

Terms of Reference (ToR)
for
Appointment of Consulting Firm for Environmental and Social Impacts Assessment for Solar
Feasibility Study at Jamalpur Char Area.
(Package No. S-34)

BACKGROUND

Electricity plays a pivotal role for the socio-economic development of a country. Bangladesh has experienced booming economic growth, rapid urbanization, and increased industrialization. The Government of Bangladesh (GoB) has taken a diversified fuel-based power generation program to fulfill the vision and commitment of the government. To fulfill the GoB's vision and objectives of electrification, development of renewable energy (RE) resources will play a vital role. The government has taken appropriate measures for generating clean electricity from renewable energy sources. The Government has a target to generate 10% of the electricity from RE sources by 2030. To meet the target, the government has taken all efforts to promote generation of electricity from RE sources. Under a study conducted by The World Bank, a potential site at Jamalpur has been identified for a solar PV development, as a solar hub comprised of multiple solar photovoltaic parks (solar parks). The purpose of this feasibility study is to assess the economic and technical viability of the designated area in Jamalpur, covering the 20,000 acres.

To meet the vision target, the government has taken all out efforts to promote generation of electricity from RE sources. Under a study conducted by The World Bank, a potential site at Jamalpur has been identified for RE project. The purpose of this study is to assess the environmental and social impact when a solar power is constructed at the site.

The study will be carried out under Power Cell, Power Division, Ministry of Power, Energy, & Mineral Resources (the Client), and financed by the World Bank under the ongoing TA for Strengthening and Development of Sustainable Power Sector in Bangladesh Project. A consultant firm will be hired to carry out a social and environmental viability study covering seasonal variations and subsequent impacts.

PURPOSE OF THE ASSIGNMENT

The main objectives of this assignment is:

- a) Determine the environmental and social impact study for a renewable energy zone (REZ) at Jamalpur, Bangladesh;
- b) Provide advisory on adapting legal and commercial documentation for environmental clearance of the solar park;
- c) Prepare Rehabilitation Action Plan (RAP) for the affected persons.
- d) Study the previous reports and technical studies for assessing the land assessment (flood risk assessment, geotechnical and hydro morphology).

DURATION AND LOCATION OF THE SERVICES

The duration of this assignment will be 12 (twelve) months. The location of service will be Jamalpur, Bangladesh.

SCOPE OF SERVICES

Consulting firm will conduct detailed E&S screening following the World Bank ESF. Consulting firm will also ensure that adequate numbers of experts and team members (at least one environmental specialist and one social specialist) for carrying out E&S activities are in place. The Assessment will need to carry out considering World Bank ESF's ten standards and will also need to include review of all relevant national regulations and their applicability to the project. Scope of the works includes:

- **ESMF:** The Consultants will prepare an ESMF that will provide the overall approach and methodology on E&S Risk Management to be followed by the Implementing Agency. It will include screening procedures and guidelines on ESIA, RAP, SEP, LMP, ESMP preparation, specific to the requirements of the Project. As part of preparation of ESMF, required field visits and baseline data collection will need to be ensured including stakeholders consultations. Alternative analysis in terms of siting, technology, etc. will need to be carried out. As lesson learnt, the team will look on/assess another existing Solar Project to understand its E&S risks and impacts and their management practices. The assessment would cover suggesting environmental measures in design stage and the E&S team will need to work in coordination with the design/engineering team. The assessment will also need to provide calculation on the GHG reduction for the project. The ESMF will include a climate vulnerability and risk assessment of the project area, particularly considering the char land context, exposure to river erosion, seasonal flooding, and other extreme weather events. Recommendations for climate resilience measures and integration of climate adaptation options into project design will be provided. All the E&S impacts and risks related to activities would be assessed based on which the mitigation measures will need to be suggested. The E&S management plan is suggested to cover management of e-waste including development of an e-waste management plan. Moreover, a proper mechanism/management system will need to be defined for Solar panels for end-of-life stage. As the implementation of the project will be in FI mode, detailed guidelines and procedures for the FIs will be also included with the ESMF.

- **RPF and RAP:** All the project activities will be conducted on a potential site. Project may anticipate land acquisition and displacement. However, there might be presence of government land which may be used and there might be presence of not-titled households. The Consultant will, thus, prepare a RPF for the Project. The Consultants will assess the quantum of land requirement for the Project, ownership of the land and provide appropriate measures for dealing with land related impacts and determine the required instruments to be prepared consistent with ESS5 provisions. The RPF will detail the overall approaches and methodologies for land taking under the Project, following the WB ESF requirements. In case lands that have been identified are lands small ethnic communities meeting ESS7 criteria or tied to SECs cultural heritage, ESS 7 requires “free, prior and informed consent” (FPIC), however obtaining FPIC is an absolute last resort after the project has exhausted all options for avoiding impacts in SECs to the extent that FPIC has to be obtained. The Consultants will carry out an assessment of the risks and related disruptions on livelihood of the Project Affected People (PAPs) and communities in the impact zones and, based on the assessment, prepare guidance for eventual livelihood restoration plans (LRP) that will need to be developed.

- The Consultant will explore the applicability of ESS 5 as per the following and assess impacts in scenarios, (as applicable):
 - Land rights or land use rights acquired or restricted through expropriation or other compulsory procedures in accordance with national law;
 - Restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights. This may include situations where legally designated protected areas, forests, biodiversity areas, or buffer zones are established in connection with the project;
 - Relocation of people without formal, traditional, or recognizable usage rights, who are occupying or utilizing land prior to a project-specific cut-off date;
 - Displacement of people as a result of project impacts that render their land unusable or inaccessible;
 - Restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest

- products, fresh water, medicinal plants, hunting and gathering grounds, and grazing and cropping areas;
 - Land rights or claims to land or resources relinquished by individuals or communities without full payment of compensation; and
 - Land acquisition or land use restrictions occurring prior to the project, but which were undertaken or initiated in anticipation of, or in preparation for, the project.
- **RAP:** Consultants will prepare a RAP for sites that are eventually identified. For the preparation of the RAP, the Consultant will carry out census of PAPs, including informal occupants, squatters etc. who are expected to be affected by the Project and in compliance with ESS5. All affected structures and PAPs location will be geo-tagged. The preparation of the RAP will involve extensive consultations with the PAPs and the feedback from these consultations will be incorporated in the design of both documents. The Consultants will also set up a grievance mechanism (GM) to resolve cases arising from Project-related land acquisition and involuntary resettlement. The RAP will detail the related laws, rules, and policies of GoB pertaining to land acquisition, compensation, and involuntary resettlement. The Consultants will carry out a gap-analysis and set down the necessary gap filling measures to comply with the Bank's ESS5. The RAP will ensure Identification of (a)the project activities that give rise to displacement, explaining why the selected land must be acquired for use within the timeframe of the project;(b)the zone of impact of such components or activities;(c)the scope and scale of land acquisition and impacts on structures and other fixed assets;(d)any project-imposed restrictions on use of, or access to, land or natural resources;(e)alternatives considered to avoid or minimize displacement and why those were rejected; and (f) the mechanisms established to minimize displacement, to the extent possible, during project implementation.

Tentative contents of the RAP are given below:

- Description of the project
- Potential impacts
- Objectives
- Census survey and baseline socio-economic studies
- Legal framework
- Institutional framework
- Eligibility
- Valuation of and compensation for losses
- Community participation
- Implementation schedule
- Costs and budget
- Grievance redress mechanism
- Monitoring and evaluation
- Arrangements for adaptive management

Stakeholder Engagement Plan (SEP)

The consultant will prepare a SEP following the guidelines of ESS10 of World Bank ESF. The Consultant will identify vulnerable and disadvantaged groups and propose modalities to effectively engage with stakeholders throughout the project cycle.

The SEP will include a detailed plan of activities for engaging the stakeholders and elaborate a Grievance Mechanism (GM) to receive and address potential cases of grievances from the stakeholders as well as to receive any relevant feedback. The Consultant will gather feedback from the stakeholders on the design and composition of the GM. Given the potential high reputational risk of the Project for WB, the continued engagement with stakeholders throughout the Project life, receipt of feedback and meaningful consultations will play a key role in managing the Project risks. The SEP will include the Project's Communication

Strategy, which will detail information sharing and dissemination with different categories of the stakeholders and that helps close the loop on stakeholders' feedback.

The SEP will be proportional to the scale and complexity of the project and its associated risks and impacts, and prepared in close coordination with IAs, following approach: a) Stakeholder mapping and initial consultations: identify key stakeholders, classified into (i) project-affected; (ii) other interested parties and (iii) vulnerable and disadvantaged groups (i.e., those who, because of their circumstances, may be disadvantaged or vulnerable, and due to their characteristics, may be more likely to be adversely affected by the Project impacts or more limited than others in their ability to take advantage of the Project's benefits) and hold initial consultations. b) Prepare a preliminary SEP based on initial consultations: Based on stakeholder feedback from the initial consultations, develop a draft SEP with detailed description of activities, roles and responsibilities, timeframe, and budget. c) Hold additional consultations on the preliminary SEP and feedback documentation for key stakeholders and stakeholder groups.

The Consultant will also assess whether the IA have existing Grievance Redress Mechanisms (GRMs), lessons, and whether they can be adapted for the Project, especially to receive complaints related to labor and sexual exploitation and abuse and sexual harassment (SEA/SH). Assess and provide institutional implementation and monitoring arrangement including project-specific grievance redress mechanisms (GRM) along with necessary budgetary provisions to effectively manage E&S risks; ascertain whether institutional GRM exists and how it can be adapted for the project and equipped to process SEA/SH related complaints; map existing GBV service providers.

LMP: The Consultants will prepare a draft LMPs for the Project following the ESS2 and national laws for Labor and Working Conditions. The Consultants will assess the potential risks with use of labor in the Project activities in accordance with ESS2 provisions related to Covid-19, hazardous working conditions, child labor and forced labor, migrant or seasonal workers, discrimination against women, vulnerable groups, labor influx, occupational health and safety, possible accidents and emergencies including cases of SEA/SH, among others. The assessment will include the quantum of labor required including outside labor and propose appropriate mitigation measures.

The assessment will identify project workers (direct workers¹, contracted workers², primary supply workers³, community workers⁴) and will develop a standalone LMP for the Project. The LMPs will set out the detailed procedures in which project workers will be managed, in accordance with the requirements of national law and this ESS2.

While carrying out the assessment of the risks and impacts and management measures related to ESS2, the consultant shall refer to the World Bank Group General Environmental Health and Safety Guidelines (EHSGs) and Industry Sector Guidelines for Construction Material Extraction. This draft LMPs will lay down the processes and procedures for managing labor and labor-related dimensions of the project, employment terms, payment of wages and remuneration, and methods for grievance redress for labor-related issues. The draft LMP will outline the related laws, rules, and policies of the Government of Bangladesh on labor rights and labor management and provide a gap analysis with the relevant gap-filling measures between the provisions of the Bank under ESS 2 and those of the government of Bangladesh. The draft LMP will also analyze the different categories of labor/workers (e.g.) to be engaged by the project and provide the detailed terms and conditions for employing them following the ESS2. The draft LMP will detail the worker's GRM. The Consultant will explore the mechanisms to ensure the GRM is responsive to SEA/SH cases. In conducting this assignment, the Consultant is expected to:

¹ People employed or engaged directly by the Borrower to work specifically in relation to the project.

² People employed or engaged through third parties to perform work related to core functions of the project.

³ People employed or engaged by the Borrower's primary suppliers. Primary suppliers are those suppliers who, on an ongoing basis, provide directly to the project goods or materials essential for the core functions of the project.

⁴ People employed or engaged in providing community labor

- Propose ways in which members of the local community, women and vulnerable groups can be included in project-related activities and ensure non-discrimination.
- Outline and assess key labor-related risks including forced labor, child labor, SEA/SH, setting up of labor camps and risks related to the spread of communicable diseases (i.e., COVID-19);
- Ensure provisions related to Covid-19 (PPE, sanitization arrangements, temperature checking, PCR/antigen testing) are appropriately detailed in LMP;
- Identify the functions of individuals within the project responsible for labor-related aspects such as OHS, SEA/SH, Community Health & Safety and management of project workers, labor camp management, worker conditions of contract, etc.
- Carry out consultations with the stakeholders.
- Design and propose a stand-alone GRM for labor-related grievances. The potential SEA/SH service providers will be identified by the Consultant who could be linked in running the SEA/SH GRM.
- Identify potential service providers to link with when setting up a SEA/SH-responsive GRM; and

Bangla Translation of the Executive Summary of the ESF package

The consultant will prepare the Bangla translation of the executive summary of all the documents in this list of tasks and assist the client/IA in ensuring proper disclosure on the website and other appropriate locations of the IA.

Capacity Building

The consultant shall provide a comprehensive capacity building program in their proposal for a total of 5 (five) days to enrich experience of different stakeholders from the power sector (Power Division, Power Cell, SREDA, BPDB, PGCB etc). Additionally, a workshop shall be organized by the consultant to provide in-depth review of the various results, deliverables and outputs produced during the assignment.

Workshops/ meetings will be organized by the consultant to provide in-depth review of the various results, deliverables, outputs produced and transfer of knowledge during the assignment.

TEAM COMPOSITION AND QUALIFICATION REQUIREMENTS FOR THE KEY EXPERTS

Consulting services are solicited from Environmental consulting firms experienced in providing consultancy services in RE power plant of minimum capacity of 50 MW. Consulting firms should have experience to perform the consultancy services, experience of similar assignments, experience in similar conditions, firm's capability, and availability of appropriate skills among key staff, availability of resources, relevant transactional experience. The Proposer is expected to engage the following categories of key experts for the Project and CVs shall be submitted accordingly:

- **Team Leader** (Position-1 International, 12 person months): The Team Leader must have at least a Master's degree in Engineering or Masters in Environmental Science from any recognized university with minimum of 20 years of experience including minimum 5 years of experience in the field of environment.
- **Environmental Expert/ Deputy Team Leader** (Position-1 National, 12 person months): The Environmental Expert must have at least a Master's degree in Environmental Science or studies from any recognized university. The expert must have a minimum of 15 years of experience in the field of environment studies in power sector and minimum 5 years in renewable sector and able to carry out detailed environmental study of solar sites.
- **Legal & Institutional Expert** (Position-1 National, 3 person months): The Legal Expert must have a Master's degree in Law from a recognized institute of higher learning. The expert must have a strong background and experience in Bangladesh law and legislation related to land management,

environment and conservation and natural resource management. The expert must have a minimum of 10 years of relevant and practical experience in power sector. The expert must preferably have experience in drafting commercial documents.

- **Social Specialist** (Position-1 International, 6 person months): The Social Specialist will have at least a Master’s Degree in Social Science from any recognized university and at least 10 years of relevant work experience in social assessment and land acquisition/resettlement issues in infrastructure projects. Good knowledge of international standards, including development partner agencies safeguard policies, is also required.
- **Rehabilitation Action Plan Specialist** (Position-1 National, 3 person months): The Rehabilitation Action Plan Specialist will have at least a Master’s Degree in Social Science from any recognized university and at least 10 years of relevant work experience in social assessment and land acquisition/resettlement issues in infrastructure projects. Good knowledge of international standards, including development partner agencies safeguard policies, is also required.
- **Climate Resilience Specialist** (Position-1 International/ National, 2 person months): The Climate Resilience Specialist must have at least a Master’s degree in Climate Science, Disaster Risk Management, or a closely related field from a recognized university. The expert must have a minimum of 10 years of professional experience in environmental, climate and disaster assessments, including at least 5 years in infrastructure or renewable energy projects. Experience working with projects financed by international development agencies and familiarity with the World Bank's climate co-benefits approach will be considered an added advantage.
- **E-Waste / End-of-Life Solar Specialist** (Position–1 National, 2 person months): The specialist must have at least a Master’s degree in Environmental Engineering, Renewable Energy Technology, Waste Management, or a closely related discipline from a recognized university. The expert must have a minimum of 5 years of relevant experience, including at least 3 years in managing e-waste or hazardous waste in energy or infrastructure projects.

Timeline And Milestones for Report Submission

Milestone	Period from signing the contract
Inception Report	One month
Interim Report	four months
Draft EIA/ESIA, DIA, RAP, LMP report	eight months
Stakeholder Meeting on Draft Reports	nine months
Draft Final Report	ten months incorporating comment from stakeholders
Stakeholder Meeting on Draft Final Report	Eleven months
Submission of Final Report	Twelve months incorporating comment from stakeholders

10(Ten) copies of each report has to be submitted along with a soft copy. The soft copies version of reports must be provided along with each submission

Person to receive the Report: Director General, Power Cell

The consulting firm will report to Director General, Power Cell for billing and contract management. For work execution purposes, the consulting firm will work with the associated utility/departments of Jamalpur area.

CLIENT’S INPUT AND COUNTERPART PERSONNEL

Facilitation and Reporting: Consultant will work in close association with Power Cell and other relevant utilities. The utility companies will ensure access to the available pertinent information to this assignment. A coordination mechanism will be set up to review progress, provide guidance and advice. The designated personnel of the entities will interact with the Consultants and provide data, arrange discussions and assistance as required. The Consultant will work under the guidance of Director General, Power Cell and relevant Utility Company.

Logistics Support: Office accommodation, site visits, secretarial service will have to be arranged by the consulting firm at their own costs.

Data Access: The relevant stakeholders will provide the inputs, project data and reports during the study period. However, the consultant will have to collect relevant project data and reports from the respective departments as required to successfully complete the study.