

People's Republic of Bangladesh — Ministry of Finance, Finance Division

ENVIRONMENTAL AND SOCIAL ASSESSMENT AND MANAGEMENT PLAN

Bangladesh Contingent Emergency Response Project (CERP) | P517116

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TABLE OF CONTENTS

TABLE OF CONTENTS	
ES ASSESSMENT	
Section 1 Background	4
1.1 Purpose of the CERP and This ES Assessment and ESMP	4
1.2 How This Document Will Be Used	4
1.3 Project Information and CERP Architecture	4
Section 2 Baseline Environmental and Social Conditions	5
2.1 Country Overview	5
2.2 Multi-Hazard Environmental Risk Profile	5
2.3 Ecologically Sensitive Areas	5
2.4 Social Context and Vulnerable Populations	5
2.5 Small Ethnic Communities	6
2.6 Previous Emergency Response Experience	6
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN	
Section 3 Project Activities	7
Section 4 National Environmental and Social Requirements	9
Section 5 Supplemental Environmental and Social Measures	13
5.1 Activity-Specific Measures	13
5.2 General Cross-Cutting Measures	19
Section 6 Procedures to Address Environmental and Social Issues	21
6.1 Pre-Activation Readiness Procedures	21
6.2 At-Activation Screening	21
6.3 Monitoring During Implementation	22
6.4 Incident Reporting and Response	22
6.5 Changes to Activities During Activation	22
Section 7 Consultation and Disclosure	23
7.1 Preparation Phase Consultation and Disclosure	23
7.2 Activation Phase Engagement	23
7.3 Information Disclosure	23
Section 8 Institutional Arrangements and Resources	24
8.1 Overall Architecture	24
8.2 E&S Roles and Responsibilities	24
8.3 E&S Staffing Requirements	25
8.4 Capacity Building and Training	25
8.5 Annual Readiness Review	25

8.6 Monitoring and Reporting Summary	25
8.7 Budget for E&S Management	26
ANNEXES	
Annex A Infection Control and Medical Waste Management Plan (ICWMP)	27
Annex B Fuel Handling and Storage Protocol	30
Annex C Fertilizer Management Protocol	32
Annex D Activity Screening Template and Methodology	34
Annex E Indigenous People Plan (IPP)	35

1. BACKGROUND

1.1 Purpose of the CERP and This ES Assessment and ESMP

The World Bank is providing support to the Government of Bangladesh through the Bangladesh Contingent Emergency Response Project (CERP) (P517116) to strengthen preparedness and response capacity for a broad range of natural or man-made disasters, drawing on undisbursed financing from the World Bank portfolio through the Rapid Response Option (RRO).

This Environmental and Social Assessment and Environmental and Social Management Plan (ES Assessment and ESMP) fulfills two distinct functions. The ES Assessment (Sections 1–2) presents the environmental and social context of Bangladesh, types of emergencies likely to trigger CERP activation, the baseline conditions and assessment of ES risks associated with the project activities. The ESMP (Sections 3–8 and Annexes) sets out specific project activities, national legal requirements, E&S risk profiles and corresponding supplemental mitigation measures, procedures, consultation arrangements, and institutional responsibilities for implementation.

Implementing Agencies will adopt contents of this ES Assessment and ESMP, in particular the risk profiles and mitigation measures for the Activities for which they are responsible before any CERP activation occurs. A central design principle is that all core E&S due diligence is completed upfront. During activation, activities will proceed without preparation of new standalone E&S instruments, although updates or addenda to existing instruments may be prepared where required under the E&S Framework.

1.2 How This Document Will Be Used

The project follows national law requirements for each Activity (Section 4), supplemented by the measures in Section 5. At activation, the project screens each Activity using Annex D to confirm that mitigation measures are in place. This ES Assessment and ESMP will be reviewed and updated annually through the TWG readiness review.

1.3 Project Information and CERP Architecture

The CERP is coordinated by the Finance Division (FD), Ministry of Finance (MoF), through the Project Coordination and Management Unit (PCMU). A Project Steering Committee (PSC) chaired by the Finance Secretary provides inter-ministerial governance. A Technical Working Group (TWG) chaired by the Additional Secretary supports operational readiness and annual reviews. The CERP covers all eight administrative divisions and may be activated multiple times over the six-year project period (June 2026–June 2032), with each activation lasting up to 12 months. Civil works, permanent construction, land acquisition, and law enforcement goods and services are explicitly excluded from the positive list.

2. BASELINE ENVIRONMENTAL AND SOCIAL CONDITIONS

2.1 Country Overview

Bangladesh occupies approximately 148,460 km² with a population of approximately 170 million at a density of approximately 1,265 persons per km². Approximately 25 percent of the country lies below one meter above mean sea level. Around 40 percent of the population remains below the upper poverty line; the informal economy accounts for approximately 80 percent of employment; and 47 percent of poor households are not yet covered by the national social protection system. Remittances from approximately 13 million workers abroad, principally from GCC countries account for approximately 3 percent of GDP. Geopolitical disruptions in the Middle East directly exposed these structural vulnerabilities through fertilizer and fuel supply chain pressures, prompting the development of this CERP.

2.2 Multi-Hazard Environmental Risk Profile

Bangladesh faces one of the most complex multi-hazard risk landscapes globally. Riverine floods affect up to two-thirds of the country in severe years, with annual average losses of USD 2.2 billion. Flash floods in the northeastern haor basin can destroy the entire boro rice crop within hours in March–April, eliminating months of agricultural production in a single event. Tropical cyclones strike every two to three years; cyclones Sidr, Aila, Amphan, and Mocha all caused catastrophic losses requiring emergency response. Droughts affect the northwestern districts with increasing frequency under climate change. Earthquakes pose a material risk given Bangladesh's position near the Dauki fault system and the dense urban settlements of Dhaka and Chittagong on unconsolidated sediment. Public health emergencies validated by the COVID-19 experience and geopolitical and macroeconomic shocks are formally recognized activation triggers.

2.3 Ecologically Sensitive Areas

The haor wetlands of northeastern Bangladesh covering approximately 8,000 km² across Sunamganj, Habiganj, Kishoreganj, and adjacent districts which include internationally designated Ramsar Sites Tanguar Haor. These freshwater ecosystems are acutely sensitive to eutrophication from nitrogen and phosphorus runoff, making them directly relevant to CERP fertilizer distribution activities. The Sundarbans mangrove forest the world's largest contiguous mangrove ecosystem and a UNESCO World Heritage Site is acutely sensitive to hydrocarbon contamination, making it directly relevant to CERP fuel distribution through southwestern river corridors. Bangladesh's dense riverine logistics network introduces spill risks for both commodities. Designated national parks, wildlife sanctuaries, and Ecologically Critical Areas (ECAs) declared under ECA 1995 must be excluded from CERP activity siting.

2.4 Social Context and Vulnerable Populations

Bangladesh's social context is defined by deep structural vulnerabilities. Approximately 80 percent of employment is informal, making households acutely sensitive to income disruptions. Women face constraints on financial autonomy, mobility, and decision-making in many rural and conservative settings. World Bank research has empirically established that climate-induced disasters in Bangladesh are associated with documented increases in intimate partner violence (IPV), sexual harassment, and child marriage, outcomes directly linked to the crisis events that trigger CERP activation. The Dynamic

Social Registry has a 47 percent coverage gap among poor households. Char and haor communities face chronic flood exposure; coastal communities face recurrent cyclone damage. Returning migrant workers displaced by geopolitical crises in the Gulf require dedicated emergency enrollment pathways.

2.5 Small Ethnic Communities

Bangladesh is home to distinct Small Ethnic Communities (SECs) maintaining collective attachments to specific ancestral territories, distinct cultural identities, customary institutions, and traditional livelihoods. The Chittagong Hill Tracts (CHT), Rangamati, Khagrachhari, Bandarban host approximately 1.2-1.5 million members of twelve or more ethnic groups including Chakma, Marma, Tripura, Tanchangya, Bawm, Mro, and others. Plain-land SECs, Garo, Santal, Khasi, Manipuri, and others are concentrated in Sylhet, Rajshahi, and Mymensingh. When CERP activations affect areas with SEC presence, free, prior, and informed consultations in local languages through recognized community governance structures are required. Targeting must address documentation barriers that systematically exclude SEC members. Food distributions must respect indigenous dietary practices. GRM channels must be accessible in local languages.

2.6 Previous Emergency Response Experience

The COVID-19 Emergency Response and Pandemic Preparedness Project (P173757) and Local Government COVID-19 Response and Recovery Project (P174937) established ESF-compliant operational precedents including ICWMP frameworks, labor management, WASH delivery, and community GRM designs directly applicable to health-sector CERP activations. MoHFW demonstrated the strongest ESF track record in the Bangladesh portfolio. MoDMR operates through the SOD 2019 national disaster management architecture. BADC and BPC have operational procurement experience but limited prior ESF exposure, representing the primary institutional capacity development need in the CERP implementing architecture.

3. PROJECT ACTIVITIES

The Activities that may be implemented when the CERP is activated are set out below. Not all Activities will be implemented in every activation, the Crisis Response Action Plan (CRP) will specify which Activities are triggered, with applicable Implementing Agencies, quantities, geographic scope, and beneficiary targeting criteria. All Activities operate within existing institutional and physical infrastructure.

Table 3.1: CERP Positive List — Activity Summary

No.	Activity	Lead / IA	Description
COMPONENT 1: EMERGENCY LIVELIHOOD SUPPORT TO AFFECTED HOUSEHOLDS AND MSMEs			
1.1	Direct Cash Transfers (Family Card)	MoSW / DSS / Ministry of Commerce (with PCMU)	Cash transfers to crisis-affected households via the Family Card mechanism using the Dynamic Social Registry. Vertical expansion increases transfer amounts; horizontal expansion enrolls newly crisis-affected households. Delivered via MFS platforms and agent banking. Returning migrant workers receive dedicated enrollment pathways.
1.2	Cash-for-Work	MoDMR / DDM / LGED / Union Parishads (with PCMU)	Wage income through labor-intensive tasks with no permanent physical footprint, debris clearance, drainage clearing, road cleaning. Targets unemployed crisis-affected workers with specific outreach for female workers and returning migrants.
1.3	MSME Emergency Cash Transfers	Ministry of Commerce (with PCMU)	Cash transfers to crisis-affected MSMEs for emergency liquidity stabilization and employment protection. Women-owned enterprises receive targeted outreach.
COMPONENT 2: PROVISION OF ESSENTIAL EMERGENCY SUPPLIES AND SERVICES			
2.1	Emergency Fertilizer Supply (urea, DAP, MOP)	MoA / BADC / BCIC (with PCMU)	Procurement and distribution of chemical fertilizers to smallholder farmers growing staple food crops within the planting window. G2G or open tender procurement; distributed through BADC depot and dealer network using Krishok Card targeting. Single planting season quantities only; no stockpiling; staple crops only.
2.2	Emergency Fuel and Energy Supplies	MoPEMR / BPC / BPDB (with PCMU)	LPG for low-income households; LNG to be used for power generation, industrial production and manufacturing industries, diesel for hospital backup power, cold chain, and water pumping; HFO for public power generation. Temporary electricity cost payments. Eligibility conditioned on verified physical supply disruption, not price increase alone.
2.3	Food Staples and Nutritional Supplies	Ministry of Food / TCB / MoDMR-DDM (with PCMU)	Procurement and distribution of wheat and rice via TCB outlets and DDM relief network. Priority for children under 5, pregnant/lactating women, female-headed households, and elderly. Food safety standards per BFSA requirements.
2.4	Medicines, Pharmaceutical Products, and Medical Equipment	MoHFW / DGHS / PHEOC (with PCMU)	Essential medicines, vaccines, medical gases, medical equipment, and PPE for public health facilities. DDA registration required. WHO pre-qualification for emergency imports. Chlorine and radioactive diagnostic equipment excluded.

2.5	Potable Water, Water Purification, and Hygiene Kits (WASH)	DPHE / LGED (with PCMU)	Emergency provision of bottled/package water, purification supplies, and hygiene kits including MHM materials. Temporary mobile latrines at distribution centers. Quality testing per ECR 1997 and WHO standards.
2.6	Emergency Shelter Materials	MoDMR / DDM / LGED (with PCMU)	CGI sheets, tarpaulins, bamboo, ropes, and emergency tent sets for households with damaged or destroyed dwellings. No permanent construction. Materials must meet BNBC specifications for cyclone wind loads. No asbestos or hazardous materials.
2.7	Cleaning, Debris Removal, and Minor Rehabilitation	LGED / City Corporations / Union Parishads (with PCMU)	Service contracts for cleaning, debris removal, and light equipment rental for minor rehabilitation within existing footprint necessary for other CERP Activities. Excludes new civil works, land acquisition, and permanent infrastructure.
2.8	Light Equipment Rental	Relevant IA per activity	Rental of generators, water pumps, and light machinery for CERP Activities and service continuity. Equipment returned to supplier at activation end.
COMPONENT 3: EMERGENCY RESPONSE COORDINATION AND MANAGEMENT			
3.1	Emergency Response Coordination and Management	MoF / CERP-PCMU	Incremental operational expenditures: evacuation support, shelter management, surge personnel costs, per diems, equipment rental, TA, audit, and M&E. All TA ToRs reviewed for ESF consistency. Law enforcement and security forces explicitly excluded.

4. NATIONAL ENVIRONMENTAL AND SOCIAL REQUIREMENTS

This Section sets out the key national legislative and regulatory requirements applicable to each Activity. The project will comply with all applicable national law as the baseline for implementation. Where national requirements substantially address the objectives of the relevant ESS, supplemental ESF measures may not be necessary. Where gaps exist, supplemental measures are set out in Section 5. Emergency provisions under the Disaster Management Act 2012 and SOD 2019 may activate special legal powers; however, no emergency provision waives ESF obligations.

Table 4.1: National E&S Legal and Regulatory Framework

Cluster / Activity	Law / Regulation	Key Provision and Relevance to CERP
A. DISASTER MANAGEMENT AND EMERGENCY RESPONSE FRAMEWORK		
Disaster Management Framework	Disaster Management Act 2012	Establishes NDMC, IMDMCC, DDMCs, UDMCs. Grants authority for emergency declarations and resource mobilization. Provides the legal basis for CERP coordination through MoDMR.
	Standing Orders on Disaster 2019 (SOD 2019)	Operational procedures for all government entities in disaster response. Defines roles of ministries, departments, and district administrations. All Implementing Agencies must align CERP implementation with SOD coordination procedures.
	National Plan for Disaster Management 2021–2025	Strategic framework for DRR and response. CERP activations must be consistent with NPDM priority response strategies.
B. CASH TRANSFERS AND FINANCIAL SERVICES		
Activity 1.1 Cash Transfers	National Social Security Strategy (NSSS) 2015	Defines GoB social protection architecture and Family Card targeting methodology. Activity 1.1 eligibility protocols must not contradict NSSS principles.
	Mobile Financial Services Regulations 2022 (Bangladesh Bank)	Requires KYC verification for MFS accounts; transaction limits; consumer protection. Emergency horizontal enrollment may require Bangladesh Bank guidance on simplified KYC during declared disasters.
	Payment and Settlement Systems Act 2014	Governs digital payment platforms. Applies to all MFS and agent banking channels used for cash transfer delivery.
Activity 1.3 MSME Cash Transfers	SME Development Policy 2019	Defines MSME size criteria by sector (fixed assets, employment). Activity 1.3 eligibility criteria must align with official SME definition.
C. FERTILIZER PROCUREMENT, STORAGE, AND DISTRIBUTION		
Activity 2.1 Fertilizer	Fertilizer Management Act 2006	Requires dealer licensing; quality standards and labeling; prohibits adulteration. All CERP fertilizers must meet quality standards; BADC dealers must hold valid licenses.
	Fertilizer Distribution Rules (as amended)	Governs quota allocation, dealer margin structures, and distribution protocols. Emergency arrangements must work within or formally notify deviations from standard distribution rules.
	Environment Conservation Rules 2023	The ECR 2023 establishes a mandatory, risk-based system that classifies all industries and projects into four distinct categories. This categorization dictates the level of environmental assessment and the specific procedures

		required to obtain a mandatory Environmental Clearance Certificate (ECC) from the Department of Environment (DoE). Requirements of this rules would be followed by the client.
D. FUEL AND PETROLEUM PRODUCTS		
Activity 2.2 Fuel	Petroleum Act 1934 and Petroleum Rules 2018	Classifies petroleum by flash point; requires licensed depots with mandatory fire suppression, earthing, and bunding; transportation requirements. All BPC depots and fuel transport must comply.
	LPG Rules 2004 (Amended 2016)	Governs the operational safety, storage, and bottling of Liquefied Petroleum Gas.
	Gas Cylinder Rules 1991	Mandates the manufacturing standards, periodic hydrostatic testing, and safe filling limits for pressure cylinders
	Explosives Act 1884 & Explosives Rules 2004	The overarching law administered by the Department of Explosives, which issues the mandatory licenses for the import, storage, and transport of flammable gases.
	LNG Installation, Import and Supply Policy 2019 (Revised 2023)	Governs the private and state procurement of LNG, including FSRU operations.
	Natural Gas Safety Rules 1991 (Amended 2003)	Dictates the safety parameters for the transmission of degasified LNG through the national pipeline grid managed by GTCL
	Inflammable Substances Act 1952	Regulates LPG storage, transport, and handling. LPG retailers must hold current licenses. Distribution workers require safety training.
	Bangladesh Energy Regulatory Commission Act 2003	Regulates energy pricing and distribution licensing under BERC. CERP fuel distribution must comply with BERC-approved frameworks.
	Environment Conservation Rules 2023	As per ECR 2023, CNG/LPG/LNG/Fuel Gas Filling Stations are classified as Green, indicating they are considered to have a relatively low environmental impact (Schedule 1, Item 32). Fuel oil filling stations are classified as Yellow. Fuel gas (CNG, LPG, LNG, etc.) bottling is also in the Yellow category (Schedule 1, Item 33). CERP fuel transportation, distribution and storage must comply with the requirements of ECR 2023
	Road Transport Act 2018 / Inland Shipping Ordinance 1976	Governs road and river transport of dangerous goods. Fuel transport vehicles and vessels must be licensed, roadworthy, and comply with dangerous goods loading requirements.
E. FOOD STAPLES AND NUTRITIONAL SUPPLIES		
Activity 2.3 Food	Bangladesh Food Safety Act 2013	Establishes BFSA standards for food safety, storage, handling, and labeling. All CERP food commodities must meet BFSA standards. Suppliers must be certified.
	BSTI Ordinance 2018	Quality and labeling standards for food products including grains. International food imports must meet equivalent standards.
	Food Grain Supply Ordinance 1979	Governs public food grain distribution; prohibits hoarding. CERP emergency procurement must be recorded to prevent regulatory conflict.

F. MEDICINES, PHARMACEUTICAL PRODUCTS, AND MEDICAL EQUIPMENT		
Activity 2.4 Medicines	Drugs (Control) Ordinance 1982 and Drug Policy 2005	All drugs must be registered with DDA. Cold chain requirements for vaccines and temperature-sensitive medicines. International emergency imports require WHO pre-qualification equivalent.
	Bangladesh Pharmacy Council Act 1976	Only registered pharmacists may dispense scheduled medicines. CERP health-sector dispensing must be under pharmacist supervision.
	Vaccine Management Policy / EPI Guidelines (MoHFW)	Governs cold chain management, vaccine storage temperatures, and disposal of expired vaccines. Activity 2.4 vaccine procurement and distribution must comply.
G. MEDICAL WASTE MANAGEMENT		
Activity 2.4 Medical Waste	Medical Waste (Management and Processing) Rules 2008	Classifies medical waste into eight categories; requires color-coded segregation at source, licensed transport, and treatment (incineration/autoclave) before disposal. ICWMP in Annex A operationalizes compliance.
H. WASH — WATER, SANITATION, AND HYGIENE		
Activity 2.5 WASH	Bangladesh Water Act 2013 / Groundwater Management Ordinance 1985	Regulates water use rights. Water abstraction for emergency supply must comply with applicable provisions.
	ECR 2023	Schedule-2 of ECR 2023 provides standards for drinking water (Section C), which lists around 55 parameters with their permissible limits, including physical, chemical, and bacteriological standards. All CERP distributed water must meet these standards; WHO guidelines apply where ECR is less stringent.
	Water Supply and Sewerage Authority Act 1996 (WASA Act)	Governs water supply in major city WASA service areas. CERP WASH in WASA areas must be coordinated with the relevant WASA.
I. EMERGENCY SHELTER MATERIALS		
Activity 2.6 Shelter	Bangladesh National Building Code 2020 (BNBC)	Minimum structural safety standards; wind load specifications for cyclone-prone areas. CGI sheets must meet BNBC minimum thickness for target area.
	Cyclone Shelter Management Policy (MoDMR)	Gender-separated facilities and protection requirements in cyclone shelters. CERP shelter distribution must comply with this Policy.
J. DEBRIS REMOVAL AND WASTE MANAGEMENT		
Activity 2.7 Debris	Solid Waste Management Rules 2021	Prohibit open burning and dumping in water bodies. All debris must be transported to licensed municipal disposal facilities.
	Road Transport Act 2018	Regulates debris removal vehicles — load limits, vehicle fitness, driver licensing, and load covering requirements.
K. LABOR, WORKING CONDITIONS, AND OCCUPATIONAL HEALTH AND SAFETY		
All Activities — Labor	Bangladesh Labour Act 2006 (BLA 2006) and Amendment 2018	Covers employment contracts, working hours (max 48 hrs/week), minimum wage compliance, OHS, prohibition of forced and child labor (min age 14 for light work; 18 for hazardous work), workers' compensation, and dispute resolution. Applies to all contracted workers under CERP.

	Bangladesh Labour Rules 2015	Detailed OHS requirements, accident reporting to DIFE, PPE obligations. Implementing Agencies must comply with specific OHS procedural requirements.
	National OHS Policy 2013	National framework for OHS including risk assessment, employer obligations, and health surveillance. Implementing Agency OHS management must align with this Policy.
	Children Act 2013	Defines a child as any person under 18 years. No person under 18 may be engaged in hazardous work under CERP; no person under 14 in any work.
L. ENVIRONMENT AND BIODIVERSITY		
All Activities — Environment	Environment Conservation Act 1995 and ECR 2023	Comprehensive environmental protection. Requires Environmental Clearance for scheduled industries; prohibits pollution; sets ambient quality standards. CERP activities must comply with pollution prevention requirements.
	Bangladesh Biodiversity Act 2017 / Wildlife (Preservation and Security) Act 2012	Biodiversity conservation and protected area management. CERP activities must not occur within national parks, wildlife sanctuaries, or ECAs.
	Wetlands Policy 2014	Protects haor and wetland ecosystems from degradation. Activity 2.1 fertilizer distribution near haors must comply; buffer zone criteria in Annex C apply.
M. CHT AND SMALL ETHNIC COMMUNITIES		
All Activities in CHT	CHT Accord 1997 / CHT Regional Council Act 1998 / Hill District Council Acts 1989	Any CERP activation in CHT districts needs to be coordinated with the CHT Regional Council and relevant Hill District Council. Forced or coercive displacement is prohibited.
	CHT Regulation 1900 (as amended)	Governs land administration in CHT; recognizes traditional land use rights. CERP activities must not involve land acquisition or restriction in CHT areas.

5. SUPPLEMENTAL ENVIRONMENTAL AND SOCIAL MEASURES

This Section presents the supplemental E&S measures to be implemented in addition to the national requirements in Section 4. For each Activity and cross-cutting issue, the potential risk or impact is identified first, followed by the corresponding supplemental mitigation measures. This risk-to-mitigation structure ensures that every measure is traceable to a specific identified risk, consistent with the requirements of ESS1. In many cases, national requirements are adequate to satisfy the relevant ESS and no supplemental measure is required; in others, ESF supplemental measures address identified gaps between national standards and ESF requirements.

In implementing Activities, the emergency nature of CERP responses means that priority will always be given to urgent interventions and the protection of people and assets most affected by the emergency. All measures must be implemented as soon as practicable given activation conditions and documented in the Annex D screening form and the monthly E&S monitoring report.

5.1 Activity-Specific Measures

Table 5.1: Activity-Specific E&S Risks and Supplemental Mitigation Measures

Issue	Risk / Potential Impact	Mitigation Measures
ACTIVITY 1.1 — DIRECT CASH TRANSFERS		
Beneficiary Targeting and Inclusion	With 47% of poor households not registered in the Dynamic Social Registry, horizontal expansion without dedicated outreach risks systematic exclusion of extreme-poor, informal workers, and returning migrants. Elite capture by connected households further reduces resources reaching genuine crisis-affected beneficiaries.	Pre-agreed emergency horizontal expansion protocols must be documented in the CRP, with simplified enrollment allowing community validation by Union Parishad members in lieu of formal identity documents. Proactive outreach required for: extreme-poor households below lower poverty line; returning migrant workers; informal workers; tenant and sharecropper farming households. Disaggregated disbursement records (sex, age, disability) maintained monthly; exclusion errors rectified within 10 working days.
Women as Primary Transferees	Male household members may divert transfers away from female-registered beneficiaries, denying women financial autonomy. World Bank research documents that cash transfers to women in Bangladesh are associated with increased intimate partner violence (IPV) when received without accompanying GBV prevention measures.	Where a household is enrolled under a female name or the crisis context makes women the primary income-earner, transfers must be directed to the woman. Male household members must not collect female-registered beneficiary transfers without written proxy authorization. Information on GBV support services must accompany all cash transfer notifications to female beneficiaries.
Digital Inclusion and Payment Access	Beneficiaries without mobile money accounts or in areas with limited digital connectivity, haor, char, remote CHT face exclusion from MFS-based disbursements. This risk disproportionately affects elderly, women without financial accounts, and Small Ethnic Communities.	Where beneficiaries lack MFS accounts, agent banking enrollment must be facilitated before disbursement begins. In areas with limited digital connectivity, alternative cash payment modalities must be available at designated public distribution points. Female MFS agents must be available at delivery points primarily serving female beneficiaries.
Cash-Point Safety	High-volume disbursement events in dense settlements create crowd risks,	Crowd management plan required before each disbursement event: expected crowd estimation, queue management,

Issue	Risk / Potential Impact	Mitigation Measures
	crush injuries, communicable disease transmission that are amplified by Bangladesh's exceptional population density.	security, emergency procedures, priority access for elderly, pregnant women, and PWD. Ground-floor or ramp-accessible venues; separate queuing for priority groups.
SEA/SH Prevention	Disbursement agents exercising discretionary power over vulnerable beneficiaries may condition transfer access on personal favors. Risk is elevated in remote settings with limited supervision and in communities where returning migrants face heightened economic dependency.	All disbursement agents must sign a Code of Conduct (CoC) before serving. SEA/SH complaint channel information (National Helpline 109; PCMU Gender/GBV Specialist) displayed at every disbursement point. No disbursement may be conditioned on any form of personal service. Referral to the separate SEA/SH Action Plan.
ACTIVITY 1.2 — CASH-FOR-WORK		
Worker Selection and Inclusion	Locally influenced selection may exclude genuinely crisis-affected workers. PDO targets (50% female, 20% youth) will not be met without affirmative outreach.	Transparent public announcement of eligibility criteria before selection. Priority quotas or outreach targets for female workers, returning migrants, and persons with mild disabilities. Selection not influenced by any affiliation.
Minimum Age and Hazardous Work	Engagement of workers under 18 in physically demanding or hazardous debris work constitutes child labor in violation of BLA 2006 and Children Act 2013.	Age verification (NID or birth registration) required at time of engagement. Minimum age 18 for all cash-for-work activities. Supervisors briefed on age verification obligation.
Gender and OHS at Work Sites	Female workers at mixed-gender sites face SEA/SH risk. Absence of gender-separated sanitation deters female participation. Workers face material injury risks, lacerations, falls, crush injuries, heat stroke, dust inhalation — elevated in post-disaster settings.	Separate, clean, secure sanitation for female workers. Female supervisors or safety monitors at mixed-gender sites. Flexible scheduling for women with childcare responsibilities. Site-specific OHS risk assessment before work commences. Mandatory PPE at no cost. First aid kits at every site. No work under unsupported overhead structures. CoC signed by all workers; SEA/SH complaint channel at every site.
Waste from Work Sites	Improperly managed debris, including potentially contaminated materials — risks soil and water contamination if not segregated and disposed of correctly.	Debris segregated into: recyclable materials; non-hazardous waste for licensed disposal; potentially hazardous materials (asbestos, chemically contaminated debris) for specialist handling. No open burning.
ACTIVITY 1.3 — MSME EMERGENCY		
Targeting Integrity	MSME cash transfers may be captured by larger enterprises misrepresenting as MSMEs, or by politically affiliated businesses. Women-owned enterprises face higher systematic exclusion risk.	Eligibility criteria aligned with SME Development Policy 2019 definition. Spot verification of minimum 15% of applications. Women-owned enterprises: targeted outreach and simplified documentation.
Excluded Activities and Labor Standards	Cash transfer recipients may operate enterprises with poor labor practices or environmentally harmful activities. CERP cash transfers enabling such operations create ESS2/ESS3 risk.	Cash transfer eligibility excludes: tobacco, alcohol, firearms, gambling, child or forced labor enterprises. Cash transfer condition: recipients confirm BLA 2006 compliance for their own employees (minimum wage, OHS, no child labor). Sector-specific environmental screen for high-risk MSME categories before approval.
SEA/SH Prevention	Cash transfer delivery agents exercising approval discretion over applicants may condition cash transfer access on personal favors or relationships.	All cash transfer delivery staff sign CoC. No cash transfer approval conditioned on personal service. Female enterprise owners informed of SEA/SH complaint channel.
ACTIVITY 2.3 — FOOD STAPLES AND NUTRITIONAL SUPPLIES		

Issue	Risk / Potential Impact	Mitigation Measures
Food Safety and Quality	Distribution of substandard, contaminated, or improperly stored food commodities risks foodborne illness among crisis-affected populations with compromised immune systems. In health emergency activations, immunocompromised beneficiaries face amplified consequences from food contamination.	All food procured from BFSA-certified suppliers. HACCP principles applied throughout storage, transport, and distribution chain. Batch quality testing at port of entry (imports) and regional warehouse before distribution. Failed batches quarantined and disposed of not distributed. BFSA-compliant labeling in Bengali; expiry date display mandatory.
Nutritional Targeting	Children under 5, pregnant and lactating women, and elderly may not receive appropriate nutritional products if distribution is designed only for general food staples. Under-nutrition impacts are irreversible in children under 2.	Nutrition-sensitive distribution: children under 5 and PLW receive priority access and nutrition-specific commodities. Coordination with MoHFW for therapeutic and supplementary foods where malnutrition risk is identified in the activation area.
Community Health and Safety at Distribution Points	High-volume food distribution events in dense settlements create crowd injury risks and communicable disease transmission risks.	Distribution site management plan before each event: crowd capacity, queue management, security, emergency procedures. Priority access for pregnant women, elderly, and PWD. Handwashing facilities at all distribution points.
SEA/SH Prevention	Distribution staff in positions of power over food-insecure beneficiaries may condition food access on personal service. This risk is documented in humanitarian distribution contexts.	All distribution staff sign CoC. SEA/SH complaint channel displayed at every distribution point. Female distribution staff at points serving predominantly female beneficiaries.
Safe Storage of food supply	Storage of food would require pest control mechanism to be put place.	The project would employ an Integrated Pest Management (IPM) approach that relies on temperature control (chilling) and a controlled atmosphere (nitrogen gas) to manage pests, thereby avoiding the use of chemical pesticides.
Food Waste Disposal	Spoiled, expired, or contaminated food commodities improperly disposed of risk aquatic ecosystem contamination, vector breeding, and disease in surrounding communities.	Damaged or expired food disposed of as per BFSA requirements and ECA 1995. No dumping in fields, drainage channels, or water bodies. Packaging waste collected daily from all distribution sites to licensed municipal facilities.
ACTIVITY 2.4 — MEDICINES, PHARMACEUTICAL PRODUCTS, AND MEDICAL EQUIPMENT		
Product Quality and Cold Chain	Distribution of substandard, counterfeit, or expired medicines poses direct life-threatening risks, treatment failure, adverse reactions, drug resistance. Vaccines experiencing a temperature excursion lose efficacy, giving false assurance of immunity while leaving patients unprotected.	All medicines DDA-registered or WHO pre-qualified for emergency imports. Minimum remaining shelf life 12 months at delivery. Temperature monitoring devices (data loggers) on all temperature-sensitive shipments. Cold chain excursion → quarantine, test, dispose if compromised; not distributed. Cold chain failure reported to PCMU within 24 hours.
Medical Waste and ICWMP	Improper management of infectious waste (used sharps, contaminated PPE, pharmaceutical waste) risks needlestick injuries, pathogen transmission, and soil and water contamination near health facilities.	Full Infection Control and Medical Waste Management Plan (ICWMP) in Annex A applies. Waste segregation at point of generation using color-coded system: yellow, infectious; red — sharps; black/brown — pharmaceutical; green — recyclable. Licensed transport and treatment only. Workers require specific training and PPE. Needlestick injury protocol (immediate first aid; PEP within 2 hours; incident report to PCMU within 24 hours) pre-positioned at all facilities.
OHS for Health Workers and	Health workers face infection, needlestick, and chemical exposure risks. Patients dependent on uninterrupted	PPE (gloves, masks, gowns, eye protection) included in activation packages; IPC training for health facility staff.

Issue	Risk / Potential Impact	Mitigation Measures
Access for Chronically Ill	supply (dialysis, oncology, HIV/AIDS, insulin-dependent diabetes) face life-threatening deterioration if not prioritized.	Critical patient mapping at each participating health facility before distribution; these patients prioritized in supply plans. Distribution extended to UHCs and community clinics in remote areas using river transport or community health worker delivery where needed.
ACTIVITY 2.5 — POTABLE WATER, WATER PURIFICATION, AND HYGIENE KITS (WASH)		
Water Quality and Sanitation Siting	Distribution of water not meeting bacteriological or chemical quality standards risks waterborne disease outbreaks. cholera, typhoid, dysentery among crisis-affected populations. Improperly sited pit latrines or chemical toilets near drinking water sources risk fecal coliform contamination of community water supplies.	All distributed water tested for bacteriological and key chemical parameters before distribution. Water not meeting ECR 2023 and WHO standards must not be distributed. Temporary sanitation facilities sited minimum 30m from drinking water sources; 15m from surface water; on downslope side of water sources. In high-groundwater-table areas (coastal, haor), lined or sealed chemical toilets replace unlined pit latrines.
Chemical Handling and Vector Control	Mishandling of water purification chemicals risks chemical burns, eye injuries, and respiratory harm to workers. Standing water at distribution sites creates rapid mosquito breeding habitat for dengue and malaria vectors in Bangladesh's monsoon climate.	Water purification chemical handlers: chemical-resistant PPE (gloves, goggles, apron); dosing training mandatory; no over-dosing. Standing water near distribution sites and sanitation facilities eliminated daily. Where dengue or malaria risk identified in the activation area, vector control coordinated with local health authority.
Gender, Menstrual Hygiene Management (MHM), and Inclusion	Without gender-separated, secure WASH facilities and MHM materials, women and adolescent girls are excluded from dignified sanitation access. PWD and elderly may be physically unable to access standard distribution points or sanitation facilities.	Gender-separated, lockable, well-lit sanitation facilities at all distribution sites; maintained and cleaned daily. Hygiene kits must include MHM materials; female hygiene promotion workers at distribution points. WASH access points include minimum one accessible unit for PWD. Homebound beneficiaries receive home delivery through CLOs or community health workers.
ACTIVITY 2.1 — EMERGENCY FERTILIZER SUPPLY (UREA, DAP, MOP)		
Beneficiary Targeting and Anti-Diversion	Tenant and sharecropper farmers approximately 25–30% of agricultural households may lack documentation in the BADC registry, creating systematic exclusion. Subsidized fertilizer may be diverted to commercial farms, export crop producers, or resold at market price, undermining the food security objective and wasting public resources.	Tenant and sharecropper farmer enrollment through Union Parishad-validated community lists as alternative to BADC registry. Per-transaction distribution records: farmer name, NID/Krishok Card, village/union/upazila, crop type, fertilizer type, quantity, recipient signature. Post-distribution spot checks minimum 10% sample within 30 days of each distribution round; findings submitted to PCMU.
Haor and Ecologically Sensitive Area — Eutrophication Risk	Fertilizer distribution in agricultural zones adjacent to Ramsar-designated haor wetlands carries a credible risk of eutrophication through nitrogen and phosphorus runoff. Eutrophication causes excessive algal growth, dissolved oxygen depletion, and aquatic biodiversity loss in ecosystems supporting millions of fisherfolk and subsistence farmers. Bangladesh applies fertilizers at approximately 391.9 kg/ha — more than double the global average — amplifying the runoff risk.	No fertilizer storage or distribution depot within Ramsar site boundaries or within 500m of Ramsar site boundary. Application guidance at distribution points: no fertilizer application within 50m of permanent water bodies; correct dosing rates per Annex C; timing aligned with crop uptake cycle. PCMU E&S Specialist must approve any distribution activity proposed within 2km of a Ramsar site boundary. Full Fertilizer Management Protocol in Annex C applies.

Issue	Risk / Potential Impact	Mitigation Measures
Chemical Storage and Worker Safety	<p>Co-storage of urea and DAP generates ammonia gas, creating acute inhalation hazard for depot workers.</p> <p>Fertilizer dust inhalation causes respiratory disease; eye and skin exposure to ammoniacal compounds causes injury.</p>	<p>Storage in covered, dry, ventilated warehouses; impermeable floors; urea and DAP stored in separate bays.</p> <p>Maximum stacking height 2.0m for bagged fertilizer. No co-storage with food, fuel, or pesticides.</p> <p>Mandatory PPE: FFP2 dust respirator, chemical-resistant gloves, safety boots, dust-protective goggles.</p> <p>Eyewash station at all fertilizer depots. No smoking within 10m of urea storage.</p>
Transport Spill and Water Body Risk	<p>Fertilizer spills during road or river transport risk runoff into drainage channels, irrigation canals, and water bodies, causing localized aquatic ecosystem damage.</p> <p>River transport in open or bilge-water-exposed conditions risks fertilizer dissolution and release into waterways.</p>	<p>Fertilizer bags stacked on raised platforms and covered with waterproof tarpaulins for all river transport. No contact with bilge water.</p> <p>Spill response kit (absorbent, shovels, sealed collection bags) on all transport vehicles and vessels.</p> <p>Fertilizer spill reaching a water body: notify DoE and PCMU within 12 hours; immediate sweep-up; no washing to drains.</p>
ACTIVITY 2.2 — EMERGENCY FUEL AND ENERGY SUPPLIES		
Eligibility Verification and End-Use Controls	<p>CERP fuel funds may be misused for non-emergency needs or diverted to commercial users if eligibility is not rigorously enforced.</p> <p>Distribution to commercial transport, private vehicles, or industrial users is prohibited but requires active verification to prevent.</p>	<p>CRP must document the specific supply disruption event and list pre-identified critical facilities and eligible household categories for each fuel type.</p> <p>BPC distribution records document: facility or household name, location, fuel type, quantity, delivery date for every transaction.</p> <p>End-use spot verification for minimum 10% of transactions.</p>
LPG Fire, Explosion, and Community Safety	<p>Mishandled or damaged LPG cylinders create fire and explosion risk — burns and fatalities for distribution workers and community recipients.</p> <p>Improper cylinder storage in residential areas creates community safety risks in densely populated urban settings.</p>	<p>The government must implement stringent screening to procure solely from suppliers licensed by the Department of Explosives, enforce rigorous hydrostatic testing of all distributed cylinders</p> <p>Cylinders inspected before acceptance: corrosion, dents, valve damage, gas smell exclusions. Damaged cylinders quarantined and returned to supplier.</p> <p>Storage in ventilated areas away from ignition sources. No smoking within 15m of LPG storage.</p> <p>Community recipients receive Bengali-language safety instruction card: storage, connection, leak testing (soapy water only), emergency contact.</p>
LNG	<p>Key concerns include severe occupational health and safety hazards at import terminals due to the cryogenic nature of LNG (e.g., instant frostbite and asphyxiation in confined spaces), substantial environmental risks from "methane slip" emissions, and localized community health and safety flash-fire risks along high-pressure transmission lines.</p>	<p>The government must ensure that Petrobangla, its relevant subsidiaries such as Rupantarita Prakritik Gas Company Limited (RPGCL), and its suppliers strictly adhere to the LNG Installation Policy (2019) and Natural Gas Safety Rules (1991), maintain advanced engineering controls (like continuous oxygen monitoring and pressure relief systems) at FSRUs, and enforce rigorous emergency response protocols across the national transmission network.</p>
HFO	<p>Because HFO is a dense, high-viscosity residual fuel, the primary environmental risk is the consequence of a spill. Unlike volatile gases, an HFO spill is highly persistent, extremely difficult to clean, and can devastate terrestrial and aquatic ecosystems along transport routes. Furthermore, burning HFO generates air pollution, releasing high levels of sulfur</p>	<p>To mitigate these impacts, the government must strictly enforce the use of double-hulled vessels and specialized tankers for transport, mandate the pre-positioning of Tier-2 oil spill response equipment (such as booms and skimmers) at all transfer points, and ensure that power plants operate air pollution control equipment (like scrubbers) in strict compliance with the World Bank Group's EHS Guidelines.</p>

Issue	Risk / Potential Impact	Mitigation Measures
	oxides, nitrogen oxide and particulate matter, which pose community health and safety hazards by exacerbating respiratory issues in surrounding populations. Occupational health and safety risks are also pronounced, as workers must handle the highly heated fuel and are exposed to toxic vapors during equipment maintenance.	Dry powder fire extinguishers positioned every 15m; foam extinguishers at tank areas. Earthing cables connected before and during all transfer operations. No single-hull tank barges on Sundarbans-adjacent corridors. Spill response kit on board all fuel transport vessels. Any fuel spill reaching a water body: notify DoE, BIWTA, and PCMU within 12 hours. Full Fuel Handling and Storage Protocol in Annex B applies.
Diesel Spill, and Sundarbans Corridor Risk	Diesel storage without secondary containment creates spill risks that can cause soil and water contamination. Hydrocarbon spill into the Sundarbans-adjacent riverine corridor (Khulna, Bagerhat, Satkhira, Pirojpur districts) risks contamination of the world's largest mangrove ecosystem — a UNESCO World Heritage Site — with potentially irreversible consequences for biodiversity and local livelihoods.	Secondary containment bunding around all diesel storage: minimum 110% of largest tank volume; impermeable bund walls. Dry powder fire extinguishers positioned every 15m; foam extinguishers at tank areas. Earthing cables connected before and during all transfer operations. No single-hull tank barges on Sundarbans-adjacent corridors. Spill response kit on board all fuel transport vessels. Any fuel spill reaching a water body: notify DoE, BIWTA, and PCMU within 12 hours. Full Fuel Handling and Storage Protocol in Annex B applies.
OHS for Fuel Workers	Fuel handling workers face fire, explosion, and chemical exposure risks. Exposure to petroleum vapors causes respiratory and systemic health effects.	Required PPE: flame-resistant coveralls, chemical-resistant gloves, safety boots, goggles, face shield for transfer operations. Eyewash station and emergency shower at all fixed fuel depots. No worker alone at fuel storage sites. Maximum continuous shift for fuel handling: 8 hours. No fuel handling when fatigued.
ACTIVITY 2.6 — EMERGENCY SHELTER MATERIALS		
Material Quality and Structural Safety	Shelter materials that do not meet structural specifications may fail under cyclone wind loads, causing injury or death of occupants in cyclone-exposed coastal districts.	CGI sheets must meet BNBC minimum thickness specifications for the target area's cyclone risk level. Tarpaulins UV-resistant and waterproof. No asbestos-containing materials, lead-based paints, or other hazardous substances in any procured shelter materials. Incoming consignments inspected against specifications before acceptance.
SEA/SH and Gender Protection in Cyclone Shelters	Communal cyclone shelter settings create elevated SEA/SH and protection risks for women and girls, documented in Bangladesh and international humanitarian contexts. Absence of gender-separated, secure facilities in shelters accommodating displaced populations is a direct risk factor.	Gender-separated sleeping areas demarcated with opaque barriers; secure, lockable, well-lit sanitation for women and girls, accessible 24 hours. Female protection monitors present at all cyclone shelters accommodating displaced populations. SEA/SH complaint channel information displayed at all cyclone shelter entry points. Community protection committees (including female members) activated within 24 hours of shelter occupation.
No Land Acquisition; Inclusion	Shelter material activities risk inadvertent restriction of land access or displacement of occupants if siting is not carefully managed.	All distribution and storage on public land or with documented voluntary permission. Any apparent land access issue referred to PCMU immediately, cannot proceed without World Bank agreement. PWD and elderly accommodation adaptation materials included in kits where damage assessment identifies need. Homebound PWD and elderly receive home delivery.
ACTIVITY 2.7 — CLEANING, DEBRIS REMOVAL, AND MINOR REHABILITATION		
Hazardous Material in Debris Stream	Post-disaster debris in Bangladesh commonly contains asbestos cement sheeting from older buildings, creating	Visual inspection at all debris sites before removal commences to identify hazardous materials.

Issue	Risk / Potential Impact	Mitigation Measures
	acute inhalation risk if dry-broken or crushed. Chemically contaminated debris from damaged industrial sites, fuel storage, and pharmaceutical storage creates worker and community exposure risk.	Suspected asbestos: wet before removal, double-bag in labeled heavy-duty polythene, transport separately to specialist disposal site. No grinding, crushing, or dry sweeping. Potentially hazardous materials handled only by trained workers with appropriate PPE including face shields.
Worker OHS and Traffic Safety	Workers face physical injury risks, lacerations from sharp objects, falls, crush injuries, tetanus elevated in post-disaster settings with damaged infrastructure. Debris removal vehicles on congested roads create traffic safety risks for community pedestrians, especially children.	Mandatory PPE: hard hat, steel-toed boots, puncture-resistant gloves, dust mask (FFP2), high-visibility vest. First aid kit and supervisor with first aid training at every site with more than 10 workers. Tetanus vaccination for debris workers. Debris transport vehicles covered; road closures with flagging personnel; speed limit 30 km/h in residential areas; no debris removal near schools during school hours without traffic management.
Waste Disposal and Land Restoration	Illegal dumping of debris in roadsides, water bodies, or agricultural fields risks environmental contamination and community health impacts.	All non-hazardous debris transported to licensed municipal disposal facilities. No open burning; no dumping in water bodies or wetlands. Temporary debris staging areas cleared and restored to original condition within 48 hours of completion of removal operations.
ACTIVITY 2.8 — LIGHT EQUIPMENT RENTAL		
Equipment Safety and Carbon Monoxide Risk	Uncertified equipment failure risks worker and community injury. Generators operated in enclosed or semi-enclosed spaces create life-threatening carbon monoxide accumulation.	Pre-rental inspection checklist completed and retained before deployment. Only certified, roadworthy equipment accepted. All generators in enclosed or semi-enclosed spaces must have exhaust venting to outside. Carbon monoxide detectors installed where generator operation in partially enclosed spaces is unavoidable.
ACTIVITY 3.1 — EMERGENCY RESPONSE COORDINATION AND MANAGEMENT		
OHS and SEA/SH for Field-Deployed Staff	Government staff and consultants deployed in disaster-affected areas face personal safety risks from structural instability, contaminated water, and post-disaster security conditions. Field deployment in crisis contexts creates elevated SEA/SH risks for staff operating with reduced supervision.	Field deployment only after documented safety assessment. No solo field deployments in high-risk areas. Communication devices provided; check-in schedule established. All field-deployed staff briefed on SEA/SH policy and CoC before deployment. Female staff not deployed alone on overnight assignments without agreed safety protocols. SEA/SH incidents involving CERP-deployed staff reported through confidential channel within 24 hours.
Technical Assistance and Law Enforcement Exclusion	TA activities without ESF-consistent ToRs may create E&S impacts not covered by this ES Assessment and ESMP. Financing of law enforcement or security forces is prohibited but requires active exclusion at approval stage.	ToRs for all TA activities reviewed by PCMU E&S Specialist for ESF consistency before contracting. Law enforcement agencies, security forces, police, military: no financing under any Component 3 expenditure category. Security requirements referred to World Bank before engagement.

5.2 General Cross-Cutting Measures

Table 5.2: Cross-Cutting E&S Risks and Supplemental Mitigation Measures

Issue	Risk / Potential Impact	Supplemental Mitigation Measures
5.2.1 LABOR AND WORKING CONDITIONS — ALL ACTIVITIES		

Worker Categories and Minimum Standards	Contracted workers engaged without written contracts, below-minimum wages, without OHS measures, or without access to a grievance mechanism are a material ESS2 compliance risk across six implementing agencies with varying labor standards awareness.	Three worker categories: (i) direct workers; (ii) contracted workers; (iii) primary supply workers. Written contracts for all contracted workers. Minimum standards regardless of BLA coverage: minimum wage; no deduction for PPE; no child labor under 18 for hazardous work; worker grievance mechanism; Code of Conduct signed at engagement. A comprehensive LMP will be prepared as a standalone instrument, ready as per ESCP timeline.
5.2.2 COMMUNITY HEALTH AND SAFETY — ALL ACTIVITIES		
Traffic, Crowds, and Communicable Disease	CERP logistics convoys on congested roads and high-volume distribution events create traffic accident risks, crowd injury risks, and communicable disease transmission risks. Bangladesh's exceptional population density amplifies all three risk pathways.	Community notification before activities commence. Speed limit 30 km/h in residential areas. Flagging personnel at all logistics-related hazards. All distribution sites require crowd management plans. Handwashing facilities at all distribution points. Disease surveillance coordination with local health authority for activations in outbreak contexts.
5.2.3 BIODIVERSITY AND ECOLOGICALLY SENSITIVE AREAS — ACTIVITIES 2.1 AND 2.2		
Protected Area and Critical Habitat Risk	Distribution sites, depots, or routes established within or adjacent to protected areas, Ramsar sites, or critical habitats risk ecological damage that may be irreversible, particularly in the haor and Sundarbans contexts.	Exclusion zones — no CERP activity within: Ramsar site boundaries or 500m buffer (fertilizer); Sundarbans UNESCO WHS boundary or 100m buffer (fuel); any National Park, Wildlife Sanctuary, or ECA boundary. Biodiversity exclusion check in Annex D screening form mandatory for every activation site. Agricultural inputs must be certified BARI/BRRI varieties — no uncertified or potentially invasive seed varieties. Food commodity international procurement includes supplier self-declaration confirming no deforestation-origin sourcing.
5.2.4 SMALL ETHNIC COMMUNITIES — ACTIVATIONS AFFECTING CHT AND PLAINS SEC AREAS		
Cultural Exclusion and Rights	Small Ethnic Communities face documentation barriers excluding them from mainstream targeting systems, language barriers limiting access to information and GRM, and risk that distributed goods (food varieties, material types) are culturally inappropriate. Emergency activities could inadvertently restrict access to customary lands or sacred sites if not carefully managed.	Free, prior, and informed consultations in local languages through CHT Regional Council and Hill District Councils for CHT districts; recognized community leaders for plains SEC areas. Food distributions to account for indigenous dietary practices consultation to confirm acceptable food varieties. GRM accessible in local languages; SEC members informed of right to file complaints without reprisal. Emergency enrollment for SEC members using community-validated lists to address documentation barriers.
5.2.5 SOLID WASTE MANAGEMENT PLAN — ALL ACTIVITIES		
Packaging and Operational Waste	CERP activities generate significant quantities of packaging waste, spoiled goods, and operational materials. Improper disposal risks environmental contamination, vector breeding, and disease.	Waste minimization: minimum-packaging procurement specifications; returnable containers where practicable. Segregation: recyclable / non-recyclable general / hazardous waste receptacles at all distribution sites. Collection: all non-hazardous solid waste collected daily and transported to licensed municipal disposal facilities. No open burning (ECA 1995 prohibition); no dumping in water bodies, wetlands, or agricultural fields. Waste disposal log maintained by each Implementing Agency: date, material type, quantity, licensed collector name, destination facility. Submitted to PCMU monthly.

6. PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES

6.1 Pre-Activation Readiness Procedures

Before the first CERP activation, and before each subsequent activation, the following readiness steps to be completed:

Step 1 — E&S Staff Confirmation: PCMU confirms Environmental Specialist, Social Specialist (with gender expertise), positions are filled or accessible (ESCP Action A). Each Implementing Agency confirms its designated E&S focal point is in place and has completed CERP E&S orientation training.

Step 2 — Annual E&S Readiness Review: TWG conducts annual review covering: currency of this ES Assessment and ESMP; GRM operational status; Implementing Agency E&S focal point capacity; training completion status; lessons learned from prior activations.

Step 3 — Familiarization: All Implementing Agency staff with operational CERP responsibility must complete ES Assessment and ESMP orientation before deployment. New staff complete orientation within 30 days of appointment. PCMU E&S Specialist organizes and documents sessions.

Step 4 — Pre-Positioned Resources: Annex D screening forms, GRM intake forms, incident report forms, CoC templates, and PPE checklists printed and distributed to all Implementing Agency E&S focal points before activation.

6.2 At-Activation Screening

On preparation of the CRP, the PCMU E&S Specialist and the relevant Implementing Agency E&S focal point must complete the Annex D screening for each proposed Activity before that Activity commences.

Screening Outcome	Required Action
No sensitive area proximity; no exclusionary conditions; all Section 5 measures applicable	Activity CLEARED to proceed. Screening form filed.
Sensitive ecosystem proximity identified (Ramsar site, Sundarbans, protected area)	Relocate Activity site outside sensitive area. If relocation impossible, consult PCMU E&S Specialist before proceeding.
ESS7 relevance identified (Small Ethnic Communities in activation area)	PCMU updates SEP and this ES Assessment and ESMP with ESS7-compliant provisions before Activity commences, with World Bank prior written agreement.
Exclusionary condition identified (civil works, land acquisition, law enforcement)	Activity CANNOT PROCEED under CERP. Remove from CRP or modify to eliminate the exclusionary condition. World Bank notification required.

6.3 Monitoring During Implementation

Activity	Description	Frequency	Responsible
Delivery Point Monitoring	Site visits to ≥20% of active delivery points per activity per month to verify Section 5 mitigation measures. Findings on standard checklist submitted to PCMU within 5 working days.	Monthly during activation	IA E&S focal points
GRM Dashboard Review	Review of GRM MIS for complaint patterns, unresolved cases, GRM accessibility failures. Corrective measures within 10 working days of identification.	Monthly	PCMU Social Specialist
E&S Progress Report	Consolidated report covering screening status, delivery point monitoring findings, GRM performance, incident log, SEA/SH summary (non-identifiable), corrective actions.	Semi-annually during activation (within 15 days of period end)	PCMU

6.4 Incident Reporting and Response

Incident Type	Notification to World Bank	Required Response
General E&S incident (spill, community safety event, labor dispute, discrimination)	As per ESCP timeline (48 hours after knowing about the incident)	Investigate; Corrective Action Plan to World Bank within 10 days
SEA/SH allegation involving CERP-financed worker	Do	Immediate routing to PCMU Social Specialist; survivor-centered response per SEA/SH Action Plan; Corrective Action Plan within 10 days
Serious injury or fatality of worker or community member	Do	Operations suspended at affected site; independent root cause analysis; Corrective Action Plan
Environmental pollution incident (fuel spill to water body; fertilizer runoff into Ramsar site)	Do	Immediate containment; environmental assessment within 10 days; coordination with DoE
Exclusionary condition found in active CERP activity	Do	Activity suspended pending World Bank guidance

6.5 Changes to Activities During Activation

Changes to the CERP during activation, including additions of new activity types, new geographies, or changes to implementing arrangements to be assessed by the PCMU E&S Specialist before implementation. Changes affecting E&S risk, including expansion to new geographies, addition of activities not in Section 5, or changes potentially triggering currently not-relevant ESSs require prior World Bank written agreement and may require updates to this document, the ESCP, and the SEP. All changes are recorded in the Aide Memoire from supervision missions.

7. CONSULTATION AND DISCLOSURE

7.1 Preparation Phase Consultation and Disclosure

The Implementing Agency for CERP has prepared this ES Assessment and ESMP, the Environmental and Social Commitment Plan (ESCP), and the Stakeholder Engagement Plan (SEP) as part of CERP preparation under the WBG ESF. Institutional consultations were conducted with officials from the Finance Division, MoDMR, Ministry of Agriculture, Ministry of Food, MoHFW, MoPEMR, Ministry of Commerce, and the National Social Protection Agency. Consultations focused on CERP design, institutional architecture, E&S risk management arrangements, and activation procedures.

Given the contingent nature of the CERP, designed for activation in future, undefined emergency scenarios, community-level consultations with prospective beneficiaries will be conducted as per activation schedule. This is consistent with standard CERP preparation practice and with the ESS10 requirement for consultation proportionate to the nature of the project. A record of preparation-phase consultations is maintained in Annex 1 of the SEP.

The E&S instruments, this ES Assessment and ESMP, the ESCP, and the SEP were disclosed on the Ministry of Finance and World Bank external websites prior to appraisal in English and will remain publicly accessible throughout the project implementation period.

7.2 Activation Phase Engagement

Upon activation, the PCMU and Implementing Agencies will scale up stakeholder engagement in accordance with the SEP. The following minimum requirements apply to each activation:

Within 30 days: Public announcements through radio/TV broadcasts, SMS alerts, and Union Parishad notice boards informing affected communities of: the eligible emergency; CERP Activities to be implemented; eligibility criteria; how to access benefits; and GRM contacts.

Within 60 days: Dedicated outreach to vulnerable groups, women-only sessions, local language sessions for Small Ethnic Communities, accessible format sessions for PWD using CLOs and NGO partner networks.

Throughout activation: Component-specific engagement at all delivery points; GRM operational and monitored; CPP volunteer network for last-mile communication in coastal areas.

At activation completion (As per SEP timeline): Beneficiary perception survey; results shared with Implementing Agencies, development partners, and World Bank.

7.3 Information Disclosure

All updated versions of E&S instruments will be disclosed within 30 days of finalization on the Finance Division and World Bank websites. E&S Progress Reports will be disclosed on the World Bank external website as per the Access to Information Policy. Where fuel or fertilizer is sold to end users at subsidized prices, summary information on revenue disposition arrangements including ring-fenced sub-account balances and transparent accounting will be publicly disclosed on MoF and Implementing Agency websites, consistent with OPCS procurement guidance.

8. INSTITUTIONAL ARRANGEMENTS AND RESOURCES

8.1 Overall Architecture

The Bangladesh CERP operates through a three-tier governance architecture. The Finance Division, Ministry of Finance, serves as the PCMU with overall responsibility for coordination, fiduciary management, E&S compliance, monitoring, and World Bank communication. The Project Steering Committee (PSC), chaired by the Finance Secretary, provides high-level inter-ministerial oversight and approves each CRP. The Technical Working Group (TWG), chaired by the Additional Secretary of the Finance Division, supports operational readiness, maintains and updates the CERP Manual and this ES Assessment and ESMP, and conducts annual E&S readiness reviews. Implementing Agencies, line ministries and their designated SOEs implement Activities within their sectors and operate the Tier 1 GRM at delivery points.

8.2 E&S Roles and Responsibilities

Entity	E&S Responsibilities
PCMU E&S Specialist (Environmental)	Leads environmental compliance oversight; reviews Annex D screening forms for environmental parameters; monitors fertilizer buffer zone exclusion and fuel spill prevention; reviews ICWMP implementation; prepares environmental sections of semi-annual E&S Progress Reports.
PCMU E&S Specialist (Social)	Leads social compliance oversight; reviews Annex D for social parameters; monitors GRM MIS dashboard; leads beneficiary inclusion monitoring; assesses ESS7 applicability at each activation; manages CHT Regional Council liaison.
PCMU Gender/GBV Specialist (Social Specialist will adopt this role)	Manages all SEA/SH complaints; operates confidential SEA/SH pathway; maintains SEA/SH service provider mapping; delivers SEA/SH training; reports aggregate SEA/SH data to World Bank.
PCMU OHS Specialist (Environmental Specialist will adopt this role)	Leads OHS compliance oversight; reviews OHS plans for logistics and distribution; monitors PPE provision; conducts OHS training; investigates OHS incidents; maintains worker injury log.
TWG E&S Sub-Committee	Coordinates across IA E&S focal points; conducts annual E&S readiness review; recommends ES Assessment and ESMP updates.
MoDMR E&S Focal Point	E&S compliance for Activities 2.6, 2.7, and DDM food distribution. Operates Tier 1 GRM at DDM relief distribution points. Monthly E&S performance reports to PCMU.
MoA / BADC E&S Focal Point	E&S compliance for Activity 2.1. Implements Annex C Fertilizer Management Protocol. Monitors dealer distribution records for targeting compliance. Monthly reports to PCMU.
MoPEMR / BPC E&S Focal Point	E&S compliance for Activity 2.2. Implements Annex B Fuel Handling and Storage Protocol. Monitors BPC depot and delivery point safety. Monthly reports to PCMU.
MoHFW / DGHS E&S Focal Point	E&S compliance for Activity 2.4. Oversees ICWMP implementation at health facilities. Monitors cold chain integrity. Monthly reports to PCMU.
Ministry of Food / TCB E&S Focal Point	E&S compliance for Activity 2.3. Monitors food safety and storage quality. Monthly reports to PCMU.
MoSW / DSS E&S Focal Point	E&S compliance for Activity 1.1. Monitors Family Card targeting, horizontal expansion enrollment, and disbursement accessibility. Monthly reports to PCMU.

8.3 E&S Staffing Requirements

The PCMU will ensure the following are staffed or accessible at all times throughout project implementation: (i) Environmental Specialist — minimum 5 years' experience in E&S assessment and management, WBG ESF familiarity, Bangladesh environmental regulatory knowledge; (ii) Social

Specialist — minimum 5 years' experience in social development and risk management, WBG ESF familiarity, vulnerable group experience in Bangladesh; (iii) OHS Specialist (Environmental specialist will adopt this role) — minimum 5 years' experience in industrial or logistics OHS including chemical handling and waste management; (iv) Gender/GBV Specialist (Social Specialist will adopt this role) — minimum 5 years' experience in GBV prevention and response, SEA/SH risk management, and survivor-centered case management. During activation periods, each Implementing Agency will designate an E&S focal point communicated to PCMU.

8.4 Capacity Building and Training

The PCMU coordinates the CERP E&S capacity building program. Besides those mentioned in ESCP, other training components include: (i) CERP E&S Orientation (all IA E&S focal points) — one-day covering ES Assessment and ESMP structure, screening, GRM operation, incident reporting, and SEA/SH awareness; completed before first activation and refreshed annually. (ii) SEA/SH Awareness Training (all delivery-point staff and supervisors) — half-day covering Code of Conduct, confidential complaint pathway, and survivor-centered principles; delivered by PCMU Gender/GBV Specialist. (iii) Chemical Handling Safety (fertilizer and fuel workers) — half-day practical on PPE, storage, spill response, and emergency procedures. (iv) ICWMP Training (health facility and medical waste workers) — half-day on waste categories, segregation, safe sharps disposal, and needlestick injury response. All training documented with attendance registers; records submitted to PCMU.

8.5 Annual Readiness Review

The TWG conducts an annual CERP E&S readiness review covering: currency of this ES Assessment and ESMP, baseline conditions, positive list, national law, and mitigation measures; Implementing Agency E&S capacity, focal points in place and trained; GRM status, channels operational, publicized, and staffed; and lessons learned from any prior activation. Output is a short E&S readiness confirmation memo submitted to PSC and World Bank as part of the semi-annual report submission.

8.6 Monitoring and Reporting Summary

Monitoring Activity	Responsible	Frequency	Reporting Destination
Annex D Activity screening	PCMU E&S Specialist + IA E&S focal point	Before each Activity commences	World Bank (with first periodic E&S report)
Delivery point site visits ($\geq 20\%$ sample per Activity)	IA E&S focal points	Monthly during activation	PCMU within 5 working days
GRM MIS dashboard review	PCMU Social Specialist	Monthly	PCMU Project Director; World Bank (semi-annual)
SEA/SH case log review	PCMU Gender/GBV Specialist	Monthly (confidential)	World Bank (semi-annual, non-identifiable data)
E&S Progress Report (activation)	PCMU (consolidated from IA reports)	Semi-annual	World Bank within 15 days of reporting period end
E&S Progress Report (preparedness)	PCMU	Annual	World Bank within 15 days of reporting period end

Annual E&S Readiness Review	TWG E&S Sub-Committee; PCMU	Annual	PSC; World Bank
Beneficiary perception survey	PCMU / M&E firm	Per activation completion	World Bank; PSC; Implementing Agencies

8.7 Budget for E&S Management

Costs of implementing this ES Assessment and ESMP, E&S specialist salaries, IA focal point costs, training, monitoring visits, GRM operation, and reporting to be included in Component 3 (Emergency Response Coordination and Management). The PCMU ensures sufficient budget is allocated in each CRP for activation-phase E&S management costs. Preparedness-phase E&S management costs are covered under PCMU operational budgets.

ANNEX A: INFECTION CONTROL AND MEDICAL WASTE MANAGEMENT PLAN (ICWMP)

A.1 Purpose and Scope

This Annex A (Infection Control and Medical Waste Management Plan — ICWMP) constitutes the **medical and hazardous waste component** of the Bangladesh CERP Waste Management Plan (WMP), as required under ESCP Action 3.1. The CERP WMP covers the full spectrum of waste streams generated by CERP Activities across three instruments: this Annex A addresses infectious, pathological, sharps, pharmaceutical, and chemical waste arising from health-sector activations and any other CERP activity generating medical or hazardous waste; **Section 5.2.5** of the ES Assessment and ESMP body constitutes the **general and packaging solid waste component**, covering non-hazardous waste generated across all distribution and logistics activities; and **activity-specific waste measures** embedded in Section 5.1 address waste streams particular to individual positive list activities, including fertilizer spill waste (Activity 2.1), hydrocarbon waste (Activity 2.2), food waste and contaminated packaging (Activity 2.3), and debris waste (Activity 2.7). Together, these three instruments constitute the CERP WMP and satisfy the requirements of the Medical Waste (Management and Processing) Rules 2008, the Solid Waste Management Rules 2021, the Environment Conservation Act 1995 and ECR 2023, and the World Bank ESF ESS3. Implementing Agencies are required to apply the relevant component(s) of the WMP corresponding to their assigned Activities before commencing implementation.

A.2 Waste Categories, Segregation, and Color Coding

Waste Category	Examples	Container	Color Code
Infectious	Used PPE, bandages, swabs, waste from infectious patients	Leak-proof lined bin; double-bagged heavy-duty polythene	YELLOW
Pathological	Human tissues, body fluids, blood products	Leak-proof sealed container	YELLOW
Sharps	Needles, syringes, lancets, scalpels, broken glass	Rigid, puncture-resistant sealed sharps container	RED
Pharmaceutical	Expired/unused medicines, vaccines, cytotoxics, disinfectants	Sealed leak-proof container labeled 'Pharmaceutical Waste'	BLACK/BROWN
Chemical	Laboratory reagents, fixing solutions, heavy-metal batteries	Sealed chemical-resistant container labeled 'Chemical Waste'	BROWN
General (non-hazardous)	Packaging, cardboard, non-contaminated plastic	Standard covered bin with liner	GREEN/BLACK

Segregation rule: waste segregated at point of generation — never mixed after disposal in bins. Containers sealed and transferred to temporary storage when three-quarters full. No compaction of infectious or sharps waste at any stage.

A.3 Temporary Storage Requirements

Temporary medical waste storage must be: dedicated and clearly labeled area; impermeable floor with drainage sump; lockable; adequately ventilated; accessible to collection vehicles; not adjacent to food

storage, patient care areas, or water sources. Maximum storage duration: 48 hours for infectious/pathological waste; 72 hours for sharps; one week for pharmaceutical/chemical waste.

A.4 Transport and Chain of Custody

Medical waste transported in sealed, labeled, leak-proof containers. Transport vehicles: dedicated to medical waste; clearly marked 'Medical Waste'; equipped with spill response materials; operated by trained drivers. A waste transfer manifest accompanies every shipment recording: generator facility, date, waste category, quantity, transporter name and vehicle registration, and destination facility.

A.5 Treatment and Disposal

Waste Category	Preferred Treatment	Acceptable Alternative
Infectious	High-temperature incineration ($\geq 850^{\circ}\text{C}$) at licensed facility	Provisions of Medical Waste Management Rules 2008 to be followed.
Sharps	High-temperature incineration	Provisions of Medical Waste Management Rules 2008 to be followed.
Pharmaceutical	High-temperature incineration at licensed facility	Provisions of Medical Waste Management Rules 2008 to be followed.
Pathological	High-temperature incineration	Provisions of Medical Waste Management Rules 2008 to be followed.
General (non-hazardous)	Municipal solid waste stream	

No medical waste may be disposed of in open areas, uncontrolled landfills, agricultural fields, or water bodies. No open burning (ECA 1995 prohibition).

A.6 OHS for Medical Waste Workers

Before deployment: hepatitis B vaccination (mandatory); hepatitis A vaccination (recommended); training on waste segregation, PPE use, and emergency response.

Required PPE: heavy-duty rubber gloves; rubber boots; impermeable apron; N95 or equivalent dust mask; safety goggles for chemical waste handling.

NEEDLESTICK INJURY PROTOCOL

(1) Remove gloves immediately. (2) Wash wound with soap and running water 5 minutes — do not squeeze. (3) Apply antiseptic. (4) Report immediately to supervisor and facility health officer. (5) Receive post-exposure prophylaxis (PEP) within 2 hours if HIV risk. (6) Complete incident report; submit to PCMU within 24 hours. PEP must be pre-positioned at all health facilities activated under CERP before distribution begins.

A.7 Spill Response

Infectious material spill: (1) Isolate area; don full PPE including face shield; (2) Apply granular chlorine or 10% chlorine solution; wait 10 minutes; (3) Scoop into yellow waste bag using disposable tools; (4) Wipe area with fresh chlorine solution; (5) Dispose of cleanup materials as infectious waste; (6) Report to PCMU within 24 hours.

A.8 Record-Keeping

Monthly waste register: quantity generated (kg) by category; storage duration; transport manifest references; treatment/disposal facility name; any incidents. Submitted to PCMU with monthly E&S performance report.

ANNEX B: FUEL HANDLING AND STORAGE PROTOCOL

B.1 Purpose and Scope

This Protocol applies to all fuel activities under Activity 2.2: LPG for household cooking; diesel for hospital backup power, cold chain, and water pumping; HFO for public-sector power generation. It operationalizes the Petroleum Act 1934, Petroleum Rules 1937, and Inflammable Substances Act 1952 with supplemental ESF measures. All BPC depot managers, fuel distribution supervisors, transport operators, and handling workers must be briefed on this Protocol before CERP-related fuel operations commence.

B.2 Depot and Temporary Storage Safety Requirements

Safety Element	Requirement
Licensing	All BPC depots and temporary fuel storage sites must hold valid Petroleum Act 1934 licenses. New temporary storage sites require DoE notification before commissioning.
Secondary Containment	Bunded containment around all diesel and HFO storage: bund capacity $\geq 110\%$ of largest tank volume; impermeable walls (concrete or compacted clay); drainage valve normally closed.
Fire Suppression	Portable dry powder extinguishers (minimum 9 kg) every 15 meters; foam extinguisher at tank areas; fire bucket and sand at entry points. Water must NOT be used on petroleum fires.
Earthing and Bonding	All metal tanks and pipe systems earthed. Earthing cables connected before and during all fuel transfer operations. No operations during lightning storms.
Exclusion Zones	No smoking or naked flame within 10m of diesel/HFO storage; 15m for LPG. No-smoking signs in Bengali and pictorial format. Electrical fittings within exclusion zone must be flame-proof rated.
Separation Distances	Minimum: 20m from residential structures; 30m from schools, health facilities, places of worship; 30m from surface water bodies; 50m from Ramsar site boundaries.

B.3 LPG-Specific Requirements

LPG cylinders must: have current safety inspection sticker (maximum 5-year interval); be inspected for corrosion, dents, valve damage, and gas smell before acceptance; be stored upright in ventilated areas away from ignition sources. Damaged, corroded, or leaking cylinders quarantined and returned to supplier. Leak testing at distribution points: soapy water to valve and connector joints — bubbling indicates leak. Never use flame testing. Community recipients receive Bengali-language safety instruction card at point of receipt covering: cylinder storage, connection, leak testing, emergency shut-off, and emergency contact number.

B.4 Road and River Transport

Road transport: vehicle holds valid Road Transport Act 2018 registration and fitness; equipped with minimum two 9kg dry powder extinguishers, wheel chocks, earthing cable, absorbent spill kit, and 'Flammable' hazard placard; driver holds commercial license with dangerous goods endorsement. No fuel transport at night on rural roads with damaged surfaces.

River transport: double-hull or tank-in-tank vessels only (single-hull prohibited); valid BIWTA fitness certificate; spill response equipment on board; no transport in structurally damaged vessels; compliance with Inland Shipping Ordinance 1976 loading limits.

SUNDARBANS CORRIDOR — ENHANCED REQUIREMENTS

For fuel transport along southwestern river corridors adjacent to the Sundarbans periphery (Khulna, Bagerhat, Satkhira, Pirojpur districts): no single-hull tank barges; vessel operators carry spill response kits (absorbent booms, pads, dispersants); no fuel transfer operations at night; mandatory vessel fitness check before loading; pre-notification to BIWTA. Any hydrocarbon spill reaching water: notify DoE and PCMU within 12 hours; spill response as soon as practicable.

B.5 Spill Prevention and Response

Prevention: secondary containment at all fixed storage; absorbent mats under all transfer connections; maximum 95% fill level for all tanks. Response: (1) Stop spill source immediately; (2) Eliminate ignition sources; (3) Don PPE; (4) Contain with absorbent booms or earth berm; (5) Absorb with granular absorbent — not sawdust; (6) Collect absorbed material in sealed labeled containers for licensed disposal; (7) Report: spill reaching water body → notify DoE and PCMU within 12 hours; depot spill → notify BPC management within 2 hours.

B.6 Worker PPE and OHS

Required PPE: chemical-resistant gloves; safety boots; chemical-resistant apron; safety goggles; fire-resistant coveralls for transfer operations. Eyewash station and emergency shower at all fixed fuel depots. First aid kit at all fuel handling sites. Maximum continuous shift for fuel handling: 8 hours.

B.7 Record-Keeping

Per-transaction records: date; delivery point; fuel type; quantity; name of receiving facility or household; vehicle/vessel registration. Monthly summary to PCMU.

ANNEX C: FERTILIZER MANAGEMENT PROTOCOL

C.1 Purpose and Scope

This Protocol applies to all fertilizer activities under Activity 2.1: urea, diammonium phosphate (DAP), and muriate of potash (MOP). It operationalizes the Fertilizer Management Act 2006 with supplemental ESF measures, addressing haor ecosystem protection and safe handling of chemical fertilizers. All BADC depot managers, dealer supervisors, and fertilizer handling workers must be briefed on this Protocol before CERP-related fertilizer operations commence.

C.2 Procurement Specifications

All fertilizers procured under CERP must: be sourced from DDA/BADC-approved manufacturers or G2G suppliers; meet BSTI or equivalent international quality specifications; be supplied in intact, factory-sealed bags bearing manufacturer name, product type, nutrient analysis, batch number, and date of manufacture; arrive with batch quality certificates. Damaged, open, or resealed packaging must be rejected. All incoming consignments inspected before acceptance by BADC depot manager and PCMU-designated quality checker.

C.3 Storage Requirements by Fertilizer Type

Element	Urea	DAP	MOP
Storage condition	Covered, dry, humidity-controlled (<60% RH); sealed bags	Covered, dry, cool; ventilated	Covered, dry; relatively humidity-tolerant
Segregation	Store separately — urea + DAP contact generates ammonia gas	Store separately from urea and oxidizers	Can store near DAP if physically separated
Max stacking height	2.0m (bagged)	2.0m (bagged)	2.0m (bagged)
Co-storage exclusions	No fuels, oxidizers, food, pesticides, animal feed in same bay	No urea, fuels, oxidizing agents	No fuels, oxidizing agents

C.4 Transport Requirements

Fertilizer bags must be: stacked on raised platforms (not in contact with vessel floor or bilge water) for river transport; covered with waterproof tarpaulins secured against wind and wave movement; not overloaded beyond vehicle/vessel capacity. No co-transport with food for human consumption, animal feed, pesticides, or fuel. Spill response kit (broom, shovel, sealed collection bags) on all transport vehicles and vessels.

C.5 Environmental Buffer Zone Exclusion Criteria

Sensitive Area	Exclusion Distance for Storage or Distribution Points
Ramsar-designated wetlands (Tanguar Haor, Hakaluki Haor, and all listed sites)	No storage or distribution within boundary or within 500m of boundary
Permanent rivers, canals, and water bodies	No storage or distribution within 50m of bank
Sundarbans World Heritage Site buffer zone	No fertilizer operations within 1km of boundary

National parks, wildlife sanctuaries, Ecologically Critical Areas	No fertilizer operations within boundary or 200m
Drinking water sources (tube wells, ring wells)	No fertilizer storage within 30m

C.6 Agricultural Application Guidance

The following guidance must be provided to all farmer beneficiaries at distribution points, in Bengali and verbally for low-literacy farmers:

Fertilizer	Recommended Rate (Staple Crops)	Application Timing	Key Precautions
Urea	120–150 kg/ha per season (rice); split 2–3 applications	10–15 days after transplanting; then tillering and panicle initiation	Do not apply before heavy rain; do not apply within 50m of permanent water bodies
DAP	75–100 kg/ha per season	Basal dose before or at transplanting	Mix into soil; do not leave exposed on surface
MOP	50–75 kg/ha per season	Basal dose or split with urea top-dressing	Avoid on highly saline soils in coastal areas

C.7 Worker Health and Safety

Required PPE: FFP2 dust-filter respirator; chemical-resistant gloves; safety boots; dust-protective goggles. No smoking within 10m of urea storage. Workers with respiratory conditions must not be assigned to fertilizer handling without medical clearance. Workers wash hands and face thoroughly before eating, drinking, or leaving the depot. Eyewash station at all fertilizer depots.

C.8 Spill Response

Land spill: (1) Do not wash into drains or water bodies; (2) Sweep or shovel dry material into sealed collection bags; (3) Return recoverable material to storage; (4) Dispose of contaminated soil in lined containment. Water body spill: (1) Contain spread if possible; (2) Notify DoE and PCMU within 12 hours; (3) Monitor for fish kills; (4) Coordinate with local fisheries authority if Ramsar site or fish habitat affected.

C.9 Record-Keeping and Anti-Diversion Controls

Per-transaction distribution records: farmer name, NID/Krishok Card number, village/union/upazila, crop type, fertilizer type, quantity, recipient signature. Monthly summary records to PCMU. Post-distribution spot checks — minimum 10% sample within 30 days — confirm delivery to registered farmer and staple crop use. Confirmed diversion reported to BADC management for disciplinary and recovery action.

ANNEX D: ACTIVITY SCREENING TEMPLATE AND METHODOLOGY

D.1 Screening Methodology

Purpose: To confirm, before any CERP Activity commences, that: (i) the Activity falls within the positive list; (ii) no exclusionary condition is present; (iii) site-specific E&S risks are identified and manageable through the mitigation measures in Section 5; and (iv) the appropriate Implementing Agency E&S focal point is operational.

When to use: For every Activity proposed in a CRP, before that Activity commences. Completed forms filed in PCMU CERP record and submitted to World Bank with the first semi-annual E&S Progress Report for each activation.

How to use: Answer all questions based on best available information. Any 'YES' to an exclusionary condition (Part 3) means the Activity cannot proceed in that form. Any 'YES' to a sensitive area trigger (Part 4) requires escalation to PCMU E&S Specialist before proceeding. If uncertain, apply the precautionary principle.

D.2 Activity Screening Form

BANGLADESH CERP — ACTIVITY SCREENING FORM (Annex D — ES Assessment and ESMP, P517116)

Activation reference number	
Date of screening	
Screener name and title	
Implementing Agency	
Activity description	
Proposed location(s) — Division / District / Upazila / Union	
IA E&S Focal Point name and contact	

PART 1: Positive List Compliance

Question	Yes / No / Notes
Is the Activity included in the CERP positive list as defined in the CERP Manual and Section 3 of this ES Assessment and ESMP? (If No: Activity CANNOT proceed under CERP)	
Is the Activity limited to procurement, storage, distribution, or coordination within the existing physical footprint?	

If minor rehabilitation is proposed: is it within the existing footprint and necessary for implementation of another CERP Activity? (Mark N/A if no minor rehabilitation)	
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PART 2: Exclusionary Conditions — A 'YES' means Activity CANNOT PROCEED. Refer to PCMU.

Exclusionary Condition	Present? (Yes / No)
Does the Activity involve new civil works beyond minor rehabilitation within existing footprint?	
Does the Activity require land acquisition, restriction of land use, or displacement of occupants?	
Does the Activity involve procurement for law enforcement agencies, security forces, police, or military?	
Does the Activity involve chlorine, radioactive diagnostic equipment, or internationally banned substances?	
Does the Activity involve tobacco, alcohol, firearms, gambling, or child/forced labor enterprises?	

PART 3: Environmental Sensitivity Screening

Question	Yes / No → Required Action if Yes
Is any proposed depot, storage site, or distribution point within 500m of a Ramsar-designated wetland boundary?	If YES: Relocate outside 500m buffer. If impossible, consult PCMU E&S Specialist before proceeding.
Is any proposed site within the boundary of a National Park, Wildlife Sanctuary, or Ecologically Critical Area?	If YES: Relocate. Not eligible for CERP activity.
Is any proposed fuel transport route along the Sundarbans-adjacent corridor (Khulna, Bagerhat, Satkhira, Pirojpur districts)?	If YES: Apply Annex B Sundarbans corridor requirements. Pre-notify DoE and BIWTA.
Is any proposed fertilizer storage or distribution point within 50m of a permanent water body?	If YES: Relocate outside 50m buffer.
Is any proposed site within 30m of a drinking water source (tube well, ring well)?	If YES: Relocate outside 30m.
Will the Activity generate hazardous waste (medical, pharmaceutical, chemical, fuel-contaminated)?	If YES: Confirm ICWMP (Annex A) or Annex B/C procedures are in place before Activity commences.

PART 4: Social Risk Screening

Question	Yes / No → Required Action if Yes
Does the Activity area include Small Ethnic Communities (CHT districts or plains districts with identified SEC presence)?	If YES: Notify PCMU Social Specialist. Assess ESS7 applicability. If ESS7 triggered, update SEP and ES Assessment and ESMP before Activity commences. Engage CHT Regional Council for CHT districts.
Are female beneficiaries the primary or exclusive recipients of this Activity?	If YES: Confirm SEA/SH prevention measures from Section 5 are in place, including female

	distribution staff and SEA/SH complaint channel at delivery points.
Does the Activity involve mass gatherings at single distribution points (expected crowd >200 persons per session)?	If YES: Prepare distribution site crowd management plan before operations commence.
Does the Activity involve cash or valuable goods distribution in an area with known elite capture or targeting integrity risks?	If YES: Enhanced spot verification (minimum 20% sample). Confirm GRM is operational before distribution begins.

PART 5: Mitigation Measures Confirmation

Mitigation Requirement	Confirmed? (Yes / No / N/A)
Relevant Section 5 activity-specific measures reviewed by IA E&S Focal Point	
GRM Tier 1 constituted and operational at all delivery points for this Activity	
GRM information displayed in Bengali at all delivery/work sites	
All delivery-point staff have signed Code of Conduct	
Required PPE procured and available for workers before Activity commences	
For fertilizer: Annex C reviewed; buffer zone exclusion confirmed	
For fuel: Annex B reviewed; depot safety inspection completed	
For medicines: ICWMP (Annex A) reviewed; waste segregation materials in place	
For food: food safety management confirmed; quality testing completed	
Training of IA E&S focal point and delivery-point supervisors completed and documented	

PART 6: Screening Outcome — Tick one

<input type="checkbox"/>	Activity CLEARED — no exclusionary conditions, all mitigation measures confirmed, Activity may commence.
<input type="checkbox"/>	Activity CLEARED WITH CONDITIONS — specific additional measures required before Activity commences (specify in Part 7).
<input type="checkbox"/>	Activity REQUIRES ESCALATION — sensitive area proximity or ESS7 trigger identified; refer to PCMU E&S Specialist before proceeding.
<input type="checkbox"/>	Activity CANNOT PROCEED — exclusionary condition identified (specify in Part 7).

PART 7: Conditions, Exclusionary Conditions, and Additional Measures Required

Conditions or exclusionary conditions identified:
Additional measures required before commencement:

PART 8: Sign-Off

Role	Name and Signature	Date
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Implementing Agency E&S Focal Point		
PCMU E&S Specialist (review and clearance)		
PCMU Project Director (for Escalation/Cannot Proceed outcomes only)		

ANNEX E: INDIGENPOUS PEOPLE’S PLAN (IPP)

E.1 Purpose and Scope

This Indigenous Peoples Plan (IPP) is prepared consistent with ESS7 of the World Bank Environmental and Social Framework and the ESCP Action commitment. It establishes the framework governing how CERP Activities will be planned and implemented whenever activations affect areas where Small Ethnic Communities (SECs) meeting the criteria of ESS7 are present. Given the CERP's contingent design, activated only upon an eligible emergency with a geographic footprint defined at the time of each Crisis Response Plan (CRP) this IPP cannot be site-specific at preparation stage. It therefore constitutes a standing plan that is operationalized and adapted proportionately at each activation where SEC communities are identified in the affected area. It applies to all Components and Activities in the CERP positive list. The legal framework includes the CHT Accord 1997, CHT Regional Council Act 1998, Hill District Council Acts 1989, CHT Regulation 1900, and the World Bank ESF ESS7.

E.2 Identification of Small Ethnic Communities

Bangladesh hosts distinct SECs who maintain collective attachments to ancestral territories, customary governance institutions, and traditional livelihoods, and face economic, social, and political marginalization relative to the mainstream population. Two primary groups are relevant to CERP activations. First, the Chittagong Hill Tracts (CHT), comprising Rangamati, Khagrachhari, and Bandarban hill districts, is home to approximately 1.2–1.5 million members of twelve or more ethnic groups including Chakma, Marma, Tripura, Tanchangya, Bawm, Mro, Pangkhua, Khyang, and Chak, among others. The CHT carries a complex legal and political context governed under the CHT Accord 1997, with the CHT Regional Council and three Hill District Councils as recognized governance bodies. Flash floods and landslides are recurring hazards in the CHT, making these communities credible beneficiaries of CERP activations. Second, plain-land SEC communities, including Garo, Santal, Khasi, Manipuri, Oraon, Rajbongshi, and others, are concentrated in Sylhet, Rajshahi, and Mymensingh divisions and face similar compound vulnerabilities from geographic marginalization, limited documentation, and restricted access to government services.

E.3 Potential Risks and Impacts

Key risks to SECs under CERP activations include: systematic exclusion from beneficiary targeting registries due to absence of national identity documentation, particularly among tenant and sharecropper farmers in remote CHT areas; distribution of food commodities, agricultural inputs, or shelter materials culturally inappropriate or inconsistent with indigenous dietary practices, farming systems, or housing customs; inaccessible GRM channels due to language barriers in Chakma, Marma, Garo, Santal, and other mother-tongue languages; inadequate outreach through mainstream communication channels that do not reach geographically remote communities; and inadvertent restriction of access to customary lands, sacred sites, or natural resources upon which SECs depend for livelihoods, if CERP logistics or distribution operations are not carefully sited.

E.4 Free, Prior, and Informed Consultation

When any CRP includes Activities in CHT districts or in areas with identified plain-land SEC presence, the PCMU Social Specialist will initiate culturally appropriate consultation processes before those Activities commence. For CHT districts, consultations may be conducted through the CHT Regional Council and the relevant Hill District Council. For plain-land SECs, engagement will be through recognized traditional

leaders and representative community organizations. Consultations will be conducted in local languages using trained interpreters, at times and in settings appropriate to community practices, and free from any manipulation, coercion, or incentives tied to CERP benefit access. The outcomes of consultations, including community-identified concerns, preferences, and agreed modifications to delivery arrangements, will be documented and reflected in the CRP and reported to the World Bank.

E.5 Inclusion and Benefit-Sharing Measures

Beneficiary enrollment in SEC areas will use community-validated lists developed with Union Parishad and traditional governance body endorsement, as an alternative to mainstream registry systems that systematically exclude undocumented SEC members. Food commodity distributions will account for indigenous dietary practices, acceptable food varieties confirmed through consultation before procurement for that activation. Agricultural input distributions will account for traditional farming systems and seed varieties. Information materials will be translated into relevant local languages and communicated verbally through community liaison person where literacy is limited. All distribution points serving SEC communities will have designated SEC-language GRM intake support, and no distribution arrangement will restrict access to customary lands or sacred sites.

E.6 Grievance Mechanism

SEC community members have full access to the CERP GRM described in the SEP, with local-language intake support and community liaison officers (CLOs) specifically trained in culturally appropriate complaint handling for SEC communities. The SEA/SH confidential channel is equally accessible to SEC community members. No SEC community member may be subjected to reprisal for raising a complaint.

E.7 Monitoring and Updates

ESS7 applicability is formally assessed at each CRP preparation using the Annex D screening form (Part 4). Where an activation materially affects SEC communities, this IPP will be updated proportionately, with World Bank prior agreement before affected Activities commence. Monitoring of SEC inclusion and engagement quality will be reported in semi-annual E&S Progress Reports to the World Bank. Post-activation beneficiary perception surveys will include disaggregated data on SEC beneficiary access and satisfaction.