

GOVERNMENT OF MEGHALAYA
OFFICE OF THE CHIEF ENGINEER (NH), P. W. D. (ROADS)
LOWER LACHUMIERE: MEGHALAYA, SHILLONG.

Email:cenhwbmitp@gmail.com

REQUEST FOR EXPRESSIONS OF INTEREST
(Consulting Services – Consultant Qualification Selection (CQS))

INDIA: MEGHALAYA INTEGRATED TRANSPORT PROJECT (MITP).

Project ID: P-168097

Assignment Title: Consultancy Services for conducting an Environmental and Social Impact Assessment (ESIA) of Urban Roads (Town roads) and Non-urban roads and Major/Minor bridges and preparation of Environmental and Social Management instruments under MITP (World Bank) initiative.

Reference No: IN-PWD-226217-CS-CQS

The Government of Meghalaya has applied for financing from the World Bank toward the cost of the Meghalaya Integrated Transport Project and intends to apply part of the proceeds for consulting services.

The consulting services (“the Services”) include

1. Conduct detail Environmental and Social Impact Assessment (ESIA) for road projects while conducting ESIA, the Consultant will coordinate with DPR Consultant to ensure integration of ESA findings in engineering feasibility studies. In addition the Consultant will prepare as necessary any Environmental and Social Management Plan (ESMP), Biodiversity Management Plan (BMP), Resettlement Policy Framework (RPF), Resettlement Action Plan (RAP), Tribal (Indigenous) Peoples Policy Framework (TPPF), Indigenous People Development Plan (IPDP), Labor Management Procedure and Stakeholder Engagement Plan (SEP) etc as appropriate for the activities corresponding to tranche 1 of this multiphase programmatic engagement as indicated in Table 1 (of indicative ToR).
2. Conduct the entire step a comprehensive Environmental and Social Screening.
3. Support the client in complying with requirements such as preparation of application and supplementary reports (survey and preparation) required as per local regulatory requirements for obtaining project’s clearances like forest /environmental/wildlife clearances, if applicable, and presentation before expert panel committees of MoEF & CC, Govt. of India.
4. Develop a coordination mechanism to ensure timely sharing/exchange of information and documents with Feasibility and DPR Consultant. The Consultant shall ensure DPR Consultant integrate recommendations on environmental and social mitigation measures in design, working drawings, developing specifications, estimates of quantity and ESMP budget; and linking quantity and management measures in bid document.
5. The Consultant shall ensure DPR Consultant integrate recommendations on environmental and social mitigation measures in design, working drawings, developing specifications, estimates of quantity and ESMP budget; and linking quantity and management measures in bid document.
6. The Consultant shall conduct consultations with identified stakeholders and project-affected parties/community from early project planning and design stages of the assignment.
7. The consultant shall develop the Plans which will provide according to a specific timeframe (a) a list of management plans, based on ESA/ESIA findings that borrower will develop and implement, (b) the appropriate plans and actions required for the project to meet ESSs requirements, (c) adaptive management process for changes in project scope and unforeseen circumstances, and (d) include targets and performance indicators for borrower’s monitoring (e) Conduct capacity building training on Bank’s new Environmental and Social Framework (ESF), Environmental and Social Management Plan, and aspects like slope stabilization and erosion control; efficient use of raw materials i.e. use of local materials, recycled aggregates; climate resilient measures; water conservation and management, GHG reduction, emergency.

8. Conduct capacity building training on Bank's new Environmental and Social Framework (ESF), Environmental and Social Management Plan, and aspects like slope stabilization and erosion control; efficient use of raw materials i.e. use of local materials, recycled aggregates; climate resilient measures; water conservation and management, GHG reduction, emergency preparedness etc. which are integral part of Bank's ESF policy.

The Meghalaya Public Works Department (R&B), Government of Meghalaya (PWD) now invites eligible consulting firms ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The short listing criteria are:

- The experience of preparation/review of EIA reports of road project involving road length not less than 180 Km in each project. For JV (as a lead member) qualifying length for lead member would be 120 Km (for each project) and for other partner it would be 80 Km of road work (for each project). Such project must have been completed within last 7 (seven) calendar years.
- The experience of preparation/review of Biodiversity Management Plan of road project involving road length not less than 180 Km in each project. For JV (as a lead member) qualifying length for lead member would be 150 Km (for each project) and for other partners it would be 100 Km of road work (for each project). Such project must have been completed within last 5 (five) calendar years.
- Turn-over of the existing firm of last 5 consecutive financial year, from the year of REOI. Annual turnover of any one of the last five financial years i.e. from 2015 -16 to 2019-20 updated @ 5% to the current financial year shall be more than Rs. 5 crores. In case of JV, the lead member shall have more than Rs. 4 crores of annual turnover (updated) of any one of the last five financial years. This threshold for each other member of JV shall be more than Rs. 3 crores.
- Qualifications and Experience of the key personnel of the consultancy firm as per TOR.
- Experience of working in hilly terrain shall be given preference.
- Experience in externally aided projects shall be given preference.

Following information shall be submitted by the consultant while submitting EOI.

Consultant's experience shall be given under three categories (a) Preparation/Review of EIA reports. (b) Preparation/Review of SIA reports. (c) Preparation/Review of Biodiversity Management Plan. In case of JV applicant, each member has to likewise give above information. Only those works which are done as prime consultant need to be reported.

Power of attorney (on stamp paper duly notarized) of the person submitting the Expression of Interest on behalf of the Applicant shall be attached. Joint Venture (JV) shall not have more than 2 members. One of the members should be a Lead Member.

The Consultant (including the individual members of any Joint Venture) shall submit only one Proposal, either in its own name or as part of a Joint Venture member in another Proposal, if a Consultant, including any Joint Venture member, submits or participates in more than one proposal, all such proposals shall be disqualified and rejected.

The Application and all related correspondence and documents should be written in the English language. Supporting documents and printed literature furnished by Applicant with the Application may be in any other language provided that they are accompanied with translations in the English language. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.

An undertaking for supply of true information

The TOR for the activity is also enclosed.

The employer intends to engage the services of a consultant for the aforementioned works.

The attention of interested Consultants is drawn to paragraph 3.17 of the World Bank's *Procurement Regulations for IPF Borrowers, July 2016- Revised November 2017 and August 2018* as amended from time to time [under *IBRD Loans and IDA Credits & Grants*] by the World Bank Borrowers, setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms in the form of a joint venture or a sub consultancy to enhance their qualifications.

A Consultant will be selected in accordance with the Consultant's Qualification's Based Selection (CQS) method set out in the Consultant Guidelines of the World Bank.

Further information can be obtained at the address below during office hours i.e., 11:00 am to 03:00 pm.

Expressions of interest must be delivered in a written form to the address below (by post/courier) on or before **21.05. 2021 at 3.00 PM**. If the office happens to be closed on the date of submission of EOI as specified, the EOI may be submitted on the next working day at the same time and venue.

Attn: B.P. Marak,
O/o The Chief Engineer PWD (Roads), Meghalaya Shillong.
Lower Lachumiere, Shillong-793001, Meghalaya.
Office Mobile No.: 8787375062
E-mail: cenhwbmitp@gmail.com

Meghalaya Integrated Transport Program (MITP)

Terms of Reference for ESIA

This TOR covers generic as well as specific aspects of conducting Environmental and Social Impact Assessment of subprojects envisaged as part of MITP initiative. Thus, all steps, generic as well as specific should be followed as per the given category of the subproject(s). The subprojects envisaged under MITP are but not limited to Roads (SH, District roads, Urban roads, Rural roads– with/ without bridges), Standalone Bridges, Ropeways, Footpaths, etc.

1. Scope of Work

In line with the requirements Central and State governments laws and regulation and that of the World Bank's applicable Operational Policies (as listed in Annex F of this TOR), Government of Meghalaya (GoM) wishes to engage a Consulting Firm(hereinafter referred to as "the Consultant") for the preparation of an Environmental and Social (E&S) Impact Assessment (ESIA) and preparation of management/mitigation instruments to address project's Environmental and Social (E&S) risks, impacts and opportunity that may occur during construction and operation of the proposed subprojects. *The proposed subprojects are part of Meghalaya Integrated Transport Program (MITP) for which the Environmental and Social Safeguard Management Framework (ESMF) has been prepared and disclosed at the websites of MIDFC¹ and the World Bank². It should also be noted that in specific to the rural roads the ESMF guidelines delineated under PMGSY RRP II (P165402) and subsequently revised for Additional Finance in 2018 to be followed.*

Some important points:

- The Consultant should support the client in complying with requirements for preparation of application and other supplementary reports (survey and preparation) as required for obtaining project's clearances like forest /environmental/wildlife clearances, if applicable, and presentation before expert panel committees of MoEF&CC, Govt. of India.
- Based on Central and State governments laws and regulation and that of the World Bank's applicable Operational Policies, different category of subprojects may require to undertake special and additional assessment activities. Same has been listed out under Section 2C. Consultant should undertake the given special and additional assessments as applicable. However, consultant may not restrict them to the identified and tentative list.
- Requirement of special and additional assessment may also change as per the environmental and social setting of a given subproject. Thus, consultant should apply scientific and expert judgement for adding and or skipping any element of assessment.
- All subprojects should undergo Screening process and during the screening process the Consultant should define the SoW for detailed assessment if required. Thus, as an outcome of the screening process of any given subproject should indicate the inclusion and or exclusion of special and additional assessment steps.
- If based on Screening process it is concluded that detailed assessment is not required, then the Screening Report should detail out the Environment and Social Management Plans, Health and Safety Plans including COVID 19 management plans, Stakeholder Engagement Plan, Public Disclosure, and Grievance Redressal Mechanism. Guidelines for the same have been provided in ESMF of MITP.

¹<https://rb.gy/suua5u>

²<https://rb.gy/gnzw7y>

The scope of work to be carried out by the Consultant shall include but is not limited to the following:

- a) Conduct a **comprehensive Environmental and Social Screening** for all the subprojects listed below.

Table 1: List of subprojects

- b) While conducting the assessments, the Consultant shall closely coordinate with the DPR Consultant and Meghalaya PWD (hereinafter MPWD) to obtain all available baseline data and information as required and follow the guidelines detailed under MITP's ESMF. Further details shall be provided by MPWD on request.
- c) Conduct **detailed Environmental and Social Impact Assessment (ESIA)** only for those subprojects against which need for detailed assessment has been recommended as an outcome of Screening Activity. The Screening Activity should identify and justify as against which applicable Operational Policies and Central and State government laws the detailed assessment has been recommended.
- d) While conducting ESIA, the Consultant shall closely coordinate with the DPR Consultant and PWD for finalization of alignment/ site and need for any geometric design correction. Thus, consultant shall also ensure **integration of ESIA findings and ESMP budget in engineering feasibility studies** being completed by DPR Consultants.
- e) In addition, the Consultant will prepare as necessary any **Environmental and Social Management Plan (ESMP), Health and Safety Plans including COVID 19 management plan, Resettlement Action Plan (RAP), Tribal (Indigenous) Peoples Development Plan, Gender Action Plan; Labor Management Procedure and Stakeholder Engagement Plan (SEP)** etc. as appropriate.
- f) The Consultant will support the client in complying with requirements such as preparation of application and supplementary reports (survey and preparation) required per local regulatory requirements for **obtaining project's clearances like forest /environmental/wildlife clearances**, if applicable, and presentation before expert panel committees of MoEF&CC, Govt. of India.
- g) The Consultant shall **conduct consultations with identified stakeholders and project-affected parties/community** from early project planning and design stages of the assignment.

2. Detailed Scope of Work

A. Screening

The Consultant, through site visit(s), initial consultation(s) and collection and review of data from primary and secondary sources, shall identify the salient environmental and social setting and potential risks/ concerns / impacts that may occur due to subproject construction and or operation. The consultant may refer to the ESMF guideline for detailing out the screening list and establishing an understanding of how to define an impact/ risk in terms of direct, indirect and cumulative, its magnitude, its likelihood of occurrence, etc. The screening phase should also determine whether there is any further need for detailed assessment as against central and or state laws and regulations or against any World Bank's Operational Policies as applicable to the project (MITP). Thus, Screening Stage should conclude by defining the scope and work plan for further detailed studies if required, or else should conclude suggesting management plans and best practices following which the subprojects can avoid and mitigate any reversible impact and enhance the project outcome. This exercise should be coordinated with the engineering survey works such that if need be, designs can be altered to include the screening recommendations.

As an outcome of the Screening exercise, the consultant should mention in the Screening report: (a) any need for exclusion of project site/ corridors i.e., inconsistent with E&S Safeguards criteria as set out in ESMF of MITP; (b) specify any environmental and or social criteria for prioritization and or

realignment of subproject site/ corridor; (c) define the environmental and social settings of the subproject; (d) detail out anticipated risks/ impacts and possible mitigation measures (where further studies are not required); (e) identify any project affected person, family, structure and or any habitat that could be beyond the project RoW/ influence area but could be of concern for an overall development of the area/ region, (f) conduct stakeholder consultation with all concern stakeholders and present the outcome specifying any specific concern and or need (related to the project); (g) identify scope for integrating green and sustainable concepts (use of local materials, recycled aggregates, use of innovative materials, creating carbon sink, soil and water conservation (managing watershed of river/stream & water harvesting), climate resilient measures etc. as suited to local needs and challenges; (h) set out project boundary and identify project activities for GHG emission estimation;

The consultant should also:

- i. **Define project's 'study area' or project influence area and associated stakeholders:** The Consultant shall define the 'study area' considering different environmental & social settings at the project site and along corridor, project activities and associated facilities³. Specify the boundaries of the study area for the assessment: watersheds, enhanced access to sensitive/remote areas such as parks/reserves/forests, in-migration and settlement, natural resource exploitation and commercial development; and identify all stakeholders within the project area towards conducting stakeholder consultation and prepare a stakeholder engagement plan that shall be applicable throughout the project cycle.
- ii. **Surveys:** The Consultant shall collect information on the existing environment & social setting from authentic secondary sources, and identify gaps to be filled, relevant to the environmental & social screening needs. In addition, the Consultant, while planning baseline data collection shall ensure (a) relevance of baseline data to predict impact and design mitigation measures; (b) identify data gaps and uncertainties associated with prediction; (c) based on current information, assess the scope of the area to be studied based on physical, biological, and socioeconomic conditions; (d) takes into account current and proposed development activities within the project area but not directly connected to the project. This section will address the separate Project influence Area (PIA) of each of the site/ route under assignment (i) and will present GIS map, as appropriate. The Consultant shall survey the environmentally & socially sensitive locations on and along the project roads/ bridges, as well as within the project's study area. All regionally or nationally recognised environmental resources and features within the project's study area shall be clearly identified, and studies in relation to the proposed scope of the project. Typically, these will include stretches of congested habitation/densely built-up areas, roadside trees; environmental and common property resources such as forests, water bodies; land use types; archaeological sites and major/minor physical cultural properties such as temples, shrines, mosques, etc. All these parameters for impact assessments shall be depicted using on a strip map along the chainage (this may be available with the PWD/ DPR consultant). The information of longitude, latitude should also be recorded. In addition, the consultant is to ascertain presence of tribal – whose characteristics match with requirements as listed under OP 4.10 on Indigenous People and thereby assess need for identify project sites/ corridors preparing Tribal Development Plans for those specific site/ corridors.
- iii. **Review of Environmental & Social Legal Requirements:** Taking cognizance of existing state and national's social and environmental acts, rules and regulations, the Consultant shall review environmental and social legal requirements set forth per local regulations to assess

³Refer to World Bank Operation Procedures (OP), Para 4, OP 4.12

their applicability to the project. The permissions and clearances required shall be listed beforehand for implementation of the project.

- iv. **Scoping of ESIA:** The scoping exercise should identify potential environmental risks and impacts that requires further detailed assessment, and recommend the scope of such additional studies to comply the requirements as against Central/ State laws and regulations and or World Bank's Environmental and Social Operational Polices. The Consultant shall define the boundaries of the project ESIA after careful consideration of the baseline scenario, likely potential environmental and social risks and impacts on the identified, sensitive environmental and social receptors/VECs, and the proposed mitigation and enhancement measures. The scoping shall include a listing of potential environment and social issues that deserves a detailed examination in the project ESIA (covering induced impacts that may be outside the purview of the client) along with a justification and also list out those that may not require further investigation. Consultant may refer to the ToR included in here while defining the ESIA ToR for subprojects.
- v. **Community Consultation:** Consultations will enable both verification of the information reviewed from existing sources about the project's social and environmental context, an initial screening of likely environmental and social impacts and sensitivities, and for all relevant stakeholders the be informed about the potential projects. Consultations shall be held in relevant local language (or with translation). Consultations to be held with affected, NGOs, selected Government Agencies and other stakeholders to obtain a better understanding of the potential risks and impacts and capacities, as well as understand the perspectives/concerns of the stakeholders. Consultations shall be preceded by a systematic stakeholder analysis, which would (a) identify the individual or stakeholder groups relevant to the project and to social and environmental issues including affected parties, other interested parties, disadvantaged/vulnerable or groups (b) determine the nature and scope of consultation with each type of stakeholders, (d) method of consultation, and (e) mode of consultation and time of consultation. Consultation with the stakeholders shall not be treated as a project information dissemination session but beused to improve the plan and design of the project and shall continue through project implementation.
- vi. **Screening Report:** The consultant will prepare specific Screening and Scoping Reports and ToRs where needed, to meet both GoIs and World Bank requirements. The Scoping Report will consist of, but not limited to, the following:
 - a. Project description and definition of overall project Area of Influence (including impact zones);
 - b. Applicable regulatory requirements of GoI, as well as World Bank OPs, and WBG EHS Guidelines;
 - c. Summary of findings on the key potential environmental and social issues/ risks/ impacts, and baseline features/aspects, which should be included for further study in the environmental and social assessment and planning studies where needed.
 - d. Draft TORs/outlines of each of the further environmental and social assessments and instruments required, including a ToR(s) and Scoping Document(s) for EIA(s) and SIA(s) as required by the GoI and or World Bank.The scoping report will describe the methodologies to be used for carrying out ESIA and other assessments and preparing various plans; and contain a detailed work plan to conduct the studies, prepare the plans etc.

NOTE: Only if based on the screening exercise an extensive study is recommended in future then following Scope of Work may be followed. This is indicative only. The detailed ToR will be prepared as part of Screening activity output.

B. Environmental and Social Impact Assessment

The Consultant shall determine all relevant direct, indirect and cumulative environmental and social risks and impacts (both positive and negative) such as, but not limited to (a) construction impacts such water and soil contamination from wastewater generated from construction/workers camps; spillage and handlings of chemical and hazardous materials; damage to vegetation; potential inducement of landslides, landslips, erosion from cut faces of hill slopes; disposal of spoils from hill cutting and tunnelling; air pollution due to fugitive dust from hill cutting and earthwork, and emission from operation of vehicle, equipment and plants; cutting of trees for widening of road; reduction of natural resources base and degradation due to extraction/quarrying; land degradation from project induced development; change in aesthetic of landscape; impacts on archaeological and historical sites/assets, private land taking, relocation, economic losses, culturally and socially important common properties, religious properties/sites, sacred groves on or near the project roads; distress of public/community due disruption of utility services; and likely direct, indirect and induced impacts on ecological functions of forests, other natural habitats including protected areas; community health and safety risks and issues; (b) occupational health and safety risks and issues during construction and operation, impact on host community due to labour influx, issues related to sexual exploitation and abuse / sexual harassment (SEA/SH); (c) operation stage safety concerns and risks, considering increased speed and traffic volumes and community/ pedestrian safety issues; (d) environmental impacts during operational e.g. air pollution, noise, traffic safety, and impacts on wildlife, etc. The detailed scope of the ESIA is provided below.

- i. **Environmental Impact Assessment:** The Consultant will (a) collect information from secondary sources that are relevant to understand the baseline, as well as the design of mitigation measures pertaining to physical, biological and socio-cultural environments; (b) carry out site visits and identify environmentally sensitive features locations within direct or indirect project area and document them on the base maps to identify conflict points with preliminary designs (including verification of these from authentic sources of information, such as from the revenue and forest records); and (c) prepare detailed specific maps showing details of candidate sites with opportunities to enhance positive impacts of project. All surveys shall be carried out in compliance with the GoM, GoI standards/guidelines/norms. Wherever such guidelines/norms are not available, the techniques, tools and samples employed for the surveys shall conform to the International practices. Whenever directly relevant secondary data is available, these should be used, while indirectly relevant data should be verified through primary survey. Environmental quality (air, water, noise and vibration) monitoring shall include an adequate number of samples, as established on a sampling network to provide a representative picture of pollution levels at site and or along all the road corridor. Additional data for sensitive environmental / ecological receptors, if any, shall be collected such as to analyze and predict the possible risks and impacts to a degree and precision of acceptable standards. The surveys shall necessarily cover inventory of trees, streams/rivers, historical/cultural sites, construction material sources, settlements, land use, sensitive receptors etc. in project site/ corridors, including preparation of tree cutting schedules and forest land diversion case. Further, additional specialized surveys, such as **biodiversity assessment survey**, and hydrological surveys shall be conducted, if and when required as part of environmental scoping. As part of EIA, the Consultant shall collect information on all regionally or nationally recognized environmental resources and features within the project area, which shall be clearly identified and studied in relation to activities proposed under the project. These will include all protected areas (national parks, wildlife sanctuaries, reserved forests, biosphere reserves, wilderness zones), unprotected and community forests and forest patches, all wetlands, rivers, rivulets and other surface water bodies. The Consultant shall

consolidate all this information on maps of adequate scale (1:250,000 minimum), superimposed on the project's site/ roads corridor.

ii. **Social Impact Assessment:** The Consultant will carry out

- a. Consultations with each stakeholder category and present a Stakeholder Analysis of local stakeholders such as local government, associations, who could play a role in the project implementation process (including R&R) with positive/negative influence on the outcomes. These consultations will also cover issues relating to gender, labour influx and SEA/SH. It shall record and analyze people's perception of the project, its adverse impacts, and minimum acceptable mitigation measures (relocation options, if any are required assistance offered) that will enable them to cope with displacement or loss of livelihoods – temporary or permanent in nature, if any. As part of this process, disadvantaged and vulnerable groups will be identified and separate focused group discussions (FGDs) with such groups besides women will be held.
- b. In case of tribal, the Consultant shall conduct consultations and identify if the project impacts are result in loss of land, livelihood, relocation; and has significant impacts on indigenous peoples' cultural heritage that is material to their identify and /or the cultural/ceremonial/spiritual aspects of their lives and in such cases carry out Free Prior and Informed Consultation of the affected indigenous persons/tribal. Summarize the concerns, suggestions by stakeholder for consideration by project authorities during design.
- c. Quantitative and qualitative surveys: This shall involve identification of adverse (on the finalized alternative) and positive impacts of the project through consultations and quantitative survey. Survey should cover all categories of impacted persons and results of the Census and Socio-economic survey on affected households, should be presented segregated by gender and social category. It will help to establish impact categories that is critical to the determination of potential adverse impacts and help analyze the relative vulnerability of, and risks to, the affected communities. The assessment should analyse key impacts on different groups of people (such as land owners, small, farmers; small businesses, shopkeepers; commercial establishments, disadvantaged and vulnerable groups and women), and communities (common properties, lands). The impacts should be segregated by pre-construction and construction stage (such as disruption, loss of access, loss of livelihood, debris disposal following hill cutting, impact on host community, if any, issues arising due to labour influx, etc.). Besides all the affected community assets such as worship place, drying up of drinking water source, impacts to schools and the community facilities need to be recorded. As some of the districts and possibly some sub-project sites/ corridors have presence of scheduled tribes, and if the Screening exercise indicates the need, the SIA needs to assess the current socio-cultural living style of the tribal communities in line with the World Bank's OP 4.10 and ascertain required measures.
- d. Entitlement policy and assistance package: As MPWD proposes to use Direct purchase /Negotiated award method for land taking under this project, consultant should further assess the approach to better understand the processes and whether the method meets the requirements of OP 4.12 on involuntary resettlement. Also, the gap analysis between this method and OP 4.12 requirements will cover the treatment of non-title holders, such as squatters and encroachers. Hence, based on discussions with GoM and WB, the study will help establish the criteria for eligibility of compensation and other resettlement assistance and present entitlements by type of impacted assets and category of impacted persons including disadvantaged and vulnerable persons.
- e. Identification of gender concerns/gaps: In order to meet the Bank's requirements on gender, the project should carry out sub-project specific assessment of access, safety, benefits from

increase in mobility, access to water points (often along the roads), fuel and fodder paths, etc. shall help inform the projects through gender perspective; hold separate FGDs with women households and road users; and explore areas for skill development/enhancement. The exercise is expected to formulate commensurate actions relating to gender and help devise suitable monitoring indicators.

- f. Identify modes for citizen engagement: As persons and communities would be impacted/influenced by the project activities, identify all the relevant stakeholders, revise the preliminary stakeholder analysis and plan, to identify means to engage with citizen/communities in respect to design and mitigation measures, monitoring, grievance mechanisms.
 - g. Institutional Capacity Building & Training: Assess the role of the key institutions, departments, and stakeholders involved in the project and describe their roles, responsibilities and relationship with the project activities in specific relation to implementation of RAP/ARAP, TDP. Provide an assessment of the strengths, weaknesses, and opportunities for capacity enhancement to address social and gender issues.
 - h. Grievance Redressal Mechanism and procedures: Assess existing grievance redressal mechanisms (available for MPWD, road related grievance mechanisms and for the state as a whole) to help develop a GRM. (i) Labor related aspects: Assess applicability of labour laws and, non-discrimination and equal opportunity, potential risks of child labor and forced labor, including the workers to be brought to the project by brokers (sub-contractors); grievance mechanism to all workers, occupation health and safety aspects, etc. The assessment will scope out impact and absorptive capacity on host communities to address risks that arises from labour influx and identify measures that need to be incorporated in the bid documents for the civil works contractor.
- iii. **Cumulative Impact Assessment** of the proposed project activities, and of the induced effects due to construction and operational activities of the project along with other actual or planned development activities in the project area. For this analysis, the Consultant will identify Valued Environmental Components specifically relevant to the Cumulative Impact Assessment based on inputs from stakeholders and will assess the potential impacts of multiple development activities on the VECs.
- iv. **Analysis of Alternatives:** The Consultant while doing analysis of alternatives shall compares feasible alternatives to the proposed project site, technology, design, and operation—including environmental and social risks and impacts “with project” and “without project” scenarios. The Consultant shall quantify and provide estimated budget for the alternative mitigation measures; and suggest institutional, training and monitoring requirements for implementation. The Consultant shall suggest on efficient use of environment friendly construction materials and technologies, energy and resource efficiency, water conservation and management, reduction of GHG emission and increasing carbon sink, climate resilient measures etc. The Consultant to the extent possible shall attaches economic values where feasible. The Consultant need to suggest nature-based options (if available) to minimize the geohazards/enhancing slope stability due to the road construction during construction and operation period.
- v. **Environmental inputs to Engineering Feasibility Studies:** The Consultant shall make location-specific design recommendations, wherever possible or required related to alignment (major/minor shifts or bypass or altogether different route alternative), road cross-sections, construction material use, slope stabilisation, erosion control, and mitigation & enhancement measures. For all the different alternative improvement proposals under

consideration, using acceptable/established valuation techniques, the Consultant shall prepare {a} an estimate of economic costs of the environment damages, and economic benefits from the direct positive impacts that the project is likely to cause, and {b} an estimate of financial cost on the mitigation and enhancement measures that the project is likely to require, and financial benefits, if any. The Consultant shall consult with the engineering team and familiarize themselves with the project's overall feasibility analyses models, so that the ESIA inputs are in conformity to the needs of the overall feasibility study. In addition, wherever economic and financial costs of the environmental impacts cannot be satisfactorily estimated, or in the cases of significant irreversible environmental impacts, the Consultant shall make recommendations to avoid generating such impacts.

C. Special and Additional Assessments:

- **Cumulative Impact Assessment (CIA)** - In the context of MITP, CIA is to be integrated with the conduct of the ESIA when the following criteria are met with regard to the particular road sub-project:
 - Passing through a wildlife sanctuary or adjoining wildlife sanctuary or when a wildlife sanctuary is within the area of influence of the road;
 - Cutting through or adjoining any wildlife corridor;
 - Stretches of the road are adjacent to a major river or significant tributary; and,
 - Passing through densely populated areas or areas with sensitive receptors

These screening criteria are chosen as these conditions may have adverse impact on the state's unique biodiversity and on sensitive receptors during construction and / or operation phase of the road project. If the sub-project meets any of these criteria, a Rapid CIA should be carried out (as is reflected in ESMF), to determine whether a detailed CIA is required.
- **Biodiversity and Critical Habitat Assessment and Preparation of Biodiversity Management Plans-** In regard to MITP, biodiversity and critical assessment to be carried out if the subproject site is proximate to any declared critical and natural habitats such as national parks, wildlife sanctuaries, eco-sensitive areas, important bird areas, reserve forest, biosphere reserves, etc. SOW presented in Annex – F should be followed for the given assessment.
- **Bridges-** For subprojects involving rehabilitation and or construction of new bridges (with roads or standalone) shall prepare
 - **Erosion and Sediment Control Plan** including detail of appropriate work methods and best practices for working around water, proposed erosion control plan and containment methodology;
 - **River-bank slope stability** - Where necessary suggest appropriate bio-engineering/ engineering remedial measures to be applied for embankment protection.
 - **Trans boundary Impact Assessment** – If the subproject is worked upon any trans boundary river following across international border (downstream), then Consultant should carry out trans boundary impact assessment on two points – pollution load and environmental flow during construction period.
- **Ropeways**–In addition to TOR to be provided by MOEFCC, prepare:
 - **Emergency Preparedness and Response**–including plan for evacuation, fire and medical emergencies management plan during construction, and passenger evacuation procedures, life and fire safety, and medical emergencies and disaster risk management during operation period.
 - **Design a monitoring and reporting system during operations** - This should include measurement and reporting of all E&S performance data, including but not limited to incident report (for employees, contractors, third parties and passengers), energy/water consumption, waste management, noise, vibration, complaints etc.

- **Wastewater, Hazardous Materials and Solid Waste Management Plans** -at the terminal stations.
- **Traffic Management Plan** – additional traffic envisaged during operation period.
- **Community Health, Safety and Security Plan**
- **Infrastructure and Equipment Design and Safety** - Internationally accepted standards should be incorporated into the design criteria and specifications for stations, ventilation and emergency systems. Safety measures should include evacuation measures, cable correction systems, cable specifications, equipment checks and dedicated fire water reservoir at each station. The cable cars, the towers and the cables should be designed for the system to be operated safely with a maximum allowed wind speed. Above that, the cable car system should not be operated. Annual electron microscope inspections should be conducted to check cable safety. Each tower should have cable correction tools. There should be telecom and camera systems in each cabin. In case of malfunctioning, all cabins can manually be returned to the stations within 30 minutes or less. At the stations, there should be elevators/ramps for the disabled passengers and cyclers. The seats in the cabins should have the provision to be folded for the transportation of the wheelchairs.
- **Life and fire safety (“L&FS”) and seismic/structural safety design and installations** – should clearly mark the exits at the stations, smoke detectors, alarm system, fire exits, evacuation plan posting, emergency lights, and compliant with the local/ State standards and regulations.

D. Environment and Social Management Plan

Based on the environmental and social impacts assessed, separate ESMPs, RAP, TDP (as required) for each project site/ road corridors shall be prepared that consists a set of mitigation, monitoring, and institutional measures required to eliminate/address adverse environmental and social risks and impacts. These instruments shall be prepared as per the requirements of WB’s OPs and should identify responses to potentially adverse impacts; determine requirements for ensuring timely responses; and describe the means for meeting those requirements. The technical details for each mitigation measure shall include the type of impact to which it relates, the conditions under which it is required (e.g., continuously or in the event of contingencies), as well as preliminary design, equipment descriptions, and operating procedures, as appropriate. This should include the following:

- i. Estimate the impacts and costs of the mitigation measures for each of the activities separately and of the institutional and training requirements to implement them. Assess compensation to affected parties/persons for impacts that cannot be mitigated. However, this assessment and subsequent compensation plan are to be more strongly addressed in the Social Impact Assessment (SIA) and Social Management Plan document.
- ii. The Consultant shall recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels. Apart from mitigation of the potential adverse impacts on the environmental and social component, the ESMP shall identify opportunities that exist to induce positive impacts at the subproject site/ along the corridor of subproject. Residual impacts from the environmental measures shall also be clearly identified. Include measures for emergency response to accidental events (land slide during construction or operation.), as appropriate
- iii. The ESMP shall include: a) specific or sample plans, such as for management and redevelopment of quarries, borrow areas and construction camps; b) detailed specification, bill of quantities (BoQ), execution drawings and contracting procedures for execution of the environmental mitigation and enhancement measures suggested, separate for pre-construction, construction and operation period; c) actions identified based on assessment of potential quarry sites if any are identified, conditions of primary supply workers with a focus on child, forced labor and OHS; and d) good practice guides that relates to construction and upkeep of plant and machinery.

- iv. Responsibilities for execution and supervision of each of the mitigation and enhancement measures shall be specified in the ESMP. The Consultant for unanticipated incidents arising from both natural and man-made hazards, shall prepare Emergency Response Plan (ERP) particularly during construction stage.
- v. The Consultant shall also prepare a detailed management plans with specific actions to be taken by the contractors and sub-contractors with regard to working conditions and management of workers, management of chemical, hazardous and non-hazardous material/waste, noise, occupational health and safety of workers and community, labor influx (workers accommodation, HIV/AIDS prevention etc.) and other key impacts under contractors' control.
- vi. ESMPs should include provisions/actions relating to construction stage social impacts, gender mainstreaming, citizen engagement, management of labor influx⁴, HIV/AIDS and gender-based violence, etc.
- vii. The Consultant shall provide assessment on existing institutional/organizational status to support timely and effective of environmental and social project components. The findings shall be basis to identify measures and actions to strengthen environmental and social management capability in MPWD. The ESMPs shall describe the implementation arrangement needed for capacity building proposals including the staffing of the environment unit adequate to implement the environmental mitigation and enhancement measures. For each staff position recommended to be created, detailed job responsibilities shall be defined. Equipment and resources required for the environment unit, training plan and modules shall be specified, and bill of quantities prepared..
- viii. The Consultant in the ESMP shall provide implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and estimated cost and sources of funds for implementing the ESMP (integrated into the total project cost tables).
- ix. The relevant sections of ESMP prepared shall be incorporated into the bidding document. The Consultant shall ensure implementation costs of mitigation measures and actions is integrated into the project's overall planning, design, budget, and implementation.
- x. Prepare Resettlement Action Plan: The scope and level of detail of the resettlement plan vary with the magnitude and complexity of resettlement. The plan shall be prepared based on social assessment survey and should cover the impacts on the community and other adversely affected groups and mitigation measures. (See Annexure X for indicative contents of RAP).
- xi. Prepare Tribal Development Plan: On the basis of the social assessment and in consultation with the affected Indigenous Peoples' communities, Consultant shall prepare an Tribal Development Plan that sets out the measures through which the project will ensure that (a) tribal affected by the project receive culturally appropriate social and economic benefits; and (b) when potential adverse effects on tribal are identified, those adverse effects are avoided, minimized, mitigated, or compensated for. (See Annexure X for indicative contents of TDP).
- xii. Develop Labor Management Procedures. The consultant shall help MPWD to develop and implement written labor management procedures applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. It will cover the following aspects: a) Provisions on the treatment of direct, contracted, community, and primary supply workers; b) Requirements on terms and conditions of work, non-discrimination and equal

⁴Guidance note on managing the risks of adverse impacts on communities from temporary project induced Labour Influx, 2016

opportunity and workers organizations; c) Provisions on child labor and forced labor; d) Requirements on occupational health and safety, in keeping with the World Bank Group's Environmental, Health, and Safety Guidelines (EHS); e) grievance mechanism for these workers and f) Estimate the total number of workers including contracted and migrant workers, the skill requirement and timing and the associated risks and the facilities to be provided as per the World Bank Group occupational health and safety requirements.

E. Environmental Social Monitoring and Evaluation Framework

To monitor implementation of ESMP, for different stage of project (pre-construction, construction, post construction), the Consultant shall identify the performance indicators, approach of monitoring, and frequency as part of Monitoring & Evaluation Framework. The performance indicators should include both quantitative and qualitative types, but the Consultant shall consider practicality aspect and provide approach for monitoring each identified indicator.

The Consultant while designing the M&E framework should also bring out and suggest practicable corrective measures to remediate any non-compliance in the project. The Consultant shall ensure integration of identified performance indicators and corrective measures in the bid document, along with design drawings, specification, BoQ, and budget for environmental mitigation and enhancement measures.

The M&E shall specify the environmental supervision, monitoring and auditing requirements. The monitoring program shall specify performance indicators, monitoring parameters (air, water, noise, soil and vibration), reference standards, monitoring method, frequency, duration, location, and reporting on progress and results of mitigation. In addition, the program will specify what action should be taken and by whom in the event that the proposed mitigation measures fail, either partially or totally, to achieve the level of environmental protection expected.

Deliverables 1: Environmental & Social Screening Report. The reports will be revised in consideration of the comments of the Client and the World Bank.

Deliverables 2: Stakeholder Engagement Plan (along with screening report)

Deliverables 3: Environmental and Social Impact Assessment Report

Deliverables 4: Corridor/ site specific ESMP, RAP and TDP (as required) and M&E Framework

Deliverables 5: Labor Management Procedures (See Annexure for outline)

Deliverables 6: Biodiversity Management Plan

F: Public Disclosure

The Consultant will prepare a plan for in-country disclosure, specifying the timing and locations; translate the key documents, such as the executive summary of Environmental and Social Impact Assessment, Environmental and Social Management Plan, RPF, TDF, RAP, TDP, or any other documents in local language and draft advertisement for the newspaper announcements for disclosure; and help the client to place all the related Environmental and Social Impact Assessment reports on the client's website. The draft ESIA and management plans should also be available in a public place accessible to affected groups and local NGOs for appropriate consultation.

Relevant materials will be provided to affected groups in a timely manner prior to consultation and in a form and language that is understandable and accessible to the groups being consulted. The Consultant should maintain a record of the public consultation and the records should indicate: means other than consultations) eg, surveys) used to seek the views of affected stakeholders; the date and location of the consultation meetings, a list of the attendees and their affiliation and contact address; a video of the consultation workshop and summary minutes.

G: Environment, Social, Health and Safety Requirements for Bidding Document

Based on the special environmental clauses (SECs) identified from the EIA study – which require to be included in the Bidding documents, the Consultant shall prepare detailed specifications for environmental, social, health and safety (ESHS) requirements for the bidding documents. These would also cover MPWD’s ESHS policies that will apply to the project, minimum requirements for bidder’s code of conduct, and requirement of contractors ESHS staff and other aspects identified as relevant to civil works

H: Other Assistance to the Client

The Consultant shall support the client to furnish any relevant information required for obtaining clearance from various state and central government agencies. This may include {a} assisting the client in the submission of application for the Clearance of Reserved or Protected Forests to the State Forest Department, which shall include marking boundary pillar of proposed right-of-way, conduct tree counting survey and its enumeration, preparation of forest land diversion map and delineate its boundary by conducting DGPS survey, coordinate verification of trees for cutting and forest area to be acquired, presentation of case before MoEF& CC, preparation of forest diversion proposal, coordination and follow-up with forest departments till obtaining FC approvals; {b} completion and submission of the MoEF&CC questionnaire for Environmental Appraisal for the project, if applicable; {c} assistance in presentation to the Wildlife Board of the MoEF&CC in obtaining clearance for any section or road passing through the Wildlife Reserves or Sanctuaries or other protected areas, if any; {d} assistance in submission for any other clearance requirements with respect to the environmental components relevant to the project; {e} to prepare presentation, brochures, pamphlets for any kind of stakeholder consultation and disclosure; {f} consultation with WB Mission as and when required upon instruction of client; {g} to attend all progress review meetings with Team Leader as and when called by the client as well as to prepare progress review reports.

Refer to Annexures for templates/outlines for preparation of ESIA, RPF, RAP and IPDP.

3. Reporting Requirements/ Deliverables and Payment Schedule: -

S N	Deliverables	No. of copies	Due date for submission from the start date of contract signing (Days)	Payment Schedule
1	Inception report and work plan (including methodology and site visits)	5	15	10%
2	Environmental & Social Screening Report along with Stakeholder Engagement Plan (SEP)	5	30	
3	Environment Impact Assessment Report and Social Impact Assessment Report	5	90	60%
4	Corridor/ site specific ESMP, RAP and TDP (as required) and M&E Framework	5	120	
5	Final Labor Management Procedure	5	180	
6	Review, update/revise the RPF and TPPF and completion of feasibility studies.	5	230	30%

Note: all above payments shall be made after review and approval by the client and the World Bank and submission of pre-receipted bills by the Consultant in quadruplicate for respective stages.

Review of reports: -

Following members of the review committee will review all reports of Consultant and suggest any modifications/changes considered necessary within 15 days of receipt.

- 1) Engineer-in-chief (MPWD)
- 2) Chief Engineer-Cum-Project Director (MPWD)
- 3) Superintending Engineer (MPWD)
- 4) Nodal Officer Environment (MPWD)
- 5) Social development officer (MPWD)

Duration of the Assignment:

The total duration of the assignment would be about **8 months**.

Accordingly, the total man-month requirements for the assignment would be as follows:

Subject Expert	No. of Experts
Environment Expert	2
Social Expert (SIA & R&R)	2
Bio-diversity Expert	1
Bio-engineering Expert	1
Gender Expert with specific knowledge and experience on GBV	1
Community Consultation Expert	1
Road and Bridge Engineer	1
Geotechnical Engineer	1
Support Staff – Social and Environment	As required

The Consultant team would be required to undertake at least three visits (and more as required to perform the task envisaged in ToR) to the project in each phase. The Consultant with their industry experience and in close consultation with the MPWD would be required to deploy/demobilize its personnel in accordance with the progress of preparation work by Consultant to ensure that total man-months are not exceeded.

Key Qualifications

1. ENVIRONMENTAL SPECIALIST

Educational Qualifications

Minimum – Master’s Degree or equivalent in Environment Sciences or related field

General Experience

Minimum total work experience after post-graduation – 15 years

Relevant Experience

- (i) Minimum 7 years of total work experience on carrying out environment impact assessments of road development projects.
- (ii) Desirable - Environmental Expert in at least two World Bank funded projects

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bank’s guidelines, procedures and operational policies/directives.
- (ii) Candidate should be conversant with all the activities expected to be undertaken for

Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of Environment & forests (MoEF), Government of India.

- (iii) The candidate must have the experience of preparing environmental management plans and supervising & monitoring implementation of the plans.
- (iv) Working in hilly terrain will be given performance.

2. SOCIAL DEVELOPMENT SPECIALIST

Educational Qualifications

Minimum – Master’s Degree or equivalent in Social Sciences or related field

General Experience

Minimum total work experience after post-graduation – 15 years

Relevant Experience

- (i) Minimum 7 years of total work experience on carrying out Social impact assessments and preparation of Resettlement Action Plans of road development projects
- (ii) Desirable - Social/resettlement expert in at least two World Bank funded projects

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bank’s guidelines, procedures and operational policies/directives.
- (ii) Experience in preparation of RAP, gender plan, LAP, community consultations and IPDP is required.
- (iii) Familiarity with project area and local language will be advantageous

3. BIODIVERSITY SPECIALIST

Educational Qualifications

Minimum – Master’s Degree or equivalent in biology or natural resource management or related field

General Experience

Minimum total work experience after post-graduation – 15 years

Relevant Experience

- (i) Minimum 7 years of total work experience on carrying out conducting biodiversity impact assessment for roads located in areas with similar types of biodiversity values and should be conversant in preparing management/mitigation measures for at least two projects of similar type; working knowledge of ecosystem services analysis would be an advantage.
- (ii) Desirable – Biodiversity Expert in at least two projects funded by World Bank or international financial institutions funded projects is required

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bank’s guidelines, procedures and operational policies/directives.
- (ii) Candidate should be conversant with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India.
- (iii) The candidate must have the experience of preparing Biodiversity management plans and supervising & monitoring implementation of the plans.

4. BIOENGINEERING SPECIALIST

Educational Qualifications

Minimum – Master’s Degree or equivalent in Horticulture, arboriculture or botany or related field.

General Experience

Minimum total work experience after post-graduation – 15 years

Relevant Experience

- (i) Minimum 7 years of total work experience on community forestry and landscape development programme.
- (ii) Desirable – Bio-engineering Expert in at least two about 2 highway projects and 2 landscape development projects funded by World or international financial institutions is required

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bank's guidelines, procedures and operational policies/directives.
- (ii) Candidate should be conversant with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India.
- (iii) The candidate must have the experience of preparing Biodiversity management plans and supervising & monitoring implementation of the plans.

5. ROAD AND BRIDGE ENGINEER:

Educational Qualifications

Minimum – M. Tech in Transportation Engineering/Highway Engineering/Structural Engineering.

General Experience

Minimum total work experience after post-graduation – 15 years.

Relevant Experience:

Minimum 10 yrs experience in project preparation and design of Highway projects including design of road geometry. Minimum 3 years experience in design of hill roads. Thorough knowledge of Hill Roads specifications.

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bank's guidelines, procedures and operational policies/directives.
- (ii) Candidate should be conversant with all the activities expected to be undertaken for Environmental / Forest / Wild life clearance procedures and pertinent guidelines of Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India.

6. GEOTECHNICAL ENGINEER

Educational Qualifications

Graduate in Civil Engineering with Post Graduate Degree in Civil Engineering with specialization in Geotechnical Engineering // Soil Mechanics & Foundation Engineering.

General Experience

Minimum total work experience after post-graduation – 15 years.

Relevant Experience:

Minimum Experience of at least 5 years should be in the field of soil / sub soil investigations for the design of foundations of structures.

Essential Knowledge and Experience

- (i) The candidate must have knowledge of the World Bank's guidelines, procedures and operational policies/directives.
- (ii) He should have experience in conducting and evaluation of soil / sub-soil investigation results.
- (iii) He should have experience of designing of foundation of major structures especially river bridges. Have in depth knowledge of various types of foundations i.e. shallow foundations & deep foundations (well foundations, Pile Foundations etc)

Annexures

Annexure A - Indicative Outline of ESIA

- a) Executive Summary
 - Introduction
 - Project Description
 - Baseline Environment
 - Anticipated Environmental Impacts and Mitigation Measures
 - Alternatives
 - Public Consultation and Information disclosure
 - Consultation to Date
 - Disclosure of documents
 - Environmental Management Plan
 - Conclusion and Recommendations
- b) Introduction
 - Background/Overview
 - Purpose of the document/ESIA
- c) Legal and Institutional Framework
 - Government Policy
 - World Bank ESF
 - International Treaties
 - Policies Applicable to the Project
- d) Project Description
 - Location
 - Key Project Components
 - Description of Road Alignment
 - Project Design
 - Traffic Volume
 - Road Design
 - Overpasses
 - Tunnels
 - Interchanges
 - Corridors/ sites
 - Special Curves
 - Volume of Civil Works
 - Quarries and Borrow Sites
 - Construction Camps
 - Construction Process
 - Project Costs
 - Implementation Schedule
- e) Baseline Data
 - Physical Resources
 - Climate
 - Topography and Landscape
 - Geomorphology
 - Geodynamics process along the project road
 - Geological hazards of the project area
 - Hydrology
 - Hydrogeology
 - Ecological Resources

- Flora
- Fauna
- Protected Areas
- Bird migration

Environment Quality

Social Economic and Cultural Resources

f) Environmental and Social Risks and Impacts

Approach to Screening of Environmental Impacts

- Preconstruction
- Construction
- Operation

Spill Contingency Plan

Road Safety Measures

Preliminary assessment of climate change impact

Induced cumulative impacts

g) Mitigation Measures: Impact Specific ECoPs

h) Analysis of alternatives

Overview

Without Project Alternatives

Alternative Analysis in Feasibility Study

Alternative Analysis during Detailed Design

- Improvement of Project Route of Feasibility Study Stage
- Study of Alternative Alignment

Selection of Design and Construction Standard

i) Grievance Redress Mechanism

j) Information on Disclosure

k) Environmental Management Plan

- a. Objective of EMP
- b. Methodology for EMP preparation
- c. Environmental and social risk and impacts
- d. Mitigation Measures
- e. Monitoring timing and performance indicator
- f. Capacity Building and Training
- g. Implementation Schedules and cost estimates
- h. Integration of EMP with Project
- i. Emergency Response Plans
- j. Reporting responsibility
- k. Cost and Estimate
- l. Special Clause for the BoQ/Bid Document

l) Measures and Actions for the Environmental and Social Commitment Plan (ESCP)

m) Key Appendices

For details refer to www.worldbank.org/esfProject Description

Annexure B - Elements of Resettlement Action Plan

- 1) Description of the project.
- 2) Potential impacts.
- 3) Objectives of the resettlement program.
- 4) Census survey and baseline socioeconomic studies.
- 5) Legal framework
- 6) Institutional framework

- 7) Eligibility
- 8) Valuation of and compensation for losses
- 9) Community participation
- 10) Implementation schedule.
- 11) Costs and budget
- 12) Grievance redress mechanism.
- 13) Monitoring and evaluation
- 14) Arrangements for adaptive management.

Additional planning requirements where resettlement involves physical displacement

- 15) *Transitional* assistance.
- 16) Site selection, site preparation, and relocation.
- 17) Housing, infrastructure, and social services.
- 18) Environmental protection and management.
- 19) Consultation on relocation arrangements.
- 20) Integration with host populations.

Additional planning requirements where resettlement involves economic displacement

- 21) Direct land replacement.
- 22) Loss of access to land or resources.
- 23) Support for alternative livelihoods.
- 24) Consideration of economic development opportunities
- 25) Transitional support

Annexure C - Outline of Tribal Development Plan (TDP)/Indigenous Peoples Development Plan (IPDP)

1. Summary of the Targeted Social Assessment, including the applicable legal and institutional framework and baseline data;
2. A summary of the results of the meaningful consultation tailored to IP/SSAHUTLC, and if the project involves the three circumstances, then the outcome of the process of FPIC carried out with the affected IP/SSAHUTLC during project preparation;
3. A framework for meaningful consultation tailored to IP/SSAHUTLC during project implementation;
4. Measures for ensuring IP/SSAHUTLC receive social and economic benefits that are culturally appropriate and gender sensitive and steps for implementing them;
5. Measures to avoid, minimize, mitigate, or compensate IP/SSAHUTLC for any potential adverse impacts that were identified in the social assessment, and steps for implementing them;
6. The cost estimates, financing plan, schedule, and roles and responsibilities or implementing the IP/SSAHUTLC Plan;
7. Accessible procedures appropriate to the project to address grievances by the affected IP/SSAHUTLC arising from project implementation; and
8. Mechanisms and benchmarks appropriate to the project for monitoring, evaluating, and reporting on the implementation of the IP/SSAHUTLC Plan, including ways to consider input from project-affected IP/SSAHUTLC in such mechanisms

Annexure D – Stakeholder Engagement Plan

- A. Objectives of Stakeholder Engagement Plan
- B. Stakeholder Identification and Analysis
 - Affected parties

- Other interested parties
 - Disadvantaged / vulnerable individuals or groups
 - Summary of project stakeholder needs
- C. Stakeholder Engagement Plan
- Proposed Strategy for Information Disclosure
 - Proposed Strategy for consultation with groups
 - Affected parties
 - Other interested parties
 - Disadvantaged / vulnerable individuals or groups
 - Engagement during Project preparation
 - Proposed Activities
 - Timelines – to provide information for project phases, key decisions and feedback
 - Engagement during Project Implementation
 - Proposed Activities
 - Timelines – to provide information for project phases, key decisions and feedback
 - Grievance Redressal Mechanism
 - Organizational Capacity and Commitment
 - Monitoring and Reporting
 - Involvement of stakeholders in monitoring activities
 - Reporting back to stakeholder groups
 - Budget & Costs

Annexure E – Labor Management Procedure

- a. Overview of Labor Use On The Project: This section describes the following, based on available information: Number of Project Workers, Characteristics of Project Workers, Timing of Labor Requirements, Contracted Workers, Migrant Workers
- b. Assessment of Key Potential Labor Risks: This section describes the following, based on available information: ***Project activities, Key Labor Risks:*** The key labor risks which may be associated with the project. These could include, for example:
 - The conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials
 - Likely incidents of child labor or forced labor, with reference to the sector or locality
 - Likely presence of migrants or seasonal workers
 - Risks of labor influx or gender based violence
 - Possible accidents or emergencies, with reference to the sector or locality
 - General understanding and implementation of occupational health and safety requirements
- c. Brief Overview of Labor Legislation: Terms and Conditions: This section sets out the ***key aspects*** of national labor legislation with regards to term and conditions of work, and how national legislation applies to different categories of workers.
- d. Brief Overview of Labor Legislation: Occupational Health and Safety: This section sets out the ***key aspects*** of the national labor legislation with regards to occupational health and safety, and how national legislation applies to the workers.
- e. Responsible Staff: This section identifies the functions and/or individuals within the project responsible for (as relevant): engagement and management of project workers, engagement and management of contractors/subcontractors, occupational health and safety (OHS), training of workers and addressing worker grievances
- f. Policies and Procedures: This section sets out information on OHS, reporting and monitoring and other general project policies. Where relevant, it identifies applicable national legislation.
- g. Age of Employment: This section sets out details regarding: (i) the minimum age for employment on the project (ii) the process that will be followed to verify the age of project

workers (iii) the procedure that will be followed if underage workers are found working on the project (iv) the procedure for conducting risk assessments for workers aged between the minimum age and 18.

- h. Terms and Conditions: This section sets out details regarding:
 - Specific wages, hours and other provisions that apply to the project
 - Maximum number of hours that can be worked on the project
 - Any collective agreements that apply to the project. When relevant, provide a list of agreements and describe key features and provisions
 - Other specific terms and conditions
- i. Grievance Mechanism: This section sets out details of the grievance mechanism that will be provided for direct and contracted workers and describes the way in which these workers will be made aware of the mechanism.
- j. Contractor Management This section sets out details regarding:
 - The selection process for contractors,
 - The contractual provisions that will put in place relating to contractors for the management of labor issues, including occupational health and safety,
 - The procedure for managing and monitoring the performance of contractors.
- k. Community Workers: Where community workers will be involved in the project, this section sets out details of the terms and conditions of work, and identifies measures to check that community labor is provided on a voluntary basis,
- l. Primary Supply Workers: Where a significant risk of child or forced labor or serious safety issues in relation to primary suppliers has been identified, this section sets out the procedure for monitoring and reporting on primary supply workers.

Annex F –TOR for Biodiversity and Critical Habitat Assessment and Preparation of Biodiversity Management Plans

Scope of Work

i) Desk Study / Secondary Survey of Biodiversity Values (Flora & Fauna): Using secondary information and geospatial data, the consultant should identify areas of critical habitat as per the criteria of the IFC Performance Standard 6 and WB ESS 6 to inform project decisions on selection of roads and other interventions such as ropeways and waterways. Critical habitats are identified by the presence of qualifying biodiversity features. These may include significant components of Critically Endangered and Endangered species, species with small ranges, migratory or congregatory species, rare and threatened ecosystems, and key evolutionary processes. The consultant should undertake a biodiversity survey document the notable flora, fauna, including avifauna of the Core Road Network, including records of wildlife movements between community/ reserve forests and other sites.

ii) Primary Biodiversity Survey and Critical Habitat Assessment: The consultant should design and undertake primary surveys to ascertain the presence of critical habitat such as national parks, wildlife sanctuaries, eco-sensitive zone, biosphere reserves, or forest have the presence of Schedule 1 species are in proximity to subproject site. The consultant should use the methodology of a critical habitat assessment in the IFC Guidance Note 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (IFC, 2012b). iii) The consultant should lead the survey design and implementation to ascertain the valuable flora and fauna on the selected project road sections including an inventory of wildlife movement (s) on the section

iii) Site-Specific Biodiversity Management Plans: Based on the biodiversity survey and critical habitat assessment, including any wildlife fauna movements within the selected project stretches, the consultant will analyse and assess whether any significant and irreversible degradation of

forest/habitat is likely due to the proposed improvements to the road either directly, indirectly or cumulatively. If dealing with habitats for rare, endangered or threatened species, or schedule 1 species, the consultant should identify and consult with specific species specialists (such as from IUCN's Species Survival Commission Specialists Group). The consultant should assess the magnitude and significance of the impacts from the project to wildlife and its habitat and develop site-specific and, where relevant, species-specific management plans. The consultant should work closely with the State Wildlife Board, Forest department, Autonomous District Councils, NGOs and other relevant departments while designing the Biodiversity Management Plan. The management plans should provide holistic and integrated solutions for the management of biodiversity, applying the mitigation hierarchy approach. The solutions must consider hard engineering solutions as well as nature-based solutions and identify the timeline and budget to implement the measures. This should be combined with suggestions on conservation efforts, community-led approaches and measures to be taken in coordination with line departments such as forest, tourism, aquaculture mission, community and rural development.

iv) Contractors EMP: The consultant work with the PIU to integrate the identified measures into the contractors EMP and sensitize the PIU and contractor on the implementation of the Biodiversity/ Species specific management plan

v) Training and Capacity Building in Environmental and Social Cell, PWD: The consultant must facilitate the development of training modules and train master trainers within the Environmental and Social Cell of the PWD to systematically integrate biodiversity considerations through all phases of infrastructure design - through the planning, construction, operation and maintenance phase. This should include use of Geo-spatial tools, conceptual understanding of critical and natural habitats, consideration of direct, indirect, cumulative and landscape scale impacts and how to assess and manage them, relevant global and national best practices on measures to reduce impacts of roads on biodiversity.

Consultants Profile: The Consultant should be a Regional Biodiversity Specialist with 10-15 years of experience. S/he should have specific experience working on managing impacts of linear infrastructure on biodiversity, including planning and supervision of the implementation of hard engineering measures as well as nature-based solutions. Consultant should be familiar with World Bank or other multilateral organization Safeguards Policies and Standards. Consultant can expand his team after initial assessment of specific survey requirements.

Assignment Duration: 8 Months

Annex G - List of the World bank Operational Policies and Guidelines Operational Policies (OP) /Bank Practices (BP) /Good Practices (GP) / Operational Directives (OD) / Guidelines

- OP / BP / 4.01 Environmental Assessment
- OP / BP / GP 4.02 Environmental Action Plans
- OP / BP / GP 4.04 Natural Habitats
- OP / BP 4.12 Involuntary Settlement
- OD 4.10 Indigenous Peoples
- BP 17.50 Disclosure of Operational Information
- OP/BP 4.11 Physical Cultural Resources
- OP/BP 4.36 Forests