**APPENDIX - C**

**DETAILED ESIA REQUIREMENTS**

The Consultant shall undertake ESIAs and prepare ESIA Reports as defined in the Scoping Report and ESMPF issued alongside the FSR[[1]](#footnote-1). The topics to be included in the ESIA Reports are detailed below.

1. **Description of the Project**
2. The Consultant is responsible for gathering additional information on Project activities and clearly identifying Project’s development, with a focus on potentially high-risk aspects. The E&S Consultant shall summarize the activities expected to occur during each Project phase, including planning, pre-construction/construction (including necessary site preparation), operations, and, to the extent possible, decommissioning, including Associated Facilities (AF), in accordance with the requirements outlined in paragraph 35 of AIIB ESP.
3. A detailed description of the existing site topography shall be provided, and the land required for the Project shall be clearly demarcated and presented using graphical or areal maps. The Project Description shall include a site layout and provide specific details about the functions and operations.
4. The Consultant shall also include the following details in the Project Description:
   * + Information on facilities and activities by third parties that could impact or be impacted by the Project or which effects could accumulate to those from the Project (e.g., synergies or antagonistic effects). Administrative setup, land use and planned developments within the vicinity of the Project location, detailed maps / photos showing the Project site/footprint and Project Area of Influence (AoI);
     + Summary of activities likely to take place by Project phase, including future Project development planned. This includes specifying any classified as either AF or Project components for which third parties shall have responsibility for assessment and management of E&S risks and impacts;
     + Labor and Workforce: Total labor requirement during all Project phases, a summary of workforce management, accommodation strategy, and human resources policies and procedures. Workforce requirement of various categories such as skilled, semi-skilled, unskilled workers, technicians, engineers, managers and other professionals for both construction and operational phases shall be discussed here. Also, details on contractual staff and employed staff shall be presented with men and women ratio here. Targets for local hiring, hiring of women, or on the basis of vulnerabilities/impacts/social categories shall also be proposed. For the operations phase, the number of workers required for technical operations, module cleaning, security, housekeeping, and other miscellaneous jobs shall also be presented here, along with targets, as described above, as agreed and committed;
     + Power: Power requirement for construction and operation phase from local power sources (village power lines) of the project to be assessed here. Also, use of DG sets along with any other identified auxiliary power source shall be identified and discussed here;
     + Accurate plans showing the layout of Project infrastructure, structures, offices, roads, waste management and disposal location, fuel storage areas, accommodation camps (if any), workshops, power generation equipment, water supply and storage, and drainage and sewage treatment as applicable;
     + Water quantity and quality required both for construction and operations phase of the project. In addition, potential source of water for construction and operation phase, along with potential alternatives considered, if any. Requirement of water treatment to make water usable, if any proposed, shall be included in this section of the report.
     + Details of expected emissions and discharges (to air, water, and soil) including greenhouse gases (GHG), noise and waste, as well as any anticipated measures for reduction of the same that are incorporated within the Project design. Provide information on expected types and amounts of waste to be generated during each Project phase and potential disposal options and associated quality requirements. Particularly, the E&S Consultant shall determine the presence of treatment, storage, and disposal facilities (TSDFs) in the province/region for handling hazardous waste (if any);
     + Details of location of additional land take required, if any, for storage of materials during the construction phase; and
     + Updated schedule of execution of main project development phases.
5. **Deliverable**: The Consultant shall deliver the Project Description. This document shall be included in the ESIA Report as a standalone section.
6. **Project Alternatives**
7. The Consultant shall compare reasonable alternatives in terms of their technical, economic as well as social, environmental, and safety impacts, especially in relation to use of resources and Project footprint. The alternatives assessment can be qualitative or semi-quantitative, including assigning relevant “weights” to various E&S characteristics, based on sensitivity to the Project context.
8. The E&S Consultant shall provide justification(s) as to why the proposed Project design is considered the optimal solution, considering the following:
   * + Project site selection.
     + Project technology.
     + Project layout and design.
     + Project interface with Associated Facilities.
     + Project and contextual E&S risks; and
     + No Project alternative (what happens if the Project is not developed).
9. **Deliverable**: The Consultant shall deliver the Analysis of Alternatives report. This document shall be included in the ESIA Report as a standalone section.
10. **Project Area of Influence (AoI)**
11. The Consultant shall provide a description and justification of the E&S Project Area of Influence (AoI) in accordance with the requirements specified in paragraph 8 of AIIB ESS 1. This shall involve clearly indicating the Project's footprint and the extent of direct and indirect impacts within the Project AoI, which may have broader social implications. The determination of the Project AoI shall be based on the following:
    * + Project activities and facilities that are directly owned, operated, or managed (for example by contractors) and are components of the Project.
      + Impacts from unplanned but predictable developments caused by the Project that may occur later or at a different location; and
      + Indirect Project impacts on biodiversity or ecosystems services upon which affected communities’ livelihoods are dependent.
12. Additionally, AF, as per AIIB requirements, shall be considered when defining the AoI. The Project AoI shall be presented using graphical or areal maps, utilizing Geographic Information System (GIS) or similar mapping technologies. E&S Consultant to provide clear rationale for the AoI.
13. Using this above definition of AoI, this may include but not limited to the following:
    * + Physical footprint of the Project, transmission lines, and substation.
      + Area nearby the Project that may be used as a resting/stopover point for migrating birds; and
      + Area within the zone of theoretical visibility of the solar panels.
14. **Deliverable:** The Consultant shall deliver the Project Area of Influence report. This document shall be included into the ESIA Report as a standalone section.
15. **Review of Country’s Legal Framework and AIIB Environmental and Social Framework (ESF)**
16. The Consultant shall define the legal framework under which the ESIA is being completed, including applicable laws and regulations, AIIB ESS, WBG EHS, norms and requirements set forth at the international, national, regional and/or local levels. The most stringent requirement to prevail. The review shall comprise the following:
    * + Detailed review of the environment, health, safety and social regulatory framework that governs the development of the Project from concept to operations.
      + Detailed review of laws, regulations, national guidelines, standards, international treaties and conventions of which Cambodia is a signatory to, and which is relevant to the Project directly or indirectly. A clear requirement from the Project shall be enumerated for each relevant piece of legislation.
      + Detailed review of the relevant country regulations, environmental permit process and relevant institutional set-up (entities involved in environmental management in country); and
      + Detailed review of the AIIB ESS E&S requirements as identified in scoping process including the ones that would be triggered for the Project and necessary requirements that shall be taken care of during Project development.
17. **Deliverable:** The Consultant shall deliver the Legal and Regulatory Framework report. This document shall be included in the ESIA Report as a standalone section.
18. **Methodology**
19. The Consultant shall incorporate in the ESIA a comprehensive description of the methodology employed for collecting additional baseline data and conducting updated impact assessments. The methodology section shall provide a clear explanation of how the Project is expected to impact each of the identified E&S parameters. It shall include details on the methods utilized to assess these impacts, such as model studies, empirical approaches, referencing existing similar situations, or drawing from previous studies.
20. Furthermore, the methodology section shall specify the tools used for both the baseline data collection and impact assessment. When applicable, these tools shall be provided as an annex to the ESIA, ensuring transparency and enabling further examination of the methodology's application.

#### Baseline Methodology

1. The Consultant is expected to collect and analyze relevant data for the aspects detailed in the *E&S Baseline Collection*section of this ToR. The following shall be considered by the Consultant:
   * + Secondary data shall be used where relevant (e.g., trustworthy statistical records, census records, government reports, non-governmental organization (NGO) publications, academic studies and articles, topographic maps, aerial photos, satellite imagery, international databases, E&S Studies carried out for the Project, GIS data etc.); and
     + Primary data collection through site visit. A field planning exercise shall be undertaken to facilitate collection of primary data. This shall include scheduling of activities, logistics planning, and development of field tools.
2. Data collection shall be undertaken to enable an assessment that is appropriate to the nature and scale of the Project and is able to meet requirements of both prevailing laws and regulations within country and the AIIB ESS. The spatial and temporal extent of the baseline surveys shall be determined through professional judgment and good practice. Data shall be gender disaggregated, relevant to inform decisions about design, construction, operation, and mitigation measures. This section shall indicate the accuracy, reliability, and data sources, and shows that the necessary investigations to gather, review and compile all relevant data, and/or to consult with stakeholders have been undertaken by the E&S Consultant.

#### Impact Assessment Methodology

1. The Consultant is expected to incorporate the following:
   * + Impacts characterization (negative, positive, mixed).
     + Impacts nature and duration (direct, secondary, indirect, cumulative; short-term, long term, permanent, reversible).
     + Impact significance/magnitude (negligible, minor, moderate, major).
     + Impacts likelihood (unlikely, possible, likely).
     + Spatial scale (national, regional, local).
     + Measures to mitigate (adverse) or enhance (positive) impacts.
     + Significance/magnitude of residual impacts (negligible, minor, moderate, major) and
     + Where relevant receptor sensitivity/vulnerability (negligible, low, medium, high).
2. The mitigation hierarchy, avoidance or minimization, mitigation, and as last resort compensation, with clear indication of the impact before mitigation and the residual impact after mitigation, shall be captured in the ESIA. Impact assessment shall also consider the views and concerns of Project Affected People (PAP) and other stakeholders (where relevant).
3. **Deliverable**: The Consultant shall deliver the Methodology report. This document shall be included in the ESIA Report as a standalone section.
4. **Environmental and Socioeconomic Baseline**
5. E&S conditions shall be described for the Project AoI, with clear indication of the Project footprint. The collection of data shall cover the range of physical, biological/ecological, socioeconomic, and cultural heritage aspects that are likely to be affected (directly or indirectly) by the Project pre-construction, construction (including any relocation of utilities, resettlement, trees, and any earth work activity), and operation and maintenance (O&M) phases (decommissioning when possible and applicable).
6. Baseline information shall be supported with figures, site visit photos and maps.
7. The Consultant is expected to (a) collect and analyze all the baseline information needed to assess the potential Project impact and then to be used as benchmark for monitoring purposes, and (b) present in the baseline section of the ESIA the existing E&S condition and related context in an objective manner and with clear reference to the primary and/or validated secondary data that substantiate the description.
8. Baseline data shall be compared against AIIB ESS requirements and relevant GIIP including WBG EHS Guidelines.
9. The proposed list of items/aspects to be addressed in the baseline section of the ESIA, presented in Table 1 is not to be considered exhaustive and the E&S Consultant is expected to use its professional judgment to complete this list following the International Standards and Guidelines (section D).
10. This task involves collecting necessary environmental and socioeconomic information from secondary and primary sources to establish an environmental and socioeconomic baseline for the project area. Any changes anticipated in the baseline conditions before the project commencement shall also be identified and determined. The current and proposed development activities within the project area but not directly connected to the project shall also be reviewed. The trends in the key environmental and social parameters of the area shall also be analyzed. Data shall be relevant to decisions about project location, design, and operation. For this purpose, secondary data shall be collected while primary data shall also be needed, through techniques such as instrument monitoring and reconnaissance surveys.
11. The baseline analysis shall cover the following:
    * + Physical environment (baseline survey need conducted twice, both for wet and dry season): land use, topography, geology and soils, climate and weather, seismic, water resources, water quality, floods, ambient air quality, noise, and vehicular traffic on the existing roads.

**Table 1. Baseline Data – Environmental**

| **Topic** | **Indicative Scope** |
| --- | --- |
| Landscape and Visual | Based on the site visit, identify general landscape and topography conditions within the area of influence. In addition, based on site assessment and consultations with relevant entities, identify any key visual receptors which could be impacted (touristic sites, villages, key archaeological/cultural sites, etc.). |
| Climate Change | Capture data considered necessary to conduct a Climate Risk E&S Assessment per the steps outlined in the *Climate Risk E&S Assessment below*. |
| Flooding | Gather available data on historical flood events in the Project area. This includes records of past floods, flood levels, flood durations, and flood frequency. Obtain data from local authorities, meteorological departments, hydrological agencies, and any existing flood monitoring systems. Engage with local communities, experts, and stakeholders to gain insights into past flood events, flood impacts, and local flood risk perception. |
| Biodiversity | Review the habitat types contained within the Project area and classify the habitat as either natural, critical, or modified (as per IFC Performance Standards (PS) 6, Guidance Note (GN) paragraph 39). Review the data available from online data sources (such as the Integrated Biodiversity Assessment Tool) and from interviews/consultation to screen for any critical habitat values that may be present within an appropriate area of assessment for the Project. Reference shall be made to IFC PS6 GN paragraph 66. The E&S Consultant is to provide a clear statement as to any selected biodiversity values that are identified.  Map the extent and condition of Natural and Modified Habitats, as defined in IFC PS6. Consultation with local experts to assess potential for the presence of sensitive species identified from IBAT screening to occur on-site.  Through survey results and consultation with relevant local and international NGOs if relevant, assess potential impacts to sensitive/protected areas identified from IBAT and other screening, including potential impacts from the Project’s Associated Facilities.  Provide a list of potential selected biodiversity values associated with the project according to the principles of vulnerability and irreplaceability per IFC PS 6 Guidance Note 6.  Confirm Habitat designation based on selected biodiversity values, and if Critical Habitat is confirmed a Critical Habitat Assessment as per IFC PS6 requirements shall be conducted – but only with prior approval of MOWRAM and AIIB. |
| Air Quality | Comprehensive air quality monitoring baseline shall be undertaken, also related to any sensitive off-site receptors which may be affected by the Project. The E&S Consultant is expected to provide a classification of site environment (e.g., degraded, or non-degraded airshed), establish present background air pollutants, applicable ambient air quality limits for the area, local dimensioning practice, and assessment of future expected air quality based on available contextual information. This shall consider any implications for the Project design. |
| Noise & Vibration | Noise monitoring baseline shall be undertaken, also related to any sensitive off-site receptors which may be affected by the Project. The E&S Consultant is expected to provide a classification of the site environment, establish present background noise level, and identify applicable noise limits and location of boundary to a level sufficient for the development of mitigation measures envisaged and to assess the future expected levels of noise, and, if applicable vibration, during operations. |
| Water | Assess the nature of and characterize surface water and groundwater in within the Project AoI, with particular attention to the Project footprint. As possible assess current water sourcing & permitting requirements as well as quality. This shall include the assessment of the sustainability of groundwater and/or surface resources, and aspects such as ecological flow requirements in any surface water resources the Project might exploit. If groundwater resources are potentially limited and/or there is an indication of potential impacts on other users, including ecological aspects, a groundwater model shall be developed. The ESIA report shall have the drainage maps to capture and analyze the drainage pattern in the area. A Digital Elevation Model (DEM) map shall also be included to identify the flow of water in the Project area. The ESIA study shall also cover surface water resources in the area and through water quality assessment, identify if there is any contamination of water. |
| Geology, soil, and land cover | The geological and geotechnical/ hydrogeological features shall be described in the baseline report and to cover Geo-hazards and analysis of land cover, soil types, quality, and distribution over the interested area. |
| Waste (Hazardous and non-hazardous) generation and management | Assess the city sewerage treatment system capacity. Provide details on solid and waste management including storage, treatment and disposal with details of the EPC Contractors’ practices (if applicable); availability of companies with required permits if engaged in the treatment and disposal of waste.  Determine expected types and amounts of waste stream. Map local disposal options and associated quality requirements, including the permitting status of local landfills and their compliance with international standards and guidelines. Assess local recycling capacity for wastes generated by the Project (including the potential for waste to energy), and any needs, longer term, for building local capacity. |

* + - Socioeconomic baseline: Demographical profile of the region shall be developed with data available from secondary sources and sample survey in the project’s footprint. The sample survey shall also present household level data on income, education, ethnicity, marital status, occupation, expenditures, and access to basic facilities. The income of the commercial units shall also be captured in the survey. In addition, the socioeconomic baseline data, gender-segregated where applicable, shall be collected through a combination of secondary literature review and appropriate primary data collection techniques such as surveys and interviews, on the following parameters/aspects, as appropriate and relevant:
  + population and demography,
  + vulnerable groups and poverty profile,
  + local government institutions; community organizations and patterns of social interaction, such as social networks and support systems, and service delivery related complaints resolution;
    - Gender: A gender survey shall also be carried out to determine the gender issues and trends in the project area. The baseline shall include but not limited to the project affected persons (PAPs). Gender baseline data shall include (but may not be limited to) indicators of women’s mobility; gender differences in constraints faced in accessing facilities; gender equality; gender-based violence (GBV); gender responsive infrastructure facility; and gender differences in preferences/concerns.
    - Cultural Resources: a list of cultural heritage, archaeology, objects and places of special interest in the project area (e.g., World Heritage Sites/Buildings listed by UNESCO, masjid and monuments; and others) shall be developed. Any cultural resources in the immediate vicinity of the project area (e.g., road corridor, construction camps, borrow areas, any other project-related facility) shall be described in greater detail.

1. **Deliverable**: The Consultant shall deliver the E&S Baseline Collection report. This document shall be included into the ESIA Report as a standalone section.
2. **Environmental and Social Impact Assessment:**
3. This task builds upon the initial scoping and analyses carried out during Scoping. Develop a methodology/grading system for impacts to record severity in a matrix (long vs. short-term, reversible vs. irreversible etc.); This task aims to assess all potential environmental risks and impacts, both positive and adverse, associated with the Project. This includes direct and indirect impacts on the physical and biological environment, recognizing they are closely linked with social and economic conditions. These include risks in both the short-term and the long-term resulting from pre-construction, construction and operation phases of the Project. Tools such as the Leopold Matrix may be used to determine the interaction of the project activities with various environmental and social aspects. Based on its nature and likelihood of occurrence, significance of each potential impact shall be assessed as severe, moderate, mild, or negligible. Qualitative approaches and where necessary/appropriate, quantitative techniques shall be used to assess the potential impacts, and significant positive and negative impacts, direct and indirect impacts, and short-term and long-term impacts shall be distinguished, particularly those adverse impacts which are likely to be unavoidable or irreversible. The assessment shall cover generic as well as project- and site-specific impacts. In addition, sensitive receptors shall be identified in the project area with respect to environment, biodiversity, and socioeconomic aspects. Direct and indirect impacts on biodiversity shall also be assessed. The ecological impact assessment shall particularly specify disturbance to the protected area and wildlife due to the construction and operation and provide recommendations for synergizing the positive effects and minimizing short-term and long-term adverse impacts and possible integration with socio-economic development.
4. Scope and Coverage. Refer to AIIB ESP. The Consultant is required to address the identified environmental and social risks and impacts of the Project in accordance with Sections D through L of the AIIB ESP. Section A of ESS 1 sets out general requirements for assessing and managing environmental and social risks under the Project; Sections B, C and D of ESS 1 set out more detailed requirements for, respectively: environmental aspects, social aspects, and working conditions and community health and safety aspects of such assessment and management.
5. Environmental Coverage: The following environmental aspects are to be assessed:
   * + Biodiversity - habitat loss, degradation and fragmentation, invasive species, overexploitation, hydrological changes, nutrient loading, pollution and incidental take, as well as projected climate change impacts.
     + Impacts on Critical habitats, Natural habitats, Protected areas
     + Sustainability of Land and Water Use
     + Pollution Prevention
     + Resource Efficiency
     + Climate Change and Greenhouse Gases.
     + Occupational Health and Safety. Includes Traffic Road and Safety
6. Social Coverage: Undertake a broad assessment of potential social and economic risks and impacts, both positive and adverse, associated with the Project, not limited to Involuntary Resettlement or impacts on Indigenous Peoples. This includes direct and indirect impacts at the community and household level, recognizing they are closely linked with physical and biological conditions. To address the potential land acquisition and resettlement issues, a Resettlement Planning Framework (RPF) for Project Areas and Resettlement Plan (for Project Areas) shall be prepared, as an annexure B to the ESIA.
   * + The following areas are to be covered:
   * Vulnerable Groups (economic, geography, social, occupation, disability) and discrimination
   * Gender and social inclusion
   * Ethnic minority group and indigenous community
   * Availability of social safety nets
   * Land and Natural Resource Access
   * Loss of Access to Assets or Resources or Restrictions on Land Use
   * Cultural Resource
   * Safe Working Conditions and Community Health and Safety
   * Child Labor and Forced Labor
   * Labor Management Relationships in Private Sector Projects
   * Use of Security Personnel
     + The social impact assessment shall include, but not be limited to, the following topics:
   * Analyze and address issues of land acquisition, including land title, nature of displacements (physical, commercial), total numbers of Project Affected People (census survey), any other impacts due to land acquisition, such as livelihood restoration etc. Provide gender disaggregated data on PAPs.
   * Analyze and address social development issues, and ensure accomplishing the outcomes in terms of inclusion, cohesion, equity, safety, security, and accountability.
   * Assess impacts on communities, e.g., temporary access restrictions, disturbance to traffic and other public utilities due to construction. Impact on both residential and commercial units (linked to item #a) shall be studied to understand the short- and medium-term disruptions due to construction.
   * Analyze labor health and safety as well as impacts of labor influx on the community.
   * Analyze risks on community health and safety during construction and operation phases.
   * Analyze the risk of human trafficking and STIs/HIV/AIDS associated with the Project
   * Identify stakeholders at different levels, mapping key expectations, analyze impacts, issues and concerns as related to each stakeholder subgroups thereof.
   * Identify potentially adverse gender-specific risks and impacts of the Project and develop mitigation measures to reduce these. Use gender/sex disaggregated data and analysis and consider enhancing the design of the Project to promote equality of opportunity and women’s socioeconomic empowerment, particularly with respect to provision of services and employment.
   * Identify risks to and impacts on vulnerable groups and develop measures for their mitigation.
   * Develop measures for the management of interactions between the communities and workers.
     + In addition, close coordination shall be maintained with the engineering design team to assess the climate risks and to analyze climate adaptation/ mitigation measures incorporated in the project design. For the former, an internationally recognized methodology shall be applied to estimate the Gross Emissions of Greenhouse Gases (GHGs) as a result of the Project and to predict the net GHG emissions compared to baseline emissions.
     + Subsequently, avoidance, mitigation, and/or compensatory measures, in this order of preference, shall be identified to address each potential impact, in the context of the Project. The proposed mitigation measures shall be project- and site-specific, practical, and cost effective. After determining the mitigation measures, residual impacts (i.e., impacts after implementing the mitigation measures) shall also be identified and their significance assessed based upon their severity and likelihood of occurrence.
     + Issues related to Labor and Working Conditions: Provide guidance for use of a labor management system for Project workers, consistent with relevant national law, which provides for:
   * Clear and understandable terms of employment made available to Project workers in an accessible manner.
   * Timely payment for Project work and those working hours are in conformity with national regulations.
   * Employment on the basis of the principle of equal opportunity, fair treatment and non-discrimination.
   * Compliance with national law relating to workers’ organizations and collective bargaining.
   * An accessible, understandable, and transparent Grievance Redress Mechanism for raising Project workplace concerns that:
     1. Does not impede access to other judicial or administrative remedies that might be available under law or through existing arbitration or mediation procedures, or substitute for grievance mechanisms provided through workers unions or collective agreements.
     2. Involves an appropriate level of management and addresses concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned, without any retribution; and
     3. Allows for confidential complaints to be raised and addressed; and
   * A suitable system designed to inform Project workers of the grievance mechanism at the time of hiring and make it easily accessible to them.
7. **Rapid Cumulative Impacts Assessment**
8. Assess whether the project development may contribute to cumulative impacts.
9. The Consultant shall undertake an assessment of other existing or planned/permitted projects which along with the Project could have cumulative impacts on Valued Environmental and Social Components (VECs). This shall recognize that Cumulative Impacts are contextual and encompass a broad spectrum of impacts at different spatial and temporal scales. Then information shall be used in the development of the management plans to avoid and/or minimize these impacts to the greatest extent possible. A map shall be included which illustrates the proximity of these features to the Project and, as appropriate, the VECs.
10. **Stakeholder Engagement Plan (for Project Areas):**
11. The Consultant shall develop a Stakeholder Engagement Plan (“SEP”) as a standalone document in line with the AIIB’s requirements. The SEP shall recognize that stakeholder engagement is an ongoing process that involves stakeholder analysis & planning, disclosure and dissemination of information, consultation & participation, grievance mechanism and on-going reporting to affected communities. In line with the requirements of AIIB, the SEP shall be developed and scaled to the Project risks and impacts and be tailored to the characteristics and interests of the Affected Communities and key stakeholders.
12. The Consultant shall build the SEP based on the E&S assessment outcomes considering local settings. The SEP shall be developed to include the following:
    * + Identify all Project related direct and indirect, primary and secondary stakeholders influenced by the Project to include central governmental entities, local governmental entities, NGOs, local communities and CBOs; academic and research institutions; private sector companies; media organizations; and most important any vulnerable groups if applicable.
      + Evaluate Project related stakeholders to understand their priorities and relevance to the Project.
      + Define the Project’s approach to stakeholder engagement (post ESIA study, during construction and operations). Preference shall be given to identification of engagement mechanisms that are: (i) culturally appropriate, (ii) scaled to the project risks and impacts, (iii) tailored to the characteristics and interests of the stakeholder groups language preferences, and decision-making process, and (iv) capture the needs of vulnerable groups and gender considerations.
      + Identify the objective of undertaking such consultation activities for each stakeholder group.
      + Identify the phase of involvement of stakeholders. This shall include: (i) summary of stakeholder consultations and engagement undertaken as part of the ESIA (scoping process, baseline, impact assessment, mitigation, etc.) and (ii) future engagement post-ESIA phase to be implemented through the project duration to include four distinct phases – planning, construction, operation, and decommissioning and
      + A detailed grievance/project complaints mechanism that is responsive and facilitates establishing and facilitating the resolution of stakeholders’ concerns and grievances.
13. This SEP shall describe the process undertaken for disclosing Project information, consulting key stakeholders and, where appropriate, incorporating responses into Project design and mitigation. It shall also list all key issues raised to date, who raised them (unless anonymous/confidential), and responses provided, as well as the dates and times of meetings held, details of how meetings were advertised, methods of info dissemination etc. (e.g., radio, TV, newspaper adverts, public meetings, small meetings / focus groups, key informant discussions). It shall establish a Grievance Mechanism to record, evaluate, and address complaints or issues raised by stakeholders.
14. **Grievance Redress Mechanism (GRM)**
15. A Project level Grievance Redress Mechanism (GRM) shall be included in the ESMP. It shall be outlined with clear roles, timelines, procedures and responsibilities. It shall also describe the options available to PAPs for grievance redress regarding environmental, social and resettlement issues.
16. The ESMP shall indicate how the information of GRM would be disseminated and accessible clearly and comprehensible to the PAPs.
17. The GRM shall include provisions to protect complainants from retaliation and to remain anonymous, if requested. Reference shall be made to the Project-affected People’s Mechanism Policy of the AIIB. It is important to constitute field level GRCs (Grievance Redress Committees) which can be easily accessed by the community members.
18. **Deliverables**: The Consultant shall submit the SEP, along with the Grievance Mechanism in compliance with the applicable requirements. This document shall be a standalone document, as an annex to the ESIA Report.
19. **Preparing Detailed Environmental and Social Management Plan (for Project Areas):**

**Environmental and Social Management Plan (ESMP)**

1. The Consultant shall develop an Environmental and Social Management Plan (“ESMP”) as part of the ESIA. This is to identify for each impact the mitigation, monitoring and management measures to be taken during the various phases of the Project (construction, operations and maintenance) to avoid, reduce, mitigate, or compensate for adverse environmental, social, and health and safety impacts. This is to be provided in a consolidated table form (Table 2), with the measures required for pre-constructing, construction, and operation to be described. Measures shall be developed based on the mitigation hierarchy, commencing with avoiding risks/impacts, followed by minimizing them, and finally compensating/offsetting remaining impacts.

**Table 2 – Proposed Mitigation Measures**

| **Issue** | **Potential Environmental Impacts** | **Proposed Mitigation Measures** | **Responsible Institutions** | |
| --- | --- | --- | --- | --- |
| **Implementation** | **Supervision** |
| **Pre-Construction Stage** |  |  |  |  |
| Design of project facilities |  |  |  |  |
| Utility |  |  |  |  |
| Lack of environmental specifications |  |  |  |  |
| Tree cutting |  |  |  |  |
| **Construction Stage** | | | | |
| Air pollution |  |  |  |  |
| Noise pollution |  |  |  |  |
| Sewage Pollution/Sanitation Hazard |  |  |  |  |
| Drainage Congestion |  |  |  |  |
| Solid Waste Pollution |  |  |  |  |
| Landscape |  |  |  |  |
| Access Road/Traffic Congestion |  |  |  |  |
| Liquid/hazardous waste |  |  |  |  |
| Construction Camp Management |  |  |  |  |
| Worker Health and Safety |  |  |  |  |

1. For each identified impact, the Consultant shall establish:
   * + A set of mitigation measures that shall include feasible measures to prevent significant adverse impacts or reduce them to acceptable levels. Such measures shall involve technical requirements, guidelines or procedures and practices to be implemented during design, construction, and operation phases of the Project; and
     + A set of monitoring requirements that ensure that the identified mitigation measures are considered, implemented properly and are sufficient measures for protecting the environment and environment resources, local communities, and workers.
2. As part of the ESMP, the Consultant shall also identify the proposed management structure and roles and responsibilities, as applicable, that shall be followed for the project. This to capture Sponsor, EPC Contractors, and O&M contractor (if any).
3. An ESMP (Table 3) shall be prepared including the following:
   * + A summary of the anticipated significant adverse environmental impacts together with the mitigation measures for each anticipated significant/non-significant adverse environmental and social impact throughout the project cycle (i.e., Detailed design and planning phase, Preconstruction Phase – Site Preparation, Construction Phase, and Operation and Maintenance phase) and residual impact if any. Mitigation measures shall be specific as much as possible.
     + Monitoring plan including:
   * Parameters to be monitored.
   * Proposed locations of sampling points.
   * Methodology for monitoring.
   * Frequency of monitoring and
   * Responsible agency / agencies.
     + Availability of funds, expertise and facilities including budget/cost considerations.
     + Implementation arrangement including:
   * Implementation schedule of the impact mitigation plan showing phasing and coordination with overall project implementation.
   * Institutional framework, indicating who is responsible for carrying out the mitigation and monitoring; and
   * Capital and recurrent costs to implement mitigation and monitoring measures described above. Identify the availability and source of funds to implement the measures including for capacity development activities.

**Table 3. Environmental and Social Management Plan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Project Activity** | **Potential**  **Impacts** | **Proposed**  **Mitigation**  **Measures** | **Institutional**  **Responsibilities**  (Implementation  and Supervision) | **Estimated Quantities Required and Material Specifications Recommended** | **Cost**  **Estimates** | **Comments**  (e.g.,  secondary impacts**)** |
| **Detailed Design and Planning Phase** | | | | | | |
|  |  |  |  |  |  |  |
| **Site Preparation** | | | | | | |
|  |  |  |  |  |  |  |
| **Construction Phase** | | | | | | |
|  |  |  |  |  |  |  |
| **Operation and Maintenance Phase** | | | | | | |
|  |  |  |  |  |  |  |

1. The ESMP shall be prepared based on the impact assessment and collate all recommended mitigation measures and compliance conditions of different permits. The institutional mechanism shall also provide details on training and capacity building, internal and external reporting on E&S, budgetary allocation etc.
2. Subject to the status of project definition, the following management plans shall be developed, or their content outlined in detail to allow its full development by the responsible party (only indicative list provided). The management plans which may include but not limited to:
   * + Pollution Prevention and Control Plan;
     + Transportation Management Plan;
     + Air Quality Management Plan;
     + Water Conservation / Minimization Plan;
     + Wastewater Management Plan;
     + Hazardous Material Management Plan;
     + Waste Minimization and Resource Efficiency and Conservation Management Plan;
     + ESHS Training Management Plan;
     + Labor Influx Management Plan and Working Conditions (including Gender, GBV, and Harassment),
     + Local Recruitment and Training Plan;
     + Occupation Health and Safety Management Plan and procedures (includes management of climate risk);
     + Community Health and Safety Management Plan (includes management of Climate risk);
     + Mitigation measures for Impact on private and communal property including loss of access;
     + Security Risk Assessment and Management Plan;
     + Gender/Gender Based Violence (GBV) Assessment and Action Plan;
     + Biodiversity Management Plan (if applicable depending on the finding of the ESIA);
     + Emergency Preparedness and Management Program (includes management of Climate risk for safety of workers and community);
     + E&S Contractor Management Plan (including GBV); and
     + Cumulative Impact Assessment and Management Program,
     + Policy, legal and administrative framework, social related act
3. **Deliverable**: The Consultant shall develop the ESMP in compliance with the applicable requirements as part of the ESIA. This document shall be included into the ESIA Report as a standalone section.
4. **ESIA Standalone Non-Technical Summary (NTS)**
5. The E&S Consultant shall prepare a Non-Technical Summary (“NTS”) report that concisely presents meaningful information on the subproject, its E&S footprint and impacts, significant findings, and recommended actions in easily understandable (non-technical) language.
6. The section shall include a summary of the ESIA (Project description, baselines, impact analysis and mitigation measures for the environmental, social and health and safety negative and positive impacts) and a summary of the stakeholder engagement process. NTS is required in English and local language.
7. **Deliverable**: The Consultant shall develop the NTS. This document shall be a standalone document, as an annex to the ESIA Report.

1. Refer to ToR Part B Paragraph 10 item (iii) [↑](#footnote-ref-1)