 2015) and its Attainments (May 2019)
86	Mid-term Implementation Review of the Seventh Five Year Plan (FY 2016-FY 2020) May 2019
87	Background Studies for the Second Perspective Plan of Bangladesh (2021-2041) Volume-1(June 2019)
88	Background Studies for the Second Perspective Plan of Bangladesh (2021-2041) Volume-2 (June 2019)
89	Empowering people: ensuring inclusiveness and equality For Bangladesh Delegation to HIGH-LEVEL POLITICAL FORUM 2019 (July, 2019)
90	Implementation Review of the perspective plan 2010-2021 (September 2019)

No.	Name of Publications
91	Bangladesh Moving Ahead with SDGs (Prepared for Bangladesh Delegation to 74 <sup>th</sup> UNGA session 2019) (September 2019)
92	টেকসই উন্নয়ন অভীষ্ট অর্জনে এগিয়ে যাচ্ছে বাংলাদেশ (জাতিসংঘ সধারণ পরিষদের ৭৪তম অধিবেশনে বাংলাদেশ প্রতিনিধিগণের জন্য প্রণীত) (সেপ্টেম্বর ২০১৯)।
93	Prospects and Opportunities of International Cooperation in Attaining SDG Targets in Bangladesh (Global Partnership in Attainment of the SDGs) (September 2019)
94	Background Studies for the Second Perspective Plan of Bangladesh (2021-2041) Volume-3 (October 2019)
95	Background Studies for the Second Perspective Plan of Bangladesh (2021-2041) Volume-4 (October 2019)
96	Background Studies for the Second Perspective Plan of Bangladesh (2021-2041) Volume-5 (October 2019)
97	Background Studies for the Second Perspective Plan of Bangladesh (2021-2041) Volume-6 (October 2019)
98	Monograph 4: Population Management Issues (December 2019)
99	Monograph 5: Population Management Issues (December 2019)
100	Consultation on Private Sector Engagement (PSE) in attaining Sustainable Development Goals (SDGs) in Bangladesh: Bonding & Beyond. Proceedings (January 2020)
101	Impact Assessment and Coping up Strategies of Graduation from LDC Status for Bangladesh (March 2020)
102	Perspective Plan of Bangladesh 2021-2041 (March 2020)
103	বাংলাদেশের শ্রেণিকৃত পরিকল্পনা ২০২১-২০৪১ (মার্চ ২০২০)
104	Revised Monitoring and Evaluation Framework of the Sustainable Development Goals (SDGs): Bangladesh Perspective (April 2020)
105	Sustainable Development Goals: Bangladesh Progress Report 2020 (April 2020)
106	টেকসই উন্নয়ন অভীষ্ট : বাংলাদেশ অগ্রগতি প্রতিবেদন ২০২০ (ইংরেজি থেকে বাংলায় অনূদিত) (এপ্রিল ২০২০)
107	Bangladesh Voluntary National Review 2020 (June 2020).
108	বাংলাদেশ ব-দীপ পরিকল্পনা ২১০০: একুশ শতকের বাংলাদেশ (সংক্ষিপ্ত বাংলা ২য় সংস্করণ) (আগস্ট ২০২০)
109	Leaving No One Behind (LNOB) in Bangladesh; Recommendations for the 8 <sup>th</sup> Five Year Plan for implementing Sustainable Development Goals (SDGs) (September 2020)
110	A Compendium of Social Protection Researches, July 2020
111	Midterm Implementation Review of the National Social Security Strategy, July 2020
112	Scope of Gender-responsive Adaptive Social Protection in Bangladesh, July 2020
113	Sector Strategy on Economic Governance in the Financial Sector in Bangladesh, December 2020
114	8 <sup>th</sup> Five Year Plan (July 2020-June 2025), December 2020
115	অষ্টম পঞ্চবার্ষিক পরিকল্পনা (জুলাই ২০২০-জুন ২০২৫) বাংলা সংস্করণ জুন-২০২১
116	রূপকল্প ২০৪১ বাস্তবে রূপায়ণ : বাংলাদেশের শ্রেণিকৃত পরিকল্পনা ২০২১-২০৪১ (সংক্ষিপ্ত সংস্করণ)
117	Promoting Sustainable Blue Economy in Bangladesh Through Sustainable Blue Bond: Assessing the Feasibility of Instituting Blue Bond in Bangladesh (June-2021)
118	Bangladesh Moving Ahead with SDGs (Prepared for Bangladesh Delegation to 76 <sup>th</sup> UNGA session 2021) (September 2021)
119	Integrating Climate Change Adaptation into Development Planning of Bangladesh, Training Manual (December 2021)
120	Monograph 6: Population Management Issues (December 2021)
121	Monograph 7: Population Management Issues (December 2021)
122	8 <sup>th</sup> Five Year Plan (July 2020-June 2025) : Background Papers Volume 01: Financial Sector, Investment Climate, ICT and Governance (December 2021)

No.	Name of Publications
123	8 <sup>th</sup> Five Year Plan (July 2020-June 2025) : Background Papers Volume 02: Trade and Industry (December 2021)
124	8 <sup>th</sup> Five Year Plan (July 2020-June 2025) : Background Papers Volume 03: Agriculture, Land Management and Urbanization (December 2021)
125	8 <sup>th</sup> Five Year Plan (July 2020-June 2025) : Background Papers Volume 04: Education, Health, Poverty and Social Inclusiveness (December 2021)
126	8 <sup>th</sup> Five Year Plan (July 2020-June 2025) : Background Papers Volume 05: Issues of Women and Children in Bangladesh (December 2021)
127	Training Needs and Capacity Assessment of Bangladesh Planning Commission (January 2022)
128	Revised Mapping of Ministries/Divisions and Custodian/Partner Agencies for SDG implementation in Bangladesh (January 2022)
129	A Training Handbook on Implementation of the 8 <sup>th</sup> Five Year Plan (June 2022)
130	ANNUAL HIGH-LEVEL CONSULTATION ON SDGs LOCALIZATION AND EFFICIENT USE OF OCEAN RESOURCES (May 2022)
131	Synthesis Report on Second National Conference on Sustainable Development Goals (SDGs) Implementation Review (SIR) 2022 (June 2022)
132	Sustainable Development Goals: Bangladesh Progress Report 2022 (December 2022)
133	2 <sup>nd</sup> National Action Plan of Ministries/Division by Targets for the Implementation of SDGs
134	End Evaluation of the Seventh Five Year Plan (FY2016-2020)



**General Economics Division (GED)**  
Bangladesh Planning Commission  
Government of the People's Republic of Bangladesh