

TERMS OF REFERENCE

Consultancy Services for "Environmental and Social Impact Assessment Consultant" (ESIA) for conducting an Environmental and Social Assessment of 221km core network and preparation of Environmental and Social impacts mitigation/management instruments.

1.0 Project Background

Himachal Pradesh is known as being the most prosperous and fastest growing economy in India due to initiatives taken in the field of education, horticulture, health, social welfare and inclusive growth. Tourism and agriculture are the main drivers of the economic growth in the State. Road remains to be the main mode of transportation, since rail and air transportation services are not well-developed. HP has 38,426 km of roads consisting of 2,023 km of national highways, 4,703 km of major/other district roads (the State Core Roads Network) and 31,700 km rural roads.

Himachal Pradesh State Road Transformation Project (HPSRTP) is an ambitious project of the Govt. of Himachal Pradesh under which it intends to strategically transform the Core Road Network of 2000 km road length. In the project, State Road Network roads of 650 km road length will be widened, and 1350 km road length will be provided periodic maintenance besides other institutional, development activities. Based on the outcome of the feasibility study of 2000 km length, 650 km of core roads have been prioritized for upgrading under Tranche-I, Tranche-II and Tranche-III project adopting appropriate contracting models. Now, HPRIDCL intends to Prepare Feasibility Study and Detailed Project Report for Selected Corridors in Himachal Pradesh of about 221 Km of additional MDR/ODR roads, with the expected outcome of upgradation and Detailed Engineering, including integration of Environment and Social aspects for the next tranche and will be used for improvement and up gradation of State Road network under Tranche-II.

List of additional roads under Tranche-II are indicated in Table 1.

Table 1: Proposed List of Additional Roads prioritized under Tranche-II of HPSRTP

(Sanctioned length -221 km)

List of Roads of 221 Km. Length			
Sr. No.	Name of Road	District	Length (in Km.)
1.	Nadaun-Dhaneta-Barsar-Shahtalai-Bhroli Kalan-BagchalBrdige-Thapna at NH-203	Hamirpur & Bilaspur	93.00
2.	Kainchi Mode Junction (NH-205 Tunnel 1)- Naina Devi –Bakhra Dam and Spur Roads connecting Naina Devi Temple (MDR 31, MDR 32)	Bilaspur	53.00
3.	Rohru-Chirgaon-Tikri (RCT)	Shimla	21.00
4.	Sungri-Khadrala -Baghi Road	Shimla	24.00
5.	Palampur to Sheela Chowk Road (MDR 78)	Kangra	30.00
Total Road Length			221.00

As part of the project preparation, Environmental and Social assessments (ESA) of proposed roads will be carried out in accordance with the World Bank's Environmental and Social Framework and applicable environment and social legal framework of GOI/GoHP.

2.0 Objective

The objectives of this assignment are to: i) conduct Environmental & Social Screening of the 221 km project roads and based on the findings ii) undertake Environmental and Social Impact Assessment and preparation of E&S risks and impacts management tools for priority 221km road identified for Tranche-II;

3.0 Scope of Work

HPRIDCL now wishes to engage a Consulting Firm (hereafter named "the Consultant") for the preparation of an Environmental and Social assessment and follow on management/mitigation instruments to address project's E&S risks and impacts for roads under Himachal Pradesh State Road Transformation Program (HPSRTP) tranche II. The ESIA will be conducted in accordance with relevant Environmental and Social Standards of ESF¹; and will consider, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts of the project. The scope of work to be carried out by the Consultant shall include but not limited to the following:

- a) Conduct, as the first step, a comprehensive Environmental and Social Screening for the entire 221 km
- b) Conduct detail Environmental and Social Impact Assessment (ESIA) for selected 221km of up-gradation in accordance with Bank's ESF. In addition, the Consultant will: prepare as necessary, i) the Environmental and Social Management Plan (ESMP), ii) Biodiversity Management Plan (BMP), update the existing ; iii) Resettlement Action Plan (RAP), iv) prepare Tribal (Indigenous) Peoples Policy Framework (TPPF) Indigenous People Development Plan (IPDP), if found relevant, v) update the existing Labor Management Procedure (LMP), Stakeholder Engagement Plan (SEP) and GBV (SEA/SH) risk mitigation plan etc. as appropriate for the activities corresponding to tranche II of this engagement.
- c) The Consultant will 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.
- d) While conducting ESIA, the Consultant will coordinate with DPR Consultant to ensure integration of ESIA findings in engineering feasibility studies, for timely sharing/exchange of information and documents 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.
- e) The Consultant shall conduct consultations with identified stakeholders and project-affected parties/community from early project planning and design stages of the assignment. The Consultant shall support the client in update the existing Stakeholder Engagement Plan (SEP) for entire project cycle and its disclosure before project appraisal.

¹ ESS identified as relevant during project preparation phase were: ESS1, 2, 3, 4, 5, 6, 8 and 10.

- f) Conduct capacity building training on Bank's 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, various grievance mechanisms to address grievances of communities, labor and also of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH)/Gender Based Violence (GBV) etc. which are integral part of Bank's ESF policy.

Scope of activities at each stage is describe below:

Task A: Activities to be undertaken during Inception Stage

- a) The Consultant shall use the inception period to familiarize with the project details. The Consultant shall take cognizance of engineering studies that are being prepared in parallel. The Consultant should also recognize that due care and diligence planning during the inception stage helps in improving the timing and quality of the ESIA reports.
- b) During the inception period the Consultant shall (a) study the project information to appreciate the context within which the ESIA should be carried-out, (b) identify the sources of secondary information on the project and on the project area, (c) conduct preliminary planning survey to understand environment settings, available ROW based on revenue records from the revenue department and required ROW along the road corridors, identify parameters or criteria for E&S screening in subsequent tranches, design and developing formats for field and design survey; (d) prepare preliminary estimation of impacts on private and community properties including impacts on non-titleholders (e) carry out identification of stakeholders, plan consultations with stakeholders and likely project affected parties; and (e) study the various available surveys, techniques, models and software in order to determine the most appropriate options in the context of the project.
- c) The Consultant shall review and identify Borrower's E&S rules/regulations to identify, required actions considered necessary for the project to achieve compliance with local legal requirements, insofar as they do not contradict the Bank ESF Policy;
- d) HPRIDCL, preceding to HPSRTP, has part of Himachal Pradesh State Roads Project (HPSRP) implemented measures to minimize the impacts of project on overall environment by undertaking interventions like design modification and adoption of innovative technologies with objectives to create a sustainable road. The interventions intended to enhance, but not limited to, road safety, slope stabilization, erosion control, biodiversity conservation measures, aesthetics of landscape etc. The Consultant shall review reports of Himachal Pradesh State Road Project (HPSRP), HPSRTP and will assess applicability of identified good engineering practices in the projectandin the ongoing project(Tranche 1) and adopt in Tranche II Project Roads. The Consultant will summarize how lessons learnt from the previous project would be applied to the preparation and implementation of this project.
- e) The Consultant after appreciation of consultancy assignment scope and site conditions, shall fine-tune the methodology(ies) that shall be used to carry out Environmental and Social Impact Assessment (ESIA) for Tranche-II additional roads proposed (Table1) under HPSRTP.
- f) The Consultant shall interact with the Feasibility and DPR Consultant to determine how the ESIA activities fits into the overall project preparation/ project cycle and to appropriately plan the timing of the deliverables of the ESIA process. The Consultant

shall develop criteria for prioritization of road corridor and for selecting appropriate ESIA instrument (s) for subsequent stage of project preparation.

- g) The successful execution of this project hinges on the proficient use of GIS software-based mapping and remote sensing data by the consultant's team. A detailed workflow needs to be prepared for developing the ICT tool to be used for collecting data on real time basis and geo-referencing required for preparing the sub-project level E&S instruments. These technologies are fundamental in establishing baseline conditions, conducting thorough environmental and social assessments, and performing detailed analyses. The consultant's team shall deploy such pivotal tools for making informed decisions to ensure the preservation and sustainable management of our environment.
- h) All of the above along with a detailed work plan should be presented in the Inception Report.

Deliverable 1: : Inception report, including GIS software-based mapping and ICT tool for data collection.

Task B: Undertaking Environmental & Social Screening for 221 km core road network as part of Feasibility study and prioritization of road

Environment & Social screening is done in the early stages of the project preparation to make preliminary assessment of the nature and scale of social and environment issues and impacts that are likely to arise due to the proposed roads. It helps determine the appropriate extent and type of project ESMP to be undertaken, provides information/input that are required to assess technical, economic and financial feasibility of the project, and recommend possible modifications to the preliminary project design. The Consultant shall carry out social and environmental screening as per the work plan and methods described in the Inception Report, and in consideration of the comments of the Client/other Consultants hired by the Client and the Bank on the same. The Consultant shall keep in mind the particular requirements of the project, especially the needs of the overall feasibility studies in carrying out the screening. The E&S surveys be coordinated with the engineering surveys.

The outcomes of screening exercise shall provide inputs to (a) overall criteria for selection of project corridors (technical, environmental, social and economic criteria) (b) scope of ESIA for each corridor (c) identification of associated facilities and primary supplier of project that need to be assessed in detail during ESIA; (e) identify scope for integrating green highway 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; (f) set out project boundary and identify project activities for GHG emission estimation; (g) applicability of Environmental and Social standards (ESSs 2-8) and scope for assessment during ESIA. Further, the scoping shall identify issues that need to be studied in detail - related to sensitive receptors / land uses that could be affected due to road improvements with a view to integrate appropriate measures in the designs.

Specific tasks as this stage are as follows:

a) Define project's 'study area' or project influence area

The Consultant shall define the 'study area' considering different environmental & social settings along corridor, project activities and associated facilities². Specify the boundaries of the study area for the assessment: watersheds, enhanced access to sensitive/remote areas such

² means facilities or activities that are not funded as part of the project and, in the judgment of the Bank, are: (a) directly and significantly related to the project; and (b) carried out, or planned to be carried out, contemporaneously with the project; and (c) necessary for the project to be viable and would not have been constructed, expanded or conducted if the project did not exist

as parks/reserves/forests, in-migration and settlement, natural resource exploitation and commercial development.

b) 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 from primary surveys. Primary surveys shall include baseline monitoring of air, water, soil, noise and vibration at representative and sensitive locations, and identification of all macro-level environmental & social issues within the project's study area. The Consultant shall extensively use the video records of the project road (carried out as part of the engineering surveys).

The Consultant shall survey the environmentally & socially sensitive locations on and along the project road, as well as within the project's study area. All regionally or nationally recognized 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 plan/map along the chainage. The information of longitude, latitude should be recorded.

In addition, the consultant is to ascertain presence of tribals — whose characteristics match with requirements as listed under ESS 7 and therein assess need to Tribal Development Plans for those specific corridors,

c) Review of Environmental & Social Legal Requirements

Taking cognizance of existing state and national social and environmental acts, rules and regulations, the Consultant shall review environmental and social legal requirements set forth per local regulations to assess their applicability to the project. The permissions and clearances required shall be listed beforehand for implementation of the project.

d) Baseline Data

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) takesin account current and proposed development activities within the project area but not directly connected to the project. (This section should indicate the accuracy, reliability and sources of the data and consequences for assessing impacts and their mitigation). This section will address the separate Project Influence Area (PIA) of each of the route under assignment (i) and will present GIS map, as appropriate.

e) Analysis of Impacts and Management Measures

The Consultant shall conduct a preliminary analysis of the nature, scale and magnitude of the impacts that the project is likely to cause on the environment, especially on the identified sensitive environmental receptors, and classify the same using established methods and tools. For the negative impacts identified, alternative avoidance/mitigation/management options shall be examined (in line with mitigation hierarchy outlined in the ESF), and the most appropriate ones suggested. For the positive measures identified, alternative and preferred enhancement measures shall be proposed.

f) Scoping

The Consultant shall define boundaries of the project ESIA after careful consideration of the baseline scenario, likely potential environmental risks and impacts on the identified sensitive environmental receptors/VECs, and the proposed mitigation and enhancement measures. The scoping shall include a listing of potential environment issues that do not deserve a detailed examination in the project ESIA (covering induced impacts that may be outside the purview of

the client) along with a justification. The scoping needs to identify potential environmental risks and impacts that should be studied during ESIA and recommend additional studies needed to comply the requirements of Environmental and Social Standards (ESSs) of the World Bank. If an extensive study is recommended in future which is beyond the scope of the project, the draft ToR should be attached as an Annexure to the Inception report.

g) 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 stabilization, 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.

h) Stakeholder Assessment & Consultation

In updating the existing Stakeholder Engagement Plan the Consultant shall carry out consultations with communities that are likely to be affected, NGOs, selected Government Agencies and other stakeholders to: (a) collect baseline information, (b) obtain a better understanding of the potential risks and impacts and capacities (c) appreciate the perspectives/concerns of the stakeholders. Consultation with the stakeholders shall not be treated as a project information dissemination session, but as an exercise to improve the plan and design and implementation of the project. The plan will be such that it shall ensure appropriate project information is disclosed to stakeholders in a timely understandable, accessible and appropriate manner.

Deliverable2: The Consultant shall prepare an Environmental & Social Screening Report. The reports will be revised in consideration of the comments of the Client and the World Bank.

Task C: Undertake ESIA and Preparation of Corridor Specific Environmental Management Plan, RAP and TDP for 221km of up-gradation roads

Based on the findings of screening exercise, the Consultant shall determine the scale and type of surveys that will be conducted as part of ESIA. The intent of surveys shall be to: (a) validate secondary data with latest baseline information; (b) facilitates the design and integration of appropriate management / mitigation measures; (c) comply with the regulatory requirements and to facilitate GoHP/GOI (as applicable) to process relevant environmental clearances.

a. Legal and Institutional Framework

The Consultant shall review and assess applicability of existing national and state's Environmental and social requirement according to applicable policies, laws, regulations, rules and procedures; as well as the institutional framework relevant to environmental and social

aspects. The assessment will identify inconsistency or lack of clarity and aspects relevant to address project's E&S risks and impacts; and deviations with respect to requirements in ESSs. For this purpose, the Consultant should review the existing E&S documents and based on assessment findings, the Consultant in discussion with HPRIDCL shall update the relevant framework documents and also incorporate the same in the assessment documents for sub-projects under tranche 2.

b. Baseline Surveys:

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 GoHP, 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 along all the road corridors. 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 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.

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 these information on maps of adequate scale (1:250,000 minimum), superimposed with the project roads corridor.

c. Biodiversity Management Plan

The consultant based on outcome of environmental screening and scoping, shall conduct biodiversity assessment study to assist in decision-making on conservation and management of areas with high biodiversity values situated along the project roads and project influence area as per the HPRIDCL's ESP-IPP requirements. Based on the initial analysis, some road works that would cause significant adverse or irreversible impacts on such areas may be excluded. The consultant, in consultation with relevant stakeholders will formulate a Biodiversity Management Plan defining management and enhancement measures, estimating budget and earmark provision for implementation of measures proposed.

The biodiversity management plan shall describe the ecosystems affected, species affected, eco system services affected, protection status, site ownership and control, baseline threats along with potential project related risks and impacts. Baseline data studies may comprise a combination of literature review, stakeholder engagement, in-field surveys, and other assessments, using sound scientific practice, GIIP, and reflecting the nature and significance of potential risks and impacts of the project.

The Biodiversity Management plan shall also include the baseline and CHA (Critical Habitat Area) summary; summary of the likely impacts; requirement of no net loss; proposed mitigation measures with additional details provided to guide implementation; along with the requirements for implementation of mitigation measures. A BMP should clearly state the objectives based on the findings of the baseline and recommendations of the ESA; the activities to be carried out along with any specific project requirements; followed by an implementation schedule, the institutional responsibilities and cost estimates (including upfront investment costs and recurrent costs).

d. Social Impact Assessment

- i. Consultations with stakeholders: The Consultant shall carry out meaningful consultations as outlined under ESS 10 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 Based Violence (GBV) and GBV-related concerns about the project. 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.
- ii. In case of tribals, the Consultant shall conduct consultations and identify if the project impacts 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 obtain Free Prior and Informed Consent of the affected indigenous persons/tribals. In case FPIC cannot be ascertained, the project will not proceed with those sub-projects/activities. Summarize the concerns, suggestions by stakeholder for consideration by project authorities during design.
- iii. 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 analyze key impacts on different groups of people (such as landowners, small, farmers; small businesses, shopkeepers; commercial establishments, SCs/STs, 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.
- iv. Entitlement policy and assistance package: As HPRIDCL is using Direct purchase /Negotiated award method for land taking under this project, consultant should further assess the approach to identify any shortcomings and suggest improvements to the processes and include the same in the updated RPF.

- v. 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.
- vi. Labor related aspects: Assess applicability of labour laws and potential risks of child labor and forced labor, including the workers to be brought to the project by brokers (sub-contractors) from within or outside the district/state; grievance mechanism to all workers, occupation health and safety aspects, etc. also the implementation of the current LMP. 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, if any
- vii. Gender Based Violence or SEA/SH aspects: To minimize the risk of GBV (and Sexual Exploitation and Abuse), the consultant shall: (a) Assess the overall GBV risks in the project area based on; (i) data on partner/non-partner physical violence against women; (ii) cultural practices vis-a-vis women (early marriage, physical practices); and (iii) information obtained from consultations carried out as part of consultations with stakeholders; b) map of GBV service providers in the project area that indicates the type of services, including formal service providers (i.e., hospitals, NGOs, government offices) and informal (i.e., women's groups, community elders, etc.). The mapping should indicate any capacity constraints of informal GBV service providers; c) Confirm the GBV risk assessment rating provided by the World Bank for the project and assess the capacity of the implementing agency to supervise GBV mitigation measures; d) Identify GBV mitigation measures linked to activities to manage labor influx (including specifications for placement of worker camps, signage, infrastructure for men and women, etc.); e) Consult with women's groups, groups that advocate for children and adolescent rights, and other stakeholders. These consultations should feed into the identification of potential GBV issues and possible prevention and mitigation strategies. As part of these consultations, those affected by the project should be properly informed of GBV risks and project activities to get their feedback on project design and safeguard issues. Community consultations should never directly ask about experiences of GBV and should follow ethical protocols. The draft ESIA report(s) shall articulate the findings of the targeted consultations and GBV mapping and present a matrix off issues and recommendations of the consultant to mitigate the critical GBV issues, including the engagement third party monitoring, as required.

e. Environmental and Social Risk and Impacts and Mitigation Measures:

The Consultant shall determine all relevant direct, indirect and cumulative environmental and social risks and impacts of the project related to key issues identified through the scoping, 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 tunneling; 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, 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; (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 Consultant shall (a) identify feasible measures for resource efficiency i.e. energy use, water usage and management, and raw materials so as to minimize project's foot prints on finite natural resources; (b) estimate carbon and GHG emissions due to implementation of project, identify feasible measures for reducing such emissions, creating carbon sink, and climate resilient measures to suite local needs and challenges, and by possible use of alternative technologies. The Consultant shall be responsible to validate project boundary, baseline data, tools and methods that shall be used for estimating GHG emission and designing mitigation measures.

The Consultant for identified environmental risks and impacts shall prepare ESMP in accordance with 'mitigation hierarchy'. which will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

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.

f. 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.

g. Environment and Social Management Plan

- Based on the environmental and social impacts assessed, separate ESMPsRAP andTDP (as required) for each road corridors shall be prepared that consists of 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 ESSs 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.
- 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 ESIA document.

- 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 component, the ESMP shall identify opportunities that exist to induce positive impacts of project along the corridor. This shall include but not limited to the enhancement of specific locations as water bodies; micro-watershed; innovative storm water management practices - like rainwater harvesting and bio-retention apart from preventing water logging conditions in the adjoining settlements of the highway; enhancement of scenic areas along the corridor; enhancement of community and cultural assets, etc. 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.
- 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, 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.

Responsibilities for execution and supervision of each of the mitigation and enhancement measures shall be specified in the ESMP.
- 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. 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 for unanticipated incidents arising from both natural and man-made hazards, shall prepare Emergency Response Plan (ERP) particularly during construction stage.
- 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.
- The ESMP 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. An outline of the contents of the EMP to be included in the project's Operational Manual should be provided along with environmental/social protection clauses for contracts and specifications.
- ESMPs should include provisions/actions relating to construction stage social impacts, gender mainstreaming, citizen engagement, management of labor influx, HIV/AIDS and gender-based violence, etc.
- The EIA shall highlight the special environmental clauses (SECS) to be included in the Tender Document under General/Particular Specification. These clauses are aimed at ensuring that the Contract Or carries out his responsibility of implementing the EMP

and other environmental and safety measures. The EIA shall also include a health safety plan of the project to be included in the tender document.

- The Consultant shall provide assessment on existing institutional/organizational arrangements on management of E&S aspects. . The findings shall be basis to identify measures and actions to strengthen environmental and social management capability in HPRIDCL The ESMPs shall describe the implementation arrangement needed for the project, especially the 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. All key actions identified essential for capacity development for effective implementation of project's E&S mitigation measures shall be linked with ESCP.
- 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).
- The ESMP prepared will shall be incorporated into the ESCP. The Consultant shall ensure implementation costs of mitigation measures and actions is integrated into the project's overall planning, design, budget, and implementation.
- Update RPF (if required): Based on the findings of ESIA studies, the consultant should propose changes/updates to the RPF.
- Prepare TDF: Prepare Tribal Development Framework (if required): The TDF should cover the approach and processes involved in addressing tribal issues in the project context in accordance with requirements of ESS 7.
- Prepare Resettlement Action Plan: The scope and level of detail of the resettlement plan vary with the magnitude and complexity of settlement. 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 B**for indicative contents of RAP).
- Prepare Tribal Development Plan (if required): 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) tribals affected by the project receive culturally appropriate social and economic benefits; and (b) when potential adverse effects on tribals are identified, those adverse effects are avoided, minimized, mitigated, or compensated for. (See **Annexure C**for indicative contents of TDP).

h. StakeholderEngagement

The Consultant will update the nature/type, scope and frequency of stakeholder engagement required in the SEP proportionate to environmental and social risks and impacts identified during E&S screening. The Consultant will conduct stakeholder engagement as outlined under ESS 10 during ESIA preparation as per updated SEP. It is recommended that consultation sessions shall be organized in co-ordination with the Feasibility and DPR Consultant. The ESIA will include the planning of the stakeholder engagement during the project implementation.

Deliverable 3. Updated Resettlement Policy Framework (if required), Tribal (Indigenous) Peoples Planning Framework (if required), Updated GBV risk mitigation plan, Updatedexisting Labor Management Procedure (LMP), Updated existing Stakeholder Engagement Plan (SEP) etc.

Deliverables 4: Draft ESIA of 221 km road upgradation(Package wise)

Deliverable 5. Biodiversity Management Plan

Deliverable 6. Package wise Draft Environment and Social Management Plans (ESMP), SEA/SH Plan

Deliverable 7: Package wise Draft Resettlement Action Plans (RAP)– Indigenous Peoples Development Plans and FPIC (IPDP)**TaskD: 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, updated RPF, TDF, RAP, TDP, or any other documents in local language (Hindi and other relevant). Consultant shall help in drafting an advertisement for the newspaper announcements for disclosure; and help the client to place all the related ESIA 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) e.g, 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.

Deliverables 8: Stakeholder consultation Report/FPIC workshops for disclosure and feedback on draft and final ESIA and site-specific plans

TaskE: Provide inputs to preparation of ESCP

The Consultant shall provide inputs to HPRIDCL in updating the ESCP (if required) which will include (a) measures, actions with timelines required for the project to achieve compliance with the ESSs requirements over specified timeframe for the road construction and maintenance, (b) process (reporting and managing) allowing adaptive management of propose project changes or unforeseen circumstances, (c) different management tools that borrower will develop proportionate to the risk and impacts of the project;

Deliverables9: Draft Environment and Social Commitment Plan (ESCP).

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

Based on the special environmental clauses (SECS) identified from the ESIA 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 HPRIDCL'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;

Task G: 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.

Deliverables 11: Required Clearances

Task - H: Training of Client's Staff

The Consultant shall conduct training for the client at various levels. The training should as far as possible be conducted in the HPRIDCL office at Shimla. This is to ensure that the knowledge, skills and perspectives gained by the Consultant is transferred to the client so that these can be utilized effectively during project implementation. The training should be focused (a) borrower's responsibilities and ESSs requirements of the World Bank and (b) on ESMP's covering both central and field offices. The Consultant shall develop a plan for training the client's staff. The plan should specify the types of training, the participants for each training type, the number of sessions required, the duration of each session and when it should be conducted. At the end of the training, when the ESMPs are ready, brief reports shall be prepared for the training conducted and observations relevant for future training, if any.

Deliverables 13: Training Plan and Calendar and Training Completion Report.

Task I: Co-ordination with DPR Consultant:

The Consultant shall at the direction of HPRIDCL ensure absolute coordination and shall include but not limited to the following as part of the scope of work:

- Coordination with Consultant hired for feasibility study and preparation of detailed design report.
- Provide assistance to the HPRIDCL as appropriate in preparation of the project.
- Develop mechanism to establish a strong co-ordination with the other project-preparation /management Consultant appointed in the project.
- Work under the overall supervision of HPRIDCL will facilitate the consultancy in contacting relevant officials, departments and agencies.
- Ensure the timely flow/exchange of information and documents with DPR Consultant and stakeholders of the project.

Deliverables 10: Package wise Final Reports – ESIA, ESMPs, RAPs, IPDPs, and ESCP

TASK J. LAND ACQUISITION:

The ESIA Consultant in coordination with the HPRIDCL shall carry out the following activities:

- i) Liaise with the concerned Government Agencies for No Objection Certificates (NOCs) regarding the acquisition of land for the project, having considered HPRIDCL's request for land for the project.
- ii) Once the ESIA study is completed (prior to preparation of RAP), assist the District Administration/District Level Land Purchase Committee (DLLPC) of the

respective Districts in conducting a census survey/joint spot measurement of the affected land in the respective villages in conjunction with the Executing Agency, current usufruct occupiers of the respective land, if any and Village Pradhan/MC officials or Revenue Officials as the case may be. During the census survey/ joint spot verification, the land to be acquired for the project will be identified, and land holding patterns, village boundaries, its trees, crops, buildings, and other assets shall be recorded. [The census survey/ joint spot verification will cover several aspects which have been covered in the ESIA. The difference is that the aspects will be more detailed to make a concrete plan for compensation and R&R.]

- iii) Once the census survey/joint verification is completed, facilitate consultations— among the affected households, their representatives, Village Pradhan, HPRIDCL representatives, and the revenue officer to arrive at a fair compensation comprising land compensation and valuation of the affected property, if required. The valuation of land, structures and other assets will be calculated as per the RFCTLARR Act, 2013.
- iv) Liaison with the Revenue Officer for drafting the 'bill of compensation' based on the ESIA report, resettlement action plan/R&R scheme, joint spot verification/census survey, land measurements, revenue records, individual consent of each land user to handover the land parcel, the estimates of land values as per the rates for land approved by the district administration, and the rates approved by the Public Works Department (PWD) of Himachal Pradesh for civil structures and buildings. Co-ordination with Executive Member of Revenue and the Deputy Commissioner of the concerned districts for approval of Bill of Compensation.
- v) Identification of land parcels missed out from acquisition in the first round and assist the Village Pradhan in Joint spot measurement. Assist and coordinate with respective authorities for preparation and finalization of Bill of Compensation for acquisition of the land under missing plots.
- vi) Obtain approval for estimates for shifting of utilities of all types from the concerned authorities and HPRIDCL.
- vii) Coordinate with the DPR consultants in finalizing the DPRs and bid documents based on the ESIA and the status of land acquisition/land purchase process.
- viii) Consultant is also required to prepare all land acquisition/land purchase papers on behalf of HPRIDCL (i.e. all necessary schedules and draft notifications as per applicable RFCTLARR Act and Land Purchase Policy) for acquisition of land.

Deliverables12: Relevant Notifications, etc. required for land acquisition/purchase process.

5.0 Inputs to be provided by the Client

The Client shall provide all necessary and reasonable support to the Consultant to collect secondary data by issuing authorization letters. The Consultant will be responsible for any translation of documents and for processing of data. The Project Director or his representative will liaise with the Consultant for all activities and participate as possible in the study. The HPRIDCL will provide the following reports:

- All relevant documents related to the specific projects and any other background documentation and studies, available with HPRIDCL.
- Making all necessary arrangements for supporting the work of the Consultant(s), by e.g. facilitating access to government authorities and other project stakeholders and infrastructure facilities.

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

B. Reporting Schedule

1. Reporting Requirements/ Deliverables: -

Task	Deliverables	No. of hard copies	Time period in month from the date of commencement
1	Inception report, including GIS software-based mapping and ICT tool for data collection.	5	1
2	Environmental and Social Screening and Scoping Report	5	2
3	Update (if required) a) Tribal (Indigenous) Peoples Planning Framework (if required) b) Updated GBV risk mitigation plan c) Resettlement Policy Framework (RPF) d) Updated existing Labor Management Procedure (LMP), e) Updated existing Stakeholder Engagement Plan (SEP)		3
4	Draft ESIA Report	5	4
5	Biodiversity Management Plan	5	4
6	Package wise Draft Environment and Social Management Plans (ESMP), SEA/SH Plan	5	5
7	Package wise Draft Resettlement Action Plans (RAP)– Indigenous Peoples Development Plans and FPIC (IPDP)	5	5
8	Stakeholder consultation Report/FPIC workshops for disclosure and feedback on draft and final ESIA and site-specific plans		From 3 months onwards
9	Draft Environment and Social Commitment Plan (ESCP)	5	6
10	Package wise Final Reports – ESIA, ESMPs, RAPs, IPDPs, and ESCP	5	7

11	Required Clearances		From 3 months onwards
12	Notifications, etc. required for land acquisition process		From 3 months onwards
13	Training Plan and Calendar and Training Completion Report.	5	From 5 months onwards

Terms of Payment

The mode of payments to be made in consideration of the work- to be performed by the Consultant shall be as follows:

Sl. No.	Activity	Payment in % of the total price of the Contract
1	Submission and approval of Inception Report	10%
3	Submission and approval of Environmental and Social Screening and Scoping Report	10%
4	Submission and approval of Draft E&S Impact Assessment Report	20%
5	Submission and approval of Package wise Draft Report - Environment and Social Commitment Plan (ESCP), Environment and Social Management Plans (ESMP), Biodiversity Management Plan, SEA/SH Plan	20%
6	Submission and approval of Sub-project Draft Resettlement Action Plans (RAP)– Indigenous Peoples Development Plans and FPIC (IPDP)	10%
7	Submission and approval of Package wise Final Reports - ESIA, ESMPs, RAPs, IPDPs, and ESCP	20%
8	Required Clearances	10%

Note:

- All the above said report shall be submitted in hard and soft copies (Pen Drive).
- All payments shall be made on submission of pre-receipted bills by the consultants in quadruplicate for respective stages.
- 50% Payment will be made to the Consultant on submission of reports and balance 50% after approval from HPRIDC and World Bank and on acceptance of the reports/deliverables by the Review Committee.

Review of reports: -

A review committee (to be restricted to Five members) consisting of following officers of the client's Department will review all reports of consultant (inception, progress, intermediate and draft final) and suggest any modifications/changes considered necessary within 15 days of receipt.

- 1) Engineer-in-chief, HPPWD
- 2) Director (Projects), HPRIDCL
- 3) Executive Director (Design)-Cum-Superintending Engineer (P&D), HPRIDCL
- 4) Nodal Officer Environment, HPRIDCL
- 5) Environment and Social development officer, HPRIDCL

Duration of the Assignment and Project Team:

The total duration of the assignment would be about 7 months and the services shall be delivered in Himachal Pradesh. The consultant will be required to make their own arrangements for an office and other logistics.

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

KEY PROFESSIONALS

Sl.	Subject Expert	Total person months
1.	Team Leader – Environmental Engineer	
2.	Environmental Expert	
3.	Social cum Resettlement and Rehabilitation Specialist	
4.	Tribal Specialist	
5.	Bio-diversity Expert	
6.	Gender Expert	
7.	Community Consultation Expert	
8.	Land acquisition Expert	
9.	GIS & Remote Sensing Mapping Specialist	
10.	Geologist (with expertise in geohazards specifically landslides)	
	Total	27

It is expected that above team shall be assisted by other sub professional/ support staff for their respective part of the assignment, however, they shall not be considered for purposes of evaluation of technical bid. The sub-key professional staff mentioned below is tentative. The consultant shall propose the requisite sub professional/ support staff and the respective person-months based on their understanding and experience.

Sub-Key Professional Staff

Sl. No.	Sub-Key Staff
1	Social, L.A & R&R Support Staff including revenue persons
2	Environmental Support Staff

The above list of key experts and estimated person-month is **minimum and for reference only**. The Consultant is responsible to review the required services and may propose additional key experts and estimated person-months as per their own assessment to complete the services

as per Terms of Reference. Any increase in key experts, Support staff and their estimated person-months during the services, except any additional works, shall not constitute any additional financial implication. Age of key personnel shall not be more than 65 years.

The Consultant shall establish and maintain at least 2 offices (Shimla, Bilaspur) at the Project Site manned by senior key personnel during the course of the surveys and investigations. All the project related office work shall be carried out by the consultant in their site office unless there are special reasons for carrying out part of the office work elsewhere for which prior approval of client shall be obtained. The Consultant shall maintain the office at Shimla for complete duration of assignment. The address of site office including the personnel manning with their Telephone numbers and email Id will be intimated by the Consultant to client before commencement of the services.

The Consultant with their industry experience and in close consultation with the HPPWD/HPRIDCL would be required to deploy/demobilize its personnel in accordance with the progress of preparation work by the Consultant.

Key Qualifications

The key personnel required for the completion of the assignment are mentioned below. The qualification and experience requirement are also mentioned herein. CV of sub-key professional staff positions will not be used for scoring. **CVs of only Key Professional Staff will be considered for scoring in evaluation of technical bids.**

Team Leader – Environmental Engineer

i)	Educational Qualification	
	Essential	Must be Graduate in Civil Engineering/ Environmental Engineering and Postgraduate in Environmental Engineering/ Environmental Science
ii)	Essential Experience	
	a) Total Professional Experience	Minimum 15 years
	b) Role specific experience	<ul style="list-style-type: none"> • Minimum 10 years on environmental impact assessment of development projects and conversant with WB and other MDBs / ADB requirements under safeguard Policy Statement. • 5 years in base line survey, environment impact assessment, monitoring and Environmental Management Plan (EMP), preparation of EIA reports, Environmental/ Forest/ Wildlife clearance reports of highway infrastructure projects/ externally aided projects. • The candidate should have experience of conducting environmental impact assessment for roads located in hilly area and should be conversant in preparing management/mitigation measures for at least three projects of similar type and scale. • Related experience of about 5 years in

		<p>developing countries is essential.</p> <ul style="list-style-type: none"> • The candidate must have full knowledge of the international financial institutions' guidelines, procedures and operational policies/directives. • Experience of working as environmental specialist in at least two international financial institutions funded projects is required. • The candidate must have the experience of preparing environmental management plans and supervising and monitoring implementation of the plans. The candidate should have organized participatory consultation workshops.
	c) Experience in similar capacity	<p>Environmental Specialist in at least 3 highway projects (intermediate /2/4/6 laning of NH/SH/MDR/Expressways/ externally aided projects).</p> <p>Environmental Specialist in preparation of DPR/ Feasibility Study of intermediate/ 2/ 4 laning works of major highway projects (NH/ SH/ MDR/ Expressways/externally aided projects) of aggregate length of about 100 km.</p>

Environmental Expert

i)	Educational Qualification	
	Essential	Post Graduate in Environmental Engineering/ Environmental Science
ii)	Essential Experience	
	a) Total Professional Experience	Minimum 10 years
	b) Role specific experience	<ul style="list-style-type: none"> • Minimum 5 years on environmental impact assessment of development projects and conversant with WB and other MDBs / ADB requirements under safeguard Policy Statement. • 3 years in base line survey, environment impact assessment, monitoring and Environmental Management Plan (EMP), preparation of EIA reports, Environmental/ Forest/ Wildlife clearance reports of highway infrastructure projects/ externally aided projects. • The candidate should have experience of conducting environmental impact assessment for roads located in hilly area and should be conversant in preparing management/mitigation measures for at least three projects of similar type and scale.

		<ul style="list-style-type: none"> The candidate must have the experience of preparing environmental management plans and supervising and monitoring implementation of the plans. The candidate should have organized participatory consultation workshops.
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Social cum Resettlement and Rehabilitation Specialist

i)	Educational Qualification	
	Essential	Post-Graduate in Social Work/ Sociology or a closely related field of Social Science.
ii)	Essential Experience	
	a) Total Professional Experience	Minimum 15 years
	b) Role specific experience	<ul style="list-style-type: none"> Experts should have 15 years of post-graduate experience out of which about 10 years' experience of working as social/resettlement expert for major civil engineering projects. The person should have experience of working as social/ Resettlement expert for at least 3 major road project (s) in similar geographic/ environmental condition. 5 years in resettlement & rehabilitation impact assessment and related studies, preparation of Resettlement & Rehabilitation plan, in externally aided project in developing country is required and conversant with WB / ADB projects. The candidate must have full knowledge of international financial institutions' relevant policies and guidelines and operational directives, and must have worked as social/resettlement expert on at least three internationally funded projects. Thorough knowledge of prevailing land acquisition Act/ Policies. Experience in supervising and monitoring the implementation of the resettlement action plans is preferred. 5 years in Joint Measurement Survey (JMS) of affected land & properties to be acquired, Land Acquisition (LA) Plan, Draft LA Notifications and LA Reports of infrastructure projects / externally aided projects. Thorough knowledge of prevailing land acquisition Act, states jantri values as well as

		<p>current draft land Acquisition and Resettlement Act as well as state's/National Resettlement Policy on Resettlement and Rehabilitation for Project/ WB/ADB's R&R policy etc. He should have thorough knowledge of complete procedure of private and Government land acquisition up to the award stage.</p> <ul style="list-style-type: none"> • Familiarity with local language and past experience as social/resettlement expert in development projects in India will be advantageous.
	c) Experience in similar capacity	<p>Social/ Resettlement& Rehabilitation Specialist in at least 5 highway projects in preparation of DPR/ Feasibility Study of intermediate/ 2/ 4 laning works of major highway projects (NH/ SH/ MDR/ Expressways/externally aided projects) of total aggregate length of about 100 km.</p>

Biodiversity Expert

i)	Educational Qualification	
	Essential	Minimum of a Master's Degree in environmental science, biology, ecology, or natural resource management and related fields
ii)	Essential Experience	
	a) Total Professional Experience	Minimum 15 years
	b) Role specific experience	<ul style="list-style-type: none"> • Minimum of 10 years of experience in biodiversity assessment, biodiversity conservation activities and report preparation. Experience in snow bound/wetland management activities, linear projects in environmentally sensitive areas will be advantage. • Thorough understanding of the national legislative and regulatory requirements of India. • The candidate should have experience of 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. • The candidate should have thorough experience in designing, preparation and implementation of

		<p>Biodiversity Management Plan.</p> <ul style="list-style-type: none"> • Related experience of at least 3 years in conducting similar assignments is desired. • The candidate must have full knowledge of the international financial institutions' guidelines, procedures and operational policies/directives. • Experience of working as biodiversity expert in at least two international financial institutions funded projects is required.
	c) Experience in similar capacity	Biodiversity Expert in at least 2 highway projects in preparation of DPR/ Feasibility Study of single/ intermediate/ 2/ 4 laning works of major highway projects (NH/ SH/ MDR/ Expressways/ externally aided projects).

Tribal Specialist

i)	Educational Qualification	Post-Graduate in Social Work/ Sociology/ History/ Anthropology or a closely related field of Social Science. However, this requirement may be relaxed in case of candidates with exceptional credentials and demonstrated body of professional work with regard to application of customary tribal laws and practices applicable in the state of Himachal Pradesh.
ii)	Essential Experience	
	a) Total Professional Experience	Having significant experience of 10 years on issues related to tribal development in Himachal Pradesh or other hill States of India. This will include publications of books, journals, etc., on tribal related issues.
	b) Role specific experience	<ul style="list-style-type: none"> • Reasonable understanding on provisions under the Sixth Schedule of the Constitution. • Must have knowledge of local languages. • Strong writing skills in English. • Ability to work with minimal daily supervision and exercise sound judgment in organizing activities and meeting deadlines. • Must have experience in working with civil society

Gender Expert

i)	Educational Qualification	Master's degree in gender studies/ sociology/ anthropology/ social work/ Women's studies.
ii)	Essential Experience	

	a) Total Professional Experience	<ul style="list-style-type: none"> • Minimum 6 years of professional experience of working in the related field of gender, gender mainstreaming, gender-based violence, etc.
	b) Role specific experience	<ul style="list-style-type: none"> • Experience of working with tribal women's groups/ women's group • Fluency in Assamese and English and workable knowledge of local dialects of Himachal Pradesh. • Working knowledge of computer.

Community Consultation Expert

i)	Educational Qualification	Master's in social work/ sociology/ communication/ other related social science subjects.
ii)	Essential Experience	
	a) Total Professional Experience	Minimum 5 years of experience in community development and community engagement.
	b) Role specific experience	<ul style="list-style-type: none"> • Experience in facilitating local partners and/or community in resettlement activities of civil works. • Experience in dealing with grievances and grievance redress mechanisms. • Experience in liaising and coordinating with government counterparts and/or NGOs in various community engagement and communication activities. • Experience in governance system, coordination, policies and procedures in community engagement and communications' management. • Experience of working with vulnerable and tribal communities.

Land Acquisition Expert

i)	Educational Qualification	
	Essential	Graduate or equivalent
ii)	Essential Experience	
	a) Total Professional Experience	<ul style="list-style-type: none"> • 15 years as Kanungo / Niab-Tehsildar or above • Desirable: Ex- Revenue Officers like Ex- ADM/SDM, Ex-Tehsildar, Ex-Deputy- Tehsildar etc.
	b) Role specific experience	Min 10 years of experience in Land acquisition for government/ authority projects

Social and R&R support staff and LA Support Staff including revenue persons

The CV of the candidates need not be specified at the RFP stage. However, within 1 month of finalization of alignment, such experts in adequate numbers as mentioned or more shall be appointed by the consultant at its own cost. It is preferred that significant percentage of such candidates be recruited from amongst, land acquisition officers, revenue department officers of the state /private (Patwari, Kanungo) to enable smoother process. While HPRIDCL will provide adequate support, it will be responsibility of the consultants to ensure timely delivery of deliverables.

Environmental support staff

The CV of the candidates need not be specified at the RFP stage. However, within 1 month of signing of contract, such experts in adequate numbers as mentioned or more shall be appointed by the consultant at its own cost. It is preferred that significant percentage of such candidates be recruited from amongst multinational companies, environment and forest department, pollution control board, wildlife, state environment impact assessment authority officers of the state to enable smoother process. While HPRIDCL will provide adequate support, it will be responsibility of the consultants to ensure timely delivery of deliverables.

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
 - 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
 - 1. 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/fesf Project 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.