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2023

BUILDING BACK A GREENER BANGLADESH

Country Environmental Analysis


Acknowledgments

The Country Environmental Analysis (CEA) was prepared by a team of the World Bank staff and external experts led by Ana Luisa Gomes Lima, under the overall guidance of Christophe Crepin, Mercy Tembon, and Abdoulaye Seck. The team consisted of Markus Amann, Santiago Enriquez, Monika Kumar, Bjorn Larsen, Bushra Nishat, Jostein Nygard, Daniel Payares Montoya, Pasquale Lucio Scandizzo, Nina Tsydenova, and Eun Joo Yi. Additional inputs to different chapters were provided by Iqbal Ahmed, Sadiq Ahmed, Tanvir Ahmed, SoEun Ahn, Tanuja Bhattacharjee, Nathalia Lima Cano, Daniele Cufari, Madhu Sudan Das, Zoie Diana, Harsh Goyal, A.K. Enamul Haque, Bernard Haven, Christine Heumesser, Muhammad Anwar Iqbal, Mi Hoon Jeong, Md. Khaliquzzaman, Provat Kumar Saha, Jihae Kwon, Nathalie Laureano, Ahmad Kamruzzaman Majumder, Elizabeth Dykstra-McCarthy, Niamul Naser, Pawan Patil, Lilian Pena, Mahfuzar Rahman, Md. Shafiqur Rahman, Wameq Azfar Raza, Poonam Rohatgi, Jason Russ, Wolfgang Schöpp, Istiak Sobhan, Josefo Tuyor, Nasir Uddin, Ignacio Urrutia, Jari Väyrynen, Samina Yasmin, Nousheen Nower Zoarder, and S. M. Zulkernine.

Executive Summary

The 2023 Country Environmental Analysis (CEA) aims to support the Government of Bangladesh (GoB) in informing policies and investments for improving environmental health and pollution management, a critical step towards a green growth pathway. The CEA report focuses on (a) identifying the environmental priorities of the country and assessing how they affect health and productivity; (b) identifying interventions to tackle those priorities; (c) assessing the strengths and shortcomings in the country's environmental governance framework to address the environmental priorities and implement the proposed interventions; and (d) based on that analysis, making recommendations to strengthen governance and agencies' institutional capacity for environmental management.

Over the past two decades, Bangladesh made substantial economic progress as one of the world's fastest-growing economies, having reached lower-middle-income (LMI) country status in 2015 and being set to move off of the United Nations' Least Developed Country Index in 2026. However, the COVID-19 pandemic, followed by a sharp rise in global commodity prices and monetary policy tightening in advanced economies, decelerated the Bangladesh's economic growth and increased the poverty rate for the first time in decades.

Bangladesh's development pathway has occurred at the expense of public goods, with negative externalities that affect the health, productivity, and welfare of the Bangladeshi people, particularly the poor and the most vulnerable groups. Intensive manufacturing and rapid urbanization, coupled with limited institutional capacity for environmental governance, have resulted in severe environmental degradation, natural resources depletion, and increased vulnerability to climate change.

In Bangladesh, the exposure to environmental health risk factors is at critically high levels. Four major environmental health risks were associated with over 272,000 premature deaths and 5.2 billion days lived with illness, which has an annual cost equivalent to 17.6 percent of GDP in 2019. The highest impacts are due to ambient air pollution (AAP) and household air pollution (HAP), responsible for nearly 55 percent of the deaths. These two factors should be established as the highest environmental priorities. Unsafe drinking water, poor sanitation, and hygiene; and lead exposure also represent pressing challenges, having caused approximately one-fourth and one-fifth of total deaths, respectively. Despite substantial declines in lead exposure over the last two decades, blood lead levels (BLLs) in children and adults remain at very high levels, and 17 percent of the population relies on drinking water with arsenic concentrations above the WHO guideline of 10 ppb. Lead exposure is estimated to have impaired intelligence among children, amounting to an annual loss of nearly 20 million IQ points.

Environmental pollution limits the country's human capital formation and retention and affects city attractiveness and competitiveness by reducing livability and productivity. Environmental impacts pose a disproportional burden on the poorest and most vulnerable groups, such as women, elders, and children under five years old, who suffer long-lasting health effects (including impacts on their cognitive development and productivity). These groups have limited resources to cope with the impacts of pollution on their livelihoods. Additionally, internal climate and rural-urban migration is adding pressure on cities, with increased traffic, noise and air pollution, and higher demand for essential services such as water supply and sanitation, solid-waste management, energy provision, and health services, which are already constrained, especially for the most disadvantaged groups and during extreme climate events.

Bangladesh faces other environmental and natural resource issues, such as river pollution and salinity intrusion, soil degradation, biodiversity loss, high exposure to mercury and heavy metals and noise pollution. Plastic-waste management is particularly challenging in the country. Plastic waste is mostly burned or openly dumped together with other solid waste streams, leading to increased flooding and river pollution, damage to ecosystems, and health risks such as vector-borne diseases and illnesses from air pollution. Since rivers discharge into the sea, plastic pollution in waterways is directly linked to marine pollution.

The CEA assessed potential solutions to prevent and mitigate the impacts of Bangladesh's major environmental health risks. A benefit-cost analysis helped identify appropriate interventions that promised the greatest control of impacts by presenting benefit-cost ratios (BCRs)[1] of alternative policies and investments. Implementation of the following interventions is estimated to prevent over 133,000 premature deaths per year, among other benefits:

- **Ambient and household air pollution control interventions.** The largest range in BCRs is for ambient $PM_{2.5}$ control interventions, and comprehensive measures may reduce ambient $PM_{2.5}$ by as much as 33 percent by 2030. Priorities for such control measures include the following: (a) eliminate the burning of waste; (b) improve management of agricultural fertilizers and livestock manure; (c) control emissions from industry and the power sector; (d) replace household use of solid fuel for cooking by switching to liquefied petroleum gas (LPG) or electricity; and (e) collaborate with neighboring countries to address transnational $PM_{2.5}$ pollution. The most effective intervention to improve ambient $PM_{2.5}$ is the reduction or elimination of solid fuel for cooking by households switching to LPG or electricity, which has the added benefit of reducing the health effects of HAP. Other priorities for HAP control measures are to (f) further assess the potential for promoting the use of electric stoves for cooking, and perhaps especially induction stoves, a cheaper option than LPG for small users of electricity that can benefit from lower residential block tariff rates for electricity, and (g) further assess price and non-price obstacles and incentives for adoption of LPG for cooking. In the transition to cleaner fuels for households, continued expansion of improved cookstoves programs (particularly the promotion of dual-burner stoves) will continue to be important for households that cannot afford cooking with LPG or electricity. In parallel, health policies are needed to (a) enhance curative care of health problems brought on by air pollution, and (b) gather community-level data on the health issues in air pollution hotspots, coupled with meteorological and air quality data, to inform policy decision-making.
- **Lead exposure control interventions.** Because of data constraints on the sources of lead, three provisional interventions were considered to mitigate lead exposure and impacts. The following interventions should be prioritized: (a) supplement iron for children ages 6 to 59 months; (b) replace lead-contaminated cookware made from recycled aluminum; and (c) rehabilitate abandoned used lead-acid battery (ULAB) recycling sites. The main benefit of these interventions is increased lifetime income from averting IQ losses in early childhood. To address the challenges of lead pollution and population exposure, which will still take time to solve, priority should also be given to (d) undertaking representative BLL measurement studies along with identification of sources of lead exposure, which will inform further policy formulation; (e) building the country's laboratory capacity for measuring BLL and testing lead in food and other products; and (f) enhancing coordination across environmental, health, food safety and consumer agencies to improve data management and policy formulation and to build awareness of lead poisoning and prevention measures among key stakeholders such as health providers and community leaders.
- **Water, sanitation, and hygiene (WASH) interventions.** The interventions with the highest BCRs for addressing microbiological pollution that should be prioritized are (a) household point-of-use treatment of drinking water with ceramic filter; (b) safely managed improved non-shared sanitation for households currently having unimproved sanitation; and (c) promotion of handwashing with soap targeting caregivers of children under five. Further measures that should follow are (d) safely managed improved non-shared sanitation for households currently sharing sanitation with other households; and (e) promotion of handwashing with soap to all household members. For mitigating exposure to arsenic in drinking water, three control interventions should be prioritized: provision of deep tube wells, ponds with sand filters, and household filtering, such as the SONO filter that uses iron and sand filtration. Further analysis is needed to assess the impacts of other highly poisonous heavy metals in water, such as lead, mercury, and cadmium.

Additionally, the CEA used a computable general equilibrium (CGE) model to analyze the economic, distributional, and environmental effects of policy and investment options for the pursuit of Bangladesh's green growth objectives, particularly through interventions that could reduce air pollution and inadequate WASH. The model's results suggest that removing the present energy subsidies may be a first choice for a fiscal policy intervention, with beneficial effects on both efficiency and environmental protection, especially for air quality. The removal's impact on inclusiveness would also be beneficial if the policy is combined with a redistribution of government savings to the poor. Setting the stage for efficient carbon markets also appears to be a feasible policy for Bangladesh with several beneficial effects, especially if combined with suitable policies for redistribution to poorer households. The model's exercises also assessed investments in water-resources management, suggesting that such a program could be highly beneficial and mobilize local labor and other unemployed resources. In general, the CGE simulations indicated that those policy options may be reasonably effective in generating benefits (reduction of externalities), increasing GDP, and improving the condition of the poor. However, none of the fiscal and investment policy measures taken individually is likely able to sustainably increase incomes and reduce externalities. A combination of policy measures seems more effective than isolated interventions. In addition, command-and-control policies can be usefully complemented by fiscal and redistribution measures. Furthermore, compared to GDP, net social benefits tend to grow more than proportionally with policy combinations—and even more so if these policies include redistributive policies.

Since air pollution is the country's highest environmental priority, the CEA also assessed cost-effective measures to improve air quality in the Greater Dhaka Area (GDA), particularly to reduce human exposure to $PM_{2.5}$, the most harmful air pollutant for human health, to the WHO's annual Interim Target 1 of 35 µg/m³. Although this initial analysis could be refined with improved input data, it provides a solid basis to identify priority source sectors and interventions for emissions control, mainly due to their large emission-reduction potential. Priority sectors and interventions are (a) cleaner power generation; (b) universal access to clean cooking fuels; (c) separation of food waste, collection, and centralized composting in urban and rural areas; (d) enhanced PM controls at

large industrial sources; (e) reduction of road and construction dust; (f) modern brick kilns, and (g) enforcing the ban on open burning of waste. For some sectors, the government has already issued regulations on emission standards, which will show some effect in the future. However, additional policies are needed to improve air quality in the GDA (and the country as a whole), moving beyond command-and-control interventions. A comprehensive program must include a portfolio of measures that deliver sufficient air quality improvements while being economically, socially, administratively, and politically acceptable. Because of transboundary emissions, cooperation with other districts in Bangladesh and countries of the Indo-Gangetic Plain is also indispensable for achieving substantial air quality improvements in the GDA. At the same time, regionally harmonized strategies could alleviate the need to take the GDA's most expensive measures.

Similarly, a holistic, integrated approach based on a combination of legal, financial, and communication instruments is needed to improve plastic-waste management. These measures should include (a) research and development of alternatives to single-use plastics; (b) effective implementation of the ban on plastic bags and extension of its scope to other single-use plastic items; (c) mandatory extended producer responsibility (EPR) guidelines to enable industry co-funding of plastic-waste collection and recycling systems and establish producer responsibility organizations (PROs); (d) an integrated waste-management framework to address growing plastic waste and disposal in open places; (e) waste segregation at the household level, development of missing infrastructure needed for such segregation, and implementation of behavior-change campaigns; (f) harmonization of plastic-management policies to promote circular economy; (g) plastic cleanup and recovery schemes to reduce legacy plastic waste and mitigate associated impacts; and (h) development of a monitoring system to implement the Solid Waste Management Rules 2021 and targets of the Plastic Action Plan.

Limitations in environmental policies—mostly of command-and-control and focused on environmental clearance—and weak enforcement have rendered Bangladesh's environmental management framework ineffective in reducing environmental degradation. Although a reasonably structured institutional framework is in place at the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Department of Environment (DoE), their operation is hampered by (a) gaps in their organizational structure and environmental regulations; (b) insufficient budgetary and human resources; (c) large emphasis on environmental clearance and command-and-control policies; (d) capacity constraints for research, monitoring, and enforcement activities; (e) limited public participation and transparency in monitoring, oversight, and decision-making; (f) limited application of the polluter pays principle, with sanctions that are not able to deter polluting activities; (g) insufficient coordination among public agencies at the national and local levels; and (h) bottlenecks at environmental courts and delays in judicial cases.

Those constraints are coupled with insufficient incentives for citizens and businesses, such as access to green financing, research and development of green technologies, and awareness campaigns, to comply with environmental regulations and expand their market opportunities. Despite an explicit commitment to green growth in its 8th Five-Year Plan (2021-25) (8FYP), Bangladesh lags other emerging markets and developing economies in green finance due to structural weaknesses. Key stakeholders—such as borrowers, financial institutions (FIs), financial investors, consumers, and the government—still face several institutional bottlenecks and barriers in adopting and financing green practices.

Policy options to improve environmental quality and accelerate Bangladesh's transition towards green growth include the following:

- **Setting evidence-based priorities.** Bangladesh's environmental governance system shows a misalignment between the country's environmental priorities, institutional structure and efforts, and resource allocation. This is largely due to (a) the absence of an integrated system of reliable data and organizational capabilities to provide analytical support to the decision-making process, (b) the lack of representation of vulnerable groups that are mainly affected by environmental degradation, and (c) the absence of a formal planning mechanism for allocating financial and human resources according to clearly defined environmental priorities that are linked to poverty alleviation and social priorities. To address those challenges, the GoB needs to enhance its environmental monitoring and data-management capacity, including systematic evaluation of government interventions, networks for automated air and water-quality monitoring, outcome-oriented indicators to assess institutional performance, and adequate institutional presence in the field with sufficient and well-trained staff. Another key measure is to create a research and development unit at the DoE, which would conduct the analytical work in partnership with other government agencies to identify priorities and inform environmental planning—for example, through estimates of the cost of environmental degradation, cost-benefit analyses, and economic and distributional modeling.
- **Diversifying and strengthening environmental policy instruments.** As Bangladesh continues to develop its legal and institutional framework for environmental management, it should consider developing a wider range of environmental instruments, including (a) economic and market-based instruments, such as pollution charges, deposit-refund schemes, EPR, and final demand interventions; (b) litigation-based instruments, including liability legislation; and (c) information-based instruments, such as awareness campaigns and regular dissemination of environmental quality data and pollution loads, lists of highly polluting industries, and results of enforcement activities. These instruments could initially focus on identified environmental priorities and gradually expand to cover additional areas. In this process, the GoB should carefully assess the interventions' potential economic, social, and distributional effects, as well as identify mitigation measures for those impacts.

  As for command and control, a comprehensive amendment to the Environment Conservation Act (ECA) and its rules is needed to (a) modernize and make enforcement activities more efficient, including clear provisions to implement the polluters pay principle and set adequate sanctions and incentives for compliance with the ECA's provisions; (b) set the mandates and foundations for further regulations on EPR and payment for ecosystem services (PES); (c) mobilize green financing by establishing a permanent environmental fund, which could receive resources from the compensation for environmental damage envisaged in Article 7 of the ECA and eventually from environmental taxes; (d) improve stakeholder engagement in environmental decision-making; and (e) require Strategic Environmental Assessment for policies, plans, and programs, among other themes.

As for the Environmental Clearance (EC) system, as a first measure, the DoE should conduct an in-depth, independent evaluation of Environmental Clearance Certificates (ECCs) approved for red and orange category projects, to extract common challenges and lessons to inform policy formulation—not only for improving the EC process, but also further regulate specific technical requirements. Although the ECR 2023 is expected to improve the EC process, additional amendments and guidelines are required to clarify and strengthen assessment criteria and procedures related to key themes— for example, the screening of projects that are not pre-categorized in the ECR; monitoring and enforcement after ECC issuance; stakeholder consultations and access to information, including through ICT tools.

- **Strengthening organizational structure and institutional capacity.** The GoB should carry out a detailed analysis of the organizational structure of the MoEFCC and affiliated agencies to set clearer mandates and more efficient processes for environmental governance, including interagency coordination. The DoE needs specialized technical units to respond to identified environmental priorities with the necessary human, technical, and financial resources to fulfill their mandates. The establishment of an environmental prosecution agency that is independent of the DoE and shielded from political interference must also be considered to make the environmental courts system more effective. To strengthen the capacity of environmental organizations to execute decisions, key measures include raising the DoE's budget (especially for monitoring and enforcement activities), establishing a cadre of environmental specialists, and increasing the DoE's headcount. This will allow more qualified professionals to reach senior official positions, attract and retain talented individuals, and ensure that decisions and policies are made by people with adequate backgrounds and experience. Completing the DoE's decentralization process is also essential to expand its physical presence to all districts, with adequate staffing, equipment, and budget, and to expedite actions and better balance the needs and priorities of central government officials and politicians with local stakeholders. For that, a comprehensive information-management system with automated monitoring for compliance and enforcement is essential for an effective decentralization process, as well as for gathering critical data to inform decision-making and public participation.

- **Strengthening citizen-driven accountability.** Responding to priority environmental challenges in Bangladesh calls for a more systematic effort to raise awareness of, and social accountability for, environmental issues. Also missing in the current institutional framework are mechanisms to incorporate the concerns of groups most severely affected by environmental degradation into the GoB's planning processes, as well as to allow citizens to directly litigate in environmental courts as plaintiffs—which requires amending the Environment Court Act. Ways to improve public information and promote transparency, accountability, and awareness include the publication of data in support of key environmental indicators (including pollution loads and environmental health statistics), wider use of public forums for air development initiatives, and broader and more detailed review and discussion of environmental management tools. Mechanisms to disseminate information in a manner that is easily interpretable can allow communities to serve as informal regulators.

- **Building an enabling environment for green financing.** To facilitate the flow of resources from green finance suppliers to sectors pursuing these resources, the GoB should create an environmental management ecosystem by (a) adopting a broad-based national green growth strategy and a national action plan backed by a commensurate set of regulatory and institutional frameworks; (b) constituting a high-level national oversight body to coordinate and monitor the progress of green growth efforts; and (c) creating an ecosystem of ministries and government agencies that collect and analyze point-source data to enforce policies that create a pipeline of verified investment-ready projects. Expanding its range of environmental policy instruments, the GoB should use a mix of incentives to boost environmental markets by (a) encouraging the adoption of green practices and promoting green businesses and investments with positive environmental externalities; (b) adopting incentives that address the risks faced by FIs; (c) fostering a collaborative institutional system to implement green financial incentives; and (d) reducing the risks perceived by financiers and boost private-sector adoption of green practices and technologies, and thereby boost the offering of green products and services. Strengthening institutional and borrower capabilities is also essential for building skills and expertise in green financing across sectors, from technocrats in government agencies to FIs, and from private businesses to students.

Table 1 summarizes the CEA recommendations, including policies and investments to (a) enhance environmental governance, especially the institutional capacity of environmental agencies; and (b) control pollution at its sources with interventions in key economic sectors. The full report, which elaborates on the CEA findings and recommendations, can be downloaded from the following QR code:

Endnotes

1 BCR is the ratio of benefits to costs. A BCR greater than one indicates that the benefits are greater than the costs.

Table 1 **Summary of CEA Recommendations**

Type[a]	Action	Implementation Period		
		Immediate priority	Short-term (2024–25)	Medium-term (2026–30)
Pillar A. Addressing Bangladesh's environmental priorities				
A.1 Improving ambient and household air quality				
	Adopt a National Air Quality Management Plan (NAQMP) based on diverse policy instruments, including measures to address both ambient and household air pollution.	●		
	Adopt a Heavy Air Pollution Contingency Plan (HAPCP) to reduce emissions and people's suffering during times of extreme pollution, including requirements and procedures for triggering a graded set of restrictions.	●		
	Promote use of clean energy in cooking, switching from solid fuel use to liquefied petroleum gas (LPG) or electricity.	●	●	●
	Further assess (a) the potential for promoting the use of electric stoves for cooking, and (b) price and non-price obstacles and incentives for adoption of LPG for cooking.	●		
	Control emissions from industry and the power sector including stricter emission standards for coal and furnace oil-fired power plants; mandate the installation of emission control devices on smokestacks; invest in renewables for electricity generation; restrict the installation of future coal-fired powerplants; and provide incentives, subsidies, and tax breaks to manufacturers who invest in clean technologies.	●	●	●
	Improve quality of fuels (especially with low-sulfur diesel), enforce traffic control and effective management systems; enforce vehicle emissions inspections; restrict high-emission vehicles from roads (including heavy-duty vehicles); optimize urban layout strategies to prioritize sustainable transportation modes; and incentivize mass, nonmotorized, and electric mobility.	●	●	●
	Enforce the ban on agricultural burning, improve fertilizer and livestock-manure management to control ammonia emissions.	●	●	●
	Reduce emissions from waste through integrated solid waste management (see item A.4 below).	●	●	●
	Reduce road and construction dust, including investments in paving and street-washing practices.	●	●	●
	Modernize brick kilns and promote use of non-fired bricks.	●	●	●
	Set the stage for carbon markets, including MRV systems, and adopt fiscal instruments to address air pollution, such as the phaseout of energy subsidies and a carbon tax, combined with redistribution measures to the poor.	●	●	
	Conduct and regularly update emissions inventories and source apportionments, combined with other relevant analytics and data management (see items B.1 and B.4 below).	●	●	●
	Collaborate with neighboring countries to address transboundary air pollution, especially $PM_{2.5}$ emissions.	●	●	●
A.2 Reducing exposure to lead (Pb) and other heavy metals				
	Adopt temporary measures to reduce exposure to Pb: (a) supplement iron for children from 6 to 59 months, (b) replace Pb contaminated cookware made from recycled aluminum, and (c) rehabilitate abandoned used lead-acid battery (ULAB) recycling sites.	●	●	
	Build the country's laboratory capacity for measuring BLL and testing Pb in food and other products.	●	●	
	Undertake representative BLL measurement studies along with identification of sources of Pb exposure in households, communities, schools, and specific sources, to inform further policy formulation.	●	●	
	Improve analytical base on the impacts, sources, and measures to control other heavy metals (especially mercury and cadmium).		●	
	Adopt additional policies and investments to reduce exposure to heavy metals based on further analysis of its major sources and hotspots.		●	●
	Enhance coordination across environmental, health, food safety, and consumer agencies to improve data management, policy formulation, and awareness of lead poisoning and prevention measures among key stakeholders such as health providers and community leaders.	●	●	●

Table 1 **Summary of CEA Recommendations** *Continued*

Type[a]	Action	Implementation Period		
		Immediate priority	Short-term (2024–25)	Medium-term (2026–30)
A.3 Improving drinking water, sanitation, and hygiene				
	Prioritize (a) household point-of-use treatment of drinking water with ceramic filter, (b) safely managed improved non-shared sanitation for households currently having unimproved sanitation, and (c) promotion of handwashing with soap targeting caregivers of children under five.	●	●	●
	Complement these measures with (a) safely managed improved non-shared sanitation for households currently sharing sanitation with other households, and (b) promotion of handwashing with soap to all household members.		●	●
	Mitigate exposure to arsenic in drinking water through deep tube wells, ponds with sand filter, and household filtering.	●	●	●
	Implement priority projects of the Bangladesh Delta Plan for water supply and water resources management.	●	●	●
	Improve analytical base on the impacts of and potential solutions for salinity intrusion and identify specific interventions to manage industrial effluent or liquid discharge as well as untreated municipal sewage water.		●	
A.4 Addressing plastic pollution				
	Promote research and development of alternatives to single-use plastics (SUPs).	●	●	
	Implement the ban on plastic bags and extend its scope to other SUP items.	●	●	
	Adopt mandatory extended producer responsibility (EPR) guidelines for plastic-waste collection and recycling.	●		
	Adopt a framework for integrated waste management including waste segregation at the household level, infrastructure development, behavior-change campaigns, stricter requirements for waste incineration, and improved landfill site management practices.		●	●
	Harmonize plastic-management policies to promote circular economy.		●	

Type[a]	Action	Implementation Period		
		Immediate priority	Short-term (2024–25)	Medium-term (2026–30)
A.4 Addressing plastic pollution (chapter 8) *continued*				
	Implement plastic cleanup and recovery schemes to reduce legacy plastic waste and mitigate associated impacts.		●	●
	Establish a monitoring system for the implementation of the Solid Waste Management Rules 2021 and targets of the Plastic Action Plan.	●		
Pillar B. Strengthening environmental governance systems				
B.1 Setting evidence-based priorities and decision-making				
	Enhance environmental monitoring and data management capacity, including automated air and water quality monitoring networks, and adequate institutional presence in the field with sufficient and well-trained staff.	●	●	●
	Create a research and development unit at DoE.		●	
	Implement systematic evaluations of government's interventions and outcome-oriented indicators to assess institutional performance of environmental agencies.		●	
B.2 Diversifying and strengthening environmental policy instruments				
	Adopt economic and market-based instruments, such as pollution charges, deposit-refund schemes, EPR, and final demand interventions.	●	●	
	Adopt litigation-based and information-based instruments, including liability legislation, requirements and procedures for awareness campaigns, and regular dissemination of environmental quality data and pollution loads.		●	●
	Amend or adopt, as applicable, the Environment Conservation Act (ECA), associated rules and guidelines to (a) modernize and make enforcement activities more efficient, based on the polluter pays principle; (b) set the mandates and foundations for further regulations on EPR and Payment for Ecosystem Services (PES); and (c) mobilize green financing through a permanent environment fund, among other themes.		●	●

Table 1 **Summary of CEA Recommendations** *Continued*

Type[a]	Action	Implementation Period: Immediate priority	Short-term (2024–25)	Medium-term (2026–30)
B.2 Diversifying and strengthening environmental policy instruments *continued*				
	Amend or adopt, as applicable, the ECA, associated rules and guidelines to (a) strengthen the environmental clearance system and monitoring of projects after clearance, (b) require Strategic Environmental Assessment for policies, plans, and programs, and (c) improve stakeholder engagement in environmental decision-making.		●	●
	Conduct an in-depth, independent evaluation of effectiveness and efficiency of the environmental clearance system.	●		
	Revise the EIA Guidelines for Industry 2021, updating and expanding their contents as per the ECR 2023, and develop guidelines for non-industry projects.		●	
B.3 Strengthening organizational structure and institutional capacity				
	Analyze the organizational structure under MoEFCC and affiliated agencies to set clearer mandates and more efficient processes for environmental governance, including inter-agency coordination.		●	
	Increase DoE's budget and headcount.	●	●	●
	Establish a cadre of environmental specialists for DoE.		●	
	Implement a comprehensive information management system with automated monitoring for compliance, enforcement, and policy formulation.		●	
B.4 Strengthening environmental justice and citizen-driven accountability				
	Regularly disclose data in support of key environmental indicators (including pollution loads and environmental health statistics), use public forums to air development initiatives, and conduct broader and more detailed review and discussion of environmental management tools.	●	●	●
	Proceed with a comprehensive reform of Environment Court Act, expanding legal standing to all citizens and creating the roles of environmental prosecutors and technical experts.		●	
	Adopt rules and guidelines for applying the polluter pays principle effectively, including criteria for setting the value of fines, precautionary measures, and more severe penalties.	●	●	
B.5 Building an enabling environment for green financing				
	Adopt a broad-based national green growth strategy, a national action plan backed by a commensurate set of regulatory and institutional frameworks.	●		
	Create an ecosystem of ministries and government agencies that collect and analyze point-source data to enforce policies and create a pipeline of verified investment-ready projects.	●	●	●
	Adopt incentives to boost environmental markets, such as promotion of (a) green practices, green businesses, and investments with positive environmental externalities; and (b) incentives to address the risks faced by FIs or perceived by financiers; and (c) a collaborative institutional system to implement green financial incentives.		●	●
	Strengthen institutional and borrower capabilities by building skills and expertise on green financing across sectors.		●	●

Source: World Bank.
Note [a] The meanings of the icons in the left-most column are presented below.

	Policies and institutions		Investments		Analytics and technical assistance		Coordination and stakeholder engagement

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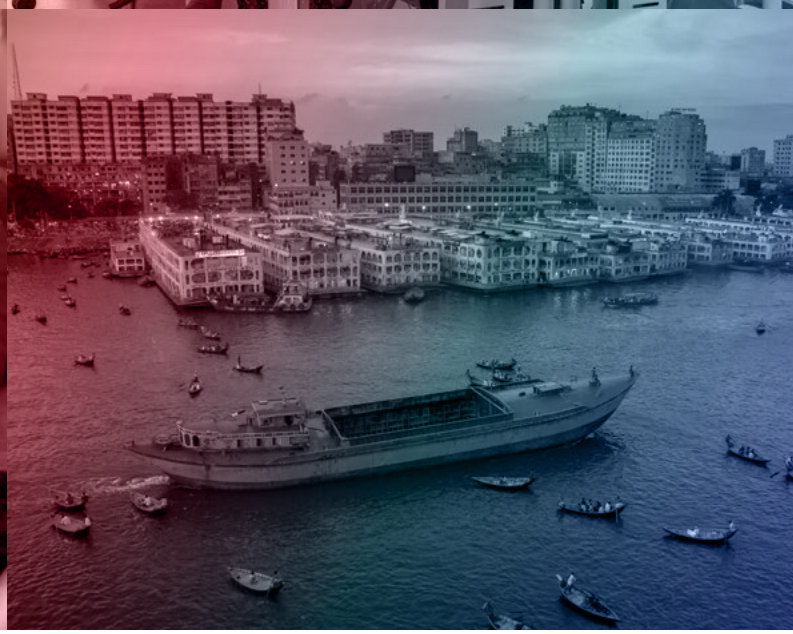

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