



BANGLADESH: SEIZING THE OPPORTUNITY

MAY 2019

WORLD BANK GROUP POLICY NOTES

Bangladesh Policy Notes

Preface

These Policy Notes seek to distill key findings from a broad range of World Bank Group engagements in Bangladesh, including policy dialogue, analytical work, strategic documents, project lending and trust funded activities. They build on discussions with government counterparts, development partners, non-governmental organizations, representatives of the private sector, and other stakeholders. These Policy Notes are selective in their coverage, and include synopses on each topic, highlighting key issues and challenges, and concluding with actionable policy recommendations. They cover a broad range of policy issues but are not intended to be comprehensive or exhaustive. This effort seeks to make these findings readily available to the incoming government of Bangladesh and support them in achieving their national objectives. The Policy Notes start with an overview section which brings together the key issues and is followed by sector-specific notes which have been compiled under four broad thematic groupings.

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1. Overview

Bangladesh has been a development success story. It transitioned to a lower middle-income country in 2015, just 40 years after having the second lowest per capita income in the world. Now Bangladesh is on pace to graduate from “least developed country” status by 2024. Over the past 15 years, growth has largely been driven by the manufacturing sector, which created several low skilled jobs, and private consumption fueled primarily by remittances and a growing middle-class. This broad-based growth more than halved poverty from 49 percent in 2000 to 24 percent in 2016, and also reduced inequality. Progress on non-monetary indicators of well-being were also rapid. Today, the average life expectancy of Bangladeshis is 72 years, compared to 68 years for Indians and 66 years for Pakistanis. These achievements occurred despite several natural disasters and other external and domestic shocks.

Strong macroeconomic fundamentals, economic liberalization, trade integration and large inflows of remittances have underpinned resilience and growth in Bangladesh. Fiscal management has been prudent, inflation has generally been in single digits, and public debt is low at 31 percent of GDP in 2018. The deregulation and economic liberalization process that started in the mid-1980s has been consolidated and extended. The export-led readymade garment (RMG) industry has played a pivotal role in the country’s structural transformation. Bangladesh is currently the second largest exporter of RMGs in the world, after China, and the country’s share in world exports almost tripled from 0.11 percent in 2000 to 0.29 percent in 2017. The RMG sector created more than 4 million jobs from 2003-18 and greatly supported the economic engagement of women. These efforts were complemented by social changes and grassroots initiatives for economic inclusion. In addition, large inflows of remittances (5.4 percent of GDP in 2018) also supported resilience and welfare improvements.

However, the institutional and governance framework could be strengthened. The most visible sign of good governance in a country is the efficient management of public finances along with adequate enforcement of laws and regulations. In Bangladesh, the tax to GDP ratio of nine percent is one of the lowest in the world, weak management of state-owned enterprises (SOEs) has created fiscal and financial risks, and public financial management systems are inadequate. Both revenues and expenditures deviate widely from budgeted numbers, and public investments typically have time and cost over-runs of 50 to 100 percent. Financial losses of SOEs are a major fiscal drain, and the high share of non-performing loans (11.5 percent) and inadequate capitalization of state-owned banks constitute a risk to financial stability. In addition, Bangladesh’s performance on the World Governance Indicators has been low, with limited improvements over the years.

Infrastructure bottlenecks and limitations in the investment climate have reduced the pace of formal job creation. Bangladesh ranked 176 out of 190 countries in the 2019 Doing Business Report, and 103 out of 140 countries in the 2018 Global Competitiveness Report. The regulatory environment remains costly, with over-regulation, lack of transparency and poor accountability. There is limited multi-modality in the transport system and logistical costs are high. About 20 percent of the population remains without access to electricity, and per capita electricity consumption is among the lowest in the region. Bangladesh’s digital infrastructure is relatively outdated and unevenly dispersed, limiting access to internet connectivity. Given these limitations, the average annual FDI inflows have remained low at about one percent of GDP, and total private investment has stagnated at around 22-23 percent of GDP. These constraints have manifested in lower overall employment creation, which has trailed the growth of the working age population.

Insufficient and poor-quality investments in human capital have left graduates unemployable in the changing economy. As formal-sector firms are adopting more skill-intensive technologies, their demand for labor has changed. However, the education system is failing to respond to this new demand. Low and uneven levels of learning continue to result in students failing to achieve grade-relevant competencies. Inadequacies in early childhood education cause low student readiness at primary schools, and access and

quality concerns exist across the education and vocational education spectrum. There is also limited collaboration with employers, and inadequate investments in research and development. The resulting skills mismatches have contributed to stagnating employment rates in the formal sectors. In addition, nearly 31 percent of Bangladeshi children under 5 years old are stunted, and the burden of non-communicable diseases is rising due to the nation's epidemiological and demographic transition.

The policy duo of hard budget constraints and closing the implementation gap will support Bangladesh's aspirations of becoming an upper middle-income country by 2031. Hard budget constraints imply financial discipline and are ultimately a political signal that unviable firms will not be bailed out. Imposing a hard budget constraint on SOEs and large business conglomerates, as well as state-owned banks, will help stem the problem of non-performing loans (NPLs) and contribute to fostering competition while preserving fiscal and financial stability. The nation's policy implementation gap results from weak capacity and the failure to enforce sanctions. Efforts, therefore, need to be focused on building technical capacity and putting legislative frameworks and structures in place to improve accountability. Citizen engagement, civil society organizations and the media also can play a larger role in building consensus to improve accountability for service delivery. In addition, the Annual Performance Agreements (APAs) in public administration could be strengthened by setting stretch targets and better aligning them with national priorities. For example, changing the incentive framework through stronger links between APA performance and budgeting will help support improvements in governance.

The government has undertaken significant initiatives in infrastructure building, skills development and technology, but diversifying the economy beyond garments, construction and agriculture will require more. Bangladesh has made impressive progress in power generation capacity, more than tripling it to 18 gigawatts (GWs) since 2009. However, power generation has not kept up with increasing demand. In the transport sector, road is the predominant mode while rail is failing to contribute. The inland waterways transport sector has the potential to reduce logistics costs but is not fully navigable in the dry season, while Chittagong port is congested and underperforming. The civil aviation sector is unable to handle growing international and domestic traffic (both passenger and cargo) because of limited capacity. Digital development has been a high priority for the government, but related infrastructure remains weak. On the business environment, the government has enacted the One Stop Shop law for investor services and also undertaken other initiatives. On skills development, Bangladesh has attained near-universal enrollment in primary education and improved the quality assurance mechanisms in higher education institutions. However, further improvements in equitable access to and quality of education along with greater focus on collaboration with industry and research is needed to bridge the skills gap.

As the government's efforts bring about greater structural transformation and migration to urban areas, it will be imperative to improve the livability of cities. Bangladesh has experienced one of the most rapid increases in urbanization in South Asia over the past 50 years, with urban areas now accounting for at least 60 percent of GDP, up from 37 percent in 1990. Cities are key drivers of Bangladesh's economic growth but have yet to realize their full potential. Unmanaged urban growth has led to congestion, poor service delivery, severe constraints on land, high costs of living, and environmental degradation. Reaping the agglomeration benefits from urbanization will require a more planned approach toward urban centers with improved service delivery.

It will also be crucial to manage the impacts of climate change to consolidate and sustain past developments. Bangladesh is one of the most climate vulnerable countries in the world, which exacts a huge toll on human lives and physical capital. Cyclone-induced storm surges are likely to worsen and will increase the vulnerability of some coastal populations. Bangladesh's average annual temperatures are expected to rise by 1 to 1.5 degrees Celsius (C) by 2050, even if preventive measures are taken. The temperature increase could cost Bangladesh 6.7 percent of GDP and depress the living standards of more than three-quarters of the population. The country has been leading the way in climate change adaptation, and the government also has committed to climate mitigation efforts aimed at reducing emissions. These efforts will require more adaptive delta management, greener public transport, increased use of renewables, and greater energy efficiency, among others.

2. Ensuring Sound Macro-Financial and Public Sector Management



Maintaining macroeconomic stability requires sustained efforts to increase tax revenues, strengthen public financial management, and bolster the financial sector. Reforms in these areas will help bring in additional revenues to finance the large development needs, manage existing revenues better, increase spending efficiencies and effectiveness, and minimize risks to financial stability. These are critical for boosting sustainable and inclusive growth which are in turn needed for continued poverty reduction and shared prosperity. The following policy notes outline the key issues related to the financial sector, public financial management, tobacco taxation and poverty reduction and suggest some priority areas for intervention.

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2.1 Accelerating Poverty Reduction and Shared Prosperity

Key Issues and Challenges

Bangladesh has recorded remarkable progress in improving the welfare of its citizens in recent years.

The national poverty rate fell from 49 percent in 2000 to 24 percent in 2016, most pronounced in rural areas and driven by non-agricultural incomes. Progress was also rapid on non-monetary indicators of wellbeing such as under-five child mortality, life expectancy, water and sanitation conditions and primary education enrolment.

Despite Bangladesh's continued progress, growth in recent years has delivered less poverty reduction than in the past.

Even though GDP per capita grew by 5.2 percent a year between 2010 and 2016, the amount of poverty reduction each percentage point of growth delivered fell from 0.7 to 0.6 percent between 2005-2010 and 2010-2016. This was primarily because of slower job creation in the garments and textile sector and lower agricultural growth. This trend is most notable in urban areas. In addition, consumption growth has become less equalizing over time. Poorer households experienced slower consumption growth (1.3 percent among the bottom 40 percent) than richer households (1.4 percent among the top 60 percent) from 2010 to 2016. In contrast, from 2000 to 2005 consumption growth had been higher among poorer households. As a result, although Bangladesh recorded steady consumption growth among the bottom 40 percent, it did not fare well on measures of equality and shared prosperity.

Though poverty reduction was predominantly rural, it was driven more by households engaged in manufacturing industries and services rather than agriculture.

Poverty fell more slowly among households engaged in agriculture than those in industry and services. The rural population engaged in agriculture (61 percent of the total) accounted for only 35 percent of poverty reduction while the rest was accounted for by the rural population engaged in manufacturing industries (such as readymade garments, food products and pharmaceuticals) and service sectors (such as in the food and beverage industries, wholesale and retail trade and education). This can, in part, be explained by slower average annual growth in agriculture (3.8 percent from 2010 to 2016) compared with average annual growth of the non-agricultural sector (including both industry and service) which grew by 7.5 percent annually during 2010-16

Poverty reduction in urban areas has stagnated in recent years.

Poverty rates using the upper poverty line (of BDT 2,381 per month) fell slowly in Dhaka city and increased in Chittagong city while there was no progress in reducing extreme poverty in urban areas. As increasing number of people migrate to urban areas, a stagnating rate of extreme poverty reduction suggests that more people lived below the extreme poverty line in 2016 than they did in 2010. This trend is predominantly driven by a slow-down in the rate of job growth in sectors like readymade garments that have traditionally been responsible for reducing poverty.

The rate of job creation slowed down despite accelerated GDP growth, especially in sectors that predominantly employ workers from poor households.

Labor force participation increased between 2003 and 2010 because of increased female labor force participation (FLP—from 26 to 35 percent), primarily in the ready-made garment (RMG) sector. Between 2010 and 2016 however, FLP in urban areas declined by 4 percentage points, from 35 to 31 percent, reflecting the rapid slowdown in job creation in the RMG and textiles sector. Further analysis of the 2010-16 period suggests that the manufacturing sector (particularly RMG) alone accounted for nearly 69 percent of poverty reduction, followed by the transport (46 percent) and construction sectors (19 percent). This explains the stagnation in poverty reduction in urban areas. It also explains lower overall poverty reduction because of the creation of fewer poverty reducing jobs in the manufacturing sector and slower agricultural growth delivering less poverty reduction than before.

The welfare gap between eastern and western Bangladesh has re-emerged. The poverty rates using the upper poverty line has risen in Rangpur division, the historically poorer northwest of the country; stagnated in Rajshahi and Khulna in the west; fallen moderately in Chittagong district; and declined rapidly in Barisal, Dhaka and Sylhet regions. The stronger progress of poverty reduction in the eastern regions widened the gap between eastern and western Bangladesh that had narrowed between 2005 and 2010. Data suggests that though there are poor districts in all divisions, they are more likely to be concentrated around the periphery of the country rather than the center and in the northwest around the *monga* region. This is likely driven by the fact that structural changes lag in the west, with most of the fast growing and job creating sectors concentrated in the east.

Demographic change and increased educational attainment were strongly correlated with consumption growth and were important drivers of the re-emerging difference between the eastern and western regions. Household size fell more slowly in rural areas in western divisions than in the east. As for education, gains in the average years of education of adult household members increased by 0.88 years among rural households in eastern divisions compared to 0.43 years in the rural west. As a result, the likely contribution of education to consumption growth in the west was half of what it was in the east. In urban areas in the eastern division, household size decreased more rapidly and education attainment was five times faster than the western urban areas.

Despite improved coverage of the poor over time, only a third of the poor participated in at least one social assistance program in 2016. There is room to increase coverage, particularly in urban areas, and improve targeting for all programs, to ensure a greater impact on poverty and human capital. With diverse challenges faced by different segments of the poor population, the requirements of the vulnerable need to be addressed in a multi-sectoral way. This problem is exacerbated by limited availability of data and long lags in collecting and updating data. As the economy grows more complex and dynamic, the importance of evidence-based policy making increases. This requires increased attention to the production of statistics as well as their public release to benefit independent research and promote public debate.

Policy Recommendations

Suggested options for the government's consideration:

- Increase investments in western Bangladesh to bridge the gap between the east and the west.
- Bolster agricultural growth and productivity since poverty continues to be higher among households primarily engaged in agriculture.
- Encourage the creation of new jobs in manufacturing which has aided significant poverty reduction in the past.
- Improve coverage and targeting of social protection programs in line with the poverty and vulnerability profile of the population.
- Make data such as the Household Income and Expenditure Surveys publicly available.

(A) Improving the Legal Framework for Public Financial Management

Key issues and challenges

The Constitution of Bangladesh (Articles 81-92) lays down the legal framework for managing public finance. The legal framework is also supported by some other laws and regulations which define and establish the key roles and responsibilities of different actors involved in the budget process. Acts and rules that constitute the Public Financial Management (PFM) legal framework of the country include Public Moneys and Budget Management Act (PMBA) 2009; Public Procurement Act of 2006; Public Procurement Rules, 2008; Comptroller and Auditor-General (Additional Functions) Act of 1974; General Financial Rules (GFR); Rules of Business 2012; Treasury Rules (TR) and Subsidiary Rules (SR) among others.

The current PFM legal framework of Bangladesh provides substantial coverage of the PFM cycle, but further upgrades are needed to make it consistent with demands arising from ongoing PFM reforms. The drive for enhanced efficiency and accountability for the use of funds is fully reflected in the Constitution, but the challenges involved in dealing with implementation, enforcement, and noncompliance are considerable. For instance, many aspects of the legal framework are no longer relevant given the current context and practices. A number of procedural, control and reporting requirements are outlined in the framework, which may no longer be relevant due to the reforms to systems and processes that have taken place over the past few years. To cite an example, as many as 252 clauses in different legal documents potentially apply to payment processes. Given the implementation of Budget and Accounting System, the continued relevance of and need for these detailed procedural arrangements needs to be reassessed.

There are several ambiguities in the PFM legislative framework which can potentially impede clarity and simplicity. Examples include: (i) potential for confusion regarding the accountability of different players, including central and local government bodies and state-owned enterprises, owing to the lack of clarity on the same; (ii) the use of terms such as “competent authority,” “administrative authority,” and “subordinate authority” when the actual officials could easily be cited; (iii) references to “specified procedures,” which might be embedded in numerous and non-accessible instructions and memoranda. Moreover, significant fragmentation, overlap, and disconnect in the legal framework result in inconsistencies in the framework. The following are examples: (i) the use of different terms for similar objects or similar terms for different objects, such as “public accounts,” “public account,” and “government account”; and (ii) conflicting definitions and requirements for financial reporting in PMBA, GFR and the Comptroller and Auditor-General (Additional Functions) Act.

Several aspects of good public financial management are yet to be covered in the PFM legal and regulatory framework. These include (but are not limited to): (i) clarity on several aspects of timeliness and fiscal transparency, including with regard to the disclosure of the audited annual financial statements; (ii) a specific requirement to reconcile cash movements between the controller general of accounts, Bank of Bangladesh, and National Board of Revenue; (iii) explicit fiduciary duties for line ministries in terms of asset, liability, and risk management; (iv) rules and regulations for internal audits; and (v) arrangements for enforcement and sanctions when the legal framework is not followed.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Take stock of existing issues in the legal and regulatory framework by examining the various rules, regulations, procedures, circulars, and government orders that are currently fragmented in various pieces of legislation. This will help the government get a holistic picture of the reforms that need to be undertaken.
- Include PFM legal and regulatory reform across the entire spectrum of the PFM system in the new PFM strategy.

Suggested options for the government's consideration in the medium to long term:

- Harmonize the PFM laws with the national PFM rules and regulations governing the local government bodies, with due focus on fiscal transfer and oversight arrangements across various tiers of local government.
- Strengthen compliance with the Right to Information Act in terms of fiscal information disclosure to enhance transparency.
- Improve compliance with the legal and regulatory framework by strengthening enforcement.
- Adopt legal frameworks to address the current anomalies facing the state-owned enterprises in terms of financial reporting, monitoring, and auditing.

(B) Strengthening PFM Reporting and Transparency

Key issues and challenges

The government has rolled-out the new Integrated Budget and Accounting System (iBAS++) to strengthen financial controls, improve public sector financial reporting, and enhance fiscal transparency. The new budget preparation module was used by all line ministries, divisions and agencies (MDAs) to prepare the 2017/18 budget and it is now mandatory to distribute the budget down to service delivery level drawing and disbursing officers (DDOs) as opposed to the past practice of spending at department level. The payment and accounting modules of the upgraded iBAS++ are now being used in all 533 Controller General of Accounts (CGA) Units down to Upazilla level. The new multi-dimensional Budget and Accounts Classification System¹ has been approved and trainings have been conducted. These expanded fund and program/project segments will enable much better financial reporting. iBAS++ has improved data security after being hosted at the Bangladesh Computer Council (a certified Tier 3 data-center). While the roll-out of the system has been a huge achievement, a few issues need to be addressed to ensure the system's long-term sustainability and effectiveness as a comprehensive public financial management (PFM) tool.

iBAS++ is yet to become a fully integrated system covering all aspects of PFM. System interface and integration opportunities remain to be strengthened with the Bangladesh Bank, Sonali Bank, tax and customs systems, debt management systems, e-procurement (e-GP), and other related applications. Expanding the coverage of iBAS++ to donor-funded projects and self-accounting entities would enable better management of public finances.

Network connectivity and data center operations need to be improved to support iBAS++ operations. The system-hosting environment is ad hoc and unreliable. Bangladesh Telecommunication Company Limited (BTCL) is currently the iBAS++ connectivity provider up to the district level. The last mile connection to upazilas is done through modems. 49 Chief Accounts (CA) offices, of which 39 are in CGA Office Block, have local area networks, but the 10 outside the CGA Office Block face connectivity challenges. There are also power supply challenges with end-user infrastructure at the upazila level. The current distributed server design has no real-time synchronization to the main server, which hampers up-to-date reporting and timely consolidation of financial reports. Finally, the system is currently centered at Chief Accounts, District Accounts, and Upazila Accounts offices, and DDOs do not have direct access to the system.

Insufficient IT security capacity and an absence of tested disaster recovery plan pose serious risks to the government financial management information. The system and network hosting iBAS++ do not use adequate security protocols. Robust security measures need to be in place to protect confidential government information from unauthorized access. Moreover, the number of IT people is insufficient for sustaining the system and for ensuring that ongoing system enhancements are uninterrupted. There are only 4 dedicated CGA IT support staff available for 533 CGA units.

The iBAS++ system needs an upgrade to adopt the digital signature module. Full automation of the civil service payroll, pension and other bill processing will require adoption of digital signature as per the ICT Act, 2006. The Financial System Management Unit (FSMU) and the CGA will be given two Sub CA licenses to authenticate individual signatures electronically. A robust and secured module will need to be developed to comply with digital signature protocol.

¹ The new Budget and Accounts Classification System is compliant with both COFOG and GFS

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Establish a well-defined governance structure with the Controller General of Accounts as the main champion to facilitate system and technology integrations and proper oversight from an appropriate authority.
- Adopt a project charter for a full roll-out of iBAS++ with a clear business case; expected results, roles, and oversight responsibilities; and an adequate implementation team.
- Adopt an information security policy, strategy, and procedures for business continuity and disaster recovery based on an incident and impact analysis that determines the required detective, preventive, and corrective controls.
- Upgrade the iBAS++ system to adopt the Digital Signature module.
- Establish dedicated user support cells comprising adequate functional and IT officers for supporting implementation, roll-out and future sustainability of the system.
- Arrange trainings across all levels of government to ensure that the skills of the current team of IT experts are transferred to government staff members who will be responsible for maintaining and sustaining the system.

Suggested options for the government's consideration in the medium to long term:

- Prepare and implement an end-to-end architecture of the PFM system identifying all system interface and integration opportunities.
- Establish online bill processing at the DDO level with strengthened in-built system controls for budget check and data entry errors.
- Interface/integrate sector-specific management information systems with iBAS++ to ensure full integration of public finance data.

(C) Improving the Budget Preparation Process

Key issues and challenges

Budget performance in Bangladesh has many strengths. The well-functioning mechanism for debt contracting and issuance of guarantees, reporting of the government guaranteed debt, and the high quality of debt data contribute to fiscal discipline. Progress has been made in establishment the medium-term budget frameworks (MTBF) for all ministries and inclusion of performance information with budget documentation. There is a good degree of predictability in funding for ministries, helping to enable efficient service delivery. The Integrated Budgeting and Accounting System (iBAS++) will help strengthen many control procedures, and address weaknesses in accounting and recording.

The medium-term budgetary framework (MTBF) could be better used as a tool to clearly guide budget decisions and to achieve allocation efficiency. The MTBFs prepared by all ministries provide for expenditure ceilings for the budget year and two following years before the first budget circular is issued, and estimates for the same periods by economic, functional and administrative classifications. However, ministries' MTBFs are not explicitly linked to medium-term strategies and business plans, except in some cases such as Education and Agriculture.

The annual revenue and expenditure forecasts are aspirational, and not typically met. There is an established procedure for revenue forecasting, but actual revenues consistently fall short of targets. There is also under-execution of both the development and nondevelopment budgets. Part of the reason for this is that expenditure targets are stretched to accommodate political aspirations for constituency-based Annual Development Program (ADP) spending, and growth-targeted revenue estimates are used to accommodate these proposals. The result is a lack of credibility in budget formulation.

Annual budgeting could be improved by better coordination of the development and nondevelopment budgets. Greater care is needed on annual or medium-term development project planning, including on project requirements for recurrent funding. Several of the larger line ministries have two different departments to prepare the development and nondevelopment budgets. Although budget management committees were set up to address the coordination issue, they are relatively new with only a few fiscal years behind them. Thus, the practices and the incentives for alignment are not yet fully in place.

There is a fixed budget calendar that is largely followed. The first budget circular (BCC1) provides an aggregate ceiling for both budgets and tries to establish a link between policy and resources. Ministries are given about two months to produce their budget framework. The second circular (BCC2) provides a separate ceiling for each budget and tries to establish a link between resources and performance. Building on this foundation, there is an opportunity to expand the comprehensiveness of the budget, in tandem with improvements in the multi-year perspective, and adoption of a new budget classification and revised chart of accounts compliant with international standards.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Enhance capacity of the macroeconomics wing to improve reliability of macro-fiscal and revenue forecasts that are used in budget preparation.
- Enable a more policy-based approach in budgeting, with annual and multiyear expenditure ceilings for ministries better reflecting government priorities
- Adopt a new budget classification and revised chart of accounts that is compliant with international standards.
- Raise awareness among parliamentarians and civil society on options for accommodating political aspirations while maintaining budget credibility.

Suggested options for the government's consideration in the medium to long term:

- Develop medium-term strategies and business plans that include both development and non-development budgets through a tripartite process involving the Finance Division, the Planning Commission, and the line ministries.
- Strengthen linkages between the annual budgets, the medium-term strategies and business plans, and the annual performance agreements by strengthening the capacity of the budget management committees and improving monitoring of outputs.

(D) Reforming the Government Performance Management System

Key issues and challenges

Line ministries, divisions and agencies (MDAs) in Bangladesh are governed by Annual Performance Agreements (APAs) which were introduced in 2015. The APAs aim at setting meaningful targets, monitoring performance data and establishing links between performance and budgeting. The speed and scale at which the performance management reforms were introduced in Bangladesh are impressive. However, more work is needed to meet the government's service delivery and governance objectives.

Implementation of APAs needs to be a performance management exercise by the MDAs, not merely a compliance exercise. The APAs signed between the MDAs and the Cabinet Division (CD) have two sets of objectives: (i) mandatory objectives set by the CD that are consistently applied to the 51 MDAs and aimed at improving governance across the public sector; and (ii) strategic objectives set by the respective ministries and discussed and agreed with the CD. Some MDAs consider the achievement of targets as more important than setting stretch targets which might eventually lead to improved performance. This has often led to the adoption of indicators by MDAs that can be easily achieved and easily measured (such as number of trainings delivered) rather than more meaningful indicators of successful service delivery (such as percent of doctors or nurses positions filled with trained personnel).

Connecting APAs to national priorities has been a challenge. An APA may contain internally-determined indicators by the MDA. These indicators may not optimally contribute to achieving the national strategic priorities as defined in the government's Perspective Plan 2010 - 2021, 7th Five Year Plan as well as the ministry level priorities like ministerial policy, planning documents and Ministry Budget Framework (MBF). Currently, there is also no limit on the number of priorities that can be set by the MDAs in the APA. This inevitably leads to too many priorities, actions and indicators being set by the MDAs, which results in a lack of focus. The Coordination and Reform Unit (CRU) of the CD has an important role in guiding the MDAs to select indicators that are well aligned with the overall priorities of the government. The capacity of the CRU needs to be enhanced to enable them to better influence the APA process.

Improved linkage between the targets as set out in the APAs and costs of delivery of the targets is of utmost importance. The APA process needs to provide assurance that the respective MDA will receive the commensurate budgetary allocations to deliver on the APA targets. The MBF² and APA need to be aligned to eliminate duplication of efforts in furnishing overlapping information and ensuring consistency of information across all relevant documents. The CRU has made progress towards fully aligning its APA calendar with that of the budget - APA guidelines are presently issued by the CRU in March each year, consultations start in April, and APAs are rolled out in early July. While there are three separate teams for the MBF, the development budget, and the APA in most ministries, Budget Management Committees (BMC) are mandated to coordinate the revenue and development budgets, and to some extent the APAs. The scope of work of the BMC can be expanded to include full coordination with the APA team to avoid any duplication of functions.

It is critical that the appropriateness and reliability of the data being used in the Annual Performance Reports (APR) is diligently monitored. The CRU has around 10 dedicated staff. It is a major responsibility for the CRU to track 51 APAs and their numerous objectives, activities and indicators. The MDAs' data systems are often paper-based and involve a manual process of collecting decentralized data. This affects the quality of data being used in setting of APA indicators and subsequently, the assessment of

² Led by the Finance Division, the Medium-term Budgetary Framework (MTBF) process requires all budgetary entities to submit a Ministry Budget Framework (MBF) document as part of their annual budget request. The MBF's contain the ministries' vision and mission statements, provide details of their strategic objectives and Key Performance Indicators (KPIs) of anticipated ministerial outcomes, as well as the agreed annual budget for the coming three years.

the indicators. Ministries can adjust targets up or down by 5 percent on their own, by providing justification to the CRU. Further revisions can be done, in consultation with the CRU, if justified by exogenous factors that could not be anticipated when the APAs were signed. Ministries are expected to do regular monitoring, at least every quarter, led by their Budget Monitoring Committee, and produce self-evaluations at the end of each fiscal year. The CRU validates evaluation reports to ensure they are supported by credible evidence. In some cases, field visits are carried out, often with support from the Implementation Monitoring and Evaluation Division.

Ensuring higher budgetary allocation or discretion in rewarding better performers is considered as an incentive for the MDAs. There is considerable potential to improve the use of the APAs to support resource allocation decisions to encourage improvements in service delivery and reward the good governance performers. The performance information is required to drive internal budget discussions or the conversations with the Ministries of Finance and Planning and to incentivize service delivery improvements.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Train the CRU staff so that they can better coach the MDAs.
- Build capacity and awareness in MDAs on prioritizing APA objectives and actions and selecting appropriate indicators for enhancing performance and service delivery. A focus on fewer high priority results will enable the CRU to add higher value in terms of guiding ministries in setting more appropriate targets for performance improvement.
- Support knowledge exchange and peer learning with other countries that have introduced or are in the process of introducing a public-sector performance management system.
- Improve business processes related to the formulation, review, monitoring and evaluation of performance agreements between the Cabinet Division and individual ministries/divisions.
- Use the Government Performance Management System (GPMS) dashboard to monitor progress.

Suggested options for the government's consideration in the medium to long term:

- Align the APA and MBF calendars and mandate a single team in the line ministries to be responsible for both under the guidance of the BMC.
- Make the key outcomes of the APA publicly available.
- Adopt a process by which stakeholders, including non-governmental stakeholders, help to identify performance indicators and thus ensure greater transparency and openness of the APA process.

(E) Enhancing the Performance of Non-Financial State-Owned Enterprises

Key issues and challenges

Bangladesh currently has 65 key non-financial SOEs across a range of economic activities with consolidated revenues of around eight percent of GDP in FY2017. SOEs are represented in all major sectors of the economy, particularly the services, utility and industry sectors where 46 SOEs are active (about 70 percent of total non-financial SOEs). The government is the only provider of water and sewage services and holds a key strategic role in the energy sector through the Bangladesh Oil, Gas, and Mineral Corporation (PETROBANGLA), Bangladesh Power Development Board (PDB), and Bangladesh Petroleum Corporation (BPC). While many industrial SOEs were privatized, the state still retains ownership of several manufacturing companies, including Bangladesh Jute Mills Corporation, Bangladesh Steel & Engineering Corporation, and Bangladesh Textile Mills Corporation (BTMC), among others.

The overall profitability of SOEs has improved in the past decade but they remain highly concentrated in two sectors. Since 2008, the assets of the SOE sector have declined as a share of GDP because the growth in the overall economy has exceeded the growth in the SOE sector. As a result, the overall footprint of the sector in the economy has decreased. However, operational revenues and profitability improved, primarily because of strong performance in the transport and communications and oil and gas sectors. In certain instances, such as in BPC, the improvement in profitability was due to favorable external conditions (the decline in global petroleum prices) and not due to improved operational efficiency. Within the transport and communications sector, the improvement in profitability was led by the Bangladesh Telecommunication Regulatory Corporation (BTRC), which greatly benefited from the high mobile spectrum auction fees. Outside of these two corporations, total losses from the SOE sector stood at BDT 45.1 billion which is approximately 0.3 percent of GDP.

In addition to subsidies, several SOEs also receive state support through state-owned entities, including state banks and other non-financial SOEs. Subsidies and dividends do not fully reflect the financial relationship between the government and SOEs. Payment schedules and pricing agreements between SOEs may shift profit and cash from less flexible statutory parent SOEs to more flexible subsidiary companies, which are subject to less financial oversight by the Ministry of Finance. In addition, data on payment arrears between SOEs and other public entities and compliance with tax laws and regulations are not systematically available. SOEs also benefit from government support in the form of on-lending of foreign credits, with the government shouldering the repayment liability.

The legal framework for SOEs is fragmented and the state's ownership function is divided among 19 different ministries, limiting effective monitoring of SOE performance. Under current institutional arrangements, SOE ownership, policy making, and regulatory functions are often intertwined. Line ministries are responsible for both policy direction and financial oversight, with statutory SOEs often functioning as extensions of the portfolio ministry. Thus, information on SOEs is fragmented and a comprehensive overview of SOE performance is not available. In addition, a performance monitoring system (Annual Performance Agreements – APAs) for SOEs is in place, but regular and systematic monitoring and review of the APAs does not happen.

The boards of SOEs remain dominated, for the most part, by government officials, and there is room to improve timeliness, compliance and disclosure of financial reporting and external audits of SOEs. There are currently no specific rules or common policy guidelines for the nomination and selection of SOE board of directors with line ministries usually involved in the nomination process. SOEs are required to be audited annually by the office of the Comptroller and Auditor General. While external audits for listed SOEs (18) tend to be relatively thorough, for non-listed SOEs, audit procedures are more limited. The Auditor General assigns an auditor to these SOEs, but the audit process may be affected by insufficient information or delayed submission of financial statements.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Take stock of the (i) existing financial reporting framework for SOEs and (ii) legal and corporate governance frameworks for all SOEs.
- Arrange peer-to-peer workshops and trainings for the SOE Monitoring Cell and other significant line ministries on effective SOE performance management.
- Adopt measures to streamline, incentivize and empower SOE boards which will help strengthen oversight of SOEs.
- Adopt performance evaluation guidelines for SOEs.
- Update the financial statement format of SOEs and institutionalize disclosure of audit reports.

Suggested options for the government's consideration in the medium to long term:

- Reduce preferential access to direct and indirect (through state-owned banks and other state-owned entities) public financing.
- Create an online performance data management tool to effectively monitor SOE financial indicators.
- Require SOEs to publicly disclose their annual financial reports.
- Conduct risk based internal audits of SOEs.

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2.3 Bolstering the Financial Sector

Key Issues and Challenges

The financial system is bank dominated, fragmented and subject to overcapacity. Banks account for about 90 percent of the total financial system assets and 70 percent of GDP. The sector's fragmentation has increased from 47 to 57 banks from 2012 to 2018, while more licenses are under consideration. There are six state-owned commercial banks (SCBs) and two state-owned specialized developmental banks (SDBs), as well as four nonscheduled specialized public banks. The financial sector also consists of microfinance institutions (about 800 licensed institutions), nonbank financial institutions (34), the capital market (with two stock exchanges) and the insurance sector (with 78 insurance companies). The capital market and insurance sector account for about 20 and 2 percent of GDP, respectively.

The gross non-performing loans (NPL) ratio in the banking sector has been around 10 percent for over five years and is significantly underestimated. The gross NPL ratio is on an increasing trend and stands at 10.3 percent. The problem is particularly acute for state owned banks (SOBs). The actual size of problem assets is estimated to be more than twice as large as the officially recognized NPLs. While the NPL ratio includes problem assets as per Bangladesh Bank's (BB) definition, which is less stringent than the Basel definition, there are many sources of problem assets uncaptured. These include 'stay orders' that allow reclassifying problem assets as performing; special mention loans that hide problem loans due to the rescheduling framework; and, BB's granting of no-objection certificates to banks to reschedule NPLs. NPLs are also under-provisioned, with the shortfall standing at 14.4 percent of required provisions, primarily attributable to SCBs. Furthermore, a large part of NPLs is concentrated in the top-20 borrowers of individual banks and cross-banking loans to directors is a widely used practice. The root NPL causes are largely linked to governance and structural weaknesses, compounded by lenient regulation and weak supervision.

The SCBs, which account for more than a quarter of the total banking system assets, pose financial stability risks, contribute modestly to development, and present competitive distortions. The rapidly declining Capital to Risk Weighted Asset Ratio (CRAR) stood at 6 percent for SCBs and -32 percent for SDBs as of Q3 2018, compared to over 12 and 26 percent for private and foreign commercial banks (PCBs and FCBs), respectively. The gross NPL ratio reached 31 and 22 percent for SCBs and SDBs respectively, compared to seven percent for PCBs and FCBs. If definition adjustments are considered and regulatory exceptions reversed, the gross NPLs escalate further and provisioning is inadequate. The Return on Equity and Return on Assets have been negative for years. Despite public capital injections of more than BDT100 billion over the past seven years, six out of eight SOBs have a combined Tier 1 capital shortfall of one percent of GDP. Overall, SCBs suffer from poor governance, weak internal controls and risk management practices, and significant inefficiencies. Despite higher rural presence and extension of agricultural loans, SCBs' overall portfolio reflects that of the private banks and entails significant competitive distortions.

BB has been strengthening supervision and regulation, but there are multiple shortcomings and enforcement remains a challenge. Operational independence is not prescribed in the law and it is compromised by BB's lack of full discretion to take supervisory actions, as well as by interference from the government's broad mandate in financial sector issues. Corrective actions against banks, especially SCBs, are not properly taken; there are no sanctions to directors; and there is extensive forbearance regarding prudential standards. BB has no legal basis for consolidated supervision, and there is no definition of 'controlling interest' and 'ultimate beneficial owner' in the law, which would be important in a banking sector dominated by founder family members who often are also dominant players in the non-financial corporate sector. In addition, there are significant gaps in prudential requirements and supervision, including corporate governance, risk management, capital, problem assets, provisioning and reserves, concentration risks and large exposure limits, related party lending, and abuse of financial services.

There are indications of constraints in access to finance for certain market segments. The micro, small and medium enterprises (MSME) financing gap is estimated at BDT237 billion. About 55 percent of all

MSMEs report at least being partially financially constrained, and 39 percent reported being fully constrained. There is a need for improvements in the strategic vision and implementation coordination, a review of the impact and effectiveness of past and existing schemes and institutions, addressing the significant financial infrastructure weaknesses, and exploring innovative and alternative financing options including risk sharing facilities, factoring, warehouse receipt finance, or start-up capital policies. The successful microfinance sector would also benefit from a stronger enabling regulatory environment and infrastructure. Furthermore, access to long term finance continues to be an issue with underdeveloped capital markets and banking sector loan maturities that do not exceed six to seven years.

The country's financial infrastructure needs to further improve to overcome these challenges. First, the credit information system is underdeveloped, posing risks and constraining financial institutions' ability to expand products and services. In this regard, it is critical that the Credit Information Bureau (CIB) expands its reach. Second, the legal framework for registering movables and immovables presents deficiencies, and there are problems with debt enforcement. Informal mechanisms to collectively address financial distress are lacking. Third, the insolvency regime contains several drawbacks that have led to a decline in its use. Finally, digital financial services (DFS) offer the potential to enhance access to financial services. Banks currently dominate the DFS market, but other players are emerging and BB should adopt a conscious 'test and learn' policy approach. In addition, it is critical that all users' mobile and bank accounts are mapped to their respective national identity to facilitate electronic 'know your customer' and more accurately identify and monitor transactions that are suspicious of money laundering and terrorist finance.

Capital markets are equity driven, shallow and small, restricting diversification of funding and access to long-term finance. Market capitalization of all listed securities stands at roughly 20 percent of GDP, with a dominance of equity securities, only 2 corporate bonds and 8 debentures among a total of 564 listed securities, and no active trading of the 221 government bonds. Key impediments include: (i) the distortionary effects of National Saving Certificates (NSCs) preventing the establishment of a benchmark yield curve and affecting the distribution of long-term savings; (ii) the dominance of the banking sector and constrained liquidity restricting other forms of corporate fund raising; (iii) cultural constraints whereby family-centric ownership structure raises reluctance towards equity stake dilution; (iv) weak court systems, tax distortions and legal impediments; and, (v) the paucity of institutional investors.

The insurance sector continues as a small component of the financial system. Total assets amounted to 2 percent of GDP and gross written premium to GDP was 0.6 percent in 2018. Only four in 1,000 people have life insurance. Important constraints include the capacity of Insurance Development and Regulatory Authority's (IDRA), fragmentation and weak quality and capacity of companies, and public trust erosion.

Policy Recommendations

Suggested options for the government's consideration:

- Set up a high-level independent working group to draft a NPL resolution strategy; conduct a comprehensive assessment of banks and require additional provisions, swift recapitalization and restructuring; issue a moratorium on bank licensing and develop a consolidation strategy.
- Restructure SOBs in line with the efforts to resolve NPLs and ensure that the provision of new public capital is made contingent on meaningful reforms; and, develop a strategic plan for the transformation of SCBs into development finance institutions.
- Remove legal/ regulatory gaps that compromise BB's operational independence; introduce prudential standards for consolidated supervision; enhance 'fit and proper criteria' and strengthen the role of independent directors; broaden the scope of licensing criteria and strengthen the licensing assessment; introduce bank resolution legislation; strengthen regulation on loan classification, provisioning, write-offs, large exposures and related-party transactions, and discontinue unduly forbearance.
- Amend the BB Order to expand the reach of the CIB; revamp the Bankruptcy Act; finalize the National Financial Inclusion Strategy; and, map all users' mobile and bank accounts to National Identities.
- Remove the embedded subsidy from the NSS instruments; update the Medium-Term Debt Management Strategy and prepare an Annual Borrowing Plan; and, establish a yield curve.
- Improve the capacity of IDRA, including through amendments to the IDRA Act.

(A) Reforming the National Saving Schemes

Key issues and challenges

The National Saving Scheme (NSS) originated in 1943, in the backdrop of an embryonic banking sector. It comprises non-tradable bonds issued directly to households and some institutions as part of the government's initiative to promote savings at the national level and use the proceeds to finance a part of the budget deficit as non-bank financing. These instruments are managed by the National Savings Directorate (NSD) at the Ministry of Finance. They are sold to the public following an 'open tap policy' under various schemes,³ with maturities ranging between 1 to 5 years at interest rates currently much higher than those offered by banks and non-bank financial institutions on deposits or savings instruments of comparable maturities. In addition, the NSS instruments enjoy significant tax benefits or exemptions. The NSS instruments are found across all South Asian countries and were introduced when banking systems were significantly underdeveloped.

Since FY2014, the buildup of NSS debt has accelerated dramatically, driven by a widening spread between NSS and market interest rates and an 'open tap' supply policy. Fixed deposit interest rates have been declining since FY14, but the NSS rates did not keep pace - the spread rapidly widened to more than 5 percentage points in FY16 and persists. The level of outstanding NSS instruments, which was hovering at BDT 600-700 billion during FY10-13, surged to BDT 2150.6 billion by end-December 2017. In FY17, the net sale exceeded the budget target by 200 percent. The projected increase in FY18 is expected to exceed the accumulated stock of the outstanding NSS debt from 1947 to FY13.

This build up has given rise to many problems of fiscal, monetary and financial nature. These include a high fiscal cost; complications in fiscal management and monetary programming of the Bangladesh Bank (BB); substantially stunting or even reducing the size of the tradable government bond market; distorting seriously the auction calendar for the treasury bills (TBs) thereby complicating treasury operations and liquidity management of commercial banks; and limiting the growth potential of the stock market and the banking system by diverting assets away from these markets.

It is hard to justify the NSS on the grounds of budget finance given the financial sector's current level of development, and concerns over inefficiencies in the social impact targeting of the schemes. The banking sector has developed and now serves as a significant source of domestic borrowing for the government (around 10 percent per annum). The expansion of the NSS scheme and unfavorable spread over market rates implies, however, that the government has effectively been replacing lower cost domestic borrowing sources with the higher cost NSS instruments. Nevertheless, the NSS can be perceived as a social safety net for women, retired government employees, senior citizens, non-resident Bangladeshis, physically challenged and other middle- and low-income earners. There appear, however, to be significant leakages to the rich and middle-income households. A beneficiary survey of 2010-11 indicated that almost half of the benefits go to less than nine percent of high value investors. Imposed investment limits on some of the instruments are quite high compared to the average income per capita, while select institutional investors (like pension/gratuity funds) can invest with no limits. Furthermore, there are no investment caps on several instruments, although their volumes are more modest. Solutions must, nevertheless, account for the political economy issues surrounding the NSS.

³ The authorities have been introducing, dropping, and modifying schemes over time. There are currently at least 11 current and three non-current schemes. The Government sets out interest rates and prescribes the eligibility criteria and investment limits for individuals under each scheme. The 'open tap' nature of the NSD operations implies that there is no control on the volume of borrowing under the schemes.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Link the interest rates on NSS instruments with treasury bill/ bond rates to make NSS borrowing market based and provide citizens with the option to invest in fully secured NSS instruments and accept the lower interest rate that applies to T-bill and T-bonds.

Suggested options for the government's consideration in the medium to long term:

- Rationalize the sale of NSS instruments and move away from an 'open tap' policy to direct household investments to banks and the bond and stock markets.
- Re-target the NSS instruments through the retirement of some schemes and the refocusing of others so that only a select group of beneficiaries (like pensioners⁴) may continue to enjoy a significant markup over the market-based interest rates for NSS instruments.
- Eliminate the preferential tax benefits, reduce the cap on investment, and discard the auto-renewal provisions.

⁴ Such concessions should be limited to public pensioners only and phased out when a reformed public pension system is in place.

(B) Enhancing MSMEs' Access to Finance

Key issues and challenges

Improving access to finance for micro, small and medium enterprises (MSMEs) is a challenge at the heart of financial and economic development. Despite significant knowledge gaps, MSMEs are undoubtedly the backbone of non-farm job creation. Bangladesh lacked a uniform MSME definition until the 2016 Industrial Policy and now needs to promote a unified definition at the policy level, while improving data collection and analysis. Nevertheless, the 2013 Economic Census and the 2013 Enterprise Survey provided important insights. Some 99 percent of all non-farm enterprises were in the micro and small categories and provided employment to 20.3 million people in 2013. Most of these enterprises were low productivity informal firms focused on trading activities. Women's economic participation lagged expectations given the country's development stage.

Access to formal finance by MSMEs is limited compared to the South Asia average, with an estimated financing gap of BDT237 billion. Small and medium firms perceive access to finance as the third most important obstacle. In line with its Vision 2021, the government has sought to improve MSMEs' access to finance through multiple avenues. Bangladesh is famous for pioneering the global micro-credit revolution based on group guarantees,⁵ and the total MSME lending from the banking sector almost tripled from 2010 to 2016. Nevertheless, there appears to exist a sizable financing gap for MSMEs.

While recognizing the multi-sectoral challenge of MSME policy making, improvements in the strategic vision and coordination can yield significant results to MSME development and finance. MSME policy invariably involves several agencies and there is little institutional coordination and no strategic vision or overarching policy framework. Among a multitude of agencies, the Ministry of Industry has taken an active role on MSME development, and Bangladesh Bank (BB) has led MSME finance policy, including direct interventions such as refinancing windows. Bangladesh would benefit from establishing a central coordinating multi-party body to promote MSME development and finance.

BB's efforts appear to have increased MSME financing overall (from a low base), yet impact and effectiveness could be enhanced by reviewing past and existing schemes and institutions. Most of the success has been with medium enterprises that do not, necessarily, face the strongest financing constraints, and most of the financing is short-term. BB should refocus attention to the most constrained among MSMEs. In addition, BB's policy emphasis on banks does not appear to be fully internalized, with banks' response best characterized as passive compliance. The reasons appear to be based on persistent underlying financial infrastructure weaknesses and banks' risk perceptions. Nevertheless, success cases such as BRAC Bank, IDLC Finance Limited, and Prime Bank deserve some credit. BB would benefit from undertaking an evaluation of past schemes, guidelines and success stories to inform future MSME finance policies. In addition, state-owned financial institutions, which would traditionally support MSME development, are faced with significant challenges – notably in their mandate and governance, profitability, capital adequacy, and non-performing loans. It is important that the government clarifies the long-term goals, mandates and objectives of the state-owned financial institutions, and undertakes the necessary reforms to enhance their role.

There are significant financial infrastructure weaknesses that need to be addressed to encourage market-driven MSME financial inclusion. The 2019 WBG's Ease of Doing Business ranks Bangladesh at 161 out of 190 countries for 'Getting Credit', a measure of credit information sharing and legal rights of borrowers and lenders. Going forward, the credit bureau coverage should include all commercial loans, regardless of value, and include a data mining facility for all available data to strengthen MSME credit information. Furthermore, loans are primarily secured through property-based collaterals (that face a challenge regarding property rights). MSME financing would benefit from the expansion of the collateral

⁵ Nevertheless, the Microcredit Regulatory Authority could facilitate a stronger enabling regulatory environment and further promote infrastructure for the digitization of the microfinance sector.

registry's mandate to include movable collateral, the enactment of the Secured Transactions Law and the setting up of a register. Notwithstanding several legal avenues in place, insolvency and debt resolution are, in practice, very difficult and costly. A Small Claims Court could lead to faster adjudication with lower cost to cases relating to MSMEs, and it is important to codify and operationalize mediation within the Money Loan Courts and the general courts. To settle disputes involving small claims or recovering loans from small enterprises, the Small Cause Courts Act needs amendments. Institutionalizing Alternative Dispute Resolution (ADR) mechanisms for commercial dispute settlement could also help address contract enforcement processes.

Payment systems, in particular, hold a promise to expand MSME financial access through Digital Financial Services (DFS). Technology is transforming the global economy and MSME financing is not exception. Several enabling factors are critical to success, and the regulatory environment is particularly important. BB has made significant advances towards a digitized payment system and has encouraged mobile financial services. The rapid growth of ICT services has led to a growing use of technology for the delivery of financial services, but penetration is limited. Amongst the key challenges, the legal and regulatory structure of the mobile-payments system is restrictive by only allowing a bank-led model. The goal should be to transform this into a mobile-financial system with a broader range of financial services. BB needs to review its strategy and policy relating to DFS and make the eco-system supportive for the growth of Fintech.

Several innovative and alternative financing options can be further explored, including risk sharing facilities (RSFs), factoring, warehouse receipt finance, or start-up capital policies. RSFs can partially cover the risks of MSME lending and help de-risk lending decisions by commercial banks. Bangladesh can launch an MSME focused scheme that learns from its past experiences by addressing governance concerns. In addition, a range of pre-bank financing options have emerged to support young and dynamic firms, but the necessary enabling environment is still under development. As financial infrastructure improves and digital technology develops, asset based solutions such as factoring and warehouse receipt finance are likely to become more attractive. Finally, start-up capital is much needed but missing, and public policy can help reduce the risks associated with this segment.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Promote the use of a unified MSME definition at the policy level and improve data collection and analysis.
- Establish a multi-party central coordinating body to promote MSME development and financing.
- Improve the credit information infrastructure, expanding the reach of the credit information bureau.
- Promote an effective payment system and financial infrastructure to support the rollout of DFS and support the evolution of Fintech.

Suggested options for the government's consideration in the medium to long term:

- Undertake an evaluation of past schemes and BB guidelines to inform MSME finance policy.
- Refocus attention to the most constrained among MSMEs – the 'missing middle'.
- Clarify the long-term goals of the government and the mandates and objectives of the state-owned financial institutions and undertake reforms.
- Enact a Secured Transaction Law and set up a register.
- Establish a Small Claims Court and institutionalize ADR mechanisms.
- Pursue legal and infrastructure reform for the introduction/ expansion of alternative finance.
- Introduce a Risk Sharing Facility for SMEs.

(C) Developing Capital Markets

Key issues and challenges

Extending the maturity structure of finance is critical to achieve financial development and sustain economic growth and job creation. To reach a higher growth trajectory, investment in Bangladesh – both public and private – will have to increase. Savings rates are at 30 percent, but this is mostly held by households with limited sums in the formal financial system - only one-quarter of investment is funded by banks and capital markets. Extending the maturity structure of finance is needed for private sector construction of plants and investment in machinery and equipment, as well as financing infrastructure investments. Without it, households cannot invest in housing or education, or benefit from higher long-term returns on their savings. Policy commitment to address fundamental institutional constraints is the most important success factor, supplemented by the medium-term efforts to build capital markets and develop institutional investors, or shorter-term solutions of direct long-term finance provision.

The ability of banks, which dominate the financial sector, to provide long-term finance is constrained by several factors. The banking sector is dependent on short-term deposits, limiting its ability for maturity transformation. The sector is characterized by weaknesses among the state-owned commercial banks (SoCBs), non-performing loans (NPLs), challenges in corporate governance, and concerns on supervisory enforcement. While such weaknesses have recently raised concerns on the banks' liquidity and ability to sustain high credit growth, a longer-term issue relates to the asset-liability maturity mismatches stemming from their inability to attract long-term funding. Weaknesses are exacerbated by the national savings scheme (NSS) and the lack of foreign currency resources.

Capital markets have a long way to go towards playing a significant role in the provision of long-term finance. A well-functioning government debt market is the foundation for capital market development, as it provides the benchmark for the pricing of other instruments. While the basic architecture is working well, the market making function is currently not being fulfilled. The market-based instruments issued by the government are insufficient as a large part of the government's deficit is financed through the NSS. The corporate debt market is limited, with currently only one issue listed on the Dhaka Stock Exchange. Issues by non-financial corporations have been few, with the stronger companies largely relying on retained earnings and/or bank financing. Key issues relate to the trading structure, tax incentives, regulatory disincentives, limited confidence in related professional services (audit, credit rating), lack of diversity in debt products, and underdeveloped institutional investors. Finally, the equity market has grown rapidly, although market capitalization is below 20 percent of GDP - lower than India, Thailand, or Vietnam.

The NSS affects the allocation of savings and investments, with the lack of a benchmark government bond yield curve being a major impediment to capital market development. The NSS originated in 1943, in the backdrop of an embryonic banking sector. Since FY14, the buildup of NSS debt has accelerated dramatically, driven by a widening spread between NSS and market interest rates, and an 'open tap' supply policy. This has given rise to many problems of fiscal, monetary and financial nature, including contributing to the NPL issues in the banking sector. Notably, the NSS distorts the benchmark rate, which is the reference rate used by the private sector in issuing long-term debt instruments, crowding out investments beyond NSS. It is hard to justify the NSS on the grounds of budget finance given the financial sector's current level of development and considering concerns on inefficiencies in the social impact targeting of the schemes.

Local institutional investors are underdeveloped and mostly invest in short-term instruments. The assets of insurance companies, pension/ provident funds, and mutual funds can be critical for long-term investment. The total assets of the insurance sector amount to just three percent of GDP. Important constraints include the capacity of the regulator, sectoral fragmentation with weak quality and capacity, and an erosion of public trust in the sector. Nevertheless, total assets under management are around US\$5bn, which is significant in absolute terms (but insurance companies need capacity building and better corporate reporting and transparency). The unregulated pension sector is also smaller than many comparator countries

but can play a potentially bigger role. The government's defined benefit pension scheme for civil servants operates on an unfunded, pay-as-you go basis, but has built up a substantial reserve mostly held in bank deposits. Private sector firms' provident funds have estimated assets of at least US\$2.5bn, which are mostly invested in NSS instruments and bank term deposits.

Beyond corporate finance, the lack of longer tenors also impedes financing for affordable housing and infrastructure investment. The mortgage market amounts to around three percent of GDP. Mortgages are only available in the premium segment, and average tenors are only up to around 10 years, with prepayment common. To move down the income brackets, it will be necessary to extend tenors to at least 15 years. Infrastructure finance is largely supplied by the government and concessional financing. A Public Private Partnership (PPP) framework is in place, with an estimated pipeline of US\$14bn. The enabling environment for infrastructure bonds or the securitization of cashflows are yet to be tested through transactions.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Build a government bond yield curve and risk-free reference rate by enforcing NSS limits to cap the demand for NSS products and allow for more wholesale, marketable government bonds. In addition, the government should pursue debt issuance for market development purposes.
- Review the legal, regulatory and tax framework to support long-term issuance and investment. This should harmonize treatment of bond issuance and issuers and provide suitable tax incentives for market development.
- Map existing long-term, domestic institutional capital by establishing the number, size and asset allocation of provident funds and life insurance companies to identify potential investment sources.
- Provide the Bangladesh Securities and Exchange Commission (BSEC) with sufficient financial and organizational autonomy and resources by approving BSEC's organogram as an important first step.

Suggested options for the government's consideration in the medium to long term:

- Build capacity of investors and issuers to encourage investors to diversify their portfolios.
- Adopt a new provident fund law and assign regulatory oversight.
- Launch demonstration transactions to develop particularly the fixed income market.
- Develop the insurance market and reform the pension system, including the civil service pension scheme. The introduction of a national social security fund would grow pension system assets down the line.
- Develop additional financial instruments including asset backed securities and derivatives combined with a confidence building program by BSEC.

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2.4 Mobilizing Additional Revenues

Key Issues and Challenges

The postponement of the implementation of the 2012 VAT Law resulted in foregone revenues. The tax to GDP ratio in Bangladesh at below 9 percent is one of the lowest in the world. This is despite structural changes in the revenue structure which replaced customs duties by direct taxes as the dominant source of tax revenues. Model simulations suggest that had the VAT been implemented with effect from July 1, 2017 at the originally proposed rate of 15 percent, it would have yielded additional tax revenues of about 1 percent of GDP in FY2018 and 0.8 percent of GDP in FY2019.

Tax automation and process simplification will be instrumental in improving transparency, reducing administration costs, facilitating compliance, and improving the business climate. In Russia, revenue collection increased by 25 percent in the period 2012-2015 thanks to a combination of enhanced emphasis on e-services, greater client-orientation, increased transparency, and reduced administrative burden through automation.⁶ In Bulgaria, the aggregate voluntary compliance rate with tax and social contribution payment obligations increased by 11 percentage points from 74.3 percent in 2002 to 85.7 percent in 2008, and the VAT compliance rate improved to 92 percent, equaling that of advanced EU member countries.⁷ These examples demonstrate that raising compliance rates would yield significant additional VAT revenues.

The development of a multi-year, holistic and realistic strategy and action plan is important for revenue policy. The Medium-Term Revenue Strategy (MTRS) process that Bangladesh has initiated, like Indonesia, Thailand, and Vietnam among others, is highly relevant to achieve the overall goals of domestic revenue mobilization. It will help articulate the country's own vision for the evolution of its tax system. To inform the process, the MTRS could benefit from relevant technical inputs like tax gap analysis, tax revenue forecasting analysis, and potential solutions to weaknesses identified by the Tax Administration Diagnostic Assessment Tool 2017.

There is substantial scope to increase efficiency by shifting from a type-of-tax towards a function-based tax administration. Evidence shows that tax administrations that follow this path save resources in terms of administrative costs while providing better services to taxpayers, thereby reducing taxpayers' compliance costs (Bangladesh ranks 151 out of 190 countries on the *Doing Business 2019* 'paying taxes indicator'). For example, in the 1990s, Canada and Portugal moved towards function-based integrated tax administration, and this reorganization yielded immediate efficiency gains. In the Bangladesh context, consideration could also be given to expanding tax withholding mechanisms.

Carbon taxes could raise additional resources of up to 1 percent of GDP. In addition to boosting revenue, carbon taxes can nudge Bangladesh to a lower carbon and cleaner growth path, helping to make it more sustainable and improving environmental and health conditions for its citizens. Some of the additional resources could be used to reduce taxes on labor or firms. Carbon taxes are much simpler to implement than many other taxes, and most fuel costs would increase by only a few Taka per liter. Effective implementation is essential to underpin the support of citizens and the business community.⁸

Tobacco taxes could generate additional resources equivalent to about 1-2 percent of GDP. While exact estimates of revenue gains from tobacco taxes under the new tax framework have yet to be prepared,

⁶ Presentation of the Russian Federal Tax Service at the TAXGIP Conference, Saint Petersburg, June 2016.

⁷ Republic of Bulgaria, Revenue Administration Reform Project, Implementation Completion Report, World Bank, 2009.

⁸ Policy Note on Options for a Carbon Tax in Bangladesh, World Bank, 2017.

rough estimates based on the former tax framework indicate potential revenue gains ranging from 1-2 percent of GDP. The government has partially implemented the recommendations on tobacco taxes.

Rationalizing tax incentives and exemptions can lead to additional revenues while reducing administrative costs. A detailed cost-benefit analysis of existing incentives and exemptions is needed to inform policy decisions. A study carried out by Bangladesh Bank in 2006 estimated the total cost of tax exemptions at 2.5 percent of the GDP.⁹ These estimates need to be updated and could yield potential gains as in Pakistan, where the government succeeded in removing distortionary tax exemptions that yielded cumulative revenue gains of about 0.8 percent of GDP over three years.

The integration of various datasets will also help improve tax collections. Nearly 153,000 VAT taxpayers covering both new and existing VAT payers have been registered through the online Registration Module. With the successful pilot of the VAT online return filing module for a selected number of large taxpayers, setup of the Collection and Returns Modules would benefit from integration with Bangladesh Bank and the Integrated Budget and Accounting System (iBAS++). In addition to the publication on the NBR's website of the total amount of VAT collected each month, disclosure of refunds will improve transparency of revenue administration.

Policy Recommendations

Suggested options for the government's consideration:

- Prepare a Medium-Term Revenue Strategy with broad ownership among all stakeholders.
- Develop and implement a time-bound Action Plan with milestones to follow-through on the Medium-Term Revenue Strategy and maintain momentum on domestic revenue mobilization efforts.
- Proceed with ongoing efforts to automate tax administration.
- Implement the new VAT Law from July 2019.
- Focus on broadening the tax base, boosting compliance rates, and expanding tax withholding mechanisms.
- Implement carbon and tobacco taxes.
- Prepare a cost-benefit analysis of existing tax incentives and exemptions and implement their rationalization.

⁹ Tax Expenditure in Bangladesh: An Introductory Analysis, PAU, Bangladesh Bank, December 2006.

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2.5 Increasing the Effectiveness of Tobacco Taxation

Key Issues and Challenges

Tobacco control poses a major public policy concern and challenge in Bangladesh, which has one of the world's highest rates of tobacco use. More than 46 million adults (43 percent of all adults) consume some form of tobacco, whether smoked or smokeless. Alarming, youth tobacco use has also been on the rise in Bangladesh with an estimated 9.2 percent of all youth using tobacco products in 2016 from 7 percent in 2010.¹⁰ Smoking has significant health impacts in Bangladesh, causing an estimated 25 percent of all deaths among men aged 25 to 69, with an average loss of life of seven years per smoker.¹¹

Low cigarette taxes and prices have contributed to an alarming expansion in consumption. As per the WHO's Global Health Observatory Data Repository, the price for the most sold brand of cigarette in Bangladesh is the lowest amongst its peer countries.¹² Prices are nearly half the level in India and Nepal and close to one-fourth the level of Sri Lanka. The quantity of cigarettes for local consumption increased by nearly 80 percent from 48.2 billion to 87.1 billion sticks between 2007 to 2016. Furthermore, the use of other tobacco products such as bidi and smokeless tobacco products remains very high in Bangladesh. Tobacco spending as a share of total household expenditures increased among all socioeconomic groups between 2010 and 2016, with the largest increase among the poor.

A complex tax structure assists in keeping cigarette prices low in Bangladesh. In a strange paradox, cigarette prices in Bangladesh are among the lowest in the world despite having tax rates higher than Norway, which is the most expensive country for cigarettes in the world. Bangladesh operates a tiered ad valorem tax structure which not only increases the administrative cost, but also reduces the efficiency of the taxation policy as consumers can easily switch between brands and products when tax increases in a certain segment.

Extensive evidence from around the world clearly shows that tax-induced price increases of cigarettes and other tobacco products are highly effective in curbing tobacco use. A tax policy reform that shifts cigarette taxation from the current ad valorem to per unit of production would increase revenues and simplify administration. Tobacco taxation has also been called “the single most effective health policy in the world”.¹³ Higher taxes induce some smokers to quit, while preventing many others from starting. They also reduce the number of ex-smokers who return to cigarettes and reduce consumption among continuing users. Moreover, a survey in 2009 found that 70 percent of smokers in Bangladesh would like to quit, and 47 percent attempted to do so in the previous 12 months.¹⁴

Current taxation policy does not achieve the dual objective of discouraging consumption and maximizing revenues. The growth in cigarette consumption over the last decade has been primarily led by the low segment. Since FY2010-11, the volume in the low segment has grown by an average of 26 percent causing its market share to increase. Market share of the low segment currently accounts for nearly 77 percent of volume compared with 51 percent in FY2010-11. While the low segment accounts for nearly 80 percent of the market by value, it only contributes to 40 percent of total revenue from cigarettes. Every stick of down trading leads to a revenue loss of approximately BDT 2.30 to BDT 6.80. Had the market share for each segment that prevailed in FY2010-11 been maintained, government revenues from tobacco taxation

¹⁰ http://www.who.int/tobacco/surveillance/policy/country_profile/bgd.pdf?ua=1; [http://www.hdrc-bd.com/admin_panel/images/notice/1390213219.tobacco_percent20taxation_percent20presentation_percent20percent20april_percent202013_percent20\(final\).pdf](http://www.hdrc-bd.com/admin_panel/images/notice/1390213219.tobacco_percent20taxation_percent20presentation_percent20percent20april_percent202013_percent20(final).pdf)

¹¹ Alam et al. (2013), “Smoking-attributable mortality in Bangladesh”. Bulletin of the World Health Organization.

¹² <http://apps.who.int/gho/data/node.main.TOB1299?lang=en>

¹³ <https://www.cgdev.org/publication/single-best-health-policy-world-tobacco-taxes>

¹⁴ http://www.who.int/tobacco/surveillance/fact_sheet_of_gats_bangladesh_2009.pdf?ua=1

would have been 50 percent higher than that in FY 2016-17. By maintaining this complex tiered structure, cigarette prices will continue to be kept artificially low, which will continue to increase cigarette consumption and at the same time not help achieve the government's revenue mobilization efforts. A growing number of low- and middle-income countries have increased tobacco taxation in recent years, leading to significant increase in revenues.

Policy Recommendations

Suggested options for the government's consideration:

- Shift cigarette taxation from the current ad valorem to per unit of production.
- Rationalize tobacco tax tiers and price slabs gradually to transition to a unitary specific tax rate in the following way (the government has partially implemented them):
 - In year 1: (i) Increase the tax rate (SD and VAT combined) for the High segment to 79 percent (ii) Increase the tax rate of Medium and Low segment to 78 percent and 70 percent respectively; and (iii) Increase the floor price of Medium and Low segments to BDT 6.0 and BDT 3.5 per stick respectively.
 - In year 2: (i) Merge the Premium and High segment, with a minimum floor price of BDT 11 per stick and a tax rate of 80 percent, and (ii) Increase the floor price of the low segment to BDT 4 per stick and increase the tax rate to 75 percent.
 - In year 3: (i) Merge the Medium and Low segment, with a minimum floor price of BDT 7 per stick and a tax rate of 78 percent
- Implement a unitary specific tax rate for cigarettes in the long run.¹⁵

¹⁵ This recommendation is fully consistent with the guidelines for implementation of article 6 (tax and price measures) of the WHO Framework Convention for Tobacco Control (FCTC), which Bangladesh ratified in 2004. Preliminary analysis suggests that a unitary rate of BDT 38.75 per pack of 20 cigarettes, can help reduce cigarette consumption volume by 23 percent while at the same time increase revenue by nearly 30 percent.

3. *Creating More and Better Jobs*



Growth in Bangladesh has primarily been driven by the export-led readymade garment (RMG) sector and higher private consumption financed from remittances. The RMG sector produced large scale manufacturing jobs which were instrumental in reducing poverty and improving other welfare measures, along with higher economic engagement of women. More recently, employment creation has dipped and almost halted in the RMG sector. This is primarily because of the limitations in the investment climate, particularly, the regulatory environment, land related issues, limited access to continuous power supply and poor connectivity. These bottlenecks have manifested in low foreign direct investment, poor export competitiveness and limited agricultural productivity. The following policy notes present the key constraints to the investment climate and suggest some options for the government's consideration to boost the private sector.

Bangladesh Policy Notes

3.1 Doing Business with Ease

Key Issues and Challenges

With a ranking of 176 in the Doing Business 2019 report, Bangladesh now stands as the lowest ranked economy in South Asia. The overall Distance to Frontier (DTF) score of Bangladesh improved slightly by 0.91 percentage points to 41.97 in DB 2019 from 41.06 in DB 2018. The slight improvement is primarily attributable to the reduction in the number of days needed to get an electricity connection (to 148 days from 404 days). Despite strong efforts from the investment authority, government faces substantial challenges in implementing DB reform recommendations mainly due to the lack of commitment from several line agencies. Additional challenges in implementing reforms stem from the absence of regular follow ups from senior policy-makers, poor coordination among implementing agencies, and inadequate monitoring and evaluation mechanisms.

In late 2016 the government set a goal of attaining a double-digit rank on the DB indicators by 2021, requiring targeted and systematic reforms. Since then, Bangladesh has taken some initiatives, including commissioning a DB Reform Memorandum outlining key reform opportunities, and preparing a detailed reform action plan for eight indicators. In addition, the Bangladesh Investment Development Authority (BIDA), an agency under the Prime Minister's Office with responsibility to coordinate on DB reforms, has recently managed to form an inter-ministerial body – the National Committee for Monitoring and Implementation of Doing Business Reforms (NCMID), headed by the Cabinet Secretary – to focus on concrete and measurable actions aimed at improving the business environment in the country. As the DB rankings tend to reflect the overall business environment, improving the ranking is likely to give potential private investors a more positive image of Bangladesh's business environment as well as foster private sector growth through small and medium enterprise (SME) development at the local level.

Complex and cumbersome Government to Business (G2B) service delivery impedes business startup and growth. The service delivery process of government agencies, which involves multiple reviews and approvals, is neither systematic nor clear, resulting in difficulties and delays for investors. The absence of a well-structured Standard Operating Procedure (SOP) for service delivery at the agency level often leads to a lack of transparency, increasing the jurisdictional power of government officials and consequently allowing a preferential delivery of services to select businesses. In addition, the lack of coordination among government agencies causes delays in business operations. An investor must navigate over 36 uncoordinated agencies to obtain the licenses and permits needed to start a business. Lack of coordination among inspectorates often leads to multiple inspections on the same regulatory compliance issues, adding time and cost for both the government and the investors.

The archaic legal framework cannot accommodate existing and new businesses. Obsolete laws and regulations governing the private sector, such as the Companies Act, do not support modern practices. An overlap of jurisdictions among government agencies caused by the introduction of new laws without a thorough analysis of their impact poses an additional burden on the private sector.

The recent initiatives for improving DB will likely address many of the aforementioned challenges but the absence of task forces impedes systematic and comprehensive reforms. The absence of topic-specific task forces impedes proper implementation of disaggregated DB Reform Action Plans. Improving the performance of a country in a specific regulatory area requires action by multiple government agencies and strong inter-agency coordination. Successful countries have developed topic-specific task forces comprising designated officials from relevant agencies responsible for implementing recommendations. The absence of topic-specific task forces delays the implementation of DB reform recommendations in Bangladesh. These task-forces should work in close coordination with or include private stakeholders to ensure that the private sector's concerns are addressed.

Furthermore, the absence of a holistic monitoring and evaluation mechanism hinders adequate tracking of the implementation progress. Several government agencies have taken individual initiatives to support the DB reform agenda. However, those efforts are dispersed, and some are not aligned with the DB reform recommendations. There is no mechanism in place to understand the planned activities of the respective agencies related to DB reform initiatives. In addition, there is no system in place to monitor the progress in implementing the disaggregated DB reform action plan. It is also important to have a designated reform champion with political leverage to ensure that the reforms are implemented. Empowering BIDA – within the Prime Minister’s Office – as the clear reform champion and strengthening its capacities will be key for successfully delivering on the country’s reform agenda.

Lack of capacity among government agencies also impedes the implementation of reforms. Government agencies often lack the necessary resources, including technical know-how, human resources and infrastructure, to make progress on the necessary reforms.

Policy Recommendations

Suggested options for the government’s consideration in the short term:

- Develop inclusive topic-specific task forces comprising representatives from respective line agencies to implement Disaggregated DB Reform Action Plans. The task forces should remain accountable for delivery of reform actions to a central high-powered coordination committee or to the Prime Minister’s Office.
- Operationalize a Doing Business Secretariat at BIDA with a clear mandate of ensuring better implementation progress on the DB reform agenda through inter-ministerial coordination, monitoring, and follow-ups.
- Hold periodic monitoring meetings between the political leadership and the implementing agencies/task forces to emphasize the importance of improvements in the DB indicators.

Suggested options for the government’s consideration in the medium to long term:

- Simplify G2B service delivery as indicated in the DB disaggregated action plans and develop standard operating procedures outlining responsibilities/authority of the officials, time and documents required to ensure a transparent, time-defined and effective delivery of services.
- Strengthen Public Private Dialogue (PPD) mechanisms through BIDA, task-forces and relevant agencies to collect inputs and feedback from the private stakeholders. Develop a monitoring and evaluation mechanism to govern the implementation of the recommendations and establish clear reporting lines and escalation mechanisms to the highest levels of government.
- Set up an institutional mechanism for regular follow up by the Prime Minister’s Office (PMO) for ensuring better inter-agency coordination.
- Review and update the existing legal framework such as the Companies Act and the arbitration framework to bring in more transparency and efficiency in the regulatory service delivery.

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3.2 Minimizing Regulatory Unpredictability

Key issues and challenges

Improvements in the current regulatory environment in Bangladesh will encourage the entry of innovative businesses. Entrepreneurs face a myriad of regulatory barriers including an absence of laws and regulations that clarify the rules of the game for new activities (regulatory gaps), and conflicting definitions and interpretations (regulatory ambiguity). Bangladeshi regulators, as elsewhere, are typically risk-averse and slow to catch up with innovations in the economy. The problem is made worse by Bangladesh's outdated legal and regulatory apparatus. During the past decade, some improvements have been made but the regulatory environment remains costly, with over-regulation, lack of transparency and poor accountability.

Typically, rules and regulations are announced without prior notice, consultation or impact assessment. As a result, they do not benefit from the practical knowledge that businesses have. Even well-designed rules and regulations cause problems if announced suddenly and with immediate effect.

There are inconsistencies and gaps in rules and regulations. Government agencies often impose their own rules and procedures without considering possible conflicts with rules and procedures imposed by other government agencies. In addition, regulatory gap is a serious issue for innovative activities whose legality may be questioned if there are gaps in the legal and regulatory framework or grey areas subject to discretionary interpretation.

Businesses find it difficult to find information on existing rules and regulations. Businesses are unaware of the rules, regulations and procedures that they need to comply with at different stages of the project cycle and, even if they are aware, lack knowledge of the detailed requirements (for example documents required, fees and where to apply).

Regulatory officials use undue discretion in dealing with businesses. Rules and regulations, as written, may leave scope for varying interpretations by officials and businesses. Often, regulatory agencies do not provide adequate guidance to the front-line officials on how to interpret and administer the rules. As a result, discretionary enforcement and interpretation of rules increases the cost of doing business in Bangladesh.

Many regulatory areas lack an effective grievance redressal system. Businesses therefore do not have avenues to complain or contest a specific decision or lack of a decision that adversely affects them. Even if businesses can voice their grievances, there may be inadequate or no follow-up by the relevant agency and businesses may have no recourse to higher authorities. However, the politically connected businesses have an undue advantage in this environment.

Insecure property rights also dis-incentivize businesses from making investments. These take the form of outright expropriation of assets and policy and regulatory actions that make costs and revenue streams more uncertain. Examples include changes in rules after an investment has been committed, non-payment by the government on goods and services procured by it, and discriminatory and confiscatory taxation.

Regulatory unpredictability hampers business entry and day to day business operations; however, the degree depends on the size of the business. In a recent survey of businesses, more than 60 percent of the respondents complained about inconsistency in laws and regulations and discretionary behavior by regulatory officials. About half complained about poor access to information on laws and regulations and the absence of grievance mechanisms. Regulatory unpredictability is felt differently by businesses depending on their size. In the survey, large and medium sized firms complain more about discretionary behavior (62 percent and 65 percent respectively) than small firms do (54 percent). Lack of effective

grievance mechanisms is felt most strongly by medium-sized firms (64 percent citing this as a problem compared to 40 percent for small and large firms). Regulatory surprises (announcement of laws and regulations without prior consultation) are felt more acutely by small firms (46 percent citing this as a problem) than medium or large firms (37 and 38 percent, respectively).

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Make it mandatory to use the existing e-platform (ministry web sites) for soliciting feedback from stakeholders on regulatory issues.
- Pilot a feedback loop with selected government-to-business services through structured questionnaires.

Suggested options for the government's consideration in the medium to long term:

- Identify areas of redundancy, conflict, jurisdictional overlap and regulatory gaps in all existing laws, acts, and rules and prepare a time bound action plan to address them.
- Introduce and publish a regulatory calendar at the beginning of a fiscal year indicating all upcoming laws for the year.
- Set up a Regulatory Impact Analysis (RIA) unit at a central ministry to introduce the concept in the law-making process of Bangladesh. Build RIA capacity at the central unit and the agency level to conduct RIA for upcoming bills or amendments.
- Establish an automated system to publish all the new laws, regulatory amendments and SROs on a dedicated website within a week of their enforcement.
- Introduce an inter-operability mechanism to facilitate data-sharing between all government agencies.
- Introduce a 'Feedback Loop' for all government-to-government, business and citizen services to generate information on the quality of regulatory service delivery and complement it with an online grievance redressal mechanism.
- Introduce a guillotine approach to remove all redundancy in the laws.

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3.3 Improving Regulatory Service Delivery

Key Issues and Challenges

Bangladesh has set up an ambitious target of attaining upper middle-income status by 2031. To achieve this objective, the economy needs to grow at a sustained rate of 7.5-8 percent annually and this would in turn require an increase in private investment to at least 26.6 percent of GDP from 22 percent in 2016/17. Although the government has implemented several policy reforms since 2008, investors still face a number of challenges in establishing and operating a business in Bangladesh. This is reflected in the World Bank Group's *Doing Business 2019* report, which ranks Bangladesh at 176 among 190 countries, making it the lowest-ranked economy in the South Asia region.

Businesses seeking to operate in Bangladesh have to cope with multiple approvals from several institutions and agencies. A potential private investor has to navigate more than 150 government services to obtain the necessary approvals to start and operate a business in Bangladesh. The processes are regulated by over 36 agencies such as the Bangladesh Investment Development Authority (BIDA), the Office of the Registrar of Joint Stock Companies and Firms (RJSC) and the Department of Environment (DoE), with little inter-agency coordination. Navigating the uncoordinated, non-transparent and cumbersome workings of the agencies imposes a high cost on domestic and foreign investors. In addition, the uncertainty and unpredictability of service delivery hampers business activities and operational planning. These challenges affect Bangladesh's competitiveness and reputation as an investment destination.

The government needs to simplify its delivery of services to attract foreign and domestic investment. A single window model One Stop Shop (OSS) for Investor Services would be very beneficial as it would create a single point of contact between the government and investors. The OSS can potentially introduce transparency by publishing all relevant information pertinent to investing in Bangladesh on the OSS website. In addition, it could make the delivery of services more efficient by automating and integrating processes administered by different agencies. A virtual single government to business (G2B) interface OSS, with an overarching governance model that defines the mandate and role of the OSS and its relationship with other agencies could offer more integrated and effective services to investors.

An interoperable OSS has been a successful tool for many countries to improve their regulatory service delivery. Countries like Macedonia, Azerbaijan and Egypt have achieved positive results by implementing an OSS which is interoperable with other agencies. Evidence of several economies shows that establishment of an OSS for regulatory service delivery reduces the average time and number of procedures needed to deliver services. The World Bank's *Doing Business 2011* study shows that 72 countries with an established OSS could on average deliver necessary approvals for business registration in less than 20 days, while the average for 111 countries without an OSS was over 40 days.

Coordination, delegation, sequencing, and phasing of the reform process, along with regulatory reform (legal and administrative) are key to establishing an effective OSS. Implementing an OSS requires a number of actions including assigning clear responsibility and accountability, following clear guidelines and process maps and developing clear action plans.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Adopt an OSS Act to establish the broad operational and governance structure of the OSS.
- Adopt Standard Operating Procedures for simplified regulatory processes.
- Develop a web-based OSS model following a single window approach along with a mechanism to ensure interoperability (e.g., sharing of data, coordination of procedures) among institutions.

Suggested options for the government’s consideration in the medium to long term:

- Develop OSS rules to finalize the responsibility of the line agencies and formalize Service Level Agreements with OSS operators and line agencies.
- Execute the OSS model following a phased approach.
- Simplify and automate the existing service delivery systems of the following five agencies: Bangladesh Investment Development Authority, National Board of Revenue, Registrar of Joint Stock Companies and Firms, Office of the Chief Controller of Imports & Exports and Rajdhani Unnayan Kartripakkha.
- Simplify and automate the existing service delivery systems of the remaining 31 agencies.
- Update all related Laws/Acts/Rules that govern the administrative processes of the OSS operators and line agencies to ensure that the simplified and automated service deliveries have an adequate legal basis on which to operate.
- Undertake capacity-building activities for government officials involved in the OSS to ensure the OSS can be properly run.
- Introduce a Feedback Loop mechanism to understand the implementation gaps in the OSS – the difference between the rules as written and their implementation in practice.

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3.4 Enabling Export Diversification

Key issues and challenges

Bangladesh's export growth has been remarkable. The country aims to generate US\$54.1 billion in export earnings by FY2020, a significant increase over the US\$35 billion earned in FY2015-16. The leading sector, textiles and apparels, usually referred to as ready-made garments (RMG), has created 4 million jobs overall and accounts for 82 percent of Bangladesh's exports. RMG exports have shown signs of deceleration in the recent past but the momentum has picked up in FY2018. At the same time, several other less dominant but promising sectors are showing a positive export growth trend and could possibly drive export diversification and job creation in the future.

However, the composition of the export basket has not changed much over the past two decades. Bangladesh's Herfindahl-Hirschmann Index, that measures the level of sectoral concentration in exports is about five times that of other export-driven economies such as Thailand, China and Vietnam. During the last two decades, Vietnam expanded its export basket from agriculture to include machinery, footwear and electronics through national-level strategies and policy reforms to support specific sectors. However, Bangladesh continues to be primarily an RMG exporter.

Nearly 80 percent of exports are destined to North America and Europe and product sophistication has remained broadly unchanged. Bangladesh's export destinations have also not changed much and it has not tapped into other large and emerging markets in the world. Also, over the years, the country continued to produce and export RMG basics in progressively larger quantities while fashion garments and higher value-added items remained a small portion of total exports. An opportunity exists for Bangladesh to increase its market share as rising wages in China are forcing firms to look for alternatives. According to a World Bank study, a 1 percent apparel price increase in China would create 1.36 percent additional demand for Bangladeshi products in its largest export market, the United States. However, countries such as Vietnam, Cambodia, Myanmar, India and Pakistan also have the advantage of a young workforce and comparatively low wages, and Bangladesh, so far, has not demonstrated much success in securing the declining share of Chinese apparel exports.

Several factors constrain export growth. A large number of sectors are identified by the Government for export diversification, resulting in diffused effectiveness of resources. Absence of a comprehensive and long-term strategic approach to support the export of potential growth sectors has resulted in a fragmented and dispersed strategy framework. Unequal access to incentives/facilities such as duty-free import of raw materials and export-friendly financial products in sectors other than RMG have created a greater incentive to invest in RMG than in other potential export sectors. Adherence to various technical and process quality standards, testing and accreditation mechanisms, and most importantly, social and environmental standards have emerged as critical success factors to export products while local producers are unable to adhere to these standards. High costs of modern machinery and lack of knowledge of modern management and production practices constrain many entrepreneurs and impede technology adoption. In addition, there are infrastructure constraints like dysfunctional common effluent treatment plants (CETPs) and restricted access to transport and power which impacts export competitiveness. Trade policy reforms like tariff rationalization and strengthening of the bonded warehouse regime have also been sluggish.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Remove policy, coordination and market failures in select sectors that demonstrate high-growth potential in export markets.

- Extend the existing incentives packages and facilities to non-RMG sectors with export growth potential, which will include expanding access to the Export Development Fund (EDF), rationalizing import duties for raw material and safety equipment, and allowing industry associations to facilitate the loan application process on behalf of the manufacturers.
- Adopt a national level compliance framework for the export sector and develop the institutional capacity to support firms to implement such a framework.

Suggested options for the government’s consideration in the medium to long term:

- Identify gaps in national product standards and testing parameters as required in international markets and take necessary actions to harmonize those.
- Increase allocation in the Green Transformation Fund (GTF) provided to banks for non-RMG export sectors and incentivize banks to consider good proposals to increase uptake of the fund to be used to enhance environmental standards of the manufacturing units.
- Introduce a national guideline/framework for CETP management and operations.
- Incentivize the establishment of private sector run technology and service centers to provide necessary technology and skills for exports by allocating appropriate land and resources.
- Allow Special Bonded Warehouse facilities for all export-oriented manufacturers to minimize higher cost of imported inputs and eliminate the difficulty in claiming duty drawback on imported raw materials.

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3.5 Accelerating Bonded Warehouse Reforms

Key issues and challenges

Benefits and rules of bonded manufacturing are often discretionary. Bonded manufacturing is a form of temporary admission, which is equivalent to suspended import duty. The term used varies from country to country: Special Bonded Warehouses (SBW) in Bangladesh, Export Only Units in India, Bonded Manufacturing Warehouses in Malaysia, etc. The rules under which they operate also vary substantially from country to country and have changed over time. Bonded manufacturing status allows firms to bring imported goods into their warehouses without paying import duty, use the goods in their production, and export the output. The firms can usually also import machinery and replacement parts and other supplies duty-free, and buy from domestic suppliers free of domestic excise, sales and other taxes. The participating factories operate under the supervision of Customs authorities, who check the import and export containers going to and from the bonded factory, or, in some cases, rely on spot checks of the factory's inventories. The benefits and rules are at the discretion of the governments.

The success of the bonded warehouse facility is not equitable and inclusive in Bangladesh. Bangladesh's customs bonded warehouse regime permits licensed manufacturers to import duty-free parts and materials required for their export production purposes. The regime is most heavily used by RMG producers and to a lesser extent by leather goods, footwear, and shipbuilding industries. Enterprises are allowed to use the Special Bonded Warehouse (SBW) facility for importing all inputs duty-free along with imports of inputs under back-to-back LC (letters of credit), a facility to pay for imported inputs from export proceeds. This policy works to negate both the effect of relatively high import tariffs and the difficulty in claiming duty drawback on the export of duty-paid imported raw materials. It ensures competitive pricing by exporters for their manufactured goods as they compete in regional (and global) markets. However, these schemes allowing the duty-free import of inputs are not available equally to other sector exporters, who must pay duties on imported inputs upfront and rely on a dysfunctional duty drawback system that involves transaction costs. Therefore, for non-RMG sectors, a tariff on imports becomes a tax on exports on two counts: (a) the higher cost of imported inputs and (b) the higher tariff-induced profitability of Import Substitute Industries that divert resources away from exports.

There are no restrictions in the policy but implementation remains challenging. While the RMG sector is currently the predominant user of the SBW facility (90 percent of the licensees), there are no specific legal or policy provisions that prohibit or restrict the use of the facility by non-RMG sectors. In practice, however, it appears that administratively there are around 750 Statutory Rules and Orders (SRO), meeting minutes and instructions governing the SBW regime, many of which are not even recorded anywhere. Most of the instructions have been drafted to support the operation of SBWs in the RMG sectors. When applied to other sectors, the rules have the effect of being less favorable and, in some cases, a barrier to seeking an SBW license. The key legal basis for the regime is the warehousing provisions of the 1969 Customs Act. However, those provisions largely described a regime for customs storage warehouses, and contain few provisions on manufacturing. The lack of a clear legal basis in the Act creates uncertainty as to the requirements and leaves greater scope for administrative discretion.

The RMG sector enjoys various advantages which are not available to the others. Advantages for RMG sector include longer audit cycles with the Bond Commissionerate; exemption from the annual entitlement process for accessing imported inputs for direct exporters; setting of utilization rates used to acquit duty liability by an industry body with industry expertise; permission to have multiple premises (within 60km) on one license; ability to send goods to sub-contractors as part of the process; and no requirement to house full time Bond Commissionerate staff on site. These perks are not offered to the leather industry, the second highest manufacturing export revenue-earner.

Even within the RMG sector, the process of obtaining a license and operating an SBW is overly arduous. The SBW system is centered on an onerous paper-based manual system. The entire system is cumbersome, from the process for licensing an entity and bonded premises to the separate process for seeking permission for, and taking delivery of, imported components and other raw materials to be used in manufacture. Authorities exercise 100 percent transaction-by-transaction control, rather than risk-based selective control, making the process burdensome for both the licensee and the Customs officials, who themselves lack capacity, resources and industry expertise. There is a significant amount of redundancy in documentation and data requirements and formalities. Duplication also appears between the bill of entry and the import entitlement.

The National Board of Revenue's (NBR) recent bond management automation project (iBMS) could be improved. iBMS has importantly recognized the need to introduce efficiencies for 'deserving' (compliant) licensees. However, it has not addressed the question of what standards or what criteria must be met and maintained to be considered 'deserving'. The project recognizes the need to review and revise SROs in the context of automation without providing a clear direction. Addressing revenue leakage is rightly identified as a priority. However, there are no details on how this is to be achieved. The project has also identified possible linkages between the new iBMS and other NBR-based systems as a possible option but without presenting a clear vision. Finally, developing the capacity of the staff has been identified as a requirement, but again there is a lack of detail on the actual skill sets needed.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Enact and implement the New Customs Act, which has addressed the SBW-related provisions in the Warehousing Chapter.
- Conduct a Business Process Review of bond license issuance, audit, management, reconciliation and renewal procedures and identify process simplification options for SBW.
- Review the existing SROs and other instructions that govern SBW and simplify them.
- In collaboration with the Customs Modernization team, make available the capacity building opportunities for Risk-based customs control.

Suggested options for the government's consideration in the medium to long term:

- Based on the Business Process Review, introduce new procedures and SROs based on the principles outlined, such as generic eligibility criteria, warehouse categories and special eligibility criteria.
- Adopt Risk Management Principles for efficient licensing and renewal system based on compliance history and transparent eligibility criteria.
- Introduce automated license management for applications and renewal, and a database of licensees and license operations including periodic operating statements.
- Build capacity, beyond the new procedures and into developing the new skills to manage risk and focus on enhancing business systems.
- Centralize the Bonded Warehouse Facilities in Economic Zones and industry clusters.
- Develop Authorized Economic Operator and trusted trader programs including Post Clearance Audit to expedite customs procedures.
- Envision a future warehousing policy that would remove roadblocks;

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3.6 Modernizing Tariff Policy

Key issues and challenges

Tariff modernization will help Bangladesh diversify its export basket. Tariff modernization is at the crux of input competitiveness for efficient manufacturing given that more than 90 percent of the raw material for exportable goods are imported in Bangladesh and the other export incentives like bonded warehouse facilities are not accessible to firms other than Ready Made Garments and a few deemed exporters. The duty drawback system is inefficient and discourages traders from claiming it in the first place and cash incentives can only be used as a temporary measure.

Tariffs serve a dual purpose of revenue-generation and protection. Efficient collection of import tax affects revenue mobilization, trade facilitation and overall economic performance. If set correctly, tariffs play a dual role of generating revenue from imports and providing protection for domestic industries. However, beyond a certain tipping point, tariffs adversely impact revenue generation. In an era of progressive trade liberalization, finding that balance is a challenge because all direct and indirect taxes are expected to be designed in a way that ensures maximum revenue mobilization.

Bangladesh has made significant progress in tariff modernization, but there is room for improvement. The economy of Bangladesh has become increasingly open since independence in 1971. Trade liberalization has been stepped up since 1990, which has opened opportunities for regional trade integration. However, there have been periodic reversals. Policy reform included a substantial scaling down and rationalization of tariffs, removal of trade-related Quantitative Restrictions (QR), elimination of import licensing, unification of exchange rates, and the move to a managed float exchange rate regime. The tariff structure has been simplified by moving from 22 tariff slabs in FY1992 to only five non-zero slabs: 1, 3, 5, 10 and 25 percent in FY2016. In addition, a 15 percent slab was introduced in FY2017. Although the average customs duty has come down over the past 15 years, the average Nominal Protection Rate (NPR) shows a mixed trend. A downward trend until FY2009 has since been reversed. Revenue or protectionist considerations have historically dominated trade policy issues. Trade policy has thus been skewed, and there has not been a strategy deliberately intended to benefit consumers and export sectors other than RMG. Despite the tariff reductions over the last 25 years, average tariffs (including paratariffs) in Bangladesh (at 25.6 percent) are still higher than in comparator countries and regions (China 9.7 percent, India 12.1 percent, South Asia 12.2 percent).

There is a significant divergence between the top NPR, which has moved up since FY2001, and the average NPR. Disregarding the high rates on luxury goods, such as automobiles, alcoholic beverages and tobacco, the top general NPR was 85.6 percent in FY2017, which is significantly higher than the average NPR of 22.95 percent. This was because a select group of domestically produced import substitutes (like ceramics, footwear and agro-processed products) were given tariff protection well above the average.

There has been a proliferation and rise in para-tariffs. The most notable development since FY2001 is the rise and proliferation of para-tariffs, such as supplementary duty (SD) and regulatory duty (RD). They were mostly applied on products subject to the top Customs Duty (CD) rate of 25 percent, which raised the nominal protection of the relevant tariff lines. In FY2017 SDs and RDs contributed nearly 50 percent of the value of the average NPR. The rise in para-tariffs appears to have offset the decline in average CD rates. In particular, SD, which was applied under the VAT and Supplementary Duties Act 1991, was not applied on a trade neutral basis (equally on imports and domestic production as the law required) but was applied mainly on imports, thus becoming a major instrument of protection.

There is significant tariff escalation at the last stage of processing. The CD tariff slabs were designed to levy higher duties on final consumer goods (25 percent), and lower duties on inputs (intermediates at 10 percent, basic raw materials at 5 percent, capital goods at 1-2 percent). The huge escalation of tariffs

between input and output was clearly meant to impart a high degree of protection to domestically produced consumer goods.

There has been a growing divergence between input and output tariffs over time. Since 2009, the divergence between input and output tariffs got wider. This resulted in a sustained level of high effective protection to many sectors. Just as with nominal tariffs, the fact that effective rates of protection in Bangladesh are significantly higher than in comparator countries is shown by the comparison of tariff escalation ratios (ratio of output to input tariffs). The upward trend in the tariff escalation ratio during FY2000-FY2014 demonstrates the rising trend in effective protection rates, which only declined moderately after FY2014. These high and rising rates of effective protection to import substitute production reveals an imbalance of incentives in favor of import substitutes over exports – a clear case of anti-export bias of incentives.

High Effective Rates of Protection (ERPs) indicate latent inefficiency in the firms. At the firm level, there were very high ERPs for most import substitute consumer products receiving tariff protection. In 2012, ERP estimates for footwear, agro-based industry, pharmaceuticals, ceramics, plastic products, light engineering, sanitary and electrical products, ranged from a low of 20 percent for pharma to a high of 480 percent for plastics. High ERPs typically indicate latent inefficiencies in firms, which tend to perpetuate over time.

Trade protection through tariffs not only reduces the competitiveness of domestic firms, but also impacts consumer welfare. Based on the estimated cost of protection measures related to consumer goods imports and the domestic production and sale of import substitute consumer goods, in the 5-year period FY2013-2017 the total protection cost to consumers ran into billions of dollars.

Policy Recommendations

Suggested options for the government’s consideration in the short term:

- Assess the impact of the current tariff structure on raw material which have export potential. This will enable a common assessment of the issue.
- Review the dispersion within the same Harmonized Commodity Description and Coding System – (HS) Codes –to prevent misdeclarations and flaws in assessments.
- Develop a strategic roadmap for tariff modernization with a gradual reduction in protection to encourage export competitiveness and integration.

Suggested options for the government’s consideration in the medium to long term:

- Develop the capacity of the National Board of Revenue and Ministry of Commerce for policy and data analysis using available statistical tools and software.
- Based on assessment reports, select sectors with export potential and identify the scope for tariff rationalization for the competitive sourcing of inputs. Accordingly, draft and implement a sector-based roadmap for tariff modernization.
- Reduce the budget’s dependence on trade tariffs.

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3.7 Capitalizing on Special Economic Zones

Key issues and challenges

The government recognizes that inadequate basic infrastructure and a severe shortage of accessible land discourages greenfield investments and industrial development. Bangladesh has one of the world's most cost competitive, sizeable supply of labor, ideal for labor-intensive production in sectors such as garments, footwear, leather products and toys. However, despite large development success fueled by RMG, microfinance, and remittances, three out of five Bangladeshi workers still find themselves in vulnerable employment. The country also has one of the world's highest population densities and some of the land is either occupied or inundated by water. Coupled with an underdeveloped power sector, a challenging land records and titling system, and the uncertainty associated with regulatory red-tape, investors seek safe havens with quality infrastructure and services for their investments. Bangladesh has a disappointing track record of attracting foreign direct investment (FDI), especially compared to countries in East Asia. The supply of serviced land with improved governance could potentially help attract more investment.

The Bangladesh Export Processing Zones Authority Act of 1980 was aimed to boost industrialization and job creation through the promotion of trade and investment and it has had some success. The Act led to the establishment of the semi-autonomous Bangladesh Export Processing Zones Authority (BEPZA), which leases serviced land to industrial tenants in eight export processing zones (EPZs) across the country, primarily focused on the garment sector. Investors enjoy several incentives of a fiscal (tax holidays, duty free imports, and exemptions of dividend tax) and non-fiscal (100 percent foreign ownership permissible, and full repatriation of capital and dividend) nature in addition to a host of support services aimed to help investors navigate the formidable bureaucracy linked to doing business. In July 2017, BEPZA hosted 463 tenants in both RMG and non-RMG sectors (like chemicals and footwear) —56 percent of which were fully foreign-owned, 16 percent were joint ventures between foreign and domestic investors and the remaining were local ventures. BEPZA estimates that in the two decades until FY2017, the EPZs attracted US\$4.3 billion of investment (average annual FDI inflows in Bangladesh are about US\$2 billion), contributed to US\$59.4 billion of exports earnings (19 percent of the total in FY2017) and employed 481,000 direct workers. The trend now is to move away from the EPZ model, because it has weaker domestic linkages and instead cater both to the domestic and the export market. The goal is also to crowd in more private participation in developing and operating zones.

The Bangladesh Economic Zones Authority Act and the Bangladesh Hi-Tech Park Authority Act—both of 2010—created two more agencies like BEPZA and these three agencies have overlapping mandates. The two new acts led to the creation of two new semi-autonomous agencies—the Bangladesh Economic Zones Authority (BEZA) and the Bangladesh Hi-Tech Park Authority (BHTPA)—tasked to oversee the expansion of economic zones (EZs) and hi-tech parks (HTPs) in the country. These new types of zones operate under different regulatory regimes from BEPZA, and allow for production aimed both for domestic and foreign markets. BEZA aims to develop 100 EZs by 2025, including in underdeveloped regions. Unlike the EPZs that are publicly owned and operated by BEPZA, BEZA and BHTPA would rely mainly on private capital and expertise to build and operate the new zones but with important government oversight. Thus, Bangladesh has today got three agencies that sometimes compete for the same investors although they come with somewhat different rules and have different offerings. In addition, other agencies like the Bangladesh Small and Cottage Industries Corporation also develops some industrial infrastructure for manufacturers.

Bangladesh's development agenda using special economic zones is affected by internal and external challenges that the government will need to address. These include:

- **Legal and regulatory mandates:** The multitude of public agencies with sometimes overlapping mandates offers choices to prospective investors but it is a complex and sub-optimal approach to development. The legal framework for public private partnership based institutional arrangements will need to be carefully laid out with a clear perspective on fiscal contingent liabilities.
- **Governance and technical capacity:** Apart from BEPZA that has nearly four decades of experience, the new agencies tasked with the expansion of industrial infrastructure are young institutions and it will take time to build the technical capacity to be effective regulators and partners in negotiations with leading industry groups and foreign multinationals. Political interference in site selection can be a threat to investment decisions and the ability of senior management to handle such pressure will be crucial.
- **Safeguards management:** Social and environmental safeguards management is constantly in the focus and an area where the agencies and ministries will need to strengthen technical capacity, probity and enforcement. The destructive forces of climate change are also having an increasingly negative impact along rivers and coastal areas where many SEZs are situated due to land scarcity.
- **Connections to the national investment climate:** The attractiveness of Bangladesh as an investment destination is dependent on the stability of its economic policies, the playing field that the government offers investors, the overall governance situation outside the SEZs, and the efficiency of transport and logistics networks connecting the SEZs to air- and sea-ports.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Establish an internal government task force, including select international experts, to annually review progress of the agencies with regards to site selection and public investments decisions. The aim would be to avoid mission creep, wasteful investment decisions, and encourage compliance of private concessionaries.
- Establish an environmental panel to review and propose initiatives to bring existing, and new, common effluent treatment plants and other joint/shared environmental infrastructure in the right hands and with the necessary finances.
- Standardize requirements and incentive structures across SEZs to ensure a level-playing field.

Suggested options for the government's consideration in the medium to long term:

- Integrate SEZ development plans better with national plans around transport and logistics corridors (road, rail, sea, air), human resources development, trade and investment policies (multilateral, regional, bilateral when relevant), support institutions linked to the protection of intellectual property rights, national quality infrastructure (testing, certifications), and fiscal policy.
- Conduct a strategic review of the regulatory environment and public agency setup, including BEPZA, BEZA and BHTPA to propose coherent joint visions and policy reforms that would bring synergies, capacity transfers and potential mergers of agencies. At a minimum, this exercise would spell out clear operating guidelines/rules to avoid duplication and wasteful competition.
- Allow for full autonomy in recruitment decisions so the agency(ies) can adopt human resource (HR) policies beyond government HR policies. This would aim to ensure that positions are filled with motivated technical people possessing the required legal, financial, engineering and planning expertise.

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3.8 Supporting Foreign Direct Investment

Key Issues and Challenges

Foreign Direct Investment (FDI) is critical for capital formation, economic diversification and private sector growth in developing economies like Bangladesh. The 7th Five Year Plan (FYP) of Bangladesh emphasizes the importance of FDI and sets an annual target of US\$9.6 billion by FY2020 from US\$2.6 billion in FY2018. FDI is not only a useful source of long-term financing but an excellent vehicle for mobilizing additional resources, transferring technology, adopting modern management practices, and promoting firm efficiency which are crucial for creating more and better jobs. Moreover, FDI also provides greater market access.

The average annual FDI inflow in Bangladesh is significantly lower than comparable economies. Over the past decade (2007 to 2017), inflows have averaged at 0.9 percent of GDP in Bangladesh compared with 3.0 percent in China, 5.5 percent in Ethiopia, 2.6 percent in The Philippines, 6.6 percent in Vietnam, 4.6 percent in Malaysia, and 2.1 percent in India. In 2017, the sectoral distribution of FDI was concentrated in businesses like telecom (24 percent), power and energy (20 percent), and banking and trading (11 percent). Inflows are primarily from the United Kingdom, the United States, Norway, Singapore and South Korea which constitute about 65 percent of FDI inflows. The country's export diversification strategy calls for an efficiency-seeking FDI policy regime with instruments for firm linkages, investment incentives, preferential trade agreements, and efficient services provided by investor promotion agencies (IPA). The absence of such a policy regime is one of the factors restraining FDI inflows into the country.

FDI in Bangladesh is mostly reinvestment of retained earnings, reflecting investor confidence but also some constraints. More than 50 percent of FDI in Bangladesh are reinvestments. This shows confidence in the economy among the existing investors. However, the low levels of FDI and absence of new investors indicates problems related to greenfield entry barriers, valuation challenges, and repatriation restrictions. The dearth of enabling policies such as easy business entry, access to serviced land, and investor aftercare, limits the potential for investment in greenfield and expansion projects which are more likely to create new jobs.

Outdated and unclear policies undermine Bangladesh's chances of reaping the full benefits of FDI. FDI facilitates the transfer of knowledge, technology and capital which can lead to technological spillovers, higher productivity, better managerial and organizational skills, greater access to global markets and higher economic growth. Moreover, greenfield investment and technologies can boost innovation and competition, increase investment in research and development and create better-paid and more stable jobs. However, outdated policies such as arbitrary caps on technology transfer transactions, lack of incentives on R&D expenses, and tight controls on expatriate skilled workers limit Bangladesh's ability to take advantage of FDI inflows. In addition, appropriate policy measures are required for increasing the capacity of local businesses to take advantage of FDI. Other restrictions such as sectoral equity caps, approval pre-requisites, and mandatory public listing on entry in various sectors and products also hinders the inflow of FDI into the country. In addition, access to private sector external financing is also constrained by an inadequate regulatory framework, arbitrary pricing caps, and complex and lengthy approval processes.

Limited institutional capacity and weak policy coordination delays service delivery to investors, raises costs and hinders prospects of FDI inflows. Foreign investors navigate through up to 50 uncoordinated government agencies to obtain licenses, permits and services required to start and operate a business. The existing IPAs like Bangladesh Investment Development Authority (BIDA), Bangladesh Economic Zones Authority (BEZA), and Bangladesh Export Processing Zones Authority (BEPZA) are constrained by weak technical capacity, inefficient investor service delivery system, and inadequate mechanisms for policy and administrative coordination, and advocacy. Lack of coordination between

agencies results in multiple, often duplicate reviews and inspections on the same issues that wastes time, raises costs, increases risks and creates uncertainties for investors.

Some gains could potentially be reaped from the current emphasis on economic zones (EZs) but more is needed to make them a success. EZs have some potential to fulfill the demand for serviced industrial land but are plagued by issues such as inadequate off-site infrastructure, non-strategic location, inconsistent policy measures, and limited capacity of EZ authorities. These drawbacks limit FDI inflows into these EZs.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Develop a new private investment and FDI policy framework which also sheds light on innovation, and transfer of technology and skills.
- Undertake selected reforms in the Companies Act, foreign exchange regulations and investment protection laws to ease entry of FDI.
- Adopt a strategic approach to restructure BIDA to enable it to undertake targeted investment promotion and provide quality and faster services to the national and global investors.
- Identify deeper institutional reforms for facilitation agencies like BIDA, BEZA and BEPZA.
- Review the policy framework for international financing including private sector external commercial borrowings.

Suggested options for the government's consideration in the medium to long term:

- Adopt the new private investment and FDI policy framework.
- Identify, analyze and formulate policy reforms to remove restrictions and limitations on business entry and operations and enable long-term private sector external financing in the priority sectors including infrastructure, energy, pharmaceuticals, logistics, and services.
- Implement a strategic restructuring approach of BIDA, initiate targeted investment promotion and establish quality and faster investor services provisions through One Stop Shop (OSS).
- Undertake deeper institutional reforms for facilitation agencies like BEZA, BEPZA, BHTPA and consolidate a targeted investment promotion function for these agencies.
- Rationalize investment incentive regimes considering the potential impact, priority, and value addition and make them time-bound.
- Adopt policy measures to integrate FDI into the local economy.
- Strengthen the contract enforcement framework to minimize uncertainty and regulatory risks for foreign investors.

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3.9 Powering the Economy

Key issues and challenges

Bangladesh has made energy access a priority, but the country remains energy poor with low per capita consumption. Bangladesh extended power access to 90 million people since 2000, with nearly 4 million new household connections annually. The country has also made progress in providing off-grid electricity access to about 10 percent of its population. However, roughly 20 percent of the population remains without grid-connect electricity access, three-quarters of whom are below the WB poverty line and nearly all in rural areas. Per capita electricity consumption remains low at 1/7th the average mid-income countries. If Bangladesh were to achieve universal access, stable 24-hour supply, and per capita consumption comparable to its peers, several folds of the current supply would be needed.

Supply of power has not kept pace with rapid growth of electricity demand, resulting in erratic supply and economic loss. To support economic growth and meet 10 percent annual demand increase, the government intends to double capacity by 2021, and reach 50 GW by 2041. Indeed, Bangladesh has made impressive progress in generation capacity, more than tripling it to 18 GW since 2009. Nonetheless, planning and implementation of energy infrastructure is often slow and suboptimal and has not kept up with the increasing demand. Inadequate power supply and suboptimal operation of the system has led to frequent outages and load shedding (1GW on average), shaving ~3 percent from GDP and inhibiting private investment in productive sectors. In addition, transmission networks have not been extended in tandem with increased generation. Furthermore, dispatch does not follow merit-order and there is further room to reduce distribution losses. Lack of spinning reserves does not allow addressing unanticipated demand surges, loss of generators, or other external shocks, such as storms that lead to grid failures.

Power generation relies heavily on depleting gas reserves and imported liquefied natural gas (LNG). There is therefore a need to increase indigenous gas supply and adopt alternate fuels. About 67 percent of electricity generation is based on natural gas, with subsidized prices keeping demand artificially high and stifling offshore field development. Half of onshore gas reserves have been depleted, and production peaked in 2018. Some of the power generating capacity is not fully utilized due to inadequate supply of gas. Increasing LNG imports may come at a relatively high cost and could increase energy cost and cost of industrial production. Shortages of gas also compel the government to adopt coal as an alternate fuel source. Its plans call for up to 35 percent of generation to come from coal by 2041. Therefore, efforts are needed to increase upstream exploration of domestic gas and make downstream use of gas more efficient.

Contribution of renewables remains low, imports can contribute more, and energy efficiency opportunities are untapped. The potential for increased renewable energy generation in Bangladesh is significant and the government has put in place several plans for adding renewable energy capacities. Despite the government commitment, progress on increasing the share of renewable energy has been slow, with less than 2 percent of generation coming from renewables. To promote renewables, the government needs to identify public land sites and prepare them for competitive tenders to bring in experienced project developers. Similarly, imports of electricity are relatively low at 8 percent. Bangladesh could tap into the regional power markets to increase electricity supply cost-effectively. Doing so requires investment in cross-border transmission interconnections. The opportunities for improved energy efficiency also remain largely untapped in industrial energy efficiency, appliances, and buildings. Increased share of renewables and imports, improved efficiency and continued investment in gas-based plants can in combination reduce the need for adding coal and oil-based generation capacity, strengthen system operation, lower supply costs and add operational flexibility.

Emergency generation scheme (30 percent of capacity) puts a financial burden on the state. As addition of baseload capacity has not kept up with demand, the government has resorted to emergency generation schemes from oil-based plants. The Special Power Act on power and gas empowers the

government to bypass the Public Procurement Act and does not ensure competitiveness, transparency and fairness in procurement. The act helped set up power plants and gas pipelines on an emergency basis but may no longer be required. The addition of the emergency capacities has often been slow and been procured in a non-competitive manner, leading to costly outcomes, increased pollution, and reduced attention to adding large least-cost capacities. Use of rentals and other engine-based plants cause pollution and push up power generation costs requiring an annual subsidy of US\$500 million. Out of merit order dispatch costs the country US\$1 billion per annum due to dispatch of such expensive, oil fired generation. In addition, engine-based generation does not contribute to frequency stabilization.

Bangladesh gets 42 percent of power generation from Independent Power Producers (IPPs) but needs to increase commercial financing. Despite the progress made on IPPs, procurement practices need improvement to ensure competitive selection processes that maximize investment and economic benefit. There is also a need for parallel huge investments in transmission and distribution - investments under way or needed for these sub-sectors total about US\$12 billion. Bangladesh therefore needs to explore opportunities to mobilize commercial financing and private sector participation in transmission and distribution.

The power sector reform program should strengthen the independence and accountability of sector actors. Completing the unfinished agenda of sector reforms and unbundling would help improve utility performance, reduce leakage, provide affordable electricity and improve sector image. The government needs to take steps to reform the utility companies to become self-sufficient and solvent entities to eliminate the impact on the budget. Further unbundling along the functional lines, e.g. to corporatize the remaining distribution of Bangladesh Power Development Board (BPDB) and more of the generation would also provide further efficiencies. Similarly, the independence of the Bangladesh Energy Regulatory Commission (BERC) should be enhanced with reporting to the Parliament. More of the ministry level decision making, and other administrative matters could be delegated to the utility companies, with appropriate accountability of the companies and their boards. Similarly, the utilities should be given a stronger mandate on their own planning and implementation, with their boards' oversight.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Review the Special Power Act and wind down additions of emergency generation capacity.
- Strengthen planning and system operation through increased cooperation among BPDB, Power Grid Company, and distribution utilities to achieve optimal network expansion planning.
- Modernize system operation, controls and introduce optimal, merit-based load dispatch to, inter alia, stabilize system frequency.
- Introduce/expand smart distribution metering and energy efficient technology in the power value chain.
- Pursue increased generation from renewable energy and improved energy efficiency.
- Explore mobilization of commercial finance for distribution utilities, renewable energy and selected transmission and distribution investments.
- Review cost of electricity and gas supply and tariff setting regime and determine the required tariff subsidy (BERC) and adopt necessary tariff regulations. Tariff adjustments should be done twice a year (both electricity and gas) to gradually reach and thereafter maintain cost reflective tariffs. Shift the responsibility of upstream gas pricing to BERC.
- Monitor the supply schedule of imported LNG to determine its financial impact and provide updates to the government on gas pricing.
- Strengthen cross-border power trade dialogue with neighboring countries and develop cross-border interconnections.

Suggested options for the government's consideration in the medium to long term:

- Revitalize and complete the Power Sector Reform Agenda.
- Pursue measures to boost domestic gas supply.

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3.10 Improving Connectivity

Key Issues and Challenges

The transport sector in Bangladesh faces institutional fragmentation and weak co-ordination. At the national level, there are 5 ministries and 21 agencies responsible for the transport sector with overlapping mandates, and conflicts between service provision and regulatory responsibilities. There is currently no integrated transport masterplan to guide the development of the transport sector in Bangladesh over the next 20 years. Different agencies have their own modal infrastructure development masterplans, with little, if any, co-ordination between them. An integrated sector wide Masterplan to meet conflicting demands including defining changes in institutional responsibilities to improve co-ordination, implementation and management is essential. The Masterplan also needs to include a sustainable financing strategy exploring private sector investments through public private partnerships (PPPs) not only in transport infrastructure development for revenue generating assets but also in operations and services in all sub-sectors.

There is limited or no-multi-modality in the transport system, logistical costs are excessively high, and there are policy constraints to regional trade integration. According to the Logistic Performance Index (LPI, 2018), Bangladesh ranks 100 out of 167 countries, and is below the regional average for South Asia. Bangladesh lags in the quality of customs, infrastructure, logistics service providers, and the tracking and tracing of consignments. The predominant transport mode is road. Rail has potential but is failing to contribute: In 2017, less than 5 percent of the containers that went to/originated from Dhaka were transported by rail. The inland waterways transport (IWT) sector has the potential to reduce logistics costs but only about 6,000 km are navigable during the monsoon (wet) season, shrinking to about 3,900 km in the dry season. The civil aviation sector is unable to handle the growing national and domestic traffic (both passenger and cargo) because of limited capacity. The Chittagong port is congested and its performance in container handling is also well short of the benchmarks for efficient container terminals in South Asia and elsewhere. The average vessel turnaround time (the time a vessel spends in port) and pre-berthing waiting time are amongst the highest in the region, and container handling rates are one-third of the most efficient ports. There are no specialist terminal operators, little integration in the logistical chain, and low levels of operating efficiency. The congested transportation system and higher logistics costs also constrain Bangladesh in playing an active role in regional integration despite its strategic geographical location. Although many regional trade and logistics protocols/ agreements have been signed, these need to be translated into action.

The problem of institutional fragmentation and inadequate co-ordination is particularly pronounced in urban transport. There are 7 ministries and 13 agencies responsible for various aspects of Dhaka's urban transport system, but there is little or no coordination, planning, or dialogue between them. As a result, the transport system in Dhaka is chaotic, costly, and highly polluting. Dhaka's competitiveness is being impacted by traffic congestion and the lack of an integrated public transport system. Secondary cities face similar issues. Given the rapid urbanization that Bangladesh is experiencing, establishing a clear policy and institutional framework for urban mobility is a pre-requisite to ensuring more sustainable mobility outcomes in Bangladesh's cities.

The infrastructure asset management across different transport modes is a challenge. Bangladesh needs to move away from the "build, neglect, rebuild" mindset and improve its asset management practices. The total road network size of the country is roughly 375,000 km (road density of roughly 250 km per 100 km²), reflecting the tremendous progress in improving connectivity, particularly at the sub-national level. The rural road network makes up 94 percent of the network, with Upzila and Union roads (UNRs) comprising 11 percent and 12 percent of the rural road network, respectively. Despite the improvement in connectivity, the overall quality of the road network remains poor. Only 27 percent of the rural roads and 40 percent of the main roads are paved, half of which are in good condition. There is little axle load

enforcement on roads. IWT terminals are also dilapidated with inadequate equipment, and railways and airport infrastructure needs upgrading and modernization due to years of lack of maintenance.

Finally, road safety in Bangladesh needs to be addressed as a key national priority as more than 20,000¹⁶ people are killed and 200,000 seriously injured every year in road traffic incidents. The economic cost of these incidents is estimated at 2-3 percent of GDP a year. Road traffic crashes are responsible for 12 percent of all deaths among men in the 15-49 age bracket, for whom transport injuries in 2016 was the 2nd leading cause of death, up from 11th in 1990 (GBD, 2016). The exponential growth in the number of motor vehicles (2.5 time increase from year 2014 to 2017)¹⁷ and expected increases in transport demand of 10 percent per annum, underpins urgent action on this issue.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Prepare the Transport Sector Masterplan based on the results from a review of institutional responsibilities, recurrent and capital financing needs and sources, public and private options, current and forecast demand on all modes over the next 20 years, and a strategy of institutional/policy and physical improvements, across all modes in an integrated manner. Such exercise shall also include a diagnostic of capacity and productivity of the local construction industry as well as unit costs of construction;
- Establish an empowered Road Safety Lead Agency at the highest level, adequately funded, to improve coordination among various agencies/stakeholders and to develop a targeted result focused road safety strategy.
- Define a lead agency that would be responsible for urban mobility at the national and city level with adequate powers to address the current fragmentation and lack of coordination.
- Operationalize the Road Maintenance Fund Board Act, which had been enacted in 2013 for maintenance, repair and renovation of national roads and prepare an Asset Management Strategy, to define appropriate levels of service for all roads.
- Prepare the Port Masterplan and Logistics Strategy to identify improvements in the operation of all ports, maritime and IWT systems, through alternative port management models and the use of specialist international terminal operators, among others.
- Expedite implementation of regional trade protocols/agreements including the Bangladesh, Bhutan, India and Nepal (BBIN) initiative, Motor Vehicle Framework Agreement (MVA), Multi-modal Transport Agreement, and the Protocol on Inland Water Transit and Trade (PIWTT).

Suggested options for the government's consideration in the medium to long term:

- Implement the Transport Sector Masterplan.
- Support the Road Safety Lead Agency to implement the results focused road safety strategy.
- Launch of a National Program for supporting urban mobility improvements in major cities in line with the national policy and based on city mobility plans.
- Support the evolution of Dhaka Transport Coordination Authority into a Greater Dhaka Metropolitan Transport Authority and with the necessary powers and resources to plan and coordinate Greater Dhaka urban transport interventions.
- Implement the Asset Management Strategy to ensure adequate maintenance of transport systems;
- Implement the Port Masterplan and Logistics Strategy.

¹⁶ Depending on the source, the estimates of annual deaths range from 2,538 (reported fatalities in 2012) to nearly ten times that – between 20,736 (Global Burden of Disease, 2016)¹⁶ and 21,316 (WHO, 2015).¹⁶ The Global Burden of Disease (GBD) estimate implies a death rate of 12.8 per 100,000 people.

¹⁷ As per Bangladesh Road Transport Authority

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3.11 Making Land Acquisition and Resettlement Fair and Sustainable

Key Issues and Challenges

The 2017 amendments to the Acquisition and Requisition of Immovable Property Act in Bangladesh include some laudable provisions but could be improved. The amendments provide enhanced compensation to titled affected persons to the tune of 200 percent of the registered value of land. They also provide for relocation and resettlement support, albeit at a limited scale, to the households which are displaced physically as a result of land acquisition. The law also includes measures for grievance redressal related to the recognition of loss of land and physical assets, compensation rates, and governance risks associated with the collection of compensation amounts. The law, however, could still be improved. It determines compensation based on the registered value of the land instead of replacement value at market prices. Very importantly, it does not recognize the non-titled holders' informal rights over land, or the customary rights/tenure arrangements of small ethnic and/or tribal communities, and thus, has no provisions for compensating them.

A key concern regarding land acquisition and resettlement in Bangladesh, notwithstanding the enactment of the new law, pertains to the cumbersome process it entails. The overall land administration system remains riddled with age-old procedures. The manually-operated land ownership records in the Directorate of Land Records and Surveys (DLRS) of the government often does not have complete information on the status of ownership, transactions and titling, resulting in contested claims of ownerships over the same piece of land. Further, the transaction costs for title updating after sale, transfer or donation of land is high, as a result of systemic difficulties in the government land administration management. The system, moreover, suffers from a lack of adequate skilled staff and required resources in the land acquisition offices and manual process of payment of compensation to the affected persons. All of these factors, usually, result in inordinate delays in undertaking land acquisition in Bangladesh. The development of a National Resettlement Policy following the stipulations of the recently adopted law, crafted to address many of these above concerns, has been under discussion for some time but has not yet been finalized.

The overall legal and policy framework of Bangladesh on land acquisition and resettlement has significant gaps. The major gaps are in the areas of timeliness, compensating at replacement cost determined on current market price for lost land and land-based assets, ongoing consultation and communication with affected people over the life of the project, responsive grievance redress processes, recognition of rights of non-titled project-affected people, gender and vulnerability considerations, and a managed system for voluntary donation of land, among others.

Policy Recommendations

Suggested options for the government's consideration:

- Finalize the National Resettlement Policy including titled and non-titled affected persons and small ethnic communities with customary land rights.
- Train relevant staff at the district and upazila levels to ensure effective handling of land acquisition and resettlement within a given timeline.
- Undertake comprehensive capacity building programs for the relevant staffs and agencies on land records management.
- Digitize land recording systems for land transactions and titles and link up land registration offices with the land records and revenue offices.
- Strengthen the nationwide Grievance Redressal System of the government with a focus on land.

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3.12 Gearing up for Digital Disruption

Key Issues and Challenges

Digital development and information and communication technologies (ICT) have been a high priority for the government. The Seventh Five Year Plan detailed ICT's important role for the country's next phase of development, especially, for improving governance, empowering citizens, and for job creation. Numerous digital development initiatives and projects were also undertaken in the last decade. These achievements are recognized in Bangladesh's global ranking in the UN E-Government Development Index, where the country improved markedly from 150 in 2012, to 115 in 2018. However, the digital development sector still faces significant constraints.

The public's access to quality mobile and internet connectivity continues to be hampered by various policy and regulatory issues. Bangladesh's digital infrastructure is relatively outdated and unevenly dispersed due to policy and regulatory hindrances, such as spectrum licensing and the sector's taxation regime. As a result, rural areas have limited access to broadband services. Citizens' broadband and smartphone penetration rates also remain relatively low, with only one in five Bangladeshis subscribed to mobile internet and 31 percent of total connections being made using smartphones. This limits Bangladeshis' access to online information and services, empowerment and digital dividends. The country's telecommunications licensing regime is outdated and does not encourage adequate investments in the sector. Additional issues have also arisen on tower licensing and measures to curb the market power of the largest telecommunications operator.

There is significant replication, limited coordination, and high cybersecurity risks in the digital investments made by the public sector. The government has invested significantly in ICT for public sector administration, transformation and delivery of public services ("digital government"). However, many of these information systems across government agencies still have duplicative information and databases, are not interoperable between agencies as they are based on disparate architectures and standards, and highly vulnerable to cyber-attacks. Such fragmentation results in inefficiencies and cybersecurity risks, impedes interagency collaboration and decision making, and undermines the delivery of public services to citizens and businesses.

Like other countries, Bangladesh needs to gear up for the impact of the Fourth Industrial Revolution¹⁸. Many jobs, especially, the low-skilled ones are susceptible to automation and disruption by technologies. The country will need to be prepared for this revolution to manage its middle-income aspirations and consolidate its development achievements.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Revisit the recent regulatory decisions on tower licensing and significant market power for the telecommunications industry, to ensure fair and open competition, and the application of international best practices.
- Develop a strategy to transition the government in to an integrated digital platform.
- Develop Bangladesh's strategy and roadmap for the Fourth Industrial Revolution drawing from an assessment of its digital economy and leveraging the international experiences so far.

¹⁸ World Economic Forum. *Agenda in Focus: The Forth Industrial Revolution*. Accessed on February 04, 2018; and available at <https://www.weforum.org/focus/the-fourth-industrial-revolution>

Suggested options for the government's consideration in the medium to long term:

- Implement a policy and regulatory framework for telecommunications, and for next-generation technologies related to data protection/sharing and platforms. This will enable investments and innovation.
- Implement whole-of-government digital government platform to improve the public-sector's efficiency and effectiveness in its internal operations and provide faster and better public services.
- Expand the availability and use of mobile-based public services using the digital government platform.
- Implement the strategy and roadmap for the fourth industrial revolution.

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3.13 Boosting Agricultural Growth and Jobs

Key Issues and Challenges

Bangladesh has an impressive track record of agricultural growth since the mid-1990s, driven mainly by a combination of policy reforms, investment in agricultural technology and rural infrastructure.

The past focus on rice has paid off remarkably and has helped Bangladesh achieve rice self-sufficiency as well as improved food security. Agricultural growth has aided poverty reduction and has had a catalytic effect in the rural non-farm economy. Agriculture (consisting of crops, livestock, and fisheries) accounts for about 43 percent of total employment. However, malnutrition remains widespread in Bangladesh even amongst food producing households and where agriculture is the main source of income. In this regard, livestock and fisheries have an important potential for income growth, diversification, nutrition, and employment. More recently, the share of agriculture in total GDP has declined from 28 percent in 1990 to just 13 percent in 2018. The decline in agricultural output growth in recent years has contributed to a decline in employment growth and to a slowdown in poverty reduction.

The main challenges that have led to a slowdown in agricultural growth include the following:

- The production structure, which is heavily concentrated on rice (representing about 80 percent of cultivated land), hinges growth disproportionately on rice productivity, which is declining. This has reduced agricultural growth from 4.7 to 2.4 percent from 2007-2011 to 2012-2016.
- Food security remains the central objective of the government's agricultural strategies, but it continues to be pursued through policies and public interventions focused on incentives for rice production, including output price support, price stabilization, and input subsidies. Furthermore, this focus discourages diversification and makes the sector highly vulnerable to climate shocks.
- Low agricultural productivity is due to land degradation and climate change (CC) induced high temperatures, drought, flood, rainfall variability, and salinity. Given a high population density, high cropping intensity (190 percent) and continued loss of arable land (0.42 percent per year), enhancing agricultural productivity and making it more resilient are critical to achieving food security. There is scope for more efficient agricultural practices and technologies that can enable significant reduction of inputs use (seeds, water, fertilizers, pesticides, feeds, vaccines) and increased use of renewable energy.
- Climate change and natural disasters cause high volatility in agriculture production putting household food security at risk, particularly for female-headed households (HHs). CC is projected to result in an overall decline in rice production; decrease in livestock and fish production; and a decline in species composition in fisheries (Dasgupta et al., 2014). Agriculture contributes to 39 percent of the country's greenhouse gas emissions and is the main source of emissions in absolute terms. Despite huge impact potential, there has been little effort towards climate smart agriculture (CSA)¹⁹ with agricultural sector development strategies that do not provide a coherent roadmap to deal with climate risk.
- Weak integration and poor linkages with more profitable value chains stymie private investments. Limited access to finance hinders the ability of small landholders, especially women, to make basic investments needed to integrate with more profitable value/supply chains and the modern retail sector. Promotion of productive alliances linking producers with buyers, agribusinesses and financial institutions can contribute to improving access to finance and attracting private finance.
- Suboptimal policy and regulatory framework, especially public expenditure priorities, do not provide appropriate incentives for farmers and rural entrepreneurs to raise productivity and diversify investments into higher value and more efficient value chains. The DRG, 2016 study highlighted that

¹⁹ CSA technologies and practices present opportunities for addressing CC challenges as well as for agriculture growth. Practices are considered CSA if they enhance food security, adaptation and/or mitigation such as submergence-resistant and high yielding varieties, salinity and drought-resistant and high yielding varieties, solar power irrigation, compost and bio-gas production, vertical gardens, floating bed cultivation of vegetables, homestead production and roof top gardening.

agricultural subsidies amounted to 80 percent of public expenditures with the largest share allocated to fertilizer subsidies.

- Inadequate post-harvest and food processing resulting from very limited commercial agriculture leads to physical post-harvest losses of up to 30 percent. Associated issues with quality reductions and food safety further limit access to structured and lucrative markets for producers and hinders the development of retail and other value chain segments. E.g. Bangladesh's market share in the modern retail sector is around 0.5 percent, the smallest in the world, and offers a huge untapped opportunity.
- Infrastructure deficit, especially, the limited connectivity to many secondary cities and remote rural areas, constrains access to markets, undermines agribusiness competitiveness and reduces private sector investments in logistics (cold storage, packaging, quality improvements, and food processing).

The government recognizes the importance of the agricultural sector and has prioritized it in its 7th Five Year Plan (7th FYP). The 7th FYP's top priorities are sustaining productivity growth, jobs creation and poverty reduction through diversification, value addition, and tackling environmental and CC problems.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Increase agricultural productivity by promoting (i) high-efficiency irrigation systems, use of renewable energy, less water-use, significant reduction in fertilizers and pesticides; and (ii) research and extension to develop and disseminate resilient technologies including mechanization, stress and disease tolerant varieties of seeds, improved feeds and better health for livestock and fisheries.
- Develop the Climate Smart Investment Plan to provide a conducive framework for adoption of climate-smart approaches to planning, and promotion of resilience by mainstreaming CSA practices²⁰ into agriculture related investments.
- Define and implement enabling investments and policy for private sector led investments in agriculture. In particular, explore linkages and opportunities in the food system while improving physical connectivity and upgrading basic public infrastructure, logistics and transportation to increase access to different market segments.

Suggested options for the government's consideration in the medium to long term:

- Reorient public expenditures towards diversification into high-value products and the development of supply chains for greater nutrition, job creation and income.
- Rebalance policy distortions that incentivize over use of inputs towards CC adaptation and mitigation benefits that include a more efficient use of inputs (in collaboration with line ministries).
- Reduce market risks in the production of high-value products by adopting and enforcing policies to encourage private investment in cold storage and in export-oriented food processing industries.
- Promote commercial agriculture and development of more inclusive (to women and youth) value chains that integrate smallholder farmers and small and medium enterprises into formal markets and supply chains by linking them with private agri-businesses and financial institutions.

²⁰ DRG (2016): diversification combined with CSA will contribute to enhancing agriculture's resilience to CC, food production and security while accelerating the sector's growth and contributing to emission efficiency gains.

4. Investing in Human Capital



Skills shortage is another key constraint that the private sector in Bangladesh faces. Human development outcomes in Bangladesh have improved over time but critical gaps remain. Concerns on the quality and relevance of the education system have limited school to work transitions while access to early childhood care as well as tertiary education institutions is limited. The prevalence of stunting in the country is one of the highest in the region and the burden of non-communicable diseases is increasing. In addition, human capital investments among the poor remain persistently low and there is still a long way to go in ensuring women's empowerment. The following policy notes outline the key constraints to developing human capital in Bangladesh and suggest some policy options.

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4.1 Improving Labor Market Outcomes

Key Issues and Challenges

Bangladesh has enjoyed sustained, rapid economic growth in recent years accompanied by strong labor market gains in the 2000s. As recently as 2000, half of the country's population lived in poverty based on the national poverty line; by 2016, this fell to 24.3 percent (the rate of extreme poverty fell to 13.8 percent in 2016). Total employment grew by 3.1 percent annually between 2003 and 2010. Wage employment for women grew even faster, driven by the ready-made-garment (RMG) sector, which created more than 2.5 million jobs over this period.

However, demographic pressures are impacting the labor market. About 1.6 million entrants are expected to join the labor market every year until 2030. However, overall employment creation has trailed the growth of the working age population, almost grinding to a halt in key sectors like RMG. Demand for labor is changing in formal sector firms as they adopt more skill-intensive technologies. The resulting skills mismatches are also contributing to stagnating labor force participation. Job quality is generally poor with high levels of informality and weak enforcement of labor regulations. Few workers outside the public sector have access to pensions. There are no mandatory pension programs for private sector wage employees, no voluntary schemes where the self-employed can participate and no matching subsidies that can be introduced for the poor. Informal sector workers, who tend to accumulate fewer assets over their lifetime become more vulnerable in later life. Overall, the pace of poverty reduction has declined in recent years, even with growth accelerating, particularly in urban areas and in the west of the country.

Overseas migration has been critical for Bangladeshi workers to access jobs, but remains a costly and risky undertaking, and current migration patterns may be unsustainable. On average, around 600,000 Bangladeshis migrated abroad, annually, over the past decade, with nearly 1 million leaving in 2017. Foreign remittances play an important role in supporting consumption growth and poverty reduction. However, Bangladeshi migrants mostly work in low-skilled occupations, face low wages, legal issues, fraud, and physical and mental abuse. The latter is especially severe for female migrants. They also face some of the highest costs of migration in the world, inflated by fees charged by recruitment agents and intermediaries, which increases their indebtedness and vulnerability at the destination. Bangladeshi migrants also mostly work in a very small number of countries – mostly in the Gulf – and this concentration makes Bangladesh's migration and remittance flows vulnerable to host country shocks and policy changes.

Women and youth are bearing the brunt of the recent slowdown in job creation. Progress on female labor force participation has reversed in urban areas and youth unemployment has spiked. Gender disparities remain acute, with just 36 percent of women in the labor force versus around 82 percent of men. In addition, one in three working women are engaged in unpaid work versus five percent of working men. The key barriers to women's access to quality jobs include women's disproportionate responsibility for caregiving and household work, restricted mobility rooted in cultural norms, lower technical skills and gender-based discrimination in the labor market. At the same time, policies that seek to address barriers to female participation, including safe transport and availability of affordable quality childcare can have a transformational impact on women's labor productivity in the long term.

Labor market challenges are being further exacerbated by rapid urbanization. About 37 percent of the population currently lives in urban areas and this share is likely to increase to 47 percent by 2030. Much of this growth will be driven by rural-urban migration. At the same time, there has been modest to no progress in reducing extreme poverty in urban areas. The proportion of the urban population living in extreme poverty was 7.7 percent in 2010 and 7.6 percent in 2016. Bangladesh continued to urbanize during this time, albeit more slowly and there are now more people living in extreme poverty in urban Bangladesh (3.3 million) than in 2010 (3 million). Poverty rates in Chittagong have risen in the past few years, in

contrast to the rest of the country. Poor and low-skilled workers in urban areas face additional labor market challenges such as congestion, safety, and adequate housing close to employment opportunities.

Policy Recommendations

Suggested options for the government's consideration:

- Develop labor-market relevant skills for domestic jobs through better industry linkages and well-designed labor market programs, including technical and vocational training and programs for supporting new entrepreneurs and the self-employed.
- Support potential migrant workers through technical training and language and psychosocial training to be more competitive in new and higher-value markets.
- Develop programs to increase access to domestic and overseas jobs for vulnerable populations including comprehensive female-focused labor market programs and entrepreneurship programs to facilitate self-employment.
- Improve public service delivery to the urban poor to enhance productivity in informal activities, entrepreneurship, and self-employment.
- Establish a sustainable and comprehensive pension system, also covering informal and private sector workers.

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4.2 Enhancing Human Capital through Education and Skills Training

Key Issues and Challenges

Despite impressive progress, there remains significant scope to further improve equitable access, education quality, and skills attainment in primary and secondary education. Bangladesh has attained near universal enrollment in primary education and has achieved gender parity in access at both the primary and secondary levels. However, some children remain out of school, especially in urban slums and the Chittagong Hill Tracts, and those with special needs. Low and uneven levels of learning continue to be a big challenge. Among Grade 3 students, 59 percent do not achieve grade-relevant competencies in Mathematics. Among grade 5 students, only 25 percent master Bangla and only 33 percent master Mathematics competencies. At the Grade 8 level, competencies in English and Mathematics are 44 percent and 35 percent, respectively.²¹

Several factors constrain student learning at the school level. These include: (i) low student readiness at primary school entry due to inadequate inputs for early childhood education (ECE); (ii) curriculum relevancy short of the demands for fully developing students' subject competencies; (iii) unstandardized examinations focused on testing rote learning, and inadequate links between formative and summative assessments; (iv) ineffective monitoring and evaluation (M&E) system and inadequate institutionalization and use of student assessment systems; (v) shortage of qualified teachers with adequate content knowledge and pedagogical skills, and inadequate emphasis on pre-service teacher training; and (vi) shortage of key inputs, for example, at the primary level, only 33 percent of schools have an average student-classroom ratio of 40:1 or less, 47 percent of schools do not have a separate functioning toilet for girls and 26.8 percent of schools still do not have a safe water source.

Higher education in Bangladesh faces the challenges of producing employable graduates and maintaining competitiveness in the global knowledge economy. Over the past decade, the sector achieved some notable progress especially in promoting research and innovation, improving digital connectivity and introducing quality assurance mechanisms. While demand for higher education continues to rise rapidly²², the sector will have to address some key challenges including: (i) inequitable access to higher education, especially for females and students from low-income families; (ii) inadequate education quality and low graduate employability arising from shortage of qualified teachers, deficient teaching-learning facilities, especially in Science, Technology, Engineering and Mathematics (STEM) programs, and lack of collaboration with employers and the private sector; (iii) underdeveloped research and innovation system undermining the competitiveness of higher education institutions (HEIs) in the global knowledge economy; and (iv) inadequate financing and underdeveloped governance and management capacities in the sector.

While Technical and vocational education and training (TVET) is increasingly being viewed by students as a desirable schooling choice, further improvements in access, equity and quality are needed. TVET enrollment as a share of total education enrollment has increased considerably, from less than 1 percent in 2007 to 14 percent in 2017²³. However, some key challenges remain: (i) There is a severe shortage of skills and skills development opportunities. Only 30 percent of Bangladeshi workers have a secondary educational qualification; 3 percent have a tertiary education degree; around 1 percent have a

²¹ Finding from a national student assessment known as Learning Assessment of Secondary Institutes (LASI) 2015.

²² Higher education enrollments increased from 2.6 million students²² in 2016 which is a significant increase compared to the 1.5 million students in 2010.

²³ Directorate of Technical Education, Ministry of Education 2017

TVET certificate or diploma while 34 percent have no education or training²⁴. And access to skills training opportunities falls far short of meeting the demand, especially, for females and the poor. (ii) Quality and relevance of education and training need to be significantly improved. Factors contributing to the quality crises include inadequate teaching-learning facilities and shortage of qualified teachers; low public funding of vocational education; absence of a quality assurance system and quality standards; and underdeveloped governance and management capacities underscored by lack of sector-wide coordination (22 ministries involved in skills training). (iii) There is a disconnect between the curricula pursued in educational institutions and the demands of the private sector and a poor perception of vocational training. Weak linkages with private sector and industry, especially in development of training programs, explain a part of the difference between the demand and supply of skills.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Improve learning measurement at the primary and secondary levels (so that learning levels can be reliably benchmarked across years and internationally) by strengthening the national student assessments to improve both policy and practice.
- Shift to competency-based curricula in all subsectors.
- Upgrade the ECE curriculum framework and child development standards and build the knowledge base for expanding access to high quality ECE.
- Improve the effectiveness of teacher professional development programs at all levels of education, drawing upon local and global best practices.
- Expand access to higher education and skills training for females and for those from disadvantaged socio-economic backgrounds.
- Operationalize the Bangladesh Accreditation Council Act 2016 for quality assurance of HEIs.
- Develop a program approach for harmonization of resources and efforts in skills training.
- Implement strategy for promoting private sector and industry collaboration in higher education and skills training.

Suggested options for the government's consideration in the medium to long term:

- Promote interventions aimed at improving equity in learning (for example, introducing standardized exams for all students; and reducing disparity across different streams of education).
- Expand public provision of pre-primary classes to include two years of good-quality ECE for all children.
- Improve overall management of teachers – selection, recruitment, pre-service training, continuous professional development and assessment – at all levels of education.
- Implement the reforms envisioned in the Government's Strategic Plan for Higher Education 2018-2030, especially for improving autonomy of HEIs and flexibility to adopt suitable governance structures.
- Establish a sustainable funding mechanism for HEIs to promote excellence and accountability and introduce a student finance system to promote equity.
- Establish a fully developed research and innovation ecosystem at par with international standards.
- Harmonize the national qualification frameworks across general and technical education to support articulation between general education and TVET.

²⁴ National Labour Force Survey, 2015-16

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4.3 Mobilizing Resources for Sustainable Health Financing

Key Issues and Challenges

Bangladesh made impressive progress in achieving the Millennium Development Goals (MDGs) related to health, nutrition and population outcomes. Between 2000 and 2015, infant, under-five and maternal mortality all decreased by over 50 percent. The Total Fertility Rate has almost reached replacement level. Despite this strong track record, key health financing indicators remain persistently weak. Government spending on health is only about 0.8 percent of gross domestic product, one of the lowest rates in the world. Approximately 67 percent of total health expenditure is paid out-of-pocket by households, resulting in high levels of impoverishment due to health shocks. Without increases in the government health budget, improvements in service coverage are likely to stall and out-of-pocket payments will continue to rise in line with growing demand for health care services, thus making the attainment of the Sustainable Development Goal (SDG) of achieving Universal Health Coverage an ever more elusive objective. Global experience suggests past success does not automatically mean continued progress. Universal health coverage as part of the SDGs requires significant domestic resource mobilization for sustainable health financing in Bangladesh.

Inadequate health financing is a major challenge toward achieving Universal Health Coverage. Total health spending per capita in nominal terms in Bangladesh was US\$37 in 2015, lower than the South Asia regional average. Large gaps remain between available and needed financial resources. The Ministry of Health and Family Welfare (MOHFW) is constrained in its capacity to finance health services, primarily because of low allocation of budget. The increase in health spending and the need to reduce out-of-pocket expenditure both require domestic resource mobilization. Moreover, budget processes and management of budget allocations are poorly connected.

The demands on the health sector are rising. Despite the achievements, significant development challenges remain in the health system, including low institutional delivery, insufficient and unequally distributed health human resources, and medicine stock-outs. More resources are required to increase the coverage of essential health services as well as scale up of additional non-communicable diseases (NCD) services in the context of the rising burden of NCDs due to the epidemiological and demographic transition. The health system is ill-equipped to address the growing and changing demand for health services. Further, in the context of the high out-of-pocket burden on households, additional financing is also required to provide better financial protection to the population.

Domestic resource mobilization is critical to meet the needs of the health sector. Bangladesh is projected to become a middle-income country by 2021 and, as expected, grant aid is falling. The share of Development Partners' financing of the health sector program dropped to 16 percent during the period between FY2012 and FY2016 (from 38 percent during FY1999–FY2003). The budget share allocated to health (5.13 percent) is very low by both regional and global standards. Financing health in Bangladesh over the short to medium term will require a combination of existing and additional domestic resources. Beneficiary contributions to insurance programs do not contribute to a significant proportion of total health spending in middle income countries due to the small size of the formal sector. Household contributions to insurance premiums, if introduced, are more likely to generate additional resources for the health sector over the medium to long term.

There is also scope to achieve greater impact with Bangladesh's current health budget, in particular through strengthened public financial management systems. Increasing the budgetary allocation for health is dependent to a certain extent on capacity to plan and prepare, execute and efficiently use budgetary resources, as well as on more explicitly linking such spending to improved health services and outcomes. Delays in procurement and fund availability are chronic problems causing poor execution of the MOHFW development budget that, in turn, adversely affects service delivery. Health facilities at the primary level

do not have cash arrangements to cover costs of minor operating expenditures. Poor and unequal resource allocation across sectoral priorities and geographic areas, and inefficient use of allocated resources, both undermine the achievement of equity and access to essential health services. It is critical therefore, that the health sector improves public financial management to ensure that all mobilized resources are fully utilized and allocated efficiently. Lack of adequate manpower skilled in planning, budgeting and public financial management, is a common and persistent problem at the operational level.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Increase public expenditure on health while reducing reliance on out-of-pocket payments and external financing.
- Strengthen public financial management to ensure more robust budget preparation and efficient budget execution in the health sector, accelerate procurement, and enable primary health facilities to have access to cash for operating expenses.
- Strengthen public financial management capacity of middle and senior managers in the health sector to create awareness and understanding of public financial management concepts, rules, and regulations and their implications.

Suggested options for the government's consideration in the medium to long term:

- Pursue social health protection²⁵ schemes aiming for high levels of population coverage.
- Encourage private health sector investment in health infrastructure, human resources pre-service training, distribution and retail systems, and pharmaceutical and medical supply production. This could help to mobilize private resources to close the health financing gap.

²⁵ Voucher Scheme, Health Equity Fund, Shasthya Suroksha Karmasuchi

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4.4 Bolstering Nutrition

Key Issues and Challenges

Undernutrition undermines human capital development in Bangladesh. In 2017-18, it was estimated that 31 percent of children under-5-years old were stunted.²⁶ Stunting reflects inadequate nutrition over a period of time. Child undernutrition undermines physical and cognitive development with long-term impacts on education, productivity and quality of life. The prevalence of stunting is an important component of the World Bank's Human Capital Index which indicates that a child born in Bangladesh today will be 48 percent as productive when she grows up as she could be if she enjoyed complete education and full health and nutrition.²⁷

Malnutrition among adults, particularly adolescent girls, leads to reduced productivity and transmission of the effects of malnutrition across generations. Undernutrition among adults leads to reduced productivity and increased vulnerability to illness. In 2014, 18 percent of women aged 15-49 years were undernourished. However, 31 percent of girls aged 15-19 years were undernourished. The effects of undernutrition can be transmitted across generations, as undernourished mothers are more likely to have small children. At the same time, it is important to note that the country is faced with a dual burden of malnutrition, as 24 percent of women aged 15-49 years were overweight or obese in 2014.²⁸

Poor children are more likely to suffer from undernutrition. In 2014, 49 percent of children from the poorest 20 percent of households were stunted, compared to 19 percent of children from the better-off 20 percent of households. While the prevalence of stunting among rural children (38 percent) was higher than the average among urban children (31 percent), children living in urban slums suffer from even higher levels of stunting (48 percent).²⁹ With regard to regional differences, the highest level of stunting among children is found in Sylhet Division (50 percent).³⁰

While child stunting is at a still-high level, over the past decade the rate of decline has improved in line with economic growth and poverty reduction in Bangladesh. After stagnating for some time, the proportion of children suffering from stunting declined from 41 percent in 2011 to 31 percent in 2018, with the pace of decline consistent with poverty reduction. Nonetheless, stunting prevalence remains high and the experience in other middle-income countries shows that improvements are possible at a still faster rate.

The main causes of child undernutrition in Bangladesh are (i) poor nutrition of adolescent girls and pregnant mothers, and (ii) inadequate infant and young child feeding practices. Diet and food sharing practices contribute to poor nutrition of adolescent girls and pregnant mothers, contributing to an inter-generational cycle of malnutrition. While infant and young child feeding practices are improving over time, there are still major gaps. The period from birth to age 2 years is critical to physical and cognitive growth. The rate of exclusive breastfeeding during the first six months has stagnated at around 65 percent between 2011 and 2017-18. From six months to two years, three types of feeding practices are important: (i) continued breastfeeding and feeding milk and milk products, (ii) feeding solid or semi-solids a minimum number of times per day, and (iii) feeding a minimum number of food groups per day. These practices were followed for just one-third of children in this critical age group in 2017-18 (even though this was an improvement from one-fourth in 2014).³¹

²⁶ 2017-18 Bangladesh Health and Demographic Survey (BDHS), Preliminary Findings (unofficial).

²⁷ http://databank.worldbank.org/data/download/hci/HCI_2pager_BGD.pdf

²⁸ 2014 BDHS (<https://www.dhsprogram.com/publications/publication-FR311-DHS-Final-Reports.cfm>)

²⁹ 2014 BDHS and 2013 Bangladesh Urban Health Survey

(<https://www.measureevaluation.org/resources/publications/tr-15-117>)

³⁰ 2014 BDHS.

³¹ 2011, 2014 and 2017-18 BDHS.

Other factors contribute to undernutrition. These include poor access to health services, inadequate hygiene, and poor access to safe water and sanitation facilities. Poor households are vulnerable to food insecurity while diets in Bangladesh, dominated by cereals, often lack important micronutrients. It is recognized that, building on nutrition-specific services addressing the critical nutrition behaviors, nutrition-sensitive interventions in other sectors will contribute to accelerating reduction in undernutrition. The Income Support Program for the Poorest provides electronic cash transfers to women conditional on utilization of antenatal care, and child growth monitoring and promotion, and parenting and early stimulation services for under-five children.

The government has demonstrated strong political commitment to addressing undernutrition. Based on the 2015 National Nutrition Policy, the second National Plan of Action for Nutrition, 2016-2025, was recently approved. The plan emphasizes the need for strengthening multi-sectoral collaboration under a revitalized Bangladesh National Nutrition Council, responsible for nutrition governance, policy coordination and leadership. An important focus of the government's strategy has been to mainstream nutrition-related services in the health service delivery system. However, this approach has been dependent on external support, has been hampered by capacity issues, including health staff workload constraints, and has so far had limited impact on the crucial household behaviors mentioned above.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Improve delivery of nutrition-specific services through the health system by addressing human resource and capacity constraints and by emphasizing counselling to change household behaviors, especially those that focus on improving adolescent, maternal, infant and young child nutrition.
- Develop and scale up community-based strategies to change critical household nutrition behaviors. These could include expanding the scope of the immunization sessions at the community clinics and promoting home visits during pregnancy till the child is 24 months of age.
- Ensure adequate funding for nutrition services to make these services sustainable over time.

Suggested options for the government's consideration in the medium to long term:

- Develop and deliver nutrition-specific interventions for the urban poor, including counselling and micro-nutrient supplementation, using both facility- and community-based mechanisms.
- Expand nutrition-sensitive interventions using program platforms in agriculture, livelihoods, water and sanitation, and social protection. Key nutrition-sensitive interventions include improving access to food and dietary diversity, providing pre-school and primary education, improving water and sanitation, and enhancing coverage of safety net programs.
- Fill knowledge gaps on how best to deliver and scale up essential nutrition interventions.
- Identify and fill current gaps in delivery of nutrition-specific and -sensitive interventions in relevant sectors.

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4.5 Investing in Early Years

Key Issues and Challenges

Over the past decade, Bangladesh has made remarkable progress in improving human development outcomes, largely achieving or surpassing the Millennium Development Goal targets. The level of stunting among children under 5 has declined from 51 percent in 2004 to 31 percent in 2018, while the incidence of wasting has fallen to 8 percent, and the level of underweight children more than halved to 22 percent. This has been possible due to prioritization, mainstreaming and scaling up of nutrition interventions by government and non-government actors. Despite the impressive decline in stunting, the prevalence in Bangladesh is among the highest in the world. Stunting rates are an indicator of chronic malnutrition and are associated with poor cognitive development, lower productivity, and decreased earning potential in adult life. With nearly 5.5 million stunted children, Bangladesh accounts for 4 percent of the global burden.³² At the current rate of reduction, Bangladesh is unlikely to meet its SDG target of under 22 percent by 2025.

Stunting remains a major development challenge for Bangladesh. Adequate nutrition is necessary for normal brain development and is especially important during pregnancy and infancy. These are crucial periods of brain formation which lay the foundation for development of cognitive, motor and socioeconomic skills throughout childhood and adulthood. Sub-optimal feeding practices have detrimental effects on a child's brain by causing changes in brain maturation and result in cognitive deficits. More than one-third of under five children that are stunted and underweight are at risk for failing to reach their developmental potential, thereby having long-term effects on academic achievement and economic productivity.³³ In addition, stunting and wasting among children under five is higher if the mother was under 18 at the time of her baby's birth. Bangladesh has had a consistently high rate of child marriage – in 2011, 50 percent of adolescent girls surveyed who were under 18 were already married.³⁴

Access to and quality of early childhood education (ECE) is also a challenge. Almost all government primary schools now offer one year of pre-primary education (PPE) targeted at 5-year-olds. The Government currently supports only one year of pre-primary education and the vast majority of children in the 3-4 year age group, especially from poorer families, have limited opportunities for accessing ECE. Although over 85 percent of grade one students have been exposed to some form of pre-primary schooling, there is little knowledge of the extent to which children are achieving the development standards required for school readiness. Overcrowding of classrooms, inadequate number of properly trained teachers, and the tendency to focus more on academics than holistic child development are some of the challenges facing this subsector. While around 43 percent of PPE children are enrolled in centers run by NGOs and the private sector, there is no structured mechanism for quality assurance and monitoring of these centers which vary widely in terms of quality.

In Bangladesh, poorer households bear a disproportionate share of the burden of stunting and have limited access to early childhood education. Despite improvements in recent years, all nutrition indicators show a negative wealth gradient. The difference between the prevalence of stunting among 0 to 60 months old in households in the lowest and the richest expenditure quintile is 29 percentage points. Poverty also interferes with the access to knowledge and services related to health and nutrition, resulting in inadequate food intake, exposure to unhealthy environments, and increased exposure to infections. In addition, rural

³² Bangladesh Demographic Health Survey, 2000-2018

³³ In addition, about 18 percent of women between 15-49 years suffer from chronic undernutrition and 23 percent of the infants are born low birth weight. Young motherhood increases the risk of intra-uterine growth retardation and low birth weight, and subsequent stunting outcomes.

³⁴ Grantham-McGregor, S. et al., 2007. Development potential in the first five years for children in developing countries. *The Lancet*, (369: 60-70)

children are more likely to be stunted than urban children (38 percent compared with 31 percent). However, with rapid urbanization, this is likely to reverse. Urban centres are emerging as a critical priority area that require accelerated effort through various pathways including access to improved Water, Sanitation and Hygiene (WASH) facilities, health services and incomes.

Nutrition is a multi-sectoral issue and achieving sustainable nutritional outcomes is fundamentally a cross-cutting challenge. Recognizing this, the government has recently endorsed the National Plan of Action 2 (NPAN-2), which sets out a comprehensive multi-sectoral working plan with targets that will take the country closer to achieving the SDG goals. The challenge will be to ensure institutional mechanisms for effective coordination among the relevant sectors.

Policy Recommendations

Suggested options for the government's consideration:

- Strengthen and scale up nutrition-specific interventions focusing on adolescent, maternal, infant and child nutrition, and early stimulation, as well as nutrition-sensitive interventions under agriculture, education, social protection and WASH sectors, together with a harmonized behaviour change communication strategy to change and sustain improved behaviors.
- Strengthen delivery systems and platforms through the use of technology and enhanced human resource capacity.
- Streamline and establish a nutrition monitoring system to track progress and facilitate corrective actions for program improvement.
- Target the poor to generate demand for Early Childhood Development services by providing conditional cash transfers during the first 1,000 days.
- Strengthen coordination of social protection with health and education sectors to improve access and quality of services for beneficiaries.
- Increase the provision of quality early childhood education by reducing overcrowding, recruiting and training teachers, revising the curriculum and training approaches, periodically assessing school readiness of children completing PPE, and establishing an effective system for monitoring, supervision and feedback that can support both government and non-government service providers.
- Enhance access to ECE by building more PPE classrooms in government schools, providing PPE in mother tongues of linguistic minorities, and forging closer government/non-government partnerships in delivering quality PPE.
- Introduce government-supported two years of pre-school education in line with the provisions of the National Education Policy 2010.
- Educate parents and communities on approaches to holistic child development, and actively engage them in improving the quality of PPE provision.
- Reduce early marriage³⁵ as half of all stunting in under-fives occurs before birth³⁶, a likely consequence of early marriage. This could be achieved through programs that increase female participation and retention in primary and secondary schools and provide girls with skills and opportunities necessary to increase their economic security.

³⁵ While the minimum legal age for marriage in Bangladesh is 18 for women and 21 for men, the recently introduced Child Marriage Restraint Act 2017 allows for child marriage in “special cases”, without specific definition of what those cases may be.

³⁶ Save the Children (2015). Malnutrition in Bangladesh: Harnessing Social Protection for the Most Vulnerable.

Key Issues and Challenges

Bangladesh experienced a steady decline in poverty between 2000 and 2016, but demographic changes, urbanization, and climate shocks can jeopardize recent gains. Poverty gains were driven mainly by improvements in the labor incomes of the poor. Notwithstanding this substantial progress, one in four people remain in poverty, a significant population live around the poverty line, and a majority are engaged in vulnerable employment with low wages and limited protection. The aggregate figure also masks the complex and diverse aspects of challenges faced by the different segments of the poor population, including women. Also, human capital investments among the poor remain persistently low, and on average in Bangladesh, a child born today is only expected to realize 48 percent of her productive potential (Human Capital Index). Frequent climate-related shocks also put in peril recent gains in human capital and productivity.

The government allocates significant resources to implement a wide spectrum of social safety net (SSN) programs. They range from cash allowances for vulnerable groups, to public works programs, and education and health programs. They complement programs focused on social insurance (civil service pensions) as well as programs to promote employment and productivity. Overall, 2 percent of GDP is allocated to these programs. The government has also developed its comprehensive National Social Security Strategy and associated action plan.

The impact of SSNs on poverty and human capital has scope for significant enhancement through improved allocation efficiency, better targeting and harmonized delivery systems. The overall allocation of resources could be better aligned with the country's poverty and vulnerability profile – with greater focus on poorer or more vulnerable geographic areas, increased focus on programs that target the poor, and increased focus on some life-cycle risks. More generally, the targeting of existing programs needs to be systematically improved, to ensure efficiency in the use of public resources. Despite improved coverage of the poor over time, only a third of the poor participated in at least one social assistance program in 2016. Greater targeting would free resources, and therefore allow for increased coverage of the poor within the current budget envelope. Greater harmonization of the largest programs – ensuring they use the same national systems to manage their activities, identify their beneficiaries, deliver services to them, and provide them with transfers – can also result in efficiency gains and increased coverage of the poor. Finally, efforts are required to address the multiplicity of small programs and rationalize related expenditure.

There are also significant gaps in the coverage of some life cycle related risks or groups. Programs aimed at boosting productivity and facilitating sustainable labor market integration are limited. Moreover, most SSNs are focused on addressing the risks faced by the rural poor while recent trends indicate a growing number of urban poor. The requirements of this vulnerable group will need to be addressed in a multi-sectoral way. Bangladesh also needs to develop a strategy for protecting the elderly and ageing population in a manner that is fiscally sustainable, and incentivize the working-age population to save for retirement and insure against risks. To avoid jeopardizing recent gains, programs are also needed to address climate-related shocks. Finally, more attention needs to be focused on young children who currently benefit from a limited share of total investments, despite the importance of early years to lay the foundations for healthy and productive adults.

Existing programs also present a unique opportunity to reach the poor and vulnerable with more comprehensive interventions. SSNs are often one of the few vehicles that governments have to effectively reach the poorest segment of the population. The SSN architecture can also be used for the delivery of more comprehensive services which are essential to poverty reduction (providing knowledge, promoting behavior changes and the adoption of good practices, etc.). They are also essential to stimulate the use of

other services by this population (demand-side interventions), including early childhood development, education, health, and nutrition services. Finally, they can include activities aimed at increasing the productivity of households, and their resilience to shocks.

There is opportunity in the political will and enabling policy environment to address these priorities. The three-fold objective of the National Social Security Strategy (NSSS) 2015 – more efficient and effective use of resources through program consolidation and better targeting; strengthened and transparent safety net delivery systems; and progress towards a more comprehensive form of social security that effectively tackles lifecycle risks – is well aligned with new ground realities.

Policy Recommendations

Suggested options for the government's consideration:

- Improve the allocation of resources, both at the central level, by allocating funds in line with the poverty and vulnerability profile of the population, and at the program level by improving the targeting of the poor and vulnerable.
- Strengthen the national safety net system, through reduction in the fragmentation of the portfolio and increase in efficiency through the use of common administrative systems for targeting, service delivery and payments, and grievance redress mechanisms.
- Develop the National Household Database into a dynamic social registry used by multiple programs to identify beneficiaries.
- Invest early in human capital through nutrition-sensitive and education-enabling social protection along with strengthened coordination of social protection with health and education sectors.
- Provide support to the increasing number of urban poor through improved access to public services and develop interventions to promote their productive inclusion.
- Ensure efficient and quality local-level service delivery for safety net programs by providing counselling and referral services to the poor and vulnerable in addition to cash transfers.

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4.7 Empowering Women Economically

Key issues and challenges

Bangladesh has made remarkable strides in reducing gender gaps. There has been greater political participation by women, higher rates of tertiary education completion, and greater control over fertility. Bangladeshi women also are more economically engaged than ever before. The labor force participation (LFP) rate among women aged 15 years and above has risen substantially—a full 10 percentage points between 2003 and 2016—whereas the female LFP rate has fallen in most other South Asian countries. According to the Global Wage Report 2018, Bangladesh has the smallest gender wage gap of any country in the region. Still, Bangladeshi women are far from being economically empowered—that is, in advancing economically with control over the decisions and fruits of their economic engagement.

At 36 percent, women’s labor force participation is still less than half that of men, and women are concentrated in lower-quality, lower-paid jobs than men. Women, especially young women, have much higher rates of unemployment than men, and women are much less likely than men to secure paid employment. More than one-third of women in the labor force are unpaid family helpers. Gender-based violence (GBV) continues to inhibit women’s employment outside of the home, as women are likely to face harassment, both while traveling to and from work and at the workplace. Various sources (Begum et al. 2010; Hossain and Ahmed 2017; Siddiqi 2003) cite alarmingly high rates of physical, sexual, and verbal abuse in Bangladesh’s readymade garment (RMG) sector, with more than 12 percent of women RMG workers reporting sexual harassment, 20 percent reporting physical harassment, and over 84 percent reporting verbal harassment (Dhaka Tribune 2018).

Gender gaps in ownership and rights over land and other household assets persist. Among rural women, only 13 percent solely or jointly own agricultural land, compared to 70 percent of rural men, according to Bangladesh Integrated Household Survey (BIHS) data from 2015. Many women do not inherit the land they are entitled to by law, in large part due to family and social pressure to hand their shares over to brothers (according to primary qualitative research). Rural men own other high-value assets—such as large livestock, large durable goods, and housing—at rates at least 40 percentage points higher than rural women’s ownership rates. Rural women own small durables and poultry at higher rates than do rural men, but these small assets are much more likely to be sold off when households face economic shocks. Because a woman often acquires land use rights through a relationship to a man—usually her husband or father—those rights are subject to continuation of that relationship. Changes in relationship status can jeopardize women’s rights over property.

Women have less access to and control over finance than men do in Bangladesh despite the government’s laudable efforts, which include programs and schemes to improve financial inclusion of women. Analysis of Findex 2017 data reveals that only 35.8 percent of women have a bank account compared to 64.6 percent of men. According to the 2015 BIHS data, less than 5 percent of rural women and 10 percent of men used savings for productive purposes, though men were more likely than women to buy land. In addition, women have limited control over household financial assets and a limited role in deciding the use of these assets.

Bangladesh has seen tremendous growth in women’s entrepreneurship since the 1970s, but it continues to have among the world’s lowest rates of women’s entrepreneurship in the formal sector. This growth encompasses the number of women’s enterprises, their structural capital and size, and their sales volume. According to the 2017 Enterprise Survey data, only 1.7 percent of formal Bangladeshi firms are majority-owned by women, compared to an average for South Asia of 9.6 percent and a global average of 14.5 percent. Low rates of land inheritance among Bangladeshi women and other constraints on women’s access to credit are key barriers to women’s entrepreneurship. Additional barriers include lack of documentation, high registration fees, and lack of time to process a loan.

Gender gaps in economic empowerment have common drivers. First, household roles and responsibilities are disproportionately relegated to women by gender norms, severely inhibiting women's opportunities for economic engagement and empowerment. Analysis of Labor Force Survey data suggests that Bangladeshi women with children aged 0-5 years in the household are significantly less likely to participate in the labor force than women without young children. However, for men, LFP probabilities have no significant relationship with having young children. According to Bangladesh Time Use Survey data from 2012, married women spent more than six hours per day on household domestic services and unpaid child and elder care work—about four times what married men spent on these activities. Second, there is a mismatch between the types of skills women acquire and those valued in Bangladesh's job markets. Men have a much greater tendency than women to acquire education and skills in science, technology, engineering, and mathematics (STEM) fields, which are associated with high-skill, high-paying jobs. Although it is declining, the prevalence of early marriage (marriage before the legal age of 18) is still very high at over 55 percent, which is linked to girls' high drop-out rates from secondary school and, in turn, their low odds of obtaining decent, paid work. The skills mismatch, related occupational sex segregation in the labor market, and financial illiteracy restrict women from securing well-remunerated jobs and/or owning and growing enterprises. Third, gender discrimination persists in job search, hiring and promotion processes; in entering high-skill and management jobs; and in accessing credit and developing entrepreneurial ventures. Employers and managers in 45 percent of firms surveyed in the 2013 Enterprise Survey for Bangladesh believed that hiring women disrupted the work environment.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Explore public-private partnership options to expand high-quality, affordable child care services.
- Scale up tested education-related conditional cash transfer (CCT) programs aimed at keeping girls in school beyond grade 10 and encouraging their acquisition of STEM skills.
- Offer discounted land registration fees for women and streamline property registration features.
- Provide financial products (accounts, savings, loans, credit, wage, etc.) solely in women's names to enable women's control.
- Encourage Bank of Bangladesh and private financial institutions to train staff in how to work with women clients and engage more women staff to create women-friendly environments.
- Experiment with tested methods, such as mobile banking and agent banking, to increase women's access to banking and other financial services.
- Provide credit that aligns with women entrepreneurs' needs—that is, flexible credit which accommodates women's lack of credit history and is bundled with other financial services to improve business performance and earnings.
- Improve collection of gender-disaggregated economic data in national surveys.

Suggested options for the government's consideration in the medium to long term:

- Build awareness on the benefits of women's economic participation and costs of women's low economic empowerment.
- Improve the safety, accessibility and affordability of public transportation systems.
- Enforce legal protections against sexual harassment and other violence against women in the workplace.
- Reduce child marriage by scaling up CCTs and other established methods and also partnering with civil society organizations working to address child marriage.
- Collaborate with the private sector to invest in secure national biometric identification, which reduces the burden of documentation-related barriers.
- Engage with men, imams and other community leaders to address gender norms that constrain women's mobility, control of finance, and confidence to start and grow enterprises.

5. Addressing Environmental and Spatial Priorities



Bangladesh has experienced one of the most rapid increases in urbanization in South Asia over the past 50 years. However, unmanaged urban growth has led to congestion, poor service delivery, severe constraints on land, high costs of living and poor living conditions, and environmental degradation. In addition, encroachment of wetland areas, combined with inadequate waste management and maintenance of drainage canals, have increased cities' vulnerability to flooding and reduced their climate resilience. Bangladesh is also one of the most climate vulnerable countries in the world with consequences for growth and poverty reduction. The availability of Bangladesh's fresh water resources is declining, and sizeable efforts will be needed for sustainable ocean development. The following policy notes outline the key concerns on the environment, water security and issues related to urbanization. They also suggest some options for the government's consideration.

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5.1 Leveraging the Potential of Urban Areas

Key Issues and Challenges

Bangladesh has experienced one of the most rapid increases in urbanization in South Asia over the past 50 years. Between 1960 and 2010, Bangladesh’s urban population grew at an average annual rate of 5 percent, and the share of the urban population almost doubled, from 15 to 28 percent.³⁷ By 2005 population growth in urban areas outpaced that in rural areas. It is estimated that this trend will continue over the next couple of decades and that the urban population will make up at least 40 percent of the national population by 2025.³⁸ While lower than in rural areas, poverty rates remain high in the urban context and could be exacerbated by population growth.

Bangladesh’s urban population is highly concentrated in Dhaka, the capital, as would be expected in a developing economy. Metro Dhaka accounts for 10 percent of the national population and 36 percent of the urban population.³⁹ One in ten residents migrated to Dhaka in the last 5 years.⁴⁰ In addition to being the political and economic hub of Bangladesh, Dhaka is also a primate city—roughly three times larger than the next largest city, Chittagong. Dhaka’s primacy is not unexpected and will likely persist for the near future. Global experience shows that urban agglomeration increases with economic development; many countries’ urban concentration only peaks when GDP per capita reaches the global mean, typically coinciding with the transition from manufacturing to a service-based economy.⁴¹

Cities are key drivers of Bangladesh’s economic growth, but they have not realized their full potential. Urban areas now account for at least 60 percent of gross domestic product (GDP), up from 37 percent in 1990, coinciding with manufacturing’s growing share of the national economy.⁴² However, in contrast to its population density, Bangladesh’s economic density is relatively low according to international trends. Both Dhaka and Chittagong’s economies are largely based on manufacturing, and particularly on ready-made garments (RMG). While these sectors make up a major share of national GDP, their local growth rates within Dhaka city have slowed vis-à-vis national averages. Meanwhile other industries are not emerging to prevent stagnation and ensure Dhaka’s continued vitality. Secondary cities (i.e., other metropolitan areas and city corporations) are largely service-based economies with narrow and declining industrial bases in jute, fabricated metals and chemicals. Public administration jobs make up a significant share of formal employment. These secondary cities have yet to find their comparative advantage. Small municipalities (*pourashavas*) have a small but expanding manufacturing base with a competitive advantage in cotton and jute textiles.

Improving the livability of Bangladesh’s cities is critical for harnessing their economic potential. International evidence indicates a strong association between economically vibrant cities and a high-quality environment; firms in advanced sectors compete for high-skilled workers, who want to live in an attractive environment with good services and amenities.⁴³ In Bangladesh, on the other hand, unmanaged urban growth has led to congestion, poor service delivery, severe constraints on land, high costs of living and poor living conditions, and environmental degradation—further exacerbating overall economic inefficiency. The

³⁷ Muzzini, Elisa, and Gabriela Aparicio. 2013. *Bangladesh: The Path to Middle-Income Status from an Urban Perspective*. Washington, DC: World Bank.

³⁸ World Bank Urban team inputs to the Bangladesh SCD, 2015.

³⁹ Muzzini and Aparicio (2013).

⁴⁰ World Bank Poverty team assessment, forthcoming. Based on Bangladesh Bureau of Statistics and HIES 2016/2017

⁴¹ Spence, Michael, Patricia Clarke Annez, and Robert Buckley, editors. 2009. *Urbanization and Growth*. Commission on Growth and Development. Washington, DC: World Bank.

⁴² Muzzini and Aparicio (2013).

⁴³ Ibid.

situation is particularly dire for the poor and extreme poor, with low human capital levels and with limited economic opportunities. Dhaka is ranked as one of the least livable major cities in the world according to the Economist Intelligence Unit and the Mercer Rankings. In fact, smaller cities and municipalities in Bangladesh fare even worse in terms of access to housing and basic services.⁴⁴

Urban governments have been unable to manage rapid urbanization due to limited autonomy and lack of fiscal resources. In the Metro Dhaka area, 70 institutions are involved in urban management, with limited authority, overlapping functions and jurisdictions, and weak coordination.⁴⁵ Most substantial capital works are planned and executed by central government departments, while local governments are essentially limited to maintenance functions, plus water supply in smaller cities and towns. Less than 2 percent of total government revenues are collected at the sub-national level, barely enough to cover day-to-day operations. In the four largest city corporations, roughly half of all revenues are from government grants or donor-funded projects.⁴⁶

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Improve livability and service delivery in Metro Dhaka through comprehensive neighborhood upgrading in underserved areas, urban rejuvenation in prime areas, and cultural heritage revitalization.
- Develop and expand labor market and social protection programs in urban areas, to promote productivity, connect workers with opportunities, and to invest in human capital.
- Improve intracity connectivity in Metro Dhaka through mass transit and transit-oriented development, especially for pedestrians and non-motorized transit.
- Strengthen fiscal decentralization through institutionalization of Basic Block Grants to Union Parishads.

Suggested options for the government's consideration in the medium to long term:

- Foster more inclusive, sustainable development (particularly affordable housing) in Metro Dhaka through better land use planning and development regulation
- Facilitate urban revitalization in Metro Dhaka and secondary cities by unlocking prime land for (re-) development
- Enhance metropolitan management in Metro Dhaka through better intergovernmental coordination and more robust fiscal resources for capital investment and operations and maintenance.
- Underpin balanced territorial development by targeting critical investments in transport and other infrastructure along major economic corridors.
- Strengthen health, education, skills, labor market and social protection services for all urban residents, to promote their productive inclusion.
- Transform the intergovernmental fiscal transfer system by broadening the scope of Basic Block Grant allocations and performance-based grants to include all Pourashavas.

⁴⁴ Ibid.

⁴⁵ World Bank. 2017. "Dhaka Megacity: Development Issues, Plans and Prospects with particular Reference to East Dhaka." Background paper for Bird et al. 2018. *Toward Great Dhaka: A new Urban Development Paradigm Eastward*. Washington, DC: World Bank.

⁴⁶ Ibid.

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5.2 Moving Towards Environmentally Clean and Resilient Growth

Key Issues and Challenges

Urbanization and industrialization in Bangladesh have come at a high environmental cost. In 2015, the total annual number of deaths attributable to pollution in urban areas was estimated at 230,000, which was 28 percent of the total number of deaths in Bangladesh. The economic cost of this mortality in terms of foregone labor output was estimated at US\$1.40 billion in all urban areas of Bangladesh, and at US\$310 million in Dhaka alone. This is equivalent to 0.7 percent and 0.2 percent of Bangladesh's 2015 national GDP, respectively. Accounting for personal and social welfare losses from this mortality that go beyond lost economic output, the cost was estimated to reach about US\$6.5 billion, which was equivalent to 3.4 percent of the GDP. In addition to mortality, costs from productivity loss in the readymade garment industry due to air pollution, IQ loss among children exposed to lead from informal used battery recycling, and illnesses due to air pollution and inadequate WASH were covered. Hazardous waste management remains an underregulated and relatively unpublicized aspect of the country's industrial development which was not costed due to lack of data.

Encroachment of wetland areas, combined with inadequate waste management and maintenance of drainage canals, have increased cities' vulnerability to flooding and reduced their climate resilience. These worrying trends have adverse implications for the livability and long-term sustainability of the cities and the health and well-being of their inhabitants. In addition, environmental risks often affect women disproportionately. These issues are caused largely by poor urban planning, lack of coordination which results in overlapping or overlooked mandates, and poor management of natural resources that provide critical ecosystem services. Major effort is needed at the local/city level to strengthen capacity for effective implementation and enforcement of the adopted policies and plans. Lack of transparency, awareness and capacity also undermine effective civil engagement to hold polluters accountable.

A strengthening of policies and better enforcement of existing rules and regulations is needed to improve the environment. Rapid industrialization without adequate pollution prevention and control measures has put pressure on resource availability and affected Bangladesh's industrial competitiveness. While Bangladesh has improved its policy regime and systems for environmental and pollution management, more needs to be done. For example, the Bangladesh Export Processing Zones (BEPZA) Authority Act of 1980 does not have any specific environment-related clauses. Environmental management is built into the legal framework of the Bangladesh Economic Zone Authority (BEZA), but BEZA's capacity to deliver on its environmental responsibilities is still limited. The environmental enforcement regime is weak because of resource and capacity constraints at the Department of Environment (DoE), as well as lack of an effective environment court system. Beyond the DoE, it is essential to mainstream environmental management and green development objectives across all relevant line ministries and agencies. In addition, there is significant scope to mainstream resource efficient and cleaner production (RECP) to reconcile environmental performance with competitiveness. Obstacles currently include inadequate pricing of resources, such as water, the lack of instruments to internalize environmental externalities in production costs, low technical capacity, especially among SMEs, and lack of financing. Achieving sustainable growth will require strengthening coordination between the public and private sector and directing more public and private resources toward greener activities and investments.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Require public disclosure of all environmental information related to environmental clearance certificates for all facilities or otherwise mandated under the Environment Conservation Act.
- Enhance environmental policies to complement ongoing updates of core policies, regulations, and standards, particularly:
 - Strengthen environmental quality standards.
 - Strengthen the legal framework for hazardous material management
 - Amend the 1980 BEPZA Act to mandate environmental compliance requirements.
 - Adopt guidelines and procedures both for BEPZA and BEZA to ensure that new zone demarcation is based on comprehensive environmental assessments and to promote RECP.
- Invest in a modern information management system for environmental clearance, compliance monitoring and enforcement processes to reduce the cost of enforcement and improve its effectiveness.
- Train officials at relevant institutions on environmental management to enhance capacity.
- Strengthen dialogue between government, industry, and financial institutions on opportunities for and constraints to cleaner production.
- Support environmental education and awareness raising to empower citizens and effectively engage local communities and relevant stakeholders in city development planning processes.

Suggested options for the government's consideration in the medium to long term:

- Implement institutional reforms at DoE to strengthen its ability to carry out core functions, including:
 - Separation of compliance and enforcement staff, elevation of core priority functional areas, institution of a cadre system, and elevation of the DG to Secretary level.
 - Increasing DoE's resource envelop and approved headcount; deployment of more staff to field offices and increase in the number of field offices.
 - Outsourcing of compliance monitoring to accredited consulting firms.
- Reform and strengthen the environment court system to hold polluters accountable, including amending the Environment Court Act of 2010 to allow the public to directly bring cases the courts; set up environment courts in all districts; and strengthen DoE's capacity to assist the public in filing cases.
- Promote formation of environment management units in relevant ministries and agencies.
- Promote environmental sustainability and cleaner production in urban planning and financial, industrial, and import/export policies.
- Clarify mandates in urban planning and implementation and implement an action plan for holistic management of wetlands and other urban natural resources.
- Promote integrated city development planning that incorporates natural resources into cities' wider spatial planning.
- Assess solid waste management options to find appropriate models for private sector involvement and public-private partnerships and implement the most viable option.
- Establish tariffs and metering for resource use (energy/water) to incentivize resource efficiency
- Develop a financing scheme to facilitate commercial financing of RECP investment by SMEs in polluting sectors and strengthen technical institutions and/or establish new center(s) to identify, demonstrate, and promote cleaner technologies

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5.3 Promoting Low Carbon Development

Key Issues and Challenges

Bangladesh is one of the most climate vulnerable countries in the world. Cyclone-induced storm surges are likely to be exacerbated by a potential rise in sea level of over 27 cm by 2050 which will increase the vulnerability of some coastal populations in the country to storm surges. Bangladesh's average annual temperatures are expected to rise by 1.0°C to 1.5°C by 2050 even if preventive measures are taken along the lines of those recommended by the Paris climate change agreement of 2015. The temperature increase could cost Bangladesh 6.7 percent of Gross Domestic Product and depress the living standards of more than three-quarters of the country's population by 2050 (World Bank, 2018).

Adaptation is the climate change priority of the government due to the country's high vulnerability to impacts such as sea level rise and extreme events. This is demonstrated by the adoption of the Climate Change Strategy and Action Plan (CCSAP) 2008 which was subsequently updated in 2009. The country has been leading the way in climate change adaptation by mainstreaming adaptation into national development and investing over US\$10 billion to make the country more climate resilient and less vulnerable to natural disasters over the last three decades.

In addition, in the CCSAP, the government had also committed to low carbon resilient development. This seeks to limit or reduce emissions, often referred to as climate mitigation. In the 2015 Nationally Determined Contributions (NDC), Bangladesh declared its unconditional contribution to reduce Greenhouse Gas (GHG) emissions by 5 percent and conditional contribution of 16 percent from Business-as-Usual by 2030 in the power, transport, and industry sectors (MOEF 2015). Although other sectors such as households, commercial buildings, agriculture, waste, and land use, land-use change and forestry (LULUCF) are not included in the commitment, the government has identified potential mitigation measures in these sectors. These measures require more robust analysis to be undertaken to quantify their mitigation potential so as to include them in future commitments.

Bangladesh may likely increase GHG emissions from the power, transport, and industry sectors by 264 percent by 2030 under a Business As Usual (BAU) scenario. These three sectors are expected to represent 69 percent of total emissions by 2030 (excluding LULUCF). The government is committed to pursuing the ongoing initiatives already highlighted in the CCSAP in order to curb their emission in these sectors to meet the NDC's conditional mitigation target. However, the government also stressed that additional mitigation efforts and identification of activities are still required to meet the conditional mitigation target. At present, there is room for further analysis and investment to meet the country's mitigation objectives as well as realize a low carbon development path in the country.

Bangladesh can demonstrate a sustainable, urban, low-carbon growth by tapping into potential energy savings in cities. Bangladesh is rapidly urbanizing. Though urbanization is still relatively low, population growth in the urban areas has been more than double that of the national population growth rate of 4.01 percent per year between 2001 and 2011. If this growth continues, by 2050, the country's population will be an estimated 200 million and half of its population will live in urban areas. Average annual GDP growth rates of 7 percent and above will significantly increase the energy needs of the people and industries, especially, in the urban areas. National and local authorities will need to promote more sustainable development patterns and encourage more efficient use of resources and energy so as to optimize operating costs in cities, improve air quality, and improve infrastructure services, while at the same time support economic development and climate mitigation objectives. For example, energy efficiency improvement is one of the least expensive measures to reduce its energy intensity and thus reduce GHG emissions. This could potentially be done through better management of urban energy supply and demand and investments in other sectors like water and waste water, transport, and buildings.

Policy Recommendations

Suggested options for the government's consideration:

- Enable better adaptive delta management.
- Green public transport (e.g., Dhaka Public Transport Improvement) and shift freight from road to water.
- Scale-up renewables such as rooftop solar and utility scale solar.
- Increase energy efficiency through energy-efficient appliances, transmission and distribution (T&D) and refurbishment and repowering.

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5.4 Strengthening Disaster Linked Social Protection

Key issues and challenges

The human cost of weather-related disasters in Bangladesh is sizeable. During the past 40 years, nearly 520,000 people died because of natural disasters. Cyclones hit the coastal regions in Bangladesh every year during April–May or October–November. The country has experienced five severe cyclones since 1995⁴⁷. Cyclone Sidr in 2007 killed 3,406 people and caused estimated damages and losses of US\$1.7 billion. Overall, it affected over 2.3 million people and seriously impacted approximately 1 million⁴⁸. In 2017, severe floods killed 142 people, destroyed around 700,000 homes, submerged crop land, and affected over 8.5 million people⁴⁹. Disasters in Bangladesh have a disproportionate impact on the poor who generally live in higher-risk areas and have limited coping mechanisms. This high vulnerability is likely to exacerbate with climate change.

Given the country's history of natural disasters, social safety net (SSN) programs have evolved largely to cater to post-disaster relief, response and resilience. The largest SSN implementing ministry – the Ministry of Disaster Management & Relief – is also responsible for disaster response. Large programs include humanitarian assistance through Gratuitous Relief (GR) and Vulnerable Group Feeding (VGF), as well as public workfare programs including the Employment Generation Program for the Poorest (EGPP). GR and VGF are relief programs designed to mitigate the consequences of disasters. The GR program becomes effective *ex-post*, whereby cash or in-kind assistance is provided to beneficiaries, while VGF ensures food security through distribution of rice or wheat. The Vulnerable Group Development (VGD) program targets poor women and integrates food security with development objectives, such as training on income-generating activities, raising awareness on social, legal, health, and nutrition issues, and literacy. In the aftermath of the 2007 cyclone, the government provided assistance through VGD and VGF. Pilots have also been conducted for *ex-ante* support of distributing cash, rice and house-building grants⁵⁰ based on early warning triggers. The EGPP is a self-targeted employment program that requires participants to work on small-scale infrastructure schemes prioritized by the local community. It was set up in 2008 to respond to the 2007-2008 food price crisis and currently provides employment to close to one million poor households annually during the two lean seasons⁵¹.

There is scope to improve the adaptiveness of the social protection system to enhance its ability to limit the impact of disasters on poverty, human capital and productivity/resilience. A few key ingredients are essential to an adaptive social protection system, namely:

- **Adaptive programs:** Programs that provide the poor with adequate and regular benefits to build household resilience should be available, along with programs that can be expanded quickly following shocks to reach affected households.

⁴⁷ Dasgupta, S., Pandey, K., Huq, M., Huq Khan, Z., Zahid Ahmed, M.M., Mukherjee, N., and Fida Khan, M., (2010): Vulnerability of Bangladesh to Cyclones in a Changing Climate. Washington DC: World Bank.

⁴⁸ Damage, Loss, and Needs Assessment for Recovery and Reconstruction after Cyclone Sidr. Dhaka, February 2008. A Report Prepared by the Government of Bangladesh Assisted by the International Development Community with Financial Support from the European Commission.

⁴⁹ <http://edition.cnn.com/2017/09/01/asia/bangladesh-south-asia-floods/index.html>

⁵⁰ Oxford Policy Management (2016): DFID Shock-Responsive Social Protection Systems research: Literature review'. February, Oxford Policy Management, Oxford, UK. Bastagli, F. and Holmes, R. (2014): Delivering social protection in the aftermath of a shock: Lessons from Bangladesh, Kenya, Pakistan and Viet Nam. ODI, London. Pelham, L., Clay, E. and Braunholz, T. (2011): Natural Disasters: What is the Role for Social Safety Nets? Social Protection Discussion Paper No 1102. World Bank.

⁵¹ Pelham, L., Clay, E. and Braunholz, T. (2011): Natural Disasters: What is the Role for Social Safety Nets? SP Discussion Paper No. 1102. World Bank

- **Adaptive information:** Information systems need to be dynamic to inform program delivery. A social registry should be available that includes information on the poor and vulnerable and is inter-operable with information on risks from early warning systems and with the registries of social protection program beneficiaries.
- **Adaptive financing:** Contingent financing schemes should be available that can be triggered rapidly and efficiently following a shock, as part of a national disaster risk financing strategy. These can range from regular budget resources (for predictable, regular shocks); contingent funds set aside for deeper shocks; insurance mechanism; or contingent lines of credit.
- **Institutional coordination:** Finally, adaptive social protection depends on mechanisms to systematically coordinate programs, systems and institutions responsible for delivering social protection within the broader national disaster risk management system.

Bangladesh’s broader social protection system is well positioned to make progress on all these fronts.

In particular, the government has prepared its National Social Security Strategy (NSSS) and associated action plan, which propose a focus on establishing a national registry – the National Household Database – which can be an effective platform to identify and target vulnerable populations for adaptive safety nets. The NSSS also highlights the importance of better targeting programs towards the poor and vulnerable and of addressing vulnerability by building components/activities in safety nets that encourage behavior change for greater resilience. Finally, the NSSS recognizes the need for greater institutional coordination. The establishment of common administrative platforms for program management, payment and service delivery should also contribute to the government’s ability to respond swiftly and efficiently to shocks, by building on the existing architecture.

Policy Recommendations

Suggested options for the government’s consideration in the short term:

- Strengthen core social protection systems, in particular, for the identification of beneficiaries through the National Household Database.
- Identify the safety net programs that can be triggered, scaled up or adapted for support during and after shocks, building on the forecast-based pilots.
- Identify the safety net programs which can be used as vehicles to strengthen communities and households’ resilience to future shocks and focus existing programs to ensure the coverage of the poorest and those most exposed to shocks.
- Overlay poverty maps with hazard and risk maps in order to quantify the population which is potentially vulnerable to shocks in different areas (and for different shocks) for effective planning and budgeting.

Suggested options for the government’s consideration in the medium to long term:

- Develop the mechanisms (early warning indicators, triggers, decision-making process, allocation process) which will be used to trigger an automatic response to disasters.
- Develop a long-term disaster risk financing strategy with a mix of instruments, including contingency budgeting, contingent credit lines, and risk transfer products, such as insurance.
- Establish a Disaster Reserve Facility that would act as a rapid disbursement fund to finance livelihood support and infrastructure reconstruction activities, ensuring efficient allocation of resources and enabling rapid responses.
- Develop institutional coordination mechanisms to ensure adaptive social protection responses are fully integrated with the broader disaster risk management systems.

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5.5 Improving Disaster Resilience Using Spatial Data

Key Issues and Challenges

Bangladesh's vulnerability to climate change and hazards poses a high risk to the population and to assets. Managing disasters and their impact has been a major area of focus for the government. The 1970 Cyclone Bhola and the 2007 Cyclone Sidr were comparable in terms of wind speeds and storm surges. However, higher investments in disaster management reduced loss of life from at least 300,000 lives in 1970 to less than 4,000 in 2007.⁵² Nonetheless, Bangladesh continues to be at risk from the negative impacts of climate change including increases in incidence and intensity of extreme weather events. Bangladesh is also located in a tectonically active region and some of the major cities including Dhaka, Chittagong and Sylhet are at risk of massive destruction by earthquakes from nearby seismic faults. Unplanned urbanization and land-use, climate change and population growth exacerbate the impact of hazards.

National spatial data infrastructure (SDI) is fundamental for Disaster Risk Management as it provides important pre- and post-disaster information in a unified geospatial platform. This helps plan, monitor and implement responses. It can help redirect and generate investments in increasing disaster resilience and enhance the institutional viability, comprehensiveness, quality and accessibility of geospatial data services for resilience impact. SDI hosts geographic data and attributes, sufficient documentation (metadata), a means to discover, visualize, and evaluate the data (catalogues and web mapping), and some method to provide access to the geographic data. This data can be made available to government and private sector entities.

In 2016, the government provided guidelines to establish the National Spatial Data Infrastructure (NSDI) and formulate laws for its implementation⁵³. NSDI is expected to foster enhanced use of geospatial data through better management of existing data as well as through more efficient collection and production of new geospatial data in ways that maximize data usefulness for multiple users. Through the NSDI, valuable mapping information as well as all geospatial information will be stored by different agencies, so that any user can access this information for socio-economic development such as urban/ rural planning, disaster management, sophisticated public-service delivery, infrastructure planning and creation of new businesses. However, not much progress has happened on the NSDI despite individual efforts for instance by the Bangladesh Forest Department that has launched their own SDI. A geospatial data sharing platform (GeoDASH.gov.bd) was established in 2014 and is hosted and managed by the Bangladesh Computer Council (BCC). GeoDASH aims to unify, host and enable data sharing of geospatial and geocoded statistical data in Bangladesh. A large amount of data from many different government and non-government agencies has been collated on GeoDASH. However, GeoDASH has no formal authority to manage and control the database. Nor is there any requirement for other agencies to upload data.

There is no active collaboration on geospatial data management amongst government organizations in Bangladesh. Currently, key line ministries and departments do not utilize any centralized platform to communicate with one another and include relevant spatial information. Also, different organizations work within the same jurisdiction and prepare the same maps for different purposes/projects and in different formats. Recently many government organizations have started generating a huge amount of geo-spatial data but sharing and using these datasets is difficult and time consuming because of lack of standards and absence of interoperability. Bangladesh National Enterprise Architecture (BNEA) framework provides a service bus to help interconnect various platforms and could potentially help with making the database comprehensive.

⁵² Government of the People's Republic of Bangladesh Ministry of Disaster Management and Relief National Plan for Disaster Management (2016-2020) *Building Resilience for Sustainable Human Development*

⁵³ <http://portal.albd.org/~parbonc/index.php/en/updates/news/18-updates/news/3751-govt-to-generate-geo-data-and-digital-mapping-for-planned-development-hpm-sheikh-hasina>

There needs to be a focus on collecting 3D information and on sharing data. There are numerous sources of geographic data which can be used for 3D map preparation such as manually entered architectural specifications, building component libraries, information from various types of remote sensing, and 2 dimensional (2D) geographic information system (GIS) databases⁵⁴. Converting 2D GIS database to 3D map, using SketchUp⁵⁵ program is time-consuming and may have no controls or standards regarding metadata. The Digital Terrain Model (DTM) data, Aerial Photographs, laser data (LiDAR) or satellite images (ALOS) are very costly and the image resolution and geometric precision could be limited. Therefore, the government should continue to focus on collecting 3D information from existing data sources and implement policies for a mandatory data sharing. For instance, new construction projects require detailed project documents and data such as survey and CAD data which usually contains height information. Sharing that data and integrating it in a database would allow a continuous growth of 3D maps in Bangladesh.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Further develop and formalize the web-based GeoDASH and provide access to this platform to all stakeholders by
 - Adding data of national importance, such as geolocated population, health, education, disaster risk or crime statistics to enable evidence-based policy making.
 - Removing data that has little or very specialized use for stakeholders.
 - Uploading curated datasets to GeoDASH with clear and proper titles, abstracts, attributes to increase the quality and usability of the GeoDASH platform
- Use GeoDASH for compiling, updating and sharing of geospatial and geocoded statistical data.

Suggested options for the government's consideration in the medium to long term:

- Appoint a high-level government department to coordinate and administer spatial data related issues among different stakeholders.
- Establish Spatial Data Standards to ensure a consistent format while producing the data. This will enable seamless sharing of data across all agencies and GIS Interoperability to ensure free flow of data across different platforms.
- Encourage stakeholders to follow guidelines and standards to increase the usability and importance of GeoDASH.
- Integrate GeoDASH in training courses for public service officials and encourage them to use and curate it.
- Implement mandatory data sharing policies whenever geospatial or geocoded statistical data is generated, for instance in statistical government institutions and government owned bodies such as universities or enterprises.
- Create awareness on geospatial data through education and training courses.
- Implement the NSDI system on cloud computing to improve utilization, make the system simple and to reduce costs.
- Establish an R&D center to help organizations with data standards, development of APIs for interoperability, creation of middleware tools to reuse/convert the existing datasets, and promotion of new technology.

⁵⁴ <https://www.esri.com/library/whitepapers/pdfs/3d-urban-mapping>

⁵⁵ <https://www.sketchup.com/>

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5.6 Increasing Forest Cover

Key Issues and Challenges

Bangladesh's forests are a safety net for the rural poor and also enhance climate resilience and mitigation but have been steadily declining in quality and cover. It is estimated that 19 million Bangladeshis depend on forests for their livelihoods (forest income as a proportion of total household income ranges between 9-19 percent). Fuelwood and other tree-sourced biomass are an important source of cooking energy, accounting for around 60 percent of total energy consumption. Clearing for agriculture and infrastructure development, unmanaged fuelwood and timber extraction, fires, and increased cultivation in the northeast of the country are generally identified as the direct drivers of forest degradation. Degradation has been a bigger challenge than deforestation. The indirect drivers are related to poverty and weak governance.

Increasing salinity and more frequent cyclones are impacting mangrove forests, thereby, reducing their recovery and protective capacities. Helping the coastal forests and mangroves thrive is important for biophysical resilience against cyclones and for the supply of plant and sea food. They are also important for climate mitigation—they store nearly four times more carbon than other forests, and if destroyed, will rapidly release this CO₂ to the atmosphere.

The influx and settling of over 750,000 Rohingyas from Myanmar in the forests of Cox's Bazar district is an unprecedented event which has led to the loss of nearly 13,000 hectares of forest and elephant habitat. While this refugee situation is an enormous humanitarian crisis that needs urgent attention, the poorest among the host communities are also affected due the loss of forests and plantations and face increased risk of landslides and soil erosion, increasing the likelihood of social tensions and conflicts.

The Seventh Five Year Plan's (2016–2020)⁵⁶ goal to increase forest and tree cover to 20 percent of the land area is ambitious, given that the current forest cover is just 11 percent. Bangladesh's forest cover is also lower than the Asian average of 26 percent. To achieve this target the country needs to afforest a further 460,000 hectares. Nearly 300,000 hectares of degraded land is available for reforestation in the hill forests while another 100,000 ha is available for coastal plantations. To make up for the remaining 60,000 hectares, there is need to increase afforestation on private lands, homesteads, and cultivated lands.

The public sector's approach to forest management needs transformation to reverse this decline in forest quality/cover. The mandate of the Bangladesh Forest Department (BFD) is to protect all government-owned forests. The moratorium on timber from natural forests is evidence that the government values the ecological and climate benefits of forests. However, these benefits are not necessarily mutually exclusive with limited and sustainable harvesting of timber and non-timber products. The Social Forestry⁵⁷ program contributes to some extent toward the afforestation goal as does private homestead planting or 'trees outside forests' (TOF). However, degradation of natural forests continues. The BFD's mandate of protection encourages greater emphasis on law enforcement than on collaboration with the local communities. Global experience shows that local communities can sustainably manage forests when they

⁵⁶ Planning Commission, Government of The People's Republic of Bangladesh: Seventh Five Year Plan (2016–20); The goals include: (a) tree cover over 20 percent of the land surface (with tree density > 70 percent) and restore/protect ecologically healthy forests in all public forest lands; (b) mitigate climate change impacts and increase adaptive capacity (including by establishing and protecting a 500 m wide permanent green belt along the coast and; (c) improve the socioeconomic conditions of forest-dependent communities.

⁵⁷ The program has been in operation since the '80s. Plantations are raised on degraded forest lands by selected beneficiaries. Each beneficiary is assigned 1 acre and receives inputs from the BFD for planting, tending, and final harvest. Returns are split: 70 percent beneficiary, 20 percent BFD and 10 percent to the tree farming fund.

are part of the decision-making process and have a clear stake in the outcomes. At the same time forest cover, quality, volume, growth, removals and carbon all need to be monitored on an ongoing basis. Management plans need to be prepared either for site specific interventions or more broadly. The implementation of these management plans need to be monitored and the data updated. To do this the BFD's capacity for national forest inventory, remote sensing, management planning and resource information processing needs to be enhanced.

Strong partnerships with communities are essential to sustainably manage forests but these partnerships are currently limited and fragmented. The two mechanisms for people's participation in forest management include: (i) Social Forestry, (only on land that is either encroached, degraded or denuded); and (ii) the newly established Co-management practice in Protected Areas (PAs). However, most of the forest lands are not classified as either and remain solely under the control of the Forest Department. A third participatory mechanism, '*Collaborative Forest management*', is being developed to fill this gap, where beneficiary villagers will be involved in developing and managing Reserve Forest areas in collaboration with the BFD. Long term and sustainable livelihood support to forest dependent communities is important to engage them successfully in these collaborations as demonstrated by the increased popularity of TOF and Social Forestry programs.

As the size of the natural habitats have shrunk and become fragmented, many species of flora and fauna are now under threat. It is therefore becoming necessary to extend the Protected Areas system to at least 30 percent of the forest area of the country, to conserve biodiversity and especially protect wildlife population. A larger area in the Sundarbans, which is very rich in floral and faunal biodiversity, needs to be brought under the PA system. The current protected area system of Bangladesh includes 18 National Parks, 20 Wildlife Sanctuaries, 1 Marine Protected Area, 2 safari parks, 10 eco-parks, and 10 Ecologically Critical Areas, that collectively cover 285,841 ha, accounting for nearly 15.2 percent of all legally constituted forests in the country.

The private sector has a role in both forestry and wood processing. The increase of TOF shows that tree planting is profitable for farmers. The domestic market for furniture in Bangladesh is growing (19 percent per year), and demand for timber is expected to reach 9.77 million m³/year by 2030. Private sector nurseries are servicing the demand for seedlings. The BFD as the technical leader in the sector can be effective in ensuring that the private sector meets this demand with quality benchmarks and advance market information to ensure profitability to farmers. To do this the BFD needs to reorient its role in forest extension and work more closely with farmers and private nurseries.

Policy Recommendations

Suggested options for the government's consideration:

- Incentivize the development of alternative livelihoods for the rural poor to prevent unsustainable use of forest lands.
- Support the institutional change, capacity building and development of new roles for the BFD (like the provision of advice to the private sector).
- Support the further development of community-based forest management and the roll out of the '*Collaborative Forest Management (CFM)*' model.
- Promote and strengthen the role that community-based businesses, and the private sector can play in the provision of goods and services to the forest sector.
- Increase the protection and improve the management of threatened habitats and biodiversity.
- Strengthen the dialogue between government, industry, and financial institutions on opportunities for the investment in 'green' wood processing, wood-based energy and non-timber forest products value addition.

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5.7 Managing Water Supply, Sanitation and Transboundary Rivers

Key Issues and Challenges

The availability of Bangladesh’s fresh water resources is declining at an alarming speed, mainly due to water contamination and groundwater over-exploitation. Most of the surface water is too polluted to be efficiently treated for consumption. Close to 90 percent of the population in the country rely on groundwater for drinking water supply and irrigation. However, groundwater faces major issues of arsenic contamination and overexploitation. For example, over the last 30 years the groundwater level has dropped significantly in Bangladesh, ranging from 2.3 meters to 11.5 meters.

Climate change represents a serious threat to water security in Bangladesh. Bangladesh is very vulnerable to climate change with projections indicating that the average annual temperatures would rise by 1.0 to 1.5°C by 2050—even if preventive measures are taken. The country is already experiencing increased temperature, changed rainfall patterns, sea-level rise, and saline intrusion. The average monsoon precipitation in South Asia is estimated to increase by 3.9 percent in the best case, threatening low-lying coastal areas. Saline water inundation due to sea level rise would pose elevated risks to the water and food security in Bangladesh. It is estimated that climate change could cost Bangladesh 6.7 percent of GDP.⁵⁸

Cross-sector River Basin and Coastal Zone Management will be crucial going forward. Bangladesh is a low-lying delta formed by the Ganges-Brahmaputra-Meghna river systems and characterized by a tropical monsoon climate. River erosion has been identified as a ‘silent killer’ and every year displaces about 100,000 people, mostly in city slums, and where women and children are the most affected. An effective river erosion management program would enhance lives and livelihoods.

Transboundary water management is crucial for Bangladesh. The water supply of Bangladesh heavily depends on the flow of the Brahmaputra, Meghna and Ganges river basins that originate in India, Nepal and China. With increasing demand for fresh water, conflicts of water-sharing have been on the rise. Addressing the challenges requires strengthening cooperation with neighboring countries and promoting integrated water resources management at the river basin level.

The water supply in Bangladesh faces two major challenges – access and quality. Although Bangladesh has achieved almost universal access to improved drinking water (98 percent), only 52 percent have access to clean water.⁵⁹ The most concerning issues with water quality are fecal (E. coli) and arsenic contaminations. Access to urban piped water supply networks is low; only 20 percent of the urban population have access to piped water and these networks are unreliable and typically operate for less than 10 hours per day. The rural population primarily rely on groundwater from tube wells of uncertain and unregulated quality. Industrial wastewater pollution contributes to groundwater contamination.

Bangladesh has made remarkable progress in reducing open defecation but the quality of access to sanitation is still a concern. According to the Joint Monitoring Program (JMP) data for 2015, the national access rate to basic sanitation services is about 47 percent.⁶⁰ Another 22 percent (35.7 million) get access to limited sanitation services and about 31 percent (49.6 million) have access to unimproved sanitation services.⁶¹ In addition, most of the sanitation facilities are overused and there is a lack of adequate funding

⁵⁸ World Bank, 2018. South Asia's Hotspots: Impacts of Temperature and Precipitation Changes on Living Standards

⁵⁹ World Bank. 2018. Promising Progress: A Diagnostic of Water Supply, Sanitation, Hygiene, and Poverty in Bangladesh

⁶⁰ WHO&UNICEF JMP DATA: <https://washdata.org/data#!/dashboard/new>

⁶¹ Improved sanitation refers to facilities that hygienically separate human excreta from human contact. Limited sanitation is the use of improved sanitation facilities that are shared between two or more households. Basic sanitation service is the use of

and management. The baseline access to basic hygiene remains low with only 28 percent people having access to washing hands with water and soap. In urban areas, few safely managed sanitation services are available. Only 3 percent of the population in Bangladesh are connected to a sewer system while fecal sludge management is lacking in most of the cities (only 2 percent of fecal sludge is properly treated in Dhaka).

Access to water and sanitation services exhibits significant wealth and gender inequities. Rich households, with deep tube wells, may have access to plentiful and arsenic free water; yet poor households generally get insufficient and unsafe access. Women and girls have primary responsibility for collecting and managing water in the household, thereby impacting their access to education, cultural and political involvement. Most of the bottom 40 percent of the population do not have access to a private improved sanitation facility in their home and only 50 percent of schools have separate latrines for girl students. Due to inadequate water, sanitation and hygiene (WASH) services, waterborne diseases (such as diarrhea, dysentery, and typhoid) account for nearly a quarter of all illnesses and remain a major cause of death. Moreover, WASH-related disease burdens are disproportionately experienced by the poor.

There is a national water and sanitation strategy and a well-defined legal framework, but implementation is lacking. Inadequate funding and weak technical capacities have negatively impacted key policy implementation. The budget allocation for WASH at both the national and the local level has been declining since 2007, and the current budget gap is estimated at 47 percent to meet the government's envisioned water targets by 2025.³ A lack of national service standards and monitoring mechanisms has also hindered the improvement of service delivery.

Poor efficiency and low tariffs threaten water and wastewater utilities' operational sustainability. The non-revenue water rate is high, ranging between 20-45 percent, and water tariffs remain low (most utilities struggle to recover even operation and maintenance costs). Consequently: i) the private sector is reluctant to enter the sector--despite a supportive policy and regulatory framework; and ii) utility infrastructure is deteriorated and underperforms.

Policy Recommendations

Suggested options for the government's consideration in the short term:

- Invest in strengthening institutional capacity to: i) implement the existing sector strategy; ii) strengthen the regulatory framework; iii) enhance monitoring of drinking water quality and sanitation services; and iv) design and implement a long-term strategy for climate change adaptation and mitigation.
- Develop and implement awareness plans that promote behavior change to reduce: i) wealth and gender biases; and ii) improve public health.
- Coordinate arsenic mitigation activities between ministries, promote alternative safe water sources in arsenic affected areas, and develop low-cost arsenic filtering methods.
- Improve the efficiency of the existing water supply and sanitation systems and increase water tariffs to restore their financial and operational sustainability.
- Encourage public-private partnerships in wastewater treatment and output-based aid in sanitation.
- Invest in infrastructure to augment access to second generation WASH services.

Suggested options for the government's consideration in the medium to long term:

- Invest in river basin protection management and erosion programs, particularly for surface water (including the Jamuna River) and that leverages building-with-nature and disruptive technologies.
- Provide rolling 5-year plans for the sector which will include demand management strategies, investment needs analysis and sustainable financing strategies.
- Invest in and place more institutional emphasis on regional cooperation in transboundary water resources management.

improved sanitation facilities that are not shared with other households. Safely managed sanitation is basic sanitation service where excreta are safely disposed of in situ or transported and treated offsite.

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5.8 Charting a Course Towards a Blue Economy

Key Issues and Challenges

Bangladesh peacefully resolved maritime boundary disputes with its neighbors in 2012 and 2014.

This was achieved following an international law adjudicated by the United Nations where Bangladesh expanded its area of the ocean under the country's jurisdiction almost equivalent to its terrestrial area. This space and the resources it contains presents both an opportunity and a challenge for the country. An opportunity exists to harvest ocean assets and thereby derive new sources of growth and the challenge is to do so sustainably. Development of this ocean space under its jurisdiction features prominently as an objective in Bangladesh's 2015 Seventh Five Year Plan and is driving development planning through 2020. Specifically, the plan aims to develop this space through application of the concept of a 'blue economy'.

Sustainable ocean development through the blue economy concept is a relatively new and delicate balance in many countries.

The concept emerged widely in 2012 as countries around the world grappled with the twin trends of accelerating growth in economic activity linked to the oceans, and changes in the underlying ecosystems. However, as subsequent national blue economy strategies emerged, definitions of the concept fluctuated widely based on the context. In 2017 the World Bank defined the concept as "comprising the range of economic sectors and related policies that together determine whether the use of oceanic resources is sustainable." This definition of the concept promotes a balance between economic opportunities and the environmental limitations of using the ocean to generate wealth, with equal consideration for the social dimension of ocean use. For this reason, it has been described as both a "bold vision and an excruciatingly delicate balancing act."

Limited guidance has been available to date on how countries can move toward a blue economy.

However, a common feature of efforts to implement this concept is the need to understand on the one hand the segment of national economic activity linked in some way to the ocean (e.g. occurring on the ocean, receiving inputs from it and/or providing outputs to it), and on the other hand the status of the ocean ecosystems that provide a flow of services as inputs to this economic activity. Essentially, this means understanding both ocean 'wealth' and 'health'.

Few countries have begun to measure ocean 'wealth and health' sufficiently or simultaneously, in order to provide the basis for policies and investments that would support a blue economy.

In Bangladesh, efforts to measure output from ocean-linked economic activities have only recently begun. The government has not traditionally disaggregated and organized data in a way that permits such analysis over time. A first conservative snapshot of the magnitude of this output suggests that economic activity connected to the ocean contributed approximately 3 percent of Bangladesh's national economic output or US\$6.3 billion in 2015. This output was generated largely by tourism and recreation (25 percent), marine capture fisheries and aquaculture (22 percent), transport (22 percent) and offshore gas/oil extraction (19 percent).

The changing status of ocean ecosystems may pose a significant risk to Bangladesh's blue economy aspirations.

Three mutually and negatively reinforcing human drivers of change will likely have a significant impact on the ocean ecosystems under the country's jurisdiction. These include increasing fishing capacity and effort (some illegal) as well as ecologically damaging fishing practices; unregulated coastal development (including altered habitats for aquaculture); and pollution (particularly of waterways from urban centers, including discharge of sewage and plastics into the coastal ecosystems) – all occurring in the context of climate change.

Policy Recommendations

Suggested options for the government's consideration:

- Develop the systems to measure and monitor the performance of the ocean-linked economic activity in Bangladesh.
- Establish an ocean account at the Bangladesh Bureau of Statistics to provide data on the contribution of the ocean-linked activity to the country's output.
- Supplement the ocean account with data for ecosystem assets and non-renewable ocean resources to provide a consolidated account of the blue economy.
- Identify policies and set targets for the development of a blue economy.
- Develop an integrated, long-term, strategic plan (based on the data collected) to transition towards a blue economy including (i) measuring the baseline status of ocean use; (ii) managing the interactions between economic activity and ecosystems in the ocean, and between sectors, based on coastal and marine spatial planning; (iii) encouraging investment in the transition to a blue economy through the adoption of sustainable ocean investment principles; and (iv) monitoring progress towards agreed blue economy targets.
- Implement the strategic plan along with leveraging private capital, raising awareness and conducting research.