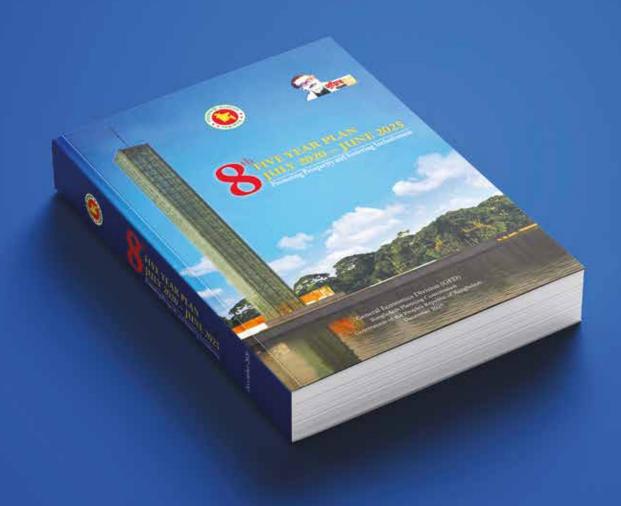


## Mid-term Implementation Review of the Eighth Five Year Plan



## General Economics Division (GED)

Bangladesh Planning Commission Government of the People's Republic of Bangladesh



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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 Mid-Term Implementation Review (MTIR) of the 8<sup>th</sup> Five Year Plan. The MTIR provides an account of the progress and achievements of the 8<sup>th</sup> FYP during its first two and half years. The key findings of the Review will provide a constructive guideline of the crucial next steps to be adopted for the remaining plan period.

The 8FYP is the first in the series of 04 Five Year Plans to complete the agenda of achieving the social and economic transformation visualized in the second "Perspective Plan of Bangladesh 2021-2041". The MTIR of 8FYP reveals that progress with poverty reduction has been extremely solid so far. According to HIES 2022, the incidence of moderate poverty fell from 24.3% in 2016 to 18.7% in 2022, while the incidence of extreme poverty declined dramatically from 12.9% to a mere 5.6% over the same periods. The progress in reducing extreme poverty at a pace that is much higher than anticipated in the 8FYP is truly inspiring. Much of this happened from an increase in the inclusiveness of the growth process. Greater labor force participation of rural female labor is indicative of this.

Since the early 1990s Bangladesh has a solid track record of accelerating GDP growth. This record was further strengthened over the implementation of the 6FYP and the 7FYP. GDP growth acceleration was halted in FY2020 by COVID-19. But the growth momentum was quickly restored during FY2021 and FY2022 by the government through a series of reforms and stimulus packages. Unfortunately the progress has been halted again by the onset of the global inflationary pressure that has been further accentuated by the Ukraine War. As a consequence, the growth performance and macroeconomic stability outcomes have been adversely affected. GDP growth is expected to slow down to 6% in FY2023. Inflation surged to 9.7% and reserves plummeted to \$31.2 billion in June 2023. The government has adopted several policy measures to counter the global inflationary effects. Solid implementation of the government's reform program agreed under the IMF program will help recover GDP growth and restore macroeconomic stability in the next two years of the 8FYP. Genuinely speaking, we should consider it as a major challenge for us moving forward.

The General Economics Division (GED) deserves special thanks for commissioning the splendid initiative. I am confident that this MTIR will serve as a guiding document to help Bangladesh attain its development aspirations by strongly handling the challenges.

(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 congratulate the General Economics Division (GED) of Bangladesh Planning Commission for successful completion of the Mid-Term Implementation Review (MTIR) of Eighth Five Year Plan (July 2020-June 2025). The MTIR provides an account of the progress and achievements of the Eighth Five Year Plan (8FYP) during its first two and half years. This MTIR will play a crucial role to asses and comprehend the attainments of the targets of the 8FYP, as well as provide guidance for adjustment in programmes for attaining the targets in the remaining plan period. The lessons learnt from the review report, through result-based monitoring and evaluation, will also provide valuable insights in the course of formulating the 9th Five Year Plan of Bangladesh.

After successful implementation of the Sixth (2011-2015) and the Seventh Five-Year plan (2016-2020), the government of Bangladesh embarked on the Eighth Five Year Plan, that laid out pragmatic targets for inclusive, pro-poor and people centric development. As a continuation of the previous two Five Year Plans, the 8<sup>th</sup> FYP has also adopted a rigorous approach and comprehensive methodological framework in conducting the MTIR. This Results-Based Monitoring and Evaluation (RBME) report has been prepared in light of the Development Results Framework (DRF) of the 8<sup>th</sup> FYP.

In addition, the macroeconomic targets of the 8FYP has been revised in this MTIR of 8FYP. It is because, the BBS rebased the national accounts from 2005-06 base year to 2015-16 base year in 2021, after the 8FYP was adopted. The rebasing caused nominal GDP in Taka terms to increase by 19% and nominal GDP in USD terms by 17%. All targets using nominal GDP have been adjusted to incorporate this change. Without this adjustment, performance assessment using previous base (2005-06) would be biased and not reflect reality.

The MTIR of 8FYP reveals remarkable progress in the areas of economic growth; poverty reduction; improving quality of basic services and enhancing the quality of education in spite of impact of COVID-19 and Russia-Ukraine war. The Government responded speedily to Covid-19 that enabled a rapid recovery of economic activity during the first two years of the 8FYP. GDP growth recovered speedily from 3.5% in FY2020 to 6.9% in FY2021 and 7.1% in FY2022. Per capita gross national income (GNI) soared to \$2793 in FY2022.

The 8FYP's progress with poverty reduction is a tribute to the government's implementation of the poverty reduction strategy. The incidence of moderate poverty fell from 24.3% in 2016 to 18.7% in 2022, while the incidence of extreme poverty declined dramatically from 12.9% to a mere 5.6% over the same periods. The progress

in reducing extreme poverty at a pace that is much higher than anticipated in the 8FYP is truly inspiring. Much of this happened from an increase in the inclusiveness of the growth process. With these positive changes, we will be able to continue our march towards graduating to an Upper Middle-Income Country status by 2031.

The General Economics Division (GED) deserves special thanks for commissioning the splendid initiative. I am confident that this MTIR will serve as a guiding document to help Bangladesh attain its development aspirations under the 8th FYP through an inclusive, equitable and just society.

(Dr. Shamsul Alam)





#### Dr. Md. Kawser Ahmed

Member (Secretary) General Economics Division (GED) Bangladesh Planning Commission

#### **Preface**

I am delighted to share that the General Economics Division (GED) is going to publish the report 'Mid-term Implementation Review of the Eighth Five Year Plan'. The report depicts the implementation progress of the 8<sup>th</sup> Five Year Plan (8FYP) till now 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 implementing the 8<sup>th</sup> Five-Year Plan for the remaining period, attaining the SDGs, conceptualizing the upcoming 9th Five Year Plan along with achieving the dream of the Father of the Nation of a poverty-free Sonar Bangla as well as the agenda of Smart Bangladesh by 2041.

A rigorous approach and methodological framework were followed for this evaluation. This requires a comprehensive understanding of the Plan documents (i.e., the 8th Plan and the Second 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 simply describing the data but also providing justification. 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/input received from the ministries and divisions. GED originated the formulation of the report in brief consultations with executing ministries/divisions. Several consultation workshops were held for the preparation of the report. As a result, ministries/divisions realized the importance and gravity of the agenda and grew their ownership consciously or subconsciously to implement it effectively. In this process, concerned officials from GED were actively in contact with the focal persons from ministries/divisions.

It is evident that Bangladesh exhibited sustained and robust economic performance in halfway through the 8FYP, despite the impact of the COVID-19 pandemic and global economic crisis. The government's prompt response to COVID-19 allowed for a quick rebound of economic activity during the first two years of the 8FYP. From 3.5% in FY2020 to 6.9% in FY2021 and 7.1% in FY2022, the GDP grew quickly. In FY2022, the gross national income (GNI) per person jumped to \$2793. Based on a jump in export profits and remittances, the balance of payments was comfortably balanced. In FY2022, export revenue surpassed a previous high of \$49.3 billion. During FY2022, the domestic economy remained steady, and the inflation rate was 6.2%. At the end of June 2022, there were comfortable foreign reserves of \$41.8 billion.

The 8FYP has made very significant strides toward reducing poverty thus far. It is a credit to the government's implementation of the poverty reduction plan because it not only secured a significant decrease in moderate and extreme poverty but also successfully mitigated the negative impacts of COVID-19. According to HIES 2022, the prevalence of moderate poverty decreased from 24.3% in 2016 to 18.7% in 2022, while the prevalence of extreme

poverty sharply decreased during the same time period from 12.9% to just 5.6%. It is quite encouraging to see how much further severe poverty has come down than was first predicted in the 8FYP.

The implementation of the agriculture sector strategies, policies, and programs of the 8FYP is proceeding well. Despite the negative consequences of COVID-19, this is seen in the agriculture sector's robust mid-term growth, production, and export performance. The results of HIES 2022, indicate a dramatic decline in severe poverty, which attributes a large portion of this decline to the development of female employment in agriculture and demonstrates the robustness of the agricultural sector's performance. Additionally, agricultural diversification has made a significant contribution to the families' continuous increase in the quality of their food basket by increasing the proportion of fish, milk, eggs, and meat in the diet as well as the intake of fruits, vegetables, and legumes.

Under the 8FYP, the government has successfully maintained its emphasis on pursuing an export-oriented trade strategy. The first three years of the Plan saw a surge in exports, which quickly recovered from the COVID-19-induced decline in export revenues in FY2020 and reached \$49.2 billion in FY2022, up from only \$32.8 billion in FY2020. \$52.6 billion is the expected export revenue for FY2023.

The expansion of the power supply program is on track during the mid-term of the 8FYP. The government's strategies for the betterment of the power sector have come a long way from the 2009 era of severe power shortage and is now in the comfortable situation of having excess power supply capacity. Power investment has contributed handsomely to the acceleration of GDP growth and exports over FY2010-FY2022 and in turn contributed substantially to lowering poverty and improving the quality of life by securing universal access to power supply.

Since the 6FYP, the government has given the transportation sector high attention, and it is beginning to show results. The improvement of road transportation has seen the most advancement. The Padma Multipurpose Bridge and the launch of Line 6 of the Mass Rapid Transit (MRT), Dhaka Elevated Expressway were some significant transformative transportation projects that were completed. The 3.23 km long Bangabandhu Tunnel under the Karnaphuli River in Chattogram, which is now under construction and is anticipated to be operational soon, is another historic development. It is highly expected that Bangladesh will be a regional industrial hub with supply chain linkages soon with NE India and other neighboring economies in South and East Asia through these transformative initiatives by the government which will highly contribute to the socioeconomic development of the country.

An intense and rigorous consultation process was followed in preparing this document. I express my sincere appreciation to all the officials of GED particularly the officials of the Poverty Analysis and Monitoring (PAM) Wing 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)





#### Dr. Munira Begum

Joint Chief General Economics Division (GED) Bangladesh Planning Commission

## The Process and the Acknowledgements

The Eighth Five Year Plan (8FYP) (July 2020-June 2025) of the Government of Bangladesh with a core focus on promoting prosperity and fostering inclusiveness was approved by the National Economic Council (NEC) in December 2020. It is the key planning document that is blended with the strategies related to attaining the SDGs, achieving Perspective Plan of Bangladesh: 2021-2041, Bangladesh Delta Plan (BDP)-2100, graduating LDC, and expediting the COVID-19 recovery process. Two reviews are supposed to be conducted during the 8FYP period to assess the degree of achievement against the targets set in the plan document of which the mid-term review of 8FYP is planned at the end of FY 2023, while a final implementation review will take place at the end of FY 2025, i.e., after the completion of the plan. GED has taken proactive and timely initiatives to conduct this mid term review commenced in January 2023 well ahead of the planned time.

An extensive and rigorous process has been followed involving a series of reviews and consultation workshops that helped to prepare the Mid-term Implementation Review of the Eighth Five Year Plan. This report has been prepared in an inclusive and participatory manner; the engagement of the stakeholders, particularly the consultations with ministries/divisions has been ensured.

In early January 2023, GED initiated the preparation of the Mid-term Implementation Review of the Eighth Five Year Plant of 8FYP. The Policy Research Institute (PRI) – a reputed consulting firm of Bangladesh specializing in Economic issues was recruited to provide the consultancy services in preparing this report. In between, GED collected input/feedback on the implementation progress of 8FYP from concerned ministries/divisions and organized two workshops on 15 March 2023 on the received input. After the workshops, all ministries/ divisions were requested to provide/correct/modify their input/comments again. In the whole process, concerned officials from GED were actively in touch with the focal persons from ministries/divisions. Once the draft of the report was prepared, GED conducted another consultation workshop with ministries/divisions on 23 August 2023 for their on the draft report. The final report incorporated all the information and feedback received from the ministries/division. GED also formed a technical committee comprised of representatives from various government organizations, i.e., Finance Division (FD), Economic Relations Division (ERD, Ministry of Commerce, Bangladesh Bank, Bangladesh Bureau of Statistics (BBS), and Bangladesh Institute of Development Studies (BIDS). This committee sat several times to critically review the macroeconomic aspect of the draft review report and recommended it accordingly.

A dedicated core team under the prudent and dynamic leadership of Dr. Md. Kawser Ahmed, Member (Secretary), General Economics Division (GED) comprised of Dr. Munira Begum, Joint Chief, Ms. Rumana

Rahman Shampa, Deputy Chief, Mr. Mohammad Fahim Afsan Chowdhury, Senior Assistant Chief, Mr. Shimul Sen, Senior Assistant Chief, Mr. Sumon Das, Senior Assistant Chief and Ms. Iffat Tanzia, Senior Assistant Chief worked as a core team from the outset to the publication of the final draft of this report. Khan Md. Nurul Amin, ndc, Chief (Additional Secretary), GED also deserves special thanks for his guidance.

We acknowledge the contribution of all focal point officers/concerned officials of all Ministries/Divisions in preparing this report. We also offer our gratitude to the Policy Research Institute (PRI) team for their support and contribution. Finally, sincere thanks and gratitude to the Honorable Minister, Ministry of Planning, Mr. M. A. Mannan, MP, and Honorable Minister of State, Ministry of Planning, Dr. Shamsul Alam for inspiration, and guidance in bringing out this important publication.

(Dr. Munira Begum)

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## Acronyms

ACC	Anti-Corruption Commission
AD	Appellate Division
ADB	Asian Development Bank
ADP	Annual Development Programme
ADR	Alternative Dispute Resolution
AEO	Authorized Economic Operator
AI	Artificial Intelligence
AIDS	Acquired Immunodeficiency Syndrome
AIG	Alternative Income Generation
AIIB	Asian Infrastructure Investment Bank
APA	Annual Performance Agreement
APAMS	APA Management System
APSC	Annual Primary School Census
APTA	Asia-Pacific Trade Agreement
AQI	Air Quality Index
ASEAN	Association of Southeast Asian Nations
a2i	Aspire to Innovate
BACS	Bangladesh Aquaculture Certification System
BACS	Budget and Accounting Classification System
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BARI	Bangladesh Agricultural Research Institute
BASIS	Bangladesh Association of Software and Information Services
ВВ	Bangladesh Bank
BBA	Bangladesh Bridge Authority
BBS	Bangladesh Bureau of Statistics
ВСС	Bangladesh Computer Council
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCF	Billion Cubic Feet
BCMCL	Barapukuria Coal Mining Company Limited
BCS	Bangladesh Civil Service
BD	Bridges Division

BDHS	Bangladesh Demographic and Health Survey
BDP2100	Bangladesh Delta Plan 2100
BDT	Bangladesh Taka
BEPZA	Bangladesh Export Processing Zones Authority
BER	Bangladesh Economic Review
BERC	Bangladesh Energy Regulatory Commission
BES	Bangladesh Education Statistics
BEZA	Bangladesh Economic Zones Authority
BFD	Bangladesh Forest Department
BFDC	Bangladesh Fisheries Development Corporation
BFDS	Bangladesh Freelancer Development Society
BFRI	Bangladesh Fisheries Research Institute
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
ВНТРА	Bangladesh Hi-Tech Park Authority
BIDA	Bangladesh Investment Development Authority
BIWTA	Bangladesh Inland Water Transport Authority
BIWTC	Bangladesh Inland Water Transport Corporation
BLPA	Bangladesh Land Port Authority
BMET	Bureau of Manpower, Employment and Training
BNDA	Bangladesh National Digital Architecture
BNFE	Bureau of Non-Formal Education
BNITTR	Bangladesh National Institute of Technical Teachers' Training and Research
ВОСМС	Bangladesh Oil, Gas and Mineral Corporation
ВООТ	Build, Own, Operate and Transfer
ВоР	Balance of Payments
BP	Bangladesh Parliament
ВРС	Bangladesh Petroleum Corporation
BPDB	Bangladesh Power Development Board
ВРО	Business Process Outsourcing
BPSC	Bangladesh Public Service Commission
BR	Bangladesh Railway
BRT	Bus Rapid Transit
BRTA	Bangladesh Road Transport Authority

BRTC	Bangladesh Road Transport Corporation
BSA	Bangladesh Shishu Academy
BSEC	Bangladesh Securities and Exchange Commission
BTCL	Bangladesh Telecommunications Company Limited
BTRC	Bangladesh Telecommunication Regulatory Commission
BWDB	Bangladesh Water Development Board
C-CAMS	Compact Continuous Air Monitoring Station
CA	Certifying Authority
CAAB	Civil Aviation Authority of Bangladesh
CAD	Comparative Advantage Defying
CAF	Comparative Advantage Following
CAG	Comptroller and Auditor General
CAGR	Compound Annual Growth Rate
CAMS	Continuous Air Monitoring Station
CBT&A	Competency-Based Training and Assessment
CC	Community Clinic
CCA	Climate Change Adaptation
CCA	Controller of Certifying Authorities
CCC	Case Coordination Committee
CD	Cabinet Division
CD	Customs Duty
CDA	Chittagong Development Authority
CEPA	Comprehensive Economic Partnership Agreement
CFF	Climate Fiscal Framework
СНТ	Chittagong Hill Tracts
CIB	Credit Information Bureau
CIP	Country Investment Plan
CIS	Commonwealth of Independent States
CMMIL-3	Capability Maturity Model Integration Level 3
CMMIL-5	Capability Maturity Model Integration Level 5
CMSE	Cottage, Micro and Small Enterprises
CoxDA	Cox's Bazar Development Authority
СРА	Chittagong Port Authority

СРІ	Consumer Price Index
СРР	Captive Power Plant
СРР	Cyclone Preparedness Programme
СРТРР	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
СРТИ	Central Procurement Technical Unit
CSSA	Contributory Social Security Scheme
DAE	Department of Agricultural Extension
DANIDA	Danish International Development Agency
DAP	Detailed Area Plan
DDM	Department of Disaster Management
DEMRS	Digital Evidence Management and Reporting System
DGC	Delta Governance Council
DGHS	Directorate General of Health Services
DIFE	Department of Inspection for Factories and Establishments
DIP	Department of Immigration and Passports
DLS	Department of Livestock Services
DMA	District Metered Area
DNCC	Dhaka North City Corporation
DoE	Department of Environment
DoF	Department of Fisheries
DoICT	Department of Information and Communication Technology
DoL	Department of Labour
DPE	Directorate of Primary Education
DPEd	Diploma in Primary Education
DPHE	Department of Public Health Engineering
DPIP	Delta Public Investment Program
DPP	Development Project Proposal
DRF	Development Results Framework
DRR	Disaster Risk Reduction
DSC	Digital Service Centre
DSCC	Dhaka South City Corporation
DSHE	Directorate of Secondary and Higher Education
EALG	Efficient and Accountable Local Governance
	Different and recommende Local Covernance

e-CAB Electronic Commerce Association of Bangladesh  EC Bangladesh Election Commission  EC4J Export Competitiveness for Jobs  EDF Export Development Fund  EDGE Enhancing Digital Government and Economy  EDI Electronic Data Interchange  EEZ Exclusive Economic Zone  EFA Education for All  EFR Environmental Fiscal Reforms  EGDI Electronic Government Development Index  EMRD Energy and Mineral Resources Division  EoI Expression of Interest  EPA Economic Partnership Agreement  EPB Export Promotion Bureau  EPI Environmental Performance Index  EPR Extended Producer Responsibility  EPZ Export Processing Zone  ERD Economic Relations Division  ERL Eastern Refinery Limited  ERP Enterprise Resource Planning  e-TIN Electronic Taxpayer's Identification Number  ETP Effluent Treatment Plant  EU European Union  FAO Food and Agriculture Organization  FD Finance Division  FID Foreign Direct Investment  FEPR Female Employment-to-Population Rate  FGD Focus Group Discussion  FID Financial Institutions Division  FIES Food Insecurity Experience Scale  FLES Female Labour Force Participation  FPMU Food Planning and Monitoring Unit  FSM Faccal Sludge Management		
EC4] Export Competitiveness for Jobs  EDF Export Development Fund  EDGE Enhancing Digital Government and Economy  EDI Electronic Data Interchange  EEZ Exclusive Economic Zone  EFA Education for All  EFR Environmental Fiscal Reforms  EGDI Electronic Government Development Index  EMRD Energy and Mineral Resources Division  Eof Expression of Interest  EDA Economic Partnership Agreement  EPB Export Promotion Bureau  EPI Environmental Performance Index  EXPREDIATE Extended Producer Responsibility  EPZ Export Processing Zone  ERD Economic Relations Division  EAL Eastern Refinery Limited  ERP Enterprise Resource Planning  e-TIN Electronic Taxpayer's Identification Number  ETP Effluent Treatment Plant  EU European Union  FAO Food and Agriculture Organization  FDI Finance Division  FID Foreign Direct Investment  FEPR Female Employment-to-Population Rate  FGD Focus Group Discussion  FID Financial Institutions Division  FIES Female Labour Force Participation  FPMU Food Planning and Monitoring Unit	e-CAB	Electronic Commerce Association of Bangladesh
EDF Export Development Fund EDGE Enhancing Digital Government and Economy EDI Electronic Data Interchange EEZ Exclusive Economic Zone EFA Education for All EFR Environmental Fiscal Reforms EGDI Electronic Government Development Index EMRD Energy and Mineral Resources Division EoI Expression of Interest EPA Economic Partnership Agreement EPB Export Promotion Bureau EPI Environmental Performance Index EPR Extended Producer Responsibility EPZ Export Processing Zone ERD Economic Relations Division ERL Eastern Refinery Limited ERP Enterprise Resource Planning e-TIN Electronic Taxpayer's Identification Number ETP Effluent Treatment Plant EU European Union FAO Food and Agriculture Organization FD Finance Division FDF Foreign Direct Investment FEPR Female Employment-to-Population Rate FGD Focus Group Discussion FID Financial Institutions Division FIES Food Insecurity Experience Scale FLES Female Labour Force Participation FPMU Food Planning and Monitoring Unit	EC	Bangladesh Election Commission
EDGE Enhancing Digital Government and Economy  EDI Electronic Data Interchange  EEZ Exclusive Economic Zone  EFA Education for All  EFR Environmental Fiscal Reforms  EGDI Electronic Government Development Index  EMRD Energy and Mineral Resources Division  EoI Expression of Interest  EPA Economic Partnership Agreement  EPB Export Promotion Bureau  EPI Environmental Performance Index  EPR Extended Producer Responsibility  EPZ Export Processing Zone  ERD Economic Relations Division  ERL Eastern Refinery Limited  ERP Enterprise Resource Planning  e-TIN Electronic Taxpayer's Identification Number  ETP Effluent Treatment Plant  EU European Union  FAO Food and Agriculture Organization  FD Finance Division  FD Foreign Direct Investment  FEPR Female Employment-to-Population Rate  FGD Focus Group Discussion  FID Financial Institutions Division  FIES Food Insecurity Experience Scale  FLFS Female Labour Force Participation  FPMU Food Planning and Monitoring Unit	EC4J	Export Competitiveness for Jobs
EDI Electronic Data Interchange  EEZ Exclusive Economic Zone  EFA Education for All  EFR Environmental Fiscal Reforms  EGDI Electronic Government Development Index  EMRD Energy and Mineral Resources Division  EoI Expression of Interest  EPA Economic Partnership Agreement  EPB Export Promotion Bureau  EPI Environmental Performance Index  EPR Extended Producer Responsibility  EPZ Export Processing Zone  ERD Economic Relations Division  ERL Eastern Refinery Limited  ERP Enterprise Resource Planning  e-TIN Electronic Taxpayer's Identification Number  ETP Effluent Treatment Plant  EU European Union  FAO Food and Agriculture Organization  FD Finance Division  FDI Foreign Direct Investment  FEPR Female Employment-to-Population Rate  FGD Focus Group Discussion  FID Financial Institutions Division  FIES Food Insecurity Experience Scale  FLFS Female Labour Force Participation  FPMU Food Planning and Monitoring Unit	EDF	Export Development Fund
EEZ Exclusive Economic Zone EFA Education for All EFR Environmental Fiscal Reforms EGDI Electronic Government Development Index EMRD Energy and Mineral Resources Division Eol Expression of Interest EPA Economic Partnership Agreement EPB Export Promotion Bureau EPI Environmental Performance Index EPR Extended Producer Responsibility EPZ Export Processing Zone ERD Economic Relations Division ERL Eastern Refinery Limited ERP Enterprise Resource Planning e-TIN Electronic Taxpayer's Identification Number ETP Effluent Treatment Plant EU European Union FAO Food and Agriculture Organization FD Finance Division FDI Foreign Direct Investment FEPR Female Employment-to-Population Rate FGD Focus Group Discussion FID Financial Institutions Division FIES Food Insecurity Experience Scale FLFS Female Labour Force Participation FPMU Food Planning and Monitoring Unit	EDGE	Enhancing Digital Government and Economy
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FEPR Female Employment-to-Population Rate  FGD Focus Group Discussion  FID Financial Institutions Division  FIES Food Insecurity Experience Scale  FLFS Female Labour Force Participation  FPMU Food Planning and Monitoring Unit	FD	Finance Division
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FID Financial Institutions Division  FIES Food Insecurity Experience Scale  FLFS Female Labour Force Participation  FPMU Food Planning and Monitoring Unit	FEPR	Female Employment-to-Population Rate
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FLFS Female Labour Force Participation  FPMU Food Planning and Monitoring Unit	FIES	Food Insecurity Experience Scale
FPMU Food Planning and Monitoring Unit	FLFS	•
	FPMU	
I docum orange municipality	FSM	

FSRU Fl	loating Storage Regasification Unit
FTA Fr	ree Trade Agreement
FVC Fu	ull Vaccination Coverage
FY Fi	iscal Year
FYP Fi	ive-Year Plan
GAP G	Good Aquaculture Practices
GBV G	Gender-Based Violence
GCF G	Green Climate Fund
GCRI G	Global Climate Risk Index
GDP G	Gross Domestic Product
GE G	Gender Equality
GED G	General Economics Division
GER G	Gross Enrolment Rate
GFEI G	Global Fuel Economy Initiative
GFI G	Global Financial Institute
GGGR G	Global Gender Gap Report
GHG G	Greenhouse Gas
GII G	Global Innovation Index
GNI G	Gross National Income
GoB Go	Government of Bangladesh
GRB G	Gender Responsive Budgeting
GRS G	Grievance Redress System
GSB G	Geological Survey of Bangladesh
GTMI G	GovTech Maturity Index
GVC G	Global Value Chain
HCD H	High Court Division
HDDWWA H	Husband Deserted and Destitute Women and Widow Allowance
HEQEP H	Higher Education Quality Enhancement Project
нғо н	Heavy Fuel Oil
HIC H	High-Income Country
HIES H	Household Income and Expenditure Survey
HIV H	Human Immunodeficiency Virus
HPN H	Health, Population and Nutrition

HPNSP	Health, Population and Nutrition Sector Programme
HS Code	Harmonized System Code
HSD	Health Services Division
HSD	High Speed Diesel
iBAS++	Integrated Budget and Accounting System
IC	Information Commission, Bangladesh
ICT	Information and Communications Technology
IDCOL	Infrastructure Development Company Limited
IDEA	Innovation Design and Entrepreneurship Academy
IFRS	International Financial Reporting Standards
IMED	Implementation, Monitoring and Evaluation Division
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IOC	International Oil Company
IPP	Independent Power Producer
IRD	Internal Resources Division
ISA	International Standards on Auditing
ISC	Industry Skills Council
ISI	Import Substitution Industrialization
ISO	International Organization for Standardization
IT	Information Technology
ITC	International Trade Centre
ITEE	Information Technology Engineers Examination
ITES	Information Technology Enabled Services
ITS	Intelligent Transportation Systems
ITU	International Telecommunication Union
IWT	Inland Water Transport
JICA	Japan International Cooperation Agency
JRC	Joint Rivers Commission
JWG	Joint Working Group
KDA	Khulna Development Authority
KPI	Key Performance Indicator
КРО	Knowledge Process Outsourcing

LC	Letter of Credit
LCD	Life Cycle Deficit
LCE	Low-Carbon Economy
LDC	Least Developed Country
LEDP	Learning and Earning Development Project
LEED	Leadership in Energy and Environmental Design
LFS	Labour Force Survey
LGD	Local Government Division
LGED	Local Government Engineering Department
LGI	Local Government Institution
LIC	Low-Income Country
LIC	Low-Income Community
LJD	Law and Justice Division
LMA	Urban Low-income Lactating Mothers
LMIC	Lower Middle-Income Country
LNG	Liquefied Natural Gas
LPAD	Legislative and Parliamentary Affairs Division
LPI	Logistics Performance Index
LPL	Lower Poverty Line
MA	Maternity Allowance
MCF	Million Cubic Feet
MCBP	Mother and Child Benefit Program
МСРР	Matarbari Coal Power Plant
MDG	Millennium Development Goals
MEFWD	Medical Education and Family Welfare Division
MFR	Monthly Fiscal Report
MFS	Mobile Financial Services
MICS	Multiple Indicator Cluster Survey
MLT	Medium and Long-Term
MMBtu	Metric Million British Thermal Unit
MMR	Maternal Mortality Rate
MMSFCD	Million Standard Cubic Feet Per Day
MoA	Ministry of Agriculture
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	Manager 1 and Community
MoC MoC	Memorandum of Cooperation
MoC	Ministry of Commerce
MoCAT	Ministry of Civil Aviation and Tourism
МоЕ	,
MoEFCC	8
MoEWOE	Ministry of Expatriates' Welfare and Overseas Employment
MoF	Ministry of Finance
MoFA	Ministry of Foreign Affairs
MoFL	Ministry of Fisheries and Livestock
MoFood	Ministry of Food
МоНА	Ministry of Home Affairs
MoHFW	Ministry of Health and Family Welfare
MoHPW	Ministry of Housing and Public Works
MoInd	Ministry of Industries
MoLand	Ministry of Land
MoLE	Ministry of Labour and Employment
MoLGRDC	Ministry of Local Government, Rural Development and Cooperatives
MoLJPA	Ministry of Law, Justice and Parliamentary Affairs
МоР	Ministry of Planning
MoPA	Ministry of Public Administration
MoPEMR	Ministry of Power, Energy and Mineral Resources
МоРМЕ	Ministry of Primary and Mass Education
MoR	Ministry of Railways
MoRTB	Ministry of Road Transport and Bridges
MoS	Ministry of Shipping
MoU	Memorandum of Understanding
MoWCA	Ministry of Women and Children Affairs
MoWR	·
MPA	Mongla Port Authority
MPM&P	Management, Production, Maintenance and Provisioning
MRP	Machine Readable Passport
MRT	Mass Rapid Transit
MSE	•
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MSP-VAW	Multi-Sectoral Program on Violence Against Women
MTBF	Medium-Term Budget Framework
MTMPS	Medium-Term Macroeconomic Policy Statement
MW	Mega-Watt
MYPIP	Multi-Year Public Investment Programme
M&E	Monitoring and Evaluation
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NBFI	Non-Bank Financial Institution
NBR	National Board of Revenue
NCD	Non-Communicable Disease
NCTB	National Curriculum and Textbook Board
NDC	National Data Centre
NDD	Neuro-Developmental Disorder
NEC	National Economic Council
NEMC	National Environment Management Council
NEP 2010	National Education Policy 2010
NER	Net Enrolment Rate
NFE	Non-Formal Education
NGO	Non-Government Organization
NGOAB	NGO Affairs Bureau
NHA	National Housing Authority
NID	National Identity Card
NIPORT	National Institute of Population Research and Training
NIS	National Integrity Strategy
NJA	National Judicial Academy
NLASO	National Legal Aid Services Organization
NMR	Neonatal Mortality Rate
NNS	National Nutrition Services
NPDM	National Plan for Disaster Management
NPL	Non-Performing Loan
NPR	Nominal Protection Rate
NRCA	Normalized Revealed Comparative Advantage

NSA	National Student Assessment
NSDA	National Skill Development Authority
NSSS	National Social Security Strategy
NTA	National Transfer Account
NUA	New Urban Agenda
OAA	Old Age Allowance
OBS	Open Budget Survey
OCC	One-Stop Crisis Centre
ODP	Ozone Depleting Potential
OECD	Organisation for Economic Co-operation and Development
OMS	Open Market Sale
O&M	Operations and Maintenance
PA	Protected Area
PC	Planning Commission
PD	Planning Division
PD	Power Division
PECE	Primary Education Completion Examination
PEDP-3	Third Primary Education Development Program
PEDP-4	Fourth Primary Education Development Program
PFM	Public Financial Management
РНС	Population and Housing Census
PIM	Public Investment Management
PKI	Public Key Infrastructure
PKSF	Palli Karma Sahayak Foundation
РМВ	Padma Multipurpose Bridge
PMO	Prime Minister's Office
РоР	Point-of-Presence
PP	Perspective Plan
PPP	Public-Private Partnership
PPPA	Public-Private Partnership Authority
PPSC	Public-Private Sector Collaboration
PP2021	Perspective Plan 2021
PP2041	Perspective Plan 2041
PSC	Production Sharing Contract

PSMP	Power System Master Plan
PTA	Preferential Trade Agreement
PTD	Posts and Telecommunications Division
PWD	Public Works Department
QLFS	Quarterly Labour Force Survey
QR	Quantitative Restrictions
RAJUK	Rajdhani Unnayan Kartripakkha
RCA	Revealed Comparative Advantage
RCEP	Regional Comprehensive Economic Partnership
RD	Regulatory Duty
RDA	Rajshahi Development Authority
RHD	Roads and Highways Division
RMG	Readymade Garments
RNPP	Rooppur Nuclear Power Plant
ROO	Rules of Origin
ROSC	Reaching Out-of-School Children
RPGCL	Rupantarita Prakritik Gas Company Limited
RTA	Regional Trade Agreement
RTHD	Road Transport and Highways Division
RTI	Right to Information
RTPP	Rampal Thermal Power Plant
R&D	Research and Development
SAM	Social Accounting Matrix
SBW	Special Bonded Warehouse
SD	Supplementary Duty
SDG	Sustainable Development Goals
SEP	Skills for Employment Program
SESIP	Secondary Education Sector Investment Program
SHED	Secondary and Higher Education Division
SHS	Solar Home System
SID	Statistics and Informatics Division
SIDS	Small Island Developing States
SME	Small and Medium Enterprises
SMI	Survey of Manufacturing Industries

SOE	State-Owned Enterprise
SPI	Students per Institution
SPIMS	Strengthening Public Investment Management System
SREDA	Sustainable and Renewable Energy Development Authority
SSP	Sector Strategy Paper
STEM	Science, Technology Engineering and Mathematics
STEP	Skills and Training Enhancement Project
SVRS	Sample Vital Registration System
SWM	Solid Waste Management
ТВ	Tuberculosis
TBI-W	Temporary Basic Income for Women
TCF	Trillion Cubic Feet
TFR	Total Fertility Rate
TMED	Technical and Madrasah Education Division
TNC	Trade Negotiating Committee
TPI	Teachers per Institution
TPP	Technical Assistance Project Proposal
TSR	Teacher-Student Ratio
TUS	Time Use Survey
TVET	Technical and Vocational Education and Training
T&D	Transmission and Distribution
UAE	United Arab Emirates
UDC	Union Digital Centre
UDD	Urban Development Directorate
UGC	University Grants Commission of Bangladesh
UHC	Universal Health Coverage
UK	United Kingdom of Great Britain and Northern Ireland
ULB	Urban Local Body
ULGI	Urban Local Government Institution
UMIC	Upper Middle-Income Country
UN	United Nations
UNCDP	United Nations Committee for Development Policy
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
CIVDI	Officed Pacions Development Flogramme

UNEP	United Nations Environment Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
UPL	Upper Poverty Line
URP	Urban Resilience Project
USA	United States of America
USAID	United States Agency for International Development
USD	United States Dollar
U-5	Under-Five
U-5MR	Under-Five Mortality Rate
VAT	Value Added Tax
VAWG	Violence Against Women and Girls
VCG	Village Conservation Group
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
VPN	Virtual Private Network
VTMS	Vessel Traffic Management System
WASA	Water Supply and Sewerage Authority
WASH	Water, Sanitation and Hygiene
WASRA	Water and Sanitation Regulatory Agency
WB	World Bank
WCO	World Customs Organization
WEF	World Economic Forum
WHO	World Health Organization
WID	World Inequality Database
WIPO	World Intellectual Property Organization
WSIS	World Summit on Information Society
WTO	World Trade Organization
4th HPNSP	Fourth Health, Population and Nutrition Sector Programme
4IR	Fourth Industrial Revolution
6FYP	Sixth Five-Year Plan
7FYP	Seventh Five-Year Plan

### **Executive Summary**

The Eighth Five Year Plan (8FYP) of the Government of Bangladesh was approved in December 2020 by the National Economic Council (NEC) for the period July 01, 2020 to June, 2025. This is the third medium-term development plan adopted by the current Awami League led government under the dynamic leadership of the Honorable Prime Minister Sheikh Hasina. The 8FYP has several notable dimensions that shapes its content and implementation experience

First, this is the first of the four medium term plans that are intended to help implement the visions, goals, targets and strategies of the Perspective Plan of Bangladesh: 2021-2041 (PP2041). Second, when preparations for the formulation of the 8FYP were underway, the world was hit by an unprecedented pandemic known as Covid-19 starting in March 2020. This global pandemic caused huge loss of lives and heavy disruption of economic activities across world owing to health-related lockdowns and work stoppages. The disruption of production, consumption, investment and trade led to substantial loss of incomes and employment across the globe. The disruption of economic activities was most severe over the periods March 2020 to December 2020, but the adverse effects continued after that. Third, the supply constraints from Covid-19 related work stoppages and the demand-pull effects of large stimulus packages, especially in the USA, pushed up global commodity and manufacturing prices leading to a surge in global inflation. Fourth, even as the world was recovering from covid-19 onslaught, Russia-Ukraine war started on February 24, 2022. This led to a further disruption of world trade and production especially as the OECD countries imposed heavy economic sanctions on Russia. The associated increase in commodity prices, especially for energy products, wheat and fertilizer, further accentuated the global inflationary effects of Covid-19.

The combined effects of these unanticipated global shocks have been adverse and destabilizing for all countries globally, but especially for energy importing countries like Bangladesh. So, a major challenge for the 8FYP was to internalize these shocks and develop an alternative pathway to restore the development momentum envisaged in PP2041 and reflected in the development strategies and targets of the 8FYP.

The Government responded to these shocks forcefully with a series of health and economic stimulus packages. Additionally, the Government took the bold decision to end the covid-19 related economic lockdown swiftly and open up economic activities. These timely actions yielded very good results. The level of known infections and deaths were modest in relation to many parts of the world including the neighboring India. The combined effects of the stimulus packages and the opening up of the economy swiftly paid rich dividends. Even as early as in the first quarter of the start of the 8FYP (July-September 2020), there were encouraging signs of revival of economic activities including GDP growth and exports. In FY2021 GDP growth recovered to 6.9% while exports rebounded from \$33 billion to \$41 billion. Bangladesh Covid-19 response has been a major success and due credit goes to the leadership of the Honorable Prime Minster who personally directed and spear-headed the Covid-19 response strategy.

Encouraged by this robust performance in tackling the adverse effects of Covid-19, the government decided to move with renewed drive to restore the growth and poverty reduction envisaged under PP2041. Furthermore, the government adopted the Smart Bangladesh Vision 2041which combines the development targets of PP2041 with a drive to adopt smart solutions to resolve problems of citizens using the digital technology.

Against the backdrop of the above, the main objective of this report is to provide an assessment of the implementation performance of the 8FYP at the mid-term. Drawing from the experience of the 6th and 7th Five Year Plans, the 8FYP developed an elaborate development results framework (DRF) to use as a basis for measuring

implementation performance at the end of the plan period and during the mid-term. Since data requirements for the DRF are substantial and data on many of required indicators are not yet available, the report uses the DRF flexibly to get an indication of the direction of the progress and supplements that with a broader evaluation of progress based on an assessment of implementation of policies and strategies. Where relevant, data on indicators of performance outside the DRF are also used.

### Progress with Economic Growth and Macroeconomic Stability

As noted, the Government responded speedily to Covid-19 that enabled a rapid recovery of economic activity during the first two years of the 8FYP. GDP growth recovered speedily from 3.5% in FY2020 to 6.9% in FY2021 and 7.1% in FY2022. Per capita gross national income (GNI) soared to \$2793 in FY2022. The balance of payments was comfortable, based on a surge in export earnings and remittances. Export earnings reached a record \$49.3 billion in FY2022. The domestic economy was stable with a moderate inflation rate of 6.2% during FY2022. Foreign reserves were comfortable and amounted to US\$41.8 billion at end June 2022.

This solid economic recovery has been adversely affected by the global inflationary impact of the Ukraine War that has tended to destabilize the macroeconomy through growing pressure on the balance of payments, fiscal balance and inflation. As a consequence, the growth performance and macroeconomic stability outcomes have been adversely affected. GDP growth is expected to slow down to 6% in FY2023. Inflation surged to 9.7% and reserves plummeted to \$31.2 billion in June 2023. The government has adopted several policy measures to counter the global inflationary effects. It has also signed an IMF program to stabilize the economy and help with the resumption of rapid GDP growth. Solid implementation of the government's reform program agreed under the IMF program will help recover GDP growth and restore macroeconomic stability in the next two years of the 8FYP.

The sound implementation of the macroeconomic reform program is a major challenge for the government moving forward. Of particular importance is the need to address the concerns on the inflation front, the banking sector, and on the fiscal front. All out efforts are needed to restore the health of the banking sector and to increase tax revenues through comprehensive tax reforms. Inflation is hurting and must be brought down to the 5-6% range through a judicious use of monetary and fiscal policies. Flexible management of the exchange rate and interest rate is essential to restore macroeconomic stability. Import controls must be removed to enable a resumption of the growth momentum. FDI flows must be boosted to provide necessary financing of investments and the balance of payments.

### Progress with Reducing Poverty and Inequality

The 8FYP's progress with poverty reduction has been extremely solid so far. It is a tribute to the government's implementation of the poverty reduction strategy that it not only successfully offset the adverse effects of Covid-19, but it also secured substantial reduction in moderate and extreme poverty. According to HIES 2022, the incidence of moderate poverty fell from 24.3% in 2016 to 18.7% in 2022, while the incidence of extreme poverty declined dramatically from 12.9% to a mere 5.6% over the same periods. The progress in reducing extreme poverty at a pace that is much higher than anticipated in the 8FYP is truly inspiring. Much of this happened from an increase in the inclusiveness of the growth process. Greater labor force participation of rural female labor is indicative of this. Additionally, the availability of mobile phones and the spread of digital technology and mobile financial services (MFS) is sharply lowering rural labor mobility barriers, which has also contributed to increasing the inclusiveness of the growth process. Spread of micro-credit and greater participation in outward migration has helped in creating non-farm jobs and incomes for the poor. The improvements in non-income measures of living standards reflected in near-universal access to electricity, improved access to tap water, and access to improved sanitary facilities are important dimensions of this poverty progress.

The only area of concern is the lack of progress in reducing inequality. The inequality targets of the 8FYP are substantially off-track. The main reason for this is the inability to implement the Plan's redistributive fiscal policy strategy. It is essential to beef up the domestic resource mobilization efforts and implement at least a part of the redistributive fiscal policy agenda, especially in the area of health, education and social protection.

### Progress with Agriculture and Water Sector

The implementation of the agriculture sector strategies, policies and programs of the 8FYP is proceeding well. This is reflected in the strong growth, production and export performance of the agriculture sector during the mid-term, notwithstanding the adverse effects of Covid-19. The strength of the agriculture sector performance is also reflected in the results of HIES 2022 that shows sharp reduction in extreme poverty and a major contributor to this is the expansion of female employment in agriculture. Additionally, agricultural diversification has contributed handsomely to the continued improvement in the food basket of the households with a larger share of food mix coming from protein provided by fish, milk, eggs and meat as well as higher consumption of fruits, legumes and vegetables.

Implementation of the water sector program relating to irrigation and flood control has proceeded reasonably well, although the progress with the implementation of water investment programs under the Delta Public Investment Program (DPIP) has moved slowly owing to serious resource constraint. Importantly, also, the implementation of regulatory, policy and institutional reforms highlighted in the Delta Plan has proceeded slowly. Covid-19 impact has been a serious constraint here. However now that covid-19 is basically under control, it is important to accelerate efforts to strengthen the implementation of the core Delta Plan reforms. Establishment of the Decentralized Water User Association and Instituting proper cost recovery policies for water are top priorities moving forward. Efforts are also needed to mobilize greater external funding to implement the large scale and transformational water programmes identified in the DPIP. The implementation of these investments is essential to secure sustained progress in reducing water-related vulnerabilities from climate change and natural disasters.

### Developments in Trade and Industrialization

The government's focus on pursuing an export-oriented trade policy has continued well under the 8FYP. Exports boomed during the first three years of the Plan, recovering swiftly from the covid-19 induced slide in export earnings in FY2020 and reaching \$49.2 billion in FY2022, as compared with only \$32.8 billion in FY2020. The estimated export earnings for FY2023 is \$52.6 billion. This rapid expansion of exports is mostly the outcome of growth in the exports of readymade garments (RMG). Non-RMG exports have not taken off. The textile-led manufacturing sector continued to provide the lead in the GDP growth recovery. Some progress also happened in boosting the recovery of the micro and small enterprises (MSEs), but this high-potential job-creating sector still lacks dynamism. Moving forward, greater efforts are needed to boost the expansion of non-RMG exports and the MSEs in order to create more jobs in the manufacturing sector. The non-RMG exports remain constrained by the anti-export bias of trade policy. Reforms of trade policy with a focus on lowering trade protection, improving trade logistics and enhancing market access through free trade agreements are the major policy agenda for the remainder of the 8FYP. Greater efforts are also needed to dynamize the MSEs in manufacturing as well as services sectors to create more jobs by strengthening access to finance, improving access to better technology, developing skills through training, enhancing market information and enabling participation in Global Value Chain (GVCs).

### Developments in Power and Energy Sector

The expansion of power supply program is on track during the mid-term of the 8FYP. The government's power sector has come a long way from the 2009 era of severe power crunch and is now in the comfortable situation

of having excess power supply capacity. Power investment has contributed handsomely to the acceleration of GDP growth and exports over FY2010-FY2022. This has also contributed substantially to lowering poverty and improving the quality of life by securing a universal access to power supply. Moving forward the government now needs to manage the excess supply situation by rephasing new investments in line with the existing demand-supply balance and eliminating rental power plants. It also needs to reduce the average cost of power production by adopting least cost power supply options. The energy mix in power needs to be improved in favor of more use of clean energy and reduction in the reliance on high carbon-emitting fossil fuels.

In the case of primary energy, greater attention is needed to enhance the production and use of renewable energy including stronger efforts to import hydropower from India and Nepal. Additionally, efforts must be strengthened to implement on time the planned expansion in the use of LNG and imported coal. More attention is needed to expand gas exploration and development.

The global energy price hike hit the energy sector finances severely. The energy subsidy bill is not sustainable. Implementation of the Prime Minister's directive to find ways to eliminate energy subsidies and deregulate the oil market are top priories. All energy enterprises must be given the autonomy and flexibility to operate as true corporate entities and earn a profit. This will substantially reduce the budgetary burden of the state-owned enterprises (SOEs).

### Transport Sector Developments

The government's strong priority accorded to transport sector since the 6FYP is paying off well. Most progress has been achieved in improving road ransport. Some major transformational transport projects have been completed during the 8FYP, especially the Padma Multi-purpose Bridge and the inauguration of Line 6 of the Mass Rapid Transit (MRT) running from Uttara to Agaragon. The Line will extend to Kamlapur – while 5 more Lines are under construction. Another historic development is the construction of the 3.23 km long Bangabandhu Tunnel under the Karnaphuli River in Chattogram, which is going on in full swing and is expected to be operational in October 2023. Evidence suggests that there have been substantial improvements in road network quality through better O&M, and the project implementation capacity of the road sector has improved significantly.

Noticeable improvements have also happened in inland water and rail transport, although there is still a substantial unfinished agenda in these important multi-modal transport links. Several large air transport projects are under way. Among them the third terminal of the Hazrat Shah Jalal International airport has been soft-launched in October 2023. The most significant recent development in the maritime port infrastructure of Bangladesh is the fast-track implementation of the deep-sea port at Matarbari, in Cox's Bazar, Not only is this project, once completed, going to have a revolutionary impact on Bangladesh trade it is expected to have major regional impacts by creating scope for turning Bangladesh into a regional industrial hub with supply chain linkages with NE India and other neighboring economies in South and East Asia. One of the mega projects, the Padma Multipurpose Bridge was inaugurated on 25 June 2022 and the train services on the Dhaka-Bhanga route via the Padma Bridge was inaugurated on 10 October 2023 by Hon'ble Prime Minister Sheikh Hasina.

Moving forward, the upgrading of the rail network and inland waterways needs stronger focus. Both are critical links to strengthen inter-modal transport and enhance connectivity between seaports and factory gate. Stronger emphasis is needed to better manage the transport-related environmental degradation and air pollution. Continued emphasis on reducing urban transport congestion through accelerated implementation of mass transit projects and better traffic management are important priorities. Greater attention is needed to improve road safety standards and strengthen enforcement of traffic laws.

### **Urban Sector Developments**

The urban sector programmes under the 8FYP are proceeding well with emphasis on basic urban services such as water supply, sanitation, solid waste management and drainage. HIES 2022 shows that access of the urban population to safe water and improved sanitation has improved. There has also been important progress in improving access to low-cost housing. The inauguration of mass transit in Dhaka city is an important milestone in urban transport and holds promise of easing traffic congestion once the full project is completed. Progress has also been made in the expansion of urban centers outside Dhaka and Chattogram, which augurs well for a more balanced urban development. Yet, the agenda moving forward is daunting as the concentration in Dhaka continues unabated.

Stronger efforts are needed to improve urban governance if Bangladesh is to achieve the urban sector vision of PP2041 whereby Bangladesh urbanization in 2041 will be like that found in Korea today. This calls for rapid progress with decentralized and accountable city governments with considerable resources and administrative authority. Resource mobilization at the local level and greening of urban centers are all core elements of this urban strategy. In housing, a major policy reform would be to develop a vibrant housing mortgage finance industry, establish digitized land records and land transactions, and sharply reduce property registration and transaction fees and charges.

### Progress with Education and Training

Bangladesh has now achieved universal primary education. For the 8FYP, important targets are to achieve 100% literacy rate, universal secondary education, expansion of tertiary education, sharp improvements in education quality at all levels, and greater supply of skilled labor force. As of the mid-term progress has been made in improving adult literacy, net enrolment in secondary education, and expansion in tertiary education. Progress has also been made in increasing training activities and improving the quality of education. The expanded use of ICT in education has been particularly important in improving the quality of education.

But the challenge in education sector moving forward is large. A major constraint is the availability of resources. While the private sector investment in education is notable, the public sector education spending is lagging. Despite the target of the 8FYP to increase education spending to around 3.2% of GDP by FY2025, education spending has fallen below 2% of GDP in FY2023, which is one of the lowest in the developing world. Resource constraint is impinging on both quality enhancement and quantity targets. The equity aspects of education sector also need substantial attention. In training, greater effort is needed to strengthen on- the- job training with support from the private sector.

### Developments in Information Communications Technology (ICT)

The ICT sector has been identified as one of the main economic growth and development drivers of Bangladesh. The nation has developed its ICT sector significantly over the past decade and has emerged as an important global player in outsourcing services. This progress has continued under the 8FYP. With the adoption of 4G technology, the quality of ICT services has improved noticeably. There has been a rapid expansion of ownership of smart phones and the use of internet services has expanded. Mobile financial services and e-commerce are flourishing. The communications and knowledge gaps between urban and rural areas and between the rich and poor are narrowing owing to the contribution of digital services.

Spurred by these achievements the government has launched the Smart Bangladesh Vision 2041. This Smart Bangladesh ICT Vision is anchored on 4 pillars: Smart citizens, Smart government, smart society and smart economy. A draft Master Plan has been prepared to implement this Smart Bangladesh ICT Vision. Moreover,

the first meeting of the Smart Bangladesh Taskforce headed by Hon'ble Prime Minister Sheikh Hasina was held on 23 August 2023, where specific guidelines were provided and 15 sub-committees were formed to expedite the journey towards Smart Bangladesh.

Nevertheless, despite the advancements in this sector, it still faces a number of issues that must be resolved in order to meet the ambitious targets outlined in the 8FYP. The high taxation of ICT reduces the use of ICT services. The digital gap remains a pressing issue. While rural areas frequently lack essential infrastructure like power and internet connectivity, urban areas frequently have access to high-speed internet and other cutting-edge technologies. Digital literacy remains a challenge. There is a persistent problem of gender gap in the access and use of ICT services that needs to be addressed. The availability of trained ICT personnel is also a concern that needs to be addressed. These issues and constraints will need to be speedily addressed through the adoption and implementation of the Smart Bangladesh ICT Master Plan 2041.

### Progress in Health, Population, Water Supply and Sanitation

Improvements in health, population, water supply and sanitation programmes are a critical determinant of better quality of life. The 8FYP put great emphasis on developments in these areas. Available evidence suggests good progress has been made in the health sector. In particular, targets set for 2022 have already been achieved for the following indicators: (i) proportion of births attended by skilled health personnel; (ii) under 5 mortality rate; (iii) neonatal mortality rate; (iv) prevalence of stunting among children under 5 years of age; (v) prevalence of undernourishment; (vi) proportion of women of reproductive age (aged 15−49 years) who have their need for family planning satisfied with modern methods; (vii) contraceptive prevalence Rate; and (viii) proportion of the target population (≤12 months old children) covered by all vaccines included in national programme.

Progress with population management is also on track. The TFR sharply decreased to 2.3, the population growth rate fell to 1.2 percent, and the life expectancy rose to 69 years. Progress with the targets for access to safe water and sanitation is also on track. Specifically, in 2022 around 77 percent of the population are using safely managed drinking water services against the target of 55 percent. Similarly, in 2022 more than 92 percent of the population are using safely managed sanitation services against the target of 70 percent.

Notwithstanding these improvements, there is an important unfinished agenda that needs further attention. The changing demographics and the growing incidence of non-communicable disease has changed the health needs from preventive care to curative care. As a result, health care is becoming increasingly more expensive. In the absence of health insurance and inadequate supply of public hospitals, out of pocket health expenses have soared. Health shocks are a major source of economic vulnerability of the poor and low-income group. In water and sanitation, the supply of in-house tap water and sanitary flush-type toilets is inadequate, with considerable regional disparity and a major rural-urban gap in service availability. At below 1% of GDP, public spending on health is very low compared with other lower middle-income countries and considerably below the average for upper middle-income countries. Similarly, considerable additional resources are needed to narrow the regional and rural-urban gaps. The swift introduction of health insurance is a top priority moving forward.

### Progress with Reducing Gender and Social Inequality

Bangladesh made considerable progress in reducing gender and social inequality during the 6<sup>th</sup> and the 7<sup>th</sup> Five Year Plans. The 8FYP has sought to build on this progress to further narrow the existing gaps. A major area of progress under the 8FYP is the increase in female labor force participation rate from 36% during the 7FYP to 43% in 2022. More girls attend secondary school than boys, and female tertiary enrolment has expanded considerably. The government has also adopted many laws to prevent discriminatory practices against women in employment and violence against women. In the area of social inequality, the legal and regulatory policies against all kinds of social

discrimination by gender, race and religion are all in place. The social protection programmes are increasingly emphasizing benefits for the child, the vulnerable women, the old age people, and the physically challenged people.

However, more needs be done to enhance economic opportunities for women and safeguard women and children. Despite laws and regulations, child marriage, abandonment, dowry, and gender-based violence (GBV) persist in Bangladesh due to antiquated social practices that favour boys over girls. The implementation of anti-discriminatory employment policies and anti-GBV laws needs to be substantially strengthened. The 8FYP targeted to increase spending on social protection program (excluding civil service pension) to 2% of GDP by FY2025, actual spending was 2.15% of GDP in FY2023.

### Progress with Climate Change, Environmental Protection and Disaster Management

The 8FYP recognizes the urgent need to address environmental issues and climate change and includes a range of strategies and measures to achieve sustainable development while reducing the country's carbon footprint. Considerable progress has been made in improving climate change and environmental management on several fronts including strategies, financing, policies and institutions during the midterm. Progress in disaster management is exemplary with a range of facilities including an effective early warning system, availability of disaster shelters, and quick deployment of support services to disaster victims. The level of preparedness has helped to minimize the loss of lives and provides critical support to the disaster victims for quick recovery and rehabilitation.

Despite progress, there are several key gaps that remain in the implementation of 8FYP's environmental and climate change efforts. These include severe incidence of air and water pollution, inadequate implementation of environmental fiscal reforms, weak institutional capacities to monitor and implement compliance with environmental regulations, inadequate coordination of inter-sectoral policies and programmes, inadequate resources to finance required climate change and environmental protection programmes, weak incentives for private sector role in financing key investment programmes in clean energy, adoption of clean technology, absence use of polluter pays principle, and absence of LGI participation in climate change and environmental management policies and programmes. Better integration of climate change and environmental management objectives, targets and strategies in national development plans will be instrumental in addressing many of the above policy gaps,

### Progress with Improvements in Governance and Institutions

There have been significant achievements in the area governance and institutions under the previous plans and the ongoing 8FYP. During the 8FYP progress is most noticeable in increasing the accountability of the public administration through the use of the Annual Performance Agreement (APA) system. The strengthening of implementation of e-government has improved the transparency of the public procurement system and reduced procurement cost. It has also improved the quality and timeliness of public services that are required to use online services including e-payments, e-licensing, and e-permits. However, the government is aware that governance and institutional improvement agenda is a long-term agenda and requires sustained efforts over a long period of time. Moving forward, the highest priority is to improve several areas of economic governance including banking, taxation, public expenditure management and fiscal decentralization to strengthen the accountability and service delivery of the LGIs. In the area of law and order, greater efforts are needed to protect the basic rights of citizens by strengthening the accountability of the law-and-order institutions.

### CHAPTER1 DEVELOPMENT CONTEXT

### 1.1 Overview

The Eighth Five Year Plan (8FYP) of the Government of Bangladesh was approved in December 2020 by the National Economic Council (NEC) for implementation effective July 01 through June 30, 2025. This is the third medium-term development plan adopted by the current Awami League government under the dynamic leadership of the Honorable Prime Minister Sheikh Hasina. The 8FYP has several notable dimensions that shapes its content and implementation experience.

First, this is the first of the four medium term plans that are intended to help implement the visions, goals, targets and strategies of the Perspective Plan 2041 (PP2041).

Second, as preparations for the formulation of the 8FYP were underway, the world was hit by an unprecedented pandemic known as Covid-19 starting in March 2020. This global pandemic caused huge loss of lives and heavy disruption of economic activities across world owing to health-related lockdowns and work stoppages. The disruption of production, consumption, investment and trade led to substantial loss of incomes and employment across the globe. The disruption of economic activities was most severe over the periods March 2020 to December 2020, but the adverse effects have continued after that.

Third, the supply constraints from covid-related work stoppages and the demand-pull effects of large stimulus packages, especially in the USA, pushed up global commodity and manufacturing prices leading to a surge in global inflation.

Fourth, even as the world was recovering from covid-19 onslaught, Russia declared War on Ukraine on February 24, 2022. This led to a further disruption of world trade and production especially as the OECD countries imposed heavy economic sanctions on Russia. The associated increase in commodity prices, especially for energy products, wheat and fertilizer, further accentuated the global inflationary effects of Covid-19.

The combined effects of these unanticipated global shocks has been adverse and destabilizing for all countries globally, but especially for energy importing countries like Bangladesh. While these shocks are unfortunate, the essence of planning is to adopt policy measures to adjust to these shocks as best as possible and move forward. So, a major challenge for the 8FYP is to internalize these shocks and develop an alternative pathway to restore the development momentum envisaged in PP2041 and reflected in the development strategies and targets of the 8FYP.

### 1.2 Development Performance under the 7FYP

The core indicators of development performance under the 7FYP are provided in Table 1.1. The Table tells a remarkable story of a strong record of development performance over the 5 years of FY2015-FY2020. While the advent of covid-19 in March 2020 did disrupt economic growth and progress on poverty reduction, overall medium-term development performance was solid. GDP growth fell sharply in FY2020 to 3.5% as compared with 8.1% in FY2019 owing to covid-19 lockdown during March-June 2020. Yet, the average 5-year growth rate was robust and exceeded the average growth rate achieved under the 6FYP. Importantly, average per capita GNI increased by a solid 77% in US Dollar terms between the end of the 6th and 7th Plans. This near-doubling of per capita gross national income in 5 years and despite the immediate adverse effect of Covid-19 is indicative of a strong and resilient economy. Additionally, all human development indicators relating to health and education show commendable progress during the 7FYP.

Table 1.1: Core Indicators of Development Performance under the 7FYP

Development Indicators	Base Year (FY2015)	End of 7FYP (FY2020)
Per capita GNI (US\$)	1316	2326
Average GDP growth rate (%)*	6.3	6.8
Poverty (% headcount)	24.8	20.5**
Extreme poverty (% headcount)	12.9	10.5**
Life expectancy (years)	70.9	72.8
Infant mortality (years)	29.0	21.0
Adult literacy (%)	64.6	75.6
Secondary school net enrolment (%)	55.3	75.9

Source: Bangladesh Bureau of Statistics (BBS) \*period average for 6th and 7th Plans \*\*Refers to estimated poverty for 2019.

### 1.3 Adoption of the Perspective Plan of Bangladesh: 2021-2041

The Government adopted the second long-term perspective plan as a successor to the first perspective plan that was to end in June 2021 (PP2021). This second perspective plan, known as Perspective Plan 2041 (PP2041), was adopted in March 2020. The PP2041 set two high level targets for Bangladesh:

- 1) Secure upper middle-income country (UMIC) status for Bangladesh as defined by the World Bank country classification by FY2031 and High-Income Country (HIC) status by FY2041.
- 2) Eliminate extreme poverty by FY2031 and reduce moderate poverty to a nominal level of 3% or less by FY2041.

The UMIC and HIC classification of the World Bank is based on per capita GNI using what is known as the Atlas Method. The macroeconomic framework of the PP2041 projected that Bangladesh needs to reach a per capita GNI of at least US\$ 6000 by FY2031 and US\$12,500 by FY2041 to secure these income-based development targets. These converted to average GDP growth targets of 8.5% per year between FY2021-FY2031 and 9% per year between FY2031-2041. These growth targets were also deemed consistent with the poverty targets along with other policy measures related to human development and social protection.

### 1.4 Formulation of the 8FYP in Relation to the PP2041

The PP2041 aimed at further developing and implementing the PP2041 through a series of four medium-term (5 year each) development plans. The approach was that each of the next five-year development plans will develop the more detailed macroeconomic and sectoral programs, strategies and policies and institutional framework to enable the implementation of PP2041. Each successive plan would cumulatively build on past progress and move forward on the path of the PP2041. The 8FYP (FY2021-FY2025) was the first in this series.

At the final stage of the preparation of the 8FYP, the Covid-19 pandemic spread rapidly globally but in the early months nobody had much clue about its origins, magnitude, severity and longevity. There was no known cure or vaccine. Policymakers globally were caught unaware. There was little knowledge or understanding how long the pandemic will prevail and its likely human and economic costs. The Plan also needed to be fine-tuned to provide a best assessment of the likely impact of Covid-19 and the government's policy response.

Except for this Covid-19 related readjustment the macroeconomic framework, sectoral programs, policies and institutional framework embedded in the 8FYP are fully consistent with the targets and strategies of the PP2041. The GDP growth and poverty reduction targets for the first two years of the 8FYP were adjusted downwards relative to the targets set in PP2041 to build in the likely adverse effects of Covid-19. But the approach adopted in the 8FYP was that the Plan would make an all-out effort to restore the growth momentum to the growth path of the 8FYP by FY2023. Similarly, the strategy was to restore the poverty reduction path of the 8FYP to the poverty reduction path of the PP2041 by FY2023. The other related macroeconomic targets (investment, exports, balance of payments, fiscal outcomes) were similarly readjusted.

Since the SDGs were ongoing at the time of adoption of the PP2041 and the 8FYP, the SDG targets were correlated with both the PP2041 and the 8FYP. Indeed, there is full consistency between SDGs, the PP2041 and the 8FYP as indicated by the Development Results Framework (DRF) of the 8FYP. The DRF is discussed further in Chapter 2.

### 1.5 Government's Covid-19 Policy Response

Like in other countries, Covid-19 hit Bangladesh hard both on the human health and on the economic front. Fortunately, the level of known infections and deaths are modest in relation to many parts of the world including the neighboring India. The economy was hit most during the first 4 months of the pandemic (April-June 2020). As a result, in FY2020 GDP growth slowed considerably, export earnings were down sharply, private and public investment rates declined, and government revenues were badly hurt. The Government moved swiftly to contain the damage by taking actions on both human health and the economy.

On the health front, policy responses sought to contain the spread of the virus through full and partial lockdowns, providing safety gears and other support to protect the healthcare workers and other essential staff, strengthening healthcare facilities with supplies and equipment, undertaking testing, and educating the masses on the adoption of health safety measures including physical distancing, use of face masks, hand washing and personal hygiene and other support measures. On the economic front, the government adopted in April 2020 a series economic stimulus packages estimated at Taka 2377 billion (6.7% of GDP) with a view to protecting the income of the poor and vulnerable and helping the revival of economic activities (Table 1.2).

Bangladesh also decided to open up the economy to avoid a sustained long-term damage to livelihoods. The government believed that there was no necessary tradeoff between human health and health of the economy; rather they were correlated and complementary. The main task was to develop a balanced mix of policies and programmes that address both goals. The government believed that the restoration of human health was of the highest priority to enable workers to resume work without fear or unwarranted risk of falling sick. The government also developed partnerships with local epidemiologists and other health experts to find ways to keep workers and families safe while economic activities revive. Most importantly, these early measures were complemented with a well-thought-out strategy to procure and dispense vaccine when they were available.

These timely actions yielded very good results for Bangladesh. The level of known infections and deaths are modest in relation to many parts of the world including the neighboring India. Furthermore, the combined effects of the stimulus packages and the opening up of the economy early on paid rich dividends. Even as early as in the first quarter of the start of the 8FYP (July-September 2020), there were encouraging signs of revival of economic activities including GDP growth and exports. In FY2021 GDP growth recovered to 7.2% while exports rebounded from \$33 billion to \$41 billion. Bangladesh Covid-19 response has been a major success and due credit goes to the leadership of the Honorable Prime Minster who personally directed and spear-headed the Covid-19 response strategy.

Table 1.2: Covid-19 Stimulus Packages (taka billion)

Serial No	Name of the Package	Amount
1.	Special fund for export-oriented industries	50.0
2.	Working capital loans to affected industries and service sector	1030.0
3.	Working capital loans provided to SMEs, cottage industries	60.0
4.	Expansion of Export Development Fund (EDF)	170.0
5.	Pre-shipment Credit Refinance Scheme	50.0
6.	Special honorarium for doctors, nurses, medical workers	1.4
7	Health insurance and life insurance	7.5
8.	Free food distribution	25.0
9.	OMS at 10 taka/kg	7.7
10	Cash transfer to targeted poor people	13.3
11.	Expansion of Old Age Allowance and Vulnerable Women Programs	8.2
12.	Construction of home for homeless people	21.3
13.	Support for farm mechanization	32.2
14.	Subsidy for agriculture	95.0
15.	Agriculture Refinance Scheme	80.0
16.	Refinance scheme for professionals, farmers, and small traders	30.0
17.	Employment generation schemes	32.0
18.	Subsidy for commercial bank's suspended interest of April-May 2020	20.0
19.	Credit risk sharing scheme for SME sector	20.0
20.	Safety net program for export-oriented industry's distressed workers	15.0
21.	Revitalizing the rural economy	15.0
22.	Expansion of coverage of old age allowance and vulnerable women's program to 150 poverty-stricken upazilas	12.0
23.	2nd tranche of cash transfers	9.3
24.	Cash transfer to targeted poor	4.5
25.	Special OMS in the city area	1.5
26.	Food support to vulnerable people	1.0
27.	Employment creation thru 3 state-owned financial institutions	15.0
28.	Subsidized working capital credit facilities to hotels/motels/theme parks	10.0
	Total (taka)	2376.8
	In Billion US Dollars	28.0
	As % of GDP	6.7

Source: 2023-24 National Budget Speech, Ministry of Finance.

# CHAPTER 2 METHODOLOGY OF THE MID- TERM REVIEW OF THE 8FYP

### 2.1 Overview

A medium-term development plan by definition is a politically determined document that seeks to highlight the government's medium-term development hopes and aspirations. It provides a road map, a strategy, a resource base and a policy framework to underpin these medium-term development goals and targets. Strategies, resources and policies are the best intentions at the planning stage. How effectively these intentions are realized at the implementation stage depends on a whole host of factors including the realism of assumptions at the planning stage, realism of implementation capacity constraints and unanticipated internal and external shocks. Given these uncertainties and the possible gaps between plans and actual outcomes, it is very important to monitor the implementation of the plan based on monitorable indicators. The need to identify monitorable indicators a priori is important to maintain the sanctity and objectivity of the planning process.

The monitoring and evaluation (M&E) of projects and programs is a well-established practice in Bangladesh. The M&E of sectoral and national plans is less well known. An innovative feature of planning experience in Bangladesh is the introduction of a results-based framework to assess the implementation performance of medium-term development plans. The results framework is aimed to be quantitative in nature and capture the essence of the plan objectives and targets. The emphasis on the quantitative nature of the results framework is intended to provide an objective basis for evaluating the performance of the plan.

The results framework was first introduced in 2011 in the context of the formulation of the 6FYP. The initial effort was modest, being constrained by both advance thinking and planning and the inadequacy of the database. As experience was gained, the results framework evolved into the existing Development Results Framework (DRF) that has become much more elaborate and with wider coverage of the themes, objectives and targets of the relevant plan. Importantly, the DRF has been internalized and integrated with the planning process whereby the DRF is developed by the General Economics Division (GED) of Bangladesh Planning Commission

The formulation of the 8FYP happened at a time when the Perspective Plan 2021 (PP2021) was coming to an end, the Sustainable Development Goals (SDGs) implementation was approaching its midyear and a new Perspective Plan 2041 (PP2041) based on Vision 2041 was just adopted. PP2041 built in elements of SDGs as relevant and expanded the outlook to ten more years. The implementation of PP2041 was envisaged in four 5-year phases. The first phase was to start with the 8FYP. So, the main task of the 8FYP is to start the implementation of PP2041 in a way that it brings Bangladesh closer to the goals of attaining Upper Middle-Income Country (UMIC) status, attaining major SDG targets, and eliminating extreme poverty by FY2031.

### Against the backdrop of these factors, the 8FYP centres on six core high-level national objectives:

- Rapid recovery for COVID-19 to restore human health, confidence, employment, income, and economic activities.
- GDP growth acceleration, employment generation, productivity acceleration and rapid poverty reduction.
   A broad-based strategy of inclusiveness with a view to empowering every citizen to participate fully and benefit from the development process and helping the poor and vulnerable with social protection-based income transfers.
- A sustainable development pathway that is resilient to disaster and climate change; entails sustainable use of natural resources; and successfully manages the inevitable urbanization transition.
- Development and improvement of critical institutions necessary to lead the economy to UMIC status.
- Attaining SDG targets and coping up the impact of LDC graduation.

The inclusive growth strategy of 8FYP includes seven pivotal themes:

- Promote labour-intensive, export-oriented manufacturing-led growth along with expansion of the domestic market.
- Promote agricultural diversification.
- Infuse dynamism in cottage, micro, and small enterprises (CMSEs)
- Strengthen modern services sector.
- Push exports of non-factor services
- Promote ICT-based entrepreneurship embracing 4th Industrial Revolution (4IR)
- Strengthen overseas employment.

The DRF picked up these core themes and objectives of the 8FYP and developed them further into a comprehensive quantitative performance assessment tool involving 15 national priority areas and 104 indicators. These priority areas and associated indicators are integrated from a combination of SDGs, implementation of the 7th FYP, implementation of the Perspective Plan 2021 and the formulation of the PP241. The DRF is summarized in Table 2.1. The full DRF for the 8FYP is provided in Annex 1. Specific results are discussed in some detail as relevant in the context of evaluating progress in specific areas in Chapters 3-12.

Table 2.1: Summary of 8FYP Development Results Framework (DRF)

National Priority Areas of the 8FYP	No of Indicators
Inclusive Economic Growth through Macroeconomic Stability (SDG-8)	13
-Real sector	(4)
-Fiscal sector	(3)
-External sector	(3)
-Monetary/Financial sector	(3)
Reducing Poverty and Inequality (SDG-1 and 10)	4
Health and Well Being ((SDG-3)	15
Clean Water and Sanitation (SDG-6)	3
Quality Education (SDG-9)	7
Employment (SDG-8)	5
Agriculture and Food Security (SDG-2)	3
Transport and Communications (SDG-9)	8
Power, Energy and Mineral Resources (SDG-7)	5
Gender and Inequality (SDG-10)	10
Environment, Climate Change and Disaster Management (SDG-13,14,15)	11
Information and Communications Technology	4
Urban Development (SDG-11)	4
Governance (SDG-16)	10
International Cooperation and Partnership (SDG-17)	2
Total indicators	104

Source: 8 FYP

### 2.2 Approach to the Use of the DRF in Mid-term Review of the 8FYP

The DRF and the associated indicators are intended to provide a broad-based framework and to serves as a guideline to prepare an objective assessment of the performance on the plan. An evaluation of progress with all 104 indicators is neither necessary nor desirable for a mid-year review for a variety of reasons including:

- (i) These indicators are intended as guidelines to provide an objective assessment and not all indicators carry a similar weight to form a reasonable objective judgement on performance;
- (ii) Many indicators are survey based and there are long delays in conducting many of the key surveys relating to poverty, employment and human development. Judgements on performance in these areas may need to be assessed based on a more limited set of indicators that are readily available; and
- (iii) Some indicators may require a longer gestation lag than a year and so the latest position may not be available on a yearly basis; performance evaluation here would be based on qualitative arguments.

In summary, the DRF has been used flexibly as a guideline and quantitative tool for mid-year performance evaluation and not as an iron-cast framework that makes or breaks progress assessment. Where relevant, expectations about achievements have been stated in qualitative terms, especially in situations where data is not available.

### 2.3 Data Availability and Data Mobilization

A strong effort was made to tap available data sources and analysis to make this Review as informative and evidence based as possible. The efforts that were made are summarized below.

Official data and analytical resources: Proper use of the DRF for performance assessment requires extensive use of appropriate data gathered from credible sources. All effort has been made to gather data from relevant official sources. Most data used in this Review were gathered from the Bangladesh Bureau of Statistics (BBS) as published in their latest available various yearly/ monthly publications including the Statistical Yearbook of Bangladesh 2021, the Monthly Statistical Bulletin of Bangladesh December 2022, Monthly Release on Prices and Wages Statistics February 2023, and the Bangladesh National Accounts Statistics: Sources and Methods July 2022. BBS also publishes various social sector survey- based data and analytical reports. The latest available survey reports that are relevant to this Review include the Preliminary Report of Household Income and Expenditure Survey (HIES) 2022, the Population and Housing Census (PHC) 2022, Survey on ICT Use and Access by Individuals and Households 2022, Bangladesh Time Use Survey (TUS) 2021, Bangladesh Disaster-related Statistics 2021, Report on Sample Vital Registration System (SVRS) 2022, Policy Brief on Raising National Nutrition Well Being December 2020, Policy Brief on Gender Based Education June 2020.

In addition to BBS, the Bangladesh Bank and the Ministry of Finance provide macroeconomic data relating to the fiscal situation, the balance of payments, monetary, exchange rate and interest rate situation and the national debt. This data are available on the respective websites and are updated fairly regularly. The Bangladesh Economic Review prepared annually by the Ministry of Finance also provides detailed data on a range of social and economic variables that is a useful resource for preparing this review. The Bangladesh Bank also puts on its website several important publications on a weekly/monthly/quarterly/yearly cycle on a variety of macroeconomic and sectoral data that has been an important source of data for this Review. These include Weekly Selected Economic Indicators, Monthly Economic Trends, Monthly Major Economic Indicators, Bangladesh Bank Quarterly, and the Bangladesh Bank Annual Report. The latest available reports were used to prepare this Review.

The General Economics Division (GED) also prepares several very useful analyses of social and economic progress. Of particular relevance to this Review is the latest report on the implementation progress with Sustainable

Development Goals (SDGs). This Report "Sustainable Development Goals Bangladesh Progress Report 2022" has a wealth of analysis and information on the latest situation with progress on SDGs, which are also very relevant for the targets of the 8FYP. The Review also benefitted from the database put together by GED in preparing its various reports on the national economy.

Rebasing of National Accounts: In 2021, the BBS rebased the national accounts from 2005-06 base year to 2015-16 base year after the 8FYP was adopted. The rebasing caused nominal GDP in Taka terms to increase by 19% and nominal GDP in USD terms by 17%. All targets using nominal GDP have been adjusted to incorporate this change. Without this adjustment, performance assessment using previous base (2005-06) will be biased and not reflect reality.

Information from sectoral ministries: While the published data by BBS, the Bangladesh Bank and the Ministry of Finance provided the bulk of data support for this Review, in many cases, especially for the sectoral ministries, updated data in a published form is not available. To meet this gap and also to elicit additional information about how sectoral ministries have understood and implemented the sectoral targets and objectives in the 8FYP, a special survey type information template was provided to sectoral ministries. The information obtained from response to this template has been a major input to preparing this Review.

Estimation of missing data: In several cases data for certain indicators were not available. This situation required undertaking data-filling or projections exercises. Since a variety of approaches are possible to make these projections, the approach used is explained in the specific cases where such estimation was required.

Use of cross-country analysis: The mid-term evaluation exercise includes an additional step of providing the relevant global and regional contexts to help policymakers and relevant stakeholders better appreciate the outcomes and/or results achieved. This is particularly so, since in a number of cases a country's performance can critically be linked to exogenous shocks arising from the global economy. Under these circumstances, assessing country performances in isolation can hardly be meaningful. While it is true that the country's performance against the plan-period specific targets is the most important yardstick in results-based evaluation, nevertheless comparisons with world/regional economies offer analytical perspectives in learning lessons and constructing informed way forward.

### 2.4 Stakeholder Consultations/Focus Group Discussions

The Review benefitted from stakeholder consultations and focus group discussions (FGDs) with the sector/ subject experts on the progress with various targets/indicators of the 8FYP. The relevant stakeholders concern senior officials in line ministries, representatives of private sector, and representatives of private research institutions with insights about specific developments related to performance outcomes in different sectors. The consultation also involved learning from the analytical work of several national research institutions including BIDS, SANEM, and BIGD. These institutions have often conducted special surveys on a range of subjects including employment, incomes, poverty, and Covid impact that have tended to provide updated information on employment and poverty that was not available from official sources. These consultations have been helpful in validating the evaluation exercise based on officially available data. They have also provided helpful insights on the policy gaps that require attention moving forward.

## CHAPTER 3 ECONOMIC GROWTH AND MACROECONOMIC STABILITY

### 3.1 Overview

Since the early 1990s Bangladesh has a solid track record of accelerating GDP growth while maintaining macroeconomic stability. This record was further strengthened over the implementation of the 6FYP and the 7FYP. GDP growth acceleration was halted in FY2020 by COVID-19. But the growth momentum was quickly restored during FY2021 and FY2022 by the government through a series of reforms and stimulus packages. This was a huge success, but unfortunately the progress has been affected by the onset of the global inflationary pressure that has been further accentuated by the Ukraine War.

Against this backdrop, this Chapter will provide an in-depth analysis of the sources and magnitude of adverse external pressures on the Bangladesh macroeconomy. It will seek to assess the implications of these factors on the macroeconomic targets of the 8FYP, analyze the nature and adequacy of policy responses, and identify the policy gaps that may need to be addressed to secure the core macroeconomic targets of the 8FYP.

### 3.2 Progress under the 7FYP

Overall macroeconomic performance under the 7FYP was remarkably solid. The progress was adversely affected by Covid-19 in the last year of the 7FYP, but on balance the macroeconomic performance was on track relative to the targets of the 7FYP.

### 3.2.1 Pre-Covid-19 Macroeconomic Performance

Growth outcomes: A major target of the current Awami League led government since assuming power in 2009 has been to accelerate the rate of GDP growth as a core instrument of development progress. The government recognized that the acceleration of GDP growth will provide the employment and income base to reduce poverty. Considerable progress was made in accelerating GDP growth under the 6FYP, and this progress was maintained for most of the 7FYP until Covid-19 struck in FY2020, which was the last year of the 7FYP (Figure 3.1).

Both GDP and per capita GDP maintained the upward trend during the first four years of the 7FYP. Average GDP and per capita GDP growth rates in the first four years of the 7FYP were 7.3% and 6.1% respectively as compared with 7.2% and 5.9% secured during the 6FYP. This remarkable journey of sustained rapid growth of the 9 years under the 6FYP and the 7FYP substantially changed the economic landscape of Bangladesh. Bangladesh transformed from a low-income economy under World Bank economic classification to join the group of lower middle-income countries (LMIC). Importantly, the growth rate climbed to 7.9% in FY2019 leading to optimism that Bangladesh was poised to break the 8% growth barrier in FY2020 and beyond. Indeed, this encouraging track record of rapid growth laid the basis for the adoption of Vision 2041 and the Perspective Plan 2041 that aspired Bangladesh to achieve the Upper Middle-Income Country (UMIC) status by FY2031.



Figure 3.1: GDP and Per Capita GDP Growth FY2011-FY2019

Source: BBS

Rapid per capita GDP growth along with favorable inflows of worker remittances from abroad contributed to the acceleration of per capita gross national income (GNI). Per capita GNI surged by 41% during the first four years of the 7FYP, climbing from USD 1566 in FY2015 to USD2209 (Figure 3.2)<sup>1</sup>.

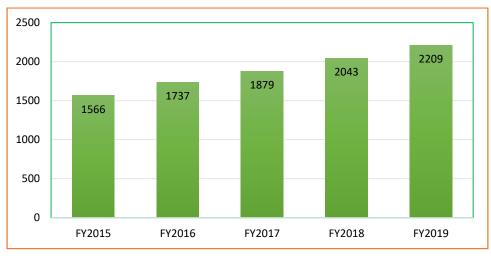


Figure 3.2: Progress with Per Capita Income (USD) FY2015-FY2019

Source: BBS

Structural change: Along with rapid GDP growth, the production structure of the economy showed increasing maturity, moving away from a rural agro-based and informal activity-dominated production structure towards a more urban industry-based economy (Figure 3.3). Industrial activities, comprising of manufacturing and other industries (mining, utilities and construction), expanded faster than agriculture and services. As a result, its share grew from 30% in FY2015 to 35%. The share of formal economic activities also increased as the role of industrial activities grew, commercial agriculture (especially in fisheries) expanded, and several new technology-based service enterprises took roots. The dominant role of faster growing industrial activities laid a solid foundation for further rapid growth during the 8FYP and beyond.

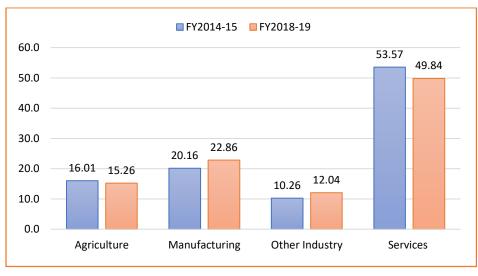


Figure 3.3: Change in the Production Structure FY2015-FY2019

Source: BBS

<sup>1</sup> Since national accounts were rebased to FY2015-16, the per capita GNI for FY2015 was also rebased to ensure comparability.

Macroeconomic stability: The growth acceleration was facilitated by an enabling macroeconomic environment. Inflation was contained at 5-6 percent; the balance of payments was comfortable with current account surpluses/ and or low deficits and accumulation of reserves; fiscal deficit was contained at below 5% of GDP; total medium and long-term (MLT) debt as a share of GDP and MLT external debt in relation to total export earnings were maintained within prudent limits (Table 3.1). This macroeconomic stability served Bangladesh well and was a key contributor to the growth acceleration illustrated in Figure 3.1.

Table 3.1: Indicators of Macroeconomic Stability FY2015-FY2019

Macroeconomic Indicators	FY2015	FY2016	FY2017	FY2018	FY2019
Inflation rate (%)	6.4	5.9	5.4	5.8	5.5
Current account balance (% of GDP)	1.5	1.9	(-)0.6	(-)3.4	1.7
Reserves (USD billion)	25.2	30.1	33.4	32.9	32.7
Fiscal balance (% of GDP)	(-)2.4	(-)3.2	(-)3.3	(-)2.6	(-)3.3
Tax/GDP ratio (%)	8.5	7.3	7.6	7.4	7.7
MLT External debt/total exports (%)	75.0	78.0	88.6	97.3	94.6

Source: Bangladesh Bank, Ministry of Financ and, BBS

A few areas of concern that emerged prior to Covid-19 and were well identified in the 8FYP that required greater policy attention involved (i) the inability to achieve the tax to GDP ratio targets of the 7FYP fiscal policy framework; (ii) inadequate progress with export diversification as the reliance on RMG grew further and non-RMG exports did not demonstrate any dynamism; and (iii) the banking sector financial health weakened with a growth in the share of non-performing loans. These are important macroeconomic challenges that were set to be better addressed in the 8FYP.

### 3.2.2 Macroeconomic Consequences of Covid-19

The unanticipated furious pace of Covid-19 starting in March 2020 shook the global economy. In addition to the loss of human lives, the global economy was shattered as many large global economies experience substantial negative growth rates. World trade slumped and unemployment surged. Bangladesh was also severely adversely affected during the March 2020-July 2020 periods. The swift policy response to Covid-19 noted in Chapter 1 was instrumental in stemming the decline in economic activities in Bangladesh. Nevertheless, there was substantial economic damage during the last year of the 7FYP. The estimated economic impact of Covid-19 in FY2020 is illustrated in Table 3.2.

Table 3.2: Macroeconomic Consequences of Covid-19

Indicators	FY2019	FY2020
GDP growth rate (%)	7.88	3.45
Exports (USD billion)	39.9	32.8
Tax Revenues (taka billion)	2260	2208
Private investment (% of GDP)	25.3	24.0

Source: BBS, Bank, Ministry of Finance

The biggest adverse effect was on GDP growth that plunged from its peak of 7.9% in FY2019 to a historic low of 3.5% in FY2020. The average GDP growth rate was 6.78% over the entire 7FYP period. Export earnings declined by over 7 billion US dollars, tax revenue fell, and private investment rate was reduced. The loss of economic activities had a huge adverse effect on short-term employment and poverty.

Nevertheless, relative to the severity of the adverse consequences in many countries that experienced negative GDP growth rates, Bangladesh performance during the Covid period stood out as a good example of pro-active management. The adoption of stimulus packages noted in Chapter 1 and the decision to open up the economy early on starting in July 2020 along with adoption of health safety measures enabled Bangladesh economy to recover swiftly from Covid-19. So, at the start of the first year of the 8FYP, the economy was in relatively better shape compared to many countries and contrary to the worst fears of a prolonged period of economic slump.

### 3.3 Macroeconomic Performance under the 8FYP

After the adoption of the 8FYP two major developments happened that requires an updating of the underlying macroeconomic framework. First, the Bangladesh Bureau of Statistics (BBS) rebased the national accounts from a base year of 2005-06 to 2015-16. This rebasing affected the nominal values of GDP and other components of the national account. Thus, the rebased nominal GDP for 2015-16 was some 20% higher than the value under the 2005-06 base. Second, Russia-Ukraine war caused a huge surge in global commodity prices and global inflation that rendered obsolete all assumptions about price and exchange rates and in turn affected GDP growth, the balance of payments, fiscal and debt outcomes. Therefore, the use of the original macroeconomic framework for performance assessment will not be meaningful (e.g., the targets that are expressed as ratio of GDP). Hence a revised macroeconomic framework was developed for the mid-term review. The results of this revised macroeconomic framework are contained in Annex Tables A3.1-A3.6 in the Annex attached to this Chapter 3.

The 8FYP put considerable emphasis on GDP growth and macroeconomic stability and adopted an elaborate list of monitorable indicators as a part of the DRF to measure progress. These 13 monitorable indicators were organized under four thematic areas: Real sector (4 indicators); fiscal sector (3 indicators); external sector (3 indicators); and monetary/financial and inflation (3 indicators). Where relevant, targets were decomposed into its various components (e.g., investment rate target broken down between public and private sectors). The assessment of performance in these 5 areas against the targets is provided below. This assessment considers the likely Covid-19 effects and the implementation of related strategies and policies.

### 3.3.1 Progress in the Real Sector

GDP, Per Capita GDP and Per Capita GNI: A core long-term development objective of the government articulated in the Vision 2041 and elaborated in the PP2041 is to adopt a growth strategy that enables Bangladesh to secure UMIC status by FY2031. Working backwards, this translated to a target of achieving an average growth rate of 8.5% during FY2021-FY2031. The PP2041 growth target for specific years and the related strategy was built around achieving this decadal average GDP growth target. For the 8FYP, which is the first of the series of four 5-year medium-term development plans for implementing PP2041, the GDP growth targets set in the 8FYP is indicated in Table 3.3.

Actual GDP performance, and the associated indicators of per capita GDP growth and per capita GNI in US dollar terms for the for the first two years of the 8FYP (FY2021 and FY2022) were broadly on track with a small

shortfall of about 7%. This is a remarkably good performance given the severity of Covid-19's impact globally and speaks well about good economic performance in the first two years of the post Covid recovery phase. GDP growth, however, decelerated in FY2023 owing to adverse effects of import controls and foreign exchange shortage on the supply of energy and industrial raw materials. The private investment rate also fell that adversely affected GDP growth. Even so, at 6.0 percent, this remains a solid growth performance.

Table 3.3: Progress with 8FYP Targets for the Real Sector, FY2021-FY2023

Real Sector	FY2020 Actual	FY2021 Target	FY2021 Actual	FY2022 Target	FY2022 Actual	FY2023 Target	FY2023 Actual
GDP growth rate (%)	3.5	7.4	6.9	7.7	7.1	8.0	6.0
Per capita GDP growth rate (%)	2.3	6.1	5.7	6.5 5.9		6.8	4.8
Gross National Savings (% of GDP)	31.4	31.4	30.8	31.2	29.4	32.3	30.2
Gross Investment (% of GDP)	31.3	32.3	31.0	32.7	32.1	34.0	31.2
Private Investment (% of GDP)	24.0	24.4	23.7	24.5	24.5	25.3	23.6
Public Investment (% of GDP)	7.3	8.2	7.3	8.2	7.5	8.7	7.6
FDI (% of GDP)	0.6	0.8	0.6	1.4	0.7	1.9	0.9
GNI Per Capita (USD) <sup>2</sup>	2326	2600	2591	2809	2793	3061	2575

Source: BBS (Actual); 8FYP; BB (FDI)

In addition to the adoption of a broad-based economic recovery package, the government pushed ahead with its RMG and remittance expansion strategies. These have been the traditional growth drivers. Progress with mobilizing national savings and investment was roughly on track for FY2021-FY2022, given the Covid impact. But, like GDP growth, the recovery was halted by the prevailing macroeconomic uncertainties related to the Ukraine War. Both private and public investment rates are substantially below the targets. Swift recovery of the investment effort will be necessary to help the recovery of GDP growth towards the 8FYP targets.

The 8FYP put considerable emphasis on the mobilization of foreign direct investment (FDI). But progress has been constrained and actual FDI inflows have been much below the 8FYP targets. Indeed, actual FDI inflows in FY2022 are still lower than in FY2019 (Figure 3.4). Consequently, the gap between the target and actual for FY2022 has widened considerably. Although some of the shortfalls can be explained by Covid impact, the performance has also been adversely affected by slower progress with improving the investment climate.

<sup>2</sup> The DRF targets for per capita GNI were revised using the 2016-17 base year national Accounts.

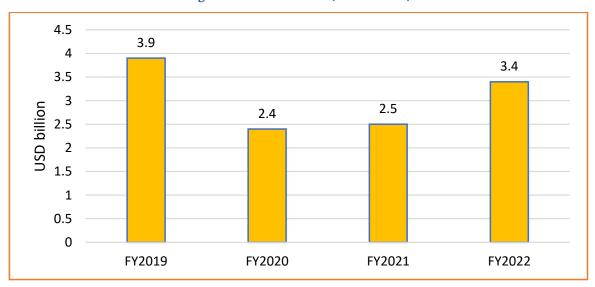


Figure 3.4: FDI Inflows (USD billion)

Source: Bangladesh Bank

The 8FYP sought to secure rapid progress with improving the business climate. This has remained an important challenge. Investors identified trade logistics, tax system, land acquisition, access to electricity, business registration and contract enforcement as major areas of concern that contribute to high cost of doing business and weakens the investment climate. The progress has been made in improving access to electricity and land. There is much work to be done to further strengthen the investment climate and compete with other countries like Vietnam, Thailand, Malaysia, Indonesia and India to attract the planned volume of FDI.

The continued good GDP growth performance in FY2021-FY2022 helped increase per capita Gross National Income (GNI) in US Dollar (USD) terms. The per capita USD GNI expansion tracks well the 8FYP targets for both these years. While GDP continued to grow at 6.0% in FY2023, the large depreciation of the Bangladesh Taka by an average of 22% between FY2022 and FY2023 caused reduction in the per capita GNI in FY2023 measured in USD terms. The per capita GNI is estimated to have fallen from USD 2793 to USD 2765 in FY2023. With the stabilization of the macroeconomy in FY2024, the exchange rate is also expected to stabilize. Consequently, the resumption of increase in GNI in USD terms can be expected from FY2024 onwards.

Production Structure: The growth strategy for the 8FYP placed emphasis on boosting export -oriented manufacturing. It sought to further modernize the economy with emphasis on manufacturing, other industry and modern services. The change in production structure is indicated in Table 3.4. The production structure has continued to modernize with growing share of industry, led by manufacturing. Agriculture's production share has continued to decline. The share of services sector also shows a slight downward trend, but with a growing share of modern services including banking, finance, ITC, modern transport, health and education. Importantly, the dynamism of the manufacturing sector that had lost some ground in the Covid-affected year FY2020 has been substantially restored. The GDP share of both manufacturing and overall industry in FY2023 exceeds the respective shares in pre-Covid FY2019.

Table 3.4: Changing Production Structure (share of total GDP %)

Production Sector	FY2020	FY2021	FY2022	FY2023
Agriculture	12.5	12.1	11.6	11.2
Industry	34.9	36.0	36.9	37.8
Manufacturing	(22.4)	(23.4)	(24.3)	(25.0)
Other Industry	(12.5)	(12.6)	(12.6)	(12.8)
Services	52.5	51.9	51.5	51.2

Source: BBS

While the recovery of the industrial sector from the Covid impact is a welcome development, the 8FYP growth strategy has not moved as convincingly as planned. The first area of concern relates to the diversification of the export sector. The 8FYP strategy put considerable emphasis on diversifying manufacturing production towards a more export-oriented production base beyond the RMG. While the RMG and associated backward linkages in the textile industry has done well, non-RMG exports have not done well. The second relates to dynamizing the micro and small enterprises (MSEs). The MSEs are a major driver of job creation and inclusive growth. Survey based evidence suggests that MSEs were most severely affected by the Covid-19 induced downturn and the recovery has been slower than in RMG and other large enterprises. These issues will be discussed in greater detail in Chapter 6 in the context of progress with trade and industrialization policies.

### 3.3.2 Fiscal Sector Outcomes

The outcomes of the fiscal sector are key determinants of growth, poverty reduction and macroeconomic stability. Public investments financed through the national budget that is focused on infrastructure and agriculture are a critical determinant of GDP growth. Public investment in health, education and social protection play an important role in poverty reduction. Public spending on social protection helps lower income inequality. Fiscal stability reflected in low fiscal deficits and low debt/GDP ratios have a determining influence on private sector investment climate and incentives. The 8FYP put strong emphasis on all three aspects of the fiscal sector development.

The Fiscal targets for the 8FYP are contained in Table 3.5. Owing to rebasing of GDP in FY2021 after the 8FYP was adopted, the targets involving GDP (ratios) are also rebased and distinguished between Original 8FYP targets based on 2005-2006 GDP base year (O) and rebased 8FYP targets based on 2015-2016 GDP base year (R). This approach is applied wherever GDP based ratios are involved as - targets.

Table 3.5: 8FYP Targets for the Fiscal Sector FY2021-FY2023

Real Sector	FY2020 Actual		FY2021 Target		FY2021 Actual		2022 eget	FY2022 Actual	FY20 Tarş		FY2023 Estimated
	О	R	О	R		О	R		О	R	
Total revenue (% of GDP)	9.4	8.2	10.2	9.3	9.3	11.1	10.2	8.3	12.0	11.1	8.6
Tax revenue (% of GDP)	7.9	7.0	9.0	8.1	7.6	9.8	8.9	7.4	10.6	9.7	7.6
Government Expenditure (% of GDP)	14.9	13.1	17.1	14.9	13.0	16.9	15.0	13.2	17.6	15.8	13.7
Budget deficit including grants (% of GDP)	-5.4	-4.9	-6.8	-6.2	-3.7	-5.8	-5.2	-4.9	-5.5	-4.9	-5.0

Source: Ministry of Finance (Actual); 8FYP

Revenue Performance: Actual fiscal performance concerning revenue mobilization and spending is progressively falling behind even in relation to the rebased targets. The primary reason for these shortfalls is the inability to mobilize tax revenues. Since the 8FYP is the first phase of the implementation of the PP2041, it essentially adopted the Medium-Term Fiscal Plan (MTFP) of the PP2041. The MTFP calls for a steady scaling up of the domestic revenue base, primarily through the tax system but also through improving the financial performance of the State-Owned Enterprises (SOEs). Accordingly, the tax to GDP ratio was projected to increase by 4.4% of GDP, while non-tax revenues were projected to grow by 0.8% of GDP over the 8FYP. In the event, the performance was much more modest. In the first three years the tax to GDP ratio increased by only 0.6 percentage points, while non-tax revenue to GDP actually fell by 0.2 percentage points. Overall, the 8FYP revenue targets are considerably off-track relative to the 8FYP targets and huge efforts will be needed in the remaining period of the 8FYP to bring them on track.

There are several reasons for the shortfall in the revenue targets. First, the reforms underlying the tax mobilization strategy of the 8FYP are yet to be fully implemented. Second, the adverse effects of Covid-19, global inflation and the Ukraine War have reduced the expansion of economic activities and imports that have lowered the tax base. Thirdly, the reform of the property tax system is yet to happen. And finally, the reforms of the SOEs have not yet gathered momentum.

Expenditure Outcomes: The shortfalls on revenues has constrained the planned expansion of the public spending targets of the 8FYP. Additionally, unanticipated increase in budget subsidies owing to global price increases of fuel and fertilizer have created difficulties for protecting core spending on health, education and social protection.

Total expenditure as a share of GDP was already very low at the eve of the launching of the 8FYP (13.1% of GDP). The 8FYP sought to increase this by 4.2 percentage points of GDP by the end of the Plan period. The inability to mobilize adequate fiscal revenues has constrained the ability to implement is expenditure strategy. In the event, total spending grew modestly by 0.6 percentage point of GDP during the first three years of the 8FYP.

The 8FYP put considerable emphasis on increasing spending for health, education and social protection. Reflecting this priority, the national budgets have made efforts to increase public spending in these areas. But implementation has suffered. Inadequate fiscal space has created a major policy dilemma in allocating resources among competing priorities. The problem has been further aggravated by rising budget subsidies owing to the global surge in fuel and fertilizer prices. Since some 50% of spending is fixed spending (wages, material cost, security spending, interest cost), the government is forced to accommodate higher subsidy by cutting social protection and development spending.

The impact of this expenditure policy on public spending on health, education and social protection is illustrated in Table 3.6. Spending on these high priority items was already low. Recognizing this, the 8FYP sought to increase public spending on health from 0.7% of GDP in FY2019 to 2% of GDP in FY2025; education spending from 2.0% of GDP in FY2019 to 3.0% of GDP by FY2025; and spending on social protection (excluding civil service pension) from 1.2% of GDP in FY2019 to 2.0% of GDP by FY2025. Notwithstanding the 8FYP's intentions, spending as share of GDP on these priority areas has declined further. Even though the annual Budgets made efforts to get some modest increases in spending on these accounts, even these modest budgeted increases were not feasible due to revenue constraints. Thus, in FY2023, Bangladesh spent a mere 0.5% of GDP on healthcare and 1.5% of GDP on education. However, social protection (excluding civil service pensions) spending was 2.15% of GDP, which was more than the target.

Table 3.6: Impact of Fiscal Adjustment on Social Sector Spending

	FY2020		FY2021		FY2022		FY2023	
(As % of GDP)	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Estimated
Health	0.81	0.54	0.83	0.61	0.82	0.53	0.82	0.6
Education	1.93	1.65	1.88	1.71	1.81	1.45	1.83	1.64
Social protection	1.78	2.10	2.29	2.35	2.34	2.22	1.92	2.15
Excluding civil service								
Pensions								

Source: Ministry of Finance, Monthly Fiscal Reports and Medium-Term Macro Policy Statements (MTMPS)

The government is taking steps to reduce the subsidy bill by adjusting energy and fertilizer prices. Global commodity prices are also coming down. These are positive developments and will help lower the subsidy bill. Nevertheless, without stronger revenue mobilization efforts, it will be difficult to implement the spending priorities of the 8FYP.

Budget Deficit and Public Debt: Traditionally, Bangladesh has maintained a prudent fiscal policy stance by keeping fiscal deficit low. This fiscal stance was carried over in the 8FYP. Accordingly, the 8FYP set fiscal deficit target in the 5% of GDP range. The performance in the first three years suggests that this prudent fiscal policy strategy is being successfully implemented. Instead of letting revenue shortfalls impinge on fiscal deficit, the government has absorbed it through cutback in public spending.

The implication of this prudent deficit management has been positive for public debt. Total medium and long term (MLT) public debt as a share of GDP has grown modestly over the years and has remained on track during the first three years of the 8FYP (Figure 3.5). This path of public debt expansion is fully consistent with the requirements of the debt sustainability analysis.

26.3 27.2 28.9 31.7 32.4 34.0 35.4 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23 (P)

Figure 3.5: Trend in Debt to GDP Ratio (%)

Source: Ministry of Finance

### 3.3.3 External Sector Performance

A core component of the macroeconomic framework of the 8FYP is the stability of the external sector. Historically, Bangladesh has paid particular attention to preserve the stability of the balance of payments (BoP) by keeping current account balance either in surplus or with low deficit. Supported by favorable financing, external debt has been modest, and reserves have accumulated. The 8FYP strategy for BoP management focused on continuing this approach. The recent outturn in the balance of payments is contained in Table 3.7.

Exports recovered substantially within the first year of the pandemic and have continued to do well since then. Remittances also surged in FY2021. Along with decent growth in imports, the overall balance of payments situation was very comfortable in FY2021. The current account deficit was at a modest 1.1% of GDP and along with favorable developments in the capital account there was a huge increase in reserves, rising from USD 35.8 billion in the base year (FY2020) to a record USD46.4 billion.

Table 3.7: Balance of Payments Outturn During the 8FYP (USD million)

Items	FY2020	FY2021	FY2022	FY2023 (E)
Exports	32832	36903	49246	52693
Imports	50690	60681	82495	72596
Trade balance	-17858	-23778	-33249	-19903
Net non-factor services	-2578	-3002	-3955	-4185
Net factor income	15712	22205	18566	18813
Of which remittances	18205	24778	21032	21611
Current account balance	-4724	-4575	-18638	-5275
Current account (% of GDP)	-1.3	-1.1	-4.3	-1.3
Total reserves	35853	46391	41827	31,203
Reserves in month of imports	7.1	7.6	5.2	4.4
Total external debt	65273	78039	95858	110858
External Debt/GDP (%)	17.5	18.7	20.8	24.8
Short-term debt	9998	14036	20646	23646
Short-term debt as share of reserves (%)	27.9	30.3	49.4	84.5

Source: Bangladesh Bank; E=estimated

This comfortable balance of payments situation reversed dramatically in FY2022 and FY2023. While export earnings performed exceptionally well in FY2022, imports surged by an unprecedented 36% in FY2022 owing to a hike in global inflation caused by Covid-19 induced supply shortages and the onset of the Ukraine War. Along with a decline in inflow of remittances, the current account deficit spiked to an unsustainable USD18.6 billion (4.2% of GDP) that created substantial pressure on reserves and a resort to short term debt financing for imports. Overall external debt including short term debt climbed from USD 65.3 billion in FY2020 to 95.8 billion in FY2022. As a share of GDP, total external debt grew from 17.5% of GDP in FY2020 to 20.8% of GDP in FY2022. While the level of external debt remains within prudent limits, the unanticipated resort to short term debt financing of imports presented a new challenge for the government that needs careful management.

The balance of payments pressure intensified further in FY2023. The government responded by depreciating the currency, increasing trade tariffs on consumer goods and restricting the inflow of non-essential imports. Shortage of foreign exchange forced further cutbacks in imports of industrial raw materials and energy products. These policy measures combined with the shortage of foreign exchange slowed the growth of imports but there was considerable loss of reserves owing to a sharp worsening of the capital account.

The estimated BoP outcome for FY2023 is shown in Table 3.7. Exports have grown by about 7%, imports declined by 12%, while remittances grew by a modest 4.2%. As a result, the trade deficit has narrowed considerably and combined with a modest recovery of remittance inflows, the current account deficit has fallen considerably to 1.3% of GDP. Even so, the weakening of capital inflows from slower disbursements of MLT loans and a tightening of trade and private sector credit along with huge repayment of short-term trade and private sector credit accumulated in FY2022 put considerable pressure on the reserve situation, which is estimated to have declined substantially falling to USD 31 billion. This amounts to only 4.4 months of even the much-reduced cif value of imports for FY2023 <sup>3</sup>.

The external debt variables also worsened owing to a combination of exchange rate effects and falling reserves. Total external debt as a share of GDP increased to almost 25% of GDP in FY2023 as compared with only 18% in the base year (FY2020). This is still within prudential external debt limits, but what is a matter of concern is the sharp rise in short-term debt as a percentage of reserves to almost 85%. This needs careful watching and efforts to bring the ratio down.

The cutbacks on imports and the shortage of foreign exchange has raised some concerns about the adverse effects on GDP growth. The government is aware of the importance of restoring the smooth inflow of imports and stabilizing the BoP to avoid disrupting the growth momentum. Accordingly, it quickly negotiated a 3- year IMF program to stabilize the balance of payments situation. The IMF program became effective February in 2023. The Government expects that the BoP outcome will improve in F2024.

The 8FYP targets for the BoP were set in terms of three indicators: exports as percent of GDP; imports as percent of GDP and remittances as percent of GDP. The BoP outcome during the first half of the 8FYP in terms of these more narrowly defined indicators is shown in Table 3.8.

Real Sector	FY2020 Actual		FY2021 Target		FY2021 Actual		2022 eget	FY2022 Actual	FY20 Tarş		FY2023 Estimated
	О	R	О	R		О	R		О	R	
Exports (% of GDP)	12.3	10.6	12.7	10.9	10.7	12.6	10.8	13.7	12.5	10.8	15.1
Imports (% of GDP)	18.3	16.0	18.7	16.3	17.1	18.5	16.1	21.0	18.3	15.9	21.5
Remittances (% of GDP)	5.8	4.9	5.5	4.6	6.0	5.3	4.5	4.9	5.1	4.3	5.3

Table 3.8: Progress in the External Sector during 8FYP period

Source: Bangladesh Bank; 8FYP (DRF)

The 8FYP targets had already built in the anticipated global effects of covid-19. Consequently, the export targets were set to show modest growth in exports as a share of GDP while imports and remittances were projected to decline in GDP terms. The unanticipated global inflationary pressures of the post Ukraine War period, derailed these targets. The export performance has been much better than projected in the modified targets, aided by a big increase in export prices. On the import side, the global inflationary pressures caused an unprecedented When the IMF definition is used to calculate usable reserves, it falls to USD24 billion, which is a mere 3.3 months of imports.

<sup>•</sup> O denotes original (GDP base year 2005-2006) and R denotes rebased/revised (GDP base year 2015-2016)

surge in import to GDP ratio in FY2022, which much exceeded the 8FYP target. On the remittance front, actual performance in FY2021 was considerably better than what was set in the 8FYP, although subsequently, remittance inflows have slowed and are now broadly on track as per the target. The estimated performance for FY2023 suggests that export target will be substantially exceeded, remittance target will be better but import to GDP ratio will much exceed the target.

The positive outcome on the export front in terms of better-than expected export earnings is a welcome development. Even so, much of this performance resulted from growth in RMG earnings. Non-RMG exports have not expanded commensurately. Non-RMG exports benefitted from the global price increases in FY2022, but export earnings dipped in FY2023. Indeed, the RMG share of exports has increased further (Table 3.9). Since a major objective of the 8FYP is to diversify the export base, this is an area of concern that needs considerably more policy attention.

Table 3.9: Progress with Export Diversification (Percent)

Export type	FY2020	FY2021	FY2022	FY2023 (E)
Growth of RMG exports (% p.a.)	-18.0	11.3	35.5	12.0
Growth of Non-RMG exports (% p.a.)	-11.0	11.1	22.0	-11.0
Share of RMG exports (%)	85.1	85.2	86.5	88.9

Source: Bangladesh Bank

Despite the better-than-expected export performance, the overall BoP situation has worsened relative to the targets of the 8FYP. While this is largely the consequence of the unanticipated global inflationary pressures emerging from supply disruptions of covid-19 and the Ukraine War, the situation signals the need for careful management of the BoP situation. On the export front, the post-Covid-19 resurgence in RMG exports is a welcome development. But greater efforts are needed to accelerate non-RMG exports. Total external borrowing is within prudent limits, although the rapid buildup of short-term debt needs monitoring. Export diversification and reserve build up are major challenges that need careful attention in the remaining years of the 8FYP.

### 3.3.4 Monetary Policy, Financial Sector Policies and Inflation Targets

The 8FYP identified three indicators to monitor progress with monetary policy, financial sector policies and inflation targets (Table 3 .10). Actual monetary growth and private sector credit growth appear off-track relative to 8FYP targets. However, they cannot be evaluated properly without reference to the underlying GDP growth and inflation rate. Regarding inflation rate, actual inflation rate was roughly on track in FY2021 but went off-track in FY2022 and got worsen in FY2023. Indeed, a fuller analysis of the inflation performance is necessary to understand the developments in monetary and credit policies.

Table 3.10: Progress in the Monetary and Financial Sector during 8FYP

Indicat	FY2020	FY2021		FY2022		FY2023 (E)	
ors	Actual	Target	Actual	Target	Actual	Target	Actual
Growth of M2 (%)	12.6	13.7	11.1	14.0	8.2	13.8	9.0
Growth of private credit (%)	13.1	14.2	10.9	14.5	11.3	14.3	12.0
CPI inflation (average) (% p.a.)	5.7	5.4	5.6	5.3	6.2	5.1	8.5

Source: 8FYP, Bangladesh Bank, BBS

The recent monthly inflation trend on an annualized basis is shown in Figure 3.6. The inflation rate has been on an upward trend since February 2021, but it gathered speed since May 2021 after the Ukraine war. Inflation hit a peak rate of 9.94% in August 2022, growing from a low of 5.32% in February 2021. Inflation rate showed a minor dip to 9.74% in June 2023. With minor monthly variations, both food and non-food inflation are on the rise, although non-food inflation has spiked considerably after July 2022. The immediate reason for acceleration of inflation was the global inflation resulting from a combination of covid-19 induced supply bottlenecks, the supply disruptions resulting from the Ukraine War, and excess demand pressures in USAs and Europe caused by the generous covid-19 linked stimulus packages.

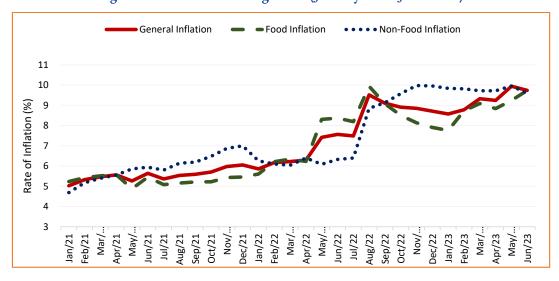


Figure 3.6: Inflation in Bangladesh (January 2021-June 2023)

Source: BBS

The initial spike in global inflation came from commodity price hikes, especially food and energy products, starting in early 2022. In Bangladesh, this also translated in rising inflationary pressure initially starting with food price inflation. As rising global energy product prices were passed on to consumers, non-food inflation started climbing up. Non-food inflation gathered momentum as international and domestic manufacturing and services prices climbed up. The government was keen to protect and accelerate GDP growth and hence did not allow interest rates to rise or to slow down the growth of credit. Rising budget deficits financed through bank borrowing in FY2022 and FY2023 also contributed to the expansion of total credit in the economy. Between May 2022 and May 2023, net government credit increased at an unprecedented rate of 44 percent per annum. Private sector credit expanded from only 8% in FY2021 to 11% in FY2023.

On the monetary policy front, a major problem faced by the government was the flexibility of the interest rate policy. The government in April 2020 adopted the "6/9" interest rate policy by which ceilings were imposed on the maximum deposit rate (6 percent) and the maximum lending rate (9 percent). The rationale for this policy was to lower the cost of bank borrowing to stimulate private economic activity and GDP growth in the face of Covid-19 debacle. This policy served Bangladesh well in the early years of economic recovery from Covid-19. But its relevance has increasingly come under pressure from the post-Ukraine War inflationary hike. The government understands that interest rates will need to be managed more flexibly to respond to the reality of inflationary pressure. The government has announced its intention to link interest rate more closely with inflation management starting in July 2023.

Regarding financial sector policies, banking sector deregulation starting in the early 2000's ushered in a modern banking sector in Bangladesh dominated by growing numbers of competitive private banks. The role of financially constrained state-owned commercial banks in both deposits and loans fell while the deposit and loan shares of private commercial banks increased considerably. Total volume, diversity and quality of banking services improved substantially, which has contributed strongly to the acceleration of private investment, exports and GDP growth over the past two decades. This strong performance, however, came under pressure as governance problems weakened the quality of the loan portfolio for both public and several private banks and the share of non-performing loans (NPLs) increased.

The 8FYP addressed this challenge and sought to adopt several measures including tightening of prudential norms and stronger supervision by BB to control; and reverse the weakening of the loan portfolio. However, the advent of Covid-19 halted the implementation of this strategy. To counter the adverse effects of Covid-19 on economic activities the BB adopted several measures as a part of the government's Covid-19 stimulus packages. These included a mix of subsidized loan schemes, several re-financing schemes, and a loan moratorium and reclassification freeze. The loan moratorium and reclassification freeze avoided a further disruption of economic activities and helped the Covid-19 economic recovery process.

The Covid-19 financial support policies expired in December 2022, which has presented a major challenge as the losses in the banking system emerge and the reclassification of banking sector loan portfolio show a growing share of distressed assets. The BB, in consultation with the IMF, is taking several measures to manage an orderly transition of the banking sector to compliance with the normal prudential norms. These include proper classification of NPLs that is aligned with international best practice, fully adopting Basel III standards for measurement of banks' financial statements and provision framework, the adoption of International Financial Reporting Standard 9 (IFRS9) and developing bank specific NPL resolution and capital restoration strategies. The NPL resolution and capital adequacy assessment will be supported by a process of Memorandum of Understanding (MOUs) that will target a reduction of the average NPL ratios to below 10% for state owned commercial banks and below 5% for private commercial banks. The capital adequacy and provision norms will be restored to statutory minimum norms by 2026.

The government also plans to tighten the governance and regulatory framework for the banking sector. Work is underway on several laws to facilitate this. The Bank Company Amendment Act (2023) has been approved by the Cabinet. This seeks to considerably tighten the penalties for willful defaulters and also reduce the influence of families on bank boards. Other planned amendments concern the Bankruptcies Act 2020, the Money Loan Court Act 2023, and the Negotiable Instrument Act 2020. These reforms will help modernize the financial sector, improve the legal environment for financial activities, facilitate the resolution of financial insolvency, and aid the recovery of unpaid bank loans.

Efforts are also underway to strengthen the development of the domestic capital market. Reforms include aligning the interest rates of National Savings Certificates in line with the market interest rates, developing secondary market for government securities, developing the bond market, and allowing the credit information bureau (CIB) to share data with private borrowers. Additionally, the government intends to continue the progress on implementing regulatory reforms to minimize risks, enhance the transparency of stock market trading and information, and improving the capacity of the Bangladesh Securities and Exchange Commission (BSEC).

# 3.4 Progress with Job Creation

8FYP Job Creation Strategy: The 8FYP recognized that the best way to ensure inclusive growth was to strengthen the job-creation prospects of the growth strategy. Accordingly, the 8FYP emphasized the adoption of a labor-intensive, export-oriented, manufacturing-sector-led growth strategy. In addition to further expansion of RMG exports, which has been the backbone for creating new jobs over the past three decades, it also put emphasis on promoting labor-intensive non-RMG manufacturing exports. Another core element of the 8FYP job-creation strategy is the efforts to dynamize the micro and small enterprises (MSE) sector. Outside agriculture, MSE's are the largest source of job creation. Finally, the 8FYP job creation strategy sought to continue to promote exports of migrant labor to host countries in the Middle East and elsewhere. Further more Ministry of Expatriate's welfare and overseas Employment will target at least 5 Million new work forces for facilitating migration abroad in 8FYP, with minimum 50% in the higher skilled categories'. It will target 20 new countries in 4 geographic regions. The ministry will also target reading USD 150 Billion of Remittance in 8FYP period, with an average remittance income of USD 30 Billion per year.

8FYP Targets for Employment Sector: Commensurate with SDG goal that postulated the need for creating increased productive and decent employment opportunities for sustainable and inclusive growth, the 8FYP DRF identified 5 specific targets to measure performance on this count. These included: (1) annual rate of growth of real GDP per employed people; (2) proportion of informal employment by gender; (3) unemployment rate by gender; (4) Proportion of youth not in education, employment or training; and (5) frequency rates of fatal or non-fatal injuries by gender. Recognizing the data problems in measuring performance on these variables in the most cases identified the baseline indicator value and end of plan value.

The most important data source on employment is the Labor Force Survey (LFS). The last full survey report was reported for FY2016-17. After that, a preliminary summary LFS report was published in March 2023 reporting for the survey done in 2022. Unfortunately, the summary report does not provide adequate disaggregated results that can be used to meaningfully comment on the targeted indicators. The only relevant data that is available relates to unemployment rate by gender. The progress is illustrated in Figure 3.7.

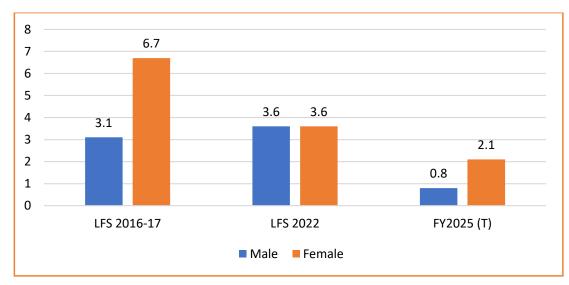


Figure 3.7: Unemployment Rates by Gender (%)

Source: LFS 2022 and 8FYP

The LFS 2022 shows that while the male unemployment rate has remained unchanged at 3.1% over the past 5-6 years, female unemployment rate has fallen sharply from 6.7% to 3.6%. Total unemployment rate has fallen from 4.3% to 3.6%. The large fall in female unemployment rate is largely explained by a substantial increase in female labor participation rate in general but mostly concentrated in agricultural sector. Thus, total female labor force participation rate expanded from 36.3% to 42.7% over the two LFS periods. Commensurately, agriculture sector's employment share expanded from 40.6% to 45.3%. Overall, the target for female unemployment is on track but it is off-track for male unemployment rate. The total employment has been increased from 60.8 million in 20016-17 to 70.78 million in 2022.

While the recorded increase in female labor force participation is a welcome development, there are several worrisome results observed in LFS2022 that needed substantial policy attention. First, total employment growth over the past 5 years is 3.1% per year. While this is marginally higher than the growth in labor force (3.0%), the employment elasticity of growth is only 0.47. This is on the low side given that there is substantial underemployment in Bangladesh and job creation needs to grow much faster than labor force to meaningfully reduce the incidence of underemployment. Second, while the production structure is moving away from reliance on agriculture and focusing more on manufacturing, employment trend is going in the reverse direction. The surge in agricultural employment along with fall in the share of agricultural value added in total value- added suggests that average agricultural productivity is falling (Figure 3.8). This is not consistent with the objective of creating high-income jobs. Third, while the large increase in average labor productivity in manufacturing is welcome, the negative growth in manufacturing employment is a hugely worrisome development. The government's employment strategy articulated in the 8FYP is anchored on creating good jobs in manufacturing, which is the leading growth sector.

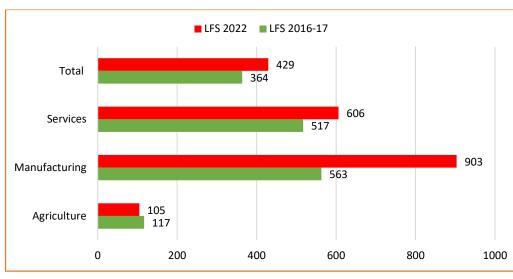


Figure 3.8: Average Labor Productivity (Taka 2015-16 constant prices)

Source: BBS, LFS and National Accounts Database

Drilling down further, the two main reasons for the absence of job creation in industrial sector is the slack in the export performance in non-RMG sectors and the absence of dynamism in MSE activities. The Non-RMG export performance has been lack-luster for a long time. But the negative export growth in FY2023 is a serious problem. Research has shown that while Bangladesh has substantial comparative advantage in many non-RMG export

products, the poor export performance is fundamentally owing to two problems: anti-export bias imparted by trade policy through large trade protection and second a sharp appreciation in the real exchange rate between FY2011 and FY2022. While there has been some correction of real exchange rate appreciation in FY2023, the anti-export bias of trade policy remains unchanged. This subject is discussed in greater detail in Chapter 5.

Regarding absence of dynamism in the MSE sector, this has also been a long-standing problem. The MSEs suffered further setback during the Covid-19 period. While it benefited from some of the stimulus packages of the Covid-19, the problems of the MSE sector are deep and require major policy reforms. Interventions are needed on several fronts including substantially better access to bank credit, access to credit guarantee schemes, proper tax treatment, better market information, skills training, and better access to technology.

# 3.5 Summary and the Way Forward

At the onset of implementation of the 8FYP, Bangladesh faced unprecedented external shocks in the form of Covid-19 and the global inflation owing to the Ukraine War. The Government responded speedily to Covid-19 that enabled a rapid recovery of economic activity during the first two years of the 8FYP. This recovery was halted by the global inflationary impact of the Ukraine War that has tended to destabilize the macroeconomy through growing pressure on the balance of payments, fiscal balance and inflation. As a consequence, the growth performance and macroeconomic stability outcomes have been adversely affected. The government has adopted several policy measures to counter the global inflationary effects. It has also signed an IMF program to stabilize the economy and help with the resumption of rapid GDP growth. Solid implementation of the government's reform program agreed under the IMF program will help recover GDP growth and restore macroeconomic stability in the next two years of the 8FYP.

Solid implementation of the macroeconomic reform program is a major challenge for the government moving forward. Of particular importance is the need to address the concerns in the banking sector and on the fiscal front. All out efforts are needed to restore the health of the banking sector and to increase tax revenues through comprehensive tax reforms. Inflation is hurting and must be brought down to the 5-6% range through a judicious use of monetary and fiscal policies. Flexible management of the exchange rate and interest rate is essential to restore macroeconomic stability. Import controls must be removed to enable a resumption of the growth momentum. FDI flows must be boosted to provide necessary financing of investments and the balance of payments.

A resumption of the growth momentum supported by private domestic and FDI investments along with more robust RMG and non-RMG export growth will help improve the job creation prospects as envisaged in the 8FYP. Focus on labor-intensive non-RMG exports will be a key driver of job creation. Further progress with ICT in line with the Prime Minister's initiative to establish a smart Bangladesh will create new jobs for educated youth in the technology sector. Additional efforts are needed to dynamize the cottage and small enterprise sectors in manufacturing and services. These enterprises offer the best prospects for creating jobs as Bangladesh production structure continues to mature towards a manufacturing and services-based economy. Finally, investments in education, skills and labor training will be critical for better job creation prospects.

# Appendix to Chapter 3 Bangladesh 8FYP Revised Macroeconomic Framework

Table A3.1: Macroeconomic Developments (FY20-25)

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25
		Actu	ıal		Proje	ction
Real Sector Indicators			(As % of C	GDP)		
Gross National Savings	31.4	30.8	29.3	30.2	30.4	31.9
Gross Domestic Savings	27.1	25.3	25.2	26.0	25.3	26.9
Gross Investment	31.3	31.0	32.0	31.2	32.2	33.5
Public Investment	7.3	7.3	7.5	7.6	7.8	8.0
Private Investment	24.0	23.7	24.5	23.6	24.4	25.5
Foreign Domestic Investment (FDI)	0.3	0.3	0.4	0.6	0.8	1.0
Domestic Investment	23.7	23.4	24.1	23.0	23.6	24.5
Net exports of goods and services	-5.4	-6.4	-8.0	-5.8	-6.1	-5.7
Exports of goods and services	10.4	10.7	12.9	13.4	15.4	15.4
Imports of goods and services	15.8	17.0	20.9	19.2	21.5	21.2
Current account balance	-1.0	-0.9	-3.9	-1.6	-1.8	-1.7
Consumption	72.9	74.7	74.8	74.0	74.7	73.1
Govt consumption	6.0	5.9	5.7	5.8	5.7	5.5
Private Consumption	67.0	68.8	69.1	68.2	69.1	67.6
Total Resources	105.4	106.4	108.0	105.8	106.9	106.6
Net Factor Income	4.1	5.3	4.0	4.0	5.1	4.9
Gross national income	104.1	105.3	104.0	104.0	105.1	104.9
Gross National Income Per Capita (in USD)	2326	2591	2793	2575	2663	2880
Memorandum Items:		(Growth R	Late (%) or O	therwise Ir	ndicated)	
Real GDP growth	3.5	6.9	7.1	6.0	7.0	7.8
CPI Inflation	5.7	5.6	6.2	8.5	7.5	6.0
GDP Deflator	3.9	4.1	5.0	5.4	5.0	4.8
Nominal GDP growth	7.4	11.4	12.6	11.8	12.4	13.0
ICOR	9.1	4.5	4.5	5.2	4.6	4.3
Net Factor Income (In Billion, Taka)	1312	1858	1573	1793	2547	2758
Gross National Income (In Billion, Taka)	33017	37160	41290	46186	52423	59105
Consumption (In Billion, Taka)	23119	26356	29700	32842	37268	41162
Govt consumption	1893	2076	2264	2553	2818	3099

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25
		Actu	Proje	Projection		
Private Consumption	21226	24281	27437	30290	34450	38063
Investment (In Billion Taka)	9927	10951	12729	13873	16060	18899
Public	2312	2584	2992	3378	3890	4508
Private	7615	8367	9737	10495	12170	14391
Current Account Balance (In Billion Taka)	-332	-334	-1545	-693	-900	-946
Net exports of goods and services	-1709	-2252.3	-3185	-2557	-3452	-3713
Total Resources	33414	37554	42902	46951	53328	60061
Gross National Savings (In Billion taka)	9961	10871	11657	13413	15160	17953
Gross Domestic Savings (In Billion taka)	8586	8945	10018	11551	12608	15186
Real Consumption	19017	20524	22037	23807	25729	27116
Real Private Consumption	17429	18826	20233	21957	23783	25074
Real Private Consumption Growth Rate		8.0	7.5	8.5	8.3	5.4
GDP Deflator Index	119.6	124.6	130.86	138.0	144.8	151.8
Exchange Rate	84.78	84.81	86.3	105.00	113.91	117.32
Index of real per capita consumption	106.5	113.8	120.6	130.7	139.5	145.3
Per Capita Real Consumption	113602	121365	128646	139396	148860	155024
Population (In Million)	167.4	169.11	171.3	170.79	172.84	174.91
Population Growth	1.1	1.0	1.3	1.2	1.2	1.2
Real GDP (in Billion taka, 2015-16)	26501	28340	30352	32183	34435	37121
Nominal GDP (In billion taka)	31705	35302	39717	44394	49876	56347

Table A3.2: Summary of Fiscal Operation FY20-25

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25
		Actual		Est.	Projec	ctions
Fiscal Indicators:			(As %	of GDP)	)	
Revenue and Grants	8.5	9.4	8.3	8.7	9.3	9.9
Total Revenue	8.4	9.3	8.3	8.6	9.2	9.8
Tax Revenue	7.0	7.6	7.4	7.6	8.0	8.4
NBR Tax Revenue	6.8	7.4	7.0	7.3	7.6	8.0
Non-NBR Tax Revenue	0.2	0.2	0.4	0.3	0.4	0.4
Non-Tax Revenue	1.4	1.7	0.9	1.0	1.2	1.4
Grants	0.1	0.1	0.1	0.1	0.1	0.1
			(As %	of GDP	)	
Total Expenditure	13.3	13.0	13.2	13.7	14.3	14.9
Non-Development Expenditure including net lending	8.1	8.2	8.3	8.8	9.1	9.3
Non-Development Expenditure	8.0	8.1	8.2	8.7	8.9	9.1
Revenue Expenditure	7.4	7.5	7.6	8.0	8.2	8.3
Capital Expenditure	0.6	0.6	0.6	0.7	0.8	0.8
Net Lending	0.1	0.1	0.1	0.2	0.2	0.2
Development Expenditure	5.1	4.8	4.9	4.9	5.2	5.6
ADP Expenditure	4.9	4.5	4.7	4.7	5.0	5.4
Non-ADP Development Spending	0.2	0.3	0.2	0.2	0.2	0.2
Overall Balance (excl. grants)	-4.9	-3.8	-4.9	-5.1	-5.1	-5.1
Overall Balance (Incl. grants)	-4.8	-3.7	-4.9	-5.0	-5.0	-5.0
Primary Balance	-3.0	-1.7	-2.8	-2.7	-2.6	-2.5
			(As %	of GDP	)	
Financing	4.8	3.7	4.9	5.0	5.0	5.0
External (Net) [including market borrowing]	1.3	1.3	1.9	1.3	1.5	1.5
Loans	1.7	1.6	2.3	1.8	2.0	2.0
Amortization	-0.4	-0.3	-0.4	-0.4	-0.5	-0.5
Domestic	3.5	2.4	2.9	3.7	3.5	3.5
Bank (CrPbs: Money))	2.5	0.9	2.2	2.2	2.2	2.0
Non-Bank	1.0	1.4	0.7	1.5	1.3	1.5
Memorandum Item:						
Nominal GDP, In Billion, Taka	31705	35302	39717	44394	49876	56347

Source: Ministry of Finance, and GED Projections, 2023

Table A3.3: Composition of NBR Tax Revenue, FY20-25

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25
		Actu		Proje	ction	
Variables / Items			(In Billion	Taka)		
NBR Tax Revenue	2158	2628	2779	3250	3791	4508
Taxes on Income and Profit	705	873	967	1084	1386	1735
Value Added Tax	861	1034	1053	1172	1347	1578
Custom Duty	236	305	317	422	419	462
Supplementary Duty	325	386	400	493	549	648
Export Duty	0	0	0	2	2	3
Excise Duty	23	25	31	43	48	38
Other Taxes and Duties	9	5	11	34	40	45
			(As % of	GDP)		
NBR Tax Revenue	6.8	7.4	7.0	7.3	7.6	8.0
Taxes on Income and Profit	2.2	2.5	2.4	2.4	2.8	3.1
Value Added Tax	2.7	2.9	2.7	2.6	2.7	2.8
Custom Duty	0.7	0.9	0.8	1.0	0.8	0.8
Supplementary Duty	1.0	1.1	1.0	1.1	1.1	1.2
Export Duty	0.0	0.0	0.0	0.0	0.0	0.0
Excise Duty	0.1	0.1	0.1	0.1	0.1	0.1
Other Taxes and Duties	0.0	0.0	0.0	0.1	0.1	0.1
Nominal GDP(In Billion Taka)	31705	35302	39717	44394	49876	56347

 ${\it Source: Ministry of Finance, and GED Projections, 2023}$ 

Table A3.4: Economic Classification of Non-Development Expenditure, FY20-25

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25
		Actual			Projection	
Variables / Items			(As % of	GDP)		
Total Operating Expenditure	8.0	8.1	8.2	8.7	9.7	10.0
Operating Recurrent Expenditure	7.4	7.5	7.6	8.0	8.9	9.1
Pay and Allowance	1.8	1.7	1.5	2.1	2.3	2.5
Goods and Services	0.9	0.9	0.9	1.0	1.1	1.2
Interest payments	1.8	2.0	2.1	2.3	2.4	2.5
Domestic	1.7	1.9	1.9	2.1	2.2	2.2
Foreign	0.1	0.1	0.2	0.2	0.3	0.3
Subsidy and net transfers	2.9	3.0	3.0	3.5	3.1	2.9
Block allocations	0.0	0.0	0.1	0.1	0.1	0.1
Operating Capital Expenditure	0.6	0.6	0.6	0.7	0.8	0.8
Acquisition of Assets and Works	0.6	0.6	0.5	0.5	0.5	0.4
Investment in Share and Equities	0.0	0.0	0.0	0.0	0.0	0.0
Transactions with IMF	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum Item:						
Nominal GDP	31705	35302	39717	44394	49876	56347

 $Source: Ministry\ of\ Finance,\ and\ GED\ Projections,\ 2023$ 

Table A3.5: Debt Dynamics FY20-25

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25	
		Actual		Est.	Proje	ection	
Debt Indicators:			(As % o	f GDP)			
Total Debt outstanding	35.6	32.4	33.7	35.1	36.3	37.1	
External Debt	13.4	11.9	12.5	12.5	12.7	12.7	
Domestic Debt	22.2	20.5	21.1	22.6	23.6	24.4	
	(In Billion Taka)						
External Debt	4248	4204	4974	5570	6318	7163	
Gross borrowing	529	577	918	777	998	1127	
Amortization/Repayment	113	120	148	181	249	282	
Net borrowing	416	457	770	596	748	845	
Interest payment on foreign debt	43	43	80	106	126	143	
Domestic Debt	7039	7226	8393	10017	11763	13735	
Gross financing	1104	838	1168	1624	1746	1972	
Interest Payment on domestic debt	540	663	772	922	1082	1264	
Effective interest rate on domestic debt	7.7	9.2	9.2	9.2	9.2	9.2	
Total Govt Debt Outstanding	11287	11429	13367	15587	18081	20898	
Total Debt Services (in billion taka)	696	826	1000	1209	1458	1689	
External	156	163	228	287	376	425	
Domestic	540	663	772	922	1082	1264	
			(In Billio	on, USD)	1	ı	
External Debt	50.1	49.6	54.0	51.1	55.5	61.1	
Gross borrowing	6.2	6.8	10.0	7.1	8.8	9.6	
Amortization/Repayment	-1.3	-1.4	-1.6	-1.7	-2.2	-2.4	
Net borrowing	4.9	5.4	8.4	5.5	6.6	7.2	
Interest payment on foreign debt	0.7	0.7	0.9	1.0	1.1	1.2	
Effective interest rate on foreign debt	1.4	1.5	1.7	1.9	2.0	2.0	
Debt Sustainability Indicators		(As %	of GDP or O	therwise Inc	dicated)		
Total Debt Services	2.2	2.3	2.5	2.7	2.9	3.0	
External	0.5	0.5	0.6	0.6	0.8	0.8	
Domestic	1.7	1.9	1.9	2.1	2.2	2.2	
External Debt as % of Export& Remittance	98.2	80.4	76.9	68.8	68.8	69.7	
External Debt Services as% Export& Remittance	3.6	3.1	3.5	3.5	4.1	4.1	

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25	
	Actual			Est.	Projection		
Total Debt to Revenue (%)	424.9	348.9	406.3	407.3	394.0	378.4	
Total Debt Service, as % of total revenue	26.2	25.2	30.4	31.6	31.8	30.6	
Memorandum Items:							
Govt Budget Deficit, as % of GDP	-4.8	-3.7	-4.9	-5.0	-5.0	-5.0	
Real GDP Growth	3.5	6.9	7.1	6.0	7.0	7.8	
Nominal GDP Growth	7.4	11.4	12.6	11.8	12.4	13.0	
CPI Inflation (Average, %)	5.7	5.6	6.2	9.0	7.5	6.0	
Inflation Rate (Trading Partners), %	2.5	2.5	3.0	3.0	3.0	3.0	
Exchange rate (Taka per us\$)	84.8	84.8	92.0	109.0	113.9	117.3	
Govt Budget Deficit including grant (In billion TK)	1520	1295	1938	2220	2494	2817	
Exports & Remittances (In Billion TK)	4327	5231	6468	8099	9187	10276	
Nominal GDP(In Billion TK)	31705	35302	39717	44394	49876	56347	

Source: Ministry of Finance, and GED Projections, 2023

Table A3.6: External Sector Performances, FY20-25

Fiscal Year	F20	F21	F22	F23	F24	F25
		Act	ual		Proje	ction
BOP Components:			(In Million	ns of USD)		
Trade balance	-17858	-23778	-33249	-19903	-21893	-22486
Export f.o.b. (including EPZ)	32832	36903	49246	52693	57962	63759
Import f.o.b (including EPZ)	-50690	-60681	-82495	-72596	-79856	-86244
Services	-2578	-3002	-3955	-4185	-4604	-4972
Receipts	6716	7439	9925	8889	9600	10368
Payments	-9294	-10441	-13880	-13074	-14204	-15340
Income	-3070	-3172	-3152	-3460	-3771	-4111
Receipts	174	217	345	317	349	377
Payments	-3244	-3389	-3497	-3777	-4155	-4570
Current transfers	18782	25377	21718	22273	22364	23508
Official transfers	19	33	16	62	72	82
Private transfers	18763	25344	21702	22211	22292	23426
Of which: Workers' remittances	18205	24778	21032	21611	22692	23826
Current Account Balance	-4724	-4575	-18638	-5275	-7906	-8060
Financial and Capital Account	8065	14525	13956	-6421	13047	15053
Capital account	256	458	181	320	350	380
Capital transfers	256	458	181	320	350	380
Financial Account	7809	14067	13775	-6741	12697	14673
Foreign Direct Investment	1271	1355	1827	2424	3503	4803
Portfolio Investment (Net)	44	-269	-158	-34	6	46
Net Aid Loans	5739	6032	8284	5465	6568	7204
Loan Disbursements	6996	7449	9811	7200	8758	9606
Debt Amortization	-1257	-1417	-1527	-1735	-2189	-2401
Other Long-term Loans (net)	499	1684	1443	323	320	320
Other Short-term Loans (net)	1142	2064	3114	-7049	300	300
Trade Credits (net)	-616	3749	-1920	-5370	2000	2000
Commercial Banks (net)	-270	-548	1185	-2500	0	0
Errors and Omissions	-172	-676	-697	-2033	0	0
Overall Balance	3169	9274	-5379	-13729	5141	6993

Fiscal Year	F20	F21	F22	F23	F24	F25
		Actual				ection
		(Growth	rate or O	therwise Ind	licated)	
Export growth	-17.8	12.4	33.4	7.0	10.0	10.0
Import growth	-8.6	19.7	35.9	-12.0	10.0	8.0
Service receipt growth	-1.0	10.8	33.4	-10.4	10.0	10.0
Service Payment growth	-11.5	12.3	32.9	-5.8	10.0	8.0
Income receipt growth	4.8	3.3	-0.6	9.8	9.0	9.0
Remittance growth	10.9	36.1	-15.1	2.8	5.0	5.0
Memorandum Items:						
Real GDP growth	3.5	6.9	7.1	6.0	7.0	7.8
Inflation rate	5.7	5.6	6.2	9.0	7.5	6.0
Nominal GDP growth	7.4	11.4	12.6	11.8	12.4	13.0
Gross Reserve	35719	44993	41827	31203	36344	43337
Reserves , months of imports of goods and services	7.1	7.6	5.2	4.4	4.6	5.1
Nominal GDP (In billion US\$)	374	416	432	407	438	480
Exchange rate	84.8	84.8	92.0	109.0	113.9	117.3
Inflation (Trading Partners) %	2.5	2.5	3.0	3.0	3.0	3.0
Export as (%) of GDP	10.6	10.7	13.7	15.1	15.4	15.4
Import as (%) of GDP	16.0	17.1	22.3	21.0	21.5	21.2
Remittance as (%) of GDP	4.9	6.0	4.9	5.3	5.2	5.0
Current Account Balance as (%) of GDP	-1.3	-1.1	-4.3	-1.3	-1.8	-1.7
FDI as (%) of GDP	0.3	0.3	0.4	0.6	0.8	1.0
Net MLT as % of GDP	1.5	1.4	1.9	1.3	1.5	1.5
Trade credit net % of GDP	-0.2	0.9	-0.4	-1.3	0.5	0.4

Source: Bangladesh Bank and GED Projections

Table A3.7: Bangladesh: Monetary Sector Outcomes, FY20-25

Fiscal Year	FY20	FY21	FY22	FY23	FY24	FY25
		Ac	ctual		Proje	ection
Components:			(In Billi	on Taka)		
Broad Money	13738	15609	17081	18758	20728	23215
Net Foreign Assets	3015	3824	3642	3073	3659	4479
Net Domestic Assets	10723	11785	13439	15685	17069	18736
Domestic Credit (a+b+c)	13027	14399	16717	19526	22341	25544
a. Claims on Govt. (net)	1762	2210	2833	4074	5171	6298
b. Claims on Other Public	292	300	372	454	522	600
c. Claims on Private Sector	10973	11889	13512	14998	16648	18646
Net Other Assets	-2304	-2614	-3278	-3841	-5272	-6808
			(Percentag	ge Change)		
Broad Money	12.6	13.6	9.4	9.8	10.5	12.0
Net Foreign Assets	10.7	26.8	-4.8	-15.6	19.1	22.4
Net Domestic Assets	13.2	9.9	14.0	16.7	8.8	9.8
Domestic Credit (a+b+c)	13.6	10.5	16.1	16.8	14.4	14.3
a. Claims on Govt. (net)	55.5	25.4	28.2	43.8	26.9	21.8
b. Claims on Other Public	24.8	2.7	24.0	22.0	15.0	15.0
c. Claims on Private Sector	8.6	8.3	13.7	11.0	11.0	12.0
Memorandum Items:						
Velocity of Money	2.3	2.3	2.3	2.4	2.4	2.4
Real GDP growth	3.5	6.9	7.1	6.0	7.0	7.8
Inflation rate (%)	5.7	5.6	6.2	9.0	7.5	6.0
Nominal GDP Growth	7.4	11.4	12.6	11.8	12.4	13.0
Overall Balance (Million USD)	3169.0	9274.0	-5379	-13729	5141	6993
Overall Balance (billion \$)	3.2	9.3	-5.4	-13.7	5.1	7.0
Nominal Exchange rate (TK/us\$)	85	85	92	109	114	117
Overall BOP Balance (In Billion, TK)	269	787	-495	-1496	586	820
Nominal GDP(In Billion, TK)	31705	35302	39717	44394	49876	56347

Source: Bangladesh Bank and GED Projections, 2023

# CHAPTER 4 REDUCING POVERTY AND INEQUALITY

#### 4.1 Overview

Along with GDP growth acceleration, Bangladesh has secured an enviable track record of reducing moderate and extreme poverty. This focus on poverty reduction is a hallmark of development strategy of Bangladesh. Progress with poverty reduction has been broad-based with rapid reduction in poverty in both urban and rural areas. Although some pockets of poverty remain, the spatial distribution of poverty by regions has also improved. In particular, the lagging regions of Rangpur, Rajshahi and Khulna have narrowed the gap in the distribution of poverty incidence with the more advanced regions of Dhaka, Sylhet, and Chittagong. This is the outcome of the government's policy to take specific programs to bring down poverty in lagging regions. The only concern is income inequality. Subsequent rounds of Household Income and Expenditure Surveys (HIES) show that despite falling poverty income inequality reflected by the Gini coefficient has been rising. The 8FYP recognized this challenge and identified a specific strategy to tackle the challenge of income inequality.

The advent of Covid-19 caused a spike in global poverty. There were fears that this may also be the case with Bangladesh. Short-term survey results emerging from several research organizations fueled these fears with alarming short-term poverty estimates for FY2020. This debate can now be put to rest since the preliminary findings of the HIES 2022 have just been announced. The results also allow an assessment of poverty progress during the 7FYP and the projected poverty path for the 8FYP.

# 4.2 Recent Progress with Poverty Reduction

Table 4.1 shows the recent progress in poverty reduction between 2010 and 2022. These 12 years capture the poverty progress during the 6FYP, the 7FYP and the first two years of the 8FYP.

Poverty Measure (%) 2010 2016 2022 Headcount rate (upper poverty line) 31.5 24.3 18.7 Headcount rate (lower poverty line) 17.6 12.9 5.6 Poverty gap (upper poverty line) 6.5 5.0 3.8 Poverty gap (lower poverty line) 3.1 2.3 0.9 Squared poverty gap (upper poverty line) 2.0 1.5 1.2 Squared poverty gap (lower poverty line) 0.8 0.6 0.2

Table 4.1: Progress with Poverty Reduction, 2010-2022

Source: HIES various rounds

The results show a remarkable continuation of poverty reduction progress over the past 12 years. Both moderate poverty (measured by the upper poverty line, UPL) and extreme poverty (measured by the lower poverty line, LPL) have come down sharply since 2010. The poverty reduction outcome for 2022 is strikingly good and reassuring that the government's poverty reduction strategy is working effectively. There could have been a temporary spike in transient short-term poverty during the first 3-4 months of Covid-related work stoppage, but this was quickly offset by the resumption of economic activities starting in July 2020. The fact that even though GDP growth rate slumped in FY2020, it remained positive at 3.5% also helped along with the pickup of remittances and the government's stimulus package including emergency income and food transfers to the poor.

Different measures of poverty suggest that the poverty progress has been broad-based. The sharp decline in extreme poverty (LPL) is a particularly remarkable result. Although disaggregated district level poverty data

has not yet been released, the reduction in extreme poverty to a mere 5.6% is indicative of the success of the government's efforts to penetrate in the concentrated areas of poverty pockets. The rapid reduction in poverty gap and the squared poverty gap indicators, which measure the depth and severity of poverty respectively, are similarly indicative of the breadth of the outreach of the government's poverty reduction strategy.

The broad-based nature of poverty reduction is further reinforced by the poverty reduction between urban and rural areas (Table 4.2). Poverty fell substantially in both urban and rural areas. The decline is particularly remarkable in the case of extreme poverty.

Table 4.2: Poverty Reduction by Location 2022

Location	2010		201	6	2022	
	Moderate poverty	Extreme poverty	Moderate poverty	Extreme poverty	Moderate poverty	Extreme poverty
Rural	35.2	21.1	26.4	14.9	20.5	6.5
Urban	21.3	7.7	18.9	7.6	14.7	3.8
National	31.5	17.6	24.3	12.9	18.7	5.6

Source: HIES 2010, 2016, 2022

# 4.2.1 Quality of Living Standards Indicators

It is well recognized that income-expenditure based measures of poverty, while extremely important, are one dimensional indicator. There are other factors that affect the living standards and quality of life of citizens. Economic literature now offer multi-dimensional measures of poverty. The time, effort and data intensity of these measures have limited the use of these measures of poverty for policy making. Nevertheless, some qualitative observations can be made. HIES 2022 reports on several non-income indicators of living standards. These include household access to electricity, access to safe water, and access to toilet facilities. Each of these indicators suggest a good improvement in living standards for both urban and rural population, which is testimony to the broadbased nature of progress with poverty reduction (Table 4.3).

Table 4.3: Progress with Living Standards (% of population)

Indicator of well being	HIES 2022	HIES 2016	HIES 2010
Access to electricity	99.3	75.9	55.3
Access to tap water <sup>4</sup>	19.3	12.0	10.6
Access to improved toilet facilities	92.3	61.4	51.1

Source: HIES 2022, BBS

# 4.3 Growing Income Inequality

While the rapid decline in the incidence of poverty, especially extreme poverty, and improvements in living standards is to be celebrated, the increase in income inequality remains a matter of concern for the government. HIES 2022 results suggest that this pattern of increase in income inequality has continued since 2016 (Figure 4.1). While the rise in Gini coefficient in 2022 is relatively modest, the magnitude of inequality and a pattern of long-

<sup>4</sup> Bangladesh already achieved near universal (97%) access to safe water sources, defined as tap water plus tube wells in 2010. So further progress is measured here in terms of access to tap water.

term rise remains a serious development challenge. Income inequality has been rising for both urban and rural areas. However, income inequality is more acute in urban areas.

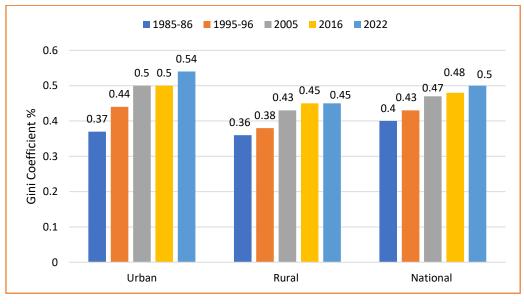


Figure 4.1: Long-Term Trend in Income Inequality

Source: HIES various rounds, BBS

# 4.4 Poverty Reduction Objectives, Targets and Strategies during the 8FYP

Poverty Reduction Objectives and Targets: The 8FYP sought to continue the progress with poverty reduction secured during the 6th Plan and the 7th Plan. Since the 8FYP is the first of the series of four medium-term plans intended to secure the poverty reduction targets of the PP2041, the poverty reduction targets in the 8FYP were set in accordance with those targets. Specifically, PP2041 aspires to eliminate extreme poverty by 2041. So, the target for extreme poverty reduction was based on moving along that poverty reduction path. The 8FYP targets for poverty reduction are shown in Table 4.4.

**Poverty Reduction Targets** FY2019 FY2022 FY2025 Actual Target **Target** Moderate poverty (%) 20.5 20.0 18.7 15.6 10.5 10.0 5.6 7.4 Extreme poverty (%)

Table 4.4: Poverty Reduction during the 8FYP Period

Source: 8FYP, NAW, BBS and HIES 2022, BBS

The 8FYP was launched immediately after the emergence of Covid-19. Anticipating an adverse effect of Covid on poverty reduction, the 8FYP moderated its poverty reduction targets for the first two years of the Plan. Indeed, it even allowed for a buildup of short-term poverty pressure in the first year of the Plan owing to Covid, and then gradually aimed to recover the lost ground.

Poverty Reduction Strategies: The solid performance with poverty reduction during the 6th Plan and the 7th Plan provided the government confidence that its ongoing poverty reduction strategies were appropriate and should

be continued. So, essentially, the proposed poverty reduction strategies for the 8FYP is the same as adopted during the 6FYP and the 7FYP. These strategies comprised of the following elements:

- (a) Strong focus on inclusive growth: The inclusive growth strategy of the 8FYP sought to accelerate the pace of GDP growth with special emphasis on the role of a diversified agriculture sector; greater reliance on export-oriented labor-intensive manufacturing; strengthening the dynamism of labor- intensive micro and small enterprises in both urban and rural areas; and strengthening rural and urban construction activities. The inclusive growth strategy essentially sought to increase the job creation aspect of growth.
- (b) Strong emphasis on financial inclusion: Access to finance is critical to support self-employment and asset creation for production purposes. The government's poverty reduction strategy placed strong emphasis to widen the access of the poor to credit and other financial services.
- (c) Emphasis on human capital: Building up human capital of the poor is necessary to allow greater participation of the poor in productive activities. The government's poverty reduction strategy put considerable emphasis on investing in basic education, health and literacy.
- (d) Facilitating outward migration: The flow of foreign remittances has been a major enabler of poverty reduction in Bangladesh since the early 1990s. The government built this factor in its poverty reduction strategy by finding ways to facilitate the outward migration of workers through training, information flows, cost reduction and other support.
- (e) Special social protection programs for the extreme poor: To reduce extreme poverty the government's poverty reduction strategy included a range of programs aimed at the vulnerable population including the old, widow, child, mother, and the physically challenged.

# 4.5 Progress with Poverty Reduction Targets and Strategies during the Mid-Term of the 8FYP

Progress with poverty reduction during the first three years of the 8FYP is indicated in Table 4.4 above. The HIES 2022 results suggest that the government's poverty reduction strategies for both the moderate poor and specially the extreme poor are working well. The anticipated increase in poverty in FY2021did not happen for a number of reasons.

First, as noted earlier, the covid-19 related shortfall in income and economic activity was considerably modest when compared with the global experience. Unlike many countries including India that experienced a seriously negative GDP growth in the first year of the covid-19 (FY2020), Bangladesh experienced a positive GDP growth rate of 3.5%. The rural economy was relatively untouched by covid-19 and most adverse impact on economic activity happened in the urban areas.

Secondly, and more importantly, the government's bold decision to reopen economic activities within the fourth month of the covid pandemic bore very good results. The government was able to support this decision with health and safety measures including use of masks, social distancing, and adoption of all available preventive and curative measures to contain the spread of covid-19. In the event, these policies were instrumental in controlling the spread of Covid while helping the fast recovery of GDP growth, employment and incomes.

Third, there was a significant and unanticipated surge in remittances that allowed consumption levels to be preserved in the face of shortfalls in incomes from domestic forces (Figure 4.2). World Bank and other global sources were projecting a decline in remittance income for Bangladesh and other countries as a fallout of the covid pandemic. But these projections were offset by Bangladeshi workers who rushed in to provide a considerably larger inflow of remittances in the first 18 months of covid that considerably negated any adverse effects of covid on family incomes from domestic sources.

Figure 4.2: Inflow of Remittances (USD billion)

Source: Bangladesh Bank

Finally, the government's stimulus packages announced in April 2020 to fight covid included several income and food support provisions for the extreme poor that played an important role to curb any rise in extreme poverty from covid effect.

A key element of the government's poverty reduction strategy is acceleration of inclusive growth. The government had considerable success during the 6th and the 7th Plans and there was renewed emphasis on this poverty reduction instrument during the 8FYP. Chapter 3 discusses that GDP growth slumped initially in FY2020 but recovered quickly in FY2021 and FY2022. The average growth rate during the 8FYP in the first two years was n 7.0% as compared with 6.8% in the 7FYP. This is a good indication for poverty reduction during the 8FYP. But also important is the implementation of inclusive growth strategy that impacts on the poverty responsiveness to GDP growth captured by the growth elasticity of poverty. Figure 4.3 shows the elasticities for moderate and extreme poverty. The elasticity of moderate poverty remains virtually unchanged at 0.64 for both HIES 2022 and HIES 2016, whereas the elasticity for extreme poverty shot up by astounding magnitude from 0.77 in 2016 to 1.97 in 2022. These results suggest that while the benefit in poverty reduction per unit of GDP growth remained virtually unchanged between the 2016 and the 2022 HIES for the moderate poor, this more than doubled for the extreme poor.

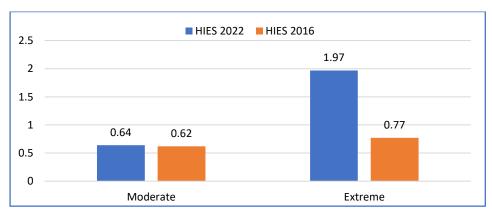


Figure 4.3: Growth Elasticity of Poverty (%)

Source: HIES 2022 and BBS National Accounts

While the magnitude of the increase in elasticity for extreme poverty is too high and requires in-depth research once the full HIES 2022 is available, it is nevertheless possible to relate this result with several other developments in the economy. Most of the extreme poor are located in rural areas and in poverty pockets in the Northern districts of Rajshahi and Rangpur. While the growth process has not changed substantially between 2016 and 2022, the rural economy has transformed in several ways that appears to have increased the participation of the rural extreme poor in the growth process.

First, the Labor Force Survey 2022 shows a significant increase in female labor force participation rate from 36% in 2016-17 to 43% in 2022. This increase is solely because of a surge in female labor force participation rate from 39% to 51%. These female labors are mostly engaged in agriculture. As a result, contrary to past long-term trend the share of agriculture workforce has gone up 41% to 45%. Most of the agricultural female workers likely belong to the extreme poor group and the substantial increase in the workforce has benefited their income and poverty reduction.

Second, the agricultural workers in the poorest districts on Northern areas, such as Gaibandha and Kurigram, have become season migrant workers where they migrate to the labor-shortage areas such as Dhaka and Comilla during the harvest season and earn a substantial amount of income. The improvement in communication and availability of mobile financial services has greatly facilitated these migrant workers who can remain connected with their families through mobile phones and also transfer money to support the families without the hassle and expense of travelling back and forth.

Third, and more generally, there is a substantial outward migration of workers away from natural disaster-prone poverty pockets to the safer and more affluent urban areas.

Finally, there is now a growing range of micro-financial programs managed by NGOs for the extreme poor that has increased the volume of non-farm activities and income. Indeed, the rural service industry has expanded rapidly providing a range of services in health, education, construction, trade and transport that has increased the demand for rural employment.

These factors suggest that the increase in the participation of the extreme poor in the growth process is very much credible, although the magnitude of the improvement needs further research and investigation.

In addition to the progress with inclusive growth, the 8FYP's strategies to lower poverty through improving access to MFS, and by enhancing participation in outward migration have progressed well. The access to MFS has now become a major enabler of lowering the transaction costs for the poor who do not have other access to financial services. There is now greater participation and competition in the provision of MFS that has greatly facilitated money transfers from poor workers to their families. Efforts are now underway to offer small loans at low transaction costs using MFS.

Regarding migration, the spread of migration opportunities to less-served districts are being addressed through an active information campaign and labor training.

Two areas where the progress has been less than anticipated concerns investment in human capital for the poor and the supply of income transfers to the poor through social protection. In the area of human capital, there is continued progress with increasing the adult literacy rates but investments in education, training and healthcare are constrained by resource shortages. As noted in Chapter 3, the budget allocations for health education could not be implemented due to resource constraint. This is also a major issue for financing social protection programs (see Table 3.6).

# 4.6 Progress with Reducing Income Inequality

8FYP Targets for Reducing Inequality: The 8FYP recognized the need to address the growing income inequality problem and adopted a comprehensive redistribution policy. The 8FYP set two targets for reducing inequality, one for income and the other for consumption. Historically, consumption inequality has not been a serious problem. The Gini coefficient for consumption inequality has been relatively low and stable. The main challenge has been income inequality which is not only rising but also the magnitude is high by global standards. The 8FYP targets for reducing inequality are indicated in Table 4.5. The 8FYP expectation was a significant reduction in both consumption and income inequality between 2026 and 2022. Based on that progress, a further target for gradual reduction in inequality was set.

Table 4.5: 8FYP Targets and performance for Inequality

Indicator	2016	2022		2025
	Actual	Target	Actual	Target
Gini coefficient for	0.324	0.299	0.334	0.450
consumption				0.336
Gini coefficient for income	0.482	0.459	0.499	0.290

Source: 8FYP, HIES 2016, HIES 2022

The actual inequality outcomes from HIES 2022 show a marginal increase in consumption inequality between 2016 and 2022 but a significant increase in income inequality. Therefore, the 8FYP inequality targets for both consumption and income are off track. For consumption, the deviation is relatively small, but is substantial for income.

Progress with Implementation of 8FYP Inequality Reduction Strategy: In addition to strengthening the inclusiveness of the growth strategy, the core element of the 8FYP strategy for reduction in income inequality was the adoption and implementation of a redistributive fiscal policy. The main objective of the redistributive fiscal policy was to substantially increase public spending on health, education, social protection and rural infrastructure and water and financing these additional spending by generating additional tax resources, by improving the financial profitability of SoEs and through cutbacks in subsidy spending.

The result that emerges on implementation of this redistributive fiscal policy is remains to happen. Instead of increasing spending on the core areas for improving income distribution, there has been an actual reduction so fare during the first 4 years of the 8FYP. The primary reason for this inability to implement the redistributive fiscal policy is the severe shortage of resources, as reviewed in Chapter 3, the implementation of the 8FYP public resource mobilization strategy has considerably lagged behind both on the tax front and on reforming the SOEs. Renewed efforts will be necessary to strengthen the domestic resource mobilization effort in the next two years of the 8FYP. The success with this resource mobilization effort will lay the basis for implementing the redistributive fiscal policy of the 8FYP in the remaining two years.

# 4.7 Summary and Conclusions

The 8FYP's progress with poverty reduction has been extremely solid so far. It is a tribute to the government's implementation of the poverty reduction strategy that it not only successfully offset the adverse effects of Covid-19, but it also secured substantial reduction in moderate and extreme poverty. The progress in reducing extreme poverty at a pace that is much higher than anticipated in the 8FYP is truly inspiring. Much of this happened

from an increase in the inclusiveness of the growth process. Greater labor force participation of rural female labor is indicative of this. Additionally, the availability of mobile phones and the spread of digital technology and MFS is sharply lowering rural labor mobility barriers, which has also contributed to increasing the inclusiveness of the growth process. Spread of micro-credit and greater participation in outward migration has helped in creating non-farm jobs and incomes for the poor. The improvements in non-income measures of living standards reflected in near-universal access to electricity, improved access to tap water, and access to improved sanitary facilities are important dimensions of this poverty progress.

The only area of concern is the lack of progress in reducing inequality. The inequality targets of the 8FYP are substantially off-track and will likely be missed when the Plan is completed. The main reason for this is the inability to implement the Plan's redistributive fiscal policy targets. While the inequality targets of the 8FYP will not be met, it is nevertheless essential to beef up the domestic resource mobilization efforts and implement at least a part of the redistributive fiscal policy, especially in the area of health, education and social protection. This is a major challenge moving forward.

# CHAPTER 5 AGRICULTURE AND WATER RESOURCE MANAGEMENT

# 5.1 Development Context

The agriculture sector which includes crops, fisheries, livestock, and forestry in Bangladesh significantly contributes to poverty reduction, and food security through adequate and nutritious food, employing 45% of the workforce and contributing to 12% of the country's GDP. However, the agriculture sector in Bangladesh confronts numerous challenges, including low farm incomes and productivity due to inadequate commercialization and diversification of farm products. Climate change and natural disasters make agriculture highly vulnerable, causing significant impacts from floods and cyclones, leading to loss of crops, livestock, and agricultural land. These disasters also contribute to soil erosion, fertility loss, and waterlogging, posing long-term threats to agricultural productivity. Additionally, increased salinity in coastal areas may alter the nutritional composition of foods, such as rice.

The emergence of Covid-19 raised concerns for farm production, but unfortunately, the impact on the agricultural sector was relatively small, mainly affecting agricultural exports due to global trade disruptions. The rural economy did not experience prolonged lockdowns, though there was some short-term disruption in farm input movements. Though urban areas faced some disruptions in food supply it was temporary due to taking initiatives by the government of Bangladesh. Despite the challenges, the overall agricultural sector grew at a healthy pace of 3.42% during FY2020, similar to the growth in FY2019, while the overall GDP growth declined significantly from 7.9% in FY2019 to 3.5% in FY2020. The agriculture GDP, however, has further declined to 3.05% in FY 2022, while that of crop and horticulture increased from 2.29% in FY 2021 to 2.61% in FY 2022.

The ongoing Ukraine War has some serious consequences for agriculture. The soaring prices of fuel oil and fertilizer have sharply increased the production cost of agriculture. Although the government intervened by providing subsidies, the pressure on the budget is immense and not sustainable.

In building smart Bangladesh through achieving SDG-2 (zero hunger), the 8FYP aims to increase farm productivity, diversification, and climate resilience in agriculture, addressing challenges like commercialization, climate change, natural disasters, and the Ukraine War. Minimizing climate change and emphasizing disaster control, and water management, the chapter reviews progress in implementing strategies, policies, and programs for agriculture and water.

The first section deals with overall agriculture performance followed by a review of progress in the crops, livestock, and fisheries sub-sectors. The final section reviews the performance of water resource management in Bangladesh against the objectives, targets and strategies of the 8FYP.

# 5.2 Overall Progress of the Agriculture Sector under the 8FYP

The 8th Plan's agricultural development vision is to ensure food and nutritional security, increase sustainable intensification and diversification of climate resilient agricultural production through increased commercialization, and improve livelihoods through technological innovations. The primary emphasis is on consolidating and expanding food grain, livestock, and fisheries production, as well as developing policies and diversification strategies.

The 8FYP DRF set three specific targets for the agricultural sector: (a) agricultural sector growth rate; (b) percentage of agriculture budget allocated to agricultural research; and (c) reduction in the prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES). Outside the DRF, the 8FYP specified additional targets for production in specific sub-sectors. Progress with the subsector production targets is assessed in the context of performance review in these specific subsectors later in the Chapter.

Growth Performance: Growth in the agricultural sector during the first three years under 8FYP is shown in Figure 5.1. While the agricultural sector's growth performance remains robust and in line with long-term trend, the actual performance falls short of the targets set in the 8FYP. The government has taken several initiatives to support the growth of agriculture, including investment in agricultural research, irrigation systems, and the use of modern technologies. These efforts have helped to increase agricultural productivity and reduce dependence on imports of food items.

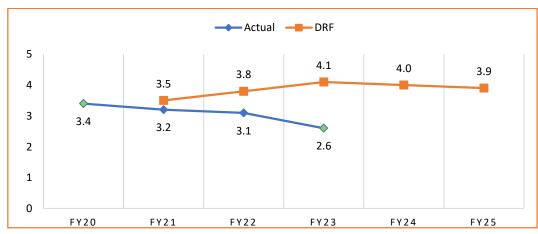


Figure 5.1: Agricultural Sector GDP Growth Rate (%): 8FYP Targets and Actual

Source: BBS, 8FYP

Breaking down by components, the agriculture sub-sectors outside fisheries have shown resilience and demonstrated a strong performance (Table 5.1). This has been possible because the government has provided extensive support to farmers during the pandemic, including subsidies, loans, and incentives to boost agricultural production. The government has also provided huge subsidies on fertilizer, irrigation and transport to compress the cost effects of the surge in global prices of fertilizer and fuel oil.

The fisheries sub-sector's performance has weakened over the past two years that has lowered the overall agriculture sector performance. This is discussed in greater detail later in the chapter.

Items FY2020 FY2021 FY2022 FY2023 Agriculture 3.17 3.05 3.42 2.61 3.92 3.20 A. Agriculture and Forestry 3.42 3.01 2.50 2.29 i) Crops & horticulture 2.61 2.26 2.94 ii) Animal farming 3.19 3.1 3.23 iii) Forest and related services 5.34 4.98 5.08 5.16 4.4 B. Fisheries 4.11 2.64 1.14

Table 5.1: Post-Covid Growth Performance of Agriculture Sub-Sectors (%)

Source: BBS, BER, and 8FYP

Progress in Food Security: The Prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES) provides an alternative household-level perspective by assessing people's perceptions and challenges in accessing nutritious and sufficient food. On this scale, severe food insecurity, for example, indicates no food for a day or more. The government of Bangladesh set the target of the prevalence of Moderate or Severe Food Insecurity under 8FYP. Unfortunately, actual data is only available for 2021. It is evident that the 8FYP

targets were missed for both moderate food insecurity and severe food insecurity in 2021 (Table 5.2). This shortfall has occurred mainly due to the effect of Covid-19. Given the strong recovery of GDP growth and exports and the rapid increase in incomes of both the rural and urban poor noted in HIES 2022, it is most likely that there has been good progress in both moderate and severe FIES during 2022 and 2023.

Table 5.2: Prevalence of Moderate and Severe Food Insecurity in the Population, based on the Food Insecurity Experience Scale (FIES) (in percentage)

Prevalence's	Target FY2021	Actual FY2021	Target FY2022	Actual FY2022	Target FY2023	Actual FY2023
Moderate	28	31.9	27.0	31.7	26.0	31.9
Severe	10.0	10.5	9.0	10.7	8.0	10.5

Source: FAO, FPMU

**Budget Allocation Progress in Agriculture:** One of the key policy instruments for supporting the agriculture sector is public spending on agriculture. The 8FYP set specific targets for the share of research spending in total agriculture spending. Unfortunately, the Ministry of Agriculture has yet to provide this information. However, it is possible to look at total agricultural spending and relate that to the implementation of the 8FYP strategy for agriculture. Total agricultural current and development spending excluding the water sector is shown in Table 5.3.

Table 5.3: Budget Allocations for Agriculture Sector (Taka billion current prices)

	FY2019	FY2020	FY2021		FY2022		FY2023	
	Actual	Actual	Budget	Actual	Budget	Actual	Budget	Estimated
Current	131	153	163	131	167	210	237	237
Development	30	29	56	47	63	54	82	66
Total Agriculture*	161	182	219	178	230	264	319	303

Source: MoF Monthly Fiscal Reports \*Excludes allocation for Ministry of Water Resources (MoA)

The emphasis placed on agriculture is evident from the growing amount of resources spent on agriculture during the 8FYP. However, the largest increase in spending has happened on fertilizer subsidy owing to the rise in global prices. This tends to reduce the resources for other priority uses. Additionally, there is a shortfall in the amount of resources actually used compared to the budget in the context of development spending. This shortfall tends to limit the resources available for agricultural research and development and agricultural extension services, both of which are critical to boosting the sector's productivity and competitiveness. Nevertheless, development spending on agriculture has expanded at a healthy pace of 15% in constant 2019 prices, which is a good development. This also explains the continued good performance of agriculture.

# 5.3 Progress in the Crop Sub-Sector

The crop sub-sector is a vital component of the economy of Bangladesh, providing employment, income, and food security for millions of people, as well as contributing to the country's economic growth and export potential. The crop sub-sector includes the production of crops such as rice, wheat, maize, pulses, oilseeds, fruits, vegetables, and spices. Over the past three decades, Bangladesh has made tremendous progress in improving crop production and food security, with higher yield rates for major products. Within rice, productivity growth has been most pronounced for Boro (4.154 MT/Ha), followed by Aman (2.566 MT/Ha, and Aus (2.517 MT/Ha) in FY2020. Productivity of wheat and maize have also increased significantly.

# 5.3.1 Performance of Crop Sub-Sector under 8FYP

# In the search for ensuring food security, the 8FYP set several multi-dimensional objectives and strategies:

- Increase productivity, ensure growth through more efficient and balanced utilization of land, water, and other resources, and minimize the yield gap of crops.
- Develop climate tolerant variety of crops, particularly rice, and wheat.
- Produce quality seed.
- Develop institutional infrastructure for farm income.
- Enhance and restore the agricultural supply chain aftermath of the COVID-19 crisis.
- Modernize agricultural research and develop skilled manpower.
- Ensure marketing facilities for fair prices.
- Enhance farm mechanization by introducing precision agriculture and
- Solar panel installation.

Progress in Crop Production: The progress with the production targets for major crops of the 8FYP is indicated in (Table 5.4). The production performance for major crops is broadly consistent with the targets set in the 8FYP. There are some shortfalls in the case of wheat, potato and lentils that may require some attention. But broadly speaking, the progress with production targets is positive.

Table 5.4: Projected and Actual Production of Selected Crops under 8 FYP

Crops	Projected (MMT)					Actual (MMT)	
	2020-21	2021-2022	2022-2023	2023-2024	2024-2025	2020-21	2021-2022
Rice	39.64	39.48	41.57	-		37.61	38.39
Wheat	1.29	1.23	1.16	1.41	1.46	1.09	1.09
Potato	11.37	10.65	10.55	12.20	12.54	9.89	10.15
Oil seeds	1.25	1.25	1.38	1.26	1.29	1.20	1.23
Vegetables	19.71	20.02	21.30	22.74	23.96	19.72	21.67
Maize	5.69	5.87	5.77	6.56	6.89	5.66	5.63
Spices	4.52	4.93	5.28	-	-	4.92	5.19
Pulses	1.09	1.02	0.94	1.21	1.25	0.93	0.84
Jute*	8.28	8.61	8.55	8.99	-	7.73	8.43

Sources: 8FYP, BBS, MOA

Note: \* indicates million bales for Jute

Progress in Food Consumption Pattern: An important positive finding that has emerged from HIES 2022 is the improving intake of healthy food mix, facilitated by the growing diversification in crop production. The consumption dependence on rice is falling in favor of a more balanced and diversified food basket consisting of greater intake of pulses and vegetables (Table 5.6)

Table 5.5: Average food intake/consumption (gm/person/day)

Item	2010	2016	2022
Rice	416	367.2	328.9
Wheat	26	19.8	22.9
Pulses	14.3	15.7	17.1
Vegetable	166.1	167.3	201.9
Fruits	44.7	35.8	95.4

Source: HIES, 2022, BBS

Progress of Strategies under 8FYP: The government has taken several policy measures to promote the development of the crop subsector. These initiatives aim to improve the productivity, competitiveness and sustainability of the sector, as well as to enhance the livelihoods of farmers who depend on crop production for their income and food security.

Agricultural Input Subsidy Program: The Bangladesh government launched an agricultural input subsidy program to provide farmers with subsidized fertilizers (see Table 5.6), seeds, and other inputs to improve their crop production. The program is expected to benefit millions of farmers and increase agricultural production in the country. In addition to the agricultural input subsidy, a 20% rebate on electricity bills for the use of electricity-driven irrigation equipment is provided.

Table 5.6: Government Subsidies in Fertilizers (Taka Billion)

Year	Urea Non-urea		Total
2015-16	23.37	39.29	62.66
2016-17	11.82	21.27	33.09
2017-18	16.95	31.91	48.86
2018-19	32.99	41.74	74.73
2019-20	29.54	37.62	67.16
2020-21	24.86	49.35	74.21
2021-22	24.42	125.00	149.42
2022-23	73.06	184.60	257.66

Source: FPMU

- Digital Agriculture Extension Services: The government is implementing a digital agriculture extension services program to provide farmers with access to agricultural information and services through digital platforms, such as mobile phones, web application and the internet. The program aims to improve farmers' knowledge and skills in crop production, as well as enhance their access to markets and financial services.
- Agriculture Credit Program: The distribution of agricultural and rural loans through banks and financial institutions is continuing to support farmers in the purchase of inputs required to improve crop production (Table 5.7). This helps to strengthen the country's food security and elevate the role of the agricultural sector and rural areas in overall socioeconomic development. Bangladesh Bank has developed an extensive agricultural and rural credit policy and program to make agricultural and rural credit disbursement easier and more convenient. The agricultural and rural credit policy and program for FY 2021-22, as in previous years, is designed to accelerate agricultural credit to the poor.

Table 5.7: Year-wise Disbursement of Agricultural Credit (in crore Tk.)

Fiscal Year	Target	Disbursement	Disbursement Percentage
2019-20	24124	22749	94.30
2020-21	26292	25511	97.03
2021-22	28391	28834	101.56
2022-23	30811	32829	106.55

Source: BBS, BB, MoA

- Agricultural Mechanization Program: The government is implementing an agricultural mechanization
  program to promote the adoption of modern farming technologies, such as power tillers and tractors,
  to improve crop productivity and reduce labor costs for farmers. The program aims to benefit around
  millions of farmers in the country.
- Crop Diversification Program: The government is continuing its crop diversification program to promote the cultivation of high-value crops, such as foreign fruits- Dragon, Avocado, Coffee, Cashew nut, various vegetables, and spices, to improve farmers' income and enhance the country's export potential.
- Climate Resilient Agriculture Program: The government, with the support of the World Bank, is implementing a climate-resilient agriculture program to promote the adoption of climate-smart agriculture practices. The program is investing in research and development of new crop varieties, as well as supporting the development of irrigation systems and other infrastructure to improve crop resilience to climate change. Agriculture research organizations have invented flood, drought, salinity and high temperature tolerant crop varieties to cope with climate change effect. Modernization of seed production, processing and distribution system have been introduced to ensure quality seed supply to farmers (Table 5.8).

Table 5.8: Climate Tolerant Seed Production (MT)

Items	2020-2021	2021-2122	
Rice seed (salinity, drought ,cold, submergence, flood, tidal tolerant)	6164.325	5681.868	
Wheat seed ( salinity and temperature tolerant)	16227.820	15800.810	
Pulses seed (drought and temperature tolerant)	129.670	134.500	
Oil seed (salinity tolerant)	174.430	63.012	

Source: MoA

### 5.4 Livestock Sub-Sector

Livestock sub-sector plays a significant role in Bangladesh's economy, contributing to the country's GDP and employing over 15% of the population. Bangladesh has a large livestock population, including cattle, buffalo, goats, sheep, and poultry. The livestock sector is predominantly small-scale and scattered, with about 95% of livestock owners owning less than five animals. The sub-sector is composed of several activities, including dairy farming, beef and mutton production, poultry farming, and egg production. Landless people's sustenance, rural poor families' options for a living, and the possibility of reducing poverty are all impacted by livestock resources.

The production of livestock continued to increase in the 7FYP. In FY2020, total livestock and poultry production increased by around by 1.24 times compared to the production in FY2011.

## 5.4.1 Performance of Livestock Sub-Sector under 8FYP

The eighth plan aims to further increase livestock production. Growing incomes has facilitated the expansion of the meat market and supply of non-poultry meat has lagged behind supply causing a steady increase in real meat prices. The 8FYP focuses on developing the infrastructure of the livestock sector and promoting private investment. The specific objectives are as follows:

- To encourage sustainable milk, meat, and egg production, including processing products.
- To ensure a production system and consumption that are nutritionally sensitive to combat malnutrition among poor and vulnerable population groups, including children and women.
- Promote opportunities for landless, small, and marginal farmers to generate stable income and find work.
- To create affordable, climate-resilient feeds and fodders

Progress in Milk, Meat, and Egg Production: The target of the eighth plan is to increase livestock production, improve animal health, enhance the quality of animal breeds, develop the dairy and poultry industries, promote private investment in the sector, and meet the growing demand for animal protein in the country. Table 5.9 shows the progress with production in the first two years of the 8FYP. The production of milk is on track with target growth for the 8FYP. Production in the first two years averaged 9.6% as compared with the 8FYP target of 8.7%. For meat, the production in the first two years is ahead of the target set for the end of the 8FYP. Concerning egg production, this is already close to the 8FYP target within the first two years. This is remarkable progress and shows the growing role of protein supply in Bangladesh, which augurs well for the health and wellbeing of the population.

Several factors have contributed to this better-than-expected progress in livestock including growing demand owing to growth in real income, increase in relative prices, growing private investment in commercial livestock, the availability of microcredit, the spread of electricity, and improved transport services.

Production items FY2021 FY2022 FY2025 Target Milk (MMT) 11.99 13.07 16.37 9.27 Meat (MMT) 8.44 8.51 20576.4 23353.3 23393 Eggs (millions)

Table 5.9: Target and Achievement of Milk, Meat, and Egg under 8 FYP

Source: Department of Livestock Services

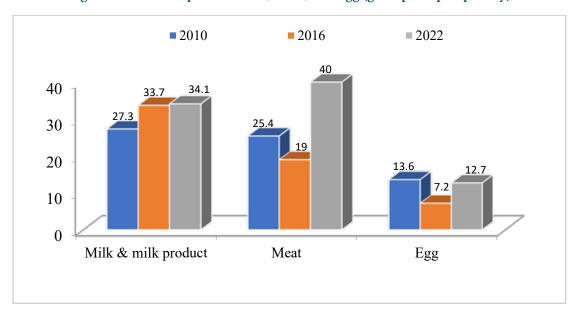
Progress in the availability and consumption pattern of Milk, Meat, and Egg: While the per capita consumption of milk, meat, and eggs in Bangladesh remains relatively low compared to several lower middle-income countries, there has been a remarkable increase in recent years owing to the expansion of production noted above (Table 5.10). The expansion of per capita availability of milk and eggs in particular has been remarkable, growing at 9% and 10% respectively. HIES 2022 also confirms this enhanced consumption of protein (figure 5.2)

Table 5.10: Availability of Milk, Meat, and Egg (gm per capita per day)

Production year	Milk	Meat	Egg
2015-16	125.59	106.21	75.06
2019-20	175.63	126.2	104.23
2020-21	193.38	136.18	121.18
2021-22	208.61	147.84	136.01

Source: Department of Livestock (DLS)

Figure 5.2: Consumption of Milk, Meat, and Egg (gram per capita per day)



Source: HIES Various Round, BBS

Progress with Strategies for Livestock Production under 8FYP: The government of Bangladesh has taken several initiatives to promote the development of the livestock and poultry sectors in the country. These initiatives aim to improve the productivity, competitiveness, and sustainability of these sectors, as well as enhance the livelihoods of smallholder farmers who depend on livestock and poultry for their income and food security. Some of these are:

- Livestock Development Project: The government is implementing the Smallholder Livestock Development Project to increase productivity and competitiveness of smallholder livestock producers in the country. A Livestock Services Project is also under implementation. The project is investing in infrastructure, technology, and training for smallholder farmers, as well as providing support for market development and value chain strengthening.
- National Vaccination Program: The government has launched a national vaccination program to
  control and prevent major diseases such as foot and mouth, avian influenza, and Newcastle disease for
  livestock and poultry. The program provides vaccines and training for vaccination campaigns, as well
  as surveillance and monitoring of disease outbreaks. To prevent diseases and reduce the financial risk
  of diseases, the government produced and delivered 31.16 crore dose vaccines for 17 cattle and poultry
  diseases in fiscal 2020-21. To prevent trans-boundary diseases, 24 animal quarantine stations are operating

at various river ports, land ports, and airports. In addition, efforts have been made to establish Veterinary Public Health Labs, including the modernization of Central and Field Disease Investigation Labs for the control of Zoonotic Diseases in order to protect public health. In Fiscal Year 2020-21, 10.93 crore livestock, 53,127 pet services, and 9,282 disease surveillance activities were carried out.

- Artificial Insemination Program: The government has launched an artificial insemination program through 15,389 artificial insemination subcenters/points to improve the genetic quality of livestock and enhance their productivity. Artificial insemination coverage has increased from 28% to 55% in the last decade. Semen production, artificial insemination, and crossbred calf production increased to 142.58 percent, 151.49 percent, and 227.50 percent, respectively, during the review period. During the fiscal year 2020-21, 95.41 lakh doses of quality sperm were produced, and 90.64 lakh breed able cows/heifers were inseminated, with approximately 35.37 lakh crossbred calves born. 64.85 lakh doses of quality sperm were produced by February 2022 in FY 2021-22, and 61.54 lakh breed able cows/heifers were inseminated. Approximately 22.86 lakh crossbred calves were born during this time period.
- Poultry Feed and Nutrition Program: The government is implementing a program to improve the availability and quality of poultry feed and nutrition in the country. The program is investing in research and development of new feed formulations, as well as supporting the development of feed mills and training for poultry farmers.

#### 5.5 Fisheries Sub-Sector

The fisheries sector plays an important role in the economy of Bangladesh, contributing significantly to employment, food security, and export earnings. Bangladesh is a country with a vast network of rivers, canals, and ponds, which provides favorable conditions for fish farming. Despite the COVID-19 situation, this sector's growth performance was strong in FY2020 and FY2021. However, the value-added performance has weakened in the most two recent years of FY2022 and FY2023. In FY2023, fisheries accounted for 2.3% of the national GDP and 21.5% of the total agricultural GDP. More than 12% of the population is directly or indirectly engaged in this sector.

#### 5.5.1 Performance of Fisheries Sub-Sector under 8FYP

The 8FYP aimed to improve the productivity, sustainability, and profitability of the fisheries sub-sector, while also promoting environmental conservation and social equity. Some of the specific objectives of the plan for the fisheries sub-sector:

- Sustainability of production and conservation of fisheries resources.
- Reduce poverty by fostering self-employment and improving the socioeconomic conditions of fishermen.
- Exporting fish and fisheries products will help you achieve economic growth and earn foreign currency.
- Create and maintain sanctuaries for fish and wetlands.
- Utilize the blue economy's potential, conduct stock assessments of marine fisheries, and promote sustainable exploitation of marine fishes, particularly tuna and tuna-like other pelagic fishing.
- Encourage a long-term value chain for fish and fisheries products.
- Ensure the domestic and international markets have safe and high-quality fish supplies.

Progress with production and productivity improvements under the 8FYP: Table 5.11 shows production trend of fisheries while Table 5.12 shows the fisheries productivity for the different water bodies. The data suggest that total production and the productivity of different water bodies is in line with the 8FYP targets. Overall,

Bangladesh has emerged as a major global producer of fish. According to FAO, Bangladesh is now ranked the world's third largest inland open water (capture) fish producer and fifth among inland closed water (aquaculture/culture) fish producing countries in the world.

Table 5.11: Progress in Fish Production under the 8FYP across Different Water Bodies (MMT)

Water Bodies	FY2021 Actual	FY2022 Actual	FY2025 (Target)
Open Water	1.30	1.32	1.36
Acquaculture	2.64	2.73	2.92
Marine Artisana	0.56	0.57	0.58
Marine Industrial	0.12	0.14	0.13
Total	4.62	4.76	5.00

Source: Department of Fisheries (DoF)

Table 5.12: Progress in Fish Productivity across Different Types of Water Bodies

Sources		vity (MT/Ha) 020-2021	Productivity (MT/Ha) in 2024-2025		
	Projected	Actual	Projected		
Open water sources					
River and estuaries	0.39	0.39	0.46		
Sundarbans	0.11	0.12	0.11		
Beel	0.92	0.92	0.97		
Kaptai Lake	0.15	0.18	0.16		
Floodplain/Haor	0.31	0.31	0.32		
Aquaculture sources					
Pond	5.48	5.13	6.29		
Baor	1.70	2.00	1.77		
Seasonal cultured waterbody	1.76	1.51	1.93		
Shrimp/prawn Farm	0.99	1.06	1.07		
Crab	0.13	1.28	0.14		
Pen culture	2.00	1.95	2.09		

Source: DoF

Progress in Fish Consumption Pattern: The fish consumption pattern in Bangladesh is influenced by various factors such as culture, religion, availability, and affordability. Fish is a significant part of the Bangladeshi diet and is a major source of protein for the population. According to the latest available data from the HIES for the year 2022, per capita fish consumption in Bangladesh is 67.8 gm per day, as opposed to the requirement of 60 grams, and almost has increased by 8.30% from the period 2010 to 2022 (Figure 5.3).

69 67.8 68 67 66.1 66 65 64 62.6 63 62 61 60 2010 2016 2022

Figure 5.3: Average Fish Consumption (gram per capita per day)

Source: HIES, Various Round, BBS

Progress in Export Earnings from Fish: Despite the challenge of shipping disruption during Covid-19 and price fluctuations and demand reduction due to the ongoing Russia-Ukraine conflict, the government of Bangladesh achieved remarkable progress in fish export. Bangladesh earns a huge foreign currency by exporting fish and fishery products including live fish, frozen shrimp, frozen fish, chilled fish, dry fish, and salted fish. Bangladesh exports primarily galda, bagda, harina, and other species of shrimp, as well as various marine fishes like sea bass, datina, pomfret, cuttlefish, crab, and chucia. Additionally, exports of shark fins, finfish scales, and shrimp shells are made. More than 50 countries, including the European Union (EU), the United States, Japan, Russia, China, and others, imported fish and fishery products from Bangladesh. In FY2022, Bangladesh earned BDT 5.19 thousand crore by exporting 74.04 thousand MT of fish and fishery products (DoF, 2020-2021) (Table 5.13).

Table 5.13: Exports of Fish and Fisheries Products

Year	Export quantity (Thousand MT)	Export value (Thousand crore Tk.)				
2015-16	75.34	4.28				
2016-17	68.31	4.29				
2017-18	68.94	4.31				
2018-19	73.17	4.07				
2019-20	70.95	3.99				
2020-21	76.59	4.09				
2021-22	74.04	5.19				

Source: DoF

Progress with Strategies under 8FYP: The 8FYP focuses on the fish production and management system's sustainability (environmentally, socially, and economically compatible) and quality (improved traceability for compliance). Therefore, the following priority strategies have been undertaken and have progressed under 8 FYP:

- Need-based Programs: In inland fisheries productivity has been increased through unique programs
  such as biological planning, habitat restoration, coordinated management, issuance of fishers' rights,
  and enforcement of conservation acts. These programs involve partnerships between government
  organizations, NGOs, local elites and fishers. Special programs for aquaculture include carp brood banks,
  shrimp hatcheries, community-based farming, beel nurseries, and monitoring and capacity building of
  local government bodies.
- Sanctuary establishment, conservation, and biodiversity protection: The government has established about six Hilsa sanctuaries and about 400 fish sanctuaries. Also, the government has taken the following initiatives: Identifying 7,000 sq. km. major Hilsa breeding area in Bay of Bengal, declaring 3,188 sq. km. Marine Reserve Area adjacent to Nijhum dweep, arranging awareness building and fish act implementation program to stop Hilsa fishing, marketing and carrying for 22 days during the peak spawning season to protect Hilsa brood, imposing 8 months (November-June) ban on Jatka fishing, imposing 65 days ban on all kind of fishing in Bay of Bengal, giving VGF (vulnerable group feeding) and AIG (alternative income generation). The open-water capture fishery showed a significant increase in fish production and an abundance of endangered species as a result of the eco-friendly initiative, which improved the aquatic biodiversity.
- Minimizing Post-Harvest Loss: To minimize post-harvest loss, the government has developed infrastructure (such as cold storage facilities, ice plants, fish processing plants), promoted modern good aquaculture practices (GAP) (i.e., intensive and semi-intensive farming), and promoted better fishing techniques including using larger fishing nets and better fishing gear. Additionally, the government has improved transportation facilities by constructing roads, bridges, and waterways.
- Promoting Research, and Institutional Capacity: The government has established several research institutions, funded by programs like the Agricultural Research Council, and collaborated with international organizations like the FAO and the World Fish Center. They promote research and institutional capacity building in the fisheries sector through the Bangladesh Fisheries Research Institute, Agricultural Research Institute, and the Fisheries Development Corporation. Furthermore, the government has introduced certification and labeling schemes for fish products to ensure that they are produced using good aquaculture practices. The Department of Fisheries has established the Bangladesh Aquaculture Certification System (BACS) to certify and label fish products that meet certain standards.

#### 5.6 Water Resource Management

Water resource management is crucial for Bangladesh as it is a deltaic country with over 700 rivers and a population of over 165 million people. The country is prone to frequent floods, cyclones, and droughts, which can cause significant damage to its economy and people's livelihoods. Protection from river erosion, protection from saline water intrusion in coastal areas, proper drainage in both wet and dry seasons, and protection from water-related hazards (storm surge/cyclone) in the coastal belt are essential in case of agriculture also. Therefore, efficient management of water resources is essential for sustainable development in Bangladesh.

Significant progress was made under the 7FYP to enhance irrigation facilities, strengthen flood protection, conserve and manage rivers' ecological balance by reducing pollution and sedimentation, and develop sustainable coastal zone management to reduce the adverse effects of climate change. Most importantly, the Delta Plan 2100 (BDP2100) was adopted in the late stages of the 7FYP.

Recognizing the long-term challenges for development outcomes presented by climate change and natural hazards, in 2018 Bangladesh adopted a comprehensive plan to manage the natural disaster and climate change risks that involve water management, land management, environmental management and the management of the ecological balance. This plan, known as the Bangladesh Delta Plan 2100 (BPD2100), develops a holistic, integrated

and adaptive long-term plan of investments, policies and institutional reforms that need to be implemented in the coming 20 years and over the next 80 years. Since much of the long-term behavior of climate change is not fully known, BDP2100 has to be implemented in an adaptive fashion, learning from the implementation experience of every 5 years or so and based on new evidence on climate change and behavior of water flows.

#### 5.6.1 Performance of Water Resource Management under the 8FYP

The fundamental objective of the water resource management sector under the 8FYP was to initiate and implement the first phase of the BDP 2100. The BDP2100 recognized the importance of funding, regulatory and institutional arrangements for the effective implementation of BDP programs. It accordingly estimated minimum funding requirements and major regulatory, governance and institutional reforms that must happen for effective Delta Plan implementation. It also identified a core Delta Plan Public Investment Program (DPIP) consisting of 80 projects for implementation during the 8th and the 9th Five Year Plans. Based on the projected implementation of the DPIP, required allocations for each Delta Ministry was estimated and incorporated in the 8FYP ministry-wise suggested development plan allocations.

Strategic Areas of Focus under 8FYP: The MoWR has implemented various strategies under the 8FYP to ensure the sustainable use of water resources in the country. These strategies have helped to improve water availability, reduce the impact of floods and natural disasters, and ensure the quality of water resources. These include: (i) water management and conservation; (ii) flood control and management; (iii) irrigation development; (iv) river navigation and dredging; (iv) water quality management; and (v) disaster management.

Implementation of the Delta Plan Funding Strategy: The successful integration of the DPIP with the 8FYP is a laudable planning effort and constitutes an essential first step for implementing the DPIP. A critical question though is to what extent the recommended allocations for Delta ministries in the 8FYP were actually provided through the annual ADPs? The required versus actual allocations for DPIP is shown in Table 5.14. The implementation gap is also illustrated. As is obvious, actual allocation of resources for DPIP in the first two years (FY2021 and FY2022) is much lower than projected in the 8FYP. The shortfall is particularly severe for the water sector, whereas the DPIP priorities are mostly concentrated in the water sector. This constrained the implementation of large, capital-intensive projects under the DPIP.

Table 5.14: Funding Constraint for BDP2100 Implementation

Indicators	FY2021	FY2022	FY2023	FY2024	FY2025
Planned Delta investment 8FYP (TK bl)	398	493	599	693	839
ADP Delta investment (Tk. bl)	265	348			
Planned water investment 8FYP (TK bl)	108.6	156.9	228.7	276.2	346.4
ADP water investment (TK. bl)	61.1	66.9			
Planned Delta investment (% of GDP)	1.5	1.7	2.0	2.2	2.4
ADP Delta investment (% of GDP)	1.0	1.2			

Source: GED estimates based on data from Ministry of Finance

Implementation of the Delta Plan Water Sector Investments: Several low-cost water projects were implemented. The performance of these investments is substantial and help make good progress towards the key output indicators under 8FYP (table 5.15).

Table 5.15: Progress against the Key Objectives and Targets under the 8FYP

Objectives/ Performance Indicators	FY20 (Baseline)	FY22 (Actual)	FY23 (Est)	FY23 (Actual)	FY25 (Target)	Comments
Bank protection work (KM)	1287	171	300	79	600	The indicator is aligned with SDG's Target 2.4, 11.5 & 15.3
Embankment construction/ reconstruction	10565	2122	609	838	1218	For FY22, out of 2122 km, New embankment is 137 km and Re- sectioning is 1985km).
(KM)						• The indicator is aligned with SDG's Target 1.5, 2.4, 11.5 & 15.3
Coastal embankment construction (KM)	5788	456	196	82	391	For FY22, out of 456 km, new embankment is 29 km and Re- sectioning is 427 km)
						• The indicator is aligned with SDG's Target 1.5, 2.4, 11.5 & 15.3
Dredging of river (KM)	2143	2232	195	348	390	• The indicator is aligned with SDG's target 2.3, 2.4 & 11.5
Excavation/re- excavation drainage	4502	2816	4742	258	9484	For FY22, 2816 km is re- excavation.
canal (KM)						The indicator is aligned with SDG's Target 2.4, 11.5 & 15.1
Excavation/ re-excavation	5355	244	292	70	583	For FY22, 244 km is re-excavation
irrigation canal (KM)						The indicator is aligned with SDG's Target 2.4, 11.5 & 15.1
Water control structure/hydraulic structure (Nos.)	15488	281	590	128	1179	The indicator is aligned with SDG's Target 1.5, 2.3, & 6.4
Coastal cross-dam (Nos.)	5	0	0	_	2	• The indicator is aligned with SDG's Target 1.5, 2.3, 2.4, 12.2 & 15.3
WMG/WMA/	3168	447	0	-	-	Target already achieved
WMF formulation (Nos.)						• The indicator is aligned with SDG's Target 5.5, 6.4 & 6.b
WMG/WMA/	2697	645	0	-	-	Target already achieved.
WMF registration (Nos.)						The indicator is aligned with SDG's Target 5.5, 6.4 & 6.b
Land acquisition (Hectare)	89024	814	2115		4230	

Source: Ministry of Water Resources (MoWR)

Progress in the irrigation sector is also solid (Table 5.16). Implementation of irrigation project is on track for Rajshahi, Faridpur, Barisal, Dhaka, Comilla and Chattogram. There is a small performance gap for Khulna and Sylhet. However, the performance gap is large for Rangpur.

Table 5.16: Targets and Achievements of Irrigation Programmes across Different Zones

Zones	FY202	0-2021	FY202	21-2022	FY 2022	2-2023
	Target (Ha)	Achieved (Ha)	Target (Ha)	Achieved (Ha)	Target (Ha)	Achieved (Ha)
Northern region, Rangpur	226741	166396	221011	181780	198527	179552
North-western region, Rajshahi	185499	200037	198303	198240	197891	198115
Western region, Faridpur	117814	100425	88336	94605	84316	87069
South-western region, Khulna	176307	152894	176050	163538	171905	149616
Southern region, Barisal	101270	101815	101075	101320	106186	106296
Central region, Dhaka	169555	169120	169643	169138	169633	170222
Eastern region, Comilla	55143	54120	56068	55373	57533	58549
North-east region, Sylhet	26250	23748	26248	23541	26241	23970
South-east, Chattogram	34760	33960	34760	34070	34960	34380
Total	1093339	1002515	1071494	1021605	1047192	1007769

Source: Bangladesh Water Development Board (BWDB) and Ministry of Water Resources (MoWR)

#### 5.6.2 Progress with Implementation of the Delta Plan Regulatory Framework, Policies and Institutions

The Delta Plan advocated several legal, regulatory, policy and institutional reforms aimed at strengthening the implementation of the underlying strategies. The important reforms included: (i) updating existing water regulatory policies and formulate new rules, regulations and procedures to provide a sound regulatory framework for the Delta programs: (ii) adoption of proper cost recovery policies for water (iii) establishment of the Delta Wing; (iv) formulation of the Delta Governance Council (DGC); (v) establishment of the Bangladesh Delta Fund; (vi) Strengthening of Delta line ministries; (vii) establishment of the Delta Knowledge Bank; (viii) establishment of Local Water Bodies; and (ix) adoption of an M&E framework to assess progress with the implementation of the Delta Plan

The implementation record so far is very limited. The DGC has been formed, but so far it has met only once. A Delta Wing has been established under the GED of the Planning Commission. But it is still at a formative stage and needs substantial more wok to undertake the full functions assigned to the Delta Wing under the Delta Plan. The Delta knowledge website has been established but it has a long way to go before it can function as an effective Delta Knowledge Bank as envisaged under the Delta Plan. Progress in other areas has not yet happened. No regulatory reform related to the Delta Plan has taken place. Water regulations are still guided by the Water Act of 2013. Pricing and cost recovery policies have not been updated. No significant initiative to mobilize private funding of Delta investments has happened. The strengthening of Delta Ministries and entities needs considerable effort, and the Water User Associations have not been formed. Also, the M&E system is yet to be set up.

These implementation shortfalls on the regulatory, policy and institutional fronts need to be addressed speedily. The core reforms include: (a) the DGC should meet regularly to take appropriate Delta policy decisions; (b) the speedy implementation of the Delta Wing in GED should be facilitated by approving the Delta Wing proposal sent to the Ministry of Establishment; (c) the PPSC should be established without further delay and made effective; (d) The Delta Wing should actively take up its assigned role to monitor implementation of the DPIP and inform the DGC of shortfalls and policy actions; it should regularly update the Delta Fund and inform the DGC of progress; it should activate the Knowledge Bank to allow for Delta-related knowledge creation activities

in high-priority areas (cost recovery and pricing policies; regulatory and incentive policies for private sector Delta investments); and it should also initiate the setting up of the Delta M&E Framework. An M&E report by June 2024 should be a useful target.

Arguably, the most important reform is some bold and radical efforts to create truly participatory local water bodies in the same spirit as the Dutch water bodies. The long-term success of Bangladesh Delta Management hinges critically on the establishment of these local water bodies. The proposed water bodies should be established based on 1) a careful review of good practices and international experiences including the Dutch experience; 2) analysis of the past approaches to establishing water user's groups and associations in Bangladesh and the reasons for their failure; 3) doing additional stake-holder consultations. The full governance principles including institutional design, membership, selection process, functions, financing and accountabilities will be provided in totality as a part of necessary legal arrangement.

#### 5.7 Summary and Conclusions

The implementation of the agriculture sector strategies, policies and programs of the 8FYP is proceeding well. This is reflected in the strong growth, production and export performance of the agriculture sector in the mid-term, notwithstanding the adverse effects of Covid-19. The strength of the agriculture sector performance is also reflected in the results of HIES 2022 that shows sharp reduction in extreme poverty and a major contributor to this is the expansion of female employment in agriculture. Additionally agricultural diversification has contributed handsomely to the continued improvement in the food basket of the households with a larger share of food mix coming from protein provided by fish, milk, eggs and meat as well as higher consumption of fruits, legumes and vegetables.

Implementation of water program has also preceded reasonably well, although the progress with the implementation of water investment programs under the DPIP has moved slowly owing to serious resource constraint. The government has introduced uniform rate schedule for the infrastructure development for agencies/organizations. But the major works of BWDB is related to reducing water related disaster effects in remote areas where infrastructure development cost becomes higher than estimated that results delayed execution of the development interventions.

Importantly, also, the implementation of regulatory, policy and institutional reforms highlighted in the Delta Plan has proceeded slowly. The investment strategy as recommended in the delta plan was impeded by COVID-19 and the current state of global instability. Covid-19 impact has been a serious constraint here. However now that covid-19 is basically under control, it is important to accelerate efforts to strengthen the implementation of the core Delta Plan reforms. Establishment of the Decentralized Water User Association and instituting proper cost recovery policies for water are top priorities moving forward. It is noted that the Bangladesh Water Development (BWDB) has formed 3 (three) tiers of Water Management Organizations (WMOs) as follows: (a) Water Management Group (WMG), (b) Water Management Association (WMA), and (c) Water Management Federation (WMF). The primary tier namely WMG used to form considering the lowest/smallest hydrological Unit within a project/subproject/scheme and the WMA & WMF form respectively consists of the representatives come from WMG and WMA. So, Water Management Associations (WMOs) have been established under BWDB in a decentralized way in the field.

On the other hand, the government has already issued cost recovery policies and rules namely "The Water Policy, 1999" & The Irrigation Service Charge Imposition & Collection Rule, 2003 amended 2005". The BWDB is collecting the Irrigation Service Charge (ISC) following existing policies and rules.

## CHAPTER 6 TRADE AND INDUSTRIAL DEVELOPMENTS

#### 6.1 Development Context

The 8FYP is a strategic document laying down the objectives and goals for meeting the challenges to be faced as the economy comes out of its LDC status and prepares to achieve the ambitious goal of becoming an Upper Middle-Income Country (UMIC) by 2031. The 8FYP invoked the strategy of inclusiveness as an integral part of its development goals: Promoting Prosperity and Fostering Inclusiveness. Therefore, promoting inclusive growth has been the focus of trade and industrial strategies in the 8FYP.

Many international analysts are now calling Bangladesh a "success case of development". Among other attributes, trade and industry have been key drivers of this development phenomenon. Trade has historically been a powerful driver of economic growth and poverty alleviation. For countries on the path of development international trade has become the driving force for creating jobs, raising incomes, and lifting millions out of poverty.

Industrial sector performance in Bangladesh during the past decade has been phenomenal, driven by trade and the tremendous dynamism in RMG exports that repeatedly broke records. With agriculture growth rates averaging at 2.5-3 per cent for much of the decade, GDP growth averages of 6-7 per cent was determined by dynamism in the industrial sector, particularly with manufacturing sub-sector registering high growth. Thus, industry's share of GDP rose from 25% in FY2000 to 37% in FY22, closing in on the target of 40% share envisaged in the Perspective Plan 2041.

#### 6.2 Progress during the 7FYP

During the first decade of the 21st century, industrial and trade policies evolved around the basic tenets of a free market economy with generous bits of government intervention in regulatory control of the economy while the private sector was acknowledged as the key driver of the economy as far as production and investment activities were concerned. Export-led growth took on a new meaning for the Bangladesh economy with the emergence of readymade garments (RMG) as the leading export industry overtaking jute and jute goods as the primary export product of the country. RMG exports overtook jute and jute goods as the predominant export item reaching 70% share in the export basket by close of the 1990s. During the period of the 6th and 7th FYP RMG march continued with increasing export concentration, introducing export vulnerability on that account, though Bangladesh emerged as the No.2 exporter of apparels after China, with Vietnam now a close No.3 posing serious competition in US and EU markets, the competition that is likely to become even more acute as Vietnam has signed an FTA with EU and joined the recently established plurilateral free-trade club of East Asia and the Pacific, Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

Both the 6th and 7th Five Year Plans articulated trade and industrial strategies and approaches that were designed to generate high rates of growth with macroeconomic stability. Internal and external macroeconomic stability having been maintained, for the first time Bangladesh experienced 7-8%+ annual GDP growth during the 7FYP. In contrast to the average GDP growth that increased by roughly one percentage point each decade until FY2010, average annual GDP growth rose by one percentage point every five years during the 6th (6.3%) and 7th FYP (7.6%). The share of industry in GDP rose from 27% in FY2011 to 35% in FY2020, with the share of manufacturing rising from 18% to 24% during the same period (Tables 6.1 and 6.2). Manufacturing growth averaged 10% during the 6th Plan and 12.3% during the 7th Plan playing the principal driver of growth acceleration.

However, trade policy stance remained practically unchanged after some modest reforms in tariffs and customs practices during the first decade of the 21st century. The economy reaped the benefits of trade liberalization and deregulation in industrial investment. Trade and tariff liberalization of the 1990s soon gave way to the

compensating emergence of para-tariffs in the form of Regulatory Duties (RD) and Supplementary Duties (SD) thus leaving average nominal and effective protection levels practically unchanged for much of the decade (Table 6.1). Though export performance could have been far more dynamic with comparative advantage following (CAF)-based export-oriented trade policies proposed in the two Plans but left largely unimplemented, average double-digit growth of 11.2% was still maintained boosted mainly by the 41.5% growth spurt recorded for FY2011. For much of the 7th FYP export growth was sluggish averaging a mere 6.8% until FY2019 (Tables 6.1-6.2). FY2020, the post-Covid year, saw a shock decline of 17%. (Tables 6.1-6.2).

Table 6.1: Trade and Tariff Policy Trends during the 7FYP

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Average NPR	23.74	26.96	28.93	28.09	26.69	25.60	25.64	26.55	26.70	26.75
Average Output Tariff (*)	41.29	43.49	46.82	45.98	43.16	41.32	40.55	38.79	39.64	46.43
Average Input Tariff (**)	12.5	12.72	13.02	12.17	12.02	11.63	12.13	12.57	12.03	13.52
Exports (\$ billion)	22.9	24.3	26.6	30.2	31.2	34.2	34.8	36.6	39.6	32.8
Export growth	41.5	6	9.3	13.6	3.4	9.7	1.7	5.2	8.2	(-) 17.2
Imports (\$ billion)	32.5	33.3	33.6	36.6	37.7	39.9	43.5	54.5	55.4	50.7
Import growth	52.1	2.4	0.8	8.9	3.0	5.9	9.0	25.3	1.7	(-) 8.5

Source: BBS; GED estimates based on NBR data

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.

Table 6.2: Industrial Sector Performance 7FYP

	FY16		FY17		FY18		FY19		FY20	
	Share	Growth								
Manufacturing	21.01	10.30	21.74	10.97	22.85	13.40	24.08	14.73	22.4	1.68
Industry	31.54	10.10	32.48	10.5	33.66	12.06	35.00	13.02	34.94	3.61
GDP growth		7.1		7.3		7.9		8.2		3.45

Source: BBS

Though trade liberalization and export-led manufacturing growth became the principal strategy of growth, a fundamental conflict emerged between trade and industrial policies since the close of the 1990s decade. The industrial policy made no particular distinction between export-oriented industries and import-substituting industries in incentivizing "thrust" sectors. The promotion of "winners" was based primarily on current successes and presumption of potentially successful industries. Though average tariffs were falling moderately, the decline was mainly due to a reduction in input tariffs while output tariffs remained elevated resulting in persistently higher effective rates of protection. In comparison incentives for exports (through subsidies or concessional credits) were no match to the higher levels of protection for import substitutes. Thankfully, the RMG sector remained largely outside the ambit of the tariff regime because of the free trade regime they enjoyed through Special Bonded Warehouse facility that ensured inputs at international prices. Compared to the non-RMG exports, the RMG sector suffered no such handicap and continued with double-digit export growth until the end of the 6FYP with a lower average growth during the 7FYP (6%, excluding dip in FY20).

#### 6.3 Trade and Industrial Strategies under the 8FYP

Trade and industrial policies formed the centerpiece of growth acceleration strategies in the 8FYP. Targeted GDP growth averaging 8% over the period of the 8FYP (FY2021-25) was to be driven primarily by growth acceleration in industry, primarily manufacturing sector projected to grow by over 12%. Export-oriented manufacturing was to be the key driver of the optimistic growth projection under the 8FYP, where agricultural growth would only average 3.9%, and services growth around 7%. In this industrial development approach, trade policy was to be the handmaiden of and inseparable from industrial policy.

#### The key features of industrial growth strategy in the 8FYP may be summarized thus:

• Bangladesh's industrial policy can be classified into two tracks: import-substituting industrial development and export-oriented industrialization. Articulation of incentives for two strands of trade policy – import substitution and export promotion. Growth acceleration will be driven by export-oriented industrialization. Strive for export diversification and competitiveness. Seek global markets and court FTAs for rapid market access expansion. Improve trade logistics for trade facilitation. Bangladesh's trade and industrial policy for the 21st century (post-LDC graduation) would be WTO-consistent. Concurrent trade policy will be supportive of the industrialization strategy focusing on developing a globally competitive manufacturing sector with strong and sustainable export performance.

#### 6.4 Progress during the 8FYP

The potential of the industrial sector often relies on a solid industrial plan that functions in tandem with market forces. It is crucial for industrial policy to be synchronized with trade policy because industrialization policy causes complementarity and conflict problems in the formulation of incentives between the two streams of trade policy—import substitution and export promotion. The two-pronged strategy of import substitution and export-oriented industrialization, which is a component of policy fundamentals, brings to the fore the choice of two broad conflicting strategies: comparative advantage following (CAF) or comparative advantage defying (CAD). While CAD policies may not always choose economic activity with comparative advantage, CAF industrial and trade policies support economic activities based on the nation's comparative advantage (e.g., labor-intensive production). Combination and Prioritization are crucial because there are not enough policy tools to handle multiple objectives, which makes it necessary for industrial policy to have specific, well-defined goals and trade policies to be effective.

#### 6.4.1 Industrial Strategy and Performance

Bangladesh industrial strategy during the 8FYP was primarily focused on achieving structural change so that industry's share of GDP would reach 40–45% of GDP by 2030, absorbing the majority of the labor force that was previously underemployed in farmland and informal industries. Additionally, the objective was to promote emerging industries with time-bound and performance-based criteria in order to establish a manufacturing sector that is globally competitive. In Bangladesh, it is customary to strategically coordinate the development and implementation of industrial policy between the government and business. Finally, in order to be WTO-compliant, Bangladesh's industrial policy for the twenty-first century (post-LDC graduation) must be comprehensive rather than target specific. The industrialization strategy, which focuses on creating a globally competitive manufacturing sector with strong and sustained export performance, will need the backing of the concurrent trade policy. Subsidies for export promotion may not be accessible in the post-LDC environment, so

the strategic approach will be to take advantage of the enormous global market through greater trade openness, which entails more trade integration with key participants in the regional and global economy.

Against the backdrop of the above considerations, the 8FYP outlined trade and manufacturing strategies and approaches aimed at generating high rates of growth while maintaining macroeconomic stability. At constant prices, the industry sector's share of GDP was expected to be around 42% by the end of 2025. The performance during the first two years of the 8FYP has been solid and broadly in line with the 8FP targets. As the primary engine of growth acceleration, the steadily rising trends of industry share will work as a positive push. Industry's GDP share increased from 35% in FY2020 to 38% in FY2022, while manufacturing's share increased from 22% to 26% during the same time (Table 6.3), indicating a resilience and decent rebound following Covid and global shocks. The targeted rise in industry share in GDP (of 42%) and manufacturing share to 28% by FY2025 appears feasible.

Table 6.3: Industry and Manufacturing Performance during 8FYP

Performance Indicators	Baseline Year 2020	Target 2021	Actual 2021	Target 2022	Actual 2022	Target 2023	Actual 2023
Industry (% GDP)	34.94	36.25	36.01	37.17	36.92	38.07	37.56
Manufacturing	22.4	24.89	23.36	25.61	24.29	26.33	24.95
Industry growth	3.61	10.29	10.29	10.59	9.86	10.79	8.18
Manufacturing	1.68	10.73	11.59	10.99	11.41	11.24	9.23
GDP growth	3.45	7.40	6.94	7.70	7.25	8.0	6.00

Source: BBS

It is fair to say that industrial performance as of the mid-term of the 8FYP has been resilient yet buoyant despite the multiple adverse shocks from Covid-19 and the Ukraine War experienced by the economy. The share of industry and manufacturing in GDP continued to rise as growth rates for FY2021-22, largely because of phenomenal growth rates in exports which posted historical record growth of 35% in FY2022. As expected, RMG was the leading sector in manufacturing which continued to grow at a record pace during the first three years of 8FYP. Manufacturing growth slowed down somewhat in FY2023 owing to foreign exchange shortage that lowered the supply of industrial raw materials. Nevertheless, manufacturing sector grew at 9.23%.

Bangladesh Industrial Policy 2021 identifies a number of 'Thrust sectors' that are earmarked to receive strong support from the Government in terms of subsidies and other official perks in order that firms in these sectors excel in exporting as well as import substituting activities. The sectors include Agro-processing industries, pharmaceuticals, textiles (including jute) and garments, leather and footwear, light engineering, and renewable energy. A review of production in apparel and the thrust sector industries (Table 6.4) reveals that apparel production was by far the most dynamic in terms of output (consistent with exports) while the others, which were both export and import substituting industries, grew modestly in comparison to the apparel sector (average growth of apparel production in FY21-23 was 24%, compared to Agro-processing, 13%; Pharma, 9.2%; Leather products, 8.5%; Light engineering, -2.5%; Textiles, 7.1%) ) Evidently, ISI production trailed behind export production in FY21-23, which is usually the case in previous Plan periods as well, demonstrated by the fact that export growth registered double digit growth during FY11-23, which was the main factor behind the superior manufacturing performance during the first 30 months of the 8FYP. This is a vindication of a successful Plan strategy of exportoriented manufacturing growth.

Table 6.4: Manufacturing Value-added Trend during 8FYP

Major Industry Group	FY20	FY21	FY22	FY23
Wearing apparel	-14.45	16.25	37.10	19.14
Agro-processing	-18.91	23.13	13.07	4.07
Pharmaceuticals and medicinal chemical	32.12	25.87	4.34	-2.57
Leather and related products	1.14	13.40	23.92	-11.9
Light engineering (including electrical/electronic)	14.00	-3.26	4.62	-8.78
Textiles (including Jute products)	23.91	12.66	9.81	-1.01

Source: GED estimates based on BBS data

The 8FYP sought to increase support to infant industries with time-bound and performance-based criteria. With the aim of ensuring support a price competitive position in the export market for infant industries cash incentive are provided to 43 categories of the different export sectors. The Ministry of Commerce prepared roadmap to accelerate the standards of the products like plastic, light engineering, footwear and leather products in accordance with international standards. Export policy 2021-2024 has given special emphasis to enhancing product quality in accordance with international standards.

One of the strategies of the 8FYP was to make Bangladesh industrial policy WTO-compliant. Being a founding member and a major beneficiary of the WTO rules-based system of multilateral trade, it is incumbent upon Bangladesh to adhere by WTO rules regarding application of industrial policy instruments. Some of these instruments widely used in Bangladesh are highlighted here. The Ministry of Commerce (MOC) reports that Ministry of Industries (MOI) is working on the process of making industrial policy WTO-compliant and MOC is prepared to offer its expertise and cooperation to MOI as they move to ensure all industrial rules and regulations as well as policy supports are in conformity with WTO rules.

#### Assessment of employment impact

One of the major objectives of industrialization is job creation. Bangladesh's industrial policy aims to create jobs, encourage structural transformation toward an industrial economy, advance technology, improve regional industrial activity distribution, encourage investment in underdeveloped areas, and facilitate more equitable income distribution. Increasing manufacturing share, which is the bulk of industry, will undoubtedly aid in achieving all of these goals.

However, there is evidence of sluggishness in employment creation in manufacturing. The growing adoption of cutting-edge technology and increasing capital intensity of production have been causing employment growth to be a bit sluggish, which occurred at a time when the economy had yearly GDP growth of more than 6%. The most recent issue of Survey of Manufacturing Industry (SMI)-2019, shows that between 2011 and 2018, yearly job growth decreased to 1.23 percent. A similar scenario is reflected in the (preliminary report) Quarterly Labour Force Survey (QLFS)-2022. Manufacturing employment overall decreased from 20.40% to 17.02% between 2017 and 2022 indicating negative job growth in the broader industry sector. More than half of the jobs in medium industries were eliminated as the number of medium factories fell by 48% to 3,178 in 2018 from 6,103 in 2011. Micro factories reduced the number of units produced by 4%, resulting in fewer jobs.

Several initiatives have been taken to bring dynamism in CMSMEs through different facilitation program. As on December 2022, about 80,000 SMEs and SME based workers (more than 60 percent women) have been benefitted

by SME foundation through 1400 training programs, 10 national & 134 district level regional SME product fairs and 04 national level handloom festivals, loan disbursement for 50 SME clusters, national SME entrepreneurs award for 42 SMEs; 118 IT firm-entrepreneurs, banker entrepreneurs, & buyers-sellers matchmaking programs.

#### **6.4.2 Trade Policy Developments**

In terms of trade and industrial strategy, Bangladesh began its economic journey bearing the burden of past policies. It acquired highly restrictive trade policies that carried import substitution to the extreme by placing high protective tariffs on a wide range of importable products, primarily in the consumer goods category, many of which had competing domestic production (i.e. import substitutes).

#### 6.4.2.1 Rationalization of Trade Protection

Rationalizing the level and structure of protection to import substitute industries and reduce the conflict between export policy and protection policy were the key strategies for trade promotion in the 8FYP. The 8FYP presented a five-year window for streamlining trade and tariff policies with a program of adjustment culminating in a trade and tariff regime that is reflective of or trending towards a UMIC economy, a goal that is set for 2031 in the PP2041. The current tariff regime, which is replete with para-tariffs for protection purposes and the near absence of tariff bindings on manufacturing products, will have to change after LDC graduation. Both external (opening markets by seizing opportunities of bilateral, regional and plurilateral agreements) and domestic content (eliminating anti-export bias by balancing incentives for exports and domestic sales) of trade policy needed to be revamped to fit the demands of a dynamic global market and an export-oriented trading regime, not to mention the impending structural adjustments that might be unleashed into the manufacturing and service sector by the ongoing 4IR.

Unfortunately, progress in tariff rationalization – a move that would reverse the incentives in favor of export-oriented manufacturing – appears to be minimal as of FY2023, after remaining nearly unchanged during the entire period of the 7FYP (Table 6). Whereas world tariffs are down to an average of only 6%, developing country average is 6.5%, LMIC average is 11%, UMIC average is 3.7%, Bangladesh continues with an average NPR of 27% that is even slightly higher than the average of 26.8% at the end of 7FYP. What is more disconcerting is that output tariffs have been on a rising trend since the end of 7FYP, with input tariffs pretty much unchanged. What this means is the not only is effective protection on the rise, but anti-export bias of trade policy is also becoming more entrenched. Reaching the target of UMIC average tariffs by 2031 has become a distant dream as there is no indication from existing tariff data to suggest that average tariffs will be trending downwards over the next 7 years unless there is a beginning in the forthcoming FY2024 Budget.

Table 6.5: Tariff and Protection Policy Trends during 8FYP

		7th FYP (I	FY16-20)		8th FYP (FY21-23)			
	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Average NPR	25.60	25.64	26.55	26.70	26.75	27.08	27.12	27.15
CD/Tariffs	13.48	13.4	13.25	13.01	13.45	13.58	14.81	14.8
Para-Tariffs	13.22	13.15	12.39	12.59	13.30	13.50	12.31	12.35
Avg Output Tariff	41.32	40.55	38.79	39.64	42.38	42.74	43.62	44.11
Avg Input Tariff	11.63	12.13	12.57	12.03	14.02	14.05	14.39	14.4

Source: BBS; GED estimates based on NBR data;

Notes: NPR=Nominal Protection Rates; CD=customs duty; Para-tariffs include Regulatory and Supplementary duties; (\*) Output tariffs refer to NPR on mainly consumer goods; (\*\*) Input tariffs refer to NPR on basic raw materials, intermediate and capital goods.

There is some discernible movement, though not speedily enough, in the direction of tariff rationalization and modernization. High level sub-committees and study groups have been constituted to come up with recommendations for action on rationalization and modernization of the tariff structure, as well as formulation of a National Tariff Policy. The National Board of Revenue (NBR) and Ministry of Commerce (including Bangladesh Trade and Tariff Commission) have been actively pursuing an agenda for rationalization of tariffs. But progress so far has not been up to the mark.

#### 6.4.2.2 Trade Policy and Export Diversification

Bangladesh's export basket is characterized by export concentration (82%) on one product group – readymade garments (RMG). This concentration has been persistent and shows no sign of going away as RMG exports continue to grow faster than non-RMG exports. Export diversification – increasing the share of non-RMG exports – has now become a top national priority. This is as much a part of industrial policy as it is trade policy. The trade policy argument has been that high and persistent tariff protection raises the profitability of import substitute production for domestic sales compared to exports thus serving as a disincentive to exports. This constitutes anti-export bias of trade policy that applies to non-RMG exports. RMG exports are largely immune to this tariff impact as they operate under a zero-tariff regime – export enclave system. The current incentive regime – subsidies to selected exports and tariff protection to import substitutes – works significantly in favor of import substitute production, which is often encouraged by policy positions that seek to promote domestic production of a vast number of import substitutes that may or may not have comparative advantage. Moreover, export subsidies that have to be paid out of the treasury are no match to the high tariff protection (indirect subsidy to import substitutes) that is paid by consumers.

### A number of strategies for making exports globally competitive and diversifying the export basket has been adopted. These strategies included the following:

- a. Increasing competitiveness and diversifying exports. To that end cash incentives (export subsidies) are provided to 43 categories of different export sectors with the aim of ensuring what MOC calls a price competitive position in the export market. A World Bank supported project, EC4J, of Ministry of Commerce is working to promote potential export sectors and it also prepared a roadmap to accelerate the standards of the products like plastic, light engineering, footwear and leather products in accordance with international standards. Export Policy 2021-2024 has given special emphasis to enhancing product quality in accordance with international standards.
- b. Introducing a range of new products in the export basket. Export Promotion Bureau (EPB) is giving special importance to export development of labor-intensive industries. Considering the expansion of local value-adding industries and development of competitive import substitution industries, EPB is working on export policy of 2021-2024 to expand export basket with new products. EPB has decided to participate in 74 international trade fairs abroad in the financial year 2022-2023 with the aim of introducing Bangladeshi products to foreign buyers and expanding the export market. So far, Bangladesh has participated in a total of 21 fairs till February-2023. However, following the government's austerity policy and aiming to save foreign exchange, participation in foreign fairs has been reduced to a minimum. However, other activities related to market expansion are continuing.
- c. Widen the range of destination markets for exports (geographical diversification). In the Export Policy 2021-2024 emphasis has been given to participate in international trade fairs in the new and existing

export market of Bangladesh. Bangladesh has participated in international trade fairs held in Latin America (Brazil), Middle east (Saudi Arab, Oman, Qatar, UAE) CIS Countries, African Countries (Ethiopia & Nigeria) etc. (to explore new export market).

- d. Upgrade to higher value-added products. To upgrade the value of existing products Bangladesh Bank has prepared arrangements for credit facilities to the producers from technology upgradation fund with easy terms and conditions.
- e. Seek opportunities to expand non-merchandise exports (services exports). Non-merchandise exports (non-factor services) such as software, hardware, ITES are being encouraged through policy supports and incentives; service through freelancing is also being promoted by Export Policy 2021-2024.
- f. Immediate Diversification to highest priority products. Export policy 2021-24 has included 13 product sectors as Highest priority sectors (19 product sectors as special development sector including service sectors) to promote export diversification. Some new products: Medical and personal protective equipment, halal fashion, Electronic & home appliances, Light engineering products, printing and packaging products, Recycled products etc. have been included in the export basket as high priority products for promotion.
- g. Prepare strategy for reducing anti-diversification bias of exports. For reducing anti-diversification bias Export Policy 2021-2024 has given support to some products with up to 20% cash subsidy. National Board of Revenue introduced Authorized Economic Operator (AEO) modality to further accelerate such exports.

The 8FYP placed top priority on the production and exports of non-RMG manufacturing in areas including agro-processing, leather and footwear, light engineering, pharmaceuticals, and ICT software and services. Some of these industries are labor intensive and have huge export market. These are also considered the 'thrust sectors' in Bangladesh according to the Bangladesh Industrial Policy 2021. The strategy is to allocate resources to these industries on a priority basis, including support with export subsidies, to stimulate growth and create job opportunities conforming to the primary goal of 8FYP. But results so far are not so encouraging.

During the course of the 6th and 7th FYP, and as of the mid-term of 8FYP, there is no discerning trend towards export diversification. Rather, during this period FY2010 through FY2022, export concentration has risen from 77% to 82%, with RMG exports growing faster than non-RMG exports almost every year. It is not a lack of competitiveness that keeps non-RMG exports from growing faster. In principle, non-RMG exports have an infinitesimal share of global export markets, so there is no lack of demand as long as our exporters can export at competitive prices. It is the lack of relative incentives – exporting versus selling in the domestic market – that discourages exports of non-RMG products, thus creating no dent in export concentration.

One of the core objectives of 8FYP strategy was to create more jobs through a diversified export-oriented manufacturing sector. However, the basket remains concentrated in RMG products, having a share of 82% in FY2022. Non-RMG exports have shown some buoyance lately recording a growth of 27.5% in 2021 and 29.7% in FY 2022 but their share in total exports remains low, with little sign of upward trend for much of the past 20 years (Table 6.6).

Table 6.6: RMG and non-RMG Exports under the 8FYP (Billion US\$)

	Agro- processing	Leather & Footwear	Light Engineering	Pharmaceuticals	Others	Non-RMG Total	RMG	Total Exports
FY 00	0.02	0.05	0.01	0.01	1.32	1.40	4.35	5.75
FY 01	0.02	0.05	0.00	0.01	1.53	1.61	4.86	6.47
FY 19	0.91	0.96	0.34	0.13	4.06	6.40	34.13	40.54
FY 20	0.86	1.06	0.29	0.14	3.37	5.72	27.95	33.67
FY 21	1.03	1.24	0.53	0.17	4.34	7.30	31.46	38.76
FY 22	1.11	1.76	0.80	0.19	5.61	9.47	42.61	52.08
			(	Growth Rate (%)				
FY 01	2.2	-6.0	-63.2	23.2	16.2	14.8	11.7	12.4
FY 20	-5.2	10.3	-14.2	4.5	-16.9	-10.6	-18.1	-16.9
FY 21	19.3	16.4	80.6	24.5	28.7	27.5	12.5	15.1
FY 22	7.9	42.2	50.4	11.7	29.5	29.7	35.5	34.4

Source: GED estimates based on EPB data

Table 6.7: RMG and Non-RMG Exports and shares

Year	RMG Exports	Non-RMG Exports	Total Exports	RMG share (%)	Non-RMG share (%)
FY 01	4.86	1.61	6.47	75.1	24.8
FY 20	27.95	5.72	33.67	83.0	17.0
FY 21	31.46	7.30	38.76	81.2	18.8
FY 22	42.61	9.47	52.08	81.8	18.2

Source: GED estimates based on EPB data

#### 6.5 Progress with Global Market Penetration through FTAs.

We are living in a world that is transforming at speeds almost incomprehensible to the average mind. Unlike historical growth rates experienced in the past centuries, it is now possible for developing economies like Bangladesh to grow at 7, 8, 9, or 10 percent annually. This is because of the enabling effect of a rapidly integrating global economy. Given Bangladesh's enormous challenge for creating roughly 2 million jobs annually, there is no option but to creating bridgeheads in the global market for our exports. Given the small size of its domestic economy, Bangladesh needs to expand its exports of goods and services in order to move to a higher growth path and grow out of poverty. The domestic market, despite its continual expansion, is still no match for the vast global marketplace of \$80 trillion Capturing pieces of that market, beyond EU and North America, into China, India, and the Asia Pacific region to reach its ambitious export target in the 8FYP and beyond.

Some headwinds have emerged on this prospect. According to some analyst globalization is in retreat. Others argue that globalization is irreversible. However, all parties agree that globalization and multilateralism need to change by adapting to the latest innovations in a digitally integrated world market. Old ways of trade must give way to 21st century ecosystem. Trade in services, intermediate goods, and in value added products, has been

sweeping the globe requiring new trade rules adapted to this change. Bangladesh must be prepared to adapt and adjust as it graduates out of LDC group.

At home, while multilateralism remains the preferred option, efforts are on to create gainful trade through Free Trade Agreements (FTAs). In this context, two simultaneous approaches are being pursued: first, under the multilateral umbrella of WTO, and second, by pursuing FTAs, bilaterally and with regional country groups. As one of the leading beneficiaries of the multilateral rules-based trading system, Bangladesh continues to make progress in reaching compliance with regard to tariffs and non-tariff measures and regulations, well before graduation out of LDC status. NBR and Ministry of Commerce are engaged in this task. But progress so far has to be adjudged as slow given that 2026 is close at hand.

Alongside, the 8FYP advocated the need to seek market access under various bilateral and regional trade and investment agreements – what is known as WTO plus arrangements. Markets in Asia are growing faster than any other region of the world and ADB projects that by 2050 50% of global GDP will be in Asia. Two regional trading arrangements that hold tremendous potential for trade and investment are RCEP (ASEAN+) and CPTPP which together will constitute the bulk of the Asian market of the future. The 8FYP trade policy sought to reach trading arrangements with these groupings. But that could be an uphill task given the current high tariff regime in Bangladesh and the enormous resistance from domestic import substitution industries to any reduction of protective tariffs. The political economy challenge is considerable, but a breakthrough is essential in this area.

Unfortunately, despite the best of intentions, progress in signing FTAs is limited so far. There appears to be hectic activity in the Ministry of Commerce, in cooperation with NBR and EPB, to reach FTA agreements with prospective countries like Malaysia, Japan, post-Brexit EU and UK. An FTA with RCEP would have been the most consequential in terms of trade and growth but not much progress is evident. With India, the current moves relate to a much more comprehensive agreement, called CEPA (Comprehensive Economic Partnership Agreement), to go well beyond trade into investment and collaboration in other areas.

During the early years of 8FYP what has so far been done is to sign a PTA (Preferential Trade Agreement) with Bhutan. A PTA is a very limited form of trade agreement that simply identifies a "positive list" of selected commodities that will be traded with preferential tariffs and perhaps relaxed rules of origin (ROO). The impact of such a trade agreement on trade creation and producing gains from trade is no match to an FTA – bilateral or regional – that usually works with a "negative list" of products. The scope for trade creation and mutual gains is much larger in an FTA. A PTA in comparison is much ado about nothing – a waste of time.

As trade preferences get phased out over the 5-10 years in developed markets, government assistance and support through embassies become even more critical for successful market penetration in the largest global markets, such as EU, North America, Japan, and emerging economies. This has been a continuing process further intensified during the 8FYP.

MoC activities relating to FTA/PTAs: In its pursuit of FTAs, MoC has so far completed the process and a Preferential Trade Agreement (PTA) was signed with Bhutan on 06 December 2020. Though this may be touted as some concrete action, a PTA is hardly what was intended in the 8FYP.

A Preferential Trade Agreement (PTA) among member countries provides preferential market access, through duty concessions or other means, to selected products of member countries (e.g., Asia Pacific Trade Agreement (APTA), of which Bangladesh is a member). A Free Trade Agreement – FTA -- is an extreme form of a PTA providing duty-free or lower-duty access to markets of partner countries on a wide range of products, typically with a small negative list of products (sensitive list). Thus, a PTA is characterized by a "positive list" of products whereas an FTA is characterized by a "negative list". An FTA could be bilateral (e.g., Vietnam and Japan), or

regional (e.g., ASEAN), or plurilateral (among several countries spread across geographical regions, e.g., CPTPP-Comprehensive and Progressive Agreement for Trans-Pacific Partnership).

Negotiating and signing bilateral and regional FTAs during the run up to LDC graduation and beyond was a specific strategy of 8FYP. Bangladesh was to seek more bilateral or regional FTAs if the projected trade creation (or trade growth) contributes positively to growth and employment creation. A PTA is no match to what an FTA can achieve. The trade and economic impacts of a PTA (bilateral) is minimal except to create some goodwill between the parties.

Nevertheless, initiatives to sign FTAs (since there is no concrete progress with FTAs) have recently intensified, according to MOC. As of March 2023, a PTA with Indonesia is under negotiation. Both Bangladesh and Indonesia already have completed three rounds of Trade Negotiating Committee (TNC) negotiation. PTA text and Rules of Origin are almost finalized. Initial Offer List has been exchanged. Fourth round of TNC meeting will be held soon.

PTA with Nepal: Both Bangladesh and Nepal already have completed three rounds of Trade Negotiating Committee (TNC) negotiation. PTA text, Rules of Origin are almost finalized. Initial Offer List has been exchanged. PTA with Indonesia: As of 2023, there is some progress in signing a PTA with Indonesia in 2024.

CEPA with India: Progress is rapid on this front to sign a CEPA by 2024. A Joint Feasibility Study has already been completed. Based on the findings, two Prime Ministers gave directions to the officials to initiate CEPA negotiation within December 2022. Accordingly Bangladesh side formed Trade Negotiating Committee (TNC).

Economic Partnership Agreement (EPA) with Japan by 2025: A Joint Declaration of initiation of the Joint Feasibility Study for the possible Bangladesh-Japan FTA/EPA was held on 12 December 2022. Accordingly, both Bangladesh and Japan formed Working Group for conducting Joint Feasibility Study. First meeting of the Working is scheduled to be held on 10-12 April 2023. Both sides already completed all the formalities to sign Memorandum of Cooperation (MoC) on Bangladesh-Japan Industry Upgradation Partnership.

FTA with Singapore by 2025: A Memorandum of Cooperation (MoC) for conducting Joint Feasibility Study for the possible Bangladesh-Singapore FTA was signed on 16 November 2022. Accordingly, both Bangladesh and Singapore formed Working Group Committee for conducting Joint Feasibility Study. First Joint Working Group meeting is scheduled to be held on 3 April 2023.

EPA with Republic of Korea by 2025: Bangladesh already has conducted a preliminary Feasibility Study for possibility of the Bangladesh-South Korea FTA. In the meantime, Bangladesh formed a Research Group for finalizing the preliminary feasibility study report.

FTA with China: Both Bangladesh and China has signed a MoU on launching the Joint Feasibility Study of Bangladesh-China FTA. As per provision of the MoU a Joint Working Group (JWG) was formed. In the first JWG meeting, both sides finalized the Terms of reference of the Joint Feasibility Study and the outline of the Feasibility Study Report. Bangladesh will host the 2nd meeting of the JWG in 2023.

Given the importance of opening more markets for Bangladesh through membership in regional and bilateral FTAs, into MoC has revamped and revised "Policy Guidelines on Free Trade Agreement 2010" and formulated a new policy titled "Regional Trade Agreement (RTA) Policy, 2022".

The bottom-line assessment appears to be that Bangladesh is facing almost insurmountable barrier to negotiating and signing an FTA with any potential country or region. However, there are nations with a lot of goodwill

that would like to welcome an FTA with Bangladesh, such as Indonesia, Malaysia, Japan, Korea, and so on. The fundamental proposition in an FTA is the opening up of a larger market. But the first hurdle that Bangladesh must overcome is its high and prohibitive tariff structure compared to global levels because the first item on an FTA negotiation agenda typically happens to be the reduction of tariffs to open trade.

#### 6.6 Progress with Trade Logistics and Trade Facilitation

The other critical argument for lack of export competitiveness stems from the poor quality of trade infrastructure and logistics. True, export competitiveness is undermined as a result. There is no doubt that export performance would have been far better if supported by a modernized 21st century trade logistics at ports and behind-the-border procedures. Overall trade competitiveness and successful export-led growth hinges on a highly efficient and modernized trade infrastructure. All the five-year plans, especially the 8FYP, had argued for placing high priority on trade facilitation as the modern concept of trade administration. Progress in this regard is mixed.

In the past three years Bangladesh has taken up a number of trade facilitative measures in recent times; including introduction of a trade information portal, modernization of Customs policy through a new Customs Act 2021 (submitted to Parliament in 2022, but still unapproved) in compliance with Revised Kyoto Convention, SAFE Framework of Standards and WTO Trade Facilitation Agreement (operational since 2017), introduction of risk management in customs clearance. Further improvements are needed in critical trade infrastructure (e.g. custom stations, land ports, trade and transport logistics, and national single window), improvement in regulatory framework for border clearance, and improvement in institutional coordination and capacity for better trade facilitation service delivery. In short, improving overall trade infrastructure – both soft and hard – is absolutely essential for meeting the challenges of preference erosion following LDC graduation in 2026. Much work remains to be done in this area during the second half of 8FYP.

Open Border Haats. One of the goals of 8FYP was to facilitate trade, particularly with India and its Northeastern region. In pursuance of that objective, a MoU was signed between Bangladesh and India on 22 October 2020 to establish border haats along the eastern and northern borders of Bangladesh with India. Four such border haats are now in operation since 2022. More are expected to be commissioned.

#### 6.7 Progress with Mobilizing FDI for Export Diversification

Attracting copious amounts of FDI is not just aspirational. It is a critical need for Bangladesh's development journey. Bangladesh faces an immediate challenge—of transforming from a Lower Middle-Income Country (LMIC) to an Upper Middle-Income Country (UMIC) in a decade, besides shedding the ubiquitous title of a least developed country (LDC). For this to materialize, it will require FDI inflows into Bangladesh in volumes not seen before.

The 8FYP adopted an aggressive stance in mobilising FDI focused especially on export diversification. It postulated an increase in private investment from 23.6% in FY2020 to 27.4% in FY2025, an increase that would only be possible by expanding the role of FDI. The global supply of FDI is large and Bangladesh hardly uses this potential. A key strategic focus of the 8FYP was to accelerate FDI inflows into Bangladesh through a massive drive to improve the investment climate and strengthen the capabilities of BIDA to do policy-based research, advocacy and deliver speedy and efficient services to foreign investors. Like the previous Plans, the 8FYP also targeted substantial amounts of FDI to meet the resource gap for infrastructure investment.

But FDI is equally critical for boosting export-led growth. In particular, FDI is needed to break into new markets and with new products – the export diversification challenge. In this regard, what is most needed in Bangladesh

is export-seeking FDI – FDI that comes in to take advantage of low-cost labor or gain preferential access to global markets in order to boost their foreign exchange earnings from exports.

Bangladesh presents an ideal destination for such export-seeking FDI that ensures not only low-cost production but, given its LDC status, also opens markets with duty-free entry in Europe and elsewhere. Of course, the economy's FDI-driven export potential is undermined by the weakness in overall investment climate and the degree of restrictiveness of its trade regime.

Though FDI inflows have been rising they are miniscule relative to the growing size of the economy, at barely 1% of GDP during the 6th-7th FYPs. The FDI performance remains subdued during the first two years of the 8FYP (Table 6.8). Overall, the prospects of approaching the target figures under the Plan are dim (e.g. reaching \$15 billion or 3% of GDP by FY2025, annual average, \$7.5 billion).

Table 6.8: FDI in Bangladesh during Five Year Plans (USD million)

Plan Period	Fiscal Years	FDI
	2010	913
	2011	1136.5
CHAD	2012	1292.6
6FYP	2013	1599.2
	2014	1551.3
	2015	2235.4
Total		8728
6FYP Avg		1454.7
	2016	2332.7
	2017	2454.8
7FYP	2018	2580.4
	2019	3232.81
	2020	2370.45
Total		12971.16
7FYP Avg		2594.2
OLAD	2021	2500
8FYP	2022	3400
Total		5900
Avg		2850

Source: BB, Data for 8FYP is till FY'2022

There are several reasons why FDI inflows are modest and not rising fast enough in Bangladesh. First, with 94% of FDI invested outside EPZ, it is possible to infer that the predominant type of FDI has been geared to the domestic market – the market-seeking type of FDI (power, telecommunications, food processing). In principle, transmission of spillover effects should be maximum in such a case. Second, export-seeking FDI has been limited and largely confined to the EPZ. This corroborates the findings that Bangladesh's leading manufacturing sector,

RMG, is still not welcoming of competition from foreign investors and de facto restrictions by the dominant associations discourage FDI presence in this sector which in turn constrains FDI in other forward and backward linkage activities. Third, high protective tariffs notwithstanding, there is not much incentive for tariff jumping FDI in view of the fact that trade policy and customs administration is still perceived as being restrictive for seamless movement of import-export goods and the domestic market is still not large enough to generate scale economies.

It could be for the same reason that there is not much traction in GVC-oriented FDI for which a high degree of trade openness is an essential prerequisite. All in all, the entire package of trade and investment policy, trade infrastructure and relevant institutions, continue to fall short in attracting more FDI under the 8FYP. Furthermore, the fact that much of our FDI is geared to the domestic market, its further proliferation is also limited by the size of the domestic market, unlike the vast global export market, which would be the destination of export-seeking FDI.

Without more FDI coming into Bangladesh and berthing outside EPZs without restrictions or constraints in any sector (except those limited by national security) progress in export diversification will be hobbled by lack of capital, technical knowhow and management, and the market access needed. A radical change in approach to attracting FDI is needed for the remaining years of 8FYP in order to create traction in substantial FDI inflows to boost export diversification.

#### 6.8 Progress with WTO-Consistent Trade Policy

The 8FYP laid out the post-LDC challenges in various dimensions one of which was the need for compliance to WTO rules, as Bangladesh is a founding member of the multilateral institution, is committed to adhering to its rules and regulations, and has been a significant beneficiary of the multilateral system. But achieving compliance with WTO rules is also a necessary condition for gaining further traction in future export growth and its diversification. Many of the current practices in Bangladesh's trade regime will run afoul of WTO rules post-LDC graduation and, unless rectified, Bangladesh will face plethora of complaints and possible administrative actions from countries offering preferential access.

The 8FYP raised the challenge that as Bangladesh graduates out of its LDC status, it will need to be cognizant of some WTO rules that it had hitherto ignored – particularly, those relating to levels of protective tariffs and para-tariffs. Other multilateral disciplines will also come into play, such as rules governing intellectual property, subsidies, standards, and trade-related investment, which are going to be the same for developing and developed economies. Moreover, if Bangladesh were to seek membership of regional trading blocs, like RCEP, it would have to submit to their disciplines which are also likely to be stringent. Broadly speaking, economic institutions in Bangladesh will have to start getting ready to face and conform to a more competitive and rules-based global trading environment in the future.

The 8FYP did articulate the required strategy for moving towards WTO compliance. Having established the critical importance of two inter-linked policy of rationalizing the protection structure and sufficiently incentivizing exports it was recognized that there was no option but to rationalize the level and structure of protection to import substitute industries in order to minimize the level of anti-export bias that impeded export diversification. This was because high protection levels meant any support to export (e.g. subsidies) will have to be high, but such measures will be fiscally unsustainable and will also fall afoul of WTO rules.

As mentioned earlier, overall progress has been slow. Two non-compliant measures relate to (a) tariffs exceeding the bound rates, and (b) practice of minimum import price for supposedly protecting revenue. These were two low hanging fruits that could have been done away in one stroke in FY2023 Budget without much impact. To roll out the full compliance over a period of three years does not reflect well on the country when little or no progress has been made in the other more substantive requirement of rationalizing and modernizing the tariff

structure. To cast these two programs as part of rationalizing the tariff structure will not reflect the seriousness of the rationalization initiative.

Moreover, the practice of direct cash subsidies on exports continues and has been expanded due to the Covid impact. These have to be toned down if not fully eliminated over the next couple of years. The existence of paratariffs (e.g. regulatory and supplementary duties) is not recognized by WTO and in recent Trade Policy Reviews Bangladesh has been sounded out for elimination of these. It appears that there is no traction in moving towards elimination of RD or SD as of the mid-term of 8FYP. Currently, para-tariffs make up roughly one-half of the average nominal protection rate on all imports and progress in rationalization is continuously hobbled by the argument of loss of revenue. The case for rationalization as a means to remove anti-export bias is still not fully understood by the authorities or those in charge of handling the adjustment.

#### 6.9 The Way Forward

The 8FYP, like the previous two 5-year Plans, proposed to strike an effective balance between the role of the state and a market-oriented economy. By and large, this strategy has produced results solid results over the past two decades. Given that the private sector is acknowledged as the principal driver of Bangladesh's rapidly growing economy, it is critical that the degree of public intervention in markets be restrained and focused on enhancing inclusiveness of growth dynamics. Such restraint is most helpful in the area of trade and industrial policies.

This is also the area of economic policy that is most influenced by political economy considerations. The heavy hand of 'dirigiste' trade and industrial policies -- where government interventions in the economy aimed at promoting and directing certain industrial sectors or businesses – still predominate, often by protecting ISIs from foreign competition. Consumers who are the largest group end up bearing the cost of this protection (via higher tariff-induced domestic prices) without having a chance to make their case for lower prices via lower protective tariffs, even at a time when domestic prices spiked in response to higher import prices of food, fuel, and commodities, in addition to a substantial depreciation of the exchange rate. Consumer groups have to be given a place at the table when Budget consultations take place.

Going forward, as Bangladesh approaches LDC graduation in 2026, trade and industrial policies will have to be revamped in line with the strategies of trade openness as laid down in the 8FYP. Otherwise, competitiveness and export performance will suffer, and export diversification will remain a distant dream.

# CHAPTER 7 ENERGY AND POWER SECTOR DEVELOPMENTS

#### 7.1 Overview

The economic development of the past decade has seen rapid decline in poverty, along with growing income and improvements in human development and living standards. This has gone hand in hand with economic transformation from primarily an agrarian economy to that which now has service sector and industry holding dominating share of GDP. The rapid development of the energy sector during the 6th and 7th FYP periods played a catalytic and enabling role in this, helping move forward the industrialization agenda. The energy sector consists of electricity, gas, coal, liquid fuel, wind energy, solar and other non-petroleum fuel. The critical role of assured supply of electricity at an affordable price for social and economic development is universally recognized, and government has also been trying to pursue this path. With more stable availability of electricity and primary energy, this period saw new factories being set up at increasing rate across the country, along with growing urban centres and cities, which in turn provide goods, jobs and homes, and amenities that make life more comfortable and enjoyable.

Bangladesh has now embarked on achieving a visionary goal of becoming a developed economy by 2041 as envisioned under the PP2041. To realize this goal, Bangladesh will have to use its experience and success in becoming a competitive manufacturing hub with a diverse export base. A sustainable power infrastructure along with a competitively functioning transparent and well-regulated primary energy sector would help strengthen the competitiveness of Bangladeshi manufacturing and export products. International experience shows that efficient and low-cost energy supply has played a pivotal role in emerging economies in accelerating growth, particularly during the rapid industrialization phase leading to quality job growth, as they move from middle-income to upper-middle income and developed stage of development.

#### 7.2 Power and Energy Sector Performance during the 7FYP

Power & Energy sector that has been at the centre of the infrastructure development vigorously pursued both during the sixth and the seventh FYP periods, has been catalytic in achieving the high growth trajectory that Bangladesh has been enjoying. In the process it has also facilitated faster growing manufacturing and export sectors growth.

During the Sixth FYP and Seventh FYP period's priority was given to increase generation capacity to meet demand; and at this point of time Bangladesh has surplus installed capacity. The policy and institutional support during these periods were geared up to help leverage private investments alongside public investments in energy and power sector. The financing strategy emphasized both public funding as well as financing based on public-private-partnership (PPP). Emphasis was also placed on improving efficiency and service delivery of relevant public agencies.

The results of this strategy were very positive. Since 2011, grid-based generation capacity has soared (Figure 7.1). In FY2020 total installed capacity, inclusive of public, IPP, captive, import and renewable energy reached 23,548 MW, higher than the target. This growth in generation capacity along with expansion of transmission and distribution networks have helped achieve substantial progress in both the indicators for the power sector: increasing growth of per capita consumption of electricity and improving the access of the population to electricity.



Figure 7.1: Trend of Grid-based Installed Capacity (MW)

Source: Annual Report FY2019-2020, Bangladesh Power Development Board (BPDB)

Electricity coverage has increased to 97%, which was 72% in the baseline FY 2015. This has resulted in increasing per capita generation of 512 kwh (including captive) from 371 kWh in FY 2015. During this period about 3.70 crore consumers got connected to the national grid with 5.67 lakh km. of distribution system. The overall system loss of electricity decreased substantially to 11.23% in FY2019-20from 15.73% in FY2009-10. However, according to the SDG tracker the share of renewable energy (including hydro) to the total electricity generation increased from 2.79% in FY 2015 to 3.49% in FY 2020. It is to be noted that the total installed capacity in FY 2020 was 23,548 MW that is inclusive of captive and off-grid renewables.

The seventh plan period also saw progress in diversifying primary energy source through LNG imports, and progress in construction of large sized coal fired power plant. There have also been several price adjustments in all segments of the energy sector. However, the progress in expanding and diversifying primary energy supply, renewable energy, and in improving the energy sector finances has been limited. The areas of progress and concerns in electricity and primary energy are reviewed in greater detail below.

Despite this progress there were two areas of concern. First, the use of renewable energy in power supply needed more attention. Thus, the share of renewable energy to the total electricity generation (% including hydro) therese from 2.79% in FY2015 to 3.49% in FY2020 (Source: SDG tracker). This continued overwhelming reliance on fossil fuel needs to be reduced to keep pace with the progress made globally in the use of clean fuel. Second, despite price increases, progress with improving the energy sector finances has been limited. The 8FYP aimed to put stronger focus on these aspects of power and energy sector development.

#### 7.3 Objectives, Targets and Strategies for the Power Sector in the 8FYP

**Objectives and Targets:** Despite strong progress, several areas of gaps emerged in the power sector after the completion of the 7FYP. These included: severe financial constraints caused by rising cost of primary fuel; high cost of power generation; and exchange rate fluctuation. The primary objective of the 8FYP was to address these performance gaps. In this regard, the 8FYP adopted several targets under the DRF to measure progress. These targets are shown in Table 7.1.

Table 7.1: Targets for the Energy and Power Sector in the 8FYP

Performance Indicators	Baseline (Year)	Target (2021)	Actual 2021	Target (2022)	Actual 2022	Target (2023)	Estimate 2023
Electricity Installed Generation Capacity (MW)	23,548 (FY 2020)	24000	25,235	26000	25700	28,000	28,134
Access to electricity (% of households)	97 (FY 2019)	100	99.3	100	100	100	100
Per capita generation of electricity (kWh)	512 (FY 2019)	552	560	592	609	632	602
Share of renewable energy to the total electricity generation (%) (including hydro)	3.25 (FY 2019)	4.50	4.00	5.75	4.00	7.00	4.59*
Proportion of population with primary reliance on clean fuels and technology	26.3% (FY 2019)	21%	29.3%	23%	28.6%**	25%	

Source: 8FYP and GED estimates based on data from Power Cell, \*Power Division \*\*SVRS 2022

#### 7.3.1 Progress against 8FYP Targets

Available data shows that considerable progress was made in achieving the targets during the first three years of the 8FYP. Access to electricity is now near universal. Installed capacity and per capita generation of electricity is basically on target in terms of adequacy. When the targets for generation were set, the adverse effects of Covid-19 on GDP growth were not known, and the emergence of the Ukraine War and effect on GDP growth was not known. Once these factors are considered, total installed capacity of 28,134 MW in FY2023 is more than adequate. Similarly, the increase achieved in per capita generation of power is adequate under the present demand conditions. The new challenge that has emerged is to find a way to absorb excess capacity by restraining new projects and utilizing better the available generation capacity.

Progress against the renewable energy target is lagging. Compared with a target of achieving 7% of power based on renewable energy, in FY2023 the share had increased to only 4.59% substantial efforts will be needed to accelerate the generation of power using renewable energy over the next few years. Unfortunately, progress against the target for use of clean fuels and technology could not be assessed owing to the lack of data.

#### 7.3.2 The Strategy for the Power Sector in the 8FYP

The Eighth Plan strategic focus sought to have a generation pipeline that will be meeting the demand while also ensuring better quality and efficiency. Specifically, the power sector and energy sector strategy sought to focus on: (a) generation through ensuring optimal primary fuel mix, including efforts to make increased use of domestic coal and gas through mining and exploration; (b) transmission and distribution of electricity through further reduction of T&D losses; and (c) maximizing use of renewable energy and energy trade. The target was to achieve an efficient least- cost production in the long run, transmission, and distribution system. The details of the strategy are summarized in Box 7.1.

#### Box 7.1: 8FYP Strategy for Energy and Power

#### The 8FYP strategy comprises of following components:

- 1. Move to an efficient least-cost power production structure based on (a) an optimal and efficient primary fuel mix; and (b) transmission, and distribution of electricity through further reduction of T&D losses.
- 2. Continue to enhance the generation capacity to match expansion of demand from all segments of the economy, particularly industry and manufacturing, to ensure supply of unhindered quality power from the grid, with 100% population connected to quality electricity supply.
- 3. While moving to a least-cost power production system, have regular power tariff adjustments to ensure long term sustainability of power generation and moving away from budgetary subsidy that is now prevalent.
- 4. To leverage higher levels of investments, undertake necessary reforms that can create a more conducive and healthier environment for the participation of private sector (IPPs and PPPs), domestic and foreign, in energy sector development under the supervision of effective regulatory authority.
- 5. Enhance the exploitation of gas, coal, renewable resources, increased energy imports particularly hydropower from neighbouring Bhutan and Nepal to optimize the energy mix and reduce the dependence on imported furnace oil and HSD. In this regard hydropower, given its abundance in the neighbouring countries and expected cheaper cost of production, will be given prime importance among other renewable resources. The other renewable resources include wind power, solar energy, biomass, and waste to power, where the core strategic goal will be to make the energy available at optimum rate to all consumers.
- 6. Address the identified issues including gas crisis, poor thermal power plant efficiency, and adulteration in furnace oil, fiscal prudence, and sustainability.
- 7. Improve Energy Efficiency & Conservation through demand side management.
- 8. Establishment of supply line network for the transportation of petroleum in quick, safe, efficient and environment friendly way all over the country.
- 9. Establishment of several energy hubs in the country including Matarbari Ultra supercritical Coal-fired Power Plant centric energy hub.

#### 7.4 Implementation Progress of Power Sector using the Mid-Term of the 8FYP

In line with Sustainable Development Goal (SDG) 7, the Government laid down a Goal to "Ensure Sustainability in Production, Consumption and Use of Energy and Mineral Resources" while formulating its 8th Five-Year Plan (FY2021-25)). Despite the disruptions in supply chain caused by the COVID-19 Pandemic and the Russo-Ukraine war, there has been substantial progress in moving close to generation targets in the power sector. However, the power sector efficiency and productivity does not come from installed capacity alone, also depends on the transmission and distribution to the consumer end. The first 3 Fiscal Years of the 8FYP, the country record its highest figures for daily generation – the peak of which was on 19 April 2023 – when the power plants across the country generated a total of 15,648 MW (Figure 7.2).

18,000
16,000
14,000
12,893
12,000
10,000
7,817
8,000
6,000
4,606
4,000
2,000
0
Repare reparation reparation reparation repart r

Figure 7.2: Trend in Maximum Generation (MW)

Source: Bangladesh Economic Review, BPDB

While power generation capacity has been rising significantly over the three Plan periods (6th, 7th, and 8th FYP), the grid-based installed capacity needs to be higher than the demands due to the consideration of auxiliary consumption, forced outage, maintenance schedule, spinning reserve for FGMO operation and contingency of the system. There are several factors underlying this situation. First, the projected growth path under the PP2041 has gone off-track with the advent of COVID-19 and the Ukraine War. So, the expected demand for power projected under the PP2041 growth scenario has now become too optimistic. Given the time lag in negotiating power production with the private sector and actual commissioning of a power plant, demand had already fallen by the time these investments started to yield power supply. Second, the Ukraine War caused a huge spike in global energy prices thereby driving up the cost of imported energy. The Government had to cut the import of primary fuel and thereby power production to avoid a balance of payments crisis. Third, growing power prices have led to power conservation efforts, thereby slowing demand.

Table 7.2: Installed Capacity, Projected Demand and Maximum Generation (MW)

Year	Projected Demand	Installed Capacity (MW)	Maximum Grid Demands (MW)
FY2017		13,555	10,400
FY2018		15,953	11,200
FY2019		18,961	12,100
FY2020	23,548	23,548	13,300
FY2021	24,000	25,235	14,500
FY2022	26,000	25,700	15,800
FY2023	28,000	28,134	17,100

 ${\it Source: 8FYP, Power Division, and Bangladesh Economic Review}$ 

#### 7.4.1 Fuel Mix in Power Generation

In the early years of independence Bangladesh was rich in natural gas relative to demand. Not surprisingly, the composition of different sources of energy in Bangladesh shows that Natural Gas was the biggest source of fuel for Power Plants across the country. Until end 1990s, roughly 80% of power generation was sourced from natural gas. Over the years, rapid depletion of natural gas led to the search for alternative sources of primary fuel. The 7FYP and the 8FYP put considerable emphasis on diversifying the primary fuel mix in favour of liquefied natural gas, coal, imported hydropower and renewable energy.

Table 7.3: Fuel wise Installed Capacity (grid based) up to FY2023

Fuel/Source	Installed Capacity (MW)	Share (%)
Gas	11,372	46%
НГО	6,492	26%
HSD	1,010	4%
Coal	2,692	11%
Hydro	230	1%
On-grid Solar	459	2%
Imported	2,656	10%
Total	24,911	100

Source: BPDB

According to the latest available data (FY2023), natural gas-based power installed capacity has fallen drastically to a mere 46%. While carbon-emitting Heavy Fuel Oil (HFO) has grown to (26%). Other sources include Coal (11%), High Speed Diesel – HSD (4%), Imported Power (10%) and on grid Solar (2%) (See Table 7.3). It should also be noted that more than 37% of the generation capacity in the Captive Power Plants (CPP) comes from Diesel (HSD). The ambitious plans to use LNG and imported coal as major sources of power have not yet materialised because of the higher energy prices since the beginning of the War in 2022 and the shortage of US Dollars during FY23.

#### 7.4.2 Reduction of System Losses

Power system loss refers to the electric power that is dissipated or wasted during the generation, transmission, and distribution of electricity from the entire power grid. These losses occur due to various factors (technical or non-technical) such as resistance in power lines, transformers, and other electrical components, as well as losses due to malfeasance (e.g. meter tampering, false reading, etc.). Bangladesh achieved major progress with the reduction of transmission and distribution losses during the 6th and the 7th Five Year Plans (Figure 7.3). The total System Loss fell from 15.73% in 2009-10 to 13.55% in 2014-15 and to 11.23% in 2019-20. This progress has continued under the 8FYP, as the System Loss has continued to fall – to 11.11% in 2020-21, 10.41% in 2021-22 and 10.33% in 2022-23. This is a good outcome. Power system losses are now comparable with good practice international experiences.

18.00% 15.73% 16.00% 14.73% 14.61% 14.36% 14.13% 12.19% 11.87% 11.96% 11.36% 11.23% 11.11% 12.00% 10.96% 10.00% 8.00% 6.00% 4.00% 2.00% ■ Distribution Losses ■ Transmission Losses ■ Transmission Distribution losses

Figure 7.3: Trend in Power System Losses (%)

Source: BPDB

#### 7.4.3 Progress with Power Sector Finances

The operational profit (loss of BPDB) is shown in Figure 7.4. Despite frequent price increases awarded by the Bangladesh Energy Regulatory Commission (BERC) and improvements in operational performance of BPDB reflected in improved billing and collection and reduction in transmission and distribution losses, the generation cost has been increased due to primary fuel (gas) shortage, high price of liquid fuel due to volatile market and exchange rate fluctuation. Moreover, the bulk tariff has not increased aligned with the power generation cost.

As explained below, the pricing policy has been reasonably flexible, but BERC is now faced with the dilemma of how to respond to cost escalation owing to excess capacity and high-cost power contracts in its pricing decisions.



Figure 7.4: Net Profits (Losses) of BPDB (taka crore)

Source: Bangladesh Economic Review Various Years, Ministry of Finance

#### 7.4.4 Power Pricing

Historically, electricity prices were heavily subsidized due to selling electricity at an average price that was lower than the average cost of production. Over the past several years, the T&D losses have been sharply reduced and pricing policy for electricity has improved.

Table 7.4: Average Sales Price of Electricity (Kw/h) 2022

BPDB(Bangladesh)	5.08	\$0.0462
India	8.00	\$0.0975
Vietnam	1820	\$0.077
Thailand	4.84	\$0.14
Malaysia	0.32	\$0.071
China	0.48	\$0.082
Nepal	7.48	\$0.057
Sri Lanka	31.76	\$0.0985
Indonesia	1259.13	\$0.084

Source: 8FYP and Power Division

#### 7.4.5 Power Subsidy

The surge in international oil prices in the post-Ukraine War period has spiked up fuel cost pressures, adding to the electricity pricing policy dilemma. Combined with the pressure of IPP capacity payments the global oil price increases raised the power subsidy bill to Taka 120 billion in FY2022 (0.3% of GDP) (Figure 7.5).

140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20 FY21 FY22 E

Figure 7.5: Power Sector Subsidy (Taka billion)

Source: Ministry of Finance

#### 7.5 Review of Progress in Energy Sub-sector during the 8FYP Mid-term

Bangladesh is an energy deficit country and relies heavily on imports for fuel oil and more recently for coal and LNG. As such it is heavily exposed to the fluctuations in international energy prices. In the early years when gas was plentiful, the power sector relied heavily on domestic gas. As the supply of natural gas lagged demand, the power sector and industry both had to increasingly rely on imported fuel oil.

Against the backdrop a major objective of the 8FYP strategy for primary energy sector is to diversify the sources of primary energy to cleaner away from carbon-intensive energy like fuel oil to cleaner energy like LNG, imported clean coal, imported hydropower, and renewable energy. Another objective was to raise domestic production of energy to lower the reliance on imports.

To implement this strategy, the 8FYP sought to considerably expand import of LNG and clean coal, expand production of natural gas, and improve the efficiency of gas use through pricing and other conservation measures, explore hydropower imports through trade agreements with India and Nepal, and to invest substantially in the production of renewable energy.

## 7.5.1 Progress with Natural Gas

The industry of hydrocarbons has come a long way in Bangladesh since the discovery of an Oil Field in Haripur, Sylhet in 1955 and that of a Gas Field in Chhatak, Sunamganj in 1959. Although Oil has not been discovered in quantities viable for commercial extraction since then, 28 Gas Fields have been discovered in total-from which more than 19 trillion Cubic Feet (TCF) of Gas have been produced so far. At present, 20 of the Gas Fields are in production – while production has been suspended in 5 Gas Fields and the 3 remaining Gas Fields have not produced at all. The bulk of this production has come from the Titas Gas Field in Brahmanbaria (discovered in 1962 and in production since 1968) and the Bibiyana Gas Field in Habiganj (discovered in 1998 and in production since 2007 under a Production Sharing Contract with Chevron).

However, it is a matter of concern that according to the current state of exploration and discovery, only more than 9 TCF of Gas Reserves remain under Bangladeshi soil. The trend in gas production is shown in Table 7.5. The production of natural gas has increased at a long-term pace of 4.4%, rising from 704 BCF during FY2010 to 1,086 BCF during FY2020. During the 8FYP, the production increased in FY2021.

Table 7.5: Trend in the Production and Consumption of Gas (Billion Cubic Feet)

Fiscal Year	Production	Consumption
2009-10	704	710
2010-11	709	714
2011-12	744	750
2012-13	801	798
2013-14	820	828
2014-15	892	877
2015-16	973	967
2016-17	969	987
2017-18	969	982
2018-19	1,078	1,042
2019-20	1,086	994
2020-21	1,104	1,018
2021-22	1080	1001

Source: Bangladesh Economic Review,

The consumption of Natural Gas has been steadily increasing over the years in line with economic growth – from 710 BCF during 2009-10 to 1,018 BCF during 2020-21. However, this consumption growth is constrained by available production. Consequently, gas supply is regulated. The power sector is the largest source of gas consumption followed by industry (Table 7.6).

Table 7.6: Share of Gas Consumption by Sector FY2022

Sector	Consumption (BCF)	Share (%)
Power	402	40.1
Industry	191	19.1
Captive	176	17.5
Domestic	128	12.8
Fertiliser	60	6.0
CNG	37	3.7
Business	6	0.6
Tea	1	0.1
Total	1,001	100.0

Source:

To mitigate the shortages of Gas, the Government has been importing Liquefied Natural Gas (LNG) from Qatar and Oman since 2018 – in addition to purchasing it from the international Spot Market. In 2017, the Government signed a Contract with the Ras Laffan Liquefied Natural Gas Company Limited of Qatar to import 1.8 to 2.5 million Tons of LNG per annum for 15 years. Accordingly, the first shipment of LNG arrived from Qatar in 2018. The same year, another Contract was signed with the Oman Trading International Limited to import 1 to 1.5 million Tons of LNG per annum for 10 years. Accordingly, the first shipment of LNG arrived from Oman in 2019. Since then, 268 Cargoes have been imported so far – 179 from Qatar and 89 from Oman (Table 7.7).

Table 7.7: Imports of LNG Cargoes from Qatar and Oman During 2018 to 2023

Year	Qatar	Oman	Total
2018	11	_	11
2019	43	20	63
2020	40	26	66
2021	39	24	63
2022	40	16	56
2023 (May)	18	6	24
Total	191	92	283

Source: Rupantarita Prakritik Gas Company Limited (RPGCL)

Before that, the government signed a 15-Year Contract with the American firm Excelerate Energy in 2016 to establish a Floating LNG Terminal in Maheshkhali, Cox's Bazar – to store, process and transmit the imported LNG into the National Grid. With a Storage Capacity of 138,000 m3 and a Regasification Capacity of 500 million Standard Cubic Feet Per Day (MMSCFD), the Terminal started operations on 19 August 2018 and has supplied 498,493 MMSCF of Gas so far – until 28 February 2023. Under the "Build, Own, Operate and Transfer"

(BOOT) Contract, Excelerate will hand over the Terminal to the Rupantarita Prakritik Gas Company Limited (RPGCL) in 2033. In 2017, the Government signed another 15-year BOOT Contract – for a 2nd Floating Storage Regasification Unit (FSRU) – this time with Summit LNG. This FSRU also has a Storage Capacity of 138,000 m3 and a Regasification Capacity of 500 MMSCFD. In operation since 30 April 2019, Summit LNG has so far supplied 388,480 MMSCF of Gas to date – until 28 February 2023. As per the BOOT Contract, Summit LNG will hand over the FSRU to the RPGCL in 2034. Recently, the government has approved the construction of a Land-Based LNG Terminal in Matarbari, Cox's Bazar with a capacity of 1,000 MMSCFD. 8 Companies have been shortlisted after their Expression of Interest (EoI).

## 7.5.2 Emergence of Ukraine War and LNG Price Shock

The Government's plan to import LNG hit a roadblock in the wake of the emergence of the Ukraine War in February 2022. Since the government has also been purchasing LNG from the Spot Market to supplement its imports from Qatar and Oman, LNG prices in the spot market shot up from US\$ 6 to US\$ 10 per MMBtu (Metric Million British Thermal Unit) to US\$ 37 per MMBtu in July 2022. However, this event renewed questions about exploration and discovery new gas fields in Bangladesh. No major gas field has been discovered since the discovery of the Bibiyana Gas Field. At present, there are only 2 International Oil Companies (IOC) operating Gas Fields in Bangladesh under Production Sharing Contracts (PSC) with PetroBangla – Chevron from the United States and Tullow from Ireland.

## 7.5.3 Progress in the Oil Sub-sector

The Bangladesh Petroleum Corporation (BPC) imports both unprocessed (Crude Oil) and processed oil (Refined Oil). BPC imports Crude Oil of 2 types – Arabian Light Crude Oil and Murban Crude Oil –refines them at the Eastern Refinery Limited (ERL) in Chattogram. Between 2011 and 2022, annual import of crude oil increased from 1.2 million tons to 1.5 million tons (Table 7.8). Total Crude Oil processed by ERL has increased from 1.2 million Tons in FY2013 to 1.3 million Tons in FY2022 (Table 7.10). The ERL processes the Crude Oil into various products including LPG, Naptha, SBPS, MS, HOBC, MTT, Jet A-1, SKO, HSD, JBO, LDO, FO and Bitumen before combining with refined product imports (Table 7.9) and supplying them to the Padma, Meghna, and Jamuna Oil Companies for distribution to retail outlets.

Table 7.8: Import of Crude Oil by Type from 2011 to 2022 in Metric Tons

Year	Arabian Light Crude	Murban Crude	Total
2011	627,535	583,960	1,211,495
2012	682,039	583,494	1,265,533
2013	592,054	591,091	1,183,145
2014	592,865	714,746	1,307,611
2015	697,667	395,006	1,092,673
2016	728,307	579,848	1,308,155
2017	497,907	667,861	1,165,768
2018	597,338	482,260	1,079,598
2019	592,711	573,717	1,166,428
2020	698,694	457,436	1,156,130
2021	796,968	628,244	1,425,212
2022	694,297	783,417	1,477,714

Source: Bangladesh Petroleum Corporation (BPC)

Table 7.9: Import of Refined Oil by Type from 2011 to 2022 in Metric Tons

Year	Gas Oil	Jet A-1		SKO	HSFO	Lube		Total
2011	2,955,798	318,202	95,824	153,598	665,260	4,980	0	4,193,662
2012	2,618,685	339,699	95,824	20,380	670,899	4,852	0	3,750,339
2013	2,608,746	310,884	97,641	28,376	1,005,104	0	0	4,050,751
2014	2,903,928	334,079	35,596	0	869,124	0	0	4,142,727
2015	2,974,749	338,315	33,842	0	414,451	0	0	3,761,357
2016	3,130,052	354,430	150,601	0	481,673	0	0	4,116,756
2017	3,716,349	393,918	32,837	0	563,856	0	0	4,706,960
2018	3,457,987	305,777	32,550	0	343,129	0	0	4,139,443
2019	3,410,937	426,745	115,603	0	274,915	0	0	4,228,200
2020	3,535,572	245,732	190,509	0	22,852	0	14,906	4,009,571
2021	3,693,758	319,708	331,740	0	141,025	0	15,058	4,501,289
2022	4,264,102	470,537	452,619	0	349,487	0	31,495	5,568,240

Source: Bangladesh Petroleum Corporation (BPC)

Table 7.10: Processing of Crude Oil by ERL from 2013-14 to 2021-22 in Metric Tons

Year	Arabian Light	Murban	Condensate	Total
2013-14	506,659	645,926	52,215	1,204,800
2014-15	663,779	545,106	43,314	1,252,199
2015-16	683,950	437,791	7,419	1,129,160
2016-17	701,706	663,659	26,298	1,391,663
2017-18	532,305	663,649	45,776	1,241,730
2018-19	715,513	671,405	23,482	1,410,400
2019-20	592,677	474,450	16,029	1,083,156
2020-21	776,459	737,188	31,593	1,545,240
2021-22	729,828	646,317	1,225	1,377,370

Source: Bangladesh Petroleum Corporation (BPC)

## 7.5.4 Adverse Effects of External Shocks on Oil Sub-Sector

Covid-19 had some serious adverse effects on the performance of the oil sub-sector owing to cost escalation emerging from rising international oil prices. Additionally, as in the case of the gas sub-sector, the Ukraine War magnified these adverse effects on the oil subsector. The surge in global oil prices forced reduction in imports and cutbacks in the production of refined oil (table 7.10).

## 7.5.5 Progress with Coal Sub-sector

Over the years, the country has achieved considerable success in identifying and exploring five noteworthy Gondwana coal fields (high volatile bituminous rank coal). This coal fields are Jamalganj, which was the first discovered in 1962, followed by Barapukuria in 1985, Khalashpir in 1989, Dighipara in 1995, and Phulbari in 1998. In 1998, the Barapukuria Coal Mining Company Limited (BCMCL) was formed as a Subsidiary of the Bangladesh Oil, Gas and Mineral Corporation (PetroBangla) to initiate the mining of the Coal underneath. However, the lack of capital and experience that the Government signed a Contract with the China National Machinery Import and Export Corporation (CMC) – under which commercial production from the Mine began in 2005. Under this Management, Production, Maintenance Services (M&P) Contract, CMC developed the Capacity of the Barapukuria Mine to enable the mining of 1 million Tons of Coal per annum. Upon expiry of the Tenure of this Contract after 71 Months in 2011, a 2nd Management, Production, Maintenance and Provisioning Services (MPM&P) Contract was signed with the Consortium of the CMC and the Xuzhou Coal Mining Group Company (XMC) for 72 Months. Due to the Government's preference for continuity in production from the Mine, a 3rd MPM&P Contract was signed with the CMC-XMC Consortium in 2017 for 48 Months. Under this arrangement, more than 12 million Tons of Coal have been mined by the CMC from Barapukuria starting in 2005 (Tables 7.11-7.12).

Table 7.11: Trend in the Production Performance of the Barapukuria Coal Mine

Fiscal Year	Production Target (Metric Tons)	Actual Production (Metric Tons)	Target Achieved (%)
2017-18	819,000	774,497	95
2018-19	718,000	942,723	131
2019-20	790,000	660,293	84
2020-21	878,000	820,477	93

Source: Barapukuria Coal Mining Company Limited (BCMCL)

Table 7.12: Trend in the Production and Sales of the Barapukuria Coal Mine (Metric Tons)

Fiscal Year	Production	Sales to BPDB	Local Sales	Use in Boilers
2016-17	1,160,658	540,577	451,512	763
2017-18	923,276	787,103	273,287	858
2018-19	805,696	828,737	20	874
2019-20	811,137	807,181	20	1,048
2020-21	753,973	753,363	10	600

Source: Barapukuria Coal Mining Company Limited (BCMCL)

A Megaproject in the Power Sector using Coal as the Fuel is the 1,200 MW Matarbari Coal Power Plant (MCPP) at the Matarbari and Dhalghata Unions in the Maheshkhali Upazilla of the Cox's Bazar District. Being constructed with financial support from the Japan International Cooperation Agency (JICA), the Ultra Super Critical Coal Fired Power Plant was supposed to have 2 Units of 600 MW with Coal to be imported from Australia, South Africa, and Indonesia. Despite this, it is expected that the 1st Unit will start producing Power from January 2024. Meanwhile, the 1,320 MW Rampal Thermal Power Plant (RTMP) located in the Rampal Upazila of the Bagerhat District – also powered by Coal but built with technical support from India – started supplying to the National Grid on 19 December 2022.

Rooppur Nuclear Power Plant is the largest and first track mega-project in Bangladesh. Under this project, construction work of two nuclear power plant units with 2400 MW capacity (each with 1200 MW) is advancing significantly. Under the general contract signed between Bangladesh Atomic Energy Commission and Russian company JSC Atomstroyexport, the construction work of reactor building, auxiliary reactor building, turbine building, and cooling tower is almost complete. Fresh nuclear fuel for the first unit is supposed to be supplied in October 2023. Upto 31 August, 2023 the overall progress of the project is more than 60%. It is expected that electricity production from the first unit will be possible within 2024 and from the second unit within 2025. This will be a great landmark in Bangladesh's history of power generation.

## 7.5.6 Progress with Renewable Energy

A key objective of the 8FYP for the energy sector is Progress with renewable energy requires more attention. Renewable energy barely accounts for 4.25% of total installed power generation., much lower than the target of 7.5% for FY2023. Within renewable energy, solar power is predominant, with 80.40% share but still less than 1000 MW capacity. (Table 7.13). Despite its stated objective to reduce dependence on fossil fuel and increase reliance on renewable energy, Bangladesh remains highly dependent on the use of fossil fuel in the various productive sectors of its economy. SREDA has already prepared the draft of National Solar Energy Roadmap for 2021 to 2041 to promote adoption of renewable energy for environmental sustainability and energy security. At present, A ToR has been developed for evaluating the draft Roadmap. This Plan has advocated well thought out strategies to enhance the production and use of renewable energy on a sustained long-term basis. The quick approval and implementation of this strategy will be very helpful in increasing the reliance on clean renewable energy.

Table 7.13: Renewable Energy by Technology

Technology	Installed Capacity (MW)	Share (%)
Solar	960.51	80.40
Hydro	230.00	19.26
Wind	2.90	0.24
Biogas	0.69	0.06
Biomass	0.40	0.03
Total	1,194.50	100.00

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

#### 7.6 Progress with Energy sub-sector Finances

Two major institutions managing energy supplies in Bangladesh concern the Bangladesh Oil, Gas and Mineral Corporation (BOGMC), also known as PetroBangla, and the Bangladesh Petroleum Corporation (BPC). PetroBangla deals with oil and gas exploration, development and production, and importation and distribution of gas and LNG. The BPC deals with oil importation, refining and distribution of oil and oil products.

## 7.6.1 Financial Performance of PetroBangla

The trend in the financial performance of PetroBangla is shown in Figure 7.6.

3,000 2,095 2,000 1,109 882 884 920 898 1,000 415 n 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19 20<mark>19-</mark>20 20<mark>20</mark> (1,000)(2,000)(1,559)(2,040)(3,000)(3,156)(4,000)

Figure 7.6: Net Profits of PetroBangla (taka crore)

Source: Bangladesh Economic Review, Ministry of Finance

PetroBangla performed well financially during the early years of its operations based on windfall gains from fees on oil and gas exploration obtained from international oil companies. But operating profits dwindled with rising cost of gas supplies to the consumer level.

## 7.6.2 Natural Gas Pricing

The price of natural gas is set much below the true economic cost. As a result, natural gas consumption has been highly inefficient and there is very limited domestic resource mobilization by PetroBangla for investment in gas extraction. The production and transmission cost of supplying gas to domestic users has increased over time, creating pressures on the profitability of PetroBangla. The government responded to the growing domestic cost of gas supply by modifying gas prices (Table 7.14). Domestic prices of natural gas have been adjusted several times since 1974, but the largest single increase happened on 1st July 2019 (except for commercial users), when the government had visualized price adjustments intended to keep PetroBangla profitable.

Table 7.14: Trend in Natural Gas Prices in Bangladesh (Tk. /mcf)

Effective From	Power	Fertilizer	Industry	Commercial	Domestic Metered	Domestic Single Burner	Domestic Double Burner
19/Jun/74	3.7	3.7	7.2	12.0	12.0	15	28
01/Dec/77	5.0	5.0	9.0	13.0	13.0	16	30
02/Jun/79	6.3	6.3	16.0	17.0	16.0	20	36
07/Jun/80	7.8	7.8	18.0	19.0	18.0	22	40
07/Jun/81	9.3	9.3	27.8	28.0	20.0	25	45
01/Jul/82	10.5	10.5	31.0	31.0	27.0	35	65
30/Jun/83	11.5	11.5	36.0	36.0	34.0	45	80
27/Jun/84	13.1	13.1	36.0	45.2	34.0	45	80
30/Jun/85	15.7	15.7	43.2	54.2	40.8	60	100

Effective From	Power	Fertilizer	Industry	Commercial	Domestic Metered	Domestic Single Burner	Domestic Double Burner
28/Jun/86	19.1	19.1	52.1	65.4	44.9	66	110
18/Jun/87	24.8	24.8	52.1	85.0	56.1	80	130
01/Jul/88	28.5	28.5	60.0	97.8	56.1	92	150
01/Jul/89	33.0	28.5	70.0	110.0	65.0	100	170
01/Jul/90	38.0	32.8	80.4	126.5	74.8	115	195
01/Jul/91	39.1	34.0	85.2	134.2	74.8	115	195
01/May/92	43.1	37.4	93.7	134.2	82.1	126	215
01/Mar/94	47.6	41.3	103.1	147.5	82.1	160	250
01/Dec/98	54.7	47.6	118.9	169.9	94.9	185	290
01/Sep/00	62.9	54.7	136.8	195.4	109.0	210	330
01/Jan/02	66.0	57.5	143.6	205.3	114.4	275	350
01/Sep/02	70.0	60.0	140.0	220.0	120.0	325	375
01/Jul/04	72.5	62.2	145.2	228.5	126.1	340	390
01/Jan/05	73.9	63.4	148.1	233.1	130.0	350	400
01/Aug/09	79.8	72.9	165.9	268.1	146.3	400	450
01/Sep/15	79.8	72.9	190.9	321.7	198.2	600	650
01/Mar/17	84.7	74.8	205.0	402.1	257.7	750	800
01/Jun/17	89.5	76.7	219.7	482.5	317.2	900	950
01/Aug/17	89.5	76.7	219.7	482.5	257.7	750	800
18/Sep/18	89.5	76.7	219.7	482.5	257.7	750	800
01/Jul/19	126.0	126.0	303.0	482.5	356.8	925	975

Source: PetroBangla Annual Reports

#### 7.6.3 LNG Pricing Issues

Rapid depletion of natural gas has led to a severe rationing of this resource. Although the government continues to give priority to power generation in supplying gas resources, gas shortage has led to a rapid increase in the use of fuel oil for electricity production. This has substantially raised the cost of power production while also contributing to carbon emission. In recent years, the government has sought to import LNG to cover some of the shortfalls in domestic gas production. While this was a smart move and aimed to lower the reliance of power generation on high carbon-emitting furnace and diesel oil, the pricing policy for LNG sets the domestic price much below the actual import cost. With the recent surge in global LNG prices, the financial performance of PetroBangla has been impacted and demand for subsidy has increased. BERC responded by hiking gas prices in July 2020 and again in June 2022. The government agreed to provide LNG subsidy to PetroBangla Taka 25 billion in FY2020; Taka 28 billion in FY 2021 and Taka 40 billion in FY2022 (Figure 7.7). These combinations of partial price adjustments and subsidies moderated the financial performance of PetroBangla,

133 140 120 100 80 60 40 40 28 25 20 10 0 FY23B FY19 FY20 FY21 FY22 E

Figure 7.7: Trend in LNG Subsidy (Tk billion)

Source: Ministry of Finance

## 7.6.4 Political Economy of Natural Gas Pricing

Domestic gas prices are still much below compared to the world average prices. Figure B9 compares the average price of natural gas that was charged to a business in thirty-nine countries back in September 2021. It ranks the countries in terms of the Price in US\$ per kWh that was charged to a business for the use of natural gas. Iran is an extreme case since it does not seem to be charging anything to its businesses for the use of Gas. On the other hand, Hong Kong charges US\$ 0.134 to its businesses for the use of every kWh of gas. Ranking these countries in an increasing order, Bangladesh charges the fourth lowest to its businesses at US\$ 0.011 for the use of every kWh of gas, out of the 39 countries depicted in the Figure above. The average price charged to businesses in these 39 countries is US\$ 0.052 per kWh.

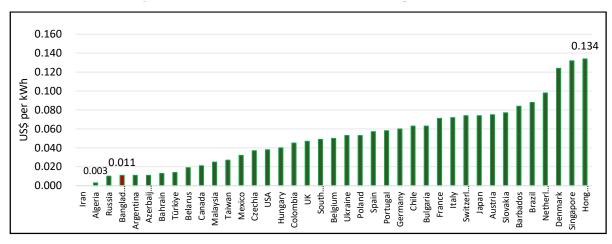


Figure 7.8: Price of Gas for Businesses in September 2021

Source: Global Petrol Prices.com

Figure 7.9 compares the Average Price of Natural Gas that was charged to a Household in 46 countries back in September 2021. It ranks the countries in terms of the Price in US\$ per kWh that is charged to a Household for the use of Natural Gas. Iran charges the lowest to its Households at US\$ 0.001 for the use of every kWh of Gas. On the other hand, Sweden charges US\$ 0.196 to its Households for the use of every kWh of Gas. Ranking these

countries in an increasing order, Bangladesh charges the ninth lowest to its Households at US\$ 0.013 for the use of every kWh of Gas, out of the 46 countries depicted in the Figure above. The Average Price charged to a Household in these 46 countries is US\$ 0.065 per kWh.

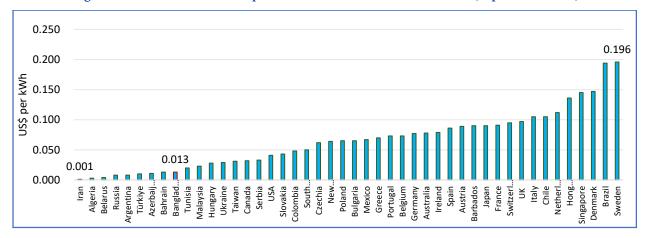


Figure 7.9: International Comparison of Gas Prices for Households (September 2021)

Source: GlobalPetrolPrices.com

These international price comparisons suggest there is scope for further increases in natural gas prices to improve the profitability of PetroBangla. Regarding LNG, the government will need to think through carefully how much subsidy it can afford and pass on that subsidy to fully compensate PetroBangla.

#### 7.6.5 Financial Performance of BPC

Profitability of BPC operations is primarily a function of the gap between international oil prices and administered prices at the pump plus applicable taxes (VAT and sales tax). For a long period, the local administered prices were below international prices leading to perennial losses for BPC (Figure 6). These losses were covered through budgetary subsidies that put a huge pressure on the budget. Additionally, large subsidy on fossil fuel has contributed to air pollution through higher consumption of fossil fuel. It has also discouraged private investment in green energy. The opportunity cost of oil price controls and subsidies is obviously large.



Figure 7.10: Operating Profits of BPC (taka crore)

Source: Bangladesh Economic Review, Ministry of Finance

Since the global oil price fall of 2014, with no downward adjustment of local pump prices, BPC has been making windfall profits. These profits rose from a negative value of Tk 114 billion in FY2012 to a peak of Tk. 90 billion in FY2016, with returns on assets rising from a negative value to over 20%. The uptick in consolidated SOE profitability since FY2015 (Figure 2) is largely a reflection of the profitability of BPC. BPC did not require subsidies since FY2015.

## 7.6.6 Fuel oil pricing policies

Fuel oil is mostly subsidized and has been a major budget buster in recent years. For example, in FY2013, total oil subsidy amounted to a whopping 1.3% of GDP that exceeded the budget of the health sector by 50% and was almost equal to 70% of the public spending on education. The decline of international oil prices since 2015 gave some temporary respite. The average domestic oil prices from FY2015-FY2021 were considerably above international oil prices leading to a surplus for BPC and the budget subsidy was eliminated. This was a positive policy move in the sense that the government did not pass on the global oil price decline despite noticeable public pressure. Within fuel oil, prices are set differently for different products. Historically, octane and petrol prices were set above cost of production, but diesel and kerosene were subsidized (Table 7.15).

Table 7.15: Recent Trends in Domestic Oil Pricing (Taka/liter)

	Petrol (Taka/ Liter)	Octane (Taka/Liter)	Diesel (Taka/ Liter)	Kerosene (Taka/Liter)	Furnace Oil (Taka/Liter)	Average Cost
Jan-06	56	58	33	33		36.0
Jul-08	87	90	55	55	30	63.4
Jan-09	74	77	44	44	30	47.8
May-11	76	79	46	46	42	57.8
Sep-11	80	84	51	51	50	63.2
Dec-11	86	89	56	56	55	68.4
Jan-12	91	94	61	61	60	73.4
Jan-13	96	99	68	68	60	78.2
Apr-16	86	89	65	65	42	69.4
Jul-17	86	89	65	65	42	69.4
Nov-21	86	89	80	80	59	76.8
Mar-22	86	89	80	80	74	81.8

Source: Ministry of Energy and Petroleum and Ministry of Finance

International oil prices started climbing from 2017. As a result, the average gap between domestic and international prices has narrowed and the surplus on the domestic oil account has been falling since FY2017. As global oil prices surged owing to the War in Ukraine, the average cost of domestic refined oil climbed up substantially.

The primary rationale for subsidizing energy is to protect the consumers. The government believes that higher energy prices tend to hurt the poor through direct energy spending and indirectly through cost-push inflationary effects. This needs to be re-examined in light of research evidence about who really benefits from energy subsidy, and what is the opportunity cost of this subsidy in terms of adverse macroeconomic and environmental effects.

#### 7.7 The Way Forward

The government's power sector has come a long way from the 2009 era of severe power crunch and is now in the comfortable situation of having excess power supply capacity. Power investment has contributed handsomely to the acceleration of GDP growth and exports over FY2010-FY2022. This has also contributed substantially to lowering poverty and improving the quality of life by securing a universal access to power supply. Moving forward it now needs to manage the excess supply situation by rephasing phasing investments. It also needs to reduce the average cost of power production by adopting least cost power supply options. The energy mix in power needs to be improved in favor of more use of clean energy and reduction in reliance on high carbon-emitting fossil fuels. For improving energy efficiency, initiatives like energy efficiency labeling of appliances, energy efficiency rating of buildings/housings, energy audits in industries etc. can be introduced. Moreover, initiatives should be prioritized for improving energy efficiency in industry and transport sub sector, i.e., commissioning of electric vehicle charging stations.

In the case of primary energy, greater efforts are needed to enhance the production and use of renewable energy including stronger efforts to import hydropower from India and Nepal. Additionally, efforts must be strengthened to implement on time the planned expansion in the use of LNG and imported coal. Stronger efforts are needed to expand gas exploration and development.

# CHAPTER 8 TRANSPORT SECTOR DEVELOPMENTS

# 8.1 Development Context

Bangladesh has made significant progress in planned development of transport infrastructure in recent years. Expansion of physical infrastructure has augmented connectivity and added vibrancy to economic activities around the country. In the past decade or so, there has been substantial investment in expansion and improvement of roads, railways, waterways, seaports and airports of the country. This has significantly enhanced domestic and regional integration, connecting people, goods, and services across the country and across the globe.

Globalization generates efficiency dividends through national and international integration of transport and communications networks, both physical and digital. In today's globalized economy, low-cost and efficient transport service is a major determinant of the competitiveness of the economy that influences trade and investment flows both internally within a country and externally. Efficient transport system also impacts on the pattern of regional development within a country and the location of poverty. Development of an efficient and low-cost transport network is, therefore, a key determinant of the ability to achieve the growth, poverty, and inclusiveness objectives of 8FYP and PP2041.

Recognizing the important role of transport, Bangladesh has put top priority to the development of its transport network. Bangladesh witnessed rapid growth of transport sector since independence. The overall annual growth rate was nearly 8.2 percent for freight transport and 8.4 percent for passenger transport. Even so, the demand for transport services continues to grow very fast, especially as the economy gets internally integrated and economic transformation away from agriculture and rural economy to urban-based industrial and modern services gathers speed. The relative roles of transport modes – multi-modal -- are evolving with road transport continuing expansion to be the predominant transport mode because of its inherent technical and cost advantages.

Transport system in Bangladesh comprises several distinct modes and services, notably railways, roads, road transport, land ports, inland water transport (IWT), coastal shipping, airports, and airlines. Roads and inland water transport are the dominant means of domestic transport carrying more than 90% of total traffic generated in the country. Although other modes like railway, coastal shipping would play a greater role, roads and IWT would continue to dominate the transport landscape in the foreseeable future. Presently there are about 55,000kms of paved roads; 2,877 route-kilometres of railways, 3,800 km of perennial waterways which increases to about 6,000 km during the monsoon, 2 seaports, 3 international airports (i.e., Dhaka, Chittagong, and Sylhet) and 8 domestic airports.

The public sector is mainly responsible for development and maintenance of transport infrastructure in Bangladesh. Nevertheless, it is also involved in commercial transport operations in road, railways, inland water transport (IWT) and ocean shipping alongside the private sector. In the road transport and IWT sub-sectors, the private sector is dominant. In ocean shipping, however, public sector still predominates, although the private sector has considerably increased its role in recent years. Recently private sector has also become important operator in air transport, both domestic and international. Involvement of the private sector in railway operation is yet to be seen.

## 8.2 Transport Sector Progress under the 7FYP

The transport sector vision for the 7FYP was to develop an efficient, sustainable, safe, and regionally balanced transportation system in which various modes complement each other, interface appropriately and, where possible, provide healthy competition to each other, within the framework of a multi-modal transport system. To realize this vision, special emphasis was placed on the introduction of modern technology for increasing capacity and

improving quality and productivity of the system, development of the two seaports with smooth transport links to Dhaka, 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 that help to develop the land route links between South Asia and East Asia through Bangladesh.

On the investment side, a conscious decision was taken to prioritize transformational transport infrastructure projects that helps modernize the Bangladesh transport network to improve the mobility of goods and services across the nation, facilitate international trade, reduce cost, and improve competitiveness. These projects are:

- Padma Multipurpose Bridge. This is the largest Bridge in the country (6.15 km) built on the Padma River, and is operational since June 2022, funded with Bangladesh's own budgetary resources an exceptional feat for any developing country (see Box 8.1). It links the south-west of the country (21 Districts), to northern and eastern regions. With this Bridge, Bangladesh is now fully connected: North-South, East-West.
- Bangabandhu Sheikh Mujibur Rahman Tunnel is an underwater expressway tunnel in Chattogram, under the Karnaphuli river. Project cost is estimated at US\$1.1B, of which half is financed by the Exim Bank of China. The tunnel is expected to be opened on 28th October 2023 and will be the first underriver road tunnel in South Asia. It is expected to improve the Dhaka-Chattogram-Cox's Bazar highway network.
- PPP-based Mass Rapid Transit (MRT). Recognizing the special challenge posed by growing urbanization and urban traffic congestion, the 7FYP sought to introduce Mass Rapid Transit (MRT) starting with the capital city Dhaka and its adjoining areas (see Box 2). The 7FYP strategy was to combine ADP allocations with a strong public-private-partnership (PPP) effort.
- Inter-modal Transport. The plan also intended to improve the inter-modal transport balance with
  greater emphasis on rail and inland waterways that are low-cost in nature and are environmentally
  friendly compared to other mode of transport.
- **Air Transport.** The importance of air transport, for tourism was recognized with a focus on improving inter-district airline connectivity.
- **User charges.** To improve resource mobilization the Government introduced user charges and fees for a range of public transport services including road user charges, port fees, inland water, and rail fares.
- **Private sector participation.** The 7FYP fostered private sector participation (local and foreign, plus PPP) in investment in transport and infrastructure network.

# Box 8.1: Padma Multipurpose Bridge

The dream of the people of South-Western Bangladesh, as well as of the rest of the country – came true on 25 June 2022 when the Padma Multipurpose Bridge was opened to traffic. The construction of the Padma Bridge is one of the most significant transport infrastructure projects in Bangladesh's history. This bridge of 6.15 km in length has not only connected the 21 Districts in the South-Western Region of Bangladesh with the Central, North-Eastern, Eastern and South-Eastern Regions of the country, it has also broken a glass ceiling for the policymakers by being constructed entirely from domestic funds. It is by far the largest infrastructure project of its kind, involving complex engineering feat, completed in a developing country without recourse to multilateral funds. Travel between the 21 Districts and Dhaka has been greatly facilitated, leading to immense benefits through lower travel times for the people.

The economic implications of this Megaproject that has now ensured that the whole country is now connected – North-South, East-West – are going to be immense. The bridge will connect the southwest region of the country with the rest of the country and is expected to have a significant impact on economic growth. No doubt this is a boost to the economy that could see addition of at least 0.5 per cent GDP growth in FY2023 alone due to heighted economic activity arising from shortening of travel times between the capital city and Southern region.

The people of the country have already started to reap the benefits of the Padma Bridge. Taking advantage of the fact that the Mongla Port is only 170 km from Dhaka, where the Chittagong Port is 260 km, RMG was exported using the Mongla Port for the first time in July 2022. In addition, the importers have also started using the Mongla to ship in reconditioned vehicles. During this 1 year, more than 5 million vehicles have crossed the Bridge, paying almost Taka 8 billion in tolls.

## Box 8.2: Dhaka Metro Rail

29 December 2022 saw the people of Dhaka starting to enjoy the benefits of Mass Rapid Transit (MRT), when the Dhaka Metro Rail began operating in December. MRT Line 6 – as it is officially known – currently runs from Uttara to Agargaon, stopping in Pallabi, Mirpur, Kazipara and Shewrapara. The Government plans to open Stations along this Line in Farmgate, the Secretariat and Motijheel in October 2023–along with plans to open Stations in Bijoy Sharani, Karwan Bazar, Shahbagh and the Dhaka University later.

Due to the opening of this Line, the time of commuting is being reduced greatly from more than 208 minutes to 40 minutes – saving every commuter along the full route 168 minutes. Current annual financial costs of US\$ 4.4 Billion and daily time losses of 3.8 Million working hours are going to be reduced when the MRT becomes fully operational. Moreover, Taka 8.38 Crore will be saved in travel time and Taka 1.18 Crore will be saved in vehicle operating costs ever day – resulting in savings of Taka 3,489.40 Crore every year.

4 more MRT Lines are planned and under construction: (i) MRT 1 from the Airport to Kamlapur on the Airport Route and from Baridhara to Purbachal on the Purbachal Route; (ii) MRT 2 from Gabtoli to Chittagong Road; (iii) MRT 4 from Kamlapur to Narayanganj; and (iv) MRT 5 from Hemayetpur to United City on the Northern Route and from Gabtoli to Aftabnagar on its Southern Route.

The objectives and strategies of the 7FYP for the transport sector were sound. The emphasis on intermodal transport coordination, development of the national highways, inter-city connectivity, regional connectivity, lowering the cost of trade logistics and improving transport network asset maintenance are all well placed. The idea of instituting road user charges and sensitivity to environmental sustainability is also appropriate. Similarly, the strategy to improve incentives for private sector participation in both transport sector service and infrastructure development is well placed.

Consistent with the 7FYP strategy, the transport sector received high priority in budget allocation. The ADP allocated resources for all major projects in line with the 7FYP strategy and priority. Significant new transport infrastructure has been added over the plan period for roads and bridges. Services have expanded for all modes of transport. Private participation in air transport has grown significantly and most large cities are now connected with air services. These are major achievements that laid a strong foundation for consolidation under the 8FYP.

Overall, substantial progress was made under 7FYP in improving the transport network, especially in the area of road network, Sea and Ports, and Railways. Progress was somewhat slow in inland water, airport and bridges. This progress was facilitated by adequate allocation of financial resources. As a result of the priority given to transport, financing was not a constraint.

Notwithstanding this good performance, the government recognized that there are a number of areas where greater policy attention would be needed in the 8FYP.

- Persistent Implementation capacity constraint: This has been a serious constraint. Consequently,
  while projects have started, completions have lagged behind, primarily in the roads and bridges, and
  civil aviation subsectors, where project completion has suffered from procurement and international
  financing negotiation constraints.
- **PPP, cost recovery policies in the slow lane:** On the policy front, progress on PPP based transport network development has lagged behind target. The PPP activities have shown some recent signs of recovery, which is encouraging. But stronger efforts are needed to fast track, the idea of introducing cost recovery from road users through the institution of a well-designed road user charges still remains to be made effective. In railways, progress with capacity expansion and service efficiency improvements has not been matched with tariff increases and cost recovery, which has led to the inability of railways to cover operating costs.
- *Inter-modal balance:* Improvement in rail performance has improved the inter-modal transport balance but inadequate progress with expanding water transport services remains a major concern. IWT is a low-cost mode of transportation which greatly facilitate inter-city transportation at lower cost. Yet its shares in passenger and freight services are small and falling. The challenges faced by IWT are manifold including the issue of navigability, inadequacy of safety standards, inadequate port facilities, weak finances and management problems. A strong push will be needed in the 8FYP to unlock the full potential of this great transport asset.
- *Under-utilization of port capacities:* In response to growing demand, the government has sought to increase port capacity by launching the Pyra port and a program to expand the Chittagong Port. These are important. Yet, despite efforts, the Mongla Port remains under-utilized. Opening up the port to neighboring countries is a smart move, but this must be facilitated by coordinated investments to enable the full use of the potential of the Mongla port. A deep-sea port at Matarbari, a project in the offing, could be a game changer in many respects.
- **Port to factory connectivity:** The further acceleration in growth under PP2041 and the 8FYP and the associated diversification of the export basket will require strong improvements in trade logistics related to port to factory movements and timely inflow of imports of capital machinery and intermediate imports from ports to factory gate. The capacity and efficiency of the sea- and airport services and the ease of internal transportation are critical to the success of the export diversification strategy, for the ease of procuring imported inputs, and for transporting goods and services from the production centres to the consumption centres.

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• Upgrading of airport services: Airport handling capacities are under severe strain due to large increase in international passenger traffic what with migrant workers going abroad plus huge demand for air transport services at the national and international level due to rise in incomes. Bangladesh also has good prospects for strengthening its tourism capabilities. Bangladesh Civil Aviation has made important progress during the 7FYP but there is a large unfinished agenda that remains to be addressed. The airport capacity for both passenger and freight need urgent upgrading. Project implementation constraints have slowed capacity expansion. Upgrading airport services will be an important challenge for the 8FYP.

## 8.3 Objectives, Targets and Strategies for the 8FYP

Objectives and Targets: The 8FYP objectives and targets for the transport sector draws from the PP2041 Vision. The key objectives and targets were to:

- Enhance inter-district and inter-regional connectivity with neighbouring countries for passengers, goods, and services with choices of alternative transport modes.
- Enable citizens to have efficient choices between different modes of transport facilities at affordable cost and time.
- Allow transport services to be provided competitively with no barriers to entry and exit for service providers.
- Strengthen the safety standards for the transport system and enforce through legal provisions for full compliance with safety standards.
- Improve urban traffic flows through a combination of Mass Rapid Transit (MRT)/Metro Rail Network, BRTC Double Decker/Articulated Bus Service and private options that balance commuter needs for easy transit with avoidance of massive congestion.
- Enhance seaports capacity to cope with International Maritime Transport Sector.
- Strengthen the 3R (Rail, Road and Riverine) intermodal connectivity to support the hinterland connectivity of all ports of Bangladesh.

**Transport Sector Strategy for the 8FYP:** The transport strategy for 8FYP builds on the lessons of experience of the implementation of the 7FYP and the PP2021. A major priority is to address the major institutional constraints that have hampered implementation of transport projects. A second priority is the reform of the PPP strategy with a view to achieving stronger progress under the 8FYP. Finally, top priority would be given to the adoption and timely completion of transformational projects.

To implement this strategy the 8FYP will adopt the following measures: (i) Strengthening long-term planning and priority setting; (ii) Creating balanced inter-modal seamless transport facility; (iii) Strengthening implementation capacity; (iv) Ensuring sustainable financing of transport infrastructure; (v) Developing and implementing key policies for ensuring quality and reliability of transport services; and (vi) Strengthening management capabilities and efficiency of public transport authorities

**Sub-sector specific strategies:** Sub-sector specific strategies medium-term strategies under the 8FYP may be summarized as follows:

## 8.3.1 Strategy for Road Transport

The core elements include: (i) Strengthening project implementation capacity; (ii) Consolidation and upgrading of the National Highway Network; (iii) Road damage control and ensuring efficient use; (iv) Establishing road connectivity with major development points; (v) Lagging district connectivity; (v) Ensuring highway and interdistrict roadside services; (vi) Upgrading Zilla and Upazilla roads; (vii) Upgrading rural roads; (viii) Improving road maintenance; and (ix) Strengthening road safety.

#### 8.3.2 Strategy for the Bridges Division

- Timely completion of all ongoing projects.
- Turnkey project contracts for internationally funded projects.
- Sharply expanded PPP capabilities.

## 8.3.3 Strategies for Bangladesh Railway

The railway expansion program envisaged under PP2041will be undertaken with due regards to projected demand for passenger and freight services with a view to maximizing the use of associated capacity expansion. A critical outcome of the expansion program should be to ensure a higher market share of railways in passenger and freight traffic. Connectivity to regional train services involving neighbouring countries will be a priority. Emphasis will be placed to the introduction and/or upgradation of modern signaling system with relevant safety measures of international standard and introduction of a proper telecommunication system. Modern and upgraded maintenance practices will be adopted.

Utmost attention will be given to timeliness and quality of passenger and freight services including introduction of high-speed train services, increasing the frequency of services, maintain time schedule standards, ensuring good quality and comfortable passenger and freight facilities, efficient ticketing and freight booking services, and professional and courteous railway personnel.

While modernizing and upgrading of train facilities and services, efforts will be made to cover full cost of rail services by the end of FY2025.

## 8.3.4 Strategy for Developing Inland Water Transport (IWT)

The main elements of the strategy for inland water transport include: (i) Establish priority routing based on potential passenger and freight traffic flows and develop those navigability improvements and river port infrastructures; (ii) Sharply improve the navigability of river routes through strategic dredging, river training, and bundling as emphasized in BDP2100; (iii) Strengthen river transport safety standards by setting proper standards and ensuring full compliance. Particular attention would be given to ensure the river-worthiness of vessels, adequacy of safety equipment including radio communications, and compliance with passenger load regulations; (iv) Bangladesh Inland Water Transport Authority (BIWTA) will be strengthened with technical staff and qualified inspectors to administer all licensing functions efficiently and on time, undertake hydrological surveys, conduct river training and implement dredging operations; (v) Given the large need for resources, a proper balance between the public and private sector will be maintained. Much of the infrastructure will be provided by the public sector but most of the passenger and freight services will be provided by the private sector. PPP based dredging projects will be promoted; (vi) Riverport facilities will be sharply improved with modern service standards for passengers, docking and unloading services for cargo including container cargo, storage facilities and security and rescue

services. International river ports of call will also provide customs and inspection services as relevant; and (vii) Pricing policies for passenger and cargo will be commercially determined with a view to enabling a reasonable rate of return on investment.

## 8.3.5 Strategy for Air Transport

The main strategy for the aviation sector is to upgrade and modernize all existing airports by creating additional runways and taxiways; augmenting gate and apron capacity to accommodate more aircraft; increase terminal capacity to accommodate more passengers; improve ground traffic management and ancillary aviation processes to ensure quick aircraft turnarounds; improve air traffic and air space management practices and new radar technology; and provide complementary services such as fuel supply, passenger and luggage handling, warehousing, workshop facilities, hangars etc. In addition, to further accommodate growing demand for air transport, new airports will be built in important air corridors. Air cargo expansion and efficiency of handling will be emphasized. Priority will be given to air traffic safety, aircraft and infrastructure maintenance, quality of all aviation staff, and airport security.

#### 8.3.6 Strategy for Maritime Port Development

The 8FYP strategy for the maritime port subsector would involve the following steps: (i) Port service efficiency and productivity will be enhanced by introducing of state-of-the-art technology/internet to implement integrated Port Operations System and to move towards paperless regime so as to reduce dwell time and also reduce transaction cost to the users. The major areas where such automation is aimed at including Vessel Traffic Management System (VTMS); Information Technology in Scientific Application, the Cargo/Container handling operations and non-operation area; Surveillance System and Safety & Security System; and Electronic Commerce (EC)/Electronic Data Interchange (EDI); (ii) Emphasis will be placed on removing all the constraints to the use of the Mongla Port to its full capacity through a combination of investments in strategic dredging and investments in port equipment and facilities to support expanded and efficient cargo handling; (iii) Modern cargo handling techniques would be introduced to improve port performance in the major ports, particularly in the dry bulk cargo, conventional and unitized general cargo trades; (iv) The investment programs for the expansion of Chittagong Port and the Pyra will be fast tracked along with other investments for expanding container traffic handling and management; (v) The efficiency of port services will be enhanced through full mechanization of cargo handling and movement, selective outsourcing of service to private operators, use of modern cargo handling technology; and (vi) Servicing of larger ships will be facilitated through proper dredging and availability of proper terminal facilities.

#### 8.3.7 Strategy for Urban Transport Development

The main objective of the 8FYP urban transport strategy will be to support sustainable urban development. The strategy for urban transport would aim at reducing the traffic congestion and to improve the environment, improving transport and traffic infrastructure so as to meet existing and potential demands, and developing an integrated and balanced system in which all modes (motorized and non-motorized) can perform efficiently, and each mode can fulfil its appropriate role in the system. The main elements of the urban transport strategy are: (i) Completion of Mass Rapid Transit (MRT)Metro Rail, both elevated and underground rail, initially in Dhaka City and its adjoining areas; (ii) Provision of Bus Rapid Transit (BRT) that is characterized by dedicated lanes for rapid movement of buses for all divisional cities; (iii) Provision of large electric bus/pollution free bus operated by BRTC phasing out other small buses from the cities for rapid movement in all divisional cities; (iv) Creating special lanes for pedestrians and cyclists.; (v) Introduce Intelligent Transportation Systems (ITS) initially in Dhaka and then extend to other metropolises. The major application areas of ITS technology include electronic road pricing, traffic management, integrated ticketing systems for different public transport modes, and traveler information; (vi) Strengthening linkages with cities and towns around Metropolitan Areas through Bus Rapid

Transit (BRT) and Mass Rapid Transit (MRT/Metro Rail); (vii) Commercial parking facilities will be encouraged through private investment with strict enforcement of parking regulations; (viii) Time of day use restrictions will be introduced on heavily congested roads; and emphasis would be given to the introduction of pedestrian roads in Dhaka City and then extend to other Metropolises.

## 8.4 Transport Sector Progress during the Mid-Term of the 8FYP

To assess progress in the transport sector, several quantitative targets at the sub-sectoral level. These targets and the progress made during the mid-term are indicated in Table 8.1. Two types of targets were identified at each sub-sector level: indicators of progress of network facilities; indicators of service provided in moving passengers and traffic. Unfortunately, the data needed to assess progress against each of the indicators is not available. However, available data suggests that considerable progress has been made in expanding the road network and in upgrading its quality. Progress has also been made in expanding rail network. An important development milestone is the opening of the first metro-rail service in Dhaka to improve urban transport system. Progress has also been made in enhancing passenger and freight service by rail and inland water. This is an important step forward as both modes of transport have been relatively under-developed and they are also relatively more environmentally friendly. Inland water transport is an important service for the rural poor.

Table 8.1: 8FYP Targets for the Transport Sector

Performance Indicator	Baseline (Year)	Target (2021)	Target (2022)	Target (2023)	Progress
Length of RHD road network (km)	22,096 (2020)				22,476 (2022)
Length of targeted four-lane road (km)	30 (2019)	50	50	150	
Share of RHD highway road network in good and fair condition (% of network)	81 (2020)	84	87	90	89 (2022)
Upazila, Union and village road network in good and fair condition (%)	38 (2019)	43	48	52	
Proportion of the rural population who live within 2 km of an all-season road	83.45% (LGED, 2016)	86	87	88	
Length of rail network (km)	4,341 (2020)				4,438 (2022)
Length of targeted new rail network (km)	2,955 (2018)	3,400	3,500	3,600	
Length of targeted new double rail network (km)	110.5	150	182	540	
Length of Metro Rail network (km)	0 (2015)	0	20	22	11.73 (2022)
Million km travelled by rail	9,578 (2020)				10,456 (2021)
by passengers					
Million km travelled by rail	1,002 (2020)				1,042 (2021)
by freight					

Performance Indicator	Baseline (Year)	Target (2021)	Target (2022)	Target (2023)	Progress
Dredging by BIWTA (Lakh Cubic Metres)	434 (2020)				447 (2021)
Passengers ferried by BIWTC in Lakh	176 (2020)				297 (2021)
Vehicles ferried by BIWTC in Lakh	31 (2020)				40 (2022)
Passenger and freight by mode of transport	Passenger: 130.99 Lac Freight: 4.12 Lac MT (CAAB, 2019)  Passenger (by Bus) 480 Lac Freight (by Truck)	Passenger (by Air) 109.28 Lac Freight (by Air) 3.71 Lac MT  Passenger (by Bus) 500 Lac Freight (by Truck)	Passenger (by Air) 121.48 Lac Freight (by Air) 4.12 Lac MT  Passenger (by Bus) 550 Lac Freight (by Truck)	Passenger (by Air) 130.13 Lac Freight (by Air) 4.39 Lac MT  Passenger (by Bus) 600 Lac Freight (by Truck)	
	4.85 Lac MT (RTHD)	5.00 Lac MT	5.50 Lac MT	6.00 Lac MT	
	Passenger: 31.47 Crore Freight: 55.94 MT (BIWTA)	Passenger: 31.88 Crore Freight: 63.13 MT	Passenger: 34.03 Crore Freight: 68.18 MT	Passenger: 36.58 Crore Freight: 74.32 MT	
	Passenger: 1.97 Lac Container: 6678 TEU Vehicle by Ferry: 30.72 (BIWTC)	Passenger: 2.07 Lac Container: 7,678 TEU Vehicle by Ferry: 32.26	Passenger: 2.17 Lac Container: 8,678 TEU Vehicle by Ferry: 32.41	Passenger: 2.28 Lac Container: 9,678 TEU Vehicle by Ferry: 25.93	

Source: RTHD, MoR and MoS

On the investment front, the ongoing period of the 8th FYP has coincided with some of the momentous achievements for Bangladesh. Firstly, the Padma Multipurpose Bridge opened to traffic on 25 June 2022. The construction of the Padma Bridge is one of the most significant transport infrastructure projects in Bangladesh's history. This bridge of 6.15 km in length has not only connected the 21 Districts in the South-Western Region of Bangladesh with the Central, North-Eastern, Eastern and South-Eastern Regions of the country, it has also broken a glass ceiling for the policymakers by being constructed entirely from domestic funds. It is by far the largest infrastructure project of its kind, involving complex engineering feat, completed in a developing country without recourse to multilateral funds. Travel between the 21 Districts and Dhaka has been greatly facilitated, leading to immense benefits through lower travel times for the people. The economic implications of this mega project that has now ensured that the whole country is now connected – North-South, East-West – are going to be immense. The bridge will connect the southwest region of the country with the rest of the country and is expected to have a significant impact on economic growth. No doubt this is a boost to the economy that could see addition of at least 0.5 per cent GDP growth in FY2023 alone due to heighted economic activity arising from shortening of travel times between the capital city and Southern region.

Secondly, Dhaka entered the era of Mass Rapid Transit (MRT) on 29 December 2022 – when Line 6 of the MRT was inaugurated. Currently running from Uttara to Agaragon, the Line will extend to Kamlapur – while 5 more Lines are under construction. Thirdly, another historic development in Bangladesh's infrastructure sector is the construction of the 3.23 km long Bangabandhu Tunnel under the Karnaphuli River in Chattogram which is going on in full swing and is expected to be operational on October 2023. The tunnel is being built by the Bangladesh Bridge Authority (BBA). The cost of the project is estimated at US\$1.1 billion, of which around half is financed by the Exim Bank of China, the rest by Bangladesh Government. The tunnel will be the first underriver road tunnel in South Asia.

#### 8.4.1 Progress in the Road Sector

Road expansion program: Due to the terrain of Bangladesh and the density of its population, roads form the main mode of transportation across the country. These roads are constructed and maintained by various Departments of the Government – including Roads and Highways Department (RHD) and the Local Government Engineering Department (LGED) – in addition to the Local Government Institutions (LGI) like the City Corporations and the Municipalities. The RHD categorizes its roads into the National Highways (connecting the Divisional cities with Dhaka), the Regional Highways (connecting the district towns with the respective Divisional cities) and the District Roads (connecting the Upazila towns with the district towns). The RHD's network of roads (Table 8.2) has grown from 20,948 km in 2010 to 22,476 km in 2022.

It should be noted that due to the challenges posed by the heavy monsoon rains every year, the RHD and other relevant agencies also must focus on repairing the roads regularly to keep the current network functional – in addition to increasing it. Thus, maintenance gets as much attention of the RHD as expansion during its request to the Finance Division for funds under the Annual Development Programme (ADP) every year.

Table 8.2: Length of Roads under the Roads and Highways Department by Type (Kilometer's)

Year	National Highway	Regional Highway	District Road	Total RHD Roads
2010	3,478	4,222	13,248	20,948
2015	3,813	4,247	13,242	21,302
2020	3,906	4,767	13,423	22,096
2021	3,944	4,883	13,592	22,419
2022	3,991	4,898	13,545	22,434
2023	3,991	4,898	13,587	22,476

Source: Bangladesh Economic Review Year and Roads and Highways Department (RHD)

The Local Government Engineering Department (LGED) is the arm of the Local Government Institutions (LGI) for the construction of roads, bridges, and culverts in areas under the jurisdiction of the Union Parishads from the funds provided by the Local Government Division (LGD) according to the ADP (Table 8.3).

Table 8.3: Development of Road Infrastructure by the LGED (Kilometres)

Fiscal Year	Paving of Roads in Rural Areas	Construction of Bridges and Culverts in Rural Areas	Construction of Roads and Footpaths in Urban Areas	Construction of Bridges and Culverts in Urban Areas
2009-10	4,023	29	92	0.250
2014-15	5,990	29	1,315	1.240
2019-20	5,500	8	2,332	2.538
2020-21	3,100	18	710	3.857
2021-22	4,450	20	1,560	1.804
2022-23	3,797	15	430	1,750
Total	73,514	365	13,541	21.144

Source: Bangladesh Economic Review Year and Local Government Engineering Department (LGED)

Improvements in project implementation: Mindful of the project implementation constraints, delays and cost over-runs, RHD took measures to strengthen its project implementation capacity. RHD now has the best track record in utilizing its allocated ADP funds on time and progress has been made in ensuring better progress with physical work and project completion. However, this is a long-term challenge and continuous efforts are needed.

Improvements in Road Maintenance and Road Quality: A most commendable progress by the RHD is its improvement of the condition of the roads under its jurisdiction (Table 8.4). RHD categorizes its roads into 5 conditions – Good, Fair, Poor, Bad and Very Bad. During 2012-13, only 20% of the RHD's roads were graded as "Good", a number that fell to 19% by 2014-15. From 2015-16, the RHD undertook multiple Projects to improve this situation and the results started to be reflected in the statistics. The proportion of "Good" roads has continued to increase and now stands as 76% at the end of 2021-22. Similarly, the proportion of "Poor" roads has declined from 30% during 2012-13 to 6% at the end of 2021-22 – while the proportion of "Bad" roads has declined from 10% during 2012-13 to only 2% at the end of 2021-22. This has been possible with a focused system of road improvement and maintenance program. The improved road network quality is not only beneficial for smoother transport journey, but it also lengthens the productive life of the road network.

Table 8.4: Conditions of the Roads under the RHD (%)

Fiscal Year	Good	Fair	Poor	Bad	Very Bad
2012-13	20	38	30	10	2
2014-15	19	37	31	10	2
2015-16	39	23	21	11	5
2017-18	54	20	12	6	9
2018-19	50	26	13	6	6
2019-20	66	15	9	5	5
2020-21	65	19	8	4	4
2021-22	76	13	6	2	2
2022-23	75	14	6	2	2

#### 8.4.2 Progress in the Rail Sector

The rail infrastructure of Bangladesh currently consists of 4,438 km of tracks, 484 Stations, 1,468 Level Crossing Gates, 304 Locomotives, 1,683 Passenger Coaches, and 3,195 Cargo Wagons. Passenger and goods carrying capacities have risen over 40% over the past decade (Table 8.5), yet this falls short of growth in demand in both

these categories. Consequently, new tracks are being constructed and the existing tracks are being upgraded to Dual Gauge to enhance the transportation of people and cargo.

Table 8.5: Performance of the Bangladesh Railway

Fiscal Year	Passenger Kilometres (Million)	Freight Ton Kilometres (Million)
2009-10	7,305	710
2014-15	8,711	694
2019-20	9,578	1,002
2020-21	10,456	1,042
2021-22	10,456	1,042

Source: Bangladesh Economic Review and Bangladesh Railway

In addition, there are 2 Megaprojects in process to improve the fortunes of Bangladesh Railway. Firstly, trial runs have been carried out on the rail tracks in the Padma Multipurpose Bridge and it is expected that trains will run on a regular basis from June 2023. When this happens, trade and connectivity with India will be enhanced – in addition to the transport of people, goods and services between Dhaka and the South-Western Region of the country – especially the Mongla Port, the Greater Khulna Region, the Payra Port and the Greater Barishal Region. Work is also going on in full swing since 2018 to link Chattogram and Cox's Bazar by rail. 73% of the work has been completed by the end of 2022 and the remaining 23% of it will be completed by June 2023. It is hoped that trains will run from Chattogram to Cox's Bazar by the end of 2023 – giving a further boost to the tourist industry in the Cox's Bazar District—in addition to enhancing the transportation of LNG from the Maheshkhali Terminal and Coal from the Matarbari Terminal.

Based on the baseline targets in Perspective Plan of Bangladesh 2021-2041, the performance of Ministry of Railways is as follows:

Table 8.6: Performance of the Bangladesh Railway

Performance Indicator	Baseline (Year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks
		Actual (2021)	Actual (2022)	Actual (2023)			
Length of rail network	3093.38 (2020)	3178.88	3338.88	3498.88	3658.88	3818.88	Representing
(km)	3146.6	3324.19	3547.268	-	-		Cumulative value
Length of targeted new	798	81.99	235.39	397.29	636.29	798	
rail network (km)		53.22	230.81	453.888		-	
Length of targeted new	348.84 (2019)	528.84	708.84	888.84	1068.84	1249	
double rail network (km		550.696	594.536	644.8	-	-	
Million km traveled by	10000	15000*	15750	16540	17370	18240	Actual
rail by passengers*	(2018)*	5626.255	2029.88	-	-	-	achievement
Million km traveled by	2000	3000*	3150	3310	3475	3650	of Million km traveled by rail
rail by freight*	(2018)*	1003.159	1467.97	-	-	-	by freight data in calendar year
							according to SDG Report

Source: Ministry of Railways

#### 8.4.3 Progress in Inland Water Transportation

The Bangladesh Inland Water Transport Authority (BIWTA) regularly carries out the crucial task of dredging the riverbeds to keep the water channels navigable and enhance the transportation of people, goods, and services by water. Dredging activity at the beginning of the 8FYP had risen more than 10 times since FY2010, at 447 lac cubic meters compared to only 40 lac cm in FY10 (Figure 8.1). Typically, maintenance dredging is just as important as development dredging, the latter being the requirement for adding new avenues for river transport.

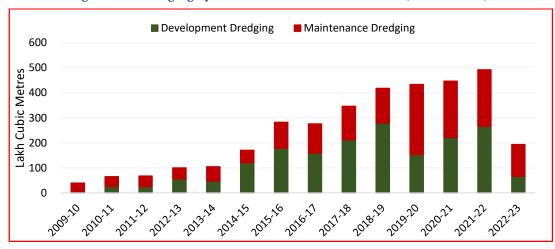


Figure 8.1: Dredging by the BIWTA from 2009 to 2023 (Lakh Metres)

Source: Bangladesh Economic Review and Bangladesh Inland Water Transport Authority (BIWTA)

Improved dredging has enhanced the capacity of inland water transport for both passengers and cargo. The BIWTC is the public enterprise transporting passengers along various inland river routes alongside private passenger river vehicles. Clearly, passenger volumes and number of vehicles used have grown steadily for BIWTC (Table 8.7). Importantly, services provided by private passenger launches and steamers have grown much faster to cater to the fast-growing number of passengers in the river routes of Bangladesh.

Fiscal Year	Vehicles (000)	Passengers (000)
2017-18	28	222
2018-19	30	223
2019-20	31	176
2020-21	36	297
2021-22	40	NA

Table 8.7: Performance of the BIWTC

Source: Annual Report – Bangladesh Inland Water Transport Corporation (BIWTC)

#### 8.4.4 Progress in Maritime Port Development

The most significant recent development in the maritime port infrastructure of Bangladesh is the fast-track implementation of the deep-sea port at Matarbari, in Cox's Bazar, with bilateral aid and technical support from Japan (JICA). Originally planned as a terminal for a coal-fired power plant, this megaproject – deep-sea port with connecting road and rail network -- costing over \$2.0 billion, is expected to be completed by 2026-27. It will not

only release the pressure on Chittagong Port, -- whose draft is not enough to allow ocean going mother vessels to dock – but will have a deep draft of about 16 meters to allow oceangoing vessels to dock here, with handling capacities of 600,000 to 1.1 million TEUs. Not only is this project, once completed, going to have a revolutionary impact on Bangladesh trade it is expected to have major regional impacts by creating scope for turning Bangladesh into a regional industrial hub with supply chain linkages with NE India and other neighboring economies in South and East Asia.

Eventually, the primary focus of this initiative will be to promote regional connectivity, with road and rail networks, and augment trade and economic activities between not only India and Bangladesh, but Matarbari could become a transhipment port for other countries in the region. It also has the potential to develop a "growth belt" through augmented trade and commerce in the region and beyond.

## 8.4.5 Progress in Civil Aviation Infrastructure

Several large airport projects are under implementation since the start of the 8FYP, most notable of which is the third terminal at Hazrat Shahjalal International Airport – a mega project. In 2019, the Civil Aviation Authority of Bangladesh (CAAB) began the construction of this3rd Terminal costing more than Taka 21,000 crore, JICA is providing more than Taka 16,000 crore while the remaining Taka 5,000 crore is being provided by the Government. At the end of 2022, more than 60% of the work has been completed and it is hoped to be opened initially at a limited scale in October 2023 and in full scale from June 2024. It will be operated under Public-Private Partnership format. With 26 Boarding Bridges being constructed instead of the initially planned 12, the Airport will have the capacity to carry an additional 16 million passengers every year instead of the initially projected 10 million, taking the total capacity to 22 million passengers and 500,000 tons of cargo.

Other notable airport expansion projects include Expansion of Osmani International Airport, Sylhet (1st Phase), Development of an extension of runway at Cox's Bazar Airport, expansion of Chittagong Airport, etc. all under implementation during the 8FYP (Table 8.8). Substantial progress has been made as December 2022, and most are expected to see completion before the end of 8FYP. Completion of these projects is expected to have enormous impact in expanding movement of domestic and international traffic thereby giving a significant boost to the economy.

Table 8.8: Projects Completed and in Progress by the CAAB during the 8th FYP Period

Name of the Project	Cost (Lakh Taka)	Deadline
Consultancy Services for Construction of Bangabandhu Sheikh Mujib International Airport	13,686	Jun-21
Extension and Renovation of Passenger Terminal Building at Saidpur Airport	3,242	Dec-21
Extension and Renovation of Passenger Terminal Building at Jashore Airport	3,226	Dec-21
Strengthening of Existing Runway & Taxiway at Osmani International Airport, Sylhet	45,198	Jun-22
Expansion of Osmani International Airport, Sylhet (1st Phase)	230,979	Dec-22
Strengthening of Existing Runway & Taxiway at Shah Amanat International Airport	54,052	Dec-22
Construction of International Terminal Building at Cox's Bazar Airport	27,788	Jun-23
Development of Cox's Bazar Airport (Phase-1)	201,564	Dec-23
Extension of Runway at Cox's Bazar Airport	370,961	Jun-25

Source: Annual Report - Civil Aviation Authority of Bangladesh (CAAB)

## 8.4.6 Progress in Bridge Sector:

The government has been implementing various fast track projects in bridge sector to change the socioeconomic scenario of the country and help build Bangladesh as a regional economic hub. The construction of the Padma Bridge is one of the most significant transport infrastructure projects in Bangladesh's history. This bridge of 6.15 km in length has connected the 21 Districts in the South-Western Region of Bangladesh with the Central, North-Eastern, Eastern, and South-Eastern Regions of the country. Furthermore, the newly established connectivity and improved accessibility in the country's southwestern region have ushered in heightened economic vibrancy, greater mobility, increased migration, and a wealth of fresh employment prospects, all of which have brought about tangible reductions in poverty levels within the region. Besides, the government also launched the Dhaka Elevated Expressway on 02 September 2023 to increase the traffic capacity within the city by improving connectivity between the northern and southern parts of Dhaka City. By increasing the traffic capacity within and around the city, the expressway will ensure a positive impact on transport time and working hours thus reducing traffic congestion and enhancing economic activity.

The construction of Bangabandhu Sheikh Mujibur Rahman Tunnel is almost completed and is going to be opened soon. While the tunnel will be in operation, it is expected that industrial development on the eastern part of Karnaphuli River would be further expedited and the connectivity with Chattogram city, Port and Airport located on the western part would be improved and easier. As a result, there will be significant flourishment of tourism industry in the region due easy communication system which will generate huge employment and increase the number of exports. Therefore, along with poverty reduction mass socio-economic development of the country will be enhanced. Bridge division has also been implementing a number of projects, i.e. construction of Bus Rapid Transit (BRT) Gazipur-4.5 kilometer elevated expressway, Dhaka-Ashulia elevated expressway project, widening of Panchabati-Muktarpur road and construction of double-decker road, construction of a bridge over the Paira River on the Kachua-Betagi road to improve national and regional connectivity.

#### 8.4.7 Summary of Progress and Challenges in Transport Infrastructure Moving Forward

Transportation infrastructure development (including roads, rail, waterways, airports, and seaports) is widely recognized to be the core infrastructure required for ensuring global competitiveness and stimulating economic growth as it can directly support production and manufacturing and service activities in an economy.

Quite appropriately, all national development plans – Five Year Plans and Perspective Plans – gave substantial emphasis on developing the transport infrastructure. The 8FYP targeted the continued development of the transport sector, building on objectives for economic development set out in the 6th-7th FYP and PP2021 and PP2041. These plans recognized that the transport sector has an important role in connecting people and firms to markets and to social opportunities. They also stressed the need to address continued inadequacies which included Bangladesh's road network quality recently ranked 108th out of 141 countries<sup>5</sup>, placing Bangladesh below comparators like India, Pakistan and Vietnam.

Past independent assessment of the transport sector (e.g., by ADB) show that road conditions are improving, rural connectivity is high, and inter-district connectivity constraints are being addressed. When the Jamuna Multipurpose Bridge connecting Dhaka to the northwest region was opened in June 1988 the improved connectivity led to favorable economic impacts and poverty reduction for the northwest. The Padma Multipurpose Bridge which started operation in June 2022, is also likely to have significant favorable impact on the southwest and south- central regions, now connected to Dhaka and the North. The first underwater tunnel in South Asia (Bangabandhu or Karnafuli Tunnel at Chattogram) is expected to go into operation by mid-2023 linking Dhaka-Chattogram-Cox's Bazar.

<sup>5</sup> World Economic Forum (WEF). 2019. Insight Report: The Global Competitiveness Report 2019. Geneva.

However, railway network continues to face significant challenges but also has specific opportunities for improvement. Rail demand is growing, but rail's share of land passengers and freight transport has not increased notably since 2005, growing at annual rate of 7.5% and 7.2% respectively. However, operating costs grew faster thereby undermining cost recovery efforts. Stronger efforts are needed to ensure financial viability of Railway operation. Rail improvement is receiving substantial attention and resource allocation under the 8FYP.

In an effective multi-modal transport infrastructure inland waterways, seaports and inland container depots are vital for trade and overall economic activity. ADP resources have been prioritized for these sub-sectors under the 8FYP while negotiations are under way for multilateral and bilateral assistance on expansion of seaport handling capacities (deep-sea port at Matarbari is the latest addition) in addition to providing adequate resources to keep inland waterways dredged and operational throughout the year.

Though domestic aviation plays a minor role in overall economic activity, that is changing with rapid rise in incomes and momentous growth of air travel – both domestic and international. The 3rd Terminal at Dhaka airport – equipped with all modern amenities – is on track for fast completion and launch in 2024. In addition, there are the airport expansion projects in Sylhet, Chattogram, and Cox's Bazar, which will all give a boost to air travel and stimulus to the economy.

The progress made in transport over the past several years of the 7FYP and the 8FYP has been captured as significant improvement by the World Bank's Logistic Performance Index (LPI) (Figure 8.2). The LPI cores countries based on their infrastructure, international shipments, competence of logistics, tracking and tracing and timeliness, in addition to Customs. The results show that Bangladesh improved its rank from a low of 100 out of 160 countries in 2018 to a rank of 87 in 2023. This suggests that the progress made in the latter part of 7FYP in transport infrastructure has helped improve Bangladesh's global competitiveness.

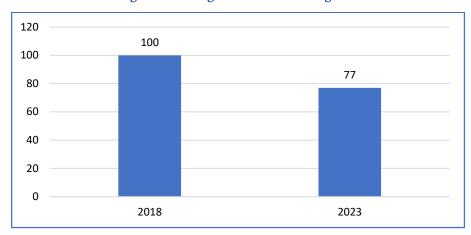


Figure 8.2: Progress with Trade Logistics

Source: Logistics Performance Index (LPI), World Bank

Despite notable progress transport infrastructure, Bangladesh continues to face major challenges as it seeks to further upgrade the transport network to achieve the transport sector vision of the PP2041 and the targets for the 8FYP. These challenges include:

- Pervasive and costly congestion. Significant congestion and delays affect national highways and
  associated terminals, including land-side access to seaports, land ports and airports. The average speed of
  trucks on highways in 2019 was about 19 kilometers per hour (kph), around half the speed of travel in
  uncongested conditions, increasing logistics costs by between 7% and 35%. The average dwell time for an
  export container and for an import container was 4 days, which these figures would decrease if land-side
  congestion at ports could be reduced.
- Inadequate logistics performance. Despite the recent improvement in trade logistics, this performance but is still behind that of India and Vietnam.
- East-West connectivity, which was constrained, is now improving. The opening of the Padma Multipurpose Bridge in 2022 improved connectivity between the southwest and south-central regions. Improving Bangladesh's integration with India (particularly NEI) and the rest of Asia would also bring important benefits for trade and the economy. The South Asia Subregional Cooperation Plan, 2016–2025 proposed improving the east-west rail connection between Myanmar and India as part of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) Trans-Asian Railway Network.
- Declining road safety. The World Health Organization (WHO) estimated Bangladesh's 2016 fatality rate to be 15.3 fatalities per 100,000 population. The fatality rate was estimated to have increased by 12.5% from 2012, when it was estimated to be 13.6 fatalities per 100,000 population. WHO's 2018 report showed that, from 2012 to 2016, there had been hardly any improvement in applying basic safety standards, for example, helmets still do not have to be fastened. It is estimated by the World Bank that Bangladesh will require an additional \$7.8 billion investment in road safety over the coming decade if it is to achieve the Sustainable Development Goal (SDG) 3.6 target of a 50% reduction in national road crash fatalities.
- Outdated vehicle emission standards. Emission standards for new vehicles in Bangladesh lag those of India and Bangladesh's other Asian neighbors. There is no effective emissions control on in-use vehicles, most of which are quite old. Bangladesh also faces challenges with poor fuel quality, due to extensive adulteration of diesel and petrol even though officially fuel quality has improved over the years (e.g., sulfur content in imported diesel is 500 parts per million [ppm] compared with over 4,000 ppm in 2005). With regard to fuel economy, the BRTA has been working with the Global Fuel Economy Initiative (GFEI) since 2018 to develop new fuel economy standards.
- Air pollution impacts the poor. Transport is a significant source of urban air pollution in Dhaka and Chittagong. Along highways, district roads, and rural roads, particulate matter and road dust is a serious health hazard in the dry season, impacting the poor who work and walk along the roadside. Congestion aggravates this pollution, and it is estimated that between 50% and 73% of exhaust pollution from trucks is due to excessive congestion.
- Climate resilience a national priority. GHG emissions from transport represented 13.8% of the total GHGs created by use of fuel combustion in Bangladesh in 2019, of which 77% were caused by land transport. Road transport's share of total GHG emissions (12MtCO2 out of 22MtCO2) was barely 5%. However, Bangladesh is a relatively low emitter of global GHG emissions.

## 8.5 The Way Forward

Bangladesh has given top priority to the development of the transport sector that has paid rich dividends in terms of supporting rapid GDP growth, growth of exports and poverty reduction. The 8FYP seeks to further modernize the transport sector as an important steppingstone to achieving the objectives of the PP2041. Further acceleration of GDP growth and diversification of the export basket during the 8FYP period will require significant improvements in trade logistics related to movement from factories to ports, timely influx of capital machinery and intermediate imports from ports to factory gates. Improvement in the capacity and efficiency of sea and airport services, as well as the ease of domestic transportation, are critical to the success of export diversification strategies, the ease of sourcing imported raw materials, and the movement of goods and services from centres of production to centres of consumption are of critical importance to maintain the socioeconomic growth of Bangladesh during the 8 FYP and beyond. Thus, the way forward is to (i) improve the balance of inter-modal transport; (ii) ensure sustainable financing of transport infrastructure; (iii) develop and implement key policies to ensure quality and reliability of transport services; (iv) strengthen management capabilities and efficiency of public transport authorities; and (v) implement and operate modern transport facilities in line with the traffic needs of 2041.

# CHAPTER 9 URBAN DEVELOPMENT

#### 9.1 Development Context

Bangladesh's independence marked the beginning of a remarkable journey towards economic progress, driven by industrialization and urbanization. The country has maintained a steady average economic growth of 5.8% over the last 30 years, allowing it to achieve 'lower-middle income status' in 2015 and receive the UNCDP's recommendation to graduate to a 'developing country' in 2026. This growth has been largely influenced by urbanization, which has brought in significant income growth, social development, and investments. However, such progress also brings the challenge of orderly urbanization so that Bangladesh is able to manage the transition to UMIC and HIC without jeopardizing its growth momentum.

Bangladesh is among the few developing countries with the highest urbanization rates (Figure 9.1). Since independence, the national urban population has surged from approximately 8% to 31.5% (equivalent to 52 million people) in 2022, with a growth rate of 5.5% over the last decade. This growth rate is significantly higher than the national population growth rate of 1.5%, leading to substantial challenges in meeting the demand for land, infrastructure, and services. While cities serve as essential drivers of economic growth and wealth creation, the inadequacy of urban land, infrastructure, and services in comparison to demand could limit further growth.



Figure 9.1: Growth of Urbanization

Source: Population and Housing Census 2011 and 2022

The urbanization path so far has followed a pattern of heavy concentration in few urban growth centers, led by the capital city Dhaka. Thus, the Dhaka Division is the most populous and urbanized region in Bangladesh, with 46.9% of its population living in urban areas (Figure 9.2). Remarkably, Dhaka's urban population represents 39.9% of the national urban population, and the city attracts nearly 2,000 migrants daily. However, the lack of adequate housing, safe water, healthcare, and infrastructure forces many of these migrants to settle in informal settlements. In contrast, Sylhet has the lowest share of the national urban population at only 4%, with over four times as many people living in rural areas compared to urban areas.

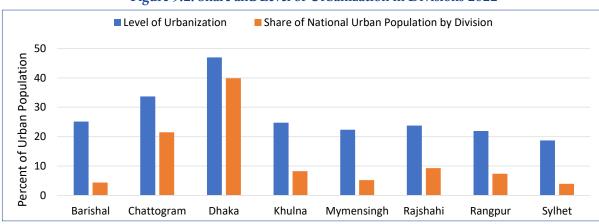


Figure 9.2: Share and Level of Urbanization in Divisions 2022

Source: Population and Housing Census 2022

Cities play a vital role in driving economic growth, as they attract foreign investment, boost social and economic development, and leverage human and physical resources to achieve gains in productivity and competitiveness. According to the 2016 Household Income and Expenditure Survey, monthly income per household in urban areas is approximately 70% higher than in rural areas. This income disparity creates an incentive for people to migrate to cities and seek better-paying jobs. Additionally, urbanization allows governments to provide basic services such as water and sanitation to a larger population at a lower cost. Major cities have a higher concentration of economic output than their population due to localization economies, access to skilled labor, and proximity to markets and services. Firms in larger cities have advantages over those in smaller cities, as well as more ease of communication, supplies, and ideas. Countries are striving to make their cities competitive through increased productivity, capital intensity, human capital, and infrastructure. Developing cities such as Hong Kong, Singapore, and Bengaluru have achieved significant economic gains through fostering growth in high value-added industry clusters, strategic infrastructure, and innovation.

While urbanization can have positive effects on economic growth, there comes a certain point where it can hinder growth and limit efficiency of service provision due to various diseconomies, such as congestion. This is quite evident in urban areas of Bangladesh, where we are seeing a diminishing rate of poverty reduction and a reduction in the growth of real wages. Uncontrolled urbanization, inadequate planning and provision of services have grave implications for the livability and sustainability of cities, as well as the health and wellbeing of their inhabitants.

One of the major problems in Bangladesh's urban environment is poor waste management and insufficient drainage, which often leads to waterlogging and a lack of access to safe water and sanitary facilities, particularly in slums. This has resulted in the worsening of air quality, which in turn led to an estimated 80,000 fatalities in 2015, with an economic cost of about \$310 million in Dhaka alone. The haphazard expansion of the city and the exponential rise in cars on the city streets have also constrained the city's transport infrastructure, leading to frequent traffic jams that affect basic mobility and mental health. This, in turn, results in working hour loss, additional fuel consumption, pavement damage, accidents, and environmental impacts that erode a significant portion of GDP every year, costing the economy \$6.5 billion in 2020.

Furthermore, rapid urbanization puts an immense strain on urban housing and service provision, particularly for poor households who have to settle in slums and squatter settlements. It is estimated that there are currently 1,800,486 people living in slums in Bangladesh, deprived of basic urban facilities such as proper sewage services and potable water that meets the GoB-set basic water service standard level. These issues must be addressed urgently to ensure the sustainable development of Bangladesh's urban areas and the wellbeing of its citizens.

It is estimated that more than 50% of the population will be living in the cities by 2050. Keeping this in mind, the New Urban Agenda (NUA) aims to tap on the opportunities to induce sustained and inclusive economic growth and development, to ensure equal opportunities and to adopt eco-friendly practices. SDG-11 necessitates creation of open, secure, resilient, and sustainable communities for the influx of populations in the cities by ensuring safe and affordable housing, services, transports, etc. for all. Bangladesh is committed to attaining SDG by 2030, and the GoB has incorporated the suggestions and objectives of NUA and SDG goals in the 8FYP.

#### 9.2 Progress under the 7FYP

There was significant progress on many fronts under the 7FYP, including mitigating the housing crisis, ensuring long-lasting urban development, improving access to safe water, and strengthening urban governance. These achievements of the 7FYP are the results of the initiatives of the different government entities involved in this sector working under the Ministry of Housing and Public Works (MoHPW) and Local Government Division (LGD).

In addressing the severe housing crisis and ensuring affordable housing for all, the National Housing Authority (NHA) has successfully constructed 849 flats and 1605 plots, with additional plans to develop 7286 flats and 2558 plots. The Public Works Department (PWD) has executed and handed over 3012 flats for government officials, increasing the total residential facilities from 8% to 10.8%. The PWD also focused on sustainable urban development, incorporating solar panels, sewage treatment plants, and rainwater harvesting in new constructions. The Directorate of Government Accommodation made housing information available in the e-management system and accomplished various initiatives such as building new structures, preserving parks/playgrounds, and formulating structural plans. The Urban Development Directorate developed 28 master plans, covering significant areas and populations. Development authorities in different cities played a vital role in house and road construction, with notable achievements in infrastructure and beautification projects.

City corporations prioritized road construction and essential services like water, waste management, and sanitation to enhance the lives of the city dwellers. The Local Government Engineering Department (LGED) has executed various development projects related to urban infrastructure services as part of its continued efforts to ensure infrastructure development/ maintenance and municipal service provision in a planned manner. Projects have been implemented in nine city corporations and 328 municipalities which benefitted more than 50 million people and had an impact on urban economy, environment, and livelihood. Water supply and sewage issues, including improving access to safe water through purification facilities, pipeline constructions, and testing water quality, were addressed by Water Supply and Sewerage Authorities (WASAs). Dhaka WASA's manufacturing capability increased to 2420 MLD in that period, and waste of water was brought down from 40% to 22%. Governance efforts focused on timely elections and increasing financial autonomy through block grants and service charges.

# 9.3 8FYP Objectives, Targets and Strategy for Urban Development

The PP2041 recognized that substantial faster progress was needed to strengthen urban governance to secure UMIC status. The PP2041 put forward a comprehensive vision for transforming the country's urban environment by 2041 to that of high-income countries like Korea. This vision is based on a recognition that urbanization will be linked to the growth of economic activities in a market economy and that public policy can influence the pattern of urbanization through incentives, regulations, public investments, and institutions. To achieve this goal, the PP2041 has developed a broad development strategy, which includes major institutional reforms for urban and rural local government institutions (LGIs) to reflect the governance structure in advanced economies. This strategy emphasizes the need for democratically elected, financially autonomous, and accountable city governments with well-defined responsibilities, standards, and coordination mechanisms, as well as participatory, structured planning processes.

The 8FYP picked up this urban vision of PP2041and sought to initiate the first round series of reforms. In addition to highlighting the goal/objectives, performance indicators and targets of the subsectors within Urban Development, the 8FYP clearly defines the functions, strategic objectives, and activities of the related departments/agencies. The 8FYP identifies the Ministry of Housing and Public Works, Local Government Division and Ministry of Road Transport and Bridges as major coordinating ministries/divisions for overseeing the programmes of the 8FYP Urban Sector, to attain Sustainable and Inclusive Urban Development as put forward in the Sustainable Development Goals (SDG 11). The strategy also includes a three-pronged approach for developing sound reforms for city management: (i) redefining public-private roles with a view to strengthening this partnership for better services; (ii) strengthening capabilities of public urban service institutions; and (iii) establishing an accountable city government.

In addition to these broader reforms, the 8FYP envisions strengthening the functioning of existing urban institutions and service agencies to improve the delivery of basic urban services. In this context, the Plan outlines 6 themes and specifies targets and strategies to support better spatial development, institutional development, development of infrastructure and services, urban land and housing development, and urban environmental and disaster management. These 6 themes are:

Strategies for Spatial Development: Promoting Balanced Urbanization with Focus on Secondary Cities and Promoting Economic Corridors: To promote balanced urbanization with a focus on secondary cities and economic corridors, the 8FYP proposes specific measures such as providing common user facilities, developing technology and innovation parks, streamlining import-export approval and clearance, investing in high-quality training, research and development facilities, and attracting private investments in infrastructure and utilities that reduce production and distribution costs. To develop economic corridors, the government will prioritize the development of hard and soft infrastructure (e.g., roads, rail, air services, and political, social, and business networks) and ICT systems and networks.

Institutional Development Strategies: The 8FYP emphasizes the need for institutional reforms at the local level, involving all related stakeholders in planning and development with local governments as the lead agency for coordination and integration of all the efforts of participating organizations.

Strategies for Development of infrastructure and Services: In terms of infrastructure and service development, the 8FYP recommends steps to establish support mechanisms that enable people living in poverty and the disadvantaged to have access to basic infrastructure and services. The plan focuses on preparing strategic plans, waste management master plans, sewerage master plans and treatment plans, implementing Faecal Sludge Management (FSM) Masterplans, using, and developing energy-efficient and affordable technological options, and incentivizing private sector investment in solid waste recycling.

Strategies for Urban Land and Housing Development: To promote sustainable land-use planning and innovative land development and management practices, the 8FYP suggests appropriate measures such as developing a land information system, using appropriate planning tools and policy instruments, and applying participatory approaches to land development. For housing development, the plan envisions the government's main role as an enabler rather than a provider of housing and puts forward strategies focusing on developing an efficient land and housing market and better access to finance.

Urban Environment and Disaster Management Strategies: Finally, the 8FYP emphasizes the need for a holistic and integrated approach to urban environmental management, with particular attention to participatory planning and management, public-private partnerships, capacity building, and cost-recovery. The plan also addresses institutional, planning, and governance challenges faced by urban areas in the country to address climate change, including establishing more effective planning and urban management practices that consider Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA), financing disaster management activities and climate change adaptation, and community participation in disaster preparedness, planning, and climate change adaptation.

#### 9.4 Progress with 8FYP Objectives, Targets and Strategy during the Mid-Term of the 8FYP

#### 9.4.1 Evaluation of Progress: The Approach

To reduce urban poverty and improve living conditions through planned, inclusive, and sustainable urbanization, better city governance, and improve infrastructure and service provisions in line with SDG 11, the 8FYP has prioritized Sustainable and Inclusive Urban Development. The Plan specified 27 performance indicators and

targets through 2025 as part of the extended DRF under various themes of the urban sector. These 27 indicators and targets were classified according to the 6 themes mentioned above: (i) Urbanization Pattern; (ii) Urban Governance and Management; (iii) Basic Urban Services; (iv) Urban Transportation; (v) Urban Poverty and Housing; (vi) Urban Environment, Disaster Management and Climate Change.

Thus, as a first step, progress in implementation is assessed through looking at the aggregate performance indicators of the targets, which is then followed by assessing progress against the more detailed thematic indicators. However, one significant impediment to gauging this progress is the dearth of data for several indicators. Consequently, this evaluation is augmented with an appraisal of the implementation progress of the key strategies in the urban development agenda, derived from a thorough examination of policies, programmes, and institutional overhauls.

# 9.4.2. Progress with Broader Level Objectives and Targets

Sustainable and inclusive urban development has been acknowledged as a national priority in the 8FYP. To reduce urban poverty and improve living conditions successfully through better city governance and service improvements, the 8FYP has identified 4 key performance indicators out of the 27 that gives a snapshot of main features and overall progress within the sector. The mid-term review exercise first seeks to assess progress of these 4 performance indicators that encapsulates the broader spectrum of urban development and gives a good sense of whether the plan is on course for implementation.

Table 9.1: Progress with Objectives and Targets of the 8FYP for Urbanization

Performance Indicators	Lead Ministry/ Division	Baseline	Target (2021)	Target (2022)	Target (2023)	Actual
Proportion of urban population living in slums, informal settlements, or inadequate housing	MoLGRD&C	33%	31.4	29.8	28.2	
Percentage of urban population having access to (a)public health service (b) safe drinking water (c) sanitation facilities	MoHFW	a) 87 b) 47.9 c) 55.9	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) - b) 94.73 c) 95.31
Percentage of urban solid waste regularly collected	MoLGRD&C	63.2	65.5	68	70.2	-
Number of a) Upazilas, b) municipalities having an approved Upazila Master Plan	LGED, MoHPW	a) 14 b) 324 (2019)	14 330	29 350	70 384	-

Source: 8FYP and HIES 2022

The 8FYP aims to provide universal access to public health services, safe drinking water, and sanitation facilities for the urban population of Bangladesh. As of 2022, remarkable progress has been made towards achieving the targets for access to safe drinking water and sanitation facilities, which have already surpassed the target for the year 2022. According to HIES 2022, 94.73% of the urban population had access to safe drinking water and 95.31% had access to sanitation facilities. The progress made so far is commendable and it is very likely that 100% access targets set for 2025 will be achieved. Nevertheless, concerted efforts are needed to ensure that the population living in low income and marginalized communities can gain access to these core urban services.

The indicator concerning the proportion of the urban population living in slums, informal settlements, or inadequate housing has been a critical concern for policymakers aiming to create sustainable urbanization. The baseline figure of 33% in 2018 suggests a dire need for improvement in this area. However, the recent update from the World Bank indicating that only 20% of the urban population lives in slums is a positive development. This may suggest that some progress has been made in addressing the issue. The ultimate target of reducing the proportion of the urban population living in such conditions to 25% by 2025 can be achievable with the right policies and interventions. Policymakers and stakeholders need to remain committed and focus on implementing effective measures to ensure decent housing for all.

The status of the percentage of urban solid waste regularly collected is unclear due to the absence of direct data. However, there are some positive developments in this regard. City corporations in Dhaka are collecting 95% of hospital waste, which is commendable. Additionally, 75 public drains have been established, and 91 waste management systems are planned to be set up in 89 pourashavas and 2 upazilas, which indicates a proactive approach towards waste management. These steps are certainly in line with the targets of collecting 68% of urban solid waste by 2022 and 70.2% by 2023. However, further efforts may be required to ensure that these targets are met, and that the urban areas are kept clean and hygienic for the health and well-being of their residents.

# 9.5 Progress with Detailed Thematic Indicators

# a) Progress with improving urbanization pattern

To measure progress with improving the pattern of urbanization, 5 indicators were included under the extended DRF: (a) share of urban population in total population; (b) number of primary cities; (c) share of Dhaka Metropolitan City in total urban population; (d) share of 7 other primary cities in total urban population; and the number of economic development corridors. The targets and progress so far are indicated in Table 9.2.

Table 9.2: Progress with 8FYP Targets under the Urbanization Pattern Theme

Performance Indicator	Lead Ministry/ Division	Baseline (Year)	Target (2021)	Target (2022)	Actual (2022)	Target (2023)	Target (2024)	Target (2025)
Share of urban population in total Population (%)*	MoHPW, MoLGRD&C	23.6 (2011)	31.0	32.0	31.49	33.0	34.0	35.0
Number of primary cities	MoHPW, MoLGRD&C	02 (2019)	02	02	02	02	02	02
Share of Dhaka Metropolitan City in total urban population (%)	MoHPW, MoLGRD&C	34 (2011)	33.60	33.20	39.88	32.80	32.40	32
Share of 7 other primary cities in total urban population (%)	MoHPW, MoLGRD&C	13 (2011)	13.40	13.80	21.55	14.20	14.60	15
Economic Development Corridor: (a) Planned (b) Execution in progress	MoP, MoHPW, MoLGRD&C MoRTB	(a) 0 (b) 0	(a)01 (b) 0	(a) 01 (b) 01	(a) 01 (b) 01	(a) 01 (b) 01	(a) 02 (b) 01	(a) 02 (b) 01

Source: 8FYP and BBS, \*Targets are reestimated

The first indicator concerns the pace of urbanization. The latest Census 2022 shows that the share of urban population in total population grew from 23.6% in 2011 to 31.5% in 2022 suggesting a growth rate of 3% for urban population. Number of primary cities remained the same as anticipated (e.g. Dhaka and Chottogram).

A specific performance indicator in the 8FYP was to bring down the share of Dhaka Metropolitan City in total urban population. The target as set out in the 8FYP for 2022 has not been achieved. Rather, the share has gone up to 40%, indicating a significant deviation from the intended goal. This is a cause for concern, as the overconcentration of population in the city can lead to numerous social and economic challenges, such as strained resources, environmental degradation, and increased vulnerability to disasters. A more concerted effort will be required to effectively manage urban growth and ensure sustainable development.

The 8FYP aimed to increase the share of 7 other primary cities in total urban population to 15% by 2025. However, according to the available data, it already stands at 21.55% in 2022, indicating a significant achievement. The possible causes behind the success could include the implementation of policies and programmes focusing on the development of these cities, which might have attracted people from other areas. This could have significant implications for the country's economic growth, as a shift towards a more balanced urbanization pattern could result in better utilization of resources, and lead to the development of regional economic hubs. Rapid development of other districts in Barisal, Sylhet, Cox's Bazar, Jessore, etc. that have already been brought under planned development, could reduce the pressure on Dhaka. However, it is important to keep monitoring the situation, as unplanned urbanization could lead to the emergence of new challenges, such as environmental degradation, congestion, and inequalities.

Additionally, development of Economic Corridors is a priority in the 8FYP that will help boost regional economic opportunities. The Jamuna River Economic Corridor Development is one such project that is being implemented, which will boost the communities' livelihood by increasing climate resilience, navigation capacity as well as economic opportunities along the Jamuna River. If the corridor is successfully planned and implemented, it could lead to increased economic growth and development and alleviate pressure on Dhaka.

Overall, there has been some encouraging progress in boosting the growth of other primary cities outside Dhaka and Chattogram that suggests an improvement in the pattern of urbanization. However, the continued overload on Dhaka is worrisome and stronger efforts are needed to deconcentrate the urban pressure on Dhaka. Traffic congestion, housing crisis and constraints on the supply of basic services have already lowered the quality of life in Dhaka, which is now rated as the third least livable megacities of the world under the Survey of Global Cities by the Economist Intelligence Unit.

#### b) Progress with urban governance and management

Several indicators were identified in the 8FYP to measure progress with improvements in urban governance: (i) share of urban LGI spending in total government spending; (ii) urban LGI spending as percentage of GDP; (iii) Urban LGI taxes as percentage of total taxes; (iv) urban LGI taxes as percentage of GDP; (iv) percent of cities having urban plans; and (v) compliance with building construction rules. The related targets and progress against those targets are shown in Table 9.3.

Table 9.3: Progress with 8FYP Targets for Improvement in Urban Governance

Performance Indicator	Lead Ministry/ Division	Baseline (Year)	Target (2021)	Target (2021)	Actual (2022)	Target (2022)	Target (2023)	Target (2023)
Share of urban LGI spending in total government spending (%)	MoLGRD &C	5 (2017)	6	5.6	7	5.34	8	4.9
Urban LGI spending as percentage of GDP	MoLGRD &C	0.70 (2017)	0.80 (1.13)	0.73	0.90 (1.3)	0.8	1.10	No data available
Urban LGI taxes as percentage of total taxes	MoLGRD&C	2.30 (2017)	2.60	No data available	3.00	No data available	3.50	No data available
Urban LGI taxes as a percentage of GDP	MoLGRD&C	0.20 (2017)	0.23	No data available	0.28	No data available	0.34	No data available
Percent of Cities having urban plans	MoHPW	55 (2018)	55	No data available	60	No data available	70	No data available
Compliance with building construction rules	MoHPW	05 (2018)	09	No data available	13	No data available	17	No data available

Source: 8FYP and MoF

The share of urban LGI spending in total government spending has been below target in the past two fiscal years, with actual values of 5.6% and 5.34% in FY21 and FY22 respectively, compared to targets of 6% and 7%. The target for FY23 is 8%, but the actual value is currently at 4.9%. This indicates a significant gap between the target and actual spending, which could impede progress towards achieving urban development goals. Similarly, the target for urban LGI spending as a percentage of GDP is also ambitious, with a target of 1.5% by FY25, compared to actual values of 0.73% and 0.8% in FY21 and FY22 respectively, and a target of 0.9% for FY22. The current trend suggests that achieving the final targets of FY25 will be challenging. Significant efforts will be required to make up for the shortfall in the previous years and accelerate progress towards the goal of achieving sustainable urban development in Bangladesh.

The 8FYP has set targets for urban planning and building construction compliance, but current progress towards these targets is unclear due to lack of data. However, there are some positive signs of progress. For instance, the Urban Development Directorate and various Development Authorities have been working on developing masterplans for various municipalities, covering more than 11% of Bangladesh's land coverage. Furthermore, RAJUK has been implementing tasks under the Bangladesh Urban Resilience Project, including deducing earthquake risk in establishments, improving the implementation process of building codes, and adopting disaster risk incorporated land use planning. They have also formed an Urban Resilience Unit and taken steps for capacity development and professional accreditation. These are all promising developments that suggest progress towards the targets of the 8FYP.

In addition to these efforts, various masterplans are currently being prepared for a further 8.21% of the country, and 117 DAPs and 250 structural plans have been approved and under implementation. These developments are important steps towards achieving the targets set by the 8FYP. Although the lack of direct data makes it difficult to determine the exact progress towards the targets, the positive developments mentioned above provide justification for cautious optimism.

# c) Progress with delivery of basic urban services

The 8FYP identified six indicators for measuring progress with the theme of delivery of urban services: (i) percentage of urban population having access to safe drinking water; (ii) percentage of urban population having access to sanitary toilet facilities; percentage of households with sewerage connection; (iii) percent of urban centers with modern waste disposal facilities; (iv) percent of urban centers with wastewater treatment facilities: (v) percentage of urban population with access to public health facilities. Specific targets and progress made so far are shown in Table 9.4.

Table 9.4: Progress with 8FYP Targets Relating to Urban Service Delivery

Performance Indicator	Lead Ministry/ Division	Baseline (Year)	Target (2021)	Target (2022)	Actual (2022)	Target (2023)	Target (2024)	Target (2025)
Percentage of urban population having access to safe drinking water	MoLGRD&C	78 (2016)	82.4	86.8	94.73	91.2	95.6	100
Percentage of urban population having access to sanitary toilet facilities	MoLGRD&C	80 (2016)	84	88	95.31	92	96	100
Percentage of households with sewerage connection	MoLGRD&C	05 (2017)	06	07	No data available	08	09	10
Percent of urban centres with modern waste disposal facilities	MoLGRD&C	0	02	04	No data available	06	08	10
Percent of urban centres with wastewater treatment facilities	MoLGRD&C	0	02	04	No data available	06	08	10
Percentage of urban population having access to public health service	MoLGRD&C	87 (2016)	89.6	92.2	No data available	94.8	97.4	100

Source: 8FYP and BBS

The Local Government Division, along with its agencies, has been working towards achieving the objectives of the 8FYP, with a major goal of ensuring 100% access to safe drinking water and sanitary toilet facilities by 2025. The latest data from the HIES 2022 shows that the target is well within reach. The Ministry of Local Government, Rural Government and Cooperatives has done well despite the challenges posed by Covid-19, providing improved toilet facilities and safe water to both the urban and rural population. The sincere efforts of relevant agencies have contributed to 94.73% of the urban population having access to safe drinking water, which is above the 8FYP target of 86.8% for 2022. Moreover, 95.31% of the urban population now has access to improved sanitary toilet facilities, exceeding the 8FYP target of 88% for the year.

Unfortunately, no data is available to assess progress with the other indicators. Dhaka WASA has been working on various development activities to improve water supply and sanitation in the region, with development partners investing almost \$3 billion to support their activities. Over FY22, 94.21% of the ADP activities were completed, including the adoption of smart water supply management initiatives such as District Metered Area (DMA), SCADA system, and Water ATM, among other capacity development and governance improvement activities. Some of the Mega Projects include development of the Gandharbpur water treatment plant, the Sayedabad

Water Treatment Plant, and the Dhaka Water Supply Network Improvement Project. The Dhaka Sanitation Improvement Project involves construction of refineries and waste-treatment facilities in Dasherkandi, Uttara, Mirpur, and Rayerbazar to provide improved sanitation to over 50 lakh people living in slums of various urban regions around Dhaka. Work has been progressing well despite the challenges presented by Covid-19.

Chittagong WASA is also involved in various Water Supply projects, including the Karnaphuli Water Supply Project and Bhandaljuri Water Supply Project. Khulna WASA has made good progress meeting most of the associated targets in its ongoing Khulna Sewage Management Improvement Program. The Khulna Water Supply Project aims to reduce the consumption of underground water by providing safe and fresh surface water to its urban inhabitants, by building the necessary infrastructure, including distribution reservoirs and overhead tanks, distribution pipes, and water treatment plants.

Notwithstanding these efforts, progress with sewerage and solid and liquid waste management is heavily constrained by lack of resources. These are heavily capital-intensive activities and require huge resources, which is a huge challenge. Cost recovery policies are also not well set to mobilize resources from users. Adequate progress with provision of basic urban services will require substantial efforts to mobilize local government financing and adequate transfers from the national budget. It is very unlikely that these targets will be met by the end of the 8FYP.

#### d) Improving urban transport

The 8FYP specified 4 indicators for measuring progress with improvements in urban transport: (a) cities having urban streets / roads with modern traffic signals; (b) primary cities with mass rapid transit options; (c) compliance with traffic laws; and (d) length of metro rail transit (MRT) network. The specific 8FYP targets and progress against those targets are indicated in Table 9.5

Table 9.5: Progress with 8FYP Targets for Urban Transport Improvements

Performance Indicator	Lead Ministry/ Division	Baseline (Year)	Target (2021)	Target (2022)	Actual (2022)	Target (2023)	Target (2024)	Target (2025)
Cities having urban streets/ roads with modern traffic signals	MoLGRD&C	01 (2017)	01	02	01	03	05	07
Primary cities with mass rapid transit options	MoRTB	0	0	0	01	01	01	01
Compliance with traffic laws (%)	МоНА	10 (2018)	14	18	No data available	22	26	30
Length of Metro Rail Transit (MRT) network (km)	MoRTB	0	0	20	11.73	30	40	50

Source: 8FYP and DMTCL

Based on the current progress towards the target of having seven cities with urban streets and roads having modern traffic signals by 2025, the actual number of cities having achieved this milestone is only one. This indicates that there is a significant gap between the target and the current progress, and much work needs to be done to bridge this gap. The implementation of modern traffic signals is crucial in reducing traffic congestion, ensuring safety of commuters, and increasing the efficiency of urban transportation. Therefore, there is a need for urgent and strategic actions to be taken to increase the number of cities with modern traffic signals, to achieve the target by 2025.

A key target in the 8FYP— having mass rapid transit option in one primary city— has been achieved. Phase one of the MRT-6 line was completed in a timely manner as it was inaugurated in December 2022 and operations began in January 2023. It comprises of a 12km-long route from Diabari to Agargaon. Phase 2 and phase 3 of the total 21.26-kilomtere MRT line 6, connecting the capital's Uttara region to Motijheel, is progressing rapidly as overall civil work progress stood at 92% as of February 2023. 88.22% installation work of electrical and mechanical system and rolling stock depot equipment collection has already been completed. Completion is likely to take some further time as the project has undergone revision and deadline has been extended to December 2025. Feasibility studies and environmental impact assessments for the MRT Lines 1 and 5 have also been completed. Full and timely completion of lines 1, 5 and 6, will be necessary to achieve the target of 50km of MRT network by 2025.

#### Progress with urban poverty and housing

Two indicators were specified to measure progress against the theme of lowering urban poverty and expanding urban housing opportunities: (i) Incidence of urban poverty; and (ii) proportion of urban population living in slums, informal settlements, or inadequate housing. The specific targets and progress in each area is provided in Table 9.6

Table 9.6: Progress with 8FYP Targets for Urban Poverty and Housing

Performance Indicator	Lead Ministry/ Division	Baseline (Year)	Target (2021)	Target (2022)	Actual (2022)	Target (2023)	Target (2024)	Target (2025)
Incidence of urban poverty (%)	CD, GED	15.7 (2016)	14	13	14.7	12	11	10
Proportion of urban population living in slums, informal settlements, or inadequate housing (%)	MoHPW MoLGRD&C	33 (2016)	31.4	29.8	No data	28.2	26.6	25

Source: 8FYP and HIES 2022

A key target of the 8FYP was to double down on progress made with poverty reduction over the years and provide the urban poor with access to income, employment, housing, and basic services and improve the condition of the slums/informal settlements. The 8FYP aims to bring urban poverty down to 10 percent by 2025. According to HIES 2022, poverty rate in urban areas of Bangladesh has decreased since 2016, falling one percentage point down to 14.7%. This has been a remarkable achievement considering the pandemic, which has forced thousands of people to migrate to urban areas in search of livelihood.

The high population density in urban areas, coupled with inadequate access to basic services and opportunities, have resulted in a growing number of urban slums. According to the World Bank, about 6.5 million people live in urban slums in Bangladesh, which is about 20% of the urban population. The high prevalence of urban slums is a particular challenge and the 8FYP targets to bring down the proportion of urban population living in slums, informal settlements, or informal housing to 25%. While concrete data is not available on progress, scores of

initiatives have been taken to provide adequate housing to lower and lower-middle income group and improve the conditions of slums/ informal housing to facilitate the integration of the settlements with the wider urban area and improve quality of life of their residents.

To alleviate the housing crisis in Dhaka and provide housing solution to lower- and middle-income group at an affordable range, RAJUK has undertaken initiatives to build apartment complexes around Dhaka city. RAJUK's Uttara Model Town (Third Phase) Project planned over 2008 acres of land is nearing completion. 12 bridges have been constructed and most of the land development and road construction work have been completed as of 2022. The Uttara apartment project was planned and designed considering various disaster parameters, in line with the National Building Code. Experienced planners of the Architecture Department participated in the design stage, while experienced architects and engineers from RAJUK and PWD closely monitored the implementation. To date, more than 92% of the work has been completed with 73 out of 79 16-storeyed buildings built. Once fully developed, the project is expected to boost housing, commuting and livelihood condition in Uttara.

NHA on the other hand completed and distributed more than 700 plots and 1763 flats for people of different income groups, including 298 flats and 448 plots for lower- and middle-income groups, by the end of FY221. A total of 2600 low-income houseless families were rehabilitated and given documents for their dwellings in that year. A significant initiative taken by NHA is to establish 3 new residential areas to ensure affordable and resilient dwelling units for lower- and middle-income groups. Besides, NHA have made progress on/completed various other projects for providing affordable housing to government employees and lower income groups, in various regions across the country, including Madaripur, Gopalgonj, Magura, Shoriotpur, Sylhet town, Moulovibazar and Chottogram. They are expected to complete a sizable amount by end of FY22 and plan to distribute further 1337 flats and 240 plots by end of FY23, out of which 533 will be dedicated to slum-dwellers of Mirpur on a rental basis.

Nevertheless, despite progress, affordable decent housing remains an acute challenge, especially in the capital city of Dhaka. Comprehensive reforms in land and property markets along with the promotion of housing mortgage industry will be necessary. The reforms include digitization of land records, sharp cutbacks in housing transaction costs including property transfer taxes and registration charges, sharp improvements in Rajuk housing clearances, expansion of low-cost government housing options.

#### e) Progress with improving urban environment, disaster management and climate change

The 8FYP specified 5 indicators to measure progress with improvements in urban environment, climate change and disaster management: (i) Mean urban air pollution of particulate matter (a) PM10 in µg/m3 (b) PM2.5 in µg/m3; (ii) green area in Dhaka; (iii) green area in 7 other major cities; (iv) percent of urban water bodies preserved with 100% compliance with water quality; (v) percent of flood free area with proper drainage. The specific 8FYP targets and actual progress so far are presented in Table 9.7.

Table 9.7: Progress with 8FYP Targets for Improving Urban Environment, Climate Change and Disaster Management

Performance Indicator	Lead Ministry/ Division	Baseline (Year)	Target (2021)	Target (2022)	Actual (2022)	Target (2023)	Target (2024)	Target (2025)
Mean urban air pollution of particulate matter (a) PM10 in μg/m³ (b) PM2.5 in μg/m³	MoEFCC	(a) 130.9 (b) 78.0 (2013)	(a) 125.0 (b) 77.0	(a) 120.0 (b) 76.0	a) b) 76.9 (2021)	(a) 115.0 (b) 75.0	(a) 110.0 (b) 74.0	(a) 105.0 (b) 73.0
Green area (parks, playgrounds etc.) Dhaka (square kilometre per million people)	MoHPW	0.70 (2014)	0.86	1.02	No clear data available	1.18	1.34	1.50
Green area other 7 major cities (square kilometre per million people)	MoHPW MoLGRD&C	Less than 1.50	1.50	1.75	No clear data available	2.00	2.25	2.50
Percent of urban water bodies preserved with 100% compliance with water quality standards	MoHPW MoLGRD&C MoEFCC	0	02	04	No clear data available	06	08	10
Percent of cities flood free with proper drainage	MoHPW MoLGRD&C	0	02	04	No clear data available	06	08	10

Source: 8FYP & MoEFCC

Bangladesh is one of the most densely populated countries in the world, and its urban areas are facing a severe air pollution crisis. The sources of air pollution in the country's urban areas are diverse and include transportation, brick kilns, and industrial activities. The World Air Quality Report 2020 ranked Bangladesh's capital city, Dhaka, as the third most polluted city in the world. However, there have been recent efforts to address the issue of air pollution in Bangladesh. The government has implemented various initiatives to address the issue of air pollution, including setting up air quality monitoring stations and promoting the use of electric vehicles. The Department of Environment (DoE) installed 20 ambient air quality monitoring stations in different parts of Dhaka city in 2020. The government also plan to introduce 5,000 electric buses in Dhaka and other major cities by 2030. Furthermore, civil society organizations and individuals have been advocating for cleaner air and raising awareness about the impacts of air pollution on public health. Despite these efforts, much remains to be done to improve the air quality in Bangladesh's urban areas.

There is a lack of data to properly assess the percentage of green area in Dhaka and other cities, the percentage of urban water bodies preserved with 100% compliance with water quality standards, and the percentage of flood-free cities with proper drainage. However, there have been some positive developments in preserving and developing open spaces and water bodies in urban areas. Under the 8FYP period, the Public Works Department (PWD) took on infrastructural development work of the Ramna Park to improve its quality and enhance the overall scenic beauty of the open space and surrounding lake. The 8FYP aims to have 1.5 sqm/million people of Dhaka covered with green area by the end of FY25.

While it is unclear what percentage of urban water bodies are currently being preserved with 100% compliance with water quality standards, there have been some positive developments. RAJUK has implemented development work on the Gulshan-Banani-Baridhara lake and the Uttara Lake with the aim of protecting them from illegal encroachment, enhancing their water holding capacity, and improving the natural environment surrounding them. So far, 80.1 acres of land have been procured for the Gulshan-Banani-Baridhara lake in accordance with the master plan, and 8.86 km of walkway and 2.43 km of driveway have been built surrounding the lake, in addition to other lake conservation work. In the case of Uttara Lake, 1.7 km of walkway and 1.6 km of bank conservation work have been completed.

RAJUK's Purbachal new township project is also expected to allocate 7.6% of the area to open lakes/canals and 11.2% of the land for sports, parks, gardens, and other green areas. The preliminary Master Plan has been completed, and RAJUK is expected to finalize the Master Plan/Layout Plan and Detail-Drawing Design soon. Overall, while specific data on the indicators mentioned is currently lacking, the efforts being made by RAJUK and the PWD in preserving and developing green areas and water bodies in urban areas are positive steps towards sustainable urban development.

# 9.6 Progress with Implementation of Strategies and Policies

# 9.6.1 Strategies for Spatial Development: Promoting Balanced Urbanization with Focus on Secondary Cities and Promoting Economic Corridors

The government of Bangladesh has implemented several urban development plans to promote sustainable development and improve citizens' quality of life. Urban development plans such as structural plans, Detailed Area Plans (DAPs), and Action Plans have been prepared and implemented by organizations such as RAJUK, CDA, KDA, RDA, Cox'sDA, and UDD, covering 11.18% of Bangladesh's land coverage, multiple districts, and 26 upazilas. As of September 2021, a total of 117 DAPs has been approved and are under implementation, covering various cities and urban areas in Bangladesh. The government places a strong emphasis on regional and subregional planning to meet specific needs in terms of infrastructure, economic development, and social services. Drainage planning and sewerage infrastructure have been given particular attention, and significant progress has been made in improving these services.

The Land Re-adjustment Law has been drafted and awaits approval after submission to the Ministry in 2018. In addition, UDD plans to complete and implement the Urban & Area Planning Act, 2022, and Payra Kuakata Development Authority Law 2018 in the current financial year. The government's emphasis on urban planning and infrastructure development is reflected in the ongoing Integrated City Master Plan for Dhaka (2020-2050) being implemented with the help of consulting firms. The National Building Code sets out technical guidelines for building construction, and RAJUK has been working to improve its implementation and enforcement throughout Dhaka city. However, work is still needed in other urban regions that require attention in the remaining period of the 8FYP.

The Bangladesh Land Use Policy aims to ensure that land is utilized in the best possible way for sustainable development and poverty alleviation, but regulations' enforcement in regions outside the jurisdiction of statutory urban plans remains questionable and needs attention. Conducting tools in land management such as GLD and land pooling, as a pilot basis in fringe areas of some urban regions remain to be done.

# 9.6.2 Institutional Development Strategies

There have been many institutional capacity building activities throughout the 8FYP period so far, with specific attention towards planned urbanization, incorporating climate change vulnerabilities and resilience in planning

and construction and provision of water, sanitation and waste management infrastructure and services. For instance, The Dhaka Water Supply Network Improvement Project aims to improve DWASA's overall capacity to provide clean water and sanitation services throughout Dhaka. There has also been improvement in governance as various online tools such as e-tendering and online application management, software-based store management, etc., have effectively improved DWASA's operating ratio to 0.66. In FY22, 12 employees of CWASA received foreign training, while 168 received internal training.

Effective capacity development of the City Corporations has also positively impacted on their service provision and revenue generation. 160 new positions have been created with 78 of them filled for DNCC, while in case of DSCC, 235 new positions have been unvacated, as 8 new unions incorporated and divided into 18 wards under DSCC have created new opportunities. While DNCC's revenue generation target remains unachieved at 68.1% in FY22, it generated 79.6 Crore BDT more than previous year. All city corporations have completed majority of their ADP targets for FY22, which is a significant demonstration of capacity improvement in the backdrop of challenges and twin crisis brough forth by the pandemic and Russia-Ukraine war.

The local government (Union Parishad) Act 2009 is currently being revised, while activities are ongoing to implement the Union Parishad (Tax) Guidelines. Furthermore, to attain the targets of the Sustainable Development Goals, various development activities are being undertaken under the Efficient and Accountable Local Governance (EALG) project that involves capacity building of Local Government Institutes (LGIs) and improvement of local government management to be more effective during service provision.

#### 9.6.3 Strategies for Development of Urban Infrastructure and Services

The government of Bangladesh has taken various initiatives to improve urban infrastructure and services in line with the strategies outlined in the 8FYP. In 2019, a 20-year Sewerage Master Plan was approved for the Dhaka metropolitan area. The plan aims to provide a sustainable solution to the sewage management problem by improving the existing sewerage system, developing new treatment plants, and expanding the coverage of the system. While there is no specific strategic plan for sustainable water supply, the government has developed policies and plans to ensure access to safe and sustainable water supply. The Bangladesh Delta Plan 2100 includes a strategic plan for water resources management, emphasizing the need to improve water governance, enhance water security, and promote equitable access to water resources. The National Water Policy 1999 was updated in 2018, setting out the principles and guidelines for the management and development of water resources in Bangladesh.

Various appropriate technologies, including reverse osmosis plants, nano-filtration units, solar pond sand filters, rainwater harvesting plants, and gravity field systems, are being adopted to ensure sustainable water supply, especially in geologically difficult and problematic areas such as Chittagong Hill tracts. Affordable technological solutions have also been adopted for the Rohingya camps.

To reduce congestion in city roads, a key strategy of the 8FYP is to provide sustainable public transport services in the form of rail based MRT and BRT in Dhaka. The 20-year Strategic Transport Plan for Dhaka has proposed five MRTs and two BRTs, with work progressing rapidly for the MRT system. The MRT line 6 has been approved, with phase one inaugurated in December 2022 and commencing operations in January 2023. The 140-km network of metro rail-based MRT consisting of six lines in Dhaka and adjacent areas is expected to significantly reduce traffic congestion and environmental pollution.

#### 9.6.4 Strategies for Urban Land and Housing Development

Bangladesh has made progress in urban land and housing development, as per its 8FYP strategies. Masterplans have been created for multiple districts and upazilas, alongside more than 117 DAPs under implementation, and UDD

plans to enforce the Urban & Area Planning Act 2022. In addition, the government is implementing National level plans, regional level plans, corridor development plans, conservation plans, various climate-sensitive strategic development plans, and risk-sensitive land use plans to support proper land use planning.

The government has adopted several policy instruments to support innovative land development and management practices. For example, the Land Re-adjustment Law has been drafted, and a digital land management system is being developed to improve land registration and management. The government is also using participatory approaches to land development, such as land pooling projects in Dhaka and other cities, to create developable land parcels for affordable housing projects. Several other projects incorporate GLD, in which the government guides infrastructure development to meet community needs. The Dhaka Mass Rapid Transit Development Project is an example of this approach.

In the housing sector, the government is taking initiatives to provide appropriate housing for low and middle-income groups, with RAJUK, PWD, NHA, and the Ministry of Housing and Public Works involved in various projects. However, the government's key strategy of working as an enabler rather than a provider has not yet taken shape. The private sector faces multiple constraints, such as rapidly increasing land prices in urban areas, weak regulatory delivery, land ownership issues, and a lack of interest/demand for units in peripheral areas. The mortgage market also needs more dynamism, as its current penetration in Bangladesh's housing market is low at 3%. Enforcement of land development laws to accommodate the low-income population remains low, while PPP projects and concrete incentives to the private sector, community organizations, and non-profit organizations for land development and housing activities are yet to materialize properly. Overall, there have been some positive developments in urban land and housing development in Bangladesh, but the government needs to address the challenges faced by the private sector to make its strategies more effective.

#### 9.6.5 Strategies for Urban Environment, Climate Change and Disaster Management Strategies

Bangladesh is extremely vulnerable to the effects of climate change. The Global Climate Risk Index ranks Bangladesh as the world's seventh most affected country over the period 1999-2018<sup>6</sup>. Recent studies estimate that by 2050 Bangladesh could have 13.3 million internal climate migrants<sup>7</sup>, which together with rural-urban migration will put additional pressure on urban areas where urban services and infrastructure are already overwhelmed. Climate change is also contributing to higher health challenges in urban areas<sup>8</sup>. ULGIs need support to better manage and mitigate increased climate change impacts including high rural-urban migration and health risks.

The Bangladesh government has implemented projects to strengthen public agencies' capacity to respond to climate emergencies and better adapt to climate change. The Urban Resilience Project (URP) aims to address seismic risk and reduce vulnerability of future building constructions in Dhaka and Sylhet, with support from implementing agencies such as DDM, RAJUK, and DNCC. The Local Government COVID-19 Response and Recovery Project aims to improve critical urban services and infrastructures in 329 municipalities and 10 city corporations, benefiting low-income areas, slums, and areas exposed to high disease outbreak and disaster risks. There has been some progress in promoting clean technologies, solid waste management, and improving sewerage networks. However, more needs to be done to address pollution, traffic congestion, and enforcing the Polluter Pay Principle. Monitoring, regular assessment, strengthening institutions, and community participation can help establish a more effective system for urban climate change and disaster management.

<sup>6</sup> Germanwatch (2020) Global Climate Risk Index 2020

<sup>7</sup> World Bank (2018) Groundswell: Preparing for Internal Climate Migration

<sup>8</sup> Higher temperatures are positively associated with respiratory illnesses – for 1% increase in humidity, likelihood increases by 1.5 % and for mean temperature by 5.7% (WB 2021, draft report on Infected and Stressed by Climate Change in Bangladesh)

# 9.7 Emerging Gaps and Challenges Moving Forward

While the relevant ministries and divisions/departments have made good progress in several areas of the urban agenda over the course of the 8FYP, there are some areas that require extra attention to fully attain the strategic objectives and targets of the 8FYP.

Urban Pollution and Environmental Management: Bangladesh, particularly its capital city of Dhaka, is facing a grave challenge in terms of air pollution and environmental management. Dhaka is ranked as the second most polluted city in the world, with fine particulate matter (PM2.5) concentrations frequently exceeding safe limits set by the World Health Organization (WHO). The sources of air pollution in Dhaka include vehicular and industrial emissions, construction activities, and brick kilns. This high level of pollution has severe health impacts and economic losses, with an estimated 78,145 to 88,229 deaths in 2019 alone, and 3.9 to 4.4 percent of Bangladesh's GDP lost due to ambient air pollution. Furthermore, the water pollution in Dhaka is also a significant concern. Dhaka's rivers are heavily polluted due to industrial waste, sewage, and other pollutants. This pollution leads to various waterborne diseases, which affect the health of the city's residents. Overall, the urban pollution scenario in Bangladesh, especially in Dhaka, is a significant challenge that requires immediate attention and action from the government in the remainder of the 8FYP to reduce its adverse effects on the environment and public health.

While the government has taken steps to develop and preserve green areas including parks and playgrounds, in Dhaka and 7 other cities, it remains to be seen if it has reached the 1.02% target provided in the 8FYP. Similarly, while urban water bodies have been preserved with initiatives from City Corporations and RAJUK, whether it complies with water quality standards remains uncertain. A strategy proposed in the 8FYP is to build capacity of DOE in monitoring, investigating, and examining pollution. Expanding the scope and accuracy of data captured and further research will be necessary, not only to better track progress and evolving pollution situation, but also to formulate effective responses. The government can also work towards enforcement of polluter pays principle, promoting low/no pollution technologies and cars, and introducing environmental audit, energy audit and water audit, as prescribed in the 8FYP.

Urban Transportation and Traffic Management: While the MRT system was prioritized in the first few years, and its progress visible with the first phase of MRT line 6 currently operational, other areas of comprehensive urban transportation strategy and traffic management have fallen behind. It was targeted that 7 cities will have urban streets/ roads with modern traffic signals by 2025— however, so far Dhaka remains the only city with such signals installed. Furthermore, not all junctions and busy crossroads of Dhaka utilizes this facility, as majority of them operates manually. This is something that can be easily investigated and prioritized in the remainder of the 8FYP period. Similarly, 8FYP targets compliance with traffic laws for 30% of Bangladesh's urban roads. With only 10 percent complying with such laws in 2018 through mobilization of traffic officers, achieving 30% by 2030 can get challenging if not prioritized timely in the next 2 years. Additionally, strategies which have not been adopted yet but can be looked into to alleviate the severe congestion in urban roads that brings down productivity and have significant impact on the GDP, are: Bus rapid transit system in Dhaka; preparation of comprehensive traffic management plan for major cities; controlling the number of cars; establishing waterways and integrating with road/rail; and introduction of Intelligent Transport System (ITS) and traffic demand management, as prescribed in the 8FYP.

Urban Governance and Management: Besides efforts to boost the revenue generation and spending capacity of urban LGIs, with the target of reaching 0.5% and 1.5% of GDP respectively by 2025, other important targets of the 8FYP cannot be ignored. One such target is the aim to have 90% of cities with urban plans by 2025. While there has been commendable progress in this area with the introduction of new structural plans like DAP and Masterplan, it is crucial to maintain this momentum and ensure effective implementation and enforcement. Another goal of the 8FYP is to extend the legal status of Pourashava plans through gazettes and empower relevant

agencies to adopt and enforce building codes across the country. This is especially important considering the target of achieving 25% compliance with building construction rules by 2025, which was only 5% in 2018. Although RAJUK has made strides in enforcing building codes in Dhaka, achieving country-wide adoption will require significant capacity-building of LGIs. As such, it is vital to remain focused on these targets in the remainder of the 8FYP period.

More broadly, the PP2041 envisioned Bangladesh to have an urban situation similar to that now found in Korea. The transformation of Korean cities into green and smart cities has been anchored on the establishment of strong, empowered, and decentralized LGIs. All UMIC and HIC have moved ahead with the establishment of similar urban institutions. Bangladesh already has made progress on the political front with elected mayors and local city officials. This political empowerment must now be matched with administrative and fiscal decentralization so the urban LGIs are able to compete and establish a track record of solid development with delivering basic urban services including water supply, sanitation, waste management, urban transport, urban housing, urban parks, clean water bodies, proper drainage, and traffic management. Empowered, financially autonomous and accountable city governments is the only viable long-term institutional solution to propelling Bangladesh urban centers comparable to Korean urban centers in the next 18 years or so (2041) as envisaged under PP2041.

Basic Infrastructure and Services: While LGD and implementing agencies have done well in building necessary infrastructure such as roads, flyover, bridges and well on course to providing 100% access to safe drinking water and sanitary toilet services. A particular area that may require more attention is complete waste management. A complete waste management system refers to a comprehensive approach to managing waste that includes various stages of waste handling, such as waste generation, collection, transportation, processing, treatment, and disposal. The goal of a complete waste management system is to manage waste in a way that protects public health, the environment, and natural resources while promoting economic growth and sustainability. It ensures that waste is collected and disposed of safely and responsibly, protecting public health and the environment. It also promotes resource conservation and can stimulate economic growth through the development of recycling and waste-to-energy industries.

Sewerage connection plays a vital role in waste management and is an essential aspect of maintaining public health and environmental sustainability in urban areas. The 8FYP for urban development sets a target of 10% of urban households to be connected to sewerage systems by 2025, a significant increase from the 2017 baseline. This connection enables the transportation of wastewater, which contains human waste, to treatment facilities for proper processing and disposal. The treatment of wastewater is crucial to prevent water source contamination and the spread of diseases. Additionally, the 8FYP aims to equip 10% of urban centers with wastewater treatment facilities and modern waste disposal systems by 2025, a new development for Bangladesh. Modern waste disposal facilities use technologies like liners, leachate collection systems, and gas collection systems to minimize the impact of waste on the environment. They play a crucial role in protecting public health, and technologies like waste-to-energy and material recovery facilities can generate electricity and recover recyclable materials from waste.

To achieve these targets, the 8FYP proposes key strategies such as the preparation of infrastructure plans for drainage and sewerage infrastructure investments, creating a sewerage master plan, and creating an enabling environment to capture the entire sanitation value chain for effective faecal sludge management. These strategies can help prioritize investments in drainage planning and sewerage infrastructure, thus ensuring better waste management in urban areas. Overall, sewerage connection is a crucial aspect of waste management, and the achievement of these targets can ensure sustainable urban livelihoods in Bangladesh.

Housing Development: Bangladesh, with a population of 165 million, has a skewed population growth towards urban areas, with almost 31.5% of the total population living there. The government has a target of reducing the proportion of the urban population living in slums or informal settlements from 33% to 25% by 2025. However, the demand for housing units, currently estimated at 6 million, is expected to grow to 10.5 million by 2030. Home loans worth USD 2.52 billion will have to be disbursed annually to meet the growing demand for affordable housing. However, the existing financing requirement for 3.5 million affordable housing units is USD 58.8 billion or 4.9 trillion BDT, and the housing loan portfolio of banks is minuscule compared to the overall banking portfolio, at just 6.46% of total advances. Mortgage finance penetration in Bangladesh's housing market is low at 3%.

The focus must shift to create an enabling environment as originally strategized in the 8FYP to provide adequate housing to lower and lower-middle income people. Foreclosure laws and practices can be reviewed and amended as necessary, along with improving land management practices to improve access to land for such initiatives. Strategies that can be revisited include constructing multi-storied residential buildings for sale on rental-purchase basis, stimulating the efficiency and the dynamism of the mortgage market by ensuring a level playing field, carrying out reforms in land administration and regulatory environment, and restructuring BHBFC, enforcement of real estate development and residential land development laws to accommodate low-income population, special support for land development activities commenced by community organizations and non-profit organizations, and considering PPP to boost supply. Government can release government-owned land in a PPP model to ensure housing for lower and lower-middle-income people at an affordable rate, as land prices in and around Dhaka usually hikes up housing prices which later ceases to be affordable.

# Other areas that may require extra attention in the remainder of the 8FYP period include:

Identifying and enforcing necessary action for vulnerable buildings: Frequent incidents of fire and explosions is another area that needs more attention. Rapid and unplanned urbanization, as well as mad rush of people to urban areas for work have resulted in an alarming increase in the number of fire, explosions and building collapses. Dozens of such devastating incidents have claimed hundreds of lives and damaged infrastructure in the megacity of Dhaka, port city of Chattogram and other industrial urban zones just over the past few months. While Fire Department, PWD and other relevant agencies have identified some buildings that are prone to such risks and preserved them, the government needs to put greater emphasis on identifying and enforce necessary action for vulnerable buildings to wane the rapid rise in fire incidents, destruction of property and loss of lives.

Construction of multistoried car park: Construction of multistoried car parking in busy areas is one such activity that has not been widely investigated but can provide quick wins in terms of cost incurred and benefits achieved. Parking is a huge concern in busy hubs all over the world, and government/private sector operated multistoried parking in strategic locations has shown to not only help reduce congestion, but also reduce pollution and add additional revenue. This is an area LGED and city corporations can also investigate as expansion of civic amenities for citizens to reduce pollution is a priority spending area for LGD, besides other arrangements such as PPP.

Urbanization planning, with focus on climate change and disaster management: The 8FYP also mentioned specific steps and strategies to be implemented in the plan period to implement the urbanization strategy that will guide investment decisions around the country for balanced urban and regional development, with focus on climate change and disaster management. While progress have been made with multiple ongoing projects with support from development partners, urban areas in the country still face substantial institutional, planning and governance challenges to address climate change.

The 8FYP proposes various strategies for Urban Climate Change and Disaster Management, which can be grouped into three categories: strengthening institutions, planning, and community participation. Under the first category, the focus is on strengthening city disaster management committees, monitoring and evaluation mechanisms, sensitizing legislations, and promoting close coordination among relevant organizations. The second category emphasizes the preparation and implementation of integrated, environmentally-sound urban planning and management, transportation plans that include disaster risk reduction measures, and establishment of a comprehensive information system. Lastly, the third category highlights the need to enhance disaster preparedness and response capabilities through the contributions of volunteers, local community groups, and non-governmental organizations, and to develop municipal-community partnerships to improve basic utilities, social services, and neighborhood environments. Speedy implementation of these strategies can play a major role in improving the urban natural environment and tackling the adverse effects of climate change and urban flooding.

# CHAPTER 10 EDUCATION SECTOR DEVELOPMENTS

# 10.1 Development Context

In the 21st century world economy, education plays a pivotal role in fostering Bangladesh's development. It is part of the soft infrastructure that the country must invest in as part of its development strategy. Bangladesh Government has accordingly prioritized investment in the education sector as an integral part of its development strategy.

There has been significant progress in the education sector in recent years, driven by the policies and strategies laid out in the Sixth and Seventh Five Year Plans, which focused on providing education and training to a large group of the population, expanding coverage to both urban and rural areas, and improving the quality of education. The literacy rate has risen substantially, and there has been an increase in the share of the workforce with secondary, higher secondary, and tertiary education.

The education sector continues to drive the nation's development in various ways. Education is contributing to the gradual skilling of a low-skilled workforce in order to compete in the global marketplace. This has complemented the growth of various sectors, such as information technology, tourism, and telecommunications, providing employment opportunities for the population in these fields and raising overall productivity. Importantly, education has played a significant role in poverty alleviation. With greater access to education, citizens are empowered to break the cycle of poverty, helping them to lift their families out of poverty. Education has also led to greater social mobility, with people from different backgrounds being able to improve their economic status. Indeed, education is the most powerful driver of positive change. Therefore, it is essential to continue investing in the education sector to ensure sustained economic growth and development in the country.

This Chapter reviews implementation progress of the education sector as of the mid-term of the 8FYP. This review will focus on how the education sector developments have fared in achieving the goals and targets set in the 8FYP at the midway of the timeframe, considering the previous successes and the challenges that lie ahead.

#### 10.2 Progress in the Education Sector under the 7FYP

Considerable progress was made in the education sector under the 7FYP. Universal primary education and gender parity was achieved. Dropout rates were reduced, teacher-student ratio was increased, and progress was made in improving the quality of primary education. In secondary education, net enrollment increased substantially from 55% in 2015 to 72% in 2020. The net enrollment for girls in secondary education stood at 82% as compared with only 63% for boys. The teacher-student ratio was enhanced while progress was made in improving school facilities and quality of education. The use of ICT was greatly enhanced along with greater emphasis on math and science, which contributed to an increase in the quality of secondary education.

The 7FYP put considerable emphasis on the expansion of higher education. The private sector took the lead with a big increase in private higher education institutions. Student enrollment in higher education grew progressively between 2015 and 2020, which allowed the gross enrolment rate to expand from only 13.9% to an impressive 22.8% in 2020. Emphasis was given to female enrolment. While good progress was made in increasing the female enrolment rate, the gender enrolment gap narrowed only slightly from 26% in 2014 to 23% in 2020. So, the gender gap still remains substantial. Progress was made in increasing emphasis on science, math and technology. Private universities have been particularly active in expanding engineering and medical schools. Use of ICT expanded substantially in higher education, which played an important role in mitigating the adverse effects of Covid-19 on higher education.

The TVET education system progressed considerably with expansion of both the number of institutions and students. The quality of education and relevance to market skills was enhanced. Outside technical education, the government made substantial progress in strengthening skills development across the country through a number of focused training initiatives like the establishment of the National Skills Development Authority (NSDA), the Industry Skills Council (ISC) and introduction of competency-based training and assessment system (CBT&A). A major skills upgrading program was adopted through ADB financing support known as the Skills for Employment Program (SEP) that achieved considerable success in increasing the availability of skilled labor force.

Progress was also made in strengthening madrassa and non-formal education. The madrassa syllabus was modernized with greater emphasis on language, math and science, and ICT was introduced. In non-formal education the effectiveness of the Board for Non-Formal Education (BONFE) was strengthened to impart greater and more effective basis literacy skills to the adult population, Evidence shows that there has been considerable progress in increasing the level of adult literacy for both male and female. Total adult literacy rate expanded from 65% in 2015 to 76% in 2020, with commensurate increases for both male and female. Indeed, the gender literacy gap has now been reduced from 9% to 7%.

An important policy objective for the education sector was to improve the equity of education. Some progress was made through the expansion of primary and secondary education system in the poor communities and hard to each area in partnership with NGOs, and focused scholarships program. Nevertheless, there is still a way to go.

Despite the impressive progress in education and training in the 7FYP, there are a number of areas where performance gap remained.

The biggest challenge is the quality challenge. More than one-third of children aged 7-14 cannot correctly read words in a story, and more than half cannot demonstrate foundational reading skills. For numeracy, more than one-third of children cannot successfully complete number reading and discrimination tasks, and about two-thirds cannot complete pattern recognition tasks. Dropout rates were still high, with almost 20% of students dropping out, especially girls. School contact hours were below international standards, with only 791 hours set for grade 3 and grade 5. While the average pass rate of Primary Education Completion Examination (PECE) increased during the plan, the National Student Assessment (NSA) suggested that learning competencies were drastically lower for students in grade 5 compared to grade 3 in mathematics and Bangla.

A second challenge concerns employment relevance of higher education. In addition to low enrollment relative to the average for LMIC, higher education sector suffers from a lack of quality education and job-readiness among graduates, particularly in the STEM disciplines. Enrollment in humanities and social science disciplines increased over the years, but the enrollment in STEM was still only 21 percent of the total enrolment at the end of 7FYP term. Moreover, the absence of industry-academia collaboration has created a gap between the skills and knowledge taught in higher education institutions and the skills needed in the workplace. This has turned out to be a major challenge and calls for a need to link the industry with the academia to provide graduates with the skills and knowledge relevant to the job market. Without addressing these challenges, increasing enrollment in higher education will create a pool of graduates who are highly educated but potentially unemployable.

A third challenge relates to expansion of higher education. At 22% enrollment rate, this is even below the average enrollment rate of 28% for LMIC and much below the rates found in Vietnam, India, Indonesia, Thailand, and Malaysia. Private sector has been playing a dynamic role in this regard. But financing remains a major constraint.

A fourth challenge relates to the equity of education. There is still a considerable gap in school attendance by the poor at all levels of education, and the gap between the rich and poor remains large. Dropout rates for children

of poor families are much higher than the non-poor. Children from the poorest families are more than twice as likely not to receive quality education in reading and numeracy skills as those from the richest families. An added concern is the growing gap between the rich and poor in the access to quality higher education. The rapid expansion of private universities has created a major gap in this regard. The cost of private higher education is prohibitively high for children from poor families. Unless public education with focus on science and technology and affordable cost expands at a much faster rate than presently, there is a risk that the gap in the access to quality higher education between the children of the rich and poor families will grow exponentially.

A final challenge is in the area of education financing. Bangladesh continues to spend a mere 2% of GDP on education. The 7FYP sought to increase this to 3.5% of GDP by the end of the plan period (FY2020). In the event, actual spending remained at around 2% of GDP. Inadequacy of education funding is a major constraint on the ability to strengthen the quality of public sector education.

The 8FYP was cognizant of these challenges and has sought to build in these concerns in defining the education sector objectives, targets and strategies.

# 10.3 Objectives, Targets and Strategies for the Education Sector under 8FYP

# 10.3.1 Objectives and Targets

The 8FYP has identified education as a key area for development and has set out a number of objectives and goals for various education levels and streams. The 8FYP acknowledges the value of education and lays out several objectives to achieve universal primary and secondary education, increase access to high-quality education, raise its standards, reduce the equity gap, and improve governance and management in the field.

# In brief, the priority goals set by the government for the education sector in the 8th FYP are:

- 1. Ensuring that all people have access to high-quality education, with an emphasis on minimizing gaps between urban and rural regions and various socioeconomic groups.
- 2. Improving skills training, technical and vocational education, and higher education, with a focus on improving both the standard and relevance of education.
- 3. Encouraging the use of technology in the classroom to enhance productivity and learning outcomes.
- 4. Enhancing the sector's administration, governance and management to increase accountability, openness, and efficiency.
- 5. Encouraging the private sector to invest in education in order to expand access to high-quality educational options.

The ultimate vision of the government for the education sector is to achieve the goal laid out in SDG4: Quality education for all; of course, after ensuring education for all. Particularly, for the primary level, the main priorities of the government are to improve school quality and system efficiency, establish a sustainable and better governed education system and ensure universal coverage and equitable access to quality primary education. For the secondary level, the government's ultimate vision is to extend compulsory basic education up to class eight and to completely restructure and reform the outcomes of secondary education. Additionally, the government has set top priority to modernize madrasa education and introduce the use of ICT heavily in the sector.

In order to achieve these visions, the government has laid out a comprehensive strategy in the 8FYP to create an inclusive and long-lasting education system with reformed curriculum and pedagogy. An overview of the education sector's progress toward achieving these objectives at the midterm of the 8FYP timeframe follows.

# 10.3.2 Sub-sectoral Objectives and targets

The key objectives and targets for the different levels of education have been summarized below:

#### Primary and secondary education

- Ensure that all children have access to quality primary and secondary education.
- Improve the quality of primary and secondary education through the development of teacher training and support programs, curriculum reform, and the provision of teaching and learning materials.
- Reduce the dropout rate and increase the retention rate in primary and secondary education.
- Increase the participation of girls and other marginalized groups in primary and secondary education.

# Higher education

- Ensure access to higher education by improving the enrollment rates.
- Improve the quality and relevance of higher education by ensuring better collaboration between institutions and industry.
- Ensure better learning outcomes by improving pedagogy and disproportionate teacher-student ratio.
- Strengthen and unify the system of governance and management in higher education institutions.
- Increase focus of science and ICT education and encourage internationalization of higher education through proper collaboration with foreign institutions.

#### **TVET**

- Increase the relevance and quality of TVET programs to meet the demands of the labor market.
- Improve the availability of TVET opportunities for young people, particularly those from disadvantaged backgrounds.
- Promote public-private partnerships in TVET to ensure that the private sector plays an active role in the development and delivery of TVET programs.

#### Madrasa education

- Improve the quality of madrasa education by enhancing the curriculum, upgrading teaching and learning facilities, and ensuring the availability of necessary technology.
- Promote the integration of modern subjects into the madrasa curriculum to increase the employability of madrasa students in the labor market.
- Enhance the development of madrasa teachers through training and capacity-building initiatives.

#### Adult literacy and non-formal education

The goal is to achieve 100% adult literacy by 2025.

#### Cross Cutting Strategies for Education Sector

The main strategies and policies to accomplish the objectives of the 8FYP education sector development include a number of cross-cutting strategies and policies that cover the entire education sector as well as sub-sector-specific strategies and policies. The cross-cutting strategies and policies comprise:

- Sharply increase public education expenditure, as a percentage of GDP.
- Involving private sector in education investment and curriculum development.
- Strengthen parent consultation process.
- Strengthen the relevance of education to skills and employment.
- Strengthen teacher quality and skills.
- Decentralize primary and secondary education to the district level.
- Strengthen research on education and skills improvement.

# 10.3.3 Strategies for different education levels under 8FYP

The cross-cutting strategies were to be strengthened with sub-sector specific strategies.

# Strategy for Pre-primary and childhood education

The 8FYP aims to focus on developing pre-primary and early childhood education in Bangladesh, based on local and global experiences. The following strategies have been outlined:

- A tool to reduce disparity: The 8FYP aims to expand pre-primary education based on equity to reduce earnings and wealth inequality by targeting disadvantaged groups, particularly first-time learners.
- Develop appropriate curriculum and train teachers for pre-primary: Under the 8FYP, a new group of teachers specializing in early childhood learning will be trained to provide appropriate curriculum design and make pre-primary education successful.
- Strengthen public-private partnership: The 8FYP aims to encourage private organizations and NGOs to provide pre-primary education and strengthen public-private partnerships in this regard.

#### Strategies for Primary education

The following strategies have been outlined in the 8th FYP regarding the objectives and challenges of the primary education sector:

- Reduce dropout and absenteeism in schools.
- Better quality learning outcome in primary education
- Create better citizens through proper moral education from an early age.
- Develop better tools to measure learning outcomes.

#### Strategies for Secondary education

The 8th FYP aims to primarily strengthen the implementation of PEDP-IV and SESIP project. The following additional strategies have also been outlined in the 8th FYP regarding the objectives and challenges of the secondary education sector:

- Develop better tools to measure learning outcomes.
- Reforming the examination and evaluation method of students learning
- Increase science enrollment.
- Introduction of Common Curriculum up to class X
- Improve equity in secondary education.

- Greater role of ICT-based learning
- Introduction of Pre-vocational and vocational education in secondary level
- Improve the reputation of TVET stream; especially at secondary level.
- Better industry-academia collaboration
- Free compulsory education up to 12 years for all children by 2030

# Strategies for Higher Education

The government has prioritized investing in tertiary education during the 6FYP and 7FYP, consistent with the National Education Policy 2010, and aims to continue that trend in the 8FYP by consolidating existing strategies and taking additional actions. The main strategies for higher education are drawn from the National Skill Development Policy 2011 and the Strategic Plan for Higher Education in Bangladesh 2018-2030 which are consistent with the NEP 2010. Additionally, the 8FYP outlines the following strategies for the higher education sector:

- Increase focus on STEM fields.
- Strengthen Government and private sector collaborations in higher education.
- Increase the number of training institutions to promote TVET in higher education.
- Reduce the gender-gap in the enrollment in higher education.
- Greater collaboration with internationally reputed universities
- Put more focus on research and publication.
- Facilitate industry-academia linkage and placement programs.
- Introduction of skill driven courses in post graduate colleges
- Strengthen the University Grants Commission (UG

# Strategy for Madrasa education

The 8FYP emphasizes involving external stakeholders in the curriculum design and implementation of innovative teaching methods to improve the quality of madrasa education. To achieve this, the national education board will bring madrasa education under its umbrella, providing accreditation and ensuring graduates' employability by incorporating science, mathematics, and ICT-related subjects. The following strategies have been outlined in the 8th FYP regarding the objectives and challenges of the madrasa education sector:

- Proper training of the teachers to ensure better pedagogy.
- Better linkage with TVET institutions to enhance labor market opportunities for madrasa graduates.
- Heavily introduce ICT materials to modernize madrasa education.
- Better transparency and management of funds, especially in the cases of Qawmi stream

#### Strategy for Adult literacy and non-formal education

The 8FYP has targeted to complete the unfinished objective of the 7FYP of achieving 100% literacy rate. In order to achieve this target and tackle other challenges, the following strategies have been outlined:

- Impart basic literacy skills and promote lifelong learning opportunities according to the SDGs.
- Develop basic skills to supplement the formal education system.

- Make use of ICT in community learning centers to modernize learning techniques.
- Introduce ICT-based access to information and self-learning tools to accelerate the spread of literacy.

# 10.4 Assessment of Implementation Progress during the Mid-Term of the 8FYP

To assess progress with the implementation of the objectives, targets and strategies in the education sector, the 8FYP identified substantial number of quantitative indicators, which is presented in Annex Table A10.1. Progress against each of the targets is discussed below.

#### 10.4.1 Progress in Pre-primary Education

The vision for the pre-primary sector is to ensure that all children regardless of gender, ethnicity or background gets the opportunity to education. At the midterm of the 8FYP, most of the strategies have not been completely implemented yet. Initially, in 2014, the government had introduced one year of pre-primary education at government primary schools for 5-year-old children. However, the results of this program were not found to be satisfactory due to low enrollment. Under the 8FYP guided by the SDG target 4.2 of access to quality early childhood education for all boys and girls, the National Curriculum and Textbook Board (NCTB) approved a pilot program to introduce 2-year pre-primary education for children over four years of age on 25th June 2022. The pilot program has already started implementation in chosen 3,000 government primary schools since 1st January 2023. Under the Fourth Primary Education Development Program (PEDP-4) which will continue until June 2025, pre-primary classes have begun in additional 3214 schools for children aged 4+. Before this, under the PEDP-3, pre-primary programs were started for children aged 5+.

However, challenges still remain in terms of teacher training in pre-primary education which was also the case at the end of the 7FYP term. A recent assessment of the pre-primary education sector in 2020 by the World Bank has found that the government provision for training and professional development of teachers has not been adequate. This has led to ineffective pedagogy in the classroom. At present, the government provides a single 15-day training session for pre-primary teachers. This practice has been prevalent since 2014 and has not been changed in the latest pilot program of the NCTB. Lack of training is found to be a major hindrance to the quality of pedagogy and learning assessment at this level. Hence, the Directorate of Primary Education (DPE) has started reforming the pre-primary teachers' training and curriculum and has initiated to cover the training issue in Diploma in Primary education (DPEd) curriculum.

According to the Ministry of Primary and Mass Education, the number of current teachers at the pre-primary level does not yet meet the increasing demand of pre-primary education in the country. In 2021, the number of teachers in Pre-primary and primary level were 657,203 and specifically for government primary schools, the number of teachers were 359,095 (Source: Bangladesh Education Statistics 2022). However, with the aim of mitigating the shortage of teachers, the Directorate of Primary Education (DPE) in collaboration with the Ministry of Primary and Mass Education (MoPME) recruited 45,000 teachers in government primary schools in July 2022. The MoPME has also revealed the plan to recruit 30,000 more teachers after the conclusion of this phase of the recruitment process.

#### 10.4.2 Progress in Primary Education

Primary education in Bangladesh encompasses grade 1 through 5. To track the midterm progress of primary education we can look at the performance indicators that have been set by the 8FYP.

Table 10.1: 8FYP Progress with Completion Rates in Primary Education

Baseline	Target for 2021	Progress in 2021	Target for 2022	Progress in 2022	Target for 2025
Primary: 82.1%	84.00%	Male: 84.95%	90.00%	Male: 85.12 %	92.00%
(Source: APSC		Female: 86.75%		Female: 86.81%	
2019)		Total: 85.85%		Total: 86.05%	

Source: 8FYP, Bangladesh Education Statistics (BES) 2022; Annual Primary School Census (APSC) 2022

In the 8FYP, the government had set a target of completion rate for primary education at 84.00% in 2021. According to recent data, in 2022, the completion rates disaggregated by gender, for primary education level are Male: 85.12%, Female: 86.81% and Total: 86.05%. Therefore, progress is fairly on target and the target of 92% for 2025 may be achieved.

The government wants to ensure at least completion of primary education for children from all walks of life. As a result, indicators like Gross enrollment rate (GER) and Net enrollment rate (NER) have been chosen to track how many children are entering into the primary education system. The GER for primary education in 2022 is as follows: Female: 118.46, Male: 103.16 and Total: 110.48, whereas the target set for GER in 2022 was 107 (see Table 10.2). On the other hand, the target for NER in 2022 was 100. According to the most recent data, the NER for primary education in 2022 is as follows: Female: 97.81, Male: 97.52 and Total: 97.56. The progress as of 2022 suggests that the achievements of the targets for primary education GER and NER are on track.

Table 10.2: 8FYP Progress with Gross and Net Enrollment Rates in Primary Education

Performance indicator	Baseline	Target for 2021	Progress in 2021	Target for 2022	Progress in 2022	Target for 2025
Gross Enrollment rate (%)	Primary education: Female: 108.9 Male: 101.1 Total: 104.9 (2020)	109	Female: 106.14 Male: 105.32 Total: 105.72	107	Female: 118.46 Male: 103.16 Total: 110.48	Total: 104
Net enrollment rate (%)	Female: 98.25 Male: 97.37 Total: 97.81 (2020)	(a) 99	(a) Female: 97.44 Male: 97.39 Total: 97.42	100	Female: 97.81 Male: 97.52 Total: 97.56	Total: 100

Source: 8FYP; BES 2022

The government also wants to ensure that the children who enter the education system persist in it and come out eventually earn a quality education. As a result, the government has set targets for repetition, dropout and survival rates for the timeframe of 8FYP. The dropout and survival rates in education are both fairly close to target set for 2022 in the 8FYP. In 2020, the dropout rate was 17.20% which declined to 13.95% in 2022 close to the target of 12%. On the other hand, in 2020, the survival rate was 84.70% which rose up to 86.25% in 2022. Therefore, the target of 88% is achievable during the plan period.

Table 10.3: 8FYP Progress with Repetition, Dropout and Survival Rates in Primary Education

Performance indicator	Baseline	Target for 2021	Progress in 2021	Target for 2022	Progress in 2022	Target for 2025
Repetition rate in primary education (%)	Female: 4.90 Male: 5.00 Total: 5.00 (2020)	6	Female: 0.75 Male: 0.95 Total: 0.85	6		Total:5
Dropout rate in primary education (%)	17.20 (2020)	14	14.15	12	Total: 13.95 Male: 14.88 Female: 13.19 (BES 2022)	Total: 9
Survival rate in primary education (%)	Female: 85.90 Male: 83.30 Total: 84.70 (2020)	86	Female: 87.10 Male: 85.25 Total: 86.20	88	Female: 87.80 Male: 85.90 Total: 86.25 (BES 2022)	Total 91

Source: 8FYP, BANBEIS, BES 2022

Raising the quality of teaching and assessment in primary education is a major priority for the government. In order to achieve this goal, 8FYP sought to increase the number of well-qualified teachers and increase the number of teachers per student for primary education. Also, to ensure proper supervision and assessment of learning outcomes according to the new curriculum, the 8FYP has targeted to decrease the number of students per institution (SPI). Table 10.4 shows the progress in this regard. In 2021, the target set for students per institution in primary education was 139. However, recent data shows that students per institution in 2021 was 169. So, the target has not been met. On the other hand, the target set for teachers per institution (TPI) in 2021 was 5 but recent data shows that it was 6 in 2021. So, the target has been met in this regard. Finally, the target set for teacher-student ratio (TSR). In 2020, the TSR was 1:34. The target for 2021 was set at 1:30 but actual data shows that it was 1:35 in 2021. So, progress on this indicator is also offtrack.

Table 10.4: Progress with Education Inputs in Primary Education

Quality indicator	Base Year 2020	2021 Target	2021 Actual	Target for 2025
Teacher-student ratio	1:34	1:30	1:35	1:30
Students per institution		139	140	169
Teachers per institution	5	5	6	5

Source: 8FYP; BES 2021

An important strategy for the primary level as outlined in the 8FYP was to improve learning outcomes and develop better quality tools for education. Much progress has been made in this regard. It has been a part of the government policy to provide free textbooks to all primary level students across the whole country since 2010. This policy has continued over the years and the ministry of education has subsequently increased the scope of distribution of free textbooks. Every year, the government conducts the "New book festival" at schools where new textbooks are distributed among the students on the first working day of the new year. This particular policy has been instrumental in ensuring the spread of education among the masses over the years. Beginning in 2023, the government has implemented a new curriculum for primary, secondary, and higher secondary levels. Up to grade

X, the new curriculum will follow a common stream of education. Students in grades one, two, six, and seven have received new books based on the new curriculum in January 2023, according to government policy. Students in grades three, four, eight, and nine will receive new curriculum books in 2024, while those in grades five and ten will receive them in January 2025. The new curriculum has been established with the vision of providing scientific, modern and relevant education to students and enhancing future academic potential of children.

Another major strategy and objective of the government was to ensure equitable distribution of primary education to children of all walks of life. The government has implemented various programs to provide food and other sanitary facilities to attract children of poorer families to schools. Recently, the government has provided stipends to 13 million students to ensure proper school health activities in primary level. These stipends were aimed at implementing proper sanitation facilities and supportive structures for children with special needs.

A commendable initiative by the Ministry of Education, called 'Amar ghore amar school', was to televise classes on various subjects under the NCTB curriculum for the primary level. This initiative was undertaken to tackle the prolonged closing of the education institutions during and after the Covid pandemic. This program was highly successful in reconnecting the children to studies who had remained largely disconnected from education for a significant portion of 2020-21. These classes were televised on the "Sangsad Bangladesh Television" channel which is originally used for televising the parliament sessions. Various subjects such as Bangla, Math, English, Science, International affairs etc. were covered in these classes.

#### 10.4.3 Progress in secondary education

The targets for secondary education in 8FYP are quite similar to the case of primary education. The government wants to ensure proper access, quality and learning outcomes in secondary education also. As a first step, the government wants to ensure proper access to secondary education for students who have already passed primary education. Secondly, the government wants to ensure that those who enroll into secondary education are able to complete it and leave with marketable skills for the labor market.

Table 10.5: Progress with Completion Rates in Secondary Education

Baseline (2019)	Target for 2021	Progress in 2021	Target for 2022	Progress in 2022	Target for 2025
Secondary level:	65.35%	Male: 67.50%	65.75	Male: 66.75 %	Total: 70%
64.98%		Female: 59.71%		Female: 59.22%	
		Total: 64.34%		Total: 64.02%	

Source: 8FYP, BES various years.

The progress with completion rates for secondary education are shown in Table 10.5. In 2019, the completion rate for secondary education was 64.98% and in 2022, it was 64.02%. So, the completion rate has actually fallen marginally. In the 8FYP, the target for completion rate in 2022 was set at 65.75% and hence the target was not met. Therefore, achieving 70% by the end of 8FYP timeframe would be very challenging.

A similar picture emerges from looking at the enrollment rates: namely- GER and NER. The GER and NER target set for secondary in 2021 was 66% and 58% respectively. Both GER and NER for secondary education has dropped since 2020. In 2020, the GER and NER for secondary education were 76.38% and 71.89% respectively (Table 10.6). The progress slipped in 2021. But there was recovery in 2022. Continued efforts will be needed to achieve the 8FYP targets for GER and NER in secondary education.

Table 10.6: Progress with Gross and Net Enrollment Rates in Secondary Education

Performance indicator	Baseline 2020	Progress in 2021	Progress in 2022	Target for 2025
Gross Enrollment rate (%)	Female: 85.19 Male: 67.13 Total: 76.38	Female: 83.15 Male: 66.40 Total: 75.52	Female: 83.20 Male: 69.10 Total: 76.10	Total: 72
Net enrollment rate (%)	Female: 80.62 Male: 62.89 Total: 71.89	(b) Female: 79.09 Male: 63.29 Total: 70.25	Female: 80.02 Male: 67.60 Total: 73.76	Total: 64

Source: 8FYP, BANBEIS, BES 2021, BES 2022

To enhance quality of secondary education teaching, the 8FYP set targets for increasing the teacher-student ratio, reducing the number of students per institution, and increasing the number of teachers per institution. In 2020, SPI in secondary education was approximately 492 which dropped down to 482 in 2022. However, the target set for SPI in 2022 was 502. There are two aspects to discern here. Firstly, a fall in the SPI could mean that the number of institutions has gone up. In 2022, the number of secondary education institutions was 21,003 (BES 2022). Whereas, in 2018 it was 20,467 according to BANBEIS. Secondly, it could mean that the enrollment rate for students in secondary education has gone down. From our previous discussion, we know that the GER has fallen slightly but NER has risen. So, it is difficult to say which the likely scenario is. Performance in terms of SPI and TPI has been fairly satisfactory for secondary education. Table 10.7 shows that the TPI for secondary education in 2022 was 13, which is fairly on target. Lastly, the TSR for secondary education in 2022 was 1:36 which is also on target that had been set in the 8th FYP. So, overall, the government has managed to progress as expected in terms of recruiting more teachers at the secondary level as well as improving the enrollment scenario slightly.

Table 10.7: Progress with Education Inputs in Secondary Education

Quality indicator	Base Year 2020	2021 Target	2021 Actual	2022 Target	2022 Actual	2025 Target
Teacher-student ratio	1:41	1:38	1:38	1:36	1:36	1:30
Students per institution (SPI)	491	502	473	502	482	502
Teachers per institution (TPI)	12	13	13	14	13	17

Source: 8FYP, BANBIES, BES Various Years

The quality of teaching also depends on the qualifications of the teachers. The 8FYP set targets to increase the proportion of qualified teachers. According to recent available data, the proportion of teachers with the minimum required qualifications at lower secondary level (classes 6-8) and upper secondary level (classes 9-10) has increased in 2022 from the base year of 2020 (Table 10.7). But the progress falls short of the 8FYP targets for 2022. This performance gap is particularly large for upper secondary level. Once again, this could be the outcome of Covid-19 related school shut down and there may have been better progress in 2023. Nevertheless, considerable efforts will be needed to meet this target for the end of the Plan.

Table 10.8: Proportion of Teachers with the Minimum Required qualifications in Secondary Education

Performance indicator	Baseline 2019	Target for 2021	Progress in 2021	Target for 2022	Progress in 2022	Target for 2025
Proportion of teachers with the minimum required qualifications, by education level	(a) Lower Secondary: 62.01%	(a)Lower secondary: 71.15%	((a) Lower secondary: Male: 62.19% Female: 64.14% Total: 62.71%	(a) Lower secondary: 79.38%	(a) Lower secondary: Male: 62.28 Female: 64.22 Total: 62.76	a) Lower secondary: 85%
eddeation rever	(b) Upper Secondary: 59.01%	(b) Upper Secondary: 69.92%	(b) Upper secondary: Male: 58.05% Female: 73.43% Total: 61.93%	(b) Upper Secondary: 76.34%	(b) Upper secondary: Male: 58.18 Female: 73.52 Total: 61.95	(b) Upper Secondary: 80.00%

Source: 8FYP, BANBEIS, BES Various Years

The government is implementing various secondary education quality and access improvement projects in-line with the strategies in the 8FYP to enhance the quality of secondary education and increase access to it, especially for girls and disadvantaged groups. The government is providing training to teachers to increase the standard of pedagogy and assessment to ensure quality education. For instance, 4 lakhs secondary school teachers are getting training to transition to the new curriculum from 2023. Additionally, the government is investing heavily to build a strong ICT infrastructure for secondary education so that online education can be facilitated. During and in the aftermath of Covid-19 pandemic throughout 2021-2023 televising of classes on various subjects under the national curriculum is being continued in the "Sangsad Bangla Television".

Also, under the newly formulated curriculum, secondary education will follow a common stream of education moving away from the Science, Arts and Commerce streams. Students of grade 9 will receive new books in 2024 and grade 10 in January 2025. Moreover, students of higher secondary grades i.e. 11 and 12 will be incorporated into the new curriculum starting from 2026 and 2027 respectively. However, a big challenge is the printing of 350 million free books for the students as reported by the Secondary and Higher Education Division (SHED). Therefore, massive undertakings have already started according to the strategies laid out for secondary education in the 8FYP and progress so far has been modest.

#### 10.4.4 Progress in higher education

The main focus for developing the higher education sector in the 8FYP were to emphasize STEM education, improve the quality of teaching in all institutions, and improve the employment relevance of education. The principal approach to achieve these objectives is to strengthen the activities of the University Grants Commission (UGC). The government has taken steps to increase the quality of teaching at higher education level by standardizing and centralizing the process of recruitment of teachers. The UGC has proposed to hold unified recruitment examinations for public university lecturers and assistant professors. The government is also taking measures to encourage private and international investments in higher education, especially outside of the capital city. These measures have been taken in accordance with the strategies laid out in the 8FYP. Recently, the government has accelerated its activities with international organizations such as World Bank, ADB, UNDP, USAID etc. Notably, the World Bank has invested heavily in Higher Education Quality Enhancement Project

(HEQEP) and the University Grants Commission (UGC) Development Project to improve the state of higher education in Bangladesh. Moreover, the British Council and the government has collaborated to improve the funding of Commonwealth scholarship programs for meritorious students to study in the UK.

Table 10.9 shows progress with increasing teacher student ratio, reducing number of students per institution and increasing the number of teachers per institution. The performances of 2022 falls considerably short of the respective 8FYP targets for all three indicators.

Table 10.9: Progress with Education Inputs in Higher Education

Quality indicator	Base Year 2020	2021 Target	2021 Actual	2022 Target	2022 Actual	Target for 2025
Teacher-student ratio	1:37	1:27	1:40	1:26	1:33	1:17
Students per institution (SPI)	7746	6704	7710	6778	6307	6799
Teachers per institution (TPI)	209	248	194	261	188	400
	Base Year 2020	2021 Target	2021 Actual	2022 Target	2022 Actual	Target for 2025
Teacher-student ratio	1:37	1:27	1:40	1:26	1:33	1:17
Students per institution (SPI)	7746	6704	7710	6778	6307	6799
Teachers per institution (TPI)	209	248	194	261	188	400
Quality indicator	Base Year 2020	2021 Target	2021 Actual	2022 Target	2022 Actual	Target for 2025
Teacher-student ratio	1:37	1:27	1:40	1:26	1:33	1:17
Students per institution (SPI)	7746	6704	7710	6778	6307	6799
Teachers per institution (TPI)	209	248	194	261	188	400

Source: 8FYP, BES Various years

A high priority for the 8FYP is to strengthen ICT and build a robust technological infrastructure at all levels of education, especially for higher education. The need for this was felt the most during the pandemic when all universities were shut down. At that time, the government focused on building a proper online infrastructure so university education could be continued. Also, the government focused on making sure that online education would be inclusive of students from all walks of life. In light of this, the government had implemented the provision for interest-free loans to university students for buying smartphones in order to facilitate online education during the pandemic period of 2020-2021. Due to the pandemic, an urgency was created in building an online infrastructure for higher education across the various public and private universities in the country. Moreover, the University Grants Commission (UGC) formed a committee to introduce a blended learning system for higher education during the Covid-19 pandemic in 2021. The blended learning system combined offline and online learning, allowing up to 40% of each course to be taught online, while the remaining part of the course is taught in person. The committee formulated a policy for introducing a blended system for the learning process for higher education, coordinating between on-site and online education, considering domestic culture, skills, socio-economic conditions, and global standards. This has further facilitated international collaboration within the higher education stream with numerous online workshops and events which are now commonplace in the aftermath of the pandemic.

#### 10.4.5 Progress in madrasa education

The government has taken steps to modernize madrasa education by improving the infrastructure, curriculum, and teaching quality of madrasas. This includes introducing emphasis on science and ICT education in the curriculum. The government has also initiated incorporating specialized ICT and science books in the curriculum of the Aliya madrasa stream alongside the already existing general science books. The major challenge in this regard is the unification of the 5 different Qawmi streams which run mostly on private funding. The government has taken steps to incentivize the Qawmi institutions to unify the Qawmi syllabus and make a coherent path of education for the students. At present, the prime focus of the government has been to develop the Alia stream of madrasa education.

The principal strategy has been to introduce science and ICT training into the syllabus at the primary and secondary level. The government has identified that madrasa students lack the proper and modern job market skills which make them the most vulnerable to unemployment after graduation. To alleviate this problem, the madrasa education board has decided to reform the curriculum for the primary and secondary level and include technical and ICT education. Various projects are underway to promote vocational and technical education in the madrasa stream. The government has already managed to increase the number of seats in polytechnic institutes across the country to about 60,000 where madrasa students are being incentivized to join.

Similar to other streams of education, the government has prioritized improving the quality of teaching and pedagogy in the madrasa stream also. In order to track the progress of quality teaching, the 8FYP has stipulated several indicators regarding the number of students, teachers and institutions (Table 10.10). Apart from SPI, the TSR and the TPI targets for 2022 were not met. The data clearly shows a secular rise in the SPI over the years. However, the number of teachers have not kept up with the rise in the number of students.

2022 Quality indicator Base Year 2021 Target 2021 2022 Target Target for 2020 Actual Actual 2025 Teacher-student ratio 1:23 1:26 1:24 1:26 1:23 1:30 Students per institution (SPI) 274 264 286 264 298 264 12 18 12 18 18 13 Teachers per institution (TPI)

Table 10.10: Progress with Education Inputs in Madrassa Education

Source: 8FYP, BES Various Years

#### 10.4.6 Progress in technical and vocational education

New technology in production can cause some workers to become redundant, leading to 'technological unemployment.' However, an updated TVET sector can provide necessary skills for displaced workers, and an alternative education option for those who couldn't continue traditional education. The 8FYP has emphasized expanding the TVET sector to build a skilled workforce. One SDG-4 sub-goal aims to ensure equal access for all to affordable and quality technical, vocational, and tertiary education. The 8FYP has chalked out objectives which are coherent with this goal. The ultimate goal of the government is to make TVET a lucrative and relevant stream of education for the youth. Studies have shown that TVET education has higher returns than regular schooling for below-average students. The government has strategized to increase investment in TVET as the academic streams cannot absorb all children and provide every necessary skill demanded in the future.

Under the objectives and strategies of the 8FYP, the government has already taken initiatives to introduce technical education into the curriculum, particularly madrasa and secondary level. Additionally, the Directorate

of technical education has taken steps to reform the curriculum and study materials of TVET stream in the upcoming years. Another important goal for the government is to expand the reach of TVET stream by increasing the number of authorized institutions and teachers and increase the overall quality of training and teaching for the enrolled students. Various projects are currently in the process of implementation regarding the establishment of vocational institutes in 23 districts across the country. The government has managed to increase the number of seats in polytechnic institutes across the country to about 60,000 and further projects are underway to improve the scope of TVET in tertiary level.

In order to track the progress of teaching quality, the 8FYP has stipulated some performance indicators regarding teach-student ratio, students per institution and teachers per institution. As of 2022, all the three 8FYP targets were missed. Noticeably, TPI has remained the same over the years. This is largely owing to a funding constraint in the education sector.

Base Year 2021 2022 Quality indicator 2021 2022 Target for 2020 Target Actual Target Actual 2025 1:22 1:16 1:21 1:15 1:22 Teacher-student ratio 1:16 154 160 157 Students per institution (SPI) 150 165 156 10 7 11 7 13 Teachers per institution (TPI)

Table 10.11: Progress with Education Inputs in TVET Education

Source: BES

Under the strategy to improve the quality of training and teaching in the TVET stream, the government has established the Bangladesh National Institute of Technical Teachers' Training and Research (BNITTR) to guarantee modern research and training facilities. Moreover, the Skills and Training Enhancement Project (STEP) which is collaboration between the government of Bangladesh, Canada and World Bank, encompasses 64 organizations where 47 are public and 17 are private, who are providing condensed training programs (360 hours in six months) in 32 different types of trades. To build a pro-science nation, government is promoting science and technology though extending laboratory facilities, scientific research, science Olympiads and displays. Besides, Ministry of Science and Technology is providing scholarships named Bangabandhu Fellowship on Science and Technology under Bangabandhu Fellowship Trust. This is promoting Science and Technology research in the country.

# 10.4.7 Progress in Non-formal Education

The government had recognized the importance of literacy and had made it a priority to achieve Education for All (EFA) in the PP2021. The new PP2041 has also made it a top priority to achieve 100% literacy among adults. The 8FYP has also focused on this target following the PP2041. Non-formal Education (NFE) is a key component of the government's EFA strategy, which aims to provide educational opportunities to all, including those who may have missed out on formal education. Non-formal Education (NFE) includes literacy and continuing education programs for adults and youths, with a focus on developing life and livelihood skills. It is viewed as an empowering process that contributes to human resource development and poverty reduction.

Since the country's independence in 1971, the government has been implementing various literacy/NFE programs to combat adult illiteracy. The NFE programs have made significant progress with the adult literacy rate increasing from 35% in 1991 to 76% in 2020. A long-term goal of the government has been to achieve a 100% adult literacy rate. Initially, the goal in the FYP was to achieve this target by 2020. However, it did not materialize. So, the government continued this goal in the 8FYP and aspires to achieve 100% adult literacy rate by 2025. The

most recent Household Income and Expenditure Survey 2022 (HIES 2022) reports that the literacy rate for the population above 7 years of age is 74%. The literacy in the rural areas is 70.3% and in the urban areas it is 82%. Therefore, there seems to be a clear shortfall in achieving the targeted literacy rates. So, the 100% literacy target by 2025 will likely be missed.

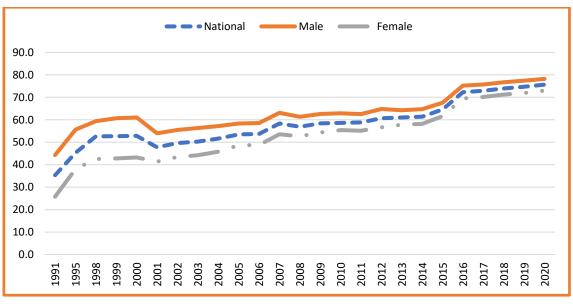


Figure 10.1: Long-term Progress with Adult Literacy Rate

Source: BBS

Several challenges constrain progress here, particularly in reaching the most marginalized and disadvantaged populations, including women, ethnic minorities, and people with disabilities. Therefore, the government's commitment to expanding and improving NFE programs remains critical to achieving its EFA goals and promoting social and economic development in the country. The Basic Literacy Project of the MoPME is currently underway across 250 upazilas in 64 districts of the country. The project had the agenda to establish 75,000 learning centers in order to provide training in basic education and skills to over 4.5 million people from the age of 15 to 45. The project has also collaborated with numerous NGOs to increase the reach of the program.

#### 10.5 Progress with Equity in Education

The 8th FYP has set goals and targets in line with the goal 4 of the SDGs which dictates equitable, inclusive and accessible quality education for all. So, it has been a top priority for the government to ensure that students from all sorts of backgrounds are given equal opportunities to attain education. To make this a reality, 8FYP dictates to build a strong infrastructure for all schools with attention to proper hygiene and accessibility for disabled children. Several indicators have been chosen in the 8FYP to track the progress in terms of inclusivity and equitability of distribution of education. The government intends to increase the number of children with disabilities in schools across the country. This works as a good indicator to see how easy it is for children with special needs to attain education. This also acts as a good indicator of the state of the infrastructure which is present at schools across the country.

Table 10.12 shows the progress of enrollment of children with disability. In 2019, the number of children with disabilities enrolled in schools was 98,311. The government had set the target to include more children with disabilities in the schooling system. The target that was set for 2021 was Male: 55000, Female: 45000 and in

total: 100000 students. However, recent data shows that the progress has not been satisfactory. In 2021, the number of enrolled disabled students were Male: 26902, Female: 21919, Total: 48821. Therefore, the shortfall in achieving the target was more than 50% in 2021. There was significant improvement in 2022. Even so, the gap in performance remains substantial. Much greater effort will have to be put during the remaining period of the 8 FYP to achieve this target.

Table 10.12: Progress with Number of enrolled children with disabilities (by gender)

Baseline 2019	Target for 2021	Progress in 2021	Target for 2022	Progress in 2022	Target for 2025
Male: 54442	Male: 55000	Male: 26902	Male: 56000	Male: 29192	Male: 56500
Female: 43869	Female: 45000	Female: 21919	Female: 49000	Female: 31189	Female: 50000
Total: 98311	Total: 100000	Total: 48821	Total: 105000	Total: 60381	Total: 106500

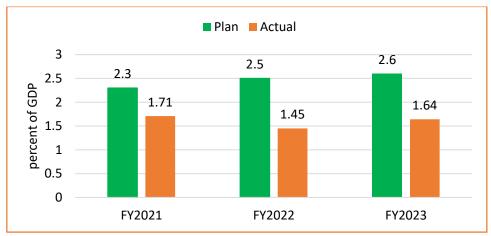
Source: 8FYP, APSC 2019, BES 2021, BES 2022

The 7FYP noted shortfalls in equity targets based on income. No new data is available to assess whether these gaps in terms of schooling access, dropouts and education between children from the poor and the rich families have been narrowed. The government needs to make concerted efforts to monitor progress by strengthening its database on the subject. This is an important analytical priority.

#### 10.6 Progress with Public Education Funding

The 8FYP was conscious of the resource constraint in public education in public education during the 7FYP. So, a major priority of the 8FYP was to progressively increase the spending level on public education from a mere 1.7% of GDP in FY2020 to 2.2% of GDP in FY2021 and further to 3.0% of GDP at the end of the Plan period. Actual spending was far lower than these targets (Figure 10.2). Public spending in education is stagnant at around 1.6-1.7% of GDP since FY2019. This inability to increase public spending is a serious constraint on the expansion of access to quality education and training in Bangladesh. As explained in Chapter 3, the government gives education high priority and allocates increased amount every year, but actual implementation falls short primarily owing to revenue constraints.

Figure 10.2: Public Expenditure on Education During 8th FYP (% of GDP)



Source: 8FYP and Ministry of Finance Monthly Fiscal Reports

#### 10.7 Summary of Progress and Emerging Gaps and Challenges Moving Forward

The biggest success story regarding the education sector in recent years has to be the implementation of a new curriculum at the primary and secondary level. The government has implemented a common stream of education up to secondary level, moving away from the trifecta of science, arts and commerce streams. Also, the new curriculum has been designed keeping the current technological revolution in mind. Heavy emphasis on ICT and science education has been given keeping in mind the requirements of working in the industry after graduation. The government has also started to reform and modernize the curriculums of the madrasa and technical education streams.

The primary education sector has made some progress under the 8FYP. Notably, in terms of completion rate the progress has been on target so far, but there is still work to be done in improving enrollment rates, particularly for disadvantaged groups. Dropout and survival rates have remained on target and progress is good. However, more teachers are needed per student, and teachers require better training to effectively implement the new curriculum. There have been concerns raised by teachers that just a few weeks of training will not be sufficient. Unfortunately, many schools in remote areas continue to suffer from a lack of basic facilities, such as sanitary toilets, multimedia classrooms, and internet and computers for pedagogy. Overall, while there have been positive developments in the primary education sector, there are still areas that require improvement to ensure that all students have access to a quality education.

The progress of development of the secondary education sector under the 8FYP has been mixed. While the teacher-to-student ratio is on target, enrollment rates and completion rates are not satisfactory. Many students, particularly females, dropout after completing primary education. Additionally, there are concerns regarding the adequacy of the number of teachers, especially if high dropout rates didn't occur during the transition from primary to secondary education. The lack of properly qualified teachers at the secondary level is also a major concern. The government needs to ensure that teachers are adequately trained. To further improve the secondary education sector, alternative streams such as TVET need to be incorporated more.

In general, one of the major challenges is the issue of quality of teaching. While the number of educational institutions and enrollment rates have increased, the quality of teaching remains a concern. There is a lack of qualified teachers, inadequate infrastructure, and a lack of proper monitoring and evaluation systems. This is mostly evident in higher educational institutions. Even now, with many new universities, the number of qualified teachers have not grown in relation to the surge in new students. So, much progress is yet to be made in this regard.

Access to education is also a major challenge, particularly in remote and marginalized areas. There is a shortage of educational institutions in these areas, and children often have to travel long distances to attend school. This poses a significant barrier to education for many children, especially girls. Another challenge is the issue of inclusive education. Children with disabilities, special needs, and those from marginalized communities often face significant barriers to accessing education. Although the government has managed to build some infrastructure to facilitate the education of students with special needs in recent years, the degree of inclusivity of such students have not been as per the 8FYP targets.

While there has been progress in expanding TVET in recent years, there is still a need for greater investment in this area. TVET is essential for developing a skilled workforce that can meet the demands of the modern job market. The government faces the most difficult challenge of promoting the TVET stream to the youth who mostly see it as a less prestigious stream compared to other academic streams.

Finally, the issue of financing education remains the core of the problems in the education sector. While the government has increased its budget for education in recent years, there is still a need for greater investment in the sector. In 2023, government expenditure on education as a percentage of GDP for Bangladesh was only 1.64%. Most UMIC spend around 5-6% of their GDP on education. If public funding cannot be managed, the government must explore innovative financing mechanisms, such as public-private partnerships, to mobilize additional resources for the education sector.

In conclusion, while the government has made moderate progress in developing the education sector at the midterm of the 8FYP, there are still challenges that remain. The government must prioritize policies and programs that address issues of quality, equity, access, inclusive education, and financing. These efforts are essential for ensuring that everyone in Bangladesh have access to a quality education that prepares them for the challenges of the 21st century.

### **Appendix to Chapter 10**

Table A10.1: Extended Development Results Framework (DRF) of 8FYP with Current Progress of indicators of the Education Sector

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022				
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)				
(NP' disal	T 9 & 10), Er oled (NPT 12	nsure the pro	oportion of s	chools by 100	0% with acces	ss to basic fac	rimary and junior ilities and adapted omic growth	secondary ed l infrastructur	ucation re for the				
1	Performano	ce indicator:	Completion	rate (primary	education, lo	wer secondar	y education, uppe	r secondary e	ducation)				
	Data Source (Institutions & Reports): BANBEIS, BES 2021, 2022												
	Lead Ministry/Division: MoPME, SHED												
	82.1 (APSC 2019) b) 64.98 c) 81.45 (BES 2019)	a) 84.00 b) 65.35 c) 82.13	a) 90.00 b) 65.75 c) 82.61	a) 90.00 b) 66.53 c) 83.08	a) 91.00 b) 67.31 c) 83.55	a) 92.00 b) 70 c) 85	SDG: 4.1.2	(a) Primary level Male: 84.95 Female: 86.75 Total: 85.85 (b) econdary level Male: 67.50 Female: 59.71 Total: 64.34 (c) Higher secondary level Male: 79.26 Female: 78.44 Total: 78.86	(a) Primary level Male: 85.1: % Female: 86.81% Total: 86.05% (b) Secondary level Male: 66.7: Female: 59.22 Total: 64.02 (c) Higher secondary level Male: 78.4: Female: 77.40 Total: 77.28				
2			Proportion of ial well-being		iuer 5 years 0	ı age wno are	e developmentally	on track in h	eaitn,				
	Data source	e (Institution	ns & Reports)	: BBS, SID									
	Lead minist	try/division:	MoPME										
	National: 74.50% (MICS,	76.30%	77.25%	78.17%	79.08%	80.00%	SDG: 4.2.1	N/A	Data covers 4-5 years of				

children.

**2**019)

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022		
3	Performano	e indicator:	Number of 6	enrolled child	ren with disal	bilities (by gen	der)				
	Data source	e (Institution	s & Reports)	: DPE, BES	2021, 2022						
	Lead minist	ry/division:	MoPME								
	Boys: 54442 Girls: 43869 Total: 98311 (APSC- 2019)	M: 55000 F: 45000 T: 100000	56000 49000 105000	56000 50000 106000	56000 50000 106000	56500 50000 106500		Male: 26902 Female: 21919 Total: 48821 (BES 2021)	Male: 29192 Female: 31189 Total: 60381 (BES 2022)		
4	(c) compute	ers for pedag	gogical purpo	ses; (d) adapt	ed infrastruci	ture and mater	b) the Internet for itials for students thing facilities (as	with disabiliti	es; (e) basic		
	Data Source	e (Institution	ns & Reports)	): a) BANBEI	IS, MoΕ; b) Γ	PE, MoPME	; c) DPE, MoPM	Е			
	Lead Ministry/Division: MoPME, SHED										
	Primary (a) 87.73% (b) 76.83% (c) 79.83% (d) 61.44% (IMD, DPE -2019) (e) 97% schools (f) 76.24% schools (g) 26% (APSC, 2019) Secondary a)93.25 b)37.64 c)76.72 d)18.48 e)97.07 f)95.93 g)28.66 (2019)	Primary: a) 90% (b) 80% (c) 82% (d) 65% (e) 98% (f) 80% (g) 42%  Secondary (a) 95.92 (b) 39.59 (c) 79.63 (d) 21.14 (e) 97.60 (f) 96.36 (g) 36.33	Primary: (a) 92% (b) 83% (c) 84% (d) 70% (e) 98% (f) 84% (g) 58%  Secondary (a) 96.00 (b)40.76 (c) 78.80 (d) 22.23 (e)97.83 (f) 96.55 (g)40.82	Primary: (a) 94% (b) 90% (c) 90% (d) 75% (e) 99% (f) 86% (g) 77%  Secondary (a) 97.08 (b)42.08 (c) 77.97 (d) 23.31 (e)98.06 (f) 69.74 (g)45.31	Primary: (a) 95% (b) 95% (c) 95% (d) 80% (e) 100% (f) 90% (g) 91%  Secondary (a) 97.90 (b)43.37 (c) 77.14 (d) 24.39 (e)98.29 (f) 96.93 (g)49.80	Primary (a) 100% (b) 100% (c) 100% (d) 80% (e) 95% schools (f) 85% schools (g) 100%  Secondary (a) 100% (b) 50% (c) 100% (d) 80% (e) 100% (f) 100% (g) 70%	SDG: 4. a.1  *Partially (Includes School, College, Madrasa, TVET & Voc, independent & English Medium)	*(a) 98.39% (b) 52.21% (c) 76.87% (d) 18.76% (e) 97.48% (f) 96.62% (g) 88.08% (BES 2021)	(a) 98.51 (b) 53.32 (c) 77.76 (d) 19.04 (e) 97.69 (f) 97.34 (g) 91.03 (BES 2022)		

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022		
5	Performano	e indicator:	Proportion o	f teachers wi	th the minimu	ım required qı	ualifications, by e	ducation leve	1		
	Data Source	e (Institution	ns & Reports)	: a) BANBEI	S, MoE; b) D	PE, MoPME					
	Lead Minist	try/Division	: MoPME, SI	HED							
	(a) Pre- Primary: (b) Primary: 80.06% (APSC, 2015) (c) Lower	(a)Lower secondary (71.15%)	(a)Lower secondary 74.26%	(a)Lower secondary: 79.38%	(a)Lower Secondary: 82.2%	(a)Lower secondary 85%	SDG:	(c) Lower secondary: Male: 62.19 Female: 64.14 Total: 62.71	(a) Lower secondary: Male: 62.28 Female: 64.22 Total: 62.76		
	Secondary: 62.01% (d) Upper Secondary: 59.01% (2019)	(b) Upper Secondary: 69.92%	(b) Upper Secondary: 73.26%	(b) Upper Secondary: 76.34%	(b) Upper Secondary: 78.56%	(b) Upper Secondary: 80.00%	4. c.1	(d)Upper secondary: Male: 58.05 Female: 73.43 Total: 61.93	(Upper secondary: Male: 58.18 Female: 73.52 Total: 61.95 (BES 2022)		
6	Performano	e indicator:	Public educat	ion expenditi	ure as % of C	GDP					
	Data Source	e (Institution	s & Reports)	: MoE, FD, V	WB						
	Lead Ministry/Division: MoE, FD										
	2.2	2.3	2.5	2.6	2.8	3.0		1.64 (2023 estimated)	The National Budget for FY21 and FY22 the allocation for Education sector was 2.86% and 2.82% of GDP respectively. In terms of monetary value, the allocation was Tk. 68,828 crore for FY21, Tk. 73,618 crore for FY22 and Tk. 85,874 crore for FY23 (Source: BES 2022, BBS)		

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022
7	Performano	e indicator:	Volume of o	fficial develop	ment assistar	nce flows for s	cholarships by se	ector and type	of study
	Data Source	e (Institution	ns & Reports)	: ERD					
	Lead Minist	try/Division	: ERD						
	8.76 MUS\$ (2015, ERD)	15.50 MUS\$	16.60 MUS\$	17.80 MUS\$	18.90 MUS\$	20.00 MUS\$	SDG: 4. b.1	N/A	
Nati	onal Priority:	Quality of t	eaching at all	levels of edu	cation (NPT	9 & 10 under	SDG 4)		
	come stateme	ent: Bring pro	oper balance	between the r	number of tea	achers and stu	dents to ensure b	etter pedagog	gy and
8	Performano	ce indicator:	Teacher-stud	ent ratio					
	Data Source	e (Institution	ns & Reports)	: BANBEIS,	BES 2021, 20	)22			
	Lead Minist	try/Division	: MoPME, SI	HED, TMED		,			
	Baseline year= 2020								
	(a) primary education: 1:34 (b) secondary education: 1:41 (c) Madrasa education (d)TVET: 1:22 (e) University education	(a) 1:30 (b) 1:38 (c) 1:26 (d) 1:16 (e) 1:27	(a) 1:29 (b) 1:36 (c) 1:26 (d) 1:15 (e) 1:26	(a) 1:29 (b) 1:34 (c) 1:27 (d) 1:14 (e) 1:23	(a) 1:30 (b) 1:32 (c) 1:28 (d) 1:13 (e) 1:20	(a) 1:30 (b) 1:30 (c) 1:30 (d) 1:12 (e) 1:17		(a) 1:35 (b) 1:38 (c) 1:24 (d) 1:21 (e) 1:40	(a) (b) 1:36 (c) 1:23 (d) 1:22 (e) 1:33
9	Performano	ce indicator:	Students per	institution					
	Data Source	e (Institution	ns & Reports)	: BANBEIS,	BES 2021, 20	)22			
	Lead Minist	try/Division	: MoPME, SI	HED, TMED					
	(a) primary education: (b) secondary education: 491.732 (c) Madrasa education (d)TVET: 154 (e) University education	(a) 139 (b) 502 (c) 264 (d) 160 (e) 6704	(a) 138 (b) 502 (c) 264 (d) 165 (e) 6778	(a) 140 (b) 502 (c) 264 (d) 161 (e) 6864	(a) 142 (b) 500 (c) 264 (d) 156 (e) 6819	(a) 140 (b) 502 (c) 264 (d) 156 (e) 6799		(a) 169 (b) 473 (c) 286 (d) 150 (e) 7710	(a) (b) 482 (c) 298 (d) 157 (e) 6307

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022	
10	Performanc	e indicator:	Teach	ers per institu	ition					
	Data Source	e (Institution	is & Reports)	: BANBEIS,	BES 2021, 20	22				
	Lead Minist	ry/Division	: MoPME, SI	HED, TMED	)					
	(a) primary education: (b) secondary education: (c) Madrasa education (d)TVET: 7 (e) University education	(a) 5 (b) 13 (c) 18 (d) 10 (e) 248	(a) 5 (b) 14 (c) 18 (d) 11 (e) 261	(a) 5 (b) 15 (c) 18 (d) 12 (e) 298	(a) 5 (b) 16 (c) 18 (d) 12 (e) 341	(a) 5 (b) 17 (c) 18 (d) 13 (e) 400		(a) 6 (b) 13 (c) 12 (d) 7 (e) 194	(a) (b) 13 (c) 13 (d) 7 (e) 188	
	tional priority: Ensure broader and inclusive opportunities for education and promote lifelong learning (SDG 4 & 5) (NPT & 15)									
Out	come stateme	nt: Increase	the number of	of students in	schools and	sustain those s	students in the ed	lucation syste	m	
11	Performanc	e indicator:	Gross Enroll	ment rate (%)	)					

Data Source (Institutions & Reports): BANBEIS, BES 2021, 2022 Lead Ministry/Division: MoPME, SHED Primary education Female: (a) Female: (a) 108.9 Female: 118.46 Male: 106.14 Male: 103.16 101.1 Male: Total: 105.32 Total: 110.48 104.9 Total: (2020)105.72 (a) 109 (a) 107 (b) 67 (a) 106 (b) 69 (a) 105 (b) 70 (a) 104 (b) 72 SDG: 4.3.1 (b) Female: (b) 66 (b) (b) 83.20 Secondary Female: Male: 69.10 education 83.15 Total: Female: Male: 76.10 85.19 66.40 Male: Total: (Source: 75.52 BES 2022) 67.13 Total: 76.38 (2020)

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022		
12	Performano	e indicator:	Net Enrollm	ent rate (%)							
	Data Source	e (Institution	ns & Reports)	: BANBEIS,	BES 2021, 20	022					
	Lead Minist	try/Division	: MoPME, S	HED							
	(a) Primary education Female: 98.25 Male: 97.37 Total: 97.81  (b) Secondary education Female: 80.62 Male: 62.89 Total: 71.89	(a) 99 (b) 58	(a) 100 (b) 59	(a) 100 (b) 61	(a) 100 (b) 62	(a) 100 (b) 64		(a) Female: 97.44 Male: 97.39 Total: 97.42 (b) Female: 79.09 Male: 63.29 Total: 70.25	(a) Female: 97.81 Male: 97.52 Total: 97.56 (b) Female: 80.02 Male: 67.60 Total: 73.76 (Source: BES 2022)		
13	Performance indicator: Repetition rate in primary education (%)										
	Data Source	e (Institution	ns & Reports)	: BANBEIS,	BES 2021, 20	022					
	Lead Minist	try/Division	: MoPME								
	Female: 4.90 Male: 5.00 Total: 5.00 (2020)	6	6	6	5	5		Female: 0.75 Male: 0.95 Total: 0.85			
14	Performano	ce indicator:	Dropout rate	in primary e	ducation (%)						
	Data Source	e (Institution	ns & Reports)	: BANBEIS,	BES 2021, 20	022					
	Lead Minist	try/Division	: MoPME								
	17.20	14	12	10	10	9		14.15	Total: 13.95 Male: 14.88 Female: 13.19		
15	Performano	ce indicator:	Survival rate	in primary ec	lucation (%)						
	Data Source	e (Institution	ns & Reports)	: BANBEIS,	BES 2021, 20	022					
	Lead Minist	try/Division	: MoPME								
	Female: 85.90 Male: 83.30 Total: 84.70	86	88	88	88	91		Female: 87.10 Male: 85.25 Total: 86.20	Female: 87.80 Male: 85.90 Total: 86.25		

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Progress in 2021	Progress in 2022
16	Performano	e indicator:	Adult literacy	rate (%) (15-	+ population)				
	Data Source	e (Institution	s & Reports)	: WB, HIES 2	2022				
	Lead Minist	try/Division	: Bureau of N	Non-formal e	ducated (BNF	FE)			
	74.7% (2019, Source: BBS)	100	100	100	100	100		74.4% (2022, Source: SVRS, BBS)	Literacy rate for age 7+: 76.8% Rural: 74.5% Urban: 84.1% (Source: SVRS, BBS 2022)

# CHAPTER 11 INFORMATION COMMUNICATIONS TECHNOLOGY (ICT) SECTOR DEVELOPMENTS

#### 11.1 Development Context

The Information Communications Technology (ICT) sector in Bangladesh has played a key role in fueling economic growth and development. The government has recognized its potential and has aggressively promoted its expansion through measures such as tax breaks, IT parks, and training programs. Employments have been generated over the years, and the industry has had a favorable influence on a variety of disciplines, including education, healthcare, and e-commerce. The Eighth Five-Year Plan (8FYP) intends to turn Bangladesh into a knowledge-based society by harnessing information and communication technology (ICT) to promote innovation, enhance efficiency, and generate new economic possibilities. The strategy prioritizes extending broadband internet access, boosting e-commerce and digital payments, improving digital skills and literacy, encouraging entrepreneurship, and strengthening cyber security. While great progress has been made, there are still obstacles to overcome in order to reach global standards for the Knowledge Economy and accomplish the goals set forth in the 8FYP.

Bangladesh has also won the World's most prestigious IT and Innovation Award 'World Summit on Information Society (WSIS) Prize-2018 for the fifth time for Muktopaath, the national platform for e-learning. In addition to that, a2i (Aspire to Innovate) Programme and Dhaka Metropolitan Police have jointly won the WSIS award for Online Police Clearance initiative funded by a2i's Service Innovation Fund and implemented by DMP. Besides, International Telecommunication Union (ITU) has granted 'ICT Sustainable Development Award' to our Honorable Prime Minister in recognition for her contribution to promote the use of ICT towards achieving UN Sustainable Development Goals (SDGs).

Notably, the e-commerce sector in Bangladesh has also seen significant growth in recent years. The government has implemented policies to promote e-commerce, such as setting up an e-commerce association and launching an e-commerce website. The growth of the e-commerce sector has not only provided a platform for entrepreneurs to sell their products but has also contributed to the country's economy. By the estimates of e-Commerce Association of Bangladesh (e-CAB), the trade body for E-commerce in Bangladesh, at present 700 e-commerce sites and 8000 e-commerce pages on Facebook are active in Bangladesh. Revenue in e-commerce is expected to show an annual growth rate of (CAGR 2023-2027) of 15.77%, resulting in a projected market value of US 13.71\$ by 2027. (Statista, 2023)

Additionally, various initiatives have been taken to close gender-based technology gap. Underprivileged, disadvantaged and poor rural women have now access to information because of the "Tottho Apa" initiative ensuring their empowerment and self-reliance. Women entrepreneurs are now integrating technological knowledge and IT based services in their daily lives.

The Digital Bangladesh Initiative of 2009 adopted by the Honorable Prime Minister Sheikh Hasina as a part of Vision 2021 has clearly yielded rich dividends. For the next stage, the Prime Minister has now launched the Smart Bangladesh Initiative as a part of Vision 2041. The Digital Bangladesh agenda has laid the foundation to transition towards a sustainable, intelligent and knowledge-based Bangladesh. Smart Bangladesh Vision 2041 is about futuristic Bangladesh with 100% smartphone penetration, more than 100% high-speed internet penetration and beyond 5G internet. It is to transform Bangladesh into technologically advanced and sustainable society. The core pillars of it are; Smart Citizen, Smart Government, Smart Society and Smart economy. To achieve its goal, 'SMART Bangladesh: ICT 2041 Master Plan (draft)' has been formulated for a guided roadmap.

Overall, the government's understanding of the potential of the ICT industry has resulted in substantial growth and development in Bangladesh. The 8FYP prioritizes infrastructure development, regulatory frameworks, and education to move the ICT sector forward. It aims to lay a firm basis for the sector's growth and to foster an environment favorable to online enterprises and digital services. As the country moves through the 8FYP, it will be

critical to track progress, solve obstacles, and harness ICT's transformational capacity for the country's economic and social success fostered through the implementation of the Smart Bangladesh Initiative.

#### 11.2 Progress under the 7FYP: Digital Bangladesh Vision

'Digital Bangladesh' is a vision of the government to transform the country into a technology-driven nation by 2021. It is an integral part of the government's Vision 2041. The objectives that have been set in the 8FYP is in accordance with Vision 2041's goal of a digitalized Bangladesh. The Digital Bangladesh initiative consists of four main goals:

- Human capital development and preparation for the twenty-first century
- Connecting citizens in the most significant ways
- Bringing services to citizens' homes
- Increasing the productivity and competitiveness of the commercial sector and market through the use of digital technology

Digital Bangladesh Vision has four pillars: 1. Connectivity and Infrastructure, 2. E-Government, 3. Human Resource Development, and 4. Industry Promotion

The discussion that follows will highlight some of the key progress made so far under these pillars.

#### 11.2.1 Connectivity and infrastructure

The Digital Bangladesh vision focuses on fostering connectivity and building long lasting infrastructure. The Bangladesh Computer Council (BCC) under the ICT Division has been working to ensure connectivity across the country. The Bangla-GovNet project has been implemented by BCC to build the ICT Backbone Network to connect government offices. Info-Sarker-II extends this network up to the Upazila level. The Info-Sarker Phase-3 project has established broadband internet infrastructure in 2600 unions across the country. Virtual Private Network has been established in 1000 police offices.

The "Connected Bangladesh" project has established an Information and Communication Technology Network in 772 remote unions of the country. The BCC has established a National Data Centre and IV Tier Data Centre. BCC has also established Computer Labs in 3544 educational institutions.

The Bangladesh Hi-Tech Park Authority (BHTPA) has established four Hi-Tech Parks to promote IT/ITES sector and attract investment. The BHTPA has allocated 7.41 lakh square feet space for IT/ITES companies and developed basic infrastructure in those parks. The major investment areas of IT/ITES sector in Bangladesh are Information Technology, Software Technology, Biotechnology, Renewable Energy, Green Technology, IT Hardware, IT Enabled Services and R&D.

BHTPA has introduced an online One Stop Service system to simplify and accelerate service delivery for investors. Currently, 7 types of services are provided through this system. Hi-Tech Park has attracted several companies including mobile phone assembling, fibre optic cable production, biotech, software development, and BPO, KPO, and call center related companies with a total investment of around \$38 million and a proposed investment of around \$281 million by the end of the 8th Five-Year Plan (8FYP).

To achieve the goal of Digital Bangladesh, Union Digital Centre (UDC) has been established and innovative delivery service like e-nothi, e-mutation, mobile financial services etc have been introduced.

Union Digital Centre was inaugurated in 2010 in all the Union Parishads across the country. Its goal was to facilitate free flow of information and easy access to public private services to all citizens. There are nearly 4554+ UDCs providing 150+ public and private services (a2i). Since its inception, nearly 367+ million services (a2i) have been provided so far. The main government services of UDC are; landfill, life insurance, payment of rural electricity bill, government forms, results of public examinations, online university admission, online birth-death registration, VGF-VGD list, citizen charter and citizen application, agriculture formation, health service etc. Private services are: Mobile Banking, Computer Training, Photography, Internet Browsing, Email, Job Information, Compose, British Council English Education, Visa Application and Tracking, Conferencing in Video, Printing, Scanning, Photocopy, Laminating etc.

#### 11.2.2 Progress in E-Government during 7FYP

The Government had launched a Master Plan for Digital Bangladesh Project, which was aimed at the effective and efficient implementation of Digital Bangladesh Vision through the learning's from e-Government implementation experience of South Korean government. As part of the implementation of the e-Government Master Plan, initiatives such as the 'Digital Municipality Services System', 'Digital Sylhet City Project', 'Bangladesh E-Government ERP Project', 'Digital Island Moheshkhali Project', 'Software and Hardware Quality Testing & Certification Centre', and 'Bangladesh National Digital Architecture (BNDA)' had been implemented successfully.

The 'Digital Municipality Services System' was piloted in 1 City Corporation and 9 Municipalities, through which 5 online citizen's services were provided to more than 20 lac people. The 'Digital Sylhet City Project' had been initiated to turn Sylhet into the country's first smart city. The 'Bangladesh E-Government ERP Project' had developed common ERP software (nine modules) primarily for use of nine organizations under the Planning Division and ICT Division. The 'Digital Island Moheshkhali Project' had improved the quality of public services in an isolated region through the utilization of Information and Communications Technology (ICT) solutions.

The 'Software and Hardware Quality Testing & Certification Centre' had been established by Bangladesh Computer Council (BCC) to ascertain the proper applicability of the software and hardware produced/developed/purchased by different government departments/agencies and maintain its quality. The 'Bangladesh National Digital Architecture (BNDA)' project had created the Bangladesh National Digital Architecture framework, based on leading standards, practices and frameworks, but aligned and tailored as per Bangladesh requirements and strategic objectives. The project had also developed the design, development and implementation of interoperability framework across the GoB.

The 'Enhancement of Bangla Language in ICT through Research & Development (1st Revision)' project had been working to standardize various features of the Bangla language and develop tools, technologies, and contents for Bangla computing. The 'BGD e-GOV CIRT (Computer Incidence Response Team)' had been developed by BCC to improve the cyber security defense capability of the government.

The six CA organizations had provided digital signature certificates and related services to various government and private organizations and to interested individuals. Digital signature had been used for E-TIN, e-File system of A2i project, birth registration, and online admittance letter of the National University. Different governmental and non-governmental organizations and banks had already started using digital signatures on their own websites and individual level.

A Virtual Private Network (VPN) connection had been established to make a link with NID database of the Election Commission to verify user information for issuing digital signature. E-Tender and e-file systems have

been launched at the Office of the Controller of Certifying Authorities. This office had also received membership of the OIC-CERT (Organization of the Islamic Cooperation-Computer Emergency Response Teams). The website of this office had been developed under the National Portal platform.

The 'Improvement of PKI (Public Key Infrastructure System) and Capacity Building of the CCA Office' project had established a Digital Forensic Lab to control and investigate cybercrimes and upgraded PKI systems. By establishing a world-class PKI system, Cyber security has been ensured through the use of digital signature certificates for online transactions and information sharing.

Various groups in society, namely, girls, students, teachers, journalists, and government officials, had been imparted training on cybercrime, related laws, safety strategies on social network platforms, ways to get rid of crime, and specific procedures to register complaints, and so on. The 'Digital Evidence Management & Reporting System (DEMRS)' has been introduced in the CCA's office for the prevention of crime investigation and immediate detection of online offenders and criminals.

#### 11.2.3 Human Resource Development

The ICT Division of Bangladesh has been focusing on human resource development for the ICT sector. The 'Leveraging ICT for Growth, Employment and Governance Project' developed 32,000 skilled manpower for IT and ITES sector during the 7th FYP timeframe. Additionally, the department has also initiated projects for the training of women and persons with disabilities in the IT sector. Through the WID Project, 536 women were trained in Office Applications & Unicode Bangla, while the 'Empowerment of Persons with Disabilities including NDD through ICT Project' provided ICT training to 1480 persons with disabilities. BCC has also introduced the ICT Professionals' Professional Certification (ITEE) system in Bangladesh through the 'Capacity Building on ITEE Management Project', which has trained students in Japanese language, IT skills, and Japanese business manner.

The Department of ICT (DoICT) of Bangladesh is responsible for spreading ICT-based quality education and developing an IT-skilled resource pool. The 'Sheikh Russel Digital Labs project' has been implemented across the country, establishing 4,176 labs nationally in secondary schools, colleges, madrasas, technical institutions, and primary schools. Under this project, around 100,000 primary and secondary-level students were trained in basic programming, IT security, and MS Office. 'The She Power Project: Sustainable Development for Women through ICT' was initiated to increase nationwide awareness of the significance of women empowerment and to increase women self-employment and entrepreneurship through ICT. This project provided training to 4,000 women as Freelance to Entrepreneur, 4,000 women as IT Service Provider, and 2,500 women as Call Centre Agent.

#### 11.2.4 ICT Industry promotion

The Bangladesh Computer Council (BCC) has played a crucial role in promoting the ICT industry both locally and globally. The ICT project has facilitated the entry of local IT and ITES capabilities into the global market, resulting in improved global awareness and perception of Bangladesh as a destination for IT and ITES businesses. The project has also conducted ICT Career camps across all 64 districts of Bangladesh, reaching over 80,000 students. The 'Innovation Design & Entrepreneurship Academy (IDEA) Project' has further promoted innovation and entrepreneurship throughout the country, providing funds to 64 start-ups with a total value exceeding Taka 5 crore. BCC has successfully organized Digital World events in 2015, 2016, and 2017 to promote the local ICT industry.

The Bangladesh Hi-Tech Park Authority (BHTPA) is actively supporting and promoting IT start-ups and entrepreneurs to establish large-scale IT companies, akin to Google, Apple, Microsoft, Amazon, and Alibaba. BHTPA has allocated space, internet, and electricity free of cost to over 100 selected local IT start-ups and entrepreneurs, with some of them already transforming into registered BPO/KPO/IT companies. BHTPA is also promoting local BPO/KPO/IT companies to obtain international standards such as CMMIL-5, CMMIL-3, ISO-9001, and ISO-27001. As a result, 2 companies have achieved CMMIL-5 certification, 21 companies have achieved CMMIL-3 certification, 47 companies have achieved ISO-9001 certification, and 6 companies have achieved ISO-27001 certification with the support of BHTPA.

#### 11.3 Objectives, Targets and Strategies for the ICT Sector under the 8FYP

The way we live, work, and interact with one another has been transformed by information and communication technology (ICT). The 8th five-year plan of Bangladesh acknowledges the enormous potential of ICT in fostering social equality, employment creation, and economic development. A number of lofty objectives have been outlined in the plan to encourage the growth and adoption of ICT across all facets of the country, especially focusing on increasing access to high-speed internet, enhancing digital literacy, and encouraging creativity and entrepreneurship in the field. All in all, the government has ambitiously targeted the ICT sector to contribute 10% to the GDP by 2025.

The government is anticipating massive undertakings in the ICT sector with the advent of the Fourth Industrial Revolution (4IR). The ultimate vision of the government is to completely digitalize the country and the governance system in order to conjure rapid growth and development in all sectors of the economy. By incorporating ICT in all aspects of the country, the government wants to move towards a paperless governing system which facilitates fast dissemination of services and enables entrepreneurship & foreign investment.

#### 11.3.1 Objectives and Targets

#### The main goals set for the ICT sector in the 8FYP are:

- 1. Increase access to digital networks and fast internet, especially in neglected and rural regions.
- 2. Enhance the growth of digital literacy and abilities to make sure that all citizens can take advantage of the opportunities provided by ICT.
- 3. Encourage the growth of regional ICT sectors, such as software creation, hardware production, and IT-enabled services.
- 4. Encourage entrepreneurship and innovation in the ICT industry to spur economic expansion and employment development.
- 5. Ensure that the ICT sector functions effectively and efficiently in the public's interest by strengthening the regulation framework and policy structure.

#### 11.3.2 Strategies for ICT Sector

In accordance with the general objectives, the 8FYP has outlined several strategic areas where the government and other stakeholders will intervene. These areas will be focused on to ensure the development of the ICT sector and achieving the goal of 10% contribution to GDP from the ICT sector by 2025. The overall strategy that has been outlined in the 8FYP are the following:

- (i) Make the government smart lead user of digital innovations in meeting line ministries' targets.
- (ii) Strengthen the supply side of physical infrastructure.

- (iii) Develop human resources and prime the knowledge creation and exploitation through R&D
- (iv) Encourage private sector to leverage ICT innovations in addressing competitiveness.
- (v) Empower ICT industry to scale up investment and innovations to create global success stories by taking home market as the steppingstone.
- (vi) Attain redesign capability out of digital technologies so that material and energy need as well as wastage decrease and yield increases in whatever Bangladesh produces.
- (vii) Leverage digital economy for harnessing the potential of fourth industrial revolution and attaining SDGs.
- (viii) Cope up as well as take advantage from the unfolding fourth industrial revolution (4IR).

In implementing these strategies, The 8FYP has picked several thematic areas where interventions will be made. They are:

- 1. Leveraging Line Ministry Centric Digital Economy Opportunities
- 2. Adopting the Five Helix Approach: Ensure collaboration between government, education and research organizations, industry, start-ups & entrepreneurs, and investors.
- 3. Establishing cooperation between Industry, Academia, and Government
- 4. Intellectual Asset and Local and Global Market Centric Start-up Success Creation and Youth Empowerment while leveraging on local opportunities.
- 5. Leveraging of Redesign Capability for Creating Success in High-tech Devices and Innovation
- 6. Turning high-tech Parks into Nucleus of Digital, Knowledge and Innovation Economy
- 7. 4IR Productive Knowledge Acquisition
- 8. Digital Economy for Leveraging Fourth Industrial Revolution
- 9. ICT for Greater Transparency, Good Governance, and Service Delivery
- 10. Ensuring Equitable and Fair Share of Bangladesh in Global Digital Value Chain
- 11. Leveraging Digital Economy for Attaining Sustainable Development Goals
- 12. Intensifying Effectiveness and Efficiency, and Encouraging Private Investment
- 13. Developing the Culture and National Innovation System for Leveraging Knowledge Economy
- 14. Harnessing the power of ICT for revival from the effect of COVID 19 and for adaptability to shocks arising from health crisis, natural disaster, climate change, or global shift in competitive landscape

#### 11.4 Assessment of Implementation Progress During the Mid-Term of the 8FYP

To measure progress the 8FYP identified several quantitative indicators that are summarized in Appendix Table A11.1 attached to this Chapter. Specific areas of progress by themes is discussed in detail below.

#### 11.4.1 Development of Digital Use and Digital Infrastructure

Under the thematic areas of the ICT sector in the 8FYP, most attention is given to building a strong digital infrastructure and promoting widespread use of ICT. As background, as depicted in Figure 11.1, there has been a steady rise in the use of mobile cellular subscriptions over the last decade in Bangladesh. In 2010, only around 68 million subscriptions were active. However, in the span of the next eleven years, it has nearly tripled to about 184.5 million. With widespread network coverage now reaching even the most remote corners of the country, communication across the country is easier than it has ever been. Under the Digital Bangladesh initiative, the

government has provided widespread and affordable access to mobile devices as well as making it easier to acquire SIM cards all over the country. In addition to this, the widespread use of handheld mobile communications and demand for such subscriptions have attracted foreign investment in the telecommunications sector

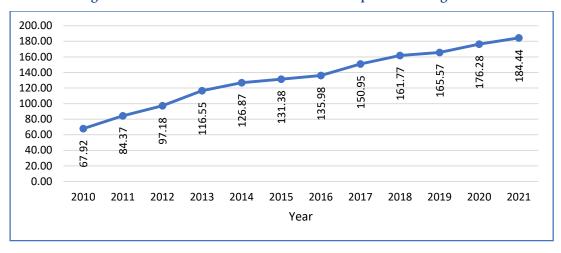


Figure 11.1: Growth of Mobile Cellular Subscriptions in Bangladesh

Source: World Bank/International telecommunication union (ITU

The 8FYP sought to accelerate this progress further. Accordingly, a major objective of the 8FYP is to ensure that the adult population has universal access to mobile phones. Table 11.1 shows the progress with mobile phone usage by gender. The 8FYP set a target of 100% for the proportion of the 15+ population who own mobile phones by 2021. The base year value was set at 75.4%. The SVRS 2022 shows considerably increased values for the percent of adult population who own mobile phones: Male: 86.9%, Female: 61.4%, Total: 73.8%.

Performance Baseline Target for 2021 Target for 2022 Target for 2025 Progress in 2022 indicator Proportion of 75.4% 100% 100% 100% Male: 86.9% individuals who Female: 61.4% Total: 73.8% own a mobile (Source: SVRS, [SVRS, BBS, telephone, by sex 2022) 2022]

Table 11.1: Progress with Mobile Phone Usage by Gender

Source: 8FYP, SVRS 2020 (baseline values), SVRS 2022 (Progress in 2022)

On the other hand, Bangladesh has made laudable advancement in mobile network coverage over the last few years (Table 11.2). For instance, in 2022, 99.63% of the population was covered by 2G mobile network, 95.5% by 3G mobile network and 98.10% were covered by 4G network. So, the target of covering almost 100% of the population is quite achievable in the near future. Apart from some of the most remote places in the country, Bangladesh has managed to create an expansive mobile network which has contributed significantly to the development of the country. This has been possible due to the early recognition by the government of the need to allow international collaboration in the telecommunications sector. Since the early 2000s, the government has closely collaborated with international organizations such as Telenor and Axiata to ensure extensive mobile network coverage across the country. These steps have also helped to grow other ICT related sectors such as e-commerce, online banking etc.

Table 11.2: Progress with Mobile Network Coverage

Performance indicator	Baseline June 2019	Target in 2021	Target in 2022	Target in 2025	Progress in 2022
Proportion of population covered by a mobile network, by technology (%)	2G: 99.6% 3G: 95.40% 4G: 82%	99%	99%	99%	2G:99.63% 3G: 95.5% 4G: 98.10%

Source: BTRC, BTCL (baseline), 8FYP (Targets), SDG Progress Report (2022 values)

Another performance indicator outlined in the 8FYP is the availability of internet access. Figure 11.2 shows the rapid rise in the use of internet among the populace. From a meager 3.7% in 2010, the usage of internet rose to almost 45.5% in 2022. We can especially see a rapid rise in the 2015-16 period from 12.9% to 18.1%, which marked the beginning of the implementation of the "Digital Bangladesh Vision 2021" Credit goes to the Government for properly accommodating the everchanging technological landscape of the 21st century and the subsequent transition to a "Smart Bangladesh".

82.87 Percent Year

Figure 11.2: Individuals Using the Internet (% of population)

Source: World Bank/International telecommunication union (ITU) and SVRS 2022, BBS

Recognizing the importance of the use of internet for implementing the Smart Bangladesh Initiative by 2041, the 8FYP put strong emphasis on fact tracking the populations access and use of internet. One facilitator of internet access is the expansion of fixed internet broadband subscription. Most recent data show that the proportion of fixed internet broadband subscriptions per 100 inhabitants is 5.82% in 2022. The target set in 8FYP was 6% for 2021 and 8% for 2022. So, the progress has not been satisfactory. The 8FYP intends to raise this number to 15% by the end of 2025 which looks like a tough challenge.

Table 11.3: Progress with Fixed Internet Broadband Subscriptions per 100 Inhabitants, by Speed (%)

Performance indicator	Baseline Dec. 2019	Target for 2021	Target for 2022	Target for 2023	Target for 2024	Target for 2025	Progress in 2022
Fixed Internet broadband subscriptions per 100 inhabitants, by speed (%)	4.80%	6%	8%	10%	12%	15%	5.82%

Source: 8FYP (Targets), BTRC (baseline), SDG Progress Report 2022 (2022 values)

While progress with fixed broadband subscription has been slow, the use of internet has been greatly facilitated by the availability of low-ccost mobile data packages. These have become the major source for the use of internet, especially in the rural areas where the use of fixed bandwidth subscription is very low. So, notwithstanding the constraint faced with rapidly expanding fixed bandwidth subscription, progress with use of internet has been rapid and wil likely continue to expand. While the expansion of mobile data services is welcome news, this cannot be considered as a good substitute for fixed bandwidth connectivity given speed and reliability issues associated with mobile data services. So, the government would need to continue its efforts to expand fixed bandwidth subscriptions.

The major constraint facing fixed bandwidth subscriptions is the cost of internet connections in Bangladesh. Although the government has allowed connection with the SEA-ME-WE 4 and SEA-ME-WE 5 submarine cables in the recent past, the cost of running continuous internet connectivity is still very high compared to neighboring countries like India. The short-term goal of the government should be to provide cheaper internet connections to the populace in order to increase the online presence of the country and ensure better connectivity.

The government has planned to expand the country's digital infrastructure by increasing high-speed internet connectivity and expanding fiber optic networks under the strategies outlined in the 8FYP. A few projects have been implemented in order to establish better connectivity across the country which have been discussed below.

A notable project that has been established in this regard is the "Project for establishing broadband connectivity in areas deprived of telecommunication services" (Source: Bangladesh Computer Council (BCC)). The ICT division launched the "Project for establishing broadband connectivity in areas deprived of telecommunication services" in July 2018, with a completion date of December 2023. According to the most recent progress report, the project has made substantial progress, with a budget utilization rate of 43.79% and an actual implementation progress rate of 67%. The project has already managed to install a 3000 km optical fiber cable network in 8 divisions. Work is in progress in other divisions. Also, the project has managed to complete the renovation of 193 PoP (Point-of-presence) in 8 divisions. Therefore, the project has made significant efforts toward the goal of improving telecommunication services in underdeveloped areas.

Another notable project in this context is the "Project for Strengthening the Government's Video Conferencing Platform". This project was initiated in July 2021 and will run until June 2023. The main goal of this project is to improve the functionality and efficiency of the government's video conferencing platform. To accomplish this goal, the initiative has prioritized upgrading the platform with advanced technologies, streamlining operations, and optimizing performance. The significance of this project lies in its ability to enable virtual communication within government agencies and with external stakeholders, especially during crises such as global pandemics. The aim of the government through this project is to better serve its different departments and agencies and improve their general performance by strengthening the video conferencing platform. So far, the project has managed to

establish 4k and AI technology video conferencing and modernized the video conference system. Also, various apps and web-based video conference frameworks have been established. The overall progress of the project is 55%.

Lastly, the third iteration of the 'National ICT framework development project' is ongoing which began on 1st January 2017 and is expected to achieve completion on 30th June 2023. The project has already established connectivity between 2600 unions and established VPN (Virtual private network) for 1000 police offices so far. (Source: BCC)

#### 11.4.2 ICT Literacy and Human Resource Development

The 8FYP puts emphasis to develop skilled human resources in the ICT sector through initiatives such as establishing ICT training institutes, increasing the number of scholarships for students pursuing ICT-related degrees, and supporting the development of digital entrepreneurship.

Recently, Bangladesh Association of Software & Information services (BASIS) has implemented a plan to transform BASIS Institute of Technology and Management into a university. BASIS also has planned to set up an integrated research and development wing with government support for the promotion of the ICT industry in Bangladesh.

The Bangladesh Hi-Tech Park Authority has implemented a campaign to train more than sixty thousand young people by 2025 and one lakh by 2030 to fulfill the demand of the IT sector. More than 36,000 people have already been trained under various projects and programs. Another project implemented by the Bangladesh Computer Council (BCC), as of 2022, has provided training on Information and Communication Technology to about 2.34 lakh people and most of them are doing jobs in various ICT companies/organizations at home and abroad. Work on establishment of Sheikh Kamal IT Training and Incubation Centers in 64 districts and 10 Digital Village is in progress to provide proper training for young people.

Additionally, here are some more on-going projects which are working to develop human resource and generate ICT literacy among the populace:

- Human capital and technology proficiency development project under the ICT framework of the National parliament
- Learning and earning development project (LEDP)
- Aspire to innovate (a2i) project.
- Innovation and entrepreneurship development academy project
- Enhancing digital government and economy (EDGE) project

Moreover, there are some continued projects and initiatives which take root from previous five-year plans of the government. Such initiatives include the creation of technology parks and innovation centers like the Bangabandhu Hi-Tech Park in Rajshahi, which has drawn substantial foreign and domestic investment and aid in the expansion of the ICT industry. The National Data Center (NDC) of the Bangladesh Computer Council, which the government created in 2013, has contributed to enhancing the safety, security and reliability of digital services and fostering consumer confidence. With massive strides in technology over the past decade, the NDC has managed to revolutionize the governance system and the process of dissemination of e-services to the public in recent years. Lastly, rural and underserved areas now have access to digital services and education thanks to the establishment of thousands of Digital Service Centers (DSCs) across the nation. The vision of Digital Bangladesh, which was introduced in 2009, has been continued through subsequent five-year plans formulated by the government, and this initiative of establishing DSCs across the country is a part of that ongoing effort.

However, there are significant challenges to overcome in terms of creating employment in the IT sector. Bangladesh has yet to form a robust industry around ICT like the digital powerhouses in the far east. This is mostly due to the lack of investment and interest in R&D in the STEM-related fields. The STEM fields have lagged behind in terms of output of qualified individuals who can significantly contribute to the creation of a robust technological industry. On the Brightside, the government has recognized the potential of the STEM fields and has formulated particular strategies under the education sector of the 8th FYP including investing heavily in R&D and innovation, and collaboration with international organizations to produce viable graduates to contribute to this sector in the near future.

#### 11.4.3 Promoting E-commerce and Digital Payments

The government has strategized under the 8FYP to promote the growth of e-commerce and digital payments sector by creating a favorable environment, offering financial incentives to entrepreneurs, and establishing e-commerce platforms for small and medium-sized enterprises. For instance, the government announced a 10 percent cash incentive against Information Technology Enabled Services (ITES) exports and companies are enjoying tax holiday benefits till 2024. BASIS is working together with the ICT Division to extend the facilities up to 2030.

Moreover, to encourage the software sector, the government has implemented incentives regarding taxes. For instance, the government has provided tax exemption on production earnings for software related businesses up to 30th June 2024. (Source: Bangladesh Association of Software & Information services (BASIS)). Moreover, the government has implemented VAT exemption on produced and imported software goods under the HS code 8523. (Source: BASIS)

The government has wholeheartedly promoted the e-commerce sector and continues to do so through the collaboration of ICT division and Ministry of commerce under the National e-commerce policy 2018. Under this policy, the government has implemented safer transaction spaces, stricter laws against piracy and hacking and digital safety signatures for all government organizations dealing with e-commerce. In recent years, the government has closely collaborated with international organizations to introduce better and more user-friendly e-commerce services to the country. For instance, in June 2022, the Government removed the 49 percent maximum allowable shareholding limit on foreign e-commerce firms, allowing 100% foreign-owned companies to operate in Bangladesh. [National Digital Commerce Policy 2018 (amended in 2020)]. However, the government is yet to give permission to such major international e-commerce platforms such as PayPal and Amazon to operate in Bangladesh.

#### 11.4.4 Creating a Supportive Regulatory Environment

The government has aimed to create a supportive regulatory environment for the ICT sector by updating existing laws and regulations, providing financing opportunities and tax exemptions and developing new regulations to address emerging issues such as data protection, cybercrime, and intellectual property rights.

The government has been providing a range of incentives to promote the development of the ICT sector in the country. These incentives are designed to encourage investment in the sector and to facilitate the growth of local ICT companies under the strategies of the 8th FYP. Some of the key incentives offered by the government include tax incentives, access to financing, export promotion of ICT products and services, regulatory support etc.

The government provides tax breaks and exemptions for ICT companies that invest in the country. For example, companies that export software and ICT-enabled services are exempt from paying value-added tax (VAT) and income tax for a certain period of time. Recently, the government has provided tax exemption on production earnings for software related businesses up to 30th June 2024. This is designed to encourage the growth of

small and medium software companies in the ICT landscape. Moreover, the government has implemented VAT exemption on produced and imported software goods under the HS code 8523 which are products and part related to ICT services.

The government has also established a number of funds and financial institutions to provide financing to ICT companies in order to incentivize production in the sector. The Bangladesh High-Tech Park Authority (BHTPA) with government intervention, has implemented various programs which provide infrastructure and financing opportunities to small and medium sized firms in the ICT sector. Notably, 29 Hi-Tech Parks have been constructed under the auspices of the BHTPA to promote and expand the country's IT/ITES industry and attract foreign direct investment (FDI). The Bangladesh High-Tech Park Authority (BHTPA) governs these parks, which provide various investment incentives such as 10-year corporate income tax exemption, import duty exemption on capital equipment, construction materials, and particularly 2% on ICT-related hardware, and tax exemption on dividend, share transfer, royalty, and technical assistance fees. Furthermore, expatriates are eligible for a three-year exemption from personal income tax, as well as a VAT exemption on local bills during production and a stamp duty exemption on mortgage deed registration. Investors in these parks also have access to bonded warehouse facilities. Due to all such incentives, the IT/ITES sector has managed to contribute 0.76% to the GDP in 2022. As a result, the government has set the ambitious target of achieving \$5 billion exports in this sector by 2025, the end term of the 8th FYP.

Moreover, the ICT division has implemented various campaigns to promote the export of ICT related services and products. Notably, the Export Development Fund provides financial assistance to ICT companies that are looking to expand into international markets. In the Export Policy 2021-2024, the government designated software hardware, IT enabled services (ITES), Business Process Outsourcing (BPO), and freelancing as the most important export sectors. The government, in collaboration with EDF, has implemented many export incentives to stimulate exporting in the industry. For starters, a 10% cash incentive has been granted for hardware, software, and ITES exports. Second, the ICT division has provided a 4% export subsidy to individual level freelancers for exports of software and ITES services obtained through approved online marketplaces. Finally, there is a 4% export incentive for Hi-Tech Park exports under the BHTPA.

The government has established a number of regulatory bodies to support the development of the ICT sector. These include the Bangladesh Telecommunication Regulatory Commission (BTRC), which regulates the telecommunications sector, and the Bangladesh Computer Council (BCC), which provides support and guidance to ICT companies. Under the strategies of the 8th FYP, these regulatory bodies have increased their activities to organize the stakeholders in the ICT sector in order to achieve the goals by the 2025 end of term.

Overall, the incentives provided by the government have created a moderately supportive environment for the growth of the ICT sector. By providing access to financing, infrastructure, and regulatory support, the government has managed to encourage investment in the sector. However, the pressing issue hindering the growth of this sector is the issue of Intellectual property protection and online security.

Recently, steps have been taken to reform and strengthen the intellectual property laws under the ICT sector. The government passed the Digital Security Act in 2016, which superseded the Information and Communication Technology Act of 2006. The goal of the Digital Security Act is to provide comprehensive legal measures to fight cybercrime, including unauthorized use and distribution of digital intellectual property. The Digital Security Act has been amended twice in recent years, in 2020 and 2021. Both amendments have been regarding cybercrime and no updates have been made to regulations of digital intellectual property.

One of the major challenges is the regulation of intellectual property. Bangladesh ranks one of the lowest in terms of protection of intellectual property. Although the government has enacted various laws and regulations to contain piracy, the environment has not improved much in the recent past. Due to the lax regulations and even

weaker enforcement, many international organizations are reluctant to do invest and do business in the ICT sector. This has impacted the low growth of employment and contribution to the economy by the ICT sector. International collaboration and investment is the logical way forward to achieve the desired objectives regarding the development of the ICT sector envisaged in the 8FYP.

#### 11.4.5 ICT in Education

The 8FYP has made it a top priority to heavily introduce ICT in all streams of education. Starting from the primary level, all the way up to higher secondary level, the government has made notable progress in introducing multimedia classrooms and e-learning platforms for the students. With the new curriculum, which has been introduced in 2023, the government has completely altered the dissemination of knowledge by focusing heavily on STEM and ICT education with a goal to capitalize on the Fourth Industrial Revolution (4IR). Especially, the government has particularly focused on introducing ICT education in the madrasa stream which has been lagging behind in terms of modernization. It is in the interest of the country to make its youth prepared for the future mechanization and A.I. takeover of several industries. As a result, the government has also introduced ICT focused materials in the technical and vocational streams.

The pandemic revealed many faults in the digital infrastructure of higher education with many public universities remaining closed for an extended period with little to no activity due to the lack of online infrastructure for classes and examinations. Since then, the government and the ministry of education has worked tirelessly to heavily invest in creating an online presence for public universities. In the aftermath of the pandemic, the government and the UCG has managed to create a robust online infrastructure which regularly participates in almost all administrative and academic activities. Moreover, the government had also implemented interest-free loans to university students in order for them to buy smartphones which have now become essential in online learning. In addition to this, the ICT division has decided to collaborate with the education lead ministries to allocate funds to create more smart classrooms with high-tech equipment in public universities across the country. The focus on building ICT infrastructure for education by the government has proved fruitful in terms of spreading general education across the populace. Notably, the A2i project fosters numerous learning programs for both adults and children who have missed out on contemporary educational streams. These programs have managed to spread literacy to people living in remote areas and this effort has produced positive results in terms of increasing literacy rates across the country.

However, major challenges remain in introducing ICT based education in the rural and remote communities. Most schools in such areas lack the necessary technological infrastructure to keep up with the modernization of the new curriculum and teaching system. The situation is even more dire in the madrasa stream, especially Qawmi madrasas which operate out of the government's regulations. If proper incorporation of technological infrastructure and ICT based knowledge can be disseminated in these two aspects then, Bangladesh would benefit immensely from a better and sustainable growth path with a workforce fit for the challenges of the 4IR and the 21st century.

#### 11.4.6 Women and ICT

As the use of ICT expands in Bangladesh, so is the need to fulfill women's potential in digital and technology-related careers. As of 2022, female comprises of 50.4 % of the population, which brings up the need to empower women's participation in ICT to achieve a broader goal of equity and inclusion. With initiatives such as Digital Bangladesh Project, facilitated by the Government, there has been a rise in women's participation in the workforce.

According to the data of the ICT division, about 500,000 freelancers are working out of 650,000 registered, a considerable portion of whom are women. About USD 100 million are generated annually through freelancing.

In 2018, the government introduced the 'She Power Project- Sustainable Development for Women through ICT' aiming to create competent women in the workforce, equipping them with relevant knowledge and empower women entrepreneurs and startups in Bangladesh. It trained 10,500 women from 21 districts in three important categories- Freelancing, IT service provider and women call center agent. Around 6700 participants successfully completed the project, got a 4-month paid internship opportunity and 3000 women out of them have been employed as freelancers. Government backed initiatives are taken with the help of Bangladesh Korea Institute of Information and Community Technology and Bangladesh Computer Council (BCC) to support working women in Bangladesh.

Initiatives, such as Ma-Telehealth Centre by a2i is helping women in need through the use of digital services. Launched in June 2020, it enables expecting mothers and lactating women with newborns receive consultations from certified doctors, counselling services, e-prescriptions and follow-up health services. Women phone operators have achieved economic and social empowerment within their households and communities. At present, more than 14.5 thousand rural women entrepreneurs are trading their goods on "lal shobuj dot com".

#### 11.4.7 Freelancing Industry, ITES and Software Exports

In Bangladesh, freelancing has developed as a key source of employment. The 8FYP has outlined several strategies to develop the ICT sector by incentivizing the rapid growth of the freelancing sector. This includes provision for financing, creating a consolidated framework, ensuring greater collaboration with international organizations etc. According to the Oxford Internet Institute, Bangladesh was the world's second-largest source of freelancing after India in 2021. The Bangladesh Freelancer Development Society (BFDS) estimated that the country currently had between 150,000 and 200,000 active freelancers in 2021. In order to help this expanding industry, the ICT Division began issuing identity cards to freelancers in November 2020, with the purpose of registering and giving various benefits to this vital group. According to the BFDS, 30,000 freelancers have already obtained ID cards, and another 100,000 are on their way.

Bangladesh's earnings from computer-related services, comprising software, IT enabled services (ITES), consultancy, and equipment maintenance, nearly doubled to \$592 million in fiscal year 2021-2022, owing primarily to the effects of the Covid-19 pandemic and cash incentives. The Export Promotion Bureau (EPB) recorded a 94.91% rise in export profits from this sector compared to 2021. IT-enabled services (ITES) generated the most revenue of \$484.4 million, representing a 123% increase over the year 2021. Bangladesh gained \$60 million from computer software exports, \$38 million from computer consultation services, and \$10 million from computer installation, maintenance, and repair services. The government has thus set a goal of achieving \$5 billion in exports from this sector by 2025. Moreover, export earnings from ICT sector had exceeded 1.3 billion USD in 2022. Such a degree of success was possible due to the efforts of the government as well as the spike in online outsourcing services during and after the pandemic. Bangladesh's ITES and freelancing sector benefitted greatly during this time from the existing low cost within the industry which brought in a huge amount of work from abroad. However, to continue the success of the past few years, the sector has to keep up with building latest technological infrastructure and establishing latest regulations.

However, there remains some major challenges for the growth of the freelancing industry. These challenges included issues related to foreign exchange regulations and revenue, poor internet connectivity and infrastructure, and a shortage of skills for high-end IT products. Additionally, there were additional challenges such as a 15% VAT on laptop imports imposed by the National Board of Revenue, a 10% advance income tax on broadband internet services, and a 5% VAT on mobile phone sales. These taxes have somewhat hindered the spread of technology among the masses along with stunting the growth of the freelancing industry.

#### 11.4.8 E-government

A major strategy of the 8FYP in order to create a robust online presence of the government was to develop the e-Government framework. The 8th FYP has set targets regarding this aspect according to the E-Government Development Index (EGDI) prepared by the Department of Economic and Social Affairs of the United Nations. A detailed evolution of the targets and progress of this index is given in Table 11.4. See that, in the most recent report of 2022, it shows that Bangladesh is still lagging behind and is nowhere near the targets that had been set for the 2020-2025 period in the 8FYP. In terms of the online service component, the score of Bangladesh in 2022 was 0.6521 which has not even come close to the target set for 2018, let alone the target score set in the 8th FYP timeframe. However, Bangladesh has achieved a somewhat satisfactory score of 0.4469 in the telecommunication infrastructure component. It is likely that the target score of 0.54 would be achievable at the end of the 8th FYP term. Overall, the EGDI score of Bangladesh in 2022 was 0.5630 out of 1 with a rank of 111 out of 193 countries. This falls short of the targeted score and rank as stipulated in the 8FYP.

Table 11.4: Evolution and Progress of Bangladesh's e-Government Development Stages

Focused Area		e-Gov	vernment D	evelopmen	t Stages Ove	r Three Majo	r Periods					
	Till 2	2018		202		2020-2025						
	Position in E-Government Development Index (EGDI) prepared by Department of Economic and Social Affairs of United Nations											
Indicator	Target Score (0-1)	Actual Rank in 2022	Target Score (0-1)	Target Rank /93								
E-Government Development Index (EGDI)	0.4862	115	0.65	80	0.5630/1	111/193	0.74	40				
Online Service Component	0.7847	N/A	0.86	N/A	0.6521/1	N/A	0.90	N/A				
Telecomm: Infrastructure Component	0.1976	N/A	0.54	N/A	0.4469/1	N/A	0.7	N/A				
Human Capital Component	0.4763	N/A	0.73	N/A	0.59	N/A	0.85	N/A				

Source: Global Innovation Index (GII) 2022

The 8FYP has also set targets regarding the development of the ICT sector according to the Global innovation index. In 2020 and 2021, Bangladesh ranked 116th out of 131/132 countries on the GII, but fell to 102 in 2022, mainly due to the general improvement in the ICT infrastructure of the country. Over the period of 2020-22, Bangladesh has managed to significantly improve its score for 'ICT Access' and 'ICT Use' which are the main factors pertaining to the secular improvement in the GII. However, the improvement could have been even greater if not for the fact that Bangladesh was unable to generate similar improvement in terms of 'Government online services' and 'E-participation'. In fact, the state of 'E-participation' has significantly deteriorated according to the GII during this time period. A detailed evolution of the targets and the current progress in the indicators of the GII has been displayed in Table 5. Notice that apart from 'ICT access', Bangladesh is yet to achieve the desired target scores for the period 2021-2025 so far. Moreover, even though Bangladesh has surpassed the desired score for ICT access, the rank among other countries is not satisfactory. This is true for the other indicators as well. This points to the fact that the rest of the world has developed in these sectors at a much faster rate and Bangladesh has lagged behind in comparison. So, there is a need for strong attention in the implementation of the various projects and programs aiming to develop the ICT sector.

Table 11.5: Evolution and Progress of Bangladesh's Competence in Digital Space and Indices

Focused Areas		Banglade	esh's Devel	opment St	ages Over T	Three Major	Periods			
and Indicators	Till 2	2017		202	2031-2041					
		Global Innovation Index								
	Target Score (0- Rank Score (0- Rank Score in 100) Rank 100) Rank Rank Rank In 2022 2022							Target Rank		
ICT Access*	30.5	111	50	50	76	90/132	85	20		
Government's Online Service	62.3	60	75	45	61.2	86/132	90	15		
e-Participation	52.5	82	70	40	57.1	90/132	85	20		
ICT and Business Model Creation	48.9	108	65	50	N/A	N/A	75	20		
ICT and Organizational Model Creation	42.4	104	55	60	N/A	N/A	65	30		

Source: Global Innovation Index (GII)

At present, almost all of the ministries and divisions of the government have their own separate websites to disseminate information and provide services to the general people. However, many of these websites are poorly managed and seldom updated. This is a major challenge in the creation of a supposed paper-less government as envisaged by the Digital Bangladesh Vision. To improve the government's online services on the route to a modern governing system, the online presence of the various branches of government must be upgraded and updated to a level suitable for the 21st century.

#### 11.5 Emerging Gaps and Way Forward

The ICT sector has been identified as one of the main economic growth and development drivers of Bangladesh. The nation has developed its ICT sector significantly over the past decade and has emerged as a major global player in outsourcing services. Mobile financial services and e-commerce is flourishing. The communications and knowledge gaps between urban and rural areas and between the rich and poor are narrowing owing to the contribution of digital services. Nevertheless, despite the advancements in this sector, it still faces a number of issues that must be resolved in order to meet the ambitious targets outlined in the 8FYP.

The digital gap is one of the most pressing issues confronting the ICT sector. While rural areas frequently lack essential infrastructure like power and internet connectivity, urban areas frequently have access to high-speed internet and other cutting-edge technologies. The government has taken initiatives to close this gap, including subsidizing internet service providers and establishing digital hubs in rural regions, but more must be done to guarantee that everyone has an equal opportunity to profit from the digital economy.

The lack of qualified human resources is another issue that the ICT sector must deal with. There is still a considerable shortage of skilled personnel in the industry despite the government's efforts to raise the number of ICT graduates. Many highly skilled workers have left the country in search of better prospects abroad, resulting in a brain drain. The government must concentrate on enhancing the standard of education and training in the ICT sector and offer incentives to keep highly trained people in the nation in order to overcome this obstacle. As mentioned in the previous section, the government has taken steps in the right direction regarding incorporating ICT training in education by formulating a new curriculum for primary and secondary levels. Additionally, the focus of ICT training in madrasa and TVET streams will surely help in raising the ICT literacy of the youth creating a modern workforce for home and abroad.

The ICT sector in Bangladesh is also faced with a sizable hurdle in the form of cybersecurity. Cybercrime is on the rise as a result of the expanding use of digital technologies, endangering both people and businesses. To combat cybercrime, the government must improve law enforcement agency training and support, as well as fortify its cybersecurity infrastructure. But in doing so, the government must ensure that such law enforcement does not encroach on the personal and constitutional freedoms of the general populace. Care should be taken in enacting cybersecurity laws since these laws are some of the most invasive on the freedoms of the vox populi.

Lack of innovation and R&D (research and development) engagement is another problem affecting the ICT sector. While the government has taken initiatives to stimulate innovation and entrepreneurship, more needs to be done to assist and encourage R&D activities in the industry. This involves assisting startups and small- to medium-sized businesses (SMEs) engaged in R&D through money and incentives, as well as encouraging cooperation between academia and industry.

Finally, a more favorable environment must be developed for ICT investments. Although the government has taken initiatives to improve the business climate, other problems like bureaucracy, corruption, and legal restrictions still need to be addressed. For the ICT sector to attract both local and foreign investment, the government must streamline the investment process, simplify the regulatory framework, and offer additional incentives.

## **Appendix to Chapter 11**

Table A11.1: Development Results Framework for ICT Sector Under the 8FYP

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Current Progress in 2022 (or stated otherwise)					
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)					
Nati	ational Priority: Development of Information and Communication Technology (ICT) sector												
Out	tcome Statement: Increased access to digital communication through telephone and broadband services												
1	Performance indicator: Proportion of individuals who own a mobile telephone, by sex												
	<b>Data Source (Institutions &amp; Reports):</b> BTRC, SVRS survey 2020, Survey on ICT Use and Access by Individuals and Households 2022: Preliminary report; BBS, MoP												
	Lead Ministry/Division: BTRC, PTD												
	75.4% (Source: SVRS BBS, 2020)	100	100	100	100	100	SDG. 5.b.1	Male: 86.9% Female: 61.4% Total: 73.8% (Source: SVRS 2022, BBS: Total no. of mobile phone subscribers= 181.02 million (Dec 2021) Source: BTRC					
2	Performance indicator: Proportion of population covered by a mobile network, by technology (%)												
	Data Source (Institutions & Reports): BTCL												
	Lead Ministry/Division: BTCL												
	2G: 99.6% 3G: 95.40% 4G: 82% (BTRC, June 2019)	99	99	99	99	99	SDG. 9.c.1	2G:99.63 (Source: PTD) 3G: 95.5 4G: 98.10 (Source: SDG progress report of Bangladesh 2022)					
3	Performance indicator: Fixed Internet broadband subscriptions per 100 inhabitants, by speed (%)												
	Data Sour	ce (Institu	utions & R	eports): B	TRC, SDC	progress i	report 2022						
	Lead Ministry/Division: BTRC												
	4.80 (Dec 2019)	6	8	10	12	15	SDG. 17.6.1	5.82 (Source: SDG progress report of BD 2022)					

SL	Baseline (year)	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Remarks	Current Progress in 2022 (or stated otherwise)			
4	Performance indicator: E-government development index										
	Data Source (Institutions & Reports): EGDI by Department of Economic and Social Affairs of United										
	Nations										
	Lead Ministry/Division: ICT division										
	Target score in										
	2020-	Progress									
	2025:	in 2022:						Progress in 2022:			
	0.65/1	Score:						Score: 0.5630/1			
	Target	0.5630/1						Rank: 111/193			
	rank in	Rank:						Kank. 111/175			
	2020-	111/193									
	2025:										
	80/193										
inve	National priority: Ensure country-wide access to technology to encourage entrepreneurship, private investment, foreign investment and innovation in order to capitalize on 4IR, Increase the number of entrepreneurs ten times in the ICT sector (NPT 27 under SDG 9)										
Out						try with im	pact on the	growth of the economy			
5	Performance indicator: Global innovation index										
	Data Source (Institutions & Reports): World Intellectual Property Organization (WIPO)										
	Lead Ministry/Division: ICT division										
	Target in 2	2021-2025				Progress in 2022					
	(a) Score is	n ICT acce	ess': 50/100			(a) Score in 'ICT access': 76/100					
	Rank in 'I	CT access':	50			Rank in 'ICT access': 90					
								(b) Score in 'Government			
	(b) Score i	n 'Governr	nent online	services': 7		online services': 61.2/100					
	Rank in 'G	Governmen	t online serv	vices': 45		Rank in 'Government online services': 86					
	(c) Score in	n 'e-Particip	oation': 70/	100		(c) Score in 'e-Participation':					
	Rank in 'e-	-Participation	on': 40			57.1/100					
								Rank in 'e-Participation': 90			

# CHAPTER 12 HEALTH, SAFE WATER AND SANITATION

#### 12.1 Development Context

Human capital development is one of the cornerstones of Bangladesh's development strategy. Allocating adequate resources, ensuring access to quality of social services such as health (including provision of safe water and sanitation), and education are considered key ingredients for human capital development. Quality health care and effective population management are very essential for ensuring sustained human development because of their huge positive impact on the overall wellbeing of human in general and on their labour productivity and rapid economic growth in particular. Considering its importance, both the global development goals – MDGs and SDGs placed importance attention on universal health coverage for long-term health and human development.

Bangladesh has made commendable progress during the last decades with a significant improvement in life expectancy and reduction in child and maternal morbidity. In addition, the country has also performed well in the case of contraceptive use and family planning and also in child immunization campaigns. The country is therefore committed to attaining SDG-3 to ensure healthy lives and promoting the well-being of people at all ages. Despite the progress, the health sector has a number of challenges to address. There exist 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 not up to the mark compared to the private hospitals with relatively efficient service delivery mechanism which are out of reach for the middle and lower-income household 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.

Population arguably is the most precious asset for a country. Proper harnessing of this asset is both a means to economic prosperity and end in itself, which is human welfare. The history of economic development clearly shows that countries that have invested well and wisely in developing the population have performed well on the development front. On the other hand, nutrition and population are interlinked with health. Good health entails the intake of adequate and nutritious food. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity. Good nutrition is thus a cornerstone of good health. Similarly, population also influences health in a number of ways. A large population adversely affects health resources, water and sanitation facilities and food availability. Thus, it should be recognized that the three sub-sectors of Health, Population and Nutrition (HPN) are intricately related to each other, which raises the need to approach the HPN sector with a holistic policy framework that will allow the actions in one sub-sector to complement the actions in the others. Effective outputs in the HPN sector depends upon coordination among health, population and nutrition.

Good health is intrinsically associated with safe water and sanitation. Accordingly SDG 6 is devoted to only on water. Recent works on assessing synergies among SGDs suggests that SDG 6 (water) has the highest number of potential synergies (a total of 124)<sup>9</sup>. In the case of Bangladesh, the outcomes of the trade-off and synergies

<sup>9</sup> Fader M, Cranmer C, Lawford R and Engel-Cox J (2018) Toward an Understanding of Synergies and Trade-Offs Between Water, Energy, and Food SDG Targets. Front. Environ. Sci. 6:112. doi: 10.3389/fenvs.2018.00112

<sup>10</sup>suggest an overwhelming importance of the Water SDGs in realizing the other SDGs. SDG 6 or water SDG has 88 number of potential synergies. Thus, achieving the water targets will make it continuously easier to achieve other targets.' Realizing the importance of water and water management, Bangladesh has already adopted the long-term Delta plan (i.e. BDP 2100).

This chapter discusses progress made under the 7FYP, objectives and strategies under the 8FYP and assesses programmes made so far.

#### A. Health Sector

The 7FYP aims to ensure access and utilization of HPN services for every citizen of the country, to reduce the total fertility rate (TFR), to ensure adolescent and reproductive health care, to strengthen 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), 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 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. In addition, the Health Care Financing Strategy (2012-2032) has been adopted to reduce out-of-pocket expenditure by more than fifty percent.

Some of the major identified factors influencing the nutrition subsector include institutional constraints, micronutrient deficits, public awareness, maternal undernutrition, acute malnutrition, and dietary diversity. Accordingly, the 7FYP had 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).

#### 12.2 Progress under the 7FYP

There has been impressive progress in improving health outcomes during the 7FYP. Some noteworthy achievements in improving the HPN 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. 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 and wealthier population. Based on the outcomes, a monitoring and evaluation framework for the HPN sector has been designed in line with the strategies envisioned in Bangladesh's 7FYP.

<sup>10</sup> Bazlul Khondker (2022), "Assessing Synergies and Trade-Offs in SDGS: The case of Bangladesh.

Notable progress has also been reported for other health related indicators such as proportion of underweight among U-5 children; proportion of stunting among U5 children; and TB case detection rate.

Progress on the vaccination fronts have been mixed. In Bangladesh, despite a high vaccination rate, inequality still exists, and the country is still lagging in fulfilling the targets related to the indicators. Districts and rural-urban divisions experience significant differences. Around 79 percent of urban children in Bangladesh have received all of the recommended vaccinations, which is lower than the average for many other comparator countries. Almost 1 percent of children living in urban areas have never been vaccinated, and seven out of eleven city corporations had FVC rates lower than 80 percent. Finding missing children or school dropouts can be especially challenging in urban slum areas with high levels of internal migration.

Another major achievement during the 7FYP is the approval of the 4th Health, Population and Nutrition Sector Programme (4th HPNSP). The Government approved the 4th HPNSP in March 2017 for implementation during January 2017 – June 2022 with an estimated cost of USD 14.7 billion, 84% of which will be financed from Government's own resources.

Progress has also been reported for universal health care (UHC). The 4th HPNSP is aligned to the goal of achieving UHC by 2030, which highlights the right of every citizen to gain access to quality health care (whether these are obtained from the public or private) without incurring economic hardship. WHO in its Progress Review Report on SDGs (2019) assessed that Bangladesh achieved a score of 54 percent on a UHC index of essential health services, which was 50 percent in 2017. Based on the outcomes, a monitoring and evaluation framework for the HPN sector has been designed in line with the strategies envisioned in Bangladesh's 7FYP.

The progress of the nutrition sub-sector has been mixed in 7FYP. The proportion of underweight among children under five was around 22 percent in 2020 which is close to the target of 20. The proportion of children under five (i.e., 65%) who are exclusively breastfed has met the target successfully. But the proportion of stunting among under 5 children has been found still lagging and much attention is needed there. Bangladesh's regular immunization schedule, which targets 3.8 million children and 6 million women annually, includes vaccines for 10 diseases. 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.

#### 12.3 Objectives, Targets and Strategies under the 8FYP

#### 12.3.1 Health Programme in the 8FYP

During the 8FYP, Bangladesh aims to attain a number of targets in the road towards universal health coverage, consistent with the proposed major targets under the proposed UN Sustainable Development Goals (SDG) framework. Promoting and sustaining health and nutrition along with containing population growth are priorities in the human development strategy. Vision 2041 envisions a middle-income Bangladesh with drastic reduction in poverty and with conditions that allows individuals to reach and maintain the highest attainable level of health. It incorporates appropriate strategies and activities for focused improvements in health service delivery for increasing access to, and quality of care and improving equity along with financial protection in order to meaningfully realize the objectives of universal health coverage (UHC) by 2030.

The goal is to ensure that all citizens enjoy health and well-being by expanding access to quality and equitable health care in a healthy environment.

The main objective is to build on existing achievements to improve equity, quality and efficiency with a view to gradually moving towards UHC and achieving the HNP related SDGs.

Past and ongoing programmes have promoted good health and nutrition while curbing population growth. In order to carry on with the progress achieved and address areas of deficiency, some of the specific targets for the HNP have been set under the 8FYP.

#### 12.3.2 Nutrition Programme in 8FYP

In Bangladesh both chronic and acute malnutrition levels are higher than the WHO's thresholds for public health emergencies, although there has been considerable progress in decreasing malnutrition, in particular undernutrition and micro nutrient deficiencies. Moreover, over nutrition due to life-style changes and intake of junk food is an emerging problem in urban areas as well, increasing the burden of NCDs such as obesity, diabetes and cardiovascular diseases. The key strategies and actions to be pursued during the 8FYP are continuation of nutrition service through regular government channels, micro-nutrient supplementation, treatment of severe acute malnutrition, strengthening BCC to promote good nutritional practices, coordination of nutrition activities across different sectors and mainstreaming gender into nutrition programming and promoting equity. Simultaneously, availability of adequate skilled human resources and nutrition logistics and commodities through improved supply chain management will be prioritized and ensured.

Although nutrition is intimately linked with the quality and quantity of food consumption, it is a multi-sectoral issue and thus requires multi-sectoral approach and multi-agency actions. More specifically, 8FYP identified critical roles of food, water and sanitation, food and agriculture, livestock and fisheries sectors for improving nutritional situation during the 8FYP.

#### 12.4 Assessment of Implementation Progress in Health over the Mid-Term

The 8FYP mid-term implementation assessment has been conducted on the basis of available official data (i.e. provided by the Ministry of Health), Preliminary report of Household Income and Expenditure Survey (HIES), 2022 and Sample Vital Registration Survey (SVRS), 2021 and Bangladesh Demographic and Health Survey, 2022.

The progress of the Health sector has been shown in Table 12.1. The data provided in Table 12.1 suggests that substantial improvement in implementation. Significant progress has been made for Under 5 mortality rate and Neonatal mortality rate. Given the trend it is expected that the targets agreed for these indicators will easily be attained by 2025.

Moreover, on the basis of achievements in 2022 against the targets set for 2025, the following indicators such as (i) prevalence of stunting among children under 5 years of age (%); (ii) prevalence of undernourishment (%); (iii) prevalence of malnutrition (wasting and overweight) among children under 5 years of age; (iv) life Expectancy at Birth; (v) total Fertility Rate (TFR) should be able to attain their respective targets.

Table 12.1: Progress in Healthcare Indicators during the Mid-term of the 8FYP

Performance Indicators	Baseline (Year)	Target (2022)	Actual 2022	Target (2025)
(i)	(iv)	(vi)	2022	(ix)
Maternal mortality ratio	165 (SVRS, 2019)	129	156	100
Proportion of births attended by skilled health personnel (%)	59 (MICS, 2019)	64.87	61.50 (SVRS)	72.00
Under-5 mortality rate	28.00 (SVRS, 2019)	27.60	31.00	27.00
Neonatal mortality rate	15.00 (SVRS, 2019)	14.60	17.00	14.00
Prevalence of stunting among children under 5 years of age (%)	28.0 (MICS 2019)	23.43	24.0 (BDHS)	20.0
Prevalence of undernourishment (%)	13.0 (FAO 2019)	12	11.4	10.5
Prevalence of malnutrition (wasting and overweight) among children under 5 years of age	Wasting: 9.8% Overweight: 2.4% (MICS 2019)	8.2 1.6	11.0 (BDHS)	7.0% 1.0%
Life Expectancy at Birth	72.6 (SVRS, 2019)	73.27	72.4	74.00
Total Fertility Rate (TFR)	2.04 (SVRS, 2019)	2.02	2.15	2.00
Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	77.4% (MICS 2019)	78.5%	62.8% (SVRS)	80%
Contraceptive Prevalence Rate (%)	63.4 (SVRS, 2019)	69.9	63.8	75.0
Proportion of the target population (≤12 months old children) covered by all vaccines included in national programme	85.60% (BDHS 2017- 18)	93.35%	93.00%	98.00%
Proportion of births in health facilities by wealth quintiles (ratio of lowest and highest quintiles)	1:3.00 (BDHS 2017- 18)	1:2.14	1:2.00	1:1.50
Tuberculosis incidence per 100,000 population	221 (WHO 2019)	150	221	112
Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	21.6% (WHO, 2019)	18.6%	25.5% (SVRS)	16.8%

Source: MEFWD

It is revealed that good progress has been made in some of the indicators in health sector. In particular, targets set for 2022 have already been achieved for the following indicators: (i) proportion of births attended by skilled health personnel; (ii) under 5 mortality rate; (iii) neonatal mortality rate; (iv) prevalence of stunting among children under 5 years of age; (v) prevalence of undernourishment; (vi) proportion of women of reproductive age (aged 15−49 years) who have their need for family planning satisfied with modern methods; (vii) contraceptive prevalence Rate; and (viii) proportion of the target population (≤12 months old children) covered by all vaccines included in national programme. Progress has also been satisfactory for the indicator - mortality rate attributed to

cardiovascular disease, cancer, diabetes or chronic respiratory disease. On the other hand, progress has largely been unsatisfactory for the indicators – tuberculosis incidence per 100,000 population.

One area of concern is the low public spending on health sector. The health sector budget as a share of GDP has remained flat at around 07-0.8% of GDP (box 12.1). While revenue constraints are the main reason for this, the sector spending has also been limited by capacity constraints as indicated by the falling share of total spending.

# Box 12.1 Low Health Sector Budget

Low budget of the health sector is a historical concern is Bangladesh. Bangladesh has failed to allocate an adequate budget (i.e. around 3 percent of GDP) for the health sector. The allocation has remained less than 1 percent



of GDP. Soon after the Pandemic year (i.e. 2021) it went slightly up to 0.89 per cent of GDP but again fell around 0.8 percent in 2022. Low budget allocation has serious implications on the health budget of an individual in Bangladesh – as reflected in high (and increasing) out of pocket expenses on health care.

Related to low public health spending and the absence of health insurance schemes in Bangladesh is the large outof-pocket spending on healthcare (box 12.2). Health financing and health insurance issues require greater policy attention.





Low budget allocation has serious implications on the health budget of an individual in Bangladesh – as reflected in high (and increasing) out of pocket expenses on health care. Out of pocket expenses of 72 percent on health care expenses is very high. Among the South Asian countries Bangladesh's position is second only after Afghanistan. This also is an indicator of high inequality in healthcare services and a cause of poverty and vulnerability.

MICS for 2022 or for a recent year are not available. The BDHS 2022 data has thus been used to assess the progress of the nutrition sub-sector. Good progress has been achieved for the indicator 'the proportion of stunting among children under five children'. The proportion reduced to 24% compared to the base value of 28%. Some progress has also been achieved for vaccination rate (i.e. 84% in 2022 compared to base value of 86%).

The review also looked into the calorie intake data of HIES 2022. The overall calorie intake per capita per day is 2393.0 K.cal in 2022, rising from 2210.4 K.cal in 2016 and 2318.3 K.cal in 2010. Per capital consumption of nutritious food items (i.e. fish, meat, milk and milk products, and fruits) has also increased in 2022 compared

to 2016 (HIES 2022). Such developments in calorie intake and food consumption suggest improvement in the nutrition front.

MEFWD is working to improve the health services through taking various initiatives updating medical/dental/paramedical curriculum, formulating laws for the establishment of nursing/paramedical education board and enhancing research capacities of medical personnel. The number of medical university is increased to 05 in FY 2022 from 03 in FY 2020 and medical college from 37 to 38 to promote postgraduate education with a focus to establish a medical university in every division of the country. Formulation of law for the establishment of medical accreditation council is in the process. Under Ministry of Science and Technology, Bangladesh Atomic Energy Commission is providing nuclear medical diagnosis and treatment for many years. At this moment there are 22 Institute of Nuclear Medicine & Allied Sciences (INMAS) and one National Institute of Nuclear Medicine & Allied Sciences (NINMAS) in the premises of 23 Medical College Hospitals situated in different areas of Bangladesh. In the past few years the scope and quality of nuclear medical services have been increased significantly in all these institutes. It has been possible to save huge foreign currency providing modern medical services to many patients who usually opt for foreign treatment.

# B. Population

Bangladesh secured major progress in managing its population since independence reflected in sharply lower total fertility rate and a huge slowdown in the rate of growth of population. This progress has been a major contributor to the increase in per capita income and the reduction in poverty. The changing population dynamics has also contributed to the evolution of the demographic dividend resulting from a sharp decline in the dependency ratio and a growing share of the working age population. This progress continued during the 6th and 7th Five Year Plans.

# 12.5 Assessment of Progress in the Population Sub-sector

The annual average growth rate of the population has decreased during the period of the 7FYP. 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

The 2022 census revealed impressive progress in population management. The TFR sharply decreased to 2.3, the population growth rate fell to 1.2 percent, and the life expectancy rose to 69 years<sup>11</sup>. The infant mortality rate significantly decreased to 39. 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 in Bangladesh.

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

Table 12.3: Trend of Population over Time

<sup>11</sup> Population and Housing Census 2022

Indicator name/time	1974	1981	1991	2001	2011	2022
Population growth		21.88	22.03	16.97	15.83	14.66
(percent)						
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, BBS

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 7FYP 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.

According to the 8FYP, harnessing the demographic dividend with the window of opportunity depends on time bound and adequate investment three identified areas. They are

- (i) Bangladesh must at least invest 2 per cent of GDP on Health from existing level of less than 1 per cent of GDP within the 8FYP period.
- (ii) Bangladesh must invest in social protection should be increased to 2 per cent of GDP by the end of 8FYP from the current 1.2 per cent of GDP (excluding civil service pensions). A large part of the additional allocation (i.e. 0.8 per cent of GDP) should go to Child focused social protection programmes.
- (iii) Bangladesh must increase the investment in education from 2.5 per cent of GDP in FY2019 to at least 3.5 per cent by the end of 8FYP.

Given that the progress in raising required investments on the above three areas are lagging, reaping the full benefit of the demographic dividend will be a challenge.

#### C. Safe Water and Sanitation

In a densely populated developing country like Bangladesh access to safe drinking water and basic sanitation facilities is crucial for protecting public health. GOB has duly recognised their importance and accordingly has taken numerous initiatives to improve the water, sanitation, and hygiene (WASH) sector during the 7FYP.

The "National Policy for Safe Water Supply and Sanitation" which was formulated in 1998 has been updated with the revised Water Supply and Sanitation national strategy in 2014. Another revision was done in 2021. Moreover, GOB adopted the Water Supply and Sanitation Sector Development Plan (FY 2011-25) with a view to further strengthening the sector. The strategies taken during the 7FYP period are aligned with the commitment to ensure universal access to safe water, sanitation, and hygiene facilities and as well to achieve the SDG 6 targets.

#### 12.6. Progress under the 7FYP

During the 7FYP period, the country continued to progress in ensuring access to safe drinking water. At the national level, in 2020 more than 98 percent of the population has access to safe drinking water, increasing from

97.7 percent in 2015. Access to safe water for the urban areas increased from 99.1 percent in 2015 to 99.7 percent in 2020, while in rural areas it reached 97.4 percent in 2020 from 97 percent in 2015 implying only marginal improvements in both of these areas. However, the 7FYP target of reaching 100 percent population with access to safe drinking water was not achieved.

The water supply system in rural areas differs from urban areas in terms of the source of water, treatment, and distribution. One of the key concerns with rural water supply was the presence of arsenic in the groundwater leading to a decrease in safe water supply coverage. The Government implemented various projects between 2016 and 2020 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 most affected.<sup>12</sup>

According to the HIES 2022 data about 92.32 percent of the population has access to improved sanitation nationally (Figure 12.1) with some variations between the rural and urban populations in accessing improved sanitation. In urban areas, 95.31 percent of the population has access to improved sanitation, the percentage is 90.91 for the rural population.

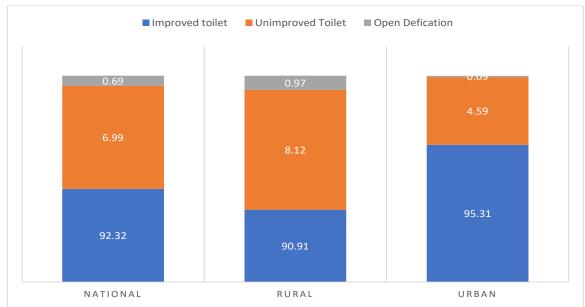


Figure 12.1: Percentage of Population with Different Types of Toilet Facilities, 2022

Source: HIES 2022, BBS.

#### 12.7 Strategies under the 8FYP

Given that progress in access to safe water and sanitation has been satisfactory, the strategies for 8FYP aim to improve the coverage and attain the remaining unfinished agenda. More specifically, 8FYP seeks to achieve the following objectives:

 During 8FYP, sustainable use and availability of safe water for drinking and sanitation purposes will be ensured. Initiatives will be undertaken to encourage rainwater harvesting where feasible. Besides, increasing storage in existing water retention bodies should be promoted.

<sup>12</sup> The WHO guideline value for arsenic in drinking water is 10 micrograms per litre (10 µg/L), which is also known as 10 parts per billion (10 ppb).

- Maintaining water quality for health, livelihoods and ecosystems is a key goal under 8FYP. This involves
  both protection of environmentally valuable and sensitive areas and the prevention of pollution by
  enhanced treatment. Urban drinking water and sanitation authorities are key actors in implementing
  proper interventions to ensure the quality of freshwater.
- Moreover, 8FYP will undertake institutional reforms to promote the development of strong local
  government institutions (LGIs) and will invest heavily in critical urban services like water supply, drainage,
  sanitation and waste management. In particular, the access to safe water and sanitation will be enhanced
  in both urban and rural areas to improve health and fight the COVID-19 infection.

# 12.8 Assessment of implementation Progress over the Mid-Term

The targets set for safe water and sanitation in the 8FYP such as (i) proportion of population using safely managed drinking water services; and (ii) proportion of population using safely managed sanitation services have already been achieved in 2022. More specifically, in 2022 around 77 percent of the population are using safely managed drinking water services against the target of 55 percent. Similarly, in 2022 more than 92 percent of the population are using safely managed sanitation services against the target of 70 percent.

Table 12.4: Progress in Water and Sanitation during 8FYP

Performance Indicators	Baseline (Year)	Target (2022)	Actual 2022	Target (2025)
(i)	(iv)	(vi)		(ix)
Proportion of population using safely managed drinking water services	National: 42.6% Urban: 37.9% Rural: 44.0%	55%	76.81	75%
Proportion of population using safely managed sanitation services	(MICS 2019)  National: 64.4  Urban: 64.7  Rural: 64.3  (MICS 2019)	70%	92.32	80%
Proportion of transboundary basin area with an operational arrangement for water cooperation	38% (JRC, 2018)	40%		41%

Source: 8FYP and HIES 2022.

In order address the arsenic presence in many tube wells in the country, GOB has taken several interventions, including awareness, arsenic test, providing alternative option for safe drinking water. In a study, conducted jointly by DPHE and JICA revealed that 19 million people needs safe water option. Some 98.5% of households have access to improved source of drinking water, with a difference between rural and urban households. However, only 43% of the population lives in an area where the improved drinking water source is located on the premises. Previously, planning, and public sector service delivery of safe water facilities were dominated by supply-driven, which often did not respond to appropriate needs. However, the situation has improved gradually over the past few years. The DPHE has introduced the demand-based projects with the assistance from the UNICEF, the World Bank and the Danida, and in coordination with Upazila Parishad and Union Parishad for distribution and selection of the appropriate water points.

# 12.9 Emerging Gaps and Challenges in Health, Population and Safe Water and Sanitation

Health sector (i.e. including safe water and sanitation) in Bangladesh has been facing wide range of challenges emanating from demographic dynamics in age stratification, demand-supply situation due to income change, unabated rural-urban migration and rapidly increasing urban population, epidemiological changes, and changes in medical technology, research and innovations, etc. Challenges also remain with regard to some unfinished agenda of the SDGs (e.g., reducing MMR, NMR). The main challenges are:

Low and Unbalanced Budgetary allocation: Even after Covid-19, the health sector has remained underfunded. The primary care sector is being neglected in favour of expanding the tertiary care sector, which includes hospitals and intensive care units, in the current budget. About 25 percent of Bangladesh's health care budget goes toward primary care, 39 percent toward secondary care, and 36 percent toward tertiary care.

High out-of-pocket expenditure: GOB pays for only around 23 percent of total health care costs of a citizen. Bangladesh has the second highest out-of-pocket expenditure (i.e. 72%) in the South Asian region. Public hospitals offer low-cost care, but their inadequate quality and inefficient administration leave much to be desired. 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 (for lower income threshold), or 25 percent (for upper income threshold) is considered hazardous under the Sustainable Development Goals (SDG) monitoring framework.

Expanding non-communicable diseases: Non-communicable diseases like diabetes, cardiovascular diseases, and cancer, which are now the main causes of morbidity and mortality, are reasons for emerging 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 Data: Another major issue is the lack of yearly data on the SDGs' output/outcome level metrics. 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 embedded in the healthcare system. Higher income people stay clear of government hospitals due to inefficient administration, corruption, and difficult access. The 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. 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 resources. Lack of coordination across the ministries in the areas of health service delivery, coverage issues constituted significant obstacles to ensuring the 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. 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 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.

Urban slum areas: Overcrowding, lack of infrastructure, waterlogging, and poor living conditions are the key characteristics of the Urban slums in Bangladesh. 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. Moreover, the pandemic has led to an increase in waste generation and management issues in urban slums.

# 12.10 The Way Forward

Increase the budgetary allocation: The inherent vulnerability of the Bangladeshi public health system has been exposed due to the onslaught of COVID-19. In particular, the pandemic exposed the deplorable condition of the district and upazila-level government-run health facilities. In order to attain the targets of the health sector, higher budgetary resources are required.

Reducing the out-of-pocket expenditure: There is an inverse association between the healthcare budget and out-of-pocket expenses. It is argued that when the budgetary allocation is increased to provide quality services, household's health expenditures is decreased. The introduction of the health insurance scheme may also mitigate this issue but implementing social health insurance in Bangladesh, would not be an easy task.

Strengthening the data system: 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 Bangladesh 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.

Emphasize lowering of NCDs: Although 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.

Improving maternal, neonatal, child and reproductive & adolescent health: Steps should be taken to encourage childbirth in hospitals/health centers under the supervision of professionals 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. 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.

Aligning various national commitments for the WASH sector should be a policy priority: 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 8th 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 thus important to undertake a thorough assessment of the WASH commitments included in these documents and strategies to avoid duplication and improve implementations.

Mobilising the resources outlined in the Bangladesh Strategy Paper 2020-23 is needed for WASH interventions: The strategy paper indicated the 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. Timely implementation of the priority activities identified across medium and long-term responses should greatly boost the WASH sector. The Local Government Division should assess the progress made and pursue the necessary mobilisation of funds.

The 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 shocks. Thus, GoB should consider adopting climate-resilient WASH policies for coastal areas, hill tracts, and char areas.

Closing the spatial disparity in access to WASH services should be a policy priority: Despite impressive progress in many WASH indicators, some serious regional disparity in accessing WASH services remains. For instance, nearly 32 percent of people in Sylhet Division had access to E. coli-free water, in contrast to 72 percent in Rangpur Division, as per MICS 2019 data. This kind of regional disparity often has spillover effects on the households' health, education, and income. Moreover, such regional disparities undermine the country's aim of achieving inclusive growth. Hence, it is important to adopt a well-coordinated approach to identify the underserved and un-served areas and take necessary policy actions to eliminate the spatial disparity in accessing WASH services.

For urban slum areas, proper implementation of community water points and sanitation blocks are needed: In order to address the WASH challenges faced by urban slum communities, the 8FYP recommended establishing community water points and sanitation blocks, which will be maintained by community-based organisations. The GoB may collaborate 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.

# CHAPTER 13 GENDER AND SOCIAL INEQUALITY

# 13.1 Development Context

Bangladesh has been striving to achieve inclusive economic expansion and broad based social and human development. Women constitute fifty percent of Bangladesh's population. Thus, inclusive economic expansion and broad based social and human development can only be achieved if conditions are right for gender equality in the labour market (i.e., participation, decent jobs, and wage etc.), access to resources and opportunities, and decision-making process. Furthermore, it also require elimination of structural and institutional barriers against women.

Considering the importance of gender equality on the one hand and identification of barriers to achieve equality, all previous five-year plans (i.e., 6FYP and 7FYP) advocated strategies to reduce inequality and remove barriers. Accordingly, a major objective of the 7FYP was to provide equal rights and opportunities to all men and women within the country. Similar attention on gender equity and empowerment has also been attached in the currently implemented 8FYP. To ensure that women have equal rights, the 8FYP advocates policies and initiatives that would expand women's access to resources and opportunities, enhance their capacities, and eliminate structural and institutional barriers. Moreover, the 8FYP emphasizes on elimination of women and girls' extreme poverty, ensuring social security, social equity by developing them as resources and harnessing their full potential.

All plans including the 8FYP recognised that 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.

Finally, the 8FYP emphasizes that 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.

This chapter briefly discusses progress made in promoting gender equality under the 7FYP, highlights the objectives and strategies under the 8FYP, and assesses progress made so far as of the mid-term of the 8FYP.

#### 13.2 Progress under the 7FYP

The core targets for gender equality set in the 7FYP included:

- Female to male ratio in tertiary education to be raised from current 70 percent to 100 percent
- The ratio of literate female to male for age group 20-24 to be raised to 100 percent from the current 86 percent
- Encourage female enrolment in technical and vocational education
- Reduce or maintain the current income inequality of 0.45
- Spending on Social Protection as a share of GDP to be increased to 2.3% of GDP

To achieve these targets, the 7FYP outlined an implementation plan consisting of 4 strategic objectives: (i) Improve women's human capabilities; (ii) Increase women's economic benefits; (iii) Enhance women's voice and agency; and (iv) Create an enabling environment for women's advancement. These were backed by providing policy and legal framework and implementing by using gender responsive budgeting (GRB).

The 7FYP end evaluation concluded that Bangladesh is on track in achieving greater gender parity with a need for increased effort in ensuring safety of women and children. Notwithstanding, despite progress, the unfinished agenda of the 7FYP was substantial. Accordingly one of the main objectives of the 8FYP gender strategy is to complete the unfinished agenda of the 7FYP.

# 13.3 Objectives, Targets and Strategies under the 8FYP

In line with the declaration of the Hon'ble Prime Minister Sheikh Hasina, Gender Equality (GE) has been identified as key to ensure equity and overcoming barrier to economic growth, poverty reduction and social development. The 8FYP emphasizes on elimination of women and girls' extreme poverty, ensuring social security, social equity by developing them as resources and harnessing their full potential. The gender vision of the 8FYP is that of establishing "a country where men and women will have equal opportunities and rights and women will be recognized as equal contributors in economic, social and political development". The mission is to ensure women's advancement as self-reliant human beings and reduce discriminatory barriers by taking both developmental and institutional measures. Gender equality and women's empowerment agenda for the 8FYP is based on pursuing strategies and actions that not only enhance women's capabilities and access to resources and opportunities but also address the barriers in structures and institutions and aim at changing social norms and protecting their rights are critical to integrate within the plan. Establishing monitoring, oversight and accountability mechanisms are equally important.

The framework for women's empowerment and gender equality of the 8FYP comprises of 5 areas of strategic objectives:

- 1. Improve women's human capabilities.
- 2. Increase women's economic participation and benefits.
- 3. Enhance women's voice and remove constraints on women's agency.
- 4. Enhance/strengthen enabling environment for achieving gender equality.
- 5. Introduce Mother and child benefit programme.

To implement these strategic objectives, the following eight action areas have been identified that would contribute to achieving the objectives targets of the 8FYP relating to gender equality.

- 1. Increase access to human development opportunities.
- 2. Enhance access to and control over diversified economic opportunities and resources.
- 3. Increase participation and decision making at all levels.
- 4. Establish conducive legal and regulatory environment for gender equality.
- 5. Provide Infrastructure and communication services for women.
- 6. Improve institutional capacity, accountability and oversight.
- 7. Increase protection and resilience from crisis and shocks.
- 8. Promote positive social norms.

#### 13.4 Assessment of implementation Progress over the Mid-Term of the 8FYP

Progress assessment of the 8FYP is based on the data available for the latest year from published public sources. The preliminary reports of both Labour Force Survey (LFS) 2022 and Household Income and Expenditure Survey (HIES) 2022 have been used in the implementation review and progress assessment.

The 8FYP targets and latest available indicators of progress are summarized in Table 13.1

Table 13.1: Progress in Gender and Inequality Indicators

Performance Indicators	Baseline (Year)	Target (2022)	Target (2025)	Actual 2022
(i)	(iv)	(vi)	(ix)	
Percentage of seats held by women at National Parliament	20.86 (2020)	26	35	20.86% (73 out of 350 seats)
Percentage of women aged 20-24 who were married before age 18	51.4 (MICS, BBS 2019)	42	30	2021: 32.4% 2022: 40.9%
Ratio of girls to boys in tertiary education	0.7	0.82	1.0	2021 {0.80 2022: 0.60)
Gender budget as percentage of total budget	30.82 (FD 2019)	32	35	33**
Percentage of female teachers at (a) primary, (b) secondary (c) tertiary education	a) b)25.60 c)27.23 (2019)	67 31 28.5	a)70 b)35 c)30	(a) Primary level (2021): 61.35% (b) Secondary level (2022): 30.66% (c) Tertiary education (2022): 29.79%
Proportion of women in managerial positions	11.4 (LFS 2016)	20	23	
Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	54.7 (FY 2015)	41	20	
Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence	6.2 (FY 2015)	4.8	3.0	
Proportion of time spent on unpaid domestic and care work, by sex	F: 23.6 M: 6.9 (FY 2017) LFS, BBS	F: 22.5% M: 8%	F: 20% M: 10%	F: 5.9 hours M: 0.9 hours
Growth rates of household expenditure or income per capita among a) the bottom 40 per cent of the population and b) the total population	a)7.7 b) 9.1 (2016)	-	a) 9.5 b) 9.3	

<sup>\*\*</sup> trend analysis

Source: BBS and other government sources

In 2022, the female to male ratio in tertiary education was 0.80, a little rise but still below the target. In order to meet the goal, the government must explore new avenues to enroll more women in college. Poverty, early marriage, violence against women, lack of security, travel limitations, paucity of sanitation facilities in educations institutions and the lack of female student hostels facilities are all factors that contribute to low female enrolment in higher education. As mentioned in 7FYP, the gender strategy and objectives of the 8FYP require adequate finance and personnel.

In Bangladesh, women held 20.3 percent of parliamentary seats in 2016 and 20.9 percent in 2020, suggesting a marginal improvement. Legal and constitutional provisions have encouraged women's participation in the National Parliament and municipal governments. The number of reserved seats for women was increased to 50 by the 14th Amendment. Further progress along the targets will depend upon the outcome of the forthcoming 2023 National Elections.

In 2009, Bangladesh enacted the Gender Responsive Budget (GRB), 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 8FYP gender budget goal for 2022 is 32 per cent of the overall budget – increase by about 1.1 percentage points from 30.86 per cent in 2020. Simple trend analysis with data suggests that the share of gender budget as percent of the total budget will be around 33 percent in 2022, which indicates an improvement.

To assess the progress in the indicators related to gender-based violence (i.e., there are two targets related to GBV) we require new surveys. Since no such surveys for recent years are available, it is not possible to assess progress at this stage<sup>13</sup>. Since the Government has put in place numerous measures to protect and empower women, it is likely to have positive impact on GBV in Bangladesh. Under the Domestic Violence Act of 2010, the "Domestic Violence (Protection and Preservation) Rules, 2013" ensures equal rights and prohibits all forms of discrimination in public life and in the government. Moreover, 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 is combating against sexual harassment in public, academic, and social media settings.

In addition, the Government has also adopted several policies and acts for the betterment of women and children, which are likely to have salutary effects on women and children welfare. These include Early Childhood Care and Development Policy, 2013; Housemaid Protection Policy, 2015; Child Marriage Prevention Act, 2017; Children Act, 2013; Prevention and Suppression of Human Trafficking Act, 2012; Hindu Marriage Registration Act, 2012 etc.

On the economic empowerment front improvement has been reported by LFS 2022. According to the LFS 2022, female labour force participation has increased to 42.7 per cent from 36.3 per cent in FY 2017. This is an encouraging development and bodes well for Bangladesh development prospects.

 Category
 2016-17
 2022

 Bangladesh
 58.2
 61.0

 Male
 80.6
 79.7

 Female
 36.3
 42.7

 Rural
 38.6
 50.9

31.0

23.6

Table 13.2: Female Labour Force Participation Rate (%)

Source: LFS 2022, BBS

Urban

Time use survey 2021 reported that female spent 5.9 hours on unpaid works compared with only 0.9 hours devoted by male. While in 2012 the respective hours were 5.9 for female and 1.5 for male. Thus, in comparison to 2012, time use pattern did not suggest any improvement.

Latest gender equality indicators demonstrate the government's strong commitment to eradicating gender disparity. According to The Global Gender Gap Report published by the World Economic Forum, Bangladesh has performed well to close the gender gap, 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 2022, Bangladesh placed first among seven South Asian countriess with a score of 0.714. 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.

<sup>13</sup> According to the Global Gender Gap Report 2022, 53.3 per cent of Bangladeshi women have faced gender-based violence.

Table 13.3: Comparative Performance of South Asian Countries in Gender Parity

Country	Overall Score										
	2016	2017	2018	2020	2021	2022					
Bangladesh	0.698	0.719	0.721	0.726	0.719	0.714					
Maldives	0.65	0.669	0.662	0.646	0.642	0.648					
India	0.683	0.669	0.665	0.668	0.625	0.629					
Sri Lanka	0.673	0.669	0.676	0.68	0.670	0.670					
Nepal	0.661	0.664	0.671	0.68	0.683	0.692					
Bhutan	0.642	0.638	0.638	0.635	0.639	0.637					
Pakistan	0.556	0.546	0.55	0.564	0.556	0.564					

Source: The Global Gender Gap Report 2016, 2017, 2018, 2020 and 2022, World Economic Forum

One surprising result is that, despite securing the top position among the South Asian nations, Bangladesh's overall score in 2022 has fallen from 0.726 in 2020 to 0.714 in 2022. Disaggregating the gender ranking by sub-indices shows that Bangladesh ranked first in South Asia for just one of the four sub-indices (political empowerment). In other three sub-indicators Bangladesh's performance has been mixed and weaker compared to 2020 scores (Figure 13.1).

Figure 13.1: Bangladesh' Performance in GGGR Subindices in 2022

0.4 0.2			Ш,	Ⅲ,	Ш.			<b>1.II.</b>
Ū	Banglade sh	Nepal	Sri Lanka	Maldives	Bhutan	India	Pakistan	Afghanis tan
■ Score Overall	0.714	0.692	0.67	0.648	0.637	0.629	0.564	0.435
Score Economic Participation and Opportunity	0.427	0.641	0.556	0.531	0.537	0.35	0.331	0.176
■ Score Educational Attainment	0.923	0.916	0.988	0.984	0.955	0.961	0.825	0.482
■ Score Health and Survival	0.962	0.965	0.98	0.956	0.962	0.937	0.944	0.952
■ Score Political Empowerment	0.546	0.247	0.157	0.121	0.093	0.267	0.156	0.132

Source: The Global Gender Gap Report 2022, World Economic Forum

Based on the latest available data for the indicators and the Government's commitment to empower women and children by implementing various measures and allocation of resource, it may be argued that the Government is broadly on track to achieve gender equality objectives and targets of the 8FYP in many areas. However, much more needs be done to enhance economic opportunities for women and safeguard women and children. Child marriage, abandonment, dowry, and GBV persists in Bangladesh due to antiquated social practices that favour boys over girls. The Eighth Five-Year Plan focuses 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.

# B. Social Inequality

In addition to women, vulnerable populations in Bangladesh encompasses different social groups such as children, elderly, ethnic and religious minorities, people with disabilities or physical impairments and low caste groups. All these heterogeneous groups are generally vulnerable to extreme poverty, natural disasters, and other external shocks that may impact their well-being. Likewise, their access to health and nutrition services is often restricted and their education participation and achievement tends to be low. Thus, the different needs and priorities of these social groups must be considered when planning to eradicate poverty and improve Human Resource Development. Empowerment through increased participation in the various spheres of a society is the most efficient and inclusive way to do so. This positively reinforces the development of a nation and strengthens economic growth both directly and indirectly, in addition to increasing social stability and the well-being of its citizens.

Based on the Constitution, the Government is committed to eliminating all kinds of social exclusion. This is a long-term agenda and continuous efforts are needed. For the Seventh Plan, goals and strategic approaches were identified for each of these groups, exploring the most efficient ways to include and empower them within society.

# 13.5 Progress under the 7FYP

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. Some progress was made in implementing the 7FYP strategy for increasing social inclusion. Progress with respect to beneficiary coverage increase and higher budgetary allocation has been satisfactory. Government spending on social protection has been increased from 2.02% in FY 2015 to 2.92% in FY 2020. As the lead ministry, Ministry of Social Welfare implemented several major policies and institutional reforms during the 7FYP. Some of the key reforms are:

- National Social Security Strategy: The Government of Bangladesh developed a National Social Security
  Strategy to ensure a comprehensive, integrated, and sustainable social security system in Bangladesh. The
  strategy aims to cover all segments of the population, including the elderly, disabled, and destitute.
- The government of Bangladesh developed a national policy and action plan for persons with disabilities to ensure their inclusion and participation in all aspects of social, economic, and cultural life. The policy and action plan include measures to provide education, employment, and healthcare services to persons with disabilities and ensure their access to public infrastructure and transportation.
- The Government introduced government to person payment (G2P) System by promoting agent banking to manage and disburse social protection allowances, which improved the efficiency and transparency of the program. This also reduced the risk of fraud and corruption in the distribution of allowances.
- Adoption of Rehabilitation and Alternative Employment of Beggary Population Implementation Policy, 2019.
- Adoption of Urban Social Development Program Implementation Policy, 2019.
- Reformation of Special Provisional Rules for Imprisoned Women Rules 2020.

# 13.6 Inclusion Strategies under the 8FYP

The Eighth Plan strategy for inclusion is based on implementation of the Constitution that provides equal rights and opportunities to all citizens irrespective of race, religion, caste, creed or profession. It will build on the positive lessons of experience of the Seventh Plan while focusing special attention on those areas where progress has been more limited.

Strategy for the Children: The vision regarding children's advancement and rights is that all children in Bangladesh, irrespective of gender and socio-economic background, should be ensured access to essential services, including social security, health care, nutrition and education, and enjoy protection from all forms of violence, abuse and exploitation, to be able to reach their full potential and realize their rights.

Strategy for Ethnic Population: The government is committed to ensuring socio-economic and political rights, fundamental human rights, and social security, while enabling tribal people to retain their social, cultural, and traditional identities. The ethnic communities of the CHT are ensured access to education, health care, food and nutrition, employment, and overseas employment, and protection of rights to land and other resources. They are ensured alternative farm and non-farm-based livelihoods. They are protected from hazards caused by climate change and other natural calamities. Additional finance will be allocated as a priority for the implementation of projects that contribute to the development of the people of the CHT and to bridging the development gap between the hills and the plains. A Perspective Plan will be formulated for the development of the CHT through a consultation process with key stakeholders. Special measures will be taken to preserve the characteristics of the tribal region and the cultural identity of the tribal groups.

Strategy for Dalits and Extreme Poor Groups: The vision of the Government is to erase the discrimination and exploitation faced by Dalit communities in Bangladesh, so that they can take their place as full citizens of the country.

Strategy for Sexual Minority Groups: The vision is a society where sexual minority groups can live with respect and dignity and enjoy tolerance and social justice. This includes an HIV/AIDS free society with zero new infections, zero discrimination and zero deaths.

Strategy for the disabled: Persons with disabilities are being brought into the mainstream of the development process. The Government will continue to promote and protect the rights of persons with disabilities to facilitate their full participation in mainstream social, political and cultural lives. These measure will continue to enable them to lead productive and meaningful lives through access to education, health care, food and nutrition, employment and protection and security in society. The Government is strongly committed to the advancement and rights of persons with disabilities by virtue of the Constitution, which enshrines equal rights and status for every citizen, and by signing the UN Convention on Rights of Persons with Disabilities and the Beijing Proclamation on the Full Participation and Equality with Disability in Asia and the Pacific Region.

Strategy for the Freedom Fighters: The 8FYP focuses on increasing social protection coverage to freedom fighters and their dependents, preserving the history and memories of the great liberation war, constructing monuments and war memorials and preparing documentaries based on liberation war.

#### 13.7 Assessment of implementation Progress over the Mid-Term of the 8FYP

Bangladesh has made efforts to expand its social safety net programs to reduce poverty and inequality in the country. The government has allocated a significant amount of its budget for social safety net programs (Table 13.4).

Table: 13.4: Proportion of Government Expenditure on Services as a Proportion of Total Government Expenditure

Sector of Expenditure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Social Protection	14.99	13.6	13.28	14.5	14.21	16.83	17.83

Source: NSSS

As the Lead, Ministry of Social Welfare has taken several initiatives for achieving the targets related to the social protection underlying in the 8FYP. The Major progress of the ministry during the 8FYP are described below (Table 13.5):

Table 13.5: Progress of Social Safety Net Programmes under the MOSW during the 8FYP

Performance indicators	FY20 (baseline)	FY21 (Target)	FY22 (actual)	FY23 (Target)	FY24 (Target)	FY25 (Target)	Comments
Enhanced Social Protection System Allocation in view of COVID-19	1.2%		3.01%	2.55%	-	2.00%	Percentage of total social safety net expenditure out of GDP
Reform the SSS by ensuring more efficient and effective use of resources, strengthened delivery systems and progress towards a more inclusive form of Social Security.	a) 7745000 b) 1169000	a) 8850000 b) 8850000	a) 10414042 b) 10414042	a) 10781042 b) 10781042	a) 13235853 b) 13235853	a) 14857507 b) 14857507	a) Number of Total Beneficiaries of Programmes Registered under MIS; b) The number of Social Safety Net Beneficiaries received their allowance payment through EFT in their mobile wallet or Agent Bank Account.
Strengthen the implementation of NSSS	(a) 180 (b) –	(a) 820 (b) –	(a) – (b) –	(a) 202 (b) 3	(a) 12660 (b) 4	(a) 12660 (b) 4	a) Increasing Number of Human Resources at DSS; b) Number of Updated Manual of Programme.
Design a universal scheme invoking higher than average transfer amount for the severely disabled persons	750	750	750	850	1000	1100	Per Person Per Month Allowance in BDT for Disability Allowance.
Expand social protection system for disabled persons focusing on the life cycle schemes.	a) 1545000 b) 100000	a) 1800000 b) 100000	a) 2080000 b) 100000	a) 2365000 b) 100000	a) 2600000 b) 100000	a) 3000000 b) 100000	a) The number of beneficiaries of Disabled Allowance. b) The number of beneficiaries of Education Stipend Program for Students with Disabilities.
Establish/ expand an adult disability benefit for all those aged 19-60 with a severe disability	350889	410000	457889	500889	557889	637889	The number of severely disabled beneficiaries of Disabled Allowance.
Developing Social Insurance products.	-	-	-	-	-	-	The Universal Pension Management Act 2022 was gazette on January 2023

Performance	FY20	FY21	FY22	FY23	FY24	FY25	Comments
indicators	(baseline)	(Target)	(actual)	(Target)	(Target)	(Target)	
Increase the number of recipients of social welfare/ safety net allocations after any disaster.	-	262	262	262	350	495	Number of Upazila covered under 100% coverage of old age allowance, Widow allowance and disability allowance.
Expansion and strengthening of the one stop crisis centers to serve the affected women	(a) 300 (b)	(a) 300 (b) -	(a) 300 (b) -	(a) 300 (b) 20%	(a) 300 (b) 50%	(a) 300 (b) 100%	a) Number of Seat Capacity of Safe Home; b) Project Implementation Rate of "Government Transit Shelter ome".
Provide Dalit households and other disadvantaged communities preferential access to social security programs	84629	84629	84629	77677	84629	93091	Number of marginalized Beneficiaries of allowance, stipend and training program
Introduce provisions for skill building of sex workers and transgender who prefer to opt out of sex work and build their lives around safer occupations in the form of either small entrepreneurship or small cooperative societies.	a) 600 b) 1920	a) Number of Inmate Receiving Skill Development Training in Rehabilitation and Training Centre for Socially Handicapped Girls; b) Number of Hijra Beneficiaries under Training program of Livelihood Development Program for the Hijras Community.					
Expansion of integrated education programme for visually impaired children, existing institutions for hearing impaired and mentally retarded children will be expanded.	a) 420 b) 371 c) 171	a) 456 b) 267 c) 179	a) 440 b) 267 c) 182	a) 447 b) 272 c) 192	a) 453 b) 275 c) 195	a) 442 b) 281 c) 189	a) The number of visually impaired students enrolled in Integrated Education Programs and Government Schools. b) Number of Hearing-impaired students are enrolled in Government Schools for the Hearing Impaired. c) Total Number of Mentally Disabled Students enrolled per year in Government Schools for the Mentally Disabled and Services recipient of NDD Trust.

Performance indicators	FY20 (baseline)	FY21 (Target)	FY22 (actual)	FY23 (Target)	FY24 (Target)	FY25 (Target)	Comments
Establish new institutions to provide access to more children with disabilities at primary, secondary and tertiary levels.	(a) 1855 (b) 50	(a) 1855 (b) 50	(a) 1855 (b) 68	(a) 1855 (b) 70	(a) 1855 (b) 70	(a) 1855 (b) 70	a) Number of Total Enroll Visually, Mentally and Hearing-impaired Students in Various Institutions (Integrated Education Centre, PHT, School for Blind, Hearing Impaired and mentally Disabled) of Department of Social Services. b) Number of Courses Participants of Bachelor of Special Education & Master of Special Education courses for PWD and Non-PWDs offered by National Special Education center.
Provide additional support to recipients of Disability Benefit by ensuring access to vocational education and small business schemes and eliminating discrimination in the labor market.	a) 37 b) 417	a) 70 b) 438	a) 110 b) 414	a) 110 b) 410	a) 120 b) 430	a) 124 b) 450	a) Number of Beneficiaries of Training and job placement service for PWDs by ERCPH. b) Number of Beneficiaries of six vocational training centers run by the Department of Social Services for orphans & PWDs.

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. Currently, the Ministry of Social Welfare pays a monthly disability stipend of 700 Tk to more than 20 lakh disabled people. The Institute for Autism and Blind Children, Socially Disabled Adolescent Girls, and promotion services for opportunities for girls with impairments are a few particular disability programs. Over time the number of beneficiaries under the programs has increased especially for the allowance for the financially insolvent disabled and service center for disabled people. In 2022-23, more than fifty percent disabled people are under the coverage of the disabled allowance than in 2018-19.

Table 13.6: Trend of the Coverage of Social Protection Programmes for Persons with Disability

Programmes	Beneficiaries in lakh ( Revised Budget)							
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
Allowances for the financially insolvent disabled	8.25	10	18	18	20.08	23.65		
Stipend for disabled students	0.8	0.9	1	1	1	1		
Grants for the schools for the disabled	0.35	0.33	0.35	0.4	0.11	0.12		
Fund for the welfare of acid burnt women and disabled	0.3	0.33	0.33	0.33	0.06	0.01		
Institute of pediatric neuro disorder and autism in BSMMU	0.02	-	-	0.11	0.21	0.18		
Trust for the protection of persons with neurodevelopmental disabilities	0	0	0	3.13	3.00	3.15		
Welfare trust for physical disabilities	0	0	0	0.07	0.09	0.09		
Service and assistance center for disabled	3.07	3.76	3.47	2.5	12	12		

Source: Finance Division

The Bangladesh Shishu Academy (BSA) has been implementing the Early Learning for Child Development (Phase III) programme. Currently, 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 program aimed to assist 50,000 youngsters in FY2019–20. According to the prior project documentation, MoWCA ran almost 1,400 pre-primary schools for more than 41,000 kids ages 5 and up, more than 500 child development centers for 16550 kids ages 4 and up, and 20 daycare centers for 400 kids ages 3 to 5 under the ELCD project. The project incorporates autism and other disabilities as a significant component (MoWCA, 2017).

The other child-related programmes and their coverages are listed in the table. 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.

The Reaching Out-of-School (ROSC) programme is an effort by the government of Bangladesh to give impoverished children aged 8 to 14 who were either unable to enroll in primary school or was forced to leave because of other obligations a second shot at education. The beneficiaries under the programme have also been increasing in number. The coverage of the street children rehabilitation programme, child development center and establishment of child day care center is almost 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 labor in Bangladesh and welfare facilities and skill development activities for workers have been launched, which are praiseworthy initiatives.

Table 13.7: Trend of the Coverage and Budgetary Allocation of Child Programmes

	Beneficiaries in lakh ( Revised Budget)							
Child programmes		2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	
Sheikh Russell Child Training and Rehabilitation Center	-	-	-	-	0.03	0.40	0.03	
Street Children Rehabilitation Program and CDC	0.02	0.02	0.02	0.02	0.02	0.02	0.01	
Welfare Fund for the Oppressed Women and Children and Fund for the Welfare of Burnt and Disabled	-	-	ı	0	0.33	0.06	0.01	
Child protection and child welfare	-	0	0	-	1.5	1.45	0.79	
H-Maternal, Neonatal, Child and Adolescent Health/ National Nutrition Services	400	400	656.32	614.87	688.22	473.77	735.76	
H-Maternal, Child, Reproductive and Adolescent Health	203.17	577.83	654.02	685.69	332.12	332.12	9.95	
Child Sensitive Social Protection in Bangladesh	0.01	-	-	1.5	0	1.55	1.76	
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 Paribar 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	1.00	

Source: Ministry of Finance

A major initiative is the reform of the Mother and Child Benefit Program that will have substantial positive effect on children and women (Box 13.1). Implementation is scheduled to start in FY2023.

# Box 13.1: Mother and Child Benefit Programme in FY 2022-23

The Ministry of Women and Children Affairs (MoWCA) has been operating two separate programmes with a view to reducing the prevalence of child malnutrition and supporting pregnant women and mothers: the Maternity Allowance Program (MA) and Allowances for Urban Low-income Lactating Mothers (LMA). MA was launched in 2007–2008 and LMA was launched in 2011-12. The MA and LMA work in both urban and rural settings respectively. In FY 2021–2022, the total budgetary allocation for MA and LMA were TK 7.6 billion and 2.8 billion, respectively. Together, these two programmes account for about 1% of the SSP budget. The total beneficiaries of the two programs have increased to 10.45 lac in 2022 (7.7 lac beneficiaries of MA and 2.75 lac beneficiaries of LMA programme). Under these programmes, a beneficiary mother gets a monthly transfer of TK800 for 36 months. Along with cash transfer, the programmes have a training component through which pregnant women are sensitized on a number of health and nutrition concerns pertaining to pregnancies and newborns, progression of pregnancy and danger signs, child delivery, and other social developmental aspects.

In accordance with the NSSS recommendation, the Government intends to combine the MA and LMA programmes under one broad intervention to be called the 'Mother and Child Benefit Program' (MCBP) for children aged 0-4 years. The programme officials confirmed that from FY 2022-23, the government will start to implement the MCBP across the country as the ongoing cycle of MA and LMA has already ended. Since the beneficiary selection of MCBP is done in each month on a rolling basis, whereas the allocation for the program is done at the beginning of the FY, the program officials do not feel any budget constraint right now. The main reason behind this is that the beneficiary selection on monthly basis enables the programme officials to use the allocation for one beneficiary to give the allowance to around 16 beneficiaries. However, as the number of beneficiaries might accumulate over time, the programme will need significantly higher allocation in the coming years. However, the target of the government to cover six million children under this scheme by 2026 reflects the government's commitment of allocating the necessary fund for the programme.

The government rolled out the much anticipated 'Universal Pension Scheme' on 17 August 2023 with an aim to bring all citizens aged above 18 under the coverage. The scheme mainly aims at bringing the growing elderly population of the country under a well-organised social safety net and provide them with a monthly allowance to support their daily expenses. All citizens aged between 18 and 50 years, including expatriate Bangladeshis, will qualify for the benefit. Four different schemes have been introduced— Progoti, Surokkha, Somota and Probash—to bring citizens from all walks of life under the pension facility. A 'National Pension Authority' has also been formed for better management and ensure proper service to the citizens of Bangladesh. This 'Universal Pension Scheme' will have multifaceted impact on achieving various SDG targets.

The Government also decided to enhance coverage of the two important cash transfer programmes – Old age allowance (OAA) and husband deserted and destitute women and widow allowance (HDDWWA). More specifically, the Government has adopted universal coverage to provide cash transfers to a wider group of citizens in higher poverty stricken Upazilas. In the first phase it extended to 112 Upazilas. In the next phase it will be extended to 150 Upazilas.

Ministry of Liberation War Affairs has taken various steps for promoting the spirit of liberation, i.e. construction of Zila Muktijjudha Complex, Upazila Muktijjudha Complex, Memorial Complex, Mass Graveyard, Mitrabahini Martyrs Monument. Besides, 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. 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 13.8). 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 13.8: Coverage of Social Protection Programmes for the Freedom Fighters

D.	Coverage (Persons in Lac/Man Month)							
Programs	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: Finance Division

To make the social safety net programmes more effective and inclusive, some policy draft for the implementation of the social safety net program has been initiated:

- 1. Amended draft of "Protection of Rights of Abandoned Children Act, 2022"- The "Protection of Rights of Abandoned Children Act, 2022" will require the Ministry of Social Welfare Bangladesh to establish procedures and mechanisms to identify and rescue abandoned children and to work with other government agencies to ensure they are placed and receive the necessary care.
- 2. Policy for Implementation of Financial Assistance Program for Patients with Cancer, Kidney, Liver Cirrhosis, Paralyzed by Stroke, Congenital Heart Disease and Thalassemia, 2019 (Revised) -The policy revision for the Financial Assistance Program for Patients with Cancer, Kidney, Liver Cirrhosis, Paralyzed

by Stroke, Congenital Heart Disease and Thalassemia, 2019 has a significant impact. It provides a clear framework for implementing financial assistance programs for patients with specific health conditions and aims to increase the amount of financial assistance provided to patients. However, effective policy implementation is vital, and the policy should be reviewed regularly to ensure it remains relevant and effective in addressing the population's needs.

- 3. Data Usage Policy of Persons with Disabilities-2021- The Data Usage Policy of Persons with Disabilities-2021 sets guidelines for the collection, storage, use, and sharing of data related to persons with disabilities to protect their privacy and ensure confidentiality. The Ministry of Social Welfare must ensure that any data it collects is collected and stored following the guidelines.
- 4. National Humanitarian Award Policy 2022- The National Humanitarian Award Policy 2022 can have a positive impact on the Ministry of Social Welfare in Bangladesh by recognizing and honoring individuals or organizations who have made significant contributions to the welfare of the people, providing guidelines and criteria for selecting recipients, increasing public trust and confidence, and providing a platform for the Ministry to showcase its initiatives and achievements.

# 13.8 Emerging Gaps

Bangladesh's performances to achieve gender parity and improving social cohesion has been impressive. However, despite progress, there is a substantial unfinished agenda.

#### The main challenges are:

- Effective implementation of social laws remains a major challenge. Despite the government's efforts, GBV prevails 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 prevalent. Key drivers of child marriages include poverty, insecurity, and lack of adequate incentive to engage in productive activities. Implementation of the Action Plan for Prevention of Child Marriage is a challenge. Early marriage has to be eliminated to eradicate early pregnancy and for the development of girls.
- 3. Universal and affordable health care for all, full vaccination coverage, universal access to family planning and reproductive health care services, maternity and neo natal care, reduction of maternal mortality, reduction of adolescent pregnancy are some of the key areas where further progress is needed. Ensuring all childbirth under trained personnel and at institutions, reduction of maternal mortality ratio are also priorities high. In addition, SRHR services for adolescents, reduction of healthcare expenditure, and awareness against taking services from unqualified persons need to be ensured. Reaching health and family planning services to the remote areas are critical.
- 4. Progress in the area of economic equality is still lagging. Despite progress during the 8FYP (i.e., 2022), the women's labor force participation rate still remains low by international norms. Moreover, significant drop in female labour for participation in urban areas in an emerging concern and challenge. When included in the labour market, women still face different forms of discrimination. Female workers are more prone to under-employment and wage and occupational gender gaps remain significant.
- 5. 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.

- 6. Financing gap for the implementation of NSSS in Bangladesh is significant, which include inadequate budget allocation, limited resources, inefficient utilization of funds, and insufficient coordination among stakeholders. The share of social security expenditure in both development and revenue budget is still insignificant considering the total development budget of Bangladesh.
- Institutional capacity to deliver social welfare services effectively is still a challenge. To provide efficient
  services, the necessary infrastructure, human resources, and information management systems need to be
  developed.
- 8. Lack of coordination among the service providers including Government agencies, NGOs, and Private sectors is a major constraint in implementing the social safety net programmes.
- Proper targeting of the beneficiaries of the social safety net programmes still remains as a challenge.

# 13.9 The Way Forward

Several areas of greater focus emerge from the above gaps.

Gender Based Violence (GBV): The government may formulate policies/strategies in line with the 'whole system' approach to prevent GBV. The whole system approach focuses on three important aspects that is prevention, provision and protection.

- A multisectoral approach should be considered to reduce the Violence Against Women and Girls (VAWG), which include the carrying out of law reform, including repeal or revision of discriminatory laws (if any); as well as the introduction of new laws.
- Strengthen capacity of all stakeholders/services providers dealing with VAWG with dedicated training programmes, digitization of data and statistics, and better co-ordination of the work of different agencies involved in tackling VAWG.
- 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.
- For financial empowerment of the women 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;
- Expand coverage of the social protection measures to household with children and marginalized 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);
- Actively address the barriers women face through the design and implementation of the CSSA and related laws';
- 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.

- To implement a results-based management system, strengthen program planning and design, promote transparency and accountability, and build trust with beneficiaries, capacity building of the implementing agencies is needed.
- Private sector companies can partner with the Government to improve the delivery and effectiveness of social protection programs, such as financial services, technology, skill development, and corporate social responsibility.
- Enhancing the service delivery by utilizing digital platforms such as mobile apps, web portals, and social
  media is crucial. Data analytics can be used to spot trends, measure outcomes, and improve program
  design. Artificial intelligence for needs assessment can find those who require the most assistance.
  Digital identity verification can help to decrease fraud and ensure that programs reach those who need
  them the most. Social media campaigns can reach a larger population and encourage people to use the
  organization's services.
- Reforming the electronic government-to-payment system to improve efficiency, transparency, and
  effectiveness of social protection programs in Bangladesh by strengthening institutional capacity,
  expanding access, and ensuring security and privacy needs to be done.
- Bangladesh needs to develop climate-resilient social protection programs to mitigate the impacts of climate change on vulnerable populations by targeting vulnerable populations, incorporating climate risk assessments, diversifying livelihoods, and promoting small business development and vocational training.
- The Government should promote digital financial literacy among beneficiaries by developing digital financial education programs, creating awareness campaigns, and partnering with financial institutions to provide training, support, and guidance.
- The Government needs to develop partnerships with employers to identify job openings and match
  qualified candidates with available positions, provide training and support to employers, offer internship
  programs, and provide assistive technology to help persons with disabilities overcome barriers to
  employment.
- Initiatives need to be taken to promote financial inclusion by supporting microfinance programs, developing innovative solutions, enhancing outreach, and expanding partnerships with other stakeholders.

# CHAPTER 14 ENVIRONMENT AND CLIMATE CHANGE

#### 14.1 Overview

Bangladesh has been successful in raising its per capita income and reducing poverty rates through sustained economic growth over the past decade. However, to achieve its long-term goal of becoming a high-income country by 2041, Bangladesh recognizes that it must focus on reconciling growth with environmental concerns. This would require finding a balance between economic aspirations and environmental and climate concerns, and reforming the economic systems that aided pollution, environmental degradation, climate risks, and disaster risks.

International experience suggests that although implementing environmental protection measures may seem costly in the short term, neglecting them could jeopardize sustained long-term economic growth due to ecosystem degradation such as land degradation, soil erosion, flooding, loss of land fertility, and health hazards resulting from air, water, and soil pollution. According to the Bangladesh Delta Plan 2100, at the macro level, moderate climate change's combined effects could cause an average loss of about 1.3% in GDP growth per year until FY2041. In 2010, the Bangladesh government and the World Bank collaborated on a study that showed climate-related disasters resulted in a loss of 0.5 to 1% of GDP annually due to damage to infrastructure, loss of livelihood, and forgone production. This loss is expected to increase unless steps are taken to address the negative impact of climate change and environmental degradation. Environmental hazards from both climate change and economic activities (namely, problems associated with poor air quality, water pollution, noise pollutions, poor waste management in urban areas, etc.) also have severe implications for public health, including the spread of disease and health hazards to pollution. Climate change can also lead to mass migration to urban centers resulting in low quality living conditions. As a result, it is important to make proactive investments to manage these issues and potential disruptions to achieve sound long-run economic performance.

In light of the above concerns, PP2041 accepted the concept of green growth and incorporated major quantitative indicators to measure progress with environmental management that is well integrated with the development process. The Eighth Five Year Plan similarly recognizes these challenges and aims to balance economic progress with environmental and disaster management concerns, with a specific focus on climate-resilient development pathway as envisioned in the Delta Plan 2100. The Plan also acknowledges Bangladesh's commitment to various international agreements and frameworks related to sustainable development, climate change, and disaster risk reduction. Failure to address environmental challenges could limit Bangladesh's ability to achieve its broader development goals. In addition to the Delta Plan, the government has developed a National Adaptation Programme of Action (NAPA) and a Climate Change Strategy and Action Plan (CCSAP) to address the challenges posed by climate change.

# 14.2 Progress with Environment, Forest, Climate Change and Disaster Management under the 7FYP

The Government of Bangladesh has incorporated environmental degradation and climate change in its medium-term planning process, with specific objectives and strategies for environmental protection and climate change. Policymakers at the highest level have become more serious about addressing this long-term challenge due to the global attention to climate change and the risks it poses to Bangladesh. The country now participates actively in global discussions on climate change and has enacted laws and regulations to protect the environment and mitigate the adverse effects of climate change. The 7FYP placed special emphasis on air and water pollution control, resulting in progress in managing air pollution from brick kilns and reducing water pollution from the leather industry. The country has also taken important steps to enhance forest and tree cover and improve biodiversity.

Implementation of this framework started under the 7FYP, building on the progress during the 6FYP. The most notable initiative was the adoption of the Bangladesh Delta Plan 2100 (BDP2100) in September 2018. The BDP2100 is a comprehensive strategy for managing the risks posed by the deltaic formation of the country along with the incidence of natural disasters and climate change. Implementation of the Delta Plan will help

reduce climate-related vulnerabilities, improving the prospects for sustained development and poverty reduction. Bangladesh is also committed to reducing GHG emissions through reducing deforestation and forest degradation and low carbon development and has prepared a National Adaptation Plan (NAP) to reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience.

Bangladesh has made exemplary progress in disaster management during the 7FYP. As a result of improved disaster readiness and response, well-functioning early warning systems and progress with disaster shelters and disaster reliefs, there has been a remarkable reduction in natural disaster-related fatalities and injuries. The government implemented the National Disaster Management Plan 2010-15, enacted the National Disaster Act in 2012, prepared Disaster Management Rules in 2015, and established the Ministry of Disaster Management and Relief in 2012, leading to a strategic shift from relief distribution to disaster readiness. This has resulted in better preparedness, early warning systems, and faster disaster response. Steps were also taken to upgrade disaster preparedness with a focus on minimizing disaster risks.

Due to limited forest land available for horizontal expansion, the Government of Bangladesh has placed emphasis on increasing tree coverage in areas outside of forests, known as tree outside forest (ToF) areas, which currently account for 22.37% of the country's total area. This approach offers multiple benefits, including enhanced biodiversity, climate change mitigation, and improved livelihoods for local communities. The national forest inventory conducted between 2016 and 2019 revealed that forest cover constitutes 12.8% of the country's total area, which corresponds to 14.1% of the country's land area. The field inventory indicated a growing stock (commercial wood volume) of 384 million cubic meters, a carbon stock of 1276 million tons (accounting for 5 carbon pools), a tree basal area of 4.52 square meters per hectare, and a seedling density of 1419 per hectare for the entire country. The forested area holds 22% of the country's carbon stock, and 66% of the growing stock originates from trees outside of forests (ToF). Further forest inventory will be conducted during the 8th five-year plan period to monitor progress and achievements.

Reducing Emission from Deforestation and Forest Degradation (REDD+) strategy (2026-2030) have been developed to reduce the deforestation and forest degradation through involving the forest dependent community in the forest resources management and conservation. The Bangladesh Wildlife Conservation Master Plan (2015-2030) have been developed to improve and conserve the wildlife habitat, wildlife and biodiversity. The protected area has been increased from 11.56% to about 19.78% of the forest land during the implementation period of the 7th five-year plan. This expansion aims to conserve wildlife and biodiversity. Around 28 co-management committees are involved in the protected areas for the wildlife and biodiversity conservation. Due importance has been given to conserving the Sundarbans and its biodiversity. Regular Spatial Monitoring and Reporting Tools (SMART) patrols have been conducted, involving community members in the protection of forest resources, wildlife, and biodiversity. The second tiger census, conducted during 2018-19, indicated an increase in the tiger population from 106 in 2015 to 114 in 2018.

During the 7th 5YP period, about 6,900 hectares of plantations were carried out in the degraded areas of the plain land Sal Forest. Additionally, approximately 24,463 hectares of plantations were conducted in the hill forest areas of Chittagong, Cox's Bazar, Sylhet, and Moulvibazar districts. These efforts aimed to increase forest cover and conserve biodiversity. In the same period, a total of 23,918 hectares of afforestation were undertaken to establish a green belt along coastal areas. This initiative was aimed at addressing climate change, reducing the impact of disasters, and enhancing the resilience of coastal communities to the effects of climate change. Between 2016 and 2020, roughly 8,037 kilometers of strip plantations were established along roadsides, embankments, and plodders as part of an effort to expand tree cover. Other initiatives, such as distributing seedlings for free among people to encourage plantation in homesteads and organizing tree fairs across the country during the monsoon season, were undertaken to motivate individuals to increase tree cover.

While Bangladesh is very well advanced on the natural disaster management front, despite all the noted efforts, the implementation of existing environmental laws and regulations still remains a difficult challenge due to capacity constraints in terms of human and financial resources. Water and air quality are deteriorating, and Bangladesh is ranked poorly in terms of forest coverage, protection of natural habitats, and overall environmental performance compared to other countries. These suggest that the challenges moving forward are immense for the country when it comes to environmental protection and climate change adaptation.

# 14.3 Environmental Strategies and Activities under the 8FYP

#### 14.3.1 Objectives and Medium-Term Targets

The 8FYP includes sustainable development targets and strategies relating to environment, climate change and forest management that will essentially draw on the long-term goals and strategies articulated in the PP2041. Based on that, the core targets for environmental management under the 8FYP are summarized in Table 14.1.

Table 14.1: Core Targets for Environmental Management during the 8FYP

Objectives	Targets	Base Year (2018)	Target (2025)
Increase wastewater treatment facilities	Per cent of urban centres with wastewater treatment facilities	N/A	50
Increase environmental	Core environmental spending (% of GDP)	1	1.5
spending	Spending by environment coordinating entity (% of GDP)	0.005	0.1
Strengthen environmental	Application of polluter pays principle (% of cases)	0	40
governance	Carbon tax (% of fuel prices)	0	5
Promote green growth	Green area for Dhaka-major cities (square meter/million people)	N/A	1-4
Strengthen disaster. management and readiness	Disaster risk reduction and management readiness (% of population)	N/A	50
A 11	Urban water bodies compliance with water quality standards (%)	0	50
Address air and water pollution	Air quality (annual average, μg/m3 PM 2.5)	86	60
Ensure proper drainage system and waste management	Per cent of cities flood-free, with proper drainage	0	45
Prevent/ reduce land degradation	Per cent of land degraded	18	12
Increase forest coverage	Area under forest cover (% of land) [base year 2015]	14.1	15.2
Enhance biodiversity conservation	Protection of Habitat and Biodiversity International Ranking	Bottom 5%	Top 50%
Improve EPI ranking	Environmental Performance Index International Ranking	Bottom 5%	Top 50%

Souce: 8FYP

# 14.3.2 Strategies, Policies and Programmes

To secure the medium-term targets, the 8FYP identified several strategies, policies and programmes. These are summarized in Box 14.1.

#### 14.4 Assessment of implementation Progress over the Mid-Term

In view of the difficulties of measuring outcome indicators of Table 14.1 in the short term, a broader assessment of implementation progress of the environment and climate change agenda against the sector specific objectives, targets, programmes, and policies. The 8FYP DRF targets for climate change, environmental management and disaster management and summary assessment of progress so far are summarized in Table 14.2

# Box 14.1: Environmental Strategies and Activities Under The 8th Plan

# 1. Adoption of Environmental Fiscal Reforms (EFR) for Sustainable Development

- Integrating Environment and Ecosystem Conservation and Climate Change Issues in Planning and Budgeting
- Increasing Resources for the Ministry of Environment, Forest and Climate Change
- Increased resources in the management of ecosystem and biodiversity conservation
- Taxation of Emission from Industrial Units
- Taxation of Industrial Water Pollution
- Developed Biosafety Policy and Biosafety guidelines.
- Reducing Subsidies for Fuel and Adopt Green Tax on Fossil Fuel Consumption
- Pricing Policies for Water, Sanitation and Solid Waste Management
- Introduction of Household Illegal Waste Dumping Charges
- Exploring Private Financing Options
- Taxation on Timber Extraction

#### 2. Administrative Reforms for Implementing Environmental Fiscal Reforms

- Coordinating NAP, BCCSAP, CIP and NDC with BDP 2100
- Mainstreaming EFR within Ministry of Finance (MoF)
- Improving the Capacity of MoEFCC
- Increasing the Role of LGIs
- Develop an "Water and Sanitation Regulatory Agency" (WASRA)
- 3. Other Environmental Institutional Reforms
- Increased Partnerships for MoEFCC
- Decentralization of Environmental Management

#### 4. Context-Specific Environmental and WASH Technologies/interventions

• This will involve mainly coastal areas, char areas, hill tracts, urban slums.

#### 5. Implementation of the Bangladesh Delta Plan 2100

- Establishment of a "Delta Wing" within the General Economics Division (GED) of the Bangladesh Planning Commission
- Establishment of a "Delta Fund" and the institutional framework

- Establishment of the "Delta Knowledge Hub" for hosting and offering intellectual support
- Develop and review new pricing policies for Water and Sewerage services.
- Form a high-powered committee to manage coordination and cooperation with the upper riparian countries.
- Form a team with ERD to pursue the US\$100 billion to LDCs for achieving SDGs.

# 6. Specific Activities to Improve Green Growth

- Promote Green Accounting and Green Budgeting
- Commitment to Renewable Energy- the Government plans to sharply increase the total generation of power from renewable sources.
- Decarbonization or A low-carbon economy (LCE)
- Improved Waste Management and Introduction of Circular Economy
- Cleaner coal- government will actively pursue the adoption of the cleanest form of technology for power generation.
- Expansion of Special Economic Zones with Effective Environmental Regulations
- Promoting Green Bricks
- Adoption and enforcement of Green Building Rating System and Low Carbon Construction Materials
- Introduction of Extended Producer Responsibility (EPR) Policy in Plastic Management:
- Blue Economy- Government will explore the potential of the Blue Economy through a sustainable mechanism.
- Promoting Green Technologies in the RMG Sector and promotion of green jobs and SMEs
- Reducing Overuse of Chemicals in Agriculture
- Drawing Lessons for an Effective Green Growth Strategy
- Increased Commitment to Green Transport System
- Supporting Eco-Tourism:
- Promoting sustainable production & consumption system in industries (SDG 12)

# Activities to be undertaken to address climate change

- Mobilizing Resources for Climate Change Trust Fund
- Utilizing the Green Climate Fund (GCF)
- Increased Oversight of the Climate Change Fund
- Formulation and Advancement of National Adaptation Plan (NAP) Process
- Technology Transfer on Adaptation and Mitigation
- Increased Commitment to Forestry and Biodiversity
- Improved Understanding of Climate Change in the Local Government
- Increased Partnership with the NGOs and Civil Society Actors
- Developing Gender-Inclusive Climate Change Response Framework
- Addressing Climate Change Induced Migration
- Gender Focus of Climate Action- ensure the women as a key change agent in promoting resilient livelihoods, drinking water and early warning systems.
- Governance of Climate Finance- capacity and role of parliament, IMED, and OAG will be enhanced in improving governance mechanism for climate finance.
- Improved Management of Water Pollution
- Controlling Noise Pollution
- Managing Solid Waste

Source: 8FYP

# Table 14.2: Assessment of Progress against 8FYP Targets

National Priority: Environment, Climate Change and Disaster Management
Outcome: The environment is preserved and prevented from degradation, and a disaster management strategy exists as
well as ensuring climate change adaptation and mitigation

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Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Actual	Remarks
Consumption of ozone depleting H-CFCs (Ozone Depleting Potential (ODP	65.35 (2016)	47.22	47.22	30.5	26.5	23.61	46.94 (2021)  Source: UN Environment Programme (UNEP)	Performance for 2021 is slightly better than targeted. Consumption level is also lower than the control limit.
Forest area as a proportion of total land area (based on periodic survey)	14.1 (2015)	14.4	14.6	14.8	15.0	15.2	14.2% Ministry of Environ- ment (2022)	A forest inventory including land cover mapping will be implemented by the Forest Department during 2023-2024 to monitor the forest cover and achievement of SDG indicators. SDGs requires the country's forest coverage to reach 16% and the country's tree coverage to 25% by the year 2030.
CO2 emissions (tonnes per capita)	0.53 (2019)		-	-	-	1.38	0.55 tonnes per capita (2021)  Source: "Our World in Data" based on the Global Carbon Project (2022)	In 2021, CO2 emissions for Bangladesh was recorded at 0.55 tonnes per capita. Bangladesh is well on track to achieve the target set for the end of the 8FYP.

Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Actual	Remarks
Coverage of protected areas in relation to marine areas	2.05 (2016- 17)	4.73	-	-	-	7.94	2.35% (2022)	two marine protected areas include areas about 348100 hectares which is 2.35% in relation to marine areas (from Forest Department). This needs to add the data from Department of Fishery to get the complete result for the indicator.
Percentage of wetland and natural sanctuaries maintained	1.51 (2014- 15)	1.70	1.85	2.0	2.10	2.20	No Data Available	According to the Forest Department, as of 2021, the country has 17 protected areas, including national parks and wildlife sanctuaries. These protected areas cover approximately 6% of the country's total land area. A 20-year master plan has been prepared for the development of haor region from 2012 to 2032. Thirteen areas of the country have been declared as ecologically critical.
Percentage of forests that are protected	3.06 (2020)	3.20	3.25	3.30	3.35	3.40	3.14 (2022)	Currently Protected areas (PAs) in Bangladesh cover 463776.7 hectares of forest areas or 3.14 percent of the country's total area. These include 19 declared national parks, 18 wildlife sanctuaries two special biodiversity conservation area, one botanical garden and eco parks. The country has a total of 53 protected areas including marine protected areas and dolphin sanctuaries that hold a combined 817,971 hectares.

Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Actual	Remarks
Mean urban air pollution of particulate matter (a) PM10 in µg/ m3 (b) PM2.5 in µg/m3	(a) 145 (2017) (b) 85 (2017)	140 83	135 81	130 78	125 75	120 73	PM 2.5: Ranges from 151-260 µg/ m³ (as on 15.03.23) Source: Department of Environment	Range is well above the targeted rate and is extremely unhealthy for human health. Progress on this indicator can be rated as unsatisfactory and requires strong attention
No. of usable cyclone shelters	4014 (2019)	4,047	4,247	4,447	4,647	4,847	4180 [2022]	The Delta Plan 2100 includes cyclone shelters as one of its priority programmes. Some 166 newly constructed shelters and 50 kilometers of all-weather access roads have been completed, while 370 existing shelters have been renovated. These shelters serve as a haven for over 589,400 people and 40,600 livestock in at-risk coastal communities.
Developing Guidelines for Risk Reduction as Mentioned in revised SoD	04 (2020)	07	10	13	16	19	No updated data on the website of Department of Disaster Management	Source: The World Bank, 2022.  Although specific data is not available, the Ministry of Disaster Management has a strong track record of implementing its programmes. It can be expected that progress on this is on track
Number of housings with disaster resilient habitats and communities' assets	70,000 (2020)	1,50,000	2,30,000	2,90,000	3,40,000	3,80,000	No updated data on the website of Department of Disaster Management	Again, based on past record, it can be expected that progress is on track.

Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Target (2024)	Target (2025)	Actual	Remarks
Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Affected PErsons: 12,881 per 100,000 peopl	6000	5000	4000	3000	2000	3765.80 (2021) Source: BDRS 2021,BBS	The actual outcome for 2021 is well within the target. However, more frequent measurements are needed to accurately understand both the direct and indirect loss from natural disasters.

The summary assessment against the 8FYP targets is constrained by unavailability of several key data on progress with indicators. Nevertheless, based on available evidence, it is clear that steady progress has been achieved in several focus areas of climate change, environmental management and disaster management goals of the 8FYP. These include lower consumption of ozone depleting H-CFCs, lower emission of per capita carbon, coverage of marine protected areas, and reduction in death from natural disasters. Two important areas where progress has been inadequate concerns the level of air pollution and forestry coverage. Both are critical for human health and welfare and greater attention is needed in these areas.

# 14.5 Progress with Implementation of Sectoral/Thematic Environmental Policies and Programmes

A more in-depth and better-informed progress assessment is possible by looking at implementation of sectoral programmes as indicated in Box 13.1.

#### 14.5.1 Strategic Objective: Increase environmental spending and resources

Three major strategies were adopted to implement this thematic objective: (a) Integrating environment and ecosystem conservation and climate change issues in planning and budgeting; (b) increasing resources for the Ministry of Environment, Forest and Climate Change (MoEFCC); and (c) improving the capacity of MoEFCC.

#### **Implementation Progress:**

- (a) Integrating environment and ecosystem conservation and climate change issues in planning and budgeting: The Ministry of Finance adopted in 2014 a climate fiscal framework (CFF) that provided evidence on the magnitude of climate financing in the national budget every year. The climate relevant allocation for climate-sensitive spending budget increased from 6.6 percent in FY 2016 to 7.55 percent in FY 2021.
- (b) Increasing resources for MoEFCC: The budget allocation of the Ministry of Environment, Forest and Climate Change (MoEFCC) has been increasing. In FY2021, some Tk 901 crore was allocated, which increased to Tk 1224 in FY2022 and Tk 1500 crore in FY 2023. This amounts to an increase of 11% per year in real terms. Although still substantially lower than what is needed to upgrade capacity, this increase is an important signal of the government's priority to strengthen the MoEFCC.
- (c) Improving the capacity of MoEFCC: Significant efforts are underway to upgrade the capacity of the MoEFCC through recruitment of skilled officers and training. For example, some 1,287 officers participated in overseas training/seminars/workshops during FY 2022. There are many in-house local

training programmes conducted by MOEFCC. The MoEFCC and Departmental Organizations are making regular efforts to develop and implement the use of Information Technology in the workplace. There is also a significant amount of technical assistance provided to MoEFCC by the develop partner community to enhance capacity.

# 14.5.2 Strategic Objective: Enhance biodiversity conservation; Increase Forest coverage; Prevent/ reduce land degradation.

Two strategies were adopted to implement this strategic objective: (a) increased resources in the management of ecosystem and diversity; and (b) increased commitment to forestry and biodiversity.

#### **Implementation Progress:**

- (a) Increased resources in the management of ecosystem and biodiversity: The Department of Environment reports quite a few engaging activities that have been undertaken to protect and conserve the ECAs (ecologically critical areas) of Bangladesh. The following description briefly depicts those measures of management at the ECAs:
  - Establishment of Village Conservation Group (VCG)
  - Creation and Conservation of Mangrove Forests
  - Creation and Conservation of Wetland Forests
  - Creation of Wetland Sanctuary by re-excavation of Lakes
  - Establishment of Solar-based irrigation pumps
  - Establishment of Environment Watch Tower
- (b) Increased commitment to forestry and biodiversity: Several initiatives are underway to implement this strategic theme. First, afforestation activities are underway to create coastal green belt and to stabilize the new pastures in the sea and river estuaries in order to reduce the damage caused by cyclones and floods in the coastal areas. Under the program, 80,403 hectares of mangrove plantations have been created from FY2010 to FY2022. Forest Department has raised 33,486 hectares block plantation, 3918 kilometers strip plantation and 22,760 hectares of mangrove plantation in the FY 2020 to FY 2022. About 100 thousand saplings has been distributed among people to celebrate the birth centenary of the father of the nation Bangabandhu Sheikh Mujibur Rahman in FY 2020. In social forestry activity BDT 41,46,26,997 has been distributed as share with 29,743 persons social forestry beneficiary. From FY2010 to FY2021, 38 development projects were implemented under the Forest Department. Second, 28 Co-Management Committees have been formed in 22 protected forest areas with the involvement of local people to conserve biodiversity. The co-management committee formed under co-management rule has 382 women out of 1690 as members. A total of 615 Collaborative Forest Management Committee (CFMC) has been formed for forest restoration activities where 50 percent of the committee members are female. As a result of nationwide afforestation activities and plantations including social forestry, the total tree-covered land in the country has increased to 22.37 percent of the country's total area. Third, the Bangladesh National REDD+ Strategy approved the creation of REDD+ management frameworks to prevent deforestation and degradation, conserve biodiversity and increase carbon removal from the atmosphere. Government has declared 2 protected area in FY 2021, one of them is the Saint Martin marine protected area. Moreover, 14 management plans, 4 Action plans, 2 management strategy and Bangladesh Wildlife Conservation Master Plan have been approved to properly manage the forest and wildlife from 2009 to 2021. 4 Rules and 1 policy have been approved for the management of forest

and wildlife during FY 2020 and FY 2021. Under the Wildlife compensation policy,2010 and Wildlife Compensation Rule, 2021 about BDT 2,04,24,500 has been distributed among wildlife victims in the FY 2020 and FY 2021.

# 14.5.3 Strategic Objective: Strengthening environmental governance

Two strategies were adopted to implement this objective: (a) control of industrial air pollution; and (b) introduction of household illegal waste dumping penalties.

#### **Implementation Progress:**

- (a) Control of industrial air pollution: As of March 2022, the total number of industrial units where ETP was established is 2,249. Additionally, 15 more Compact Continuous Air Monitoring Stations (C-CAMS) have been installed in different districts and significant places. At present, a total of 31 CAMS and CCAMS are being used to conduct air monitoring at various places regularly. Comprehensive Air Pollution Control Rules, 2022 has been drafted with a view to effectively controlling overall air pollution.
- (b) Introduction of household illegal waste dumping penalties: The MoEFCC has adopted 'Solid Waste Management Rules 2021'. According to these Rules, one may face a maximum of two years of imprisonment and a fine of Tk 2,00,000 for dumping waste in drains or water bodies or incinerating waste in open spaces under any city corporations, municipalities, upazila parishads or union parishads. A public awareness campaign will be started to facilitate a standard waste management system. Rules will be used on people who produce wastes and dump it in open places. The best performing bodies among the city corporations, municipality, upazila parishad and union parishad on waste management will be awarded.

# 14.5.4 Strategic Objective: Ensuring proper drainage system and waste management

Several strategies have been proposed to implement this strategic objective: (i) proper pricing policies for water, sanitation and solid waste; (ii) context-specific environmental and WASH technologies/interventions; (iii) improved waste management and introduction of the circular economy; (iv) proper management of solid waste; and (v) implementation of the Bangladesh Delta Plan (BDP2100).

#### **Implementation Progress:**

(i) Proper pricing policies for water, sanitation and solid waste: The National Strategy for Water Supply and Sanitation 2021 includes a comprehensive framework for the water supply, sanitation and hygiene (WASH) sector in Bangladesh in order to address the new and emerging challenges of the MDGs, and to align with the SDGs. As for water pricing policies, it was proposed to increase to Tk 19 per 1000 litres for residential use, and Tk 50 per 1000 litres for commercial use. However, Dhaka WASA authorities proposed to keep the price of water unchanged for the people of the low-income community (LIC) in slum areas as people in general have been bearing the pressure of gradual rise in price of essentials price for several months now. The Solid Waste Management Regulations 2021 were also published in Bangladesh on December 23, 2021, under the Bangladesh Environmental Protection Act, 1995. The Regulations define the responsibilities of businesses involved in solid waste management and impose collection, recycling, and disposal obligations according to Extended Producer Responsibility (EPR) on

- waste generators, consumers, and users. The Government has also committed to launching the country's first waste-based power plant, the Kaultia Waste To Energy Power Plant, which is a 42.5MW biopower project. It is planned for Dhaka and the project is expected to be commissioned in 2023.
- (ii) Context-specific environmental and WASH technologies/interventions: Considering the needs of hard-to-reach areas and vulnerable people, the following strategic directions have been taken:
- Prepare separate development projects or separate components within development projects specifically for the hard-to-reach areas and for the vulnerable people.
- Adopt different approaches considering the local infrastructure, cultural values and socio-economic status.
- Consider area specific needs while envisioning and developing technologies such as water-efficient sanitation technology and lightweight construction materials for hilly areas and saline water-resistant infrastructure for coastal areas;
- Ensure vulnerable groups' voice and meaningful participation in community level planning.
- Establish public water supply and toilet facilities at strategic locations for the use of vulnerable people.
- Make the provision of facilities for differently abled people mandatory for public water supplies and toilets.
- Incorporate climate change and disaster management strategies in development plan of all Hard-to-Reach areas of Bangladesh.
- (iii) Improved waste management and introduction of the circular economy: There are more than 70 open-air dumping stations in the two city corporations, 30 of which are located in areas under the DNCC and the rest under the DSCC. The DNCC is planning to purchase and install smart litter bins with CCTV cameras so that people can use those bins and thieves are unable to steal them. The DNCC has also started constructing an incinerator facility there under a 25-year project to produce electricity at the Amin Bazar landfill which has risen 80 feet above ground level. On the other hand, DSCC is implementing a New Clean Dhaka Master Plan, which if runs well, will produce organic fertiliser, biogas, and electricity from waste.
- (iv) Proper management of solid waste: AIIB (Asian Infrastructure Investment Bank) along with LGED has started a project on "Bangladesh Integrated Solid Waste Management Improvement Project" from February 3, 2023. The Objective is to improve Solid Waste Management (SWM) services in selected Urban Local Bodies (ULBs) in Bangladesh. The Project is expected to: (i) reduce exposure to pollutants and disease vectors (in air, water, soil) associated with solid waste; (ii) promote commercial and operational modernization in the sector through the development of regional landfills and the associated optimization of collection, transport and transfer services within regional SWM systems; (iii) enable alternate service delivery models, including private sector participation for SWM in the country; (iv) strengthen the regulatory framework in the sector and build capacity among national, regional and local actors; (v) deepen efforts to encourage waste minimization, recycling and source separation in the context of commercially viable regional operations; and (vi) reduce poverty and vulnerability among waste pickers through the development of appropriate social inclusion and economic transition programs.
- (v) Implementation of the Bangladesh Delta Plan (BDP2100): Bangladesh Delta Plan 2100 has taken "Flood Risk Management Strategies" and "Fresh Water Strategies" at national level. In Delta Plan 2100, regional hydrology and efficient, sustainable and integrated water resources management are playing major roles in formulating regional plans. The Centennial Delta Plan identified 6 hotspots in coastal

areas, Barind and drought prone areas, haor and flash flood prone areas, Chattogram Hill Tracts, river and estuary areas and urban areas and also identified 33 types of challenges. It is important to note that the Bangladesh Delta Plan 2100 is a long-term plan, and it will take several years and significant resources to fully implement all of its components. However, to effectively execute the Delta Plan 2100, the Government has formed a Delta Wing within the GED to offer overall support, guidance and coordination for the implementation of the BDP 2100. Moreover, for effective inter-ministerial coordination, a Delta Governance Council is formed, which is chaired by the Hon'ble Prime Minister. was established on the 1st of July 2020. GED has also established a Knowledge Portal, Delta Atlas, Dedicated Website and a Digital Library for better implantation of the overall Delta Plan.

# 14.5.5 Strategic Objective: Promoting Green Growth

Implementation of this objective involves the following strategies: (i) promote green budgeting and green accounting; (ii) promoting the adoption of green technologies and green products; (iii) commitment to renewable energy; (iv) adoption of a low carbon economy; (v) promoting the greening the RMG sector, green jobs and SMEs; and (vi) actively seeking use of the Green Climate Fund (GCF).

# **Implementation Progress**

- (i) Promote green budgeting and green accounting: Green budgeting has numerous benefits. These include: (i) it supports policymaking and helps achieve climate and environmental goals; (ii) it helps evaluate environmental impacts of budgetary and fiscal policies relative; (iii) it enables decision-makers to understand and guide budgetary choices; (iv) it improves budgetary steering and coherence with environmental objectives; (v) it strengthens the transparency of expenditure management for parliaments, civil society and citizens. As noted, in 2014 the Ministry of Finance adopted the climate fiscal policy framework that seeks to account for budgetary spending on climate-focused activities. This exercise was updated and expanded in 2020. The Bangladesh Bureau of Statistics is working with the World Bank to develop capacity to undertake green growth accounting. The work is at a very early stage.
- (ii) Promoting green technology and green products: In FY2022, a total of Tk. 53.40 crore was disbursed as a refinance facility from the fund for the "Refinance Scheme for Environment Friendly Products/ Initiatives." This refinance facility was provided to support banks and financial institutions that were financing ten different green products and initiatives, including Biogas plant, Green Building, Green Industry, Vermi Compost, Solar Home System, Biological ETP, Net Metering Rooftop Solar System, Installation of Energy Auditor Certified machineries, Environment Friendly/Brick Kiln Efficiency improvement Project, and Safety and Work Environment of Factory.
- (iii) Commitment to renewable energy: In 2021, Bangladesh's installed power generation capacity was about 24,000 MW, on the back of 146 power plants, captive and off-grid sources. Of the amount, only 776 MW were generated from renewable sources, representing about 3 per cent of the total electricity production. The government has now accelerated kits programme to increase the share of renewable power plants in total power supply. Thus, as of 2021, nine solar power plants were being constructed with a combined generation capacity of 450 MW, and a wind power project that is expected to produce 60 MW. Additionally, 519.62 MW renewables were being implemented having a share of 2.77% in the overall energy generation mix. The Government has extended a re-financing scheme (through state owned intermediary IDCOL) to finance alternative energy generation projects like small scale solar and micro grids, to improve energy access for those living in off- grid areas. Until 2022, the country has made small but steady progress. Progress has been hindered by inherent factors such as limited land resources and moderate solar and wind energy potential. Additional barriers that have contributed to the slow

- pace of progress include delays in getting project approvals, prolonged land acquisition procedures, high equipment expenses, and the likelihood of project cancellations.
- (iv) Adoption of low carbon economy: Bangladesh is a signatory to all international conventions to reduce its carbon imprint as it moves forward with its development. It has submitted its nationally determined contributions to carbon reduction by 2050 and is adhering to that international commitment. It is seeking to remove all subsidy on fossil fuel and is actively considering the adoption of a carbon tax.
- (v) Greening of RMG, promotion of green jobs and SMEs: The garment industry of Bangladesh has made significant strides in sustainability. Currently, it has the highest number of LEED green factories in the world-nearly 160, with another 500 in the pipeline. Furthermore, 40 of the top 100 LEED factories globally originated from Bangladesh. BGMEA has also pledged to the UNFCCC's Fashion Industry Charter for Climate Action to reduce greenhouse gas (GHG) emissions by 30 percent by 2030. Several other buildings are currently undergoing the process of obtaining LEED certification. Earlier in December 2022, among the certified green factories were Swisstex Village in Singair, Dhaka, which received a gold rating, while Jinnat Knitwears Ltd, RMG in Mawna, Gazipur, and Jinnat Knitwears Ltd, in Mawna, Gazipur, received platinum ratings. The total number of LEED-certified establishments in the apparel sector has risen to 188.
- (vi) Active participation in the GCF: Although the government understands that most of the financing needed to implement its climate change and environmental management programmes will come from domestic sources, it is also actively seeking funding from GCF to supplement its own climate finance resources.
- (vii) Promoting Blue Economy: Under Ministry of Science and Technology the newly established Bangladesh Oceanographic Research Institute (BORI) has created scope for various research activities on Blue Economy. BORI is the first and only national research institution on oceanography in Bangladesh, which will be able to play an important role in ensuring the development of Blue Economy. With a new development project, expansion and modernization of the lab facilities of various divisions of BORI is now underway. For improving fiscal space to promote blue economy, initiatives have been taken to evaluating the possibility of introducing blue bond. In the coastal region, Bangladesh Forest Department has been raising plantation to create green belt for safeguarding the lives and assets of communities from storm and tidal surges since 1966. In this context, afforestation projects are being carried out under the Forest Department's supervision within the framework of various development projects, aiming to create new stable islands by raising plantations in the coastal areas. Four development projects have been implementing by the government as part of the Sundarbans Ecosystem Conservation, Restoration, Sustainability, Biodiversity Conservation, and Forest and Wildlife Crime Control. In line with these efforts, a management plan of the Swatch of No ground has been submitted to the Ministry for approval. Moreover, a project is being formulated to ensure conservation and sustainable use of the resources from the Swatch of No Ground with assistance from GIZ. The Non-Detriment Findings (NDF) for two shark and two ray species, and the 'National Conservation Strategy and Action Plan for Sharks and Rays in Bangladesh (2023-2033) have been approved by the Ministry.

#### 14.5.6 Strategic Objective: Reduction in Air Pollution

The worsening of air pollution and the risks it presents to human health is a matter of serious concern. The 8FYP is seeking to address it comprehensively through the adoption of green products and green technologies, promotion of clean energy, adoption of green construction materials and technologies, elimination of subsidy on fossil fuel and the possibility of introducing a carbon tax. To better manage air pollution the Government on July

26, 2022, published the Air Pollution (Control) Rules 2022, based on section 20 of The Bangladesh Environment Conservation Act, 1995. This will help identify air pollution activities, and establish standards for emissions from industry, automobiles, and specific projects (power generation, textiles, cement, fertilizers, etc.). According to the new rule, there will be a committee that will impose damages and punishment for such pollution.

#### 14.6 Progress with Disaster Management Programmes

Bangladesh has a very strong track record of efficient management of natural disasters and this progress has continued in the first three years of the 8FYP. Progress with the physical targets are on track and the implementation of related strategies and policies are also on track. The Cyclone Preparedness Programme (CPP), established in 1973 by Father of the Nation Bangabandhu Sheikh Mujibur Rahman, has expanded considerably. It now has 76,140 volunteers (of which around 50% are women). Additionally, 46,000 urban volunteers are also working for urban safety and resilience. Other highlights of progress with physical facilities include:

- 4,200 Cyclone Shelters have been constructed across the coast, and 320 Flood Shelters have been constructed across the country, with additional 393 Flood Shelters under construction.
- 550 Mujib Killa, specially designed raised land, have been constructed to provide shelter for the people and livestock in coastal regions during the cyclone/tidal surge.
- 60 Multipurpose Rescue Boats have been built for persons with disability.
- A total of 66 Disaster Relief Warehouse- cum-Disaster Information Centers are established.
- 18 community radio (FM) network has been established for the coastal people and fishermen.
- Interactive Voice Response (IVR) provides weather and early warning for anticipatory action in reducing loss and damage.

The national disaster strategy is being constantly upgraded and this effort is continuing in the 8FYP. Thus, the National Plan for Disaster Management (NPDM) 2021-2025 Action for disaster risk reduction (DRR) is upgraded from the previous National Plan for Disaster Management (NPDM) 2016-2020 as well as 2010-2015, which were the first policy document of its kind. The purpose of NPDM 2021-2025 is to guide implementation of the Disaster Management Act 2012 and Standing Orders on Disaster 2019, allowing Ministries/Department of GoB and other agencies to use it to produce their Annual Work Plans. The plan takes a 'whole-of-society' approach for effective implementation. The plan highlights the importance of disaster risk management by linking it with rapid urbanization and climate change, and the necessity of disaster risk reduction for sustainable development. NPDM 2021-2025 has core goals for actions to save life, reduce economic losses in every disaster cycle stage which includes disaster risk reduction, humanitarian response and emergency recovery management.

#### 14.7 Key Emerging Gaps and Challenges Moving Forward

The Eighth Five-Year Plan (2021-2025) of Bangladesh recognizes the urgent need to address environmental issues and climate change and includes a range of strategies and measures to achieve sustainable development while reducing the country's carbon footprint. Considerable progress has been made in improving climate change and environmental management on several fronts including strategies, financing, policies and institutions. Progress has also been made in integrating climate change and environmental considerations with the national development strategy. Progress in disaster management is exemplary with a range of facilities including an effective early warning system, availability of disaster shelters, and quick deployment of support services to disaster victims. The level of preparedness has helped to minimize the loss of lives and provides critical support to the disaster victims for quick recovery and rehabilitation.

Despite progress, there are several key gaps that remain in the implementation of 8FYP's environmental and climate change efforts. These include:

- Lack of Coordination: The plan demands effective coordination among multiple government agencies and departments, but there are challenges that hinders this agenda and derails different ministry from working towards the common goal. This often leads to duplication of efforts, inefficiencies, and delays in implementation. Meaningful engagement with civil society, communities, and other stakeholders is also critical for ensuring that the plan reflects the needs and priorities of those most affected by environmental and climate change issues. Given the importance of the environmental management agenda, the government should consider establishing a National Environment Management Council (NEMC) chaired by the Prime Minister and comprising of ministries of finance, planning, environment and forestry, land, agriculture, water, fishing and livestock, law, energy and power, industry and transport. The principal focus of this institution should be to ensure the proper integration of environmental concerns in the development agenda and monitor implementation progress through effective coordination across all stakeholders. The MoEFCC can provide the secretariat service to (NEMC).
- Lack of Resources for MoEFCC: For MoEFCC to effectively function as a central body that will give leadership to environmental management, it must be adequately funded. Despite recent increases, the MoEFCC remains grossly underfunded, and it is not clear MoEFCC can give effective leadership to the huge environmental agenda with such allocations. Consequently, as a first step, progressive increases in its budget must be provided to reach the target of 0.5% of GDP by FY2041. This is a critical target, and it is essential to build up capacity through better staffing, including professional staff, establishing a strong digital management information system based on a data bank that gets regularly updated, and implementing a regular monitoring and evaluation of environmental compliance.
- Weak Commitment to Environmental Fiscal Reforms (EFR): The adoption of the CFF is a big step forward but it has major gaps on both the expenditure side and the resource mobilization side. The present allocation of financing for environmental and climate change programmes is much lower than needs, estimated at around 5-6% of GDP per year. Without progress on the resource mobilization front, there is very little hope that Bangladesh can reach that target spending even by FY2041. A major way forward would be to adopt a series of environmental fiscal reforms (EFR). But so far, there is no visible commitment to EFR as no tangible progress has happened. A comprehensive data set on the emissions from all major sources of economic activities is particularly important for enforcing the "polluter pays" principle, while initiating EFR. A review of the environmental policies also shows that the overall environmental management including control of air pollution relies heavily on command-and-control type instruments comprising of laws, regulations and standards. There is very little use of market incentives by using taxes and pricing policies. Furthermore, by providing heavy subsidy on natural gas and fuel oil, Bangladesh provides an incentive for excessive consumption of fossil fuel. Therefore, fossil fuel pricing policies are inconsistent with CO2 reduction objective.
- Effectively Exploring GCF: The Green Climate Fund was established in 2009 with the objective to mobilize climate finance to support scaled-up mitigation and adaptation actions in developing countries. The Fund identified 5 investment priorities: Transforming energy generation and access; creating climate-compatible cities; encouraging low-emission and climate-resilient agriculture; scaling up finance for forests and climate change; and enhancing resilience in Small Island Developing States (SIDS). Furthermore, as of 31st July 2020, the Green Climate Fund has raised USD 10.3 billion equivalent in pledges from 49 countries/regions/cities. Moreover, Bangladesh has so far explored only \$374 million for addressing various environmental objectives. Given, the country ranks as the thirteenth-riskiest nation in the Global Climate Risk Index 2022 and climate change induced sea level rise will submerge around 17%

of the country's coastal lands and displace about 20 million people by 2050, there is a moral necessity for global stakeholders to support Bangladesh with sufficient resources to adapt and mitigate climate vulnerabilities. This limited exploration of GCF is also in part driven by the fact that only two national institutions - Palli Karma-Sahayak Foundation (PKSF) and Infrastructure Development Company Limited (IDCOL) – are directly accredited, which constraints the number of projects and programmed that Bangladesh can support using the GCF. Consequently, the Government must mobilize more effort to ensure more national institutions are directly accredited with GCF, so that we can effectively explore resources available in the GCF.

• Mobilizing Resources from Carbon Credits: Bangladesh has earned its first-ever revenue from carbon credits – permits that allow the owner to emit a certain amount of carbon dioxide or other greenhouse gases. This resulted from long-term initiates Infrastructure Development Company Limited (Idcol) who registered its maiden clean development mechanism project with the United Nations Framework Convention on Climate Change. Since then, Idcol has sold a whopping 2.53 million carbon credits, raking in \$16.25 million, equivalent to Tk170 crore at current exchange rates. A lion-share of this impressive carbon credit revenue came from improved cook stoves, while the remaining amount was generated from solar home systems. It is also speculated that if Idcol can double improved cook stoves to 80 lakhs over the next five years and install 300 megawatts of rooftop solar within three years, then revenue from carbon credits could substantially increase.

Worsening Air Quality: Bangladesh is grappling with severe air pollution, especially in urban areas, due to industrialization, transportation, and open burning of waste. Dhaka's air quality index (AQI) was recorded as high as 288 in the earlier months of 2023, making the capital's air most polluted in the world. An AQI above 300 is considered 'hazardous', posing serious health risks to residents. Moreover, recent reports indicate that air pollution in Bangladesh reduces average life expectancy by 6.7 years – and some estimates note that as much as 24,000 premature deaths result from air pollution in the country's capital, Dhaka, between 2005 to 2018. Consequently, the Government needs to prioritize air quality monitoring and enforce stricter regulations and adopt other policies to reduce the health impacts of air pollution.

Noise Pollution: The 8th FYP underscored its commitment to controlling noise pollution in Bangladesh. However, a recent report by the United Nations Environment Programme (UNEP) on noise pollution stated that the average noise frequency in Dhaka is currently 119 decibels, which is more than twice the tolerable standard. According to the World Health Organization (WHO), constant exposure to sounds above 60 decibels can cause temporary deafness, which can transition to permanent deafness if the noise level is beyond 100 decibels. Evidently, this also makes noise pollution in Dhaka the worst among the 61 most populated countries in the world – and it demands stronger public policy response to mitigate this menacing problem.

Water Pollution: Water quality is one of the most pertinent environmental problems in Bangladesh. Increasing population, industrialization, rapid urbanization, improper sanitation and use of agrochemicals are responsible for deteriorating water quality in the country. Recent studies have also shown that concentration of heavy metals is higher in the water bodies close to the industrial zones. Different pesticides are found in wetlands near the irrigated land of Bangladesh. Among different emerging contaminants, the presence of antibiotic residue, fluorescence whitening agent and microplastics are recently being identified in water bodies of Bangladesh. As a result, water pollution must receive conspicuous commitment if Government aims to meet the objectives of the 8FYP.

Municipal Waste Pollution: In Bangladesh, there is a significant challenge in effectively managing solid waste, which has negative impacts on the health and well-being of urban residents. As one of the fastest urbanising economies in South Asia, Bangladesh has been facing a rapid growth of waste generation. In the last three decades, waste volume doubled every 15 years. An average of 55% of solid waste remains uncollected in urban areas, with a

variation of collection efficiency from 37% to 77%. Current efforts in municipal solid waste management mainly focus on collecting and disposing of waste, with few cost-effective measures for waste reduction and recycling being implemented. This results in a large amount of uncollected and untreated waste, which creates both public nuisances and health hazards. Poor waste management can lead to the spread of communicable diseases, with approximately 20% of biomedical waste being highly infectious and often improperly disposed of in sewage systems. Additionally, inadequate sanitation resulting from ineffective waste management is a major contributor to child mortality rates. Accordingly, effective management of municipal waste still undermines environmental quality in urban areas, and it remains a challenging avenue that Government should aim to efficiently address.

Climate Displacement: Recent reports by WHO notes that millions of people in Bangladesh lost their homes and livelihoods in 2022 due to the adverse effects of climate change, which is triggering strong internal migration. In particular, WHO pinpoints that over 7.1 million Bangladeshis were displaced by climate change in 2022, a number that could reach 13.3 million by 2050. This chronic crisis will require incremental attention from Government over time, so that Bangladesh is poised to develop effective mechanism to both minimize climate displacement and effectively respond to the needs of those who face displacement.

Oversight, Enforcement and Accountability: There are often concerns about whether the budget allocations are actually being spent on climate related initiatives. All policies and regulatory measures to promote environmental sustainability and combat climate change need to be enforced and monitored. Strong enforcement mechanisms and clear lines of accountability will be essential for ensuring that the plan's objectives are achieved. One potential mechanism for developing better oversights, enforcement and accountability can achieved for effective environmental management is through a Results Framework that would help track core environmental and climate change performance both over the short-term and long-term.

# CHAPTER 15 GOVERNANCE AND INSTITUTIONS

# 15.1 Development Context

The importance of strong governance and effective institutions in driving rapid and inclusive development cannot be overemphasized. Advanced industrialized nation-states have benefited from strong institutional frameworks that triggered and sustained economic and political modernization over long periods of time. Therefore, the role of good governance and effective institutions to support the long-term development process of Bangladesh is fundamental. Good governance and effective institutions are necessary to ensure inclusive and sustainable economic growth, social development, and poverty reduction. The sectors further warrant transparency and accountability, providing effective public services to citizens, and ensuring that decision-making processes are inclusive and participatory.

The Bangladesh Perspective Plan 2041 recognizes the importance of good governance and strong institutions in promoting social and economic progress, ensuring political stability, and attracting foreign investment. Investors require a stable and transparent regulatory environment, reliable legal and judicial systems, and efficient public services to operate effectively. By promoting good governance and effective institutions, policymakers can create an enabling environment for investment and innovation in Bangladesh.

Building on the PP2041, the Government is now aiming to transform Bangladesh into a technologically advanced and sustainable society with E-governance as a key component of "Smart Bangladesh". The government has launched several digital services that allow citizens to access government services online, including applying for passports, paying taxes, and accessing birth certificates. The aim is to make government services more accessible, efficient, and transparent. The government has also launched a number of mobile applications that allow citizens to report grievances, access information, and connect with their local representatives. Innovation is an essential part of Smart Bangladesh. The government has launched several initiatives to promote innovation in various sectors, including fintech, health tech, and edtech. The aim is to create an ecosystem that will encourage startups and provide funding and mentorship. The government has also launched a number of incubators and accelerators to support the growth of startups. 'Smart Government' indicates the potential of digitizing every activity in all the priority areas. A hundred percent of paperless offices and service platforms that are hyper-personalized can ensure this shift. Only digitizing sectors that are relevant to information, communication, and data is not enough to establish a 'SMART' government. Areas like health, education, agriculture, public security, etc., must also have digital government services that will enable the use of advanced technologies.

The Civil Service 2041: Digital Leadership Journey has been launched recently with the support of a2i. This project formulates plans to simplify government services and assist in building 'SMART Cities' and 'SMART Villages. Already Bangladesh's governance process has reached a new level of digitalization. According to the World Bank GovTech Maturity Index (GTMI) 2022, Bangladesh has secured a place in the World Bank's 'GovTech Leaders' list. The honor has been given to Bangladesh for implementing new projects to provide various government services using digital technologies and creating an ecosystem to involve citizens in receiving these services. One such service can be availed through national helplines 333 and 16122 which have started working together to provide emergency land-related services. Now, anyone can receive Khatian and land maps via post simply by calling the number 333-2. Online cause list, Judiciary Monitoring Dashboard, and MyCourt app have been launched to simplify the judicial process.

Furthermore, good governance and effective institutions are essential to ensure strong and independent judiciary system culminating in better contract enforcement, efficient and effective public administration, reduced corruption, decentralization and empowerment of local governments to improve service delivery, and a vibrant civil society. They enable citizens to access basic services such as education, health care, and clean water, and to participate in decision-making processes that affect their lives. Effective institutions also help to promote social cohesion and prevent conflict, which are essential to sustain development over the long term.

Bangladesh has made significant progress in promoting transparency and accountability. The government has established a number of institutions and mechanisms to address corruption, such as the Anti-Corruption Commission, and has implemented various initiatives to promote e-governance and digitization of public services. Over the last decades, Bangladesh has also made efforts to strengthen democratic institutions and processes, such as increasing the representation of women in politics and promoting local governance through the empowerment of Zila Parishad, Upazila Parishad and Union Parishads. Bangladesh Government has published "Statistics of Government Servants, 2022". The total number of sanctioned posts in all salary grades in all government offices was 19,00,151 among which number of existing employees was 13,96,818 and number of vacant posts was 5,03,333 Of the existing employees, the number of male employees was 9,87,679 while that of female employees was 4,09,139 which represent a male and female ratio of 2.4:1.

Notwithstanding the significant achievements witnessed in improving governance and promoting transparency and accountability, there are still emerging issues and challenges that need to be addressed. If Bangladesh aspires to achieve sustained high economic growth and eventually become a high-income country, it must revitalize its institutions and governance. Addressing corruption, strengthening democratic institutions, promoting citizen participation, and addressing the digital divide are key priorities for the governance and institutions sector in Bangladesh. A concerted effort to reform crucial institutions can help move Bangladesh onto a path of rapid development.

# 15.2 Progress under the 7FYP

The seventh five-year plan recognized the importance of strong institutions and good governance to support sustainable development and economic growth of Bangladesh. Continuing the effort initiated in the 6FYP, the Seventh Plan set out a vision for improving governance and institutions through a range of policy interventions and institutional reforms. The plan aimed in strengthening democratic institutions and processes, law enforcing agencies, improving public service delivery, enhancing transparency and accountability, decentralizing and reforming public administration, and promoting participation and inclusion. Additionally, the plan emphasized the importance of promoting gender equality and women's empowerment, strengthening local government institutions, and promoting e-governance to improve service delivery. Overall, important progress was made in several areas.

One notable achievement of the 7FYP was the establishment of the National Integrity Strategy NIS) in 2012, which aimed to prevent corruption by promoting transparency and accountability across government agencies. To reduce wasteful use of public resources, utmost attention has been given to public procurement and public financial management. The government has also established the system of Annual Performance Agreements (APA) to enhance the state of accountability in line Ministries and make them more accountable to the Cabinet. Furthermore, during the 7FYP period APA has been expanded up to Upazila level which covered more than 17000 government offices.

The plan also included a number of initiatives to promote e-governance, including the establishment of the National Data Center and the expansion of digital services in rural areas. For greater transparency and efficiency of services, instruments of e-governance are also being transferred to local governments. E-procurement systems were also introduced to reduce corruption and increase competitiveness in government contracts. The establishment of CPTU (Central Procurement Technical Unit) has introduced good governance in public procurement with the establishment of a unified national procurement framework and institutionalizing the procurement management capacity to ensure economy, efficiency, transparency, accountability, fairness and better value for money.

Access to justice has been made easier for the citizens of the country. More than 100,806 beneficiaries received government legal aid services through the National Legal Aid Services Organization (NLASO) in FY2019,

surpassing the target laid down in the 7FYP. The village courts became operational in 27 districts and have a high case disposal rate. Nearly16,804 victims have been treated at the One-stop Crisis Centres and Cells (OCCs) run under the Multi-Sectoral Program on Violence Against Women (MSP- VAW) by the Ministry of Women and Children Affairs (MoWCA), highlighting a positive step towards reduction of violence against women. District Legal Aid Offices, Supreme Court Legal Aid Office, Labour Court Legal Aid Cells, and National Helpline Call Centre were also established to provide legal aid services to those who cannot afford them due to financial insolvency, destitution, helplessness, etc.

Another significant achievement was the introduction of the Right to Information (RTI) Act 2009. The Act makes provisions for ensuring free flow of information and people's right to information. The freedom of thought, conscience and speech is recognised in the Constitution as a fundamental right and the right to information is an alienable part of it. Since all powers of the Republic belong to the people, it is necessary to ensure right to information for their empowerment. The right to information shall ensure that transparency and accountability in all public, autonomous and statutory organisations and in private organisations run on government or foreign funding shall increase, corruption shall decrease and good governance shall be established. It is expedient and necessary to make provisions for ensuring transparency and accountability.

The planning process was further strengthened through the preparation of numerous national strategic documents, including the National Social Security Strategy (NSSS), the Bangladesh Delta Plan BDP2100, the National SDG Action Plan, the LDC Graduation Study, and the Perspective Plan 2041. Progress has also been made to improve the budgetary process by linking it to the medium-term national development plans. The Medium-term Budgetary Framework (MTBF) is now an integral part of budget formulation.

Additionally, the Public Financial Management (PFM) Action Plan, 2018-23 has been prepared and implementation is ongoing. Under PFM reforms, E-challan system and a new budget and accounting system (Ibas++) have been introduced, new accounting BACS has been completed, and automation of National Savings Certificate sales has been introduced. While successive PFM projects have initiated many important reforms, some systemic issues remain to be addressed.

On the political front elections were successfully conducted at the national and local levels in 2018 on a timely basis. Parliamentary Standing Committees have been reinforced to provide checks and balance on the government through stronger parliamentary oversight. The capacity of anti-corruption agencies have been enhanced, and the overall state of law and order have been improved to protect human lives and property. Improvements were also witnessed in the performance of the Case Coordination Committee (CCC). The introduction of CCC at district level has succeeded in bringing together key justice system actors on a regular basis to address local problems related to prison overcrowding and case congestion.

Under the 7FYP, the Department of Immigration and Passports (DIP) has successfully offered Machine Readable Passports (MRP) to all new applicants; DIP has also started issuing e-Passports to its citizens. Furthermore, the Government has taken numerous measures to mainstream the application of Grievance Redress System (GRS) in most government bodies. These include the simplification of grievance submission process and appointment/designate the GRS and appellate officers in every public office.

Overall, the Bangladesh made notable progress in improving governance and institutions with the initiatives within the Seventh Five Year Plan. Nevertheless, the government is aware that institutional strengthening and governance improvements are ongoing processes that will evolve and create new demands for changes as Bangladesh moves forward. Given that governance and institutions are critical components of the plan's strategy, improvement targets for these two sectors were set up in the 8FYP as a step towards achieving the long-term goals defined in PP2041.

# 15.3 8FYP Strategy for Improving Governance and Institutions - Key Areas

Recognizing the importance of effective institutions in achieving long-term economic transformation, the 8FYP targeted key institutional and governance improvements to mobilize investments, foster innovation, and promote production systems. The government's commitment to democratic governance has encouraged the public administration to prioritize transparency, participation, and accountability in its operations. Improving administrative capacity is crucial for enhancing effectiveness, and several measures will be prioritized under the 8FYP, including greater participation, establishing a shared vision, offering adequate training, increasing the effectiveness of the Public Service Commission, and improving the Annual Performance Agreement and Grievance Redress System.

In particular, the 8FYP focused on improving public sector capacity, rule of law and judicial effectiveness, economic governance and the strength of local government to empower citizens and accelerate growth. The Plan underscores that institutional performance along these key dimensions, recognizing that reform and change in these areas require strong and consistent political support over a long period. The Plan also endorses the broader strategies and policies identified in the Seventh Plan, which should help attain the developmental transformation envisioned in the Perspective Plan 2041. A brief summary of some of the key areas that were selected to receive focused intervention under the 8FYP, their objectives, targets and strategies are provided in Box 15.1.

# Box 15.1: 8FYP Governance and Institutions Objectives

# Key Area 1: Public Sector Capacity-Improving Administrative Capacity

- Ensure greater participation, transparency and accountability within the administrative process.
- Establish a shared vision for the public administration to Vision 2041 and PP2041
- Develop an effective public administration; ensure that poorly qualified or insufficiently experienced personnel are not promoted within the Administration.
- Offer civil servants specialized training in general educational and management skills; address the deficit of skills in the public sector.
- Increase the effectiveness of the Public Service Commission (PSC).
- Improve the functioning of the central Grievance Redressal System (GRS).
- Strengthen the implementation of the Annual Performance Agreement (APA) enhance accountability in line Ministries and make them more accountable to the Cabinet.

#### Key Area 2a: Justice and the Rule of Law

- Increase the effectiveness of formal and semi-formal judicial institutions.
- Improve access to justice by providing legal aid to the poor and marginalized communities in Bangladesh.

#### Key Area 2b: Law Making and the Rule of Law

- Ensure digitization of judiciary
- Establish Independent Prosecution
- Establish a Judicial Academy
- Ensure Professional Development of the Judges of Sub-Ordinate Judiciary.

# Key Area 3: Improving Economic Governance

Improving Public Financial Management

- Improve Tax-GDP ratio.
- Bring improvements in planning and budgeting.
- Increase commitment to transparency and participation in the budgetary process.
- Introduce multi-year Public Investment Programme (MYPIP).
- Improve the effectiveness and accountability of the capital market.

# Improving Effectiveness and Accountability of the Banking Sector

- Improve supervision of the banking sector.
- Undertake special measures for monitoring NBFIs.
- Improve loan recovery and effectiveness of banking courts.

# Key Area 4a: Improving Governance in Local Government

- Establish a system of local government institutions (LGIs) similar to those found in current uppermiddle-income countries (UMICs).
- Strengthen the capacity of local government institutions (LGIs).
- Deliver better services to constituents through greater administrative and financial autonomy.

# Key Area 4b: Other Areas of Activities under the 8th Plan

- Strengthen the Election Commission (EC).
- Make Parliamentary process effective.
- Ensure the appointment of an Ombudsman.
- Address Corruption
- Strengthen the office of the Comptroller and Auditor General of Bangladesh.
- Ensure digitization of land management.
- Ensure better coordination among concerned ministries.
- Address Data availability- prioritize availability of data and information.
- Increase the effectiveness of information commission.
- Mobilize more resources for governance-related Institutions.
- Improve digital literacy.
- Strengthen Implementation Monitoring and Evaluation Division (IMED).

#### 15.4 Assessment of Implementation Progress during the 8FYP

The 8FYP identified several performance indicators to measure progress with governance and institutional improvements. So, as a first step, an assessment of outcomes against the indicators is provided in Table 15.1. However, a major constraint in assessing this progress is unavailability of data for many indicators. So, this assessment is then supplemented with a broader assessment of implementation progress of the governance and institutions agenda based on a review of policies, programmes, and institutional reforms.

Table 15.1: Targets and Progress during the 8FYP in Governance

Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Actual	Remarks
Weighted average national case disposal rate	32.24 (2012)	35.8	39.3	42.8	No direct data available	The rate of case disposal at lower courts has increased to 32.4% in the first six months of 2022.  The civil courts of the country have settled a record 3,348 lawsuit disputes in business and personal transactions in 2022 allowing several organisations and individuals to recover some Tk4,200 crore, the highest amount recovered in five years through resolution of transaction-related cases.
Number of access and usage of legal aid services by the poor and disadvantaged group compared to total litigants	22000	110000	120000	150000	1,00,791 (FY2021) 1,22,687 (FY2022) Source: National Legal Aid Services Organization	Met the target of 2022. Performance is satisfactory and on track.  Target — Actual  200000  100000  2021 2022 2023 2024 2025
Percentage of public institutions using e-procurement	0 % (2014)	16	41	65	No direct data available	Procurement of computers and accessories for 28 NSPSOs covering 2085 PEs is done. From 2012 to July 2021, 5842 tenderers, 13527 PE users and 128 bank users received training on e-GP. Up to August 2021, a total of 90 thousand tenderers registered with e-GP system. A total of 1362 procuring agencies registered with e-GP system up to August 2021. Training on e-GP for 888 local government institutions is going on and during 20-21 up to 2021 June, 11425 training days (around 40%) out of a total of 26700 days were conducted.  Recent research has also indicated that the introduction of e-procurement has produced positive outcomes. E-procurement results in improving access, with the number of bidders increasing by 1.6–2.2 and the probability of a single bidder decreasing by 7.8–13.5 percentage points. Administrative efficiency greatly improves too: the total time of processing a tender—starting from the public call for tenders to contrac

Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Actual	Remarks
						t signature—drops by 15.6–19.2 days. These results also indicate that the government directly saved US\$460 million to US\$513 million in the analyzed electronic tenders, largely due to increased winning rebates and lower advertising costs. Considering the indirect macro effects, the introduction of electronic procurement increased Bangladesh's gross domestic product by 0.48 to 0.54 percent, or US\$1.4 billion to US\$1.6 billion in 2019.
Number of queries attended to by the government institutions under right to information act.	12852 (2019)	8000	9000	10000	10,800 (2021)	The number of RTI requests in the country has risen slightly, and more than 90 percent of the 12,000 plus annual RTI applications reportedly receive positive responses.
Number of cases settled per year under Alternative Dispute Resolution (ADR) compared to total cases.	14,000 (2014)	17,000	19,000	21,000	No direct data available	
Proportion of children aged 1–14 years who experienced any physical punishment and/ or psychological aggression by caregivers in the past month	88.8 (2019)	87.0	85.0	83.0	No recent data available	
Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	Total- 0.92 Male- 1.14 Female- 0.64	0.7	0.6	0.5	Female: 0.2 (2021) Female: 0.17 (2022) Source: World Bank	Female victims of human trafficking per 100,000 has gone down over the years.
Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18	Female: 3.45%	Female: 3.00%	Female: 2.50%	Female: 2.25%	No recent data available	

Performance Indicators	Baseline	Target (2021)	Target (2022)	Target (2023)	Actual	Remarks
Unsentenced detainees as a proportion of overall prison population	77	75	72	70	75.6% (2022) Source: World Prison Brief	Above the targeted rate for 2022. However, it should be noted that the number of pre-trial/remand prisoners fluctuates from day to day, month to month and year to year.
Proportion of population satisfied with their last experience of public services	39.69	45	49	53	No recent data available	

Due to unavailability of adequate data, proper assessment of progress for some of the targets could not be undertaken. However, it is evident from progress on indicators for which data is available that the Government is working on implementing the targets with prompt and effective measures.

# 15.5 Progress on Governance and Institutional Strategies, Policies and Programmes under 8FYP

The 8FYP was cognizant of the fact that improvements in institutions and governance is a long-term challenge that involves initiatives in several areas. The results are of a longer duration. The challenge is to continuously build on progress at each stage. Several strategic areas of intervention were identified based on the performance gap in the 7FYP, and policies/ programmes were to be initiated to implement these strategies during the 8FYP. A brief review of progress in each of these strategic areas is provided below.

# 15.5.1 Improving Administrative Capacity

The strategy for improving administrative capacity involved four performance indicators: (a) establishing a shared vision for public administration; (b) implementing the Annual Performance Agreement (APA); (c) strengthening the Grievance Redress System (GRS) and (d) Implementing National Integrity System (NIS).

Establishing a shared vision for public administration: The basic strategy was to continuously review and upgrade the quality of staff intake in the civil service, improve organizational capabilities in core line ministries, strengthen working conditions and work environment, and strengthen the incentive system. The government has focused on the following operating procedures:

- composition of cadre services and first appointment to a post of a cadre service;
- creation of posts in different government departments and institutions, formulation/ modification of organizational structure;
- formulation/modification of rules/policies regarding service regulations and conditions;
- appointment/transfer, promotion and adoption of disciplinary procedures for the officers under the administrative control of the Ministry of Public Administration.

Progress is ongoing. The civil service has gained traction for career development with an upgrade in education and training. The salary and benefit structure is much improved and career progression and assignments to sensitive positions involve performance considerations as an important input.

#### Implementing the Annual Performance Agreements:

Annual Performance Agreement (APA), was introduced in the FY 2014-15 and has become an effective instrument for strengthening the performance of government offices. Under this system, a government office makes an agreement with its controlling office to implement its performance targets within the financial year as per budget allocation. The achievements are evaluated after the end of each financial year. The performance targets are set according to the priorities of the government; such as implementation of the election manifesto, five-year plans, decisions of the Cabinet, implementation of the commitments of the HPM, implementation of development projects, SDG targets, capacity and skill development programs, effective and efficient public service delivery, implementation of social safety net programs, monitoring and evaluation of development activities, research, formulation of law and implementation of strategies/plans prepared by respective ministry/division. Under the APA, government offices also implement workplans prepared under the National Integrity Strategy (NIS), Right to Information (RTI), Citizens Charter, Grievance Redress System (GRS) and E-governance. These work plans help strengthening good governance practices in the government offices. Best performing government offices are awarded by the respective controlling authority each year. Best performing ministry/divisions are awarded by the HPM. The Cabinet Division has introduced a software for the management of APAs.

Almost all government offices, from ministry/division to upazila level, are practicing APA. Implementation of APA is supervised by the Cabinet Division. An inter-ministerial national committee, headed by the Cabinet Secretary, provides policy support in this regard. A technical committee, headed by the Secretary Coordination and Reforms of the Cabinet Division, provides technical support to the national committee. Every year, the Cabinet Division prepares a guideline for the preparation, implementation, and evaluation of the APA and applies to the ministries/divisions, directorates and field level offices. The Cabinet Division also provides training to government officers and organizes dialogue for the stakeholder ministry/divisions. Each ministry/division also organizes similar programs for own directorates and field level offices. APA will soon be connected with the performance of individual employee; the Ministry of Public Administration is working on this. This will further strengthen the performance and result based activities of the government offices. The cabinet division is focusing on the enhancement of the quality of performances and currently working with the ministry/divisions in this regard. APA can be an effective tool for the implementation of the 8th Five Year Plan and monitoring progress.

Strengthening the Grievance Redress System: The central Grievance Redress System (GRS) has been improved by the Government, which has allowed citizens to express their concerns and grievances about public bodies in a systematic and non-threatening way. GRS is now rolled out to most of the government offices. The online platform is operative and functional which takes grievances, feedbacks, frequently asked questions, requests for appeals, suggestions for improvements, etc. It also provides GRS guidelines, user manual and process map to make the process user friendly. Compared to 2015, when the system was first introduced, the process of filing complaints through the GRS software has been simplified and made easier for the users. Today, through an automated process, all the registrations are done, and complaints are filed and resolved. The FY 2022 Annual Performance Agreement by the Cabinet Division has now included a section on strengthening Grievance Redress System as one of its mandatory strategic objectives. Under the 8FYP, the Government will improve the functioning of the central Grievance Redress System (GRS). The system has, until now, allowed the citizens to benefit from the availability of an institutional scope to systematically express their concerns or grievances with the public bodies, so that genuine concerns about them are addressed through a non-threatening, supporting mechanism. Thus, further mainstreaming of such institutional scopes for registering public grievance will allow the public bodies to serve the people better.

Implementing National Integrity Strategy (NIS): National Integrity Strategy (NIS) is a framework developed by the government of Bangladesh to promote transparency, accountability, and good governance in various sectors of the country. It aims to combat corruption and ensure the effective use of resources for the betterment of the

nation. The NIS typically involves a multi-stakeholder approach, bringing together government agencies, civil society organizations, private sector entities, and other relevant actors to collectively address issues related to integrity and corruption.

Cabinet Division has formulated 4 different types of work-plans for Ministries/Divisions/Organizations, Divisional Commissioner offices, departments/attached bodies, and field-level offices with the purpose of implementing integrity, and promotion of good governance. Ministries/divisions have been instructed to undertake at least three activities according to their respective types of work to promote integrity and prevent corruption in the process of those activities. Implementation of the NIS work plan of Ministries/Divisions/Organizations is being monitored by Cabinet Division on a quarterly basis. Integrity Award (amendment) Policy, 2021 has been introduced to encourage practicing integrity among the public servants.

NIS localization has been piloted in 8 Upazilas of 8 divisions and in one City Corporation (Sylhet City Corporation) under National Integrity Support Project (Phase 2). Workshops have been organized in the Upazilas and City Corporation with people who can play an active role in spreading integrity and NIS tools like- RTI, Citizens Charter, and Grievance Redress System. To ensure accountability and transparency at all levels Cabinet Division is playing a pioneering role in implementing National Integrity Strategy.

# 15.5.2 Strengthening Judiciary and the Rule of Law

The 8FYP identified several performance indicators to measure progress. These included: (i) formal judicial institutions; (ii) semi-formal and informal judicial institutions; (iii) access to justice; (iv) E-judiciary; (v) establishment of independent prosecution services; (vi) establishment of a judicial Academy; and (vii) professional development of judges and sub-ordinate judiciary.

Strengthening formal judicial institutions: The shortage of judges in the Bangladeshi judiciary is a major concern. Despite efforts to rapidly dispose of pending cases, the Supreme Court administration's statistical report shows that there are 528,748 pending cases in 2021, with 512,576 under the High Court Division and 16172 under the Appellate Division (Figures 15.1 and 15.2). The number of new filings has increased compared to the previous year in both the high court and appellate divisions. To address the issue of case backlogs, and to bring transparency to the judicial process, a monitoring cell has been established for each of the eight divisions of the country, headed by a judge of the High Court Division. Progress reports are submitted monthly. Additionally, eight judicial officers have been appointed for each division to assist the High Court judges. Despite progress, continuous efforts will be needed to satisfactorily address this concern.

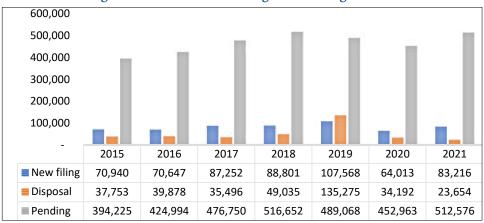


Figure 15.1: Trend in Pending Cases in High Court

Source: Annual Report 2021, Supreme Court

25,000 20,000 15,000 10,000 5,000 2015 2019 2016 2017 2018 2020 2021 ■ New filing 8,007 9,945 11,484 10,572 9,478 6,958 7,806 8,591 Disposal 9,992 9,634 6,695 6,859 6,303 15,350 ■ Pending 13,361 13,672 16,565 20,442 23,617 15,225 16172

Figure 15.2: Trend in Pending Cases in the Appellate Division

Source: Annual Report 2021, Supreme Court of Bangladesh

Enhancing the effectiveness of semi-formal and informal judicial institutions: In developing countries, between 70-80% of people tend to rely on informal or semi-formal institutions to resolve civil or quasi-criminal disputes. The government of Bangladesh has acknowledged this and has delegated judicial power to village courts to address this issue.

The second phase of the Activating Village Courts phase was launched in January 2016 (2016-2022) with financial support from the EU, UNDP, and GoB, through functionalizing VC services in 1,080 unions of 128 upazilas in 27 districts under 8 divisions. Later on, the project was extended further to 121 UPs of 26 upazilas in 3 districts of the CHT area aiming to strengthen the traditional justice system in the CHT districts and explore the possibility of Village Courts in 15 UPs doing action research (Ministry of Local Government, Rural Development & Cooperatives). The Village Courts Performance from July 2017- May 2021 shows that nearly 2,35,891 disputes were reported during the period, out of which around 70,000 cases were filed by women. Out of all the cases, nearly 83% of the cases were resolved. The government has taken necessary steps to implement the third phase of the Activating Village Courts programme across the country to make sure justice is more accessible, fair, and affordable for the poor, women, and vulnerable groups. The government is also working to amend the Village Court Act 2006 to make it more efficient and user-friendly.

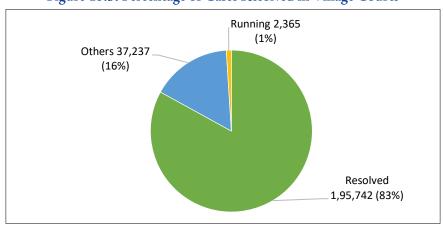


Figure 15.3: Percentage of Cases Resolved in Village Courts

Source: Bangladesh Ministry of Local Government

Enhancing access to justice: The National Legal Aid Organization offers legal aid to people who are financially poor, unable to obtain justice due to various socio-economic reasons, and in need of help. This aid is provided through a network of 64 Legal Aid Offices, Supreme Court Legal Aid Offices, 02 Labor Legal Aid Cells, and National Helpline Call Centers across the country. In FY2022, a total of 1,22,687 people benefited from government legal aid services through the National Legal Aid Agency. Legal advice is available not only from call centers but also from District Legal Aid Offices, Supreme Court Legal Aid Offices, and Labor Law Support Cell offices. Anyone can avail legal advice services under the Government Legal Aid Scheme as per the Legal Aid Policy 2014. In FY2022, a total of 58,683 individuals sought or received legal advice. During FY2022, a total of 26,693 cases were filed through the Legal Aid Offices established in the Judge Courts/Chief Judicial Magistrate Courts of 64 districts. These cases included criminal, civil, family, and other cases, and were filed for people who were financially poor, helpless, and unable to get justice due to various socio-economic reasons. Financial assistance was provided for these cases. In addition, during FY2022, the Supreme Court Legal Aid Office provided legal assistance at government expense for 118 cases.

Strengthening E-judiciary: The digitalization of courts in Bangladesh started back in 2009 with the aim of applying the Information and Communication Technology (ICT) in the judiciary system of the country. The Government of Bangladesh have a plan to implement the e-judiciary project to digitize the entire justice system with the goal of removing backlog of cases, making the justice system swift, ensuring better access to justice, speeding-up disposal of existing cases, reducing stockpile of cases' papers and facilitating the litigation. During the Covid period (2020-2022), some progress had been witnessed in the e-judiciary process when the Government, in order to ensure access to justice of the people, undertook a giant step forward for establishing digital court by enacting the "Use of Information Technology by the Courts Act, 2020 and the Supreme Court, within the scope of this act, issued several practice directives for the Appellate Division, High Court Division and Subordinate Courts for conducting judicial proceedings virtually. The new law and directives opened a new era for E-judiciary. By using the virtual court platform, the Sub-ordinate judiciary heard and disposed of a number of 3144286 bail petitions and granted bail to a number of 158181 detainees. It exhibits the effectiveness of e-judiciary in reducing backlogs of cases. However, complete digitalization of the courts' proceedings is still pending. There is still a need for quality infrastructure, good broadband connection, computer facilities, constant access to power and electricity, availability of court officers with technical knowledge, etc. This also means implementing adequate cyber-security measures to handle sensitive documents and proceedings. Although e-judiciary has shown some success in the past, it still has a long way to go, and have to curtail several challenges before becoming an efficient and safe system.

Establishing independent prosecutor services: There has been a long call for an independent prosecutorial service in Bangladesh. Reflecting this the 8FYP sought to establish independent prosecutor services. The law ministry has taken an initial step towards addressing this issue by drafting a law that would establish a permanent attorney service in Bangladesh. This would involve recruiting public prosecutors based solely on merit, through a national exam similar to that used for other civil servants. Once appointed permanently, these prosecutors would be held accountable for their performance. Enacting this law will be an important milestone to strengthen the judicial system.

Establishing a judicial academy: Recognizing the importance of proper training of judicial officials, the 8FYP sought to establish a national Judicial Academy. In the meanwhile, efforts are underway to impart training to judges with support from India. A Memorandum of Understanding (MoU) has been entered between the National Judicial Academy, India (NJA) and the Supreme Court of Bangladesh for organizing training and capacity building programmes for Bangladesh Judicial Officers. In pursuance of the said MoU, both online and in-person training programs for Judges nominated by Bangladesh were organized by NJA (hereinafter Academy) across 2021 through 2023.

#### 15.5.3 Improving Economic Governance

The 8FYP noted the importance of improving economic governance to further enhance economic development in the country. It identified several areas where governance improvement would be beneficial: (a) strengthening banking sector governance to reduce the loan portfolio and reduce the incidence of non-performing loans (NPLs); improving loan recovery and the effectiveness of banking courts; improving tax performance through stronger tax compliance; improving planning and budgeting; increased transparency and participation in the budgetary process; and adopting multi-year public investment programme.

Strengthening banking sector governance: Despite constant effort by the Government, the economy currently has a vulnerable financial sector that is burdened by large amounts of non-performing loans (NPL). Total classified outstanding loan stands at 1893.42 billion Taka as of June 2022. As of June 2022, total NPL amounted to 1252.60 billion BDT. The International Monetary Fund (IMF) has also expressed concern that high levels of NPLs could negatively affect the country's economic growth. It further pinpoints that if we add total restructured, rescheduled loans to total non-performing loans, then the size of troubled assets will be higher than 21%. In light of this, Bangladesh government has taken steps to improve the quality of staff recruitment at the Bangladesh Bank (BB), as well as providing the necessary resources to acquire technology that will increase its effectiveness. As per the Bangladesh Monetary Policy Statement (Jan-Jun 2023), BB has been adopting several legal and regulatory measures, that are complying to the international best practices, to contain NPL and establish good governance practices. Relevant regulatory frameworks are being constantly analyzed and updated. Vital instruments to manage NPLs, such as multifaceted macro prudential policies, are being amended/updated, ensuring global standards. BB is also working closely with 8 private banks and 4 state-owned commercial banks by signing MoUs to address their NPL related issues; banks and NBFIs have been advised by Bangladesh Bank to improve financial health by strengthening their recovery drive. Establishing "special monitoring cells" are being stressed on for continuous review and oversight of big loans. Necessary regulatory measures have also been taken concerning appointing Directors of NBFIs.

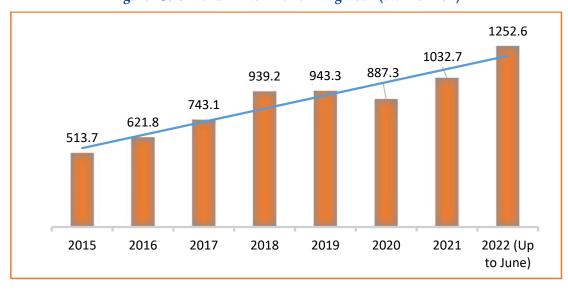


Figure 15.4: Trend in Non-Performing Loan (BDT billion)

Source: Bangladesh Bank



Figure 15.5: Trend in Total Classified Loans (BDT billions)

Source: Bangladesh Bank

Improving loan recovery and effectiveness of bank loan recovery courts: The rise in bad loans in Bangladesh's banking sector is attributed to lower loan-recovery rates and economic turmoil, as well as the nexus among directors of different banks. When borrowers fail to repay loans, cases are filed against them to recover the loan, but nearly 40 thousand cases remain pending, causing financial losses to the banks. The four Artha Rin Adalat courts have a total of around 37,500 pending cases, and the 120-day deadline for settling cases is often not met due to repeated deferments of hearing and judges being transferred. In view of this the 8FYP advocated a substantial strengthening of the effectiveness of the bank loan recovery court. As a part of the newly approved Finance Companies Law 2023 that tightens up the process of identifying loan defaulters and penalizing this behavior, efforts are underway to strengthen the functioning of the Artha Rin Adalat courts. The fast tracking of this effort is very important to stop the bleeding of the banking sector.

Strengthening tax compliance: Bangladesh has one of the lowest tax-GDP ratios in the world and in recent years tax revenues as a share of GDP have been falling. For example, in FY2022, the tax to GDP ratio stood at a mere 7.1% of GDP. While several factors explain this low and falling tax to GDP ratio, a major factor is the large incidence of tax avoidance and negotiated tax settlement between taxpayers and tax collectors. As noted in Chapter 3, the 8FYP adopted the medium-term fiscal framework of PP2041 that sought to modernize the Bangladesh tax system. A large part of this modernization effort involves instituting built in features in the tax system that provides incentives for voluntary tax compliance and eliminates opportunities for negotiated tax settlements. From the governance point of view, the key features of this modern tax system is to separate tax planning from tax administration, remove all interface e between taxpayer and tax collector through digitization of tax filing and tax payments, highly selective and productive audits, and eliminating income – expenditure reconciliation that is the primary sources of tax corruption and harassment and a major barrier to voluntary tax compliance. The government is yet to adopt this modern tax system.

In the meanwhile, steps are being taken to improve the existing tax framework to mitigate both tax avoidance and tax evasion by economic agents. An automated system has been introduced for VAT and income tax collection along with bonded warehouses. Additionally, the National Board of Revenue (NBR) organizes regular events to enroll new taxpayers and encourage the existing taxpayers to pay their due share accordingly. However, despite the efforts, the government has been struggling to raise tax-GDP ratio, which is increasing its fiscal pressure. The

adoption of a broad-based tax system as advocated in the MTFF of the PP2041 and highlighted in the 8FYP is essential to improve tax compliance and raise the tax to GDP ratio.

Improving planning and budgeting: Medium-Term Budgetary Framework (MTBF) is one of the most important policy reforms in the fiscal management of Bangladesh. To achieve this, the government adopted a number of measures, including the introduction of a performance-based budgeting system, which aims to link budgetary resources to the achievement of specific outcomes and results. As part of the process, the 'Medium Term Budget Framework (MTBF) (2022-23 to 2024-25)' book was prepared in coordination with the budget framework of 62 ministries/divisions of the Government. The book highlights information on each ministry's mission statement, strategic objectives, activities, non-profit sector, recent achievements and performance indicators. Additionally, output indicators and targets have been set against each activity. Through this, reasonable distribution and efficient use of government resources can be ensured and observed. The budget framework will also allow local and international researchers, different stakeholders, and the general public to have an opportunity to know details about the government's consolidated budget, various planning documents, budget linkages with policy strategies and the medium-term estimated or projected budgets of ministries/departments (or various institutions).

Although Bangladesh has improved the MTBF process, budget implementation has been low over the last few years. The government managed to implement 85 per cent of the budget in the last fiscal year. The execution rate was 97 per cent in 2010-11 and 90 per cent in 2012-13 and since then, it has ranged between 80 per cent and 85 per cent. In the last fiscal year (FY22), budget implementation fell short of the target as development expenditure was less than projected. Additionally, the monitoring and evaluation of the extent to which the planned linkage of spending with outcomes is actually obtained does not happen.

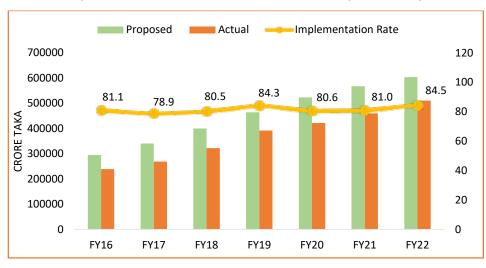


Figure 15.6: Trend in Planned and Actual Budget Spending

Source: Ministry of Finance

Increased transparency and participation in the budgetary process: According to the Open Budget Survey (OBS), Bangladesh has a transparency score of 36 out of 100, indicating that the country is not publishing enough material to support informed public debate on the budget. The OBS evaluates the online availability, timeliness, and comprehensiveness of eight key budget documents using 109 equally weighted indicators and scores each country on a scale of 0 to 100. Some progress has been made in recent years. To improve the transparency of

the budget, the Ministry of Finance (MoF) publishes various fiscal reports on its website. Actual spending and revenue data are now published with several months gap. Given the growing deviation between planned and actual revenue and spending outcomes, the availability of actual data has significantly helped to understand the ongoing developments on the fiscal front. The MoF also published its own analysis of fiscal and macroeconomic developments, which is useful background information to understand fiscal policy developments in Bangladesh.

Although the MoF has instituted a participatory process in budget making through several rounds of consultations with representatives from business, civil society and the research community, there are concerns that this consultation is mostly targeted to influential members of the business community and for other stakeholders the consultation is merely routine in nature with little impact on the actual budget making process. The MoF needs to reflect on this more and work out ways to address this concern.

Adopting multiyear investment programmes: Recognizing the need to enhance the quality of the public investment planning process, several Public Investment Management (PIM) tools have been developed. Sector Strategy Paper (SSP) is one of them. The SSP will provide necessary information regarding sectoral goals, performance, challenges and above all identify policies and strategies of the Five-Year Plan. The SSP will be complemented by Multi-Year Public Investment Programmes (MYPIP). The MYPIP of the LGRD sector has been developed by the Programming Division under the Strengthening Public Investment Management System (SPIMS) Project as one of two pilot sectors. The MYPIP can offer up-to-date projection of "fiscal space" at the sector- and sub-sector levels, based on the information from ADP, Revised ADP, Development Project Proposals (DPPs) and Technical Assistance Project Proposals (TPPs) in this sector.

Improving the effectiveness and accountability of the capital market: The Bangladesh stock market is still fairly underdeveloped and a constraint to financing long-term investments. A key target of the 8FYP was to strengthen governance and improve efficiency to enhance the role of the stock market. Accordingly, steps are being taken to beef up the long-term capacity of the Bangladesh Securities and Exchange Commission (BSEC) with emphasis on skilled human capital, modern technologies, and prudential regulations. BSEC is redefining securities laws and regulations for issuers, stock exchanges, and other capital market intermediaries with emphasis on transparency and good governance. The technology platform XBRL will be used for enhancing transparency and accountability for stock exchanges, listed companies, and other market intermediaries. BSEC is seeking to enforce compliance with International Financial Reporting Standards, International Standards of Auditing, and best-practice corporate governance codes.

# 15.5.4 Improving Governance of Local Government Institutions (LGIs) and in Other Areas of Government Activities

Improving governance in LGIs: The local government system in Bangladesh has undergone significant changes in recent years, with a focus on improving governance and decentralization. Since 2020, there have been several initiatives taken by the Bangladesh government to improve governance in the local government. These include:

- 1. **Introduction of Direct Election:** In 2020, the government introduced direct elections for local government representatives, which has helped to increase accountability and transparency in the system.
- 2. Decentralization of Power: There has been a push towards decentralization of power, with more authority being given to the local government bodies.
- 3. Strengthening of the Local Government Institutions: The government has taken steps to strengthen the local government institutions by providing training and resources to the elected representatives.
- 4. **Digitalization:** The Bangladesh government has been working on the development of an online platform for citizen engagement and participation, as well as the implementation of e-governance initiatives that have made it easier for citizens to access government services at the local level.

5. Transparency and Accountability: The government has been taking steps to improve transparency and accountability in the local government system with greater focus on planning, budgeting and financial accountability.

Strengthening the Election Commission: The government has taken several initiatives to strengthen the Election Commission (EC). These include:

- 1. Appointing 5 new commissioners with diverse backgrounds and expertise in February 2021 to the EC.
- 2. Increasing EC budget.
- 3. Bringing amendments to electoral laws,
- 4. Providing greater autonomy and independence to the EC in the implementation of the electoral laws.
- 5. Launching a national voter registration campaign to update the voter list.
- 6. Providing training for election officials

Making parliamentary process more effective: The government has taken steps to strengthen the parliamentary bodies with a view to increasing greater scrutiny and debate over various government policies and socio-economic outcomes.

Addressing corruption: The government's official policy is zero tolerance for corruption. A major instrument for addressing corruption is to strengthen the working of the Anti-Corruption Commission (ACC). In 2020 and 2021, the ACC received a combined total of 113,773 calls to its Hotline-106, of which 2449 were found to be credible allegations requiring further investigation. Additionally, the commission received 232 graft allegations from the media via email and social media, and 213 from the media via electronic and print outlets. There was a total of 732 anti-graft drives conducted by the commission, 487 in 2020, and 245 in 2021. The delegation of financial and administrative power policy has brought remarkable change in ACC. A web based software, IPMS, has added a new dimension in the technological advancement of ACC. Money Laundering and Asset Recoveries (MLARs) are being sent with due diligence since 2022 to collect money laundering information.

Digitization of land management and land E-registration: The Ministry of Land has already taken multi-faceted digital steps to fulfill the dream of making land services accessible to common people. Notable among these are e-Mutation, Digital Land Development tax, 16122 Call Center, Land Service through Social Media and Kiosks, Digital Survey, Online Application of Jalmahal, Land Data Bank, Mortgage Data Bank. The Ministry of Land has played a leading role in realizing the goal of Digital Bangladesh through these various initiatives. The Ministry of Land has been awarded the United Nations Public Service Award 2020 for its e-Mutation initiative; WSIS Award 2022 and Digital Bangladesh Award 2022 for Digital Land.

The Land Ministry is automating all of its functions, from land acquisitions to the Jalmahal system and E-mutation. People will receive online access to E-Namjari mitigation, E-Porcha, E-Dakhila, land development tax, mouza-map, and other services. In this regard, the land ministry will digitize the nation's 1,38,000 mouza-maps and acquire satellite imagery. The government has already implemented online land transfer, DCR with QR code, and land tax payment. In addition, citizens can obtain land-related services, such as mutation, khatian, and the payment of land development tax, from anywhere in the globe by dialing 16122 and visiting land.gov.bd. Through this, citizens will receive land services from the comfort of their homes, eliminating the need to visit the land office in person. The mobile apps 'Barta' for officers involved in the land management system will be released shortly, according to officials of the land ministry.

Improving digital literacy: As a part of the Prime Minister's Digital Bangladesh Policy adopted in 2009, efforts are underway to enhance the digital literacy of the population. The government's digital literacy efforts are

being complemented by efforts from private agencies. Companies, such as Microsoft, are launching programs that seek to bridge the gap from basic digital literacy to more advanced technical skills training, which can help Bangladesh attract more foreign investment through outsourcing. The latest BTRC data shows Bangladesh continues to maintain the upward trend in indices like the number of mobile phone users, internet subscription and penetration rates, tele density etc.

# 15.6 Emerging Gaps and Way Forward

There have been significant achievements in the governance and institutions sector under the previous plans and the ongoing 8FYP. However, the governance and institutional improvement agenda identified in the 8FYP need further implementation efforts. There are still challenges that need to be addressed to ensure that the sector continues to contribute to the country's economic and development process. Highlighted below are some of the gaps and challenges that need further efforts moving forward.

- Banking Sector Concern: While the Government is seriously committed to improvement of Bangladesh's banking sector governance, the sector has been facing continuous challenges over the last few years. Numerous private banks have faced increased public scrutiny as there are speculations that they have been a vassal for willful loan defaulting within the financial sector. These challenges affected the efficiency of banking operations, led to an increase in loan defaults, cyber security risks, increasing NPL, liquidity shortage, etc. that have been putting pressure on banks' balance sheets since 2020. According to the Government's plan, the entire banking sector (SCBs, PCBs, FCBs and NBFIs) will be brought under a single regulator, i.e., the Bangladesh Bank. BB will be enabled to act quickly to reduce NPLs in the banking sector and ensure that capital adequacy ratios comply with Basel III requirements. To bring some degree of accountability to the problem of willful defaulting within private banks, the Government has adopted the Bank Company (Amendment) Act, 2023 that would usher in serious consequences for habitual loan defaulters and restrict the influence of families on the bank board. In particular, under the new guidelines, the bank directors and their family members must provide collaterals, bonds or securities for taking loans from the bank as per a new provision incorporated in the draft law. The banks will publish their lists of willful defaulters on their websites and newspapers, as per the draft law. An individual will be considered a willful defaulter if he or she does not repay a loan taken in their name or their company's name despite having the means to pay it back. In addition, any person will be treated as a habitual defaulter if he or she takes loans under the name of a non-existent company. A borrower will also be defined as a willful defaulter if he or she transfers any asset kept as mortgaged in banks to get loans without prior approval from the bank concerned. Banks will inform the Bangladesh Bank about willful loan defaulters and the central bank can issue a ban on their foreign travel, obtaining trade license, and companies' registration to the joint stock and security exchange commission. Besides, they have to wait for five years after their name is removed from the list of willful defaulters to become a director of a bank or financial institute. If any director of a bank becomes a willful loan defaulter, the central bank can declare his or her post vacant. Furthermore, under the new arrangement, a maximum of three members of a family can serve on the bank board, down from four in the existing law. However, the tenure of the directors, which was increased to nine years from six years in 2018, remains unchanged.
- II. Money Laundering: The growth in money laundering has become a serious threat to Bangladesh's economic health and foreign exchange reserves, hindering economic good governance and social justice. According to Global Financial Institute (GFI) a Washington-based think tank \$61.6 billion was siphoned out of Bangladesh between 2005 and 2014. In 2015 alone, about \$5.9 billion was laundered out of the country. The GFI reveals that on an average, \$7.53 billion is laundered each year and accordingly from 2016 to 2020, around USD 37.65 billion has been laundered. The GFI ranked Bangladesh among the top 30 countries globally with around 20% of its international trade value being siphoned out of the

country every year. The alleged hot spots are the UK, USA, Canada, Saudi Arabia, Singapore, Malaysia, Switzerland, Thailand, Australia, Hong Kong and so on. Furthermore, to bring some degree of restraint on the noted problem, Bangladesh Bank is monitoring the opening of every letter of credit (LC) that involves a monetary value of more than \$3 million. Moreover, Bangladesh Bank has so far halted more than 100 letters of credit with as much as 20-200 percent higher than the usual prices of goods as part of efforts to prevent money-laundering through imports in FY23. Nonetheless, more efforts are needed to mitigate the problem of trade-based mis-invoicing and money laundering.

- III. Expenditure Overruns in Mega Infrastructure: Cost overruns of mega infrastructure projects are also a matter of concern. This not only amplifies the fiscal pressure on the Treasury, but also undermines both the economic and social viabilities. Therefore, this issue demands public policy commitment to increase the effectiveness of public investment.
- IV. Ineffective Money Loan Court: The Money Loan Court Act was enacted with a view to streamline the process of realization of overdue loans and advances by the banks and financial institutions; however, its effective implementation remains a challenge.
- V. Enhancing Tax Compliance: Despite efforts in every budget to improve tax collection, the very low and declining tax revenues as a share of GDP will seriously compromise the government's ability to implement PP2041. Clearly, an overhaul of the tax system focused on governance is essential. These reforms are clearly identified in the 8FYP and were discussed in chapter 3. Implementation of the 8FYP tax reforms is if highest priority moving forward.
- VI. Decentralization: The decentralization of power and authority to local governments is essential to improve governance and institutions' effectiveness. However, there is still a significant gap in implementing decentralization in Bangladesh. Locally positioned representative authorities with actual discretionary powers can lead to improved local efficiency, equity and development. However, conflicting jurisdiction between Member of Parliaments and local government representatives continue to hinder the effectiveness of the local government agencies. Consequently, more efforts are needed in this area. Additionally, LGIs have serious capacity and resource constraint. Fiscal management is heavily centralized and only a limited amount of resources are channeled through LGIs. The PP2041 calls for a big push in administrative and fiscal decentralization. Serious efforts are needed to jump start this process during the 8FYP as envisaged in the plan.
- VII.Protecting the civil rights of citizens guaranteed in the Constitution: Investigative reports from both local and international agencies have underscored the problem of violation of human rights through curbs on freedom of speech, harassment and even extra-judicial killings, which undermines the local and international stature of law enforcement agencies. Given that the government remains committed to honoring and protecting the human rights of citizens, more accountability mechanisms are needed to guard citizens against wrongful use of state power. The Constitution protects all basic human rights including freedom of speech and the right to property and life. All efforts must be made to ensure that all laws and their implementation are fully consistent with the human rights guaranteed under the Constitution.

# ANNEX

Table 1: Development Results Framework (DRF) of the 8th Five Year Plan

SL	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	6	7
Natio	National Priority: National Priority: Inclusive Economic Growth through Macroeconomic Stability (SDG-8)	nic Growth through M	acroeconomic Stability	, (SDG-8)		
Outco	Outcome Statement: Conducive macroeconomic environment to promote inclusive growth, supported by trade and private sector development	ironment to promote in	aclusive growth, suppo	rted by trade and private s	ector development	
Real Sector	ector					
1.	Per Capita GDP Growth (%)	3.85 (2020)	6.78	6.18% (NAW,BBS 2022-23(p))	7.33	Slightly off track
2.	Gross National Savings (as % of GDP)	30.11 (2020)	32.29	30.2 (BBS, 2023)	34.42	Slightly off track
ć.	Gross Investment (as % of GDP)  (a) Private Investment (as % of GDP)  (b) Public Investment (as % of GDP)  (c) Foreign Direct Investment (FDI) (as % of GDP)	31.75 (a) 23.63 (b) 8.12 (c) 0.54 BBS (2019)	34.00 (a) 25.32 (b) 8.68 (c) 1.90	31.2 (a) 23.6 (BBS, 2023) (b) 7.6 (BBS, 2023) (c) 0.9 (BB, 2023)	36.59 (a) 27.35 (b) 9.24 (c) 3.00	Off track Slightly Off track Slightly Off track Off track
4.	Gross National Income Per Capita (in USD)	2064 (BBS 2020)	2555	2575 (BBS, 2023)	3059	On track
Fiscal	Fiscal Sector					
и	Total Revenue (as % of GDP)	O:9.4 R: 8.2	O: 12.0 R: 11.1	8.6	14.06	Off track
 	(a) Tax Revenue (as % of GDP)	O:7.89 R:7 (FD, 2020)	O:10.6 R: 9.7	7.6 (MoF, 2023) Estimated	12.26	Off track
6.	Government Expenditure (as % of GDP)	O:14.86 R:13.1 (2020)	O:17.6 R:15.8	13.7(MoF,2023) Estimated	19.10	Off track
7.	Government Budget Deficit (including grants) (as % of GDP)	O: -5.39 (2020) R: -4.9	O: -5.5 R: -4.9	-5.0(MoF,2023) Estimated	-5.00	On track
	External Sector					
<u>&amp;</u>	Export (as % of GDP)	O:12.25 R:10.6 (2020)	O:12.5 R:10.8	15.1 (BB, 2023) Estimated	12.64	On track

SL	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
9.	Imports (as % of GDP)	O: 18.31 R: 16 (2020)	O:18.3 R:15.9	21.5 (BB, 2023) Estimated	18.74	Off track
10.	Remittance (as % of GDP)	O:5.46 R: 4.9 (2020)	O:5.1 R:4.3	5.3 (BB, 2023) Estimated	4.84	Off track
Mone	Monetary/Financial Sector					
11.	Broad Money (M2) growth (% change)	12.64 (2020)	13.83	9.0 (BB, 2023) Estimated	13.50	Off track
12.	Private Sector Credit growth (% change)	13.14 (2020)	14.33	12.0 (BB, 2023) Estimated	14.18	Off track
13.	CPI Inflation Rate (Annual Average)	5.65 (2020)	4.80	8.5 (BBS, 2023) Estimated	4.60	Off track
	National Priority: Reducing Poverty and Inequality (SDG-1,10)	tality (SDG-1,10)				
	Outcome Statement: Reduction in poverty and	nd inequality across all groups and regions	roups and regions			
14.	Proportion of population living below the national poverty line	UPL:20.5% LPL:10.5% (2019, BBS)	UPL: 18.50% LPL: 9.1%	UPL: 18.7% LPL: 5.6% (HIES, 2022)	UPL: 15.60% LPL: 7.4%	UPL: On track LPL: Target achieved
15.	Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	MPI: 0.168 Headcount Ratio: 36.10 Intensity: 46.5		MPI: 0.106 Headcount Ratio: 24.05 Intensity: 44.16 (GED & BBS Estimated 2023)	SDG 1.2.2 indicator; No target associated with 8FYP	On track
16.	Proportion of population covered by social protection	28.7% (HIES, 2016)	33.56%	National: 50.0% Rural: 59.1% Urban: 30.7% (HIES, 2022)	35.00%	On track
17.	Degree of inequality (Gini coefficient) (a) income inequality (b) consumption inequality	(a) 0.482 (b) 0.324 (HIES, 2016)	(a) 0.456 (b) 0.296	(a) 0.499 (b) 0.334 (HIES, 2022)	(a) 0.450 (b) 0.290	(a) Off track (b) On track
	National Priority: Health and Well-Being (SDG-3)	G-3)				
	Outcome Statement: Sustainable improvements in health sector including reproductive health, family planning, particularly of vulnerable group	ts in health sector inclu	ding reproductive hea	lth, family planning, particu	ılarly of vulnerable gı	roup

SF	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
18.	Maternal mortality ratio	165 (SVRS, 2019)	120	156 (SVRS 2022)	100	Slightly off track
19.	Proportion of births attended by skilled health personnel (%)	59 (MICS, 2019)	67.25	61.5% (SVRS 2022)	72.00	Slightly off track
20.	Under-5 mortality rate	28.00 (SVRS, 2019)	27.40	31 (SVRS 2022)	27.00	Off track
21.	Neonatal mortality rate	15.00 (SVRS, 2019)	14.40	17 (SVRS 2022)	14.00	Off track
22.	Prevalence of stunting among children under 5 years of age (%)	28.0 (MICS 2019)	22.28	24.0 (BDHS,2022)	20.0	Slightly off track
23.	Prevalence of undernourishment (%)	13.0 (FAO 2019)	11.5	11.4 (MEFWD,2022)	10.5	On track
24.	Prevalence of malnutrition (wasting and overweight) among children under 5 years of age	Wasting: 9.8% Overweight:2.4% (MICS 2019)	7.8 1.4	Wasting: 11% (BDHS 2022)	7.0% 1.0%	Off track
25.	Life Expectancy at Birth	72.6 (SVRS, 2019)	73.51	72.4 (BBS, SVRS 2022))	74.00	Off track
26.	Total Fertility Rate (TFR)	2.04 (SVRS, 2019)	2.01	2.15 (BBS, SVRS 2022)	2.00	Off track
27.	Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	77.4% (MICS 2019)	79%	62.8 (BBS, SVRS 2022)	80%	Off track
28.	Contraceptive Prevalence Rate (%)	63.4 (SVRS, 2019)	71.6	63.8 (BBS, SVRS 2022)	75.0	Off track
29.	Proportion of the target population (≤12 months old children) covered by all vaccines included in national programme	85.60% (BDHS 2017-18)	94.90%	93.35 (MEFWD,2022)	98.00%	On track
30.	Proportion of births in health facilities by wealth quintiles (ratio of lowest and highest quintiles)	1:3.00 (BDHS 2017-18)	1:1.99	1:2.00 (BDHS 2022)	1:1.50	On track

SF	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
31.	Tuberculosis incidence per 100,000 population	221 (WHO 2019)	143	221 (WHO,2022)	112	Off track
32.	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	21.6% (WHO, 2019)	18.0%	25.5 (BBS, SVRS 2022)	16.8%	Off track
	National Priority: Clean Water, Sanitation (SDG-6)	G-6)				
	Outcome Statement: Ensure availability of safe drinking water and sanitation for all	e drinking water and sa	mitation for all			
33.	Proportion of population using safely managed drinking water services	42.6% (MICS 2019)	62%	55.5 (BBS, SVRS 2022)	75%	On track
34.	Proportion of population using safely managed sanitation services	64.4 (MICS 2019)	74%	66.1 (BBS, SVRS 2022)	%08	On track
35.	Proportion of transboundary basin area with an operational arrangement for water cooperation	38% (JRC, 2018)	41%		41%	Updated data not available
	National Priority: Quality Education (SDG-4)					
	Outcome Statement: Quality education for all to reduce poverty and increase economic growth	to reduce poverty and	increase economic grov	vth		
36.	Completion rate (primary education, lower secondary education, upper secondary education)	82.1 (APSC 2019) b) 64.98 c) 81.45 (BES 2019)	a) 90.00 b) 66.53 c) 83.08	(a) 86.05 (b) 64.02 (c) 77.28 (BANBEIS, 2022)	a) 92.00 b) 70 c) 85	Off track
37.	Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being	National: 74.50% (MICS, 2019)	78.17%		80.00%	Updated data not available
38.	Number of enrolled children with disabilities (by gender)	Boys: 54442 Girls: 43869 Total: 98311 (APSC-2019)	56000 50000 106000	29192 31189 60381 (BES, 2022)	56500 50000 106500	

	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[(2025)	Comments
	2	3	4	ĸ	9	7
Proportion electricity; ( purposes; ( materials fc basic drinki sanitation fa washing fad definitions)	Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic hand washing facilities (as per the WASH indicator definitions)	Primary (a) 87.73% (b) 76.83% (c) 79.83% (d) 61.44% (IMD, DPE -2019) (e) 97% schools (f) 76.24% schools (g) 26% (APSC, 2019) Secondary a)93.25 b)37.64 c)76.72 d)18.48 e)97.07 f)95.93 g)28.66 (2019)	Primary:  (a) 94%  (b) 90%  (c) 90%  (d) 75%  (e) 99%  (f) 86%  (g) 77%  (g) 77%  (a) 97.08  (b) 42.08  (c) 77.97  (d) 23.31  (e) 98.06  (f) 69.74  (g) 45.31	Primary a) 98.51 (b) 53.32 (c) 77.76 (d) (e) 97.69 (f) 97.34 (g) 91.03 (BES, 2022)	Primary (a) 100% (b) 100% (c) 100% (d) 80% (e) 100% schools (f) 85% schools (g) 100% (a) 100% (b) 50% (c) 100% (d) 80% (e) 100% (f) 100% (g) 70%	Primary a) On track (b) Off track (c) Off track (d) (e) Slightly off track (f) On track (g) On track
Propor	Proportion of teachers with the minimum required qualifications, by education level	(a) Lower Secondary: 62.01% (b) Upper Secondary: 59.01% (2019)	(a)Lower secondary 79.38% (b)Upper Secondary: 76.34%	Lower secondary: Male: 62.28 Female: 64.22 Total: 62.76 Upper secondary: Male: 58.18 Female: 73.52 Total: 61.95 (BES, 2022)	(a)Lower secondary 85% (b) Upper Secondary: 80.00%	Off track
Public	Public education expenditure as % of GDP	2.2	2.6	2.82% (BES, BBS, 2022)	3.0	On track

SL	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
42.	Volume of official development assistance flows for scholarships by sector and type of study	8.76 MUS\$ (2015, ERD)	17.80 MUS\$		20.00 MUS\$	Updated data not available
	National Priority: Employment (SDG-8)					
	Outcome Statement: Increased productive and decent employment opportunities for sustainable and inclusive growth	decent employment o	pportunities for sustain	able and inclusive growth		
43.	Annual growth rate of real GDP per employed person	5.85% (BBS 2018-19)	1	3.90 (BBS, NAW, 2021- 2022)	5.5%	Off track
44.	Proportion of informal employment in total employment, by sector and sex	Both: 78.0% (M: 76.0%, F: 85.5%) (LFS 2016-17)	76.5		Both: 75%	Updated data not available
45.	Unemployment rate, by sex, age and persons with disabilities	By sex Male: 3.1% Female: 6.7%	1	Male: 3.6% Female: 3.6% (LFS, 2022)	Male: 0.8% Female: 2.1%	Male: Off track Female: On track
		By Age 15-24 years: 12.3% 25-34 years: 5.7% 35-44 years: 1.2% 45-54 years: 0.8% 55+ years: 0.6% (LFS 2016-17)			By Age 15-17 years:5.4% 18-24 years:4.4% 25-29 years:3.0% 30-64 years:1.0% 65+ years: 0.24%	Updated data not available
46.	Proportion of youth (aged 15–24 years) not in education, employment or training	Total: 26.8% (M: 9.2%, F: 43.9%) (LFS 2016-17)	1	Total: 22.0% Male: 16.2% Female: 27.1% (BBS, LFS, 2022(p))	12%	On Track
. 74	Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	a) Fatal injuries: 228 (M: 220; F: 8) b) Non-fatal injuries: 111 (M: 94; F: 17) (DIFE, 2019)	a) Fatal injuries: 130 (M:124; F: 6) b) Non-fatal injuries: 80 (M: 68; F: 12)	a) Fatal injuries: 176.0 b) Non-fatal injuries: 220. (DIFE 2021)	a) Fatal injuries: 98 (M:93; F: 5) b) Non-fatal injuries: 60 (M: 51; F: 9)	a) On Track b) Off Track

SL	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
	National Priority: Agriculture, Food Security (\$	(SDG-2)				
	Outcome Statement: Achieving food security a	ınd promoting sustaina	ble agriculture for bec	and promoting sustainable agriculture for becoming a prosperous country	ıry	
48.	Agricultural sector GDP growth rate (%)	3.11 (BBS 2020)	4.10	2.6 (BBS, 2023)	3.90	Off track
49.	% of agriculture budget allocated in the agricultural research	8.35 (2020)	11.11		13.45	Updated data not available
	Prevalence of moderate or severe food	Moderate: 30.5%	Moderate: 26%	Moderate: 31.9%	Moderate: 24.2%	
50.	insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	Severe: 10.2% (FAO, 2019)	Severe 8%	Severe 10.5% (FAO, FPMU)	Severe 6%	Off track
	National Priority: Transport and Communication (SDG-9)	on (SDG-9)				
	Outcome Statement: Improved infrastructure for higher economic growth	for higher economic gr	owth			
51.	Length of targeted four-lane road (km)	30 (2019)	150		200	Updated data not available
52.	Share of RHD highway road network in good and fair condition (% of network)	81.4% (2020)	%06	89 (RTHD 2022)	95%	On track
53.	Length of Metro Rail Transit (MRT) network (km)	0 (2015)	22	11.73 (DMTCL 2022)	45	On track
54.	Upazila, Union and Village Road network in good and fair condition	38 % (2019)	52%		57%	Updated data not available
55.	Length of targeted new railway network (km)	2955 (2018)	3600		3800	Updated data not available
56.	Length of targeted new double railway network (km)	110.5	540		1110.5	Updated data not available
57.	Proportion of the rural population who live within 2 km of an all-season road	83.45% (LGED, 2016)	%88	89.47% (SVRS, BBS 2022)	%06	On track

ST	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
		Passenger: 130.99 Lac Freight:4.12Lac M. tonne (CAAB, 2019)	Passenger: 130.13 Lac Freight: 439084 M. tonne		Passenger: 146.34 Lac Freight: 4.98 Lac M. tonne	
,	Passenger and freight volumes, by mode of	Passenger (by bus) 480 Lac Freight (by truck) 4.85 Lac Tonne (RTHD)	Passenger (by bus) 600Lac Freight (by truck) 6.00 Lac MT		Passenger (by bus) 700 Lac Freight (by truck) 7.00 Lac MT	Updated data not
	transport	Passenger:31.47 Crore Freight: 55.94 MT (BIWTA)	Passenger: 36.58 Crore Freight: 74.32 MT		Passenger: 43.06 Crore Freight: 89.52 MT	available
		Passenger: 1.97 Lac Container: 6678 TEUS Vehicle by Ferry: 30.72	Passenger: 2.28 Lac Container: 9678 TEUS Vehicle by Ferry: 25.93		Passenger: 2.52 Lac Container: 11678 TEUS Vehicle by Ferry: 9.07	
	National Priority: Power, Energy and Mineral Resources (SDG-7)	(BIW1C) Resources (SDG-7)				
	Outcome Statement: Ensure sustainability in production, consumption and use of energy and mineral resources	roduction, consumption	on and use of energy a	nd mineral resources		
59.	Electricity Installed Generation Capacity (MW)	23548 (FY 2020)	28000	28,134 (PD, 2023) Estimated	30000	Target achieved
90.	Access to electricity (% of households)	97% (PD 2019)	100%	100% (PD, 2023)	100%	Target achieved
61.	Per capita generation of electricity (kWh)	512 (PD 2019)	632	602 (PD, 2023)	720	On track
62.	Share of renewable energy to the total electricity generation (%) (including hydro)	3.25 (FY 2019)	7.00	4.59 (PD, 2023)	10.00	Slightly Off track.

SF	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	6	7
63.	Proportion of population with primary reliance on clean fuels and technology	26.3% (FY 2019)	25%	28.6% (SVRS, 2022)	30%	On track
	National Priority: Gender (SDG-5) and inequa	tality (SDG-10)				
	Outcome Statement: Achieve gender equality	and empower all women and girls	n and girls			
64.	Percentage of seats held by women at National Parliament	20.86 (2020)	29	20.86(, 2022)	35	On track
65.	Percentage of women aged 20-24 who were married before age 18	51.4 (MICS,2019)	34	40.9% (SVRS,2022)	30	On track
.99	Ratio of girls to boys in tertiary education	0.7	0.88	0.75 (SVRS,2022)	1.0	On track
67.	Gender budget as percentage of total budget	30.82 (FD 2019)	33	33.84 (2023)	35	On track
.89	Percentage of female teachers at (a) primary, (b) secondary (c) tertiary education	a) b)25.60 c)27.23 (2019)	68 32 29	a)64 b)30.6 c)28.3(2022)	a)70 b)35 c)30	On track
.69	Proportion of women in managerial positions	11.4 (LFS 2016)	21		23	Updated data not available
70.	Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	54.7 (2015)	34		20	Updated data not available
71.	Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence	6.2 (2015)	4.2		3.0	Updated data not available
72.	Proportion of time spent on unpaid domestic and care work, by sex	F: 23.6 (FY 2017) LFS, BBS	F:22%	F: 24.5% M: 3.3% (TUS, BBS 2021)	F: 20% M: 10%	Off track

SF	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
73.	Growth rates of household expenditure or income per capita among a) the bottom 40 per cent of the population and b) the total population	a)7.7 b) 9.1 (2016)	1	a) 15.1% b) 15.5% (BBS, HIES, 2022))	a) 9.5 b) 9.3	On track
	National Priority: Environment, Climate Change and Disaster Management (SDG-13, 14, 15)					
	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	erved and prevented fr	om degradation, and a	disaster management strat	egy exists as well as er	nsuring climate
74.	Consumption of ozone depleting H-CFCs (Ozone Depleting Potential (ODP))	65.35 (2016)	30.5	46.94 (UN Environment, 2021)	23.61	Off track
75.	Forest area as a proportion of total land area (based on periodic survey)	14.1 (2015)	14.8	14.2% (MoE, 2022)	15.2	Off track
76.	CO2 emissions (tonnes per capita)	0.91 (2019)	1	0.55 (Global Carbon Project,2021)	1.38	
77.	Coverage of protected areas in relation to marine areas	2.05 (2016-17)	1	8.8% (United Nations, 2022)	7.94	On track
78.	Percentage of wetland and natural sanctuaries maintained	1.51 (2014-15)	2.0		2.20	Updated data not available
79.	Percentage of forests that are protected	3.06 (2020)	3.30	2 (MoE, 2021)	3.40	Off track
.08	Mean urban air pollution of particulate matter (a) PM10 in µg/m3 (b) PM2.5 in µg/m3	(a)145 (2017) b) 85 (2017)	130 78	151-260 (DoE, 2023)	120 73	Off track
81.	No. of usable cyclone shelters	4014 (2019)	4,447	4180 (WB, 2022)	4,847	On track
82.	Developing Guidelines for Risk Reduction as Mentioned in revised SoD	04 (2020)	13		19	Updated data not available
83.	Number of housing with disaster resilient habitats and communities assets	70,000 (2020)	2,90,000		3,80,000	Updated data not available

SL	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
84.	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Affected Persons: 12,881 per 100,000 people	4000	<ul><li>a) Death: 0.85</li><li>b) Missing: 0.03</li><li>c) Directly affected: 3578.03</li><li>(BDRHS, 2021)</li></ul>	2000	On track
	National Priority: Information and Communication Technology (ICT)	ation Technology (ICT	(1			
	Outcome Statement: Increased access to digit	tal communication through telephone and broadband services	ugh telephone and broa	adband services		
85.	Proportion of individuals who own a mobile telephone	96.28 (2020)	100	Age 5+: 59.6% Age 15+: 73.8% (SVRS, 2022)	120	
.98	Proportion of population covered by a mobile network, by technology	2G: 99.6% 3G: 95.40% 4G: 82% (BTRC, 2019)	100	2G:99.63% 3G: 95.5% 4G: 98.10% (BTRC, BTCL, 2022)	100	On track
87.	Fixed Internet broadband subscriptions per 100 inhabitants, by speed	4.80 (2019)	10	5.82 (BTRC, 2022)	15	Off track
88	Internet users per 100 people population	60.34 (2020)	80	Age 5+: 41.0% Age 15+: 45.5% (SVRS, 2022)	90	
	National Priority: Urban Development (SDG-	j-11)				
	Outcome Statement: Reduced urban poverty a	and improved living cor	nditions through better	and improved living conditions through better city governance and service improvements	ce improvements	
.89	Proportion of urban population living in slums, informal settlements or inadequate housing	33%	28.2		25%	Updated data not available
90.	Percentage of urban population having access to (a)public health service (b) safe drinking water (c) sanitation facilities	a) 87 b) 47.9 c) 55.9	94.8 91.2 92	a) b) 94.73 c) 95.31 (HIES, 2022)	a) 100 b) 100 c) 100	On track
91.	Percentage of urban solid waste regularly collected	63.2%	70.2	60.20 (SVRS, 2022)	75	Off track

SF	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	9	7
92.	Number of a) Upazilas, b) municipalities having an approved Upazila Master Plan	14 324 (2019)	a) 70 b) 384		a) 250 b) -	Updated data not available
	National Priority: Governance (SDG-16)					
	Outcome Statement: Promoting inclusive, transparent, accountable and effective democratic governance system, ensuring justice for all	sparent, accountable at	nd effective democratic	governance system, ensu	ring justice for all	
93.	Weighted average national case disposal rate	32.24 (2012)	42.8		50	Updated data not available
94.	Number of access and usage of legal aid services by the poor and disadvantaged group compared to total litigants	22000	150000	1,22,687 (NLASO, FY2022)	200000	Off track
95.	Percentage of public institutions using eprocurement	0 % (2014)	65		100	Updated data not available
96.	Number of queries attended to by the government institutions under right to information act	12852 (2019)	10000	10,800 (2021)	12500	On track
97.	Number of cases settled per year under Alternative Dispute Resolution (ADR) compared to total cases	14,000 (2014)	21,000		25,000	Updated data not available
98.	Proportion of children aged 1–14years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	88.8 (2019)	83.0		80.0	Updated data not available
99.	Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	Total-0.92 Male-1.14 Female-0.64 (BP 2015)	0.5	Total: 0.72 Male: 0.90 Female: 0.54 (BP, MoHA 2022)	0.3	On track
100.	Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18	Female: 3.45% (VAW Survey, 2015)	Female: 2.25%		Female: 1.50%	Updated data not available

ST	Performance Indicators	Baseline (Year)	Target 2023	Actual (Source & Year)	Target[ (2025)	Comments
1	2	3	4	5	6	7
101.	Unsentenced detainees as a proportion of overall prison population	77 (DoP, SSD, 2020, MoHA)	72 (2022)	96 (DoP, SSD 2021) (World Prison Brief,2022)	09	Off track
102.	Proportion of population satisfied with their last experience of public services	39.69 (CPHS, 2018, BBS)	53		09	Updated data not available
	National Priority: International Cooperation and Partnership (SDG-17)	nd Partnership (SDG-1	(7)			
	Outcome Statement: Strengthen international	cooperation and partnership for sustainable development	rship for sustainable d	levelopment		
103.	Foreign assistance as percentage of ADP and budget support	35.42 % (2019-20)	28.15	41.65% (ERD, 2021- 22)	27.24	
104	Percentage of (a) concessional loan and (b) Non concessional loan to total foreign assistance	(a)55 % (b)45 % (2019-20)	(a) 53 (b) 47	(a)54 % (b)46 % (ERD,2022)	(a) 52 (b) 48	

## List of Notable Publications by General Economics Division (GED), Bangladesh Planning Commission since 2009

Policy Study on Financing Growth and Poverty Reduction: Policy Challenges and Options in Bangladesh (May 2009)
Policy Study on Responding to the Millennium Development Challenge Through Private Sectors Involvement in Bangladesh (May 2009)
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)
Steps Towards Change: National Strategy for Accelerated Poverty Reduction II (Revised) FY 2009 -11 (December 2009)
Millennium Development Goals: Bangladesh Progress Report-2009 (2009)
Millennium Development Goals: Needs Assessment and Costing 2009-2015 Bangladesh (July 2009)
এমডিজি কর্ম-পরিকল্পনা (৫১টি উপজেলা) (জানুয়ারি-জুন ২০১০)
MDG Action Plan (51 Upazillas) (January 2011)
MDG Financing Strategy for Bangladesh (April 2011)
SAARC Development Goals: Bangladesh Progress Report-2011 (August 2011)
Background Papers of the Sixth Five Year Plan (Volume 1-4) (September 2011)
6th Five Year Plan (FY 2011-FY 2015) (December 2011)
Millennium Development Goals: Bangladesh Progress Report-2011 (February 2012)
Perspective Plan of Bangladesh 2010-2021: Making Vision 2021 a Reality (April 2012)
Public Expenditure for Climate Change: Bangladesh Climate Public Expenditure and Institutional Review (October 2012)
Development of Results Framework for Private Sectors Development in Bangladesh (2012)
ষষ্ঠ পঞ্চবার্ষিক পরিকল্পনা (২০১১-১৫) বাংলা অনুবাদ (অক্টোবর ২০১২)
Climate Fiscal Framework (October 2012)
Public Expenditure for Climate Change: Bangladesh CPEIR 2012
First Implementation Review of the Sixth Five Year Plan -2012 (January 2013)
বাংলাদেশের প্রথম প্রেক্ষিত পরিকল্পনা ২০১০-২০২১ রূপকল্প ২০২১ বাস্তবে রূপায়ণ (ফেব্রুয়ারি ২০১৩)
National Sustainable Development Strategy (2010-2021) (May 2013)
জাতীয় টেকসই উন্নয়ন কৌশলপত্র (২০১০-২০২১) [মূল ইংরেজি থেকে বাংলায় অনুদিত] (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)
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	7th 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 71st 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 7th Five Year Plan (February 2017)
54	Banking ATLAS (February 2017)
55	টেকসই উন্নয়ন অভীষ্ট, লক্ষ্যমাত্রা ও সূচকসমূহ (মূল ইংরেজি থেকে বাংলায় অনুদিত) (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 7th 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)
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 সাধারণ পরিষদের ৭৩তম অধিবেশনের জন্য প্রণীত) (সেপ্টেম্বর ২০১৮)
77	Bangladesh Delta Plan 2100 (Bangladesh in the 21st Century) Volume 1: Strategy (October 2018)
78	Bangladesh Delta Plan 2100 (Bangladesh in the 21st 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 21st 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 অভীষ্টঃ 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)

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 সাধারণ 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 প্রেক্ষিত 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 অনুদিত) (এপ্রিল ২০২০)
107	Bangladesh Voluntary National Review 2020 (June 2020)
108	বাংলাদেশ ব-দ্বীপ পরিকল্পনা ২১০০: একুশ শতকের বাংলাদেশ (সংক্ষিপ্ত বাংলা ২য় সংস্করণ) (আগস্ট ২০২০)
109	Leaving No One Behind (LNOB) in Bangladesh; Recommendations for the 8th 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	8th Five Year Plan (July 2020-June 2025) (December 2020)
115	অষ্টম পঞ্চবার্ষিক পরিকল্পনা (জুলাই ২০২০-জুন ২০২৫) বাংলা সংঙ্করণ (জুন-২০২১)

116	রূপকল্প ২০৪১ বাস্তবে রূপায়ণ: বাংলাদেশের প্রেক্ষিত পরিকল্পনা ২০২১-২০৪১ (সংক্ষিপ্ত সংক্ষরণ)
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)
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: Agricluture, 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 8th Five Year Plan (June 2022)
130	Workshop Proceedings on Annual High-Level Consultation on SDGs Localization and Efficient Use of Ocean Resources (May 2022)
131	Synthesis Report on Second National Conference on SDGs Implementation Review (SIR) 2022 (June 2022)
132	Sustainable Development Goals: Bangladesh Progress Report 2022 (December 2022)
133	End Evaluation of the Seventh Five Year Plan (FY2016-2020) (June 2023)
134	2 <sup>nd</sup> National Action Plan of Ministries/Divisions by Targets for the Implementation of SDGs (May 2023)
135	Review Report on National Action Plan of Ministries/Divisions by Targets for the Implementation of SDGs
136	Journey Towards Achieving the Sustainbale Development Goals: Prepared for the Bangladesh Delegation to 78 <sup>th</sup> UNGA Session
137	টেকসই উন্নয়ন অভীষ্ট: বাংলাদেশ অগ্রগতি প্রতিবেদন ২০২২ (সেপ্টেম্বর ২০২৩)
138	Mid-Term Implementation Review of the Eighth Five Year Plan (October 2023)



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