

ISLAMIC REPUBLIC OF AFGHANISTAN

Da Afghanistan Breshna Sherkat (DABS)

**Site-Specific Environmental and Social Management Plan (ESMP)**

**For Construction of Transmission Line in selected Karokh district of Herat Province**

**Herat Electrification Project**

January 2019

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# List of Acronyms

ARAP Abbreviated Resettlement Action Plan

AP Affected Person(s)

BQ Bill of Quantity

CCMP Contractor Camp Management Plan

CDC Community Development Council

CEAP Contractor’s Environmental Action Plan

COO Chief Operating Officer

CSC Construction Supervision Consultant

DABS Da Afghanistan Breshna Sherkat

ECoPs Environmental Code of Practices

EHS Environmental Health and Safety

ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan

ESIA Environmental and Social Impact Assessment

GoA Government of (the Islamic Republic of) Afghanistan

GRM Grievance Redress Mechanism

GRC Grievance Redress Committee

HEP Herat Electrification Project

IFC International Finance Corporation

IDPs Internally Displaced People

KM Kilo Meter

KV Kilo Volt

MEW Ministry of Energy and Water

MV Medium Voltage

NEPA National Environmental Protection Agency (Afghanistan)

NGOs Non-Government Organizations

PAP Project Affected Persons

PCB Poly-chlorinated Biphenyls

PDO Project Development Objectives

PIU Project Implementation Unit

RAP Resettlement Action Plan

RPF Resettlement Policy Framework

ROW Rights of Way

STD Sexually Transmitted Disease

TA Technical Assistance

TL Transmission Line

UXO Unexploded Ordinance

WB World Bank

#

Executive Summary

The Government of Afghanistan (GoA), through Da Afghan Breshna Sherkat (DABS) plans to implement the Herat Electrification Project (HEP) in Herat province. The project is financed by the World Bank (WB) and includes, among other sub-projects, installation of a 31 kilometers (km) long transmission line from Robate Sorkh village to the proposed location of Karokh sub-station in Karokh district. To address the potentially negative environmental and social impacts of the Karokh transmission line (TL) sub-project, and to comply with the national regulatory as well as the WB policy requirements, an environmental and social management plan (ESMP) has been carried out.

**Project Background**

The Herat Electrification Project component -1 lot two is the construction of 110 kV Transmission Line (TL) in Karokh district of Herat province, Afghanistan.

The general aims of project is providing electricity to households, institutions, and businesses in the selected district of Herat Province.

The sub-project activities are identified to have some limited adverse Social and Environmental impacts. The key adverse social impacts are; limited land acquisition impacts, labor influx risk and GBV risk. The sub-project activities will affect a total of 45 PAPs (please see Karokh TL Abbreviated RAP as standalone document) that include details about the affected families. The labor influx and GBV risks are also identified to be low risk, as the sub-project activities are not expected in involve a large number of labors from outside the project’s area of influence. The ESMP include measures for labor influx risk mitigation (see annex 3 on labor influx risk mitigation Plan) and adequate measure for prevention of Gender Based Violence (GBV) risk- see annex 2 on employee code of conduct. These negative impacts are predicated to happen during the implementation and operation phase of the project. This site -specific Environmental & Social Management Plan (ESMP) is prepared to outline the types of control measures that must be implemented to reduce environmental and social risks during Construction of the TL.

##  Project Objective

The overall project development objective (PDO) is to provide electricity to households, institutions, and businesses in selected district, Karokh.

# Introduction

The Government of Afghanistan (GoA) through its electricity utility, Da Afghanistan Breshna Sherkat (DABS), plans to implement the Herat Electrification Project (HEP) in Herat province. The project is financed by the World Bank (WB) and includes, among other sub-projects, installation of a 31 kilometers (km) long, 110-kilo volt (kV) transmission line from Robate Sorkh village to the proposed location of Karokh sub-station in Karokh district of Herat province. To address the potentially negative environmental and/or social impacts of the Karokh transmission line (TL) sub-project, and to comply with the national regulatory as well as the WB policy requirements, an environmental and social management plan (ESMP) has been prepared to outline the types of control measures that must be implemented to reduce environmental and social risk during construction of TL.

## Project Location

The Herat Electrification Project component -1 lot two is construction of 31 KM transmission line from existing 110 kV transmission line between the Noor-ul-Jahad substation near Herat city and Salma Dam to Karokh district of Herat province, Afghanistan.

The subproject is comprising the building of a 110 kV transmission line, and a 110/20 kV substation and medium and low voltage distribution networks in Karokh district of Herat Province.

The TL gets T- connection from Salma Nooruljahad existing TL in the area of Robat e Sorkh village of the same district and the Karokh TL passes mostly from desert, non-cultivated land which encompasses governmental, private and communal land. There are nine villages located in the area of influence of the Karokh TL with varying degree of distance from the TL, generally the TL is reasonably away from the residential houses.

Please see below a map 2.1 showing location of the Karukh TL.



## Sub-Project Overview

The proposed Karokh TL subproject comprises installation, operation, and maintenance of a 110-kV transmission line with a total length of about 31 km. The Karokh TL will have 140 lattice steel towers with concrete foundations, steel conductor, insulators, and other accessories. The key installation activities will include excavation for tower foundations, construction of concrete pads (four pads for each tower), backfilling, tower assembly and erection, stringing of conductors and earth wire, installation of insulators and other accessories, and finally, testing and commissioning. The operation and maintenance (O&M) activities will include periodic patrolling and repairing transmission line faults such as broken conductor, damaged/faulty insulators, and damaged or fallen towers.

The Karokh TL is a sub-project of the Herat Electrification Project that envisages to provide electricity to households, institutions, and businesses in the selected area of Herat Province, The Project is expected to contribute to Da Afghanistan Breshna Sherkat’s overall objectives of alleviating poverty and ensuring inclusivity of access to electricity for all segments of the population the project will benefit the local population in this area by providing grid electricity.

## Regulatory and Policy Overview

The Afghan national legislation and regulations require the project proponents to conduct environmental and social assessment of the proposed project and obtain approval from the National Environmental Protection Agency (NEPA), before initiating the project. Similarly, the WB safeguard policies require the project proponents seeking the Bank’s financing to carry out environmental and social assessment of the proposed project and obtain the Bank’s clearance. The present assessment has been carried out in response to these requirements.

## Project Components

**Component 1 – Electrification of Four Districts in Herat Province:**

This component will support investments for building a new 110 kV transmission line, and four 110/20 kV substations and medium and low voltage distribution networks in four districts of Herat Province. The scope of the work includes:

Design, supply and installation of lattice towers, overhead conductors, optical ground wires (OPGW), insulators, grounding arrangement, foundations and civil works and all necessary fittings and equipment to construct a 25 km tapping transmission line to the new substation near Karokh from existing 110 kV transmission line between the existing Noor-ul-Jahad substation near Herat city and Salma Dam.

Design, supply and installation of power transformers, auxiliary transformers, switchgear, circuit breakers, surge arresters, current transformers (CTs), potential transformers (PTs), protection arrangement, grounding arrangement, telecommunication, relay protection, automation and dispatching systems and all necessary equipment and civil work to construct four 110/20 kV substations each with the capacity of 10 MVA in the districts of Chesht, Hobai, Karrokh and Pashtun-Zarghoon of Herat Province.

Supply of distribution transformers, overhead line and fittings, underground cables, aerial bunched cables (ABC), protection equipment, and connections from the network to final customers (including meters, meter boxes, switches, breakers and other materials) for electrification of households, businesses, schools, health centers and holy places in the districts of Chesht, Hobai, Karrokh and Pashtun-Zarghoon of Herat Province. Installation of distribution networks will be done by DABS.

**Component 2 –** Grid Densification, Extension, and Off-grid pilots in Herat Province: This component will extend grid electricity supply to other parts of Herat Province and test solar off-grid pilots. Specific sub-projects will be identified and appraised during project implementation. Sub-projects to provide electricity to Internally Displaced People (IDPs) and returnees will also be considered under Component 2.

**Component 3 – Technical Assistance:**

This component will finance technical assistance (TA) to insure timely and quality completion of the Project, to enhance DABS capacity in procurement, engineering studies and project management, to enhance financial planning for the utility, and to prepare a foundation for further extension and integration of the grid in Herat Province. The overall scope of this component includes:

Assistance to DABS for Project Implementation: This component would provide expert assistance to DABS in key aspects of project implementation including: project planning and supervision, procurement, financial management, and feasibility assessments for candidate sub-projects under Component 2.

Environmental and Social Safeguards Measures: Social and Environmental impacts of the Project are expected to be small. An environmental and social management framework (ESMF) and a stand-alone Resettlement Policy Framework (RPF) exist within DABS. This TA component would assist DABS in preparing project-specific and site-specific Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs) where needed.

Institutional Strengthening for DABS: This component will provide technical support and training to DABS personnel in areas where additional capacity building is required, particularly in procurement and financial management. In addition, training will be provided to build local capacity in the Project areas to ensure the effective operation and maintenance of the new networks. Additionally, this component will support DABS in implementing awareness programs, especially targeted to women, on electricity uses as well as on health and safety aspects of electricity use and infrastructure.

Studies for further Grid Extension: This component will support a feasibility study to investigate synchronization options and further grid extension in Herat province including geo-spatial analysis and load flow study of the system.

Development of a Grid Code: Technical assistance would also support the review of existing standards and procedures and the preparation of a Grid Code for the Afghan power system consistent with best international practices.

Financial Modelling for DABS: Development of a financial planning model that can be used to prepare pro-forma financial statements, cash flow projections, debt service obligations and financial ratios for DABS under alternative scenarios relating to capital investment, investment financing, sales forecasts, tariffs and input costs. The financial planning model will provide a sound basis for evaluating the potential for further commercialization of DABS, including its capacity to borrow on more commercial terms.

# Environmental and Social Management Plan

## Introduction

The following site specific Environmental & Social Management Plan (ESMP) is prepared to outline the types of control measures that must be implemented to reduce environmental and social risks during implementation and Construction of the Karokh transmission line (TL).

The environmental and social impacts & risks for construction of the TL were identified during preparation of the ESIA study. The ESIA & ESMP were consulted with relevant stakeholders, including community representatives and affected persons from relevant district and their feedbacks were incorporated into the safeguards document- the stakeholder consultation were conducted on mm/mm/2018- the minutes of consultation meeting is included in the ESIA for transmission line . The mitigation measures identified during that process are listed as specific commitments to direct performance criteria within the site specific ESMP for construction of TL.

The site-specific ESMP complies with the principles and policies of the ESMF and RPF for HEP.

## Purpose of the ESMP

The primary purpose of an ESMP is to mitigate/reduce potential environmental and social impacts of planned activities and to ensure that all identified environmental and social risks expected to occur during Construction works of Karokh TL are reduced to an acceptable level.

This will be achieved through engagement of all relevant parties in environmental and social management. In particular, this will include integrating environmental and social management planning with design, construction methods and operation planning.

The requirements of this plan are applicable to all on-site work carried out. All contractors and suppliers will be bound to comply with the requirements of this plan, in so far as they are applicable to the nature and scope of their work.

The scope of this plan embraces the risks created by the design of the Project, the short-term risks that will arise during the construction (the works the project is paying for) and any long-term risks that are influenced by the construction methods.

## The ESMP: Aims and Objectives of the ESMP

* Draws together the measures proposed to mitigate negative, and to maximize positive, environmental and social impacts, and groups them logically into construction of TL with common themes;
* Define a proposed institutional structure to govern the implementation of the ESMP;
* Defines the specific actions required, roles and responsibilities for these actions, timetables for implementation, and associated costs; and
* Describes capacity building and training requirements for the implementation of the ESMP.

## Legislative and Policy Considerations

Legislation and policies that are relevant to construction of Karokh TL are summarized in Table 2.1.

Table 2.1: Summary of relevant legislation and policies

|  |  |  |
| --- | --- | --- |
| **Jurisdiction** | **Legislation or Policy** | **Relevance** |
| World Bank | Operational Policy 4.01, OP 4.11 & OP 4.12 | Environmental/social assessment- land acquisition and resettlement and protection of physical cultural resources.  |
| HEP ESMF & RPF | Environmental and Social Management |
| Govt of Afghanistan | Environmental Law (2006)ESIA regulation (2017)- NEPAIFC EHS guideline | Environmental impact assessment and managementEnvironmental health and safety |
| NEPA Pollution Control and Management inAfghanistan | Policy discussion |
| Afghanistan Labor law | Labor issues, including child labor |
| MEW- Energy sector | Environmental and Social Safeguards Guideline (ESS- guideline) | Hygienic & Safety measures |
|  |  |  |

##

## Summary of Environmental and Social Impacts

### Potential Negative Environmental impacts

The environmental impacts associated with the construction of TL are low because the selected place of TL are reasonably far from residential area and community institutions, the TL mostly passes from desert and uncultivable land , there will be limited damage to landscape and green cover of the near surroundings of the proposed TL especially due to excavation for tower location, traffic of heavy machinery, paving access road for towers, storage of construction material and equipment in the area and workforce density, managing removal, storage, handling and disposal of used oil’s and lubricants, and petroleum products. Other impacts are loud noises and dust. These impacts are low to medium level and thus readily reversed or effectively managed with mitigation measures outlined in the relevant table. DABS will conduct a brief workshop to undertake risk assessment impacts of project activities under construction of TL including appropriate mitigation measures.

###  Potential Negative Social impacts

The Social safeguards impacts are identified to be moderate impact, as the TL involve land acquisition impacts- there are x towers out of y towers located on private land. The remaining towers pass through government land, which barren land. The social safeguards impacts are identified to be limited under construction of the TL in component 1, like affecting different types of land by tower erection and cable stringing between two towers, access road for stringing of conductor and erection of towers. Aside from this the project activities are expected to cause other social safeguards impacts, as such community disputes for inclusion of their villages for electrification in first stage, there might be community safety issues-labor influx risk, and disputes and or local demand to push for hiring local residents, instead of hiring labors from outside. There can also be disputes arise over whether a hiring or firing of an employee was proper.

Absence of adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, dust, and wastes) and construction activities may adversely affect the natural environment.

### Grievance Redress Mechanism (GRM)

The project activities are expected to cause grievances, such as grievances might be arising related to workplace issues, land/asset impact, employment issue and etc. To address grievances, DABS has established Grievance Redress Mechanism for HEP.

The structure of Grievance Redress Committee (GRC) for HEP includes; (i) Local or subproject level GRC, (ii) Provincial level GRC; and (iii) HQ or DABS level GRC. The GRM system is accessible and the complainants can easily register their complaint to the higher levels GRCs, in case if they are not satisfied with the resolution by local GRC.

DABS has also developed grievance guidance notes for the WB-DABS supported project which will be applied. They have also developed training materials and will conduct training for GRC members and other relevant staff. They have also planned to conduct more public awareness program among affected communities along this TL to inform them about grievance service.

The GRM system is an effective tool that provides avenue to identify issues and areas for further improvement of the project and ensuring transparency and accountability in the fair and equal treatment of the project affected people and other relevant parties.

There will be specials provisions for grievances related to GBV issues, corruption issues. For details refer to appendix x on Grievance Redress Mechanism for this TL subproject.

### Consultation and Disclosure

Separate consultations were conducted with all affected persons along Karokh TL. There were also consultation with CDCs, community representatives and other stakeholder in these villages: Saghari ha, Qala e Safid ,Machghandak,Qala e Dasht,Banafshak,Ehsan Abad,Qasab,Pashtan and Robat sorkh. The purpose of these consultations was to discuss the affected private and community structures that were identified during ESIA study to be affected for construction of TL. The draft ESIA study, including this site-specific ESMP were shared with community and other stakeholders for their review and feedback. Details of these consultations are included in Appendix 8 of this ESMP report.

There will be more consultation throughout the project implementation and operation phases with all PAPs, community, governmental officials and other stakeholders to seek their feedbacks and suggestions about this subproject.

There are a total of 45 PAPs along the TL who are identified to lose their private properties. The stand-alone Abbreviated RAP prepared provides details about all affected people.

Aside from this, the TL sub-project will also affect community- public structures, of which the BOQ and this site specific ESMP (table 3.2) provide cost for restoration of these community properties.

The ESMP for TL will be part of both bidding documents and contract documents. This ESMP will be disclosed locally on DABS website and provincial- Herat province after the WB approval.

Table 2.2 : cost for restoration of the community properties

|  | **Resettlement Impacts** | **Quantity** | **Unit Rate(000 AFN)** | **Amount (000 AFN)** |
| --- | --- | --- | --- | --- |
| **A.** | **Land under Karokh TL Towers** |   |  |  |
| 1 | Cultivated irrigated land (ha) | 0.085 | 2,250,000 | 191,250 |
| 2 | Cultivable rain-fed land (ha) | 0.24 | 750,000 | 180,000 |
| 3 | Barren land (ha) | 0.37 | 550,000 | 203,500 |
|  | ***Total (ha)*** | ***0.695*** |  | ***574,750*** |
|  |  |  |  |  |
| **B** | **Land under Conductors (but not under towers)** |  |  |  |
|  |
| 1 | Cultivated irrigated land (ha) | 0.27 | 2,250,000 | 607,500 |
| 2 | Cultivable rain-fed land (ha) | 4.95 | 750,000 | 3,712,500 |
|  | ***Total (ha)*** | ***5.22*** |  | **4,320,000** |
| **C.** | **Affected area under crops**  |  |  |  |
| 1 | Total area of agriculture land to be impacted by tower installation and conductor stringing. (hectares) | 5.915 |  | (covered under B) |
| 2 | Area under access tracks (hectares) | 7.65 | 200,000 | 1,530,000 |
|  | ***Total*** | ***13.565*** |  |  |
| **D** | **Affected trees**  |  |  |  |
| 1 | Privately owned Fruit Trees | 9 | 1000 | 9,000 |
|  | ***Total affected trees*** | ***9*** |  | ***9,000*** |
| **E** | **Project Affected Households**  |  |  |  |
|  | Households losing land | 21 |  |  |
| 1 | Households losing crops | 23 |  | - |
| 2 | Households losing trees | 1 |  | - |

### Labor Influx risk assessment

The construction of TL does not require a large influx of labor from outside the project’s area of influence. Most of the unskilled workers will be recruited locally in the project area- only specialized staff are expected to be recruited from outside. The specialized staff from outside will make about 20 percent and will be residing in labor camps in the selected districts- substations area. There will be proper location selected for labor camps, which will be away from the residential areas. Given that workers under the sub component “construction of substations” are expected to be largely recruited locally, the overall social impacts anticipated from the labor influx of workers and followers in the four sites in selected districts are **rated to be low. Also, recently there was GBV screening conducted for HEP and the Project in terms of GBV risk is ranked as low risk**. Therefore, the labor influx related mitigation measures are likely able to be addressed solely through this site-specific ESMP. This site specific ESMP includes the employee code of conduct and labor influx mitigation measures (see annex 3), which will be followed.

## Objectives of ESMP

The basic objective of the ESMP is to manage adverse impacts of proposed project interventions in a way that minimizes the adverse impact on the environment and people along the Karokh TL project. The specific objectives of the ESMP are to:

* Facilitate the implementation of the mitigation measures discussed earlier in the document.
* Maximize potential project benefits and control negative impacts;
* Draw responsibilities for DABS, contractors, consultants, and other members of the project team for the environmental and social management of the Project;
* Define a monitoring mechanism and identify monitoring parameters in order to:
* Ensure the complete implementation of all mitigation measures,
* Ensure the effectiveness of the mitigation measures;
* Assess environmental training requirements for different stakeholders at various levels.

## Inclusion of Relevant Components of ESMP in Construction Contract Documents

The ESMP of the Project along with the ECoPs will be included in the construction contractors’ bid documents. The technical specifications of the bid documents will clearly state that contractor will need to comply with the mitigation measures provided in ESMP and ECoPs, and World Bank Group EHS General Guidelines.

### BOQs in Bid Documents

The following items will be included in the bills of quantities (BOQs) of bid documents

* Preparation and implementation of Contractor’s Environmental Action Plan in compliance with ESMP, and WBG EHS Guidelines (lump sum).
* Provision of an Environmental Officer and an Occupational Health and Safety Officer
* Providing and maintenance of Vibration Meters and Dust Measurement Meters for spot measurements (2 numbers)
* 24-hour Air Quality Monitoring PM10, NO2, SO2, CO2, CO; and noise monitoring at locations specified by the DABS (10 locations).
* Provision of cost for restoration of the affected structures (private and public).

After award of the contract and before mobilization, the Contractor will need to prepare ‘Contractor’s Environmental Action Plan’ (CEAP) with site specific mitigation measures for approval by DABS.

DABS will ensure the contractors and their subcontractors carry out their responsibility of implementing the mitigation measures, monitoring plan as well as other environmental and safety measures.

### Payment Mile Stones

Payments to contractors would be linked to environmental performance, measured by completion of the prescribed environmental and social mitigation measures. Contractors would be required to join forces with the executing agency, project management unit, supervising consultants and local population for the mitigation of adverse impacts of the project. For effective implementation of the proposed mitigation and monitoring measures they will be required to employ trained and experienced environmental management staff. In addition, for any non-compliance causing damages or material harm to the natural environment, public or private property or resources, the contractor will be required to either remediate / rectify any such damages in a timeframe specified by and agreed with the engineer, or pay DABS for the cost (as assessed by DABS) of contracting a third party to carry out the remediation work.

## Institutional Arrangements

DABS will be overall responsible for implementation of ESIA and other safeguard requirements prescribed by NEPA and WB. Within DABS, the Project Implementation Unit (PIU) has already been established for HEP implementation. The PIU will be responsible for procurement contractors for construction and a consulting firm for construction supervision. The PIU includes an Environment Specialist and a Social Specialist, who will assist the PIU on issues related to environmental and social safeguards management and oversee Construction Supervision Consultant (CSC) and contractors and will compile quarterly monitoring reports on ESMP compliance, to be sent to the PIU Head and also shared with the World Bank, throughout the construction period. They will also provide trainings to the DABS field personnel responsible for monitoring of environmental and social safeguard compliance during both construction and O&M phases of the project. The organogram is shown in **Figure 2.1**.

The PIU has environmental and social safeguard specialists and will maintain coordination and liaison with CSC for effective ESMP implementation. Similarly, the CSC will also have environmental and social specialists who will supervise and monitor the contractors for effective ESMP and ARAP implementation. The contractors in turn will also have environmental, social safeguards and OHS officers who will ensure ESMP implementation during construction activities and will be tasked to develop necessary detailed HSE plans as per this ESMP, and oversee their implementation.

The provincial office of DABS in Herat will also have an environmental and a social safeguard specialist to supervise the contractors.

Head, WB Funded Projects - DABS

Construction Supervision Consultant (Environmental, OHS and Social Specialists for ESMP and RAP implementation)

PIU

Environmental Specialist;

Social Specialist

Support Staff

Contractors

(Environmental Health and Safety Officers)

M&E Consultants (Environment, Social and Resettlement)

GRC

DABS, Herat Province

Environmental Specialist;

Social Specialist

Support Staff

Figure 2.1: Organogram for Environmental and Social Management of the Project

DABS will also engage an independent organization to carry out external monitoring and evaluation on implementation of ESMP and ARAP. The roles and responsibilities of PIU and its consultants are presented in **Table 2.3**.

Table 2.3: Roles and Responsibilities for ESMP Implementation

| **Organizations** | **Responsibilities** |
| --- | --- |
| PIU | Ensure that all project activities are well-managed and coordinated.Procurement of works and goods.Payment of compensation to the project affecteesRecruitment and supervision of CSC Recruitment of third party M&E Consultants  |
| Environmental and social safeguard specialists | Obtaining environmental clearances from NEPAResponsible for assisting PIU Head in reviewing bid documents for inclusion of ESMP measures, supervising construction activities, producing periodic monitoring reports, Ensuring inclusion of ESMP and ECoPs in bidding documentsProviding training on ESMP principles and requirements to CSC, contractors, DABS field staff, and others as needed to ensure effective implementation of ESMPManaging the GRM (receiving grievances, maintaining database and monitoring)Supervising CSC for the implementation of ESMP and ARAPClosely coordinate with other concerned agencies, local governments and communities to support implementation of ESMP and ARAPPreparation of progress reports on implementation of ESMP and ARAP. |
| Provincial Office of DABS in Herat | Supervise CSC in ESMP and ARAP implementationCarrying out monitoring for ESMP and ARAP implementationMaintain liaison with PIUDistribute the notices to the entitled PAPs regarding payment of compensation;Facilitate the PAPs for completing the necessary documentation to receive their entitled payments;Maintain liaison and interaction with the PAPs and local communities to address their concerns.Provide proper guidance to PAPs for the submission of their requests for compensation as per eligibility and entitlement.Help the PAPs to forward their complaints, if any, to the GRC.Responsibility for communication about GRM for community, PAPs, and workforce. Follow-up of GRM (lodging of complaints, complaints handling, conducting of GRCs meeting reflecting report to the PIU safeguard department). Help the PAPs in any other related activities. Maintain close liaison with PIU, contractor, and relevant government departments for ESMP and ARAP implementation. |
| CSC  | Responsible for implementation of ARAP and ESMP Updating the ARAP based on the final alignmentSupervise civil works, ensuring compliance with all design parameters including quality requirements Supervising contractors for ESMP implementation and issue of noncompliance noticesConduct environmental and social safeguard trainingsProvide input, advice and approval on activity specific work plans relating to ESMPPrepare monthly reports and submit to PIU  |
| Contractor | Preparation of CEAP with site specific mitigation plans for approval of CSC before mobilizationResponsible for implementation of mitigation and monitoring measures proposed in the ESMP Prepare monthly reports |
| M&E Consultant | External Monitoring and evaluation on implementation of ESMP and ARAP |

## Environmental and Social Management

### Environmental Code of Practices for Construction

The environmental codes of practice (ECoPs) are generic, non-site-specific guidelines for the construction phase. The ECoPs consist of environmental and social management guidelines and practices to be followed by the contractors for sustainable management of all environmental issues. The contractor will be required to follow them and also use them to prepare site-specific management plans (discussed later in the Section). The ECoPs are listed below.

* ECoP 1: Waste Management
* ECoP 2: Fuels and Hazardous Substances Management
* ECoP 3: Water Resources Management
* ECoP 4: Drainage Management
* ECoP 5: Soil Quality Management
* ECoP 6: Erosion and Sediment Control
* ECoP 7: Top Soil Management
* ECoP 8: Topography and Landscaping
* ECoP 9: Borrow Areas Management
* ECoP 10: Air Quality Management
* ECoP 11: Noise and Vibration Management
* ECoP 12: Protection of Flora
* ECoP 13: Protection of Fauna
* ECoP 14: Protection of Fisheries
* ECoP 15: Road Transport and Road Traffic Management
* ECoP 16: Construction Camp Management
* ECoP 17: Cultural and Religious Issues
* ECoP 18: Workers Health and Safety

### Construction Stage Site Specific Management Plans

Contractor will be required to prepare site specific management plans, before contractor mobilization and commencement of construction works, for approval of PIU and CSC.

* **Pollution Prevention Plan** will be prepared and implemented by the contractor on the basis of the ESMP, ECoPs and WBG EHS Guidelines (2007).
* **Waste Disposal and Effluent Management Plan** will be prepared and implemented by the Contractor on the basis of the EMP, ECoP, and WBG EHS Guidelines (2007).
* **Drinking Water Supply and Sanitation Plan**: Separate water supply and sanitation provisions will be needed for the temporary facilities including offices, labor camps and workshops in order not to cause shortages and/or contamination of existing drinking water sources.
* **Occupational Health and Safety (OHS) Plan** will be prepared and implemented by the contractor on the basis of the ESMP, ESMP, WBG EHS Guidelines (2007), ECoPs, and other relevant standards.
* **Quarry Area Management Plan** will be prepared and implemented by the contractor on the basis of the WBG EHS Guidelines (2007), ECoPs, and other relevant standards.
* **Traffic Management Plan** will be prepared by the contractor after discussion with DABS and authorities responsible for roads and traffic. The Plan will be submitted to the CSC for their review and approval before contractor mobilization. The Plan will identify the routes to be used by the contractors, procedures for the safety of the local community particularly pedestrians, and monitoring mechanism to avoid traffic congestion.
* **Construction Camp Management Plan** will be prepared by the contractor. The Plan will include the camp layout, details of various facilities including supplies, storage, and disposal.
* **Fuel and Hazardous Substances Management Plan** will be prepared by the contractor in accordance with the standard operating procedures, WBG EHS Guidelines (2007) and other relevant guidelines, and where applicable, material safety data sheets (MSDS). The Plan will include the procedures for handling the oils and chemical spills.
* **Spoil Management Plan** will be prepared by the contractor on the management of excess spoils from various excavation activities.
* **Emergency Preparedness Plan** will be prepared by the contractor after assessing potential risks and hazards that could be encountered during construction.
* **Communication Plan** to deal with the interaction of the community, complaints management, workers recruitment, notice of works and workers conduct with locals.

Abbreviated Resettlement Action Plan

The social impacts of Karokh TL largely include loss of agricultural crops with associated loss of income and livelihoods. To address and mitigate these relocation and resettlement impacts, the ARAP has been prepared, in accordance with the national regulatory as well as WB safeguard policy requirements. The ARAP is based on the findings of the social baseline survey and 100 percent census surveys as well as meetings and consultations with all project-affected persons. The ESIA study provides detailed information about social baseline and census survey. The key elements of ARAP include:

* type and extent of loss of assets including land, structures and trees;
* principles and legal framework applicable for mitigation of these losses;
* the entitlement matrix,
* relocation strategies and plans, including provision for livelihoods;
* resettlement and rehabilitation budget; and
* Institutional framework for the implementation of the plan, including monitoring and evaluation.

The ARAP is presented under a separate cover as standalone document and will be an obligatory requirement on DABS to fulfill. Abbreviated RAP implementation will be completed prior to begin civil works at the relevant segments.

### Project Affected Families (PAFs)

The installation of TL will affect a total of 45 PAFs who will lose their properties, i.e. land, buildings/ structures, houses and shops and walls etc.

The table 2.4 below provides info on private land/asset to be affected along Karukh TL.

Table 2.4: Summary of type of loss and number of PAFs affected

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A.** | **Land along KTL Route**  | **Quantity** | **unite Cost/ha**  | **Total cost**  |
|  | ***Cultivated land (hectares)******Different land type affecting by towers erection.*** |
| 1 | Private irrigated land (17 towers) | 0.085 ha | 2,250,000 | 191,250 |
| 2 | Private rain fed land (17 towers) | 0.085ha | 750,000 | 63,750 |
| 3 | Communal irrigated land (4 towers) | 0.02 ha | 550,000 | 11,000 |
| 4 | Communal rain fed land (15 towers) | 0.075 ha | 750,000 | 56,250 |
| 5 | Communal barren land (30 towers) | 0.15 ha | 550,000 | 82,500 |
|  | Governmental irrigated land (4 towers) | 0.02 ha | 2,250,000 | 45,000 |
| 6 | Governmental rain fed land (13 towers) | 0.065 ha | 750,000 | 48,750 |
|  | Governmental barren (39 towers) | 0.195 ha | 550,000 | 107,250 |
|  | ***Sub Total*** | **0.695 ha** |  | **605,750** |
| **B** | ***Different land type to be affected by cable*** ***Stringing between two towers.(temporally)*** |  |  |
| 1 | Private irrigated land.  | 2.3625 ha | 200,000 | 472,500 |
| 2 | Private rain fed land.  | 1.4625 ha | 200,000 | 292,500 |
| 3 | Communal irrigated land  | 0.3375 ha | 200,000 | 67,500 |
| 4 | Communal rain fed land. | 2.025 ha | 200,000 | 405,000 |
| 5 | Governmental rain fed land  | 1.4625 | 200,000 | 292,500 |
|  | ***Sub Total*** | **7.65 ha** |  | **1,530,000** |
| C | ***loss of fruit trees*** |  |  |  |
|  | Private fruit trees( small sapling  | **9 No** | **1000** | **9000** |
|  | Grant Total  |  |  | **2,144,750** |

### Mine Clearance Procedures

The contractor will be required to follow the mine clearance procedure given in **Annex 4** to protect its own staff and equipment as well as the nearby community.

### Mitigations and Compliance Monitoring Plan

The mitigation and compliance monitoring plans are the key element of ESMP to be prepared on the basis of impact assessment. The Plan describes the potentially negative impacts of each subproject activity, lists mitigation and control measures to address the negative impacts, and assigns responsibilities for implementation and monitoring of these measures. The Plan is given in **Table 2.5.**

Table ‎2.5: Mitigation and Compliance Monitoring Plan

| **Environmental impacts/ issue** | **Actions** | **Responsibility** | **Key Performance Indicator** | **Timing** | **Cost Allocation** |
| --- | --- | --- | --- | --- | --- |
| **Execution** | **Monitoring** |
| 1. **Activity: Design/Pre-Construction**
 |  |
| 1.1 Loss of crops, trees, buildings | * The ARAP will be implemented
 | DABS Herat/CSC | PIU | * Documentary evidence of ARAP implementation
* Payment of 100% compensation amounts to each PAP
* Income levels of affected households
* Number of public grievances re resettlement and compensation
 | Before construction | Included in overall Project cost |
| * Contractors will lease the land for construction facilities on temporary basis. Proper documentation will be carried out for this leasing. Site selection will be carried out in consultation with the community and local officials; approval from CSC will also be required for the selected sites.
 | Contractor  | CSC/PIU | * Documentary evidence of land leasing for temporary facilities
* CSC approval for the selected site(s)
* Absence of grievances regarding temporary facilities
* No civil work until all PAPs are compensated.
 | Before contractor mobilization  | Included in contractors’ costs  |
| 1.2 Soil, water and noise pollution | * A pollution prevention plan will be prepared in accordance with ECoPs, WBG EHS Guidelines
 | Contractor  | CSC/PIU | * Approved plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before construction | Included in contractors’ costs  |
| 1.3 Disposal of excavated material | * Identification of re-use of excavated material on site, to reduce off site effects
* Maximization of use excavated material in construction.
 | Contractor  | CSC/PIU | * Availability of plan to dispose excavated material.
 | Before construction | Included in contractors’ costs  |
| 1.4 quarry area construction material  | * A material borrowing plan will be prepared in accordance with ECoPs
 | Contractor  | CSC/PIU | * Approved plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before construction | Included in contractors’ costs  |
| 1.5 Water quality | * Drainage system will be designed so that all spills will be drained and collected in a sump for further appropriate disposal; and
* Oil and chemical storage and vehicle wash and oil change facilities will be established on impermeable surfaces to avoid percolation
 | Contractor | CSC/PIU | * Monitoring in accordance with Drinking Water and Sanitation Plan.
* No breaches of Material Safety Data Sheet (MSDS) for hazardous substances.
 | Before construction | Included in contractors’ costs  |
| 1.6 Traffic Management | * A Traffic Management Plan (TMP) will be prepared in accordance with ECoPs
 | Contractors  | CSC/PIU | * Approved TMP
* Plan itself will outline appropriate KPIs for its implementation.
 | Before mobilization of contractor  | Included in contractors’ costs  |
| 1.7 Construction camp (and other temporary facilities) site selection | * Site for construction camp will be selected with approval from the Construction Supervision Consultants (CSC).
* Areas having thick/dense vegetation will be avoided as far as possible.
 | Contractor | CSC | * Approval from PIU
 | Before mobilization of contractor | Included in contractors’ costs  |
| 1.8 Construction camp management | * Construction Camp Management Plan will be prepared per ECoP and approval obtained from CSC.
 | Contractor | CSC | * Approved Plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before mobilization of contractor | Included in contractors’ costs  |
| 1.9 Waste management | * A Waste Management Plan will be prepared per ECoP and approval obtained from CSC.
 | Contractor | CSC | * Approved Plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before mobilization of contractor | Included in contractors’ costs  |
| 1.10 Fuels and hazardous substances management | * A fuels and hazardous substances management plan will be prepared per ECoP and approval obtained from CSC.
 | Contractor | CSC | * Approved Plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before mobilization of contractor | Included in contractors’ costs  |
| 1.11 Water resource management | * A Drinking Water Supply and Sanitation Plan will be prepared per ECoP and approval obtained from CSC.
 | Contractor | CSC | * Approved Plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before mobilization of contractor | Included in contractors’ costs  |
| 1.12 Occupational Health and Safety (OHS) management | * An OHS management plan will be prepared per ECoP and WBG EHS Guidelines, and approval obtained from CSC.
 | Contractor | CSC | * Approved Plan
* Plan itself will outline appropriate KPIs for its implementation.
 | Before mobilization of contractor | Included in contractors’ costs  |
| **2. Activity: Contractor Mobilization and Demobilization** |  |
| 2.1 Traffic management | * The approved TMP will be followed.
* Traffic facilities, such as speed limits and signal lights, are to be strengthened
* Support to be provided to the local traffic authorities to engage traffic police at the busy junctions
* Implement the mitigation measures proposed in ECoP
 | Contractors (with PIU’s assistance) | CSC/PIU | * Number of any non-compliance reports
* Number of complaints / grievances.
* Number of traffic accidents/incidents involving project vehicles and lorries bringing materials and supply to project
 | During mobilization and demobilization | Included in contractors’ costs  |
| 2.2 Soil Erosion and Contamination | * Vehicular traffic on unpaved roads will be avoided as far as possible.
* Vehicles and equipment will not be repaired in the field. If unavoidable, impervious sheathing will be used to avoid soil and water contamination.
* Waste management plan will be implemented
* ECoP 1, ECoP 5, ECoP 6, and ECoP 7 will be implemented.
 | Contractor | CSC | Number of any non-compliance reports | Throughout contractor mobilization and demobilization | Included in contractors’ costs  |
| 2.3 Air Quality | * Pollution prevention plan will be implemented.
* Construction machinery and vehicles will be kept in good working condition and properly tuned, in order to minimize the exhaust emissions.
* Fugitive dust emissions will be minimized by appropriate methods, such as spraying water on soil, where required and appropriate.
* Project vehicles will avoid passing through the communities as far as possible. If unavoidable, speed will be reduced to 15 km/h to avoid excessive dust emissions.
* Air quality will be properly monitored, especially near the population centers and sensitive receptors. Appropriate actions will be undertaken in case ambient air quality at the population centers deteriorates beyond acceptable limits.
* ECoP 10 for air quality management will be implemented.
 | Contractor | CSC | * Number of non-compliance reports.
* Number of community complaints.
* Ambient air quality found beyond the national standards
 | Throughout contractor mobilization and demobilization | Included in contractors’ costs  |
| 2.4 Noise | * Pollution prevention plan will be implemented.
* Noise barriers will be installed where needed particularly near sensitive receptors such as schools
* Vehicles will have exhaust mufflers (silencers) to minimize noise generation.
* Nighttime traffic will be avoided near the communities. Local population will be taken in confidence if such work is unavoidable.
* Vehicular traffic through the communities will be avoided as far as possible. Vehicle speeds will be kept low, and horns will not be used while passing through or near the communities.
* Compliance with WBG EHS Guidelines will be ensured.
* ECoP-11 will be enforced.
* Continued consultations with affected communities will be carried out.
 | Contractor | CSC | * Number of non-compliance reports;
* Noise measurement data
* Number of community complaints.
 | Throughout contractor mobilization and demobilization | Included in contractors’ costs  |
| 2.5 Public Safety | * Occupational health and safety procedures and OHS Plan will be enforced.
* Implement fuels and hazardous substances management plan
* Fencing would be provided around construction sites as appropriate to minimize public safety risks.
* A Traffic Management Plan will be implemented that will aim at ensuring access to residential areas, and preventing of unsafe situations, especially near schools, housing areas, construction areas, camps and offices.
* Special attention should be focused on safety training for workers to prevent and restrict accidents and on the knowledge how to deal with emergencies.
* Road signage will be fixed at appropriate locations to reduce safety hazard associated with project-related vehicular traffic.
* Liaison with traffic police will be maintained
* Project drivers will be trained on defensive driving.
* Vehicle speeds near / within the communities will be kept low, to avoid safety hazards.
* ECoP-15 and ECoP-18 will be implemented.
 | Contractor | CSC | * Number of any non-compliance reports;
* Number of any related public complaints
* Number of accidents, incidents and near-misses.
 | Throughout contractor mobilization and demobilization | Included in contractors’ costs  |
| 2.6 Damage to Infrastructure | * All damaged infrastructure will be restored to original or better condition.
 | Contractor | CSC | * On site verification
* Number of non-compliance reports;
* Number of public complaints.
 | Throughout contractor mobilization and demobilization | Included in contractors’ costs as well as BoQ. |
| **3. Activity: Construction workers camp establishment and operation** |  |
| 3.1 Soil erosion; soil and water contamination | * Camp management plan will be implemented
* location of camp will be selected after obtaining CSC’s approval and in consultation with local community
* Photographs will be taken to record the site conditions prior to the establishment of the camp.
* Land clearing, leveling and grading will be minimized, and carried out in a manner to minimize soil erosion.
* Camp will have rainwater drainage arrangements
* Camps will have protection arrangements against soil erosion
* Vehicular traffic on unpaved roads will be avoided as far as possible. Operation of vehicles close to the water channels, water reservoirs will be minimized.
* Contractors will prepare and implement a Waste Management Plan.
* For the domestic sewage, appropriate treatment and disposal system (e.g., septic tank and soaking pits) will be constructed having adequate capacity
* Waste oils will be collected in drums and sold to the recycling contractors.
* The inert recyclable waste from the site (such as cardboard, drums, and broken/used parts) will be sold to recycling contractors. The hazardous waste will be kept separate and handled according to the nature of the waste.
* Domestic sold waste from the camp site will be disposed of in a manner that does not cause soil contamination.
* The contractor will identify suitable sites for disposal of hazardous and non- hazardous waste. The selection will be done in consultation with the PIU and the local municipal authorities.
* The camp site area will be completely restored after completion of construction works. All temporary structures will be demolished,
* ECoP-1, ECoP-2, ECoP-3, ECoP 4, ECoP 5, ECoP 6, ECoP 7, ECoP 8, ECoP 16, and ECoP-18 will be implemented.
 | Contractor | CSC | * Compliance to the Camp Management Plan, Waste Management Plan
* Number of any non-compliance reports
* Results of soil and water quality analysis
* Number of related complaints
 | Before and throughout the construction phase | Included in contractors’ costs  |
| 3.2 Air Quality | * Pollution prevention plan will be implemented.
* Generators and vehicles will be kept in good working condition and properly tuned, in order to minimize the exhaust emissions.
* Fugitive dust emissions will be minimized by appropriate methods, such as spraying water on soil, where required and appropriate.
* Air quality will be properly monitored, especially near the population centers
* Compliance with WBG EHS Guidelines will be ensured.
* ECoP-10 will be implemented.
 | Contractor | CSC | * Number of non-compliance reports
* Air quality monitoring data
* Number of related grievances
 | Throughout the construction phase | Included in contractors’ costs  |
| 3.3 Vegetation loss; threat to wildlife | * Clearing natural vegetation will be avoided as far as possible.
* The camp will be established in a natural clearing, to the extent possible.
* Any loss or damage to crops or cultivation land will be compensated in accordance with ARAP
* Complete record will be maintained for any tree cutting.
* The camp staff will not indulge in any animal shooting, trapping, catching, or killing activities.
* The construction crew will be provided with liquefied petroleum gas (LPG) as cooking (and heating, if required) fuel. Use of fuel wood will be avoided.
* Include information on wildlife protection in all tool-box orientation briefings for camp staff
* Contractors shall use lower wattage flat lens fixtures that direct light down and reduce glare, and shall avoid use of flood lights.
* Contractors will also raise awareness about the protection of birds and other wildlife species among the work force to reduce impacts such as disturbance and poaching
* ECoP-12, ECoP-13, and ECoP-14 will be implemented.
 | Contractor | CSC | * Number of non-compliance reports
* Number of tree felled
* Number of sighting of key wild species
 | Before and throughout the construction phase | Included in contractors’ costs  |
| 3.4 Noise | * Pollution prevention plan will be implemented.
* Noise barriers will be installed where needed particularly near sensitive receptors such as schools
* Generators and vehicles will have exhaust mufflers (silencers) to minimize noise generation.
* Liaison with the communities will be maintained.
* Noise monitoring will be carried out.
* Compliance with WBG EHS Guidelines will be ensured.
* ECoP-11 will be implemented.
 | Contractor | CSC | * Number of any non-compliance reports
* Noise monitoring data
* Number of grievances regarding noise
 | Throughout the construction phase | Included in contractors’ costs  |
| 3.5 Health and Safety | * OHS plan will be prepared and implemented
* Implement fuels and hazardous substances management plan
* Drinking water management plan will be implemented
* Protective fencing to be installed around the Camp to avoid any accidents.
* Contain all fuel tanks in a fully bonded area with a storage capacity of at least 110 percent of the potential storage volume.
* Spill control arrangements to be made for hazardous substances (e.g., fuels)
* Firefighting equipment will be made available at the camps.
* The camp staff will be provided OHS training.
* All safety precautions will be taken to transport, handle and store hazardous substances, such as fuel.
* Construction camps will have first aid kits
* Camp crew will be provided with awareness for transmissible diseases (eg, HIV, hepatitis B and C).
* Compliance with WBG EHS Guidelines
* ECoP-2 and ECoP-18 will be implemented.
 | Contractor | CSC | * Number of any non-compliance reports
* Number of trainings conducted
* Number of accidents, incidents, and near misses.
 | Before and throughout the construction phase | Included in contractors’ costs  |
| 3.6 Social and Gender Issues | * Local norms and customs will be respected
* Camp crew will avoid entering the villages
* No child labor will be employed in the camps.
* Liaison with the community will be maintained.
* ECoP 17 will be implemented
* A clause to be included in the contract to mandate hiring of local over those from outside
* GRC committee to satisfied community
* Contractor to comply with safety guideline.
 | Contractor | CSC | * Number of non-compliance reports;
* Number of related complaints
 | Throughout the construction phase | Included in contractors’ costs  |
| 3.7 Chance finds  | * In case any artifacts or sites of archeological, cultural, historical, or religious significance are discovered during construction activities, the works will be stopped, and the concerned departments will be informed.
 | Contractor | CSC | * Number of non-compliance reports
* Number of reports of any PCR discovery
 | Throughout the construction phase | Included in contractors’ costs |
| 3.8 Increased Load on Local Services and Supplies | * The contractors to procure their supplies in a manner not significantly affecting the availability of essential commodities in the area for the residents.
* Grievance redress mechanism will be established to address community complaints and grievances.
 | Contractor | CSC | Number of related public grievances  | Construction phase | Included in contractors’ costs  |
| **4. Activity: Transportation of Equipment and Construction Material** |  |
| 4.1 Traffic management  | * The approved TMP will be followed.
* Traffic facilities, such as speed limits and signal lights, are to be strengthened
* Support to be provided to the local traffic authorities to engage traffic police at the busy junctions
* Implement the mitigation measures proposed in ECoP 15.
 | Contractor | CSC | * Number of any non-compliance reports
* Number of complaints / grievances.
* Number of traffic accidents/incidents involving project vehicles and lorries bringing materials and supply to project
 | Throughout the construction phase | Included in contractors’ costs  |
| 4.2 Soil Erosion and Contamination | * Pollution prevention plan will be implemented.
* Vehicular traffic on unpaved roads will be avoided as far as possible. Operation of vehicles and machinery close to the water channels, water reservoir will be minimized.
* Vehicles and equipment will not be repaired in the field. If unavoidable, impervious sheathing will be used to avoid soil and water contamination.
* ECoP 1, ECoP 5, ECoP 6, and ECoP 7 will be implemented.
 | Contractor | CSC | * Number of any non-compliance reports
 | Before and during construction  | Included in contractors’ costs  |
| 4.3 Air Quality | * Pollution prevention plan will be implemented.
* Construction machinery and vehicles will be kept in good working condition and properly tuned, in order to minimize the exhaust emissions, and in compliance with the WBG EHS Guidelines.
* Fugitive dust emissions will be minimized by appropriate methods, such as spraying water on soil, where required and appropriate.
* Project vehicles will avoid passing through the communities as far as possible. If unavoidable, speed will be reduced to 15 km/h to avoid excessive dust emissions.
* Trucks and conveyor belts carrying construction material and excavated soil will be covered if required to avoid air quality deterioration.
* Air quality will be properly monitored, especially near the population centers
* ECoP 10 for air quality management will be implemented.
 | Contractor | CSC | * Number of any non-compliance reports
* Air quality monitoring data
* Number of related grievances
 | Before and during construction  | Included in contractors’ costs  |
| 4.4 Noise | * Pollution prevention plan will be implemented.
* Noise barriers will be installed where needed particularly near sensitive receptors such as schools
* Vehicles will have exhaust mufflers (silencers) to minimize noise generation.
* Nighttime traffic will be avoided near the communities. Local population will be taken in confidence if such work is unavoidable.
* Vehicular traffic through the communities will be avoided as far as possible. Vehicle speeds will be kept low, and horns will not be used while passing through or near the communities.
* Liaison with the communities will be maintained.
* Noise monitoring will be carried out
* Compliance with WBG EHS Guidelines will be ensured.
* ECoP-11 will be enforced.
 | Contractor | CSC | * Number of any non-compliance reports
* Number of related public complaints
* Noise monitoring data
 | Before and during construction  | Included in contractors’ costs  |
| 4.5 Public Safety | * OHS plan will be implemented
* Implement fuels and hazardous substances management plan
* Road signage will be fixed at appropriate locations to reduce safety hazard associated with project-related vehicular traffic.
* Liaison with traffic police and communities will be maintained
* Project drivers will be trained on defensive driving.
* Vehicle speeds near / within the communities will be kept low, to avoid safety hazards.
* Compliance with WBG EHS Guidelines will be ensured
* ECoP-15 and ECoP-18 will be implemented.
 | Contractor | CSC | * Number of non-compliance reports
* Number of accidents, incidents and near misses
* Number of related public complaints
* Number of trainings provided
 | Before and during construction  | Included in contractors’ costs  |
| 4.6 Damage to Infrastructure | All damaged infrastructure will be restored to original or better condition. | Contractors | CSC | Number of non-compliance reports | Before and during construction  | Included in contractors’ costs  |
| 4.7 Blocked routes | * On-going community consultations to be carried out
* Proper scheduling of works to minimize blockage of access to places such as boat jetties
* Road signage
* Community awareness
 | Contractors | CSC | Number of non-compliance reports | Before and during construction  | Included in contractors’ costs  |
| **5. Activity: Site Preparation and Construction of Towers Foundations and Retaining Walls** |  |
| 5.1 Soil erosion | * Works will be carried out in a manner not to cause soil erosion
* Vehicular traffic near the bank line will be minimized
* Protective measures such as mulching will be undertaken to stop erosion
* Vehicular traffic on unpaved roads will be minimized
* ECoP-6 will be implemented.
 | Contractor | CSC | * Number of non-compliances observed.
 | Throughout the construction phase  | Included in contractors’ costs  |
| 5.2 Soil and water contamination | * The contractor will prepare and implement a Pollution Prevention Plan prior to the start of the work. Proper baseline data will be collected.
* Construction materials will be stored, used and handled appropriately.
* Reduce risk of a pollution event through adoption of measures set out in Solid Waste Management Plan and (Drinking Water) and Sanitation Plan
* Hazardous and toxic materials to be stored separately
* The contractor will identify suitable sites for disposal of hazardous and non- hazardous waste. The selection will be done in consultation with the PIU and the local municipal authorities, avoiding and rivers.
* Fuels and hazardous substances management plan will be implemented
* Design drainage for the batching plant area to direct runoff into a sump/basin for inspection for pollutants prior to discharge
* Any discharges to the river or streams should comply with EHS Guidelines
* Regular waste water streams are to be passed through settling basins.
* ECoP-1, ECoP-2, ECoP-4, ECoP-5, and ECoP-7 will be implemented.
 | Contractor | CSC | * Number of non-compliances observed or reported
* Monthly auditing of management of hazardous materials against Material Safety Data Sheet
* Soil and water quality monitoring data
* Number of any non-compliance
* Number of related complaints
 | Throughout the construction phase | Included in contractors’ costs  |
| 5.3 Air Quality  | * Pollution prevention plan will be implemented.
* Construction materials will be stored in designated areas away from sensitive receptors and covered to minimize dust on site from site construction works
* Construction vehicles will be sprayed with water when entering and leaving the site, covered if transporting materials, adhere to speed limits, and engines will be turned off when idling.
* Water spraying will be carried out to suppress dust emissions where needed
* Batching plants, and crushers will have appropriate dust and emission abatement systems (e.g., wet scrubber) as appropriate.
* Target zero dust related complaints
* Target zero air quality related complaints.
* EHS Guidelines compliance will be ensured.
* Monitoring of ambient air quality near settlements. Appropriate actions to be undertaken in case ambient air quality deteriorates beyond acceptable limits.
* ECoP-10 will be implemented.
 | Contractor | CSC | * Number of non-compliances observed or reported
* Number of dust-related complaints.
* Number of air quality-related complaints,
* Air quality monitoring data
 | Throughout construction phase  | Included in contractors’ costs  |
| 5.4 Health and Safety | * Compliance with Occupational Health and Safety standards and OHS Plan
* Implement fuels and hazardous substances management plan
* Use of personal protective equipment (PPE)
* Construction sites to be cordoned off to stop unauthorized access
* Develop controls and standard operating procedures for the use of fuels and other hazardous substances to prevent spills, accidents, and pilferage
* Train and designate personnel for various OHS aspects such as spill control procedures, fire fighting
* Establish firefighting system and fire safety (fire extinguishers) at the construction sites where fire is a hazard
* Spill kits and trained personnel are to be made available at the workshops.
* Contain all fuel tanks in a fully bonded area with a storage capacity of at least 110 percent of the potential storage volume.
* Use auto shut down valves for fuel transfer pipes
* Transport of hazardous goods and fuel to be done in closed containers and ISO certified tanks
* Provision of respiratory protective devices for workers where needed
* Designate agreed routes for traffic (set out in the Traffic Management Plan)
* Provision of insurance-backed compensation scheme for major injury or loss of life reflecting settlement sums that are consistent with national/international benchmarks.
* Contractor to engage a doctor at the site/camp
* Construction sites to have first aid boxes
* Site to have ambulance to transfer injured/sick workers to nearest hospital
* WBG’s EHS Guidelines to be implemented
* Regular OHS trainings to be provided to workers
* ECoP 2 and ECoP-18 will be implemented.
* GRM for workers established
 | Contractor | CSC | * Number of non-compliances observed or reported
* Number of respiratory protective devices and other PPEs issues to workers.
* Monitoring of compliance with Health and Safety standards (including monthly reporting of accidents).
* Number of accidents, incidents and near misses.
* Number of trainings provided.
* Number of grievances from workers
 | Throughout construction phase | Included in contractors’ costs  |
| 5.5 Noise and Vibration | * Pollution prevention plan will be implemented.
* Noise barriers will be installed where needed particularly near sensitive receptors such as schools
* Construction plant producing sound in excess of 85dB will be fitted with mufflers;
* Noise monitoring will be conducted
* EHS Guideline compliance will be ensured.
* ECoP-11 will be implemented.
 | Contractor | CSC | * Number of non-compliances observed or reported
* Record of equipment used on site capable of producing over 85dB and whether equipment has been fitted with mufflers
* Number of related community complaints
* Noise monitoring data
* Number of noise related grievances
 | Throughout construction phase  | Included in contractors’ costs  |
| 5.6 Vegetation loss  | * Avoid dumping material in vegetated areas.
* Avoid unnecessary loss of vegetation
* ECoP-12 will be implemented.
 | Contractor | CSC | * Area of vegetation lost/disturbed
 | Throughout construction phase | Included in contractors’ costs  |
| 5.7 Damage to infrastructure  | * Any damaged infrastructure such as roads, jetties or culverts will be repaired
 | Contractor | CSC | * Number of any non-compliance reports
* Number of related complaints
 | construction phase | Included in contractors’ costs  |
| 5.8 Chance finds | * In case any artifact or site of archeological, cultural, historical, or religious significance are discovered during construction activities, the works will be stopped, and the Archeological Department will be informed.
 | Contractor | CSC | * Number of non-compliance reports
* Number of reports of any new PCR discovered/reported
 | construction phase | Included in contractors’ costs  |
| 5.9 Loss of Access to Villages | * Local access routes will not be blocked to the extent possible
* If blockage of routes/roads is unavoidable, consultations will be carried out with the affected community and alternates will be identified. Work schedule will be prepared in consultation with the communities to minimize impact of blocked access or routes.
 | Contractor | CSC | * Number of related community complaints
 | construction phase | Included in contractors’ costs  |
| 5.10 Social conflict due to the Influx of Workers  | * Liaison will be maintained with the communities
* Contractors and workforce to follow code of conduct
* Respect of local norms and values
* Implementation of awareness campaign
* Complaints from the local community will be addressed by the Grievance Mechanism that will be developed.
* The HEP team will require to closely monitor the implementation of the project and the functioning of GRM and take additional measures to address the risk of GBV, where necessary.
 | Contractors  | CSC | Number of public grievances relating to in-migrants | Construction phase | Included in contractors’ costs  |
| 5.11 Increased Load on Local Services and Supplies | * The contractors to procure their supplies in a manner not significantly affecting the availability of essential commodities in the area for the residents.
* Grievance redress mechanism will be established to address community complaints and grievances.
 | Contractor | CSC | Number of related public grievances  | Construction phase | Included in contractors’ costs  |
| **6. Activity: Steel Erection** |  |
| 6.1 Soil and water contamination | * The contractor will prepare and implement a Pollution Prevention Plan prior to the start of the work. Proper baseline data will be collected.
* Construction materials will be stored, used and handled appropriately.
* Reduce risk of a pollution event through adoption of measures set out in Solid Waste Management Plan Hazardous and toxic materials stored separately
* The contractor will identify suitable sites for disposal of hazardous and non- hazardous waste. The selection will be done in consultation with the PIU and the local municipal authorities.
* Fuels and hazardous substances management plan will be implemented.
 | Contractor | CSC | * Monthly auditing of management of hazardous materials against Material Safety Data Sheet
* Soil and water quality monitoring data
* Number of reports if any non-compliance
* Number of related complaints
 | Throughout the construction phase | Included in contractors’ costs  |
| 6.2 Air Quality  | * Pollution prevention plan will be implemented.
* Construction materials will be stored in designated areas away from sensitive receptors and covered to minimize dust on site from site construction works
* Construction vehicles will be sprayed with water when entering and leaving the site, covered if transporting materials, adhere to speed limits, and engines will be turned off when idling.
* Water spraying will be carried out to suppress dust emissions where needed
* Compliance with EHS Guidelines will be ensured.
* Monitoring of ambient air quality near settlements and sensitive receptors such as schools.
* Appropriate actions to be undertaken in case ambient air quality deteriorates beyond acceptable limits.
* GRM will be established
* ECoP-10 will be implemented.
 | Contractor | CSC | * Number of dust-related complaints.
* Number of air quality-related complaints,
* Compliance with Traffic Management Plan.
* Air quality monitoring data
* Distance of batching plants and asphalt plants from nearest residential area.
 | Throughout construction phase  | Included in contractors’ costs  |
| 6.3 Health and Safety | * Compliance with Occupational Health and Safety standards and OHS Plan
* Implement fuels and hazardous substances management plan
* Use of personal protective equipment (PPE)
* Construction sites to be cordoned off to stop unauthorized access
* Develop controls and standard operating procedures for the use of fuels and other hazardous substances to prevent spills, accidents, and pilferage
* Train and designate personnel for various OHS aspects such as spill control procedures, fire fighting
* Establish firefighting system and fire safety (fire extinguishers) at the construction sites where fire is a hazard
* Spill kits and trained personnel are to be made available at the workshops.
* Contain all fuel tanks in a fully bonded area with a storage capacity of at least 110 percent of the potential storage volume.
* Use auto shut down valves for fuel transfer pipes
* Transport of hazardous goods and fuel to be done in closed containers and ISO certified tanks
* Provision of respiratory protective devices for workers where needed
* Designate agreed routes for traffic (set out in the Traffic Management Plan)
* Provision of insurance-backed compensation scheme for major injury or loss of life reflecting settlement sums that are consistent with national/international benchmarks.
* Contractor to engage a doctor at the site/camp
* Construction sites to have first aid boxes
* Site to have ambulance to transfer injured/sick workers to nearest hospital
* WBG’s EHS Guidelines to be implemented
* ECoP 2 and ECoP-18 will be implemented.
* GRM for workers established
 | Contractor | CSC | * Number of respiratory protective devices and other PPEs issues to workers.
* Monitoring of compliance with Health and Safety standards (including monthly reporting of accidents).
* Number of accidents, incidents and near misses.
* Number of trainings provided.
 | Throughout construction phase | Included in contractors’ costs  |
| 6.4 Noise and Vibration | * Pollution prevention plan will be implemented.
* Construction plant producing sound in excess of 85dB will be fitted with mufflers;
* Noise barriers will be provided in areas where significant noise is expected.
* Compliance with EHS Guidelines will be ensured.
* GRM will be established
* ECoP-11 will be implemented.
 | Contractor | CSC | * Record of equipment used on site capable of producing over 85dB and whether equipment has been fitted with mufflers
* Number of related community complaints
* Noise monitoring data
* Number of non-compliances
 | Throughout construction phase  | Included in contractors’ costs  |
| 6.5 Fauna / Wildlife  | * Awareness raising of workers, employees and general public;
* Include information on wildlife protection in all construction related tool-box orientation briefings for new construction staff
* A public education program will be designed and implemented to discourage poaching of wildlife
* Avoid positioning spoil in areas used by fauna
* No hunting or poaching
* No dumping of effluents or solid waste in water bodies
* Contractors shall use lower wattage flat lens fixtures that direct light down and reduce glare, and shall avoid use of flood lights.
* Contractors will also raise awareness about the protection of birds and other wildlife species among the work force to reduce impacts such as disturbance and poaching
* ECoP-13 and ECoP 14 will be implemented.
 | Contractor | CSC | * Number of reported incidences of hunting or poaching on the Project site / in land ownership.
* Number of reports of sighting of key wild species
 | Throughout construction phase  | Included in contractors’ costs  |
| 6.6 Damage to infrastructure  | * Any damaged infrastructure such as roads, bridges and culverts will be repaired
 | Contractor | CSC | * Number of non-compliance reports
* Number of related grievances
 | construction phase | Included in contractors’ costs  |
| 6.7 Chance finds | * In case any artifact or site of archeological, cultural, historical, or religious significance are discovered during construction activities, the works will be stopped, and the concerned departments will be informed.
 | Contractor | CSC | * Number of non-compliance reports
* Number of reports of any new PCR discovered/reported
 | construction phase | Included in contractors’ costs  |
| 6.8 Social conflict due to the Influx of Workers and In-migrants | * Liaison will be maintained with the communities
* Contractors and workforce to follow code of conduct
* Respect of local norms and values
* Implementation of awareness campaign
* Complaints from the local community will be addressed by the Grievance Mechanism that will be developed.
 | PIU | PIU | Number of public grievances relating to in-migrants | Construction phase | Included in contractors’ costs  |
| 6.9 Adverse Effects on Health Situation | * Raising awareness of the associated risks for the local population.
* The awareness campaign will also be aimed at the risk of interaction between the resident population and the construction work force, including the spreading of sexually transmitted diseases such as HIV/AIDS.
* The medical health facilities in the project influence area will be facilitated to deal with such incidences.
 | PIU and contractor | CSC | Number of patients being treated in the local hospitals | Construction phase | Included in contractors’ costs  |
| 6.10 Increased Load on Local Services and Supplies | * The contractors to procure their supplies in a manner not significantly affecting the availability of essential commodities in the area for the residents.
* Grievance redress mechanism will be established to address community complaints and grievances.
 | Contractor | CSC | Number of related public grievances  | Construction phase | Included in contractors’ costs  |
| 6.11 Blockage of local routes | * Local access routes will not be blocked to the extent possible
* If blockage of routs or roads is unavoidable, consultations will be carried out with the affected community and alternates will be identified.
* Work schedule will be prepared in consultation with the communities to minimize impact of blocked access or routes.
* Embankment to have stairs/ramps to facilitate people and their livestock crossing the embankment.
* Road will have crossings and tee-junctions at the appropriate places
* Road will have zebra crossings.
* Arrangements will be included in the design to facilitate elderly, disabled, and people with special needs.
 | Contractor | CSC | * Number of related community complaints
 | construction phase | Included in contractors’ costs  |
| **7. Activity: Conductor Stringing** |  |
| 7.1 Soil erosion | * Works will be carried out in a manner not to cause soil erosion
* Vehicular traffic near the bank line will be minimized
* Protective measures such as mulching will be undertaken to stop erosion
* Vehicular traffic on unpaved roads will be minimized
* ECoP-6 will be implemented.
 | Contractor | CSC | * Number of non-compliances observed.
 | Throughout the construction phase  | Included in contractors’ costs  |
| 7.2 Vegetation loss  | * Minimize clearing of vegetation to the extent feasible
* Avoid dumping material in vegetated areas.
* Avoid unnecessary loss of vegetation
* ECoP-12 will be implemented.
 | Contractor | CSC | * Area of vegetation lost/disturbed
 | Throughout construction phase | Included in contractors’ costs  |
| 7.3 Soil and water contamination | * The contractor will prepare and implement a Pollution Prevention Plan prior to the start of the work. Proper baseline data will be collected.
* Construction materials will be stored, used and handled appropriately.
* Reduce risk of a pollution event through adoption of measures set out in Solid Waste Management Plan Hazardous and toxic materials stored separately
* The contractor will identify suitable sites for disposal of hazardous and non- hazardous waste. The selection will be done in consultation with the PIU and the local municipal authorities.
* Fuels and hazardous substances management plan will be implemented.
 | Contractor | CSC | * Monthly auditing of management of hazardous materials against Material Safety Data Sheet
* Soil and water quality monitoring data
* Number of reports if any non-compliance
* Number of related complaints
 | Throughout the construction phase | Included in contractors’ costs  |
| 7.4 Air Quality  | * Pollution prevention plan will be implemented.
* Construction materials will be stored in designated areas away from sensitive receptors and covered to minimize dust on site from site construction works
* Construction vehicles will be sprayed with water when entering and leaving the site, covered if transporting materials, adhere to speed limits, and engines will be turned off when idling.
* Water spraying will be carried out to suppress dust emissions where needed
* Compliance with EHS Guidelines will be ensured.
* Monitoring of ambient air quality near settlements and sensitive receptors such as schools.
* Appropriate actions to be undertaken in case ambient air quality deteriorates beyond acceptable limits.
* GRM will be established
* ECoP-10 will be implemented.
 | Contractor | CSC | * Number of dust-related complaints.
* Number of air quality-related complaints,
* Compliance with Traffic Management Plan.
* Air quality monitoring data
* Distance of batching plants and asphalt plants from nearest residential area.
 | Throughout construction phase  | Included in contractors’ costs  |
| 7.5 Health and Safety | * Compliance with Occupational Health and Safety standards and OHS Plan
* Implement fuels and hazardous substances management plan
* Use of personal protective equipment (PPE)
* Construction sites to be cordoned off to stop unauthorized access
* Develop controls and standard operating procedures for the use of fuels and other hazardous substances to prevent spills, accidents, and pilferage
* Train and designate personnel for various OHS aspects such as spill control procedures, fire fighting
* Establish firefighting system and fire safety (fire extinguishers) at the construction sites where fire is a hazard
* Spill kits and trained personnel are to be made available at the workshops.
* Contain all fuel tanks in a fully bonded area with a storage capacity of at least 110 percent of the potential storage volume.
* Use auto shut down valves for fuel transfer pipes
* Transport of hazardous goods and fuel to be done in closed containers and ISO certified tanks
* Provision of respiratory protective devices for workers where needed
* Designate agreed routes for traffic (set out in the Traffic Management Plan)
* Provision of insurance-backed compensation scheme for major injury or loss of life reflecting settlement sums that are consistent with national/international benchmarks.
* Contractor to engage a doctor at the site/camp
* Construction sites to have first aid boxes
* Site to have ambulance to transfer injured/sick workers to nearest hospital
* WBG’s EHS Guidelines to be implemented
* ECoP 2 and ECoP-18 will be implemented.
 | Contractor | CSC | * Number of respiratory protective devices and other PPEs issues to workers.
* Monitoring of compliance with Health and Safety standards (including monthly reporting of accidents).
* Number of accidents, incidents and near misses.
* Number of trainings provided.
 | Throughout construction phase | Included in contractors’ costs  |
| 7.6 Noise and Vibration | * Pollution prevention plan will be implemented.
* Construction plant producing sound in excess of 85dB will be fitted with mufflers;
* Noise barriers will be provided in areas where significant noise is expected.
* Compliance with EHS Guidelines will be ensured.
* GRM will be established
* ECoP-11 will be implemented.
 | Contractor | CSC | * Record of equipment used on site capable of producing over 85dB and whether equipment has been fitted with mufflers
* Number of related community complaints
* Noise monitoring data
* Number of non-compliances
 | Throughout construction phase  | Included in contractors’ costs  |
| 7.7 Fauna / Wildlife  | * Awareness raising of workers, employees and general public;
* Include information on wildlife protection in all construction related tool-box orientation briefings for new construction staff
* A public education program will be designed and implemented to discourage poaching of wildlife
* Avoid positioning spoil in areas used by fauna
* No hunting or poaching
* No dumping of effluents or solid waste in water bodies
* Contractors shall use lower wattage flat lens fixtures that direct light down and reduce glare, and shall avoid use of flood lights.
* Contractors will also raise awareness about the protection of birds and other wildlife species among the work force to reduce impacts such as disturbance and poaching
* ECoP-13 and ECoP 14 will be implemented.
 | Contractor | CSC | * Number of reported incidences of hunting or poaching on the Project site / in land ownership.
* Number of reports of sighting of key wild species
 | Throughout construction phase  | Included in contractors’ costs  |
| 7.8 Damage to infrastructure  | * Any damaged infrastructure such as roads, bridges and culverts will be repaired
 | Contractor | CSC | * Number of any non-compliance reports
* Number of related grievances
 | construction phase | Included in contractors’ costs  |
| 7.9 Chance finds | * In case any artifact or site of archeological, cultural, historical, or religious significance are discovered during construction activities, the works will be stopped, and the concerned departments will be informed.
 | Contractor | CSC | * Number of any non-compliance reports
* Number of reports of any new PCR discovered/reported
 | construction phase | Included in contractors’ costs  |
| 7.10 Social conflict due to the Influx of Workers and In-migrants | * Liaison will be maintained with the communities
* Contractors and workforce to follow code of conduct
* Respect of local norms and values
* Implementation of awareness campaign
* Complaints from the local community will be addressed by the Grievance Mechanism that will be developed.
* GBV should be avoided, women should be given equal chance of decision making and play key role in the project affairs
 | PIU | PIU | Number of public grievances relating to in-migrants | Construction phase | Included in contractors’ costs  |
| 7.11 Adverse Effects on Health Situation | * Raising awareness of the associated risks for the local population.
* The awareness campaign will also be aimed at the risk of interaction between the resident population and the construction work force, including the spreading of sexually transmitted diseases such as HIV/AIDS.
* The medical health facilities in the project influence area will be facilitated to deal with such incidences.
 | PIU and contractor | CSC | Number of patients being treated in the local hospitals | Construction phase | Included in contractors’ costs  |
| 7.12 Increased Load on Local Services and Supplies | * The contractors to procure their supplies in a manner not significantly affecting the availability of essential commodities in the area for the residents.
* Grievance redress mechanism will be established to address community complaints and grievances.
 | Contractor | CSC | Number of related public grievances  | Construction phase | Included in contractors’ costs  |
| 7.13 Blockage of local routes | * Local access routes will not be blocked to the extent possible
* If blockage of routs or roads is unavoidable, consultations will be carried out with the affected community and alternates will be identified.
* Work schedule will be prepared in consultation with the communities to minimize impact of blocked access or routes.
* Embankment to have stairs/ramps to facilitate people and their livestock crossing the embankment.
* Road will have crossings and tee-junctions at the appropriate places
* Road will have zebra crossings.
* Arrangements will be included in the design to facilitate elderly, disabled, and people with special needs.
 | Contractor | CSC | * Number of related community complaints
 | construction phase | Included in contractors’ costs  |
| **8. Activity: Material Quarrying**  |  |
| 8.1 Impacts on terrestrial or aquatic habitat | * Quarry area management plan will be implemented.
* Existing quarry and borrow areas will be used. If new areas are to be developed, the contractor will obtain clearance from the CSC before extraction. The CSC will issue this clearance after surveying the area and ensuring that no critical habitat exists at such location
* GRM will be put in place.
 | Contractor | CSC | Number of any non-compliance reports | Construction phase | Included in contractors’ costs  |
| 8.2 Soil erosion | * Borrow pits/areas to be restored to the extent possible/ necessary
* Road edge buffers will be re-planted
* Replanting to be carried out after completing the quarrying, using fast-growing native species; and grasses to assist slope and soil stability.
* ECoP-6 will be implemented.
 | Contractor | CSC | Number of any non-compliance reports | construction phase | Included in contractors’ costs  |
| 8.3 Soil and water contamination | * Pollution prevention plan and waste disposal plan will be implemented.
* Any discharges to the river or streams should comply EHS Guidelines
* Regular waste water streams are to be passed through settling basins.
* Undertake pH monitoring of site runoff to ensure alkaline runoff is not leaving the site.
* Compliance with EHS Guidelines will be ensured.
* ECoP-1, ECoP-2, ECoP-4, ECoP-5, and ECoP-7 will be implemented.
 | Contractor | CSC | * Number of reports if any non-compliance
* Number of related complaints
 | construction phase | Included in contractors’ costs  |
| 8.4 Air Quality  | * Pollution prevention plan will be implemented.
* Exhaust from construction vehicles, boats, and equipment will comply with EHS Guidelines
* Construction materials will be stored in designated areas away from sensitive receptors and covered to minimize dust on site from site construction works
* Water spraying will be carried out to suppress dust emissions where needed
* Construction vehicles will be sprayed with water when entering and leaving the site, covered if transporting materials, adhere to speed limits, and engines will be turned off when idling.
* Target zero dust related complaints
* Target zero air quality related complaints.
* ECoP-10 will be implemented.
 | Contractor | CSC | * Number of dust-related complaints.
* Number of air quality-related complaints,
* Air quality monitoring data
* Compliance with Traffic Management Plan.
 | construction phase | Included in contractors’ costs  |
| 8.5 Health and Safety | * Construction workers on boats to have life jackets
* Compliance with Occupational Health and Safety standards and OHS Plan
* Implement Fuels and hazardous substances management plan
* Develop controls and standard operating procedures for the use of fuels and other hazardous substances to prevent spills, accidents
* Train and designate personnel for various OHS aspects such as spill control procedures, fire fighting
* Establish firefighting system and fire safety (fire extinguishers) at the construction sites where fire is an hazard
* Transport of hazardous goods and fuel to be done in closed containers and ISO certified tanks
* Provision of respiratory protective devices for workers where needed
* Designate agreed routes for traffic (set out in the Traffic Management Plan)
* Boats to have first aid boxes
* WBG’s EHS Guidelines to be implemented
* ECoP 2, ECoP 16, and ECoP-18 will be implemented.
 | Contractor | CSC | * Number of respiratory protective devices and other PPEs issues to workers.
* Monitoring of compliance with Health and Safety standards (including monthly reporting of accidents).
* Number of accidents, incidents and near misses.
* Number of trainings provided.
 | construction phase | Included in contractors’ costs  |
| 8.6 Noise and Vibration | * Pollution prevention plan will be implemented.
* Construction plants and vehicles producing sound in excess of 85dB will be fitted with mufflers;
* Compliance with EHS Guidelines will be ensured.
* ECoP-11 will be implemented.
 | Contractor | CSC | * Number of record of equipment used on site capable of producing over 85dB and whether equipment has been fitted with mufflers
* Number of related community complaints
* Noise monitoring data
 | construction phase | Included in contractors’ costs  |
| 8.7 Damage to infrastructure  | Any damaged infrastructure such as access roads will be repaired | Contractor | CSC | Number of any non-compliance reports | construction phase | Included in contractors’ costs  |
| 8.8 Impacts on cultivation fields | No borrowing will be carried out from the cultivation fields. | Contractor | CSC | Any non-compliances  | construction phase | Included in contractors’ costs  |
| **9. Activity: Waste management**  |  |
| 9.1 Soil and water contamination | * Contractors will implement the Waste Management Plan.
* Appropriate hazardous, industrial and domestic waste disposal facilities must be established
* For the domestic sewage, appropriate treatment and disposal system (e.g., septic tanks and soaking pits) will be constructed having adequate capacity
* Waste oils will be collected in drums and sold to the recycling contractors.
* The inert recyclable waste from the site (such as cardboard, drums, and broken/used parts) will be sold to recycling contractors.
* The hazardous waste will be kept separate and handled according to the nature of the waste.
* Domestic solid waste will be disposed of in a manner that does not cause soil contamination.
* Awareness raising for minimizing use of non-biodegradable substances
* Regular maintenance of waste management facilities will be undertaken
* No waste dumping/release will be carried out in environmental sensitive areas and rivers
* Implement ECoP 1
 | Contractor | CSC | * Monthly auditing of management of hazardous materials against Material Safety Data Sheet
* Soil and water quality monitoring data
* Reports if any non-compliance
* Number of related complaints
 | construction phase | Included in contractors’ costs  |
| 9.2 Odor  | * Waste disposal sites will be located away from the communities
* Regular maintenance of waste management facilities will be undertaken
 | Contractor | CSC | Number of related complaints | construction phase | Included in contractors’ costs  |
| **10. Activity: Site Restoration** |  |
| 12.1 Site restoration | * Demolition of temporary structures
* Removal of all debris, excess construction material, scraps, spoils, other wastes
* Landscaping
* Restoration of sites for camps and office buildings
 | Contractor | CSC | * Photographic record
* Clearance from CSC
 | construction phase | Included in contractors’ costs  |

## Monitoring Program

As one of the key elements of the ESMP, a two-tier monitoring program has been proposed comprising compliance monitoring and effects monitoring. The main purpose of this monitoring program is to ensure that the various tasks detailed in the ESMP particularly the mitigation measures are implemented in an effective manner, and also to evaluate program impacts on the key environment and social parameters. Both these types of ESMP monitoring are discussed below.

### Compliance Monitoring

The purpose of the compliance monitoring is to ensure that the contractor implements the mitigation measures given in the ESMP are effectively and timely implemented. This monitoring will generally be carried out by the CSC with the help of checklists prepared on the basis of the mitigation measures in **Table 2.5**.

### Effects Monitoring

Effects monitoring is a very important aspect of environmental management to safeguard the protection of environment. The effects monitoring plan proposed for the project is presented in **Table 2.6**. The monitoring will comprise surveillance to check whether the contractor is meeting the provisions of the contract during construction and operation of the project including the responsible agencies for implementation and supervision. Compliance indicators or threshold limits for the monitoring are also given in **Table 2.6**. Actual monitoring time and location will be decided by CSC and PIU.

Table 2.6: Effects Monitoring Plan

| **Parameter/ Activity** | **Location** | **Means of Monitoring** | **Compliance indicator/ threshold limits** | **Frequency** | **Responsible Agency** |
| --- | --- | --- | --- | --- | --- |
| **Implementation** | **Supervision** |
| **During Construction** |  |  |  |  |
| Hydrocarbon and chemical storage and handling | Construction camps and yards | Visual Inspection of storage facilities  | No leakages from the containers in the storage.Handling follows procedures to avoid spillages. | Monthly | Contractor | CSC |
| Spoils | At tower locations | Visual inspections | Disposal in approved locations  | Monthly | Contractor | CSC |
| Traffic Safety | Access Roads | Visual inspection to see whether proper traffic signs are placed and flag-persons for traffic management are engaged | Smooth flowing of traffic; and placement of traffic signs and flag-person | Monthly | Contractor | CSC |
| Dust | Construction sites | Visual inspection to ensure good standard equipment is in use and dust suppression measures (e.g., spraying of waters) are in place. | No dust generation from the construction activities | Weekly | Contractor | CSC |
| Construction Sites | Spot measurements with potable meters  | Compliance with EHS Guidelines. | Monthly | Contractor | CSC |
| Noise  | Construction sites | Noise measurement using potable noise meter;  | Compliance with EHS Guidelines | Monthly  | Contractor | CSC |
| Waste Management | Construction camps and construction sites | Visual inspection that solid waste collection facilities are in place and waste is disposed at designated site | Facilities are clean and waste collection and disposal facilities are in place  | Monthly | Contractor | CSC |
| Drinking water quality | Camps, offices | Testing of water quality of workers camp water supply for drinking water standards  | EHS Guidelines for drinking water standards | Annually | Contractor | CSC |
| Air (PM, CO2, SOx, NOx) and Noise quality | At sensitive sites identified by CSC | 24 hour continuous monitoring with appropriate equipment | Compliance with EHS Guidelines | Half yearly | Contractor  | CSC, DABS |
| Cultural and archeological Sites | At all work sties  | Visual observation for chance finds | Indication of chance finds | Daily  | Contractor  | CSC, DABS |
| Restoration of Work Sites | All Work Sites  | Visual Inspection  | The facilities are clean with no waste at the works sites  | After completion of all works | Contractor  | CSC, DABS |
| Safety of workers Monitoring and reporting accidents | At work sites | Usage of Personal Protective equipment and implementation of contractor OHS plan | All workers should be provided with, and use necessary PPEs | Monthly  | Contractor | CSC, DABS |
| Grievances | In the project area | Number of grievances registered and addressed | Minutes of grievance redress meetings | Monthly | PIU | CSC, DABS |
| **During Operation and Maintenance** |  |  |  |  |
| Inspection as per Standard Operating Procedures | Tower locations | Visual Inspection of environmental related issues | Comply with DABS SOPs | Monthly | PIU | DABS |
| Bird collision and electrocution data | At locations crossed by major rivers | Walk over surveys and interviews | Zero mortality | Six monthly – in March and October | Consultant | DABS |
| Electromagnetic fields | Near the residential areas along the TL alignment | Measurement through appropriate equipment | WHO recognized standards | Yearly | PIU | DABS |

## Performance Indicators

For evaluating the performance of the environmental management and monitoring plan, performance indicators are identified to for efficient and timely implementation of measures/actions proposed in EMP. The indicators are defined both for implementation phase and for operation phase. CSC will be responsible for compiling the information on these indicators and report to DABS.

To measure the overall environmental performance of the project, a suggested list of performance indicators is given below.

* Number of inspections carried out by CSC per month.
* Number of non-compliances observed by CSC or PIU.
* Availability of environmental specialists in CSC.
* Availability of EHS specialists with contractors.
* Timely reporting of documents (as defined in ESMP and monitoring plan).
* Number of trainings imparted to stakeholders/other capacity building initiatives
* Timely disbursement of compensation/ timely resettlement of project affectees
* Timely implementation of resettlement schedule.
* Number of grievances received from community, PAPs – and from workers.
* Number of grievances resolved.
* Number of construction-related accidents.

# Capacity Building

Capacity building for effective implementation of the environmental and social safeguard requirements is a key element of the EMP. Capacity building for environmental and social safeguard management will need to be carried out at all tiers of the project, including DABS, PIU, CSC, and contractors. At the construction site, CSC will take the lead in implementing the capacity building plan, though the contractors will also be responsible to conduct trainings for their own staff and workers. The various aspects that are covered under the capacity building will include general environmental and social awareness, key environmental and social sensitivities of the area, and key environmental and social impacts of the project, EMP requirements, OHS aspects, and waste disposal. **Table 3.1** provides a summary of various aspects of the environmental and social trainings to be conducted at the construction site. PIU may revise the plan during the project implementation as required.

During the O&M phase of the project, these trainings will continue to be conducted by DABS staff for all relevant O&M personnel.

Table ‎3.1: Environmental and Social Trainings

| **Contents** | **Participants** | **Responsibility** | **Schedule** |
| --- | --- | --- | --- |
| General environmental and socioeconomic awareness;Environmental and social sensitivity of the project influence area; Mitigation measures; Community issues and workers’ code of conduct;Labor influx mitigation planGrievance redress Mechanism;Training on prevention of gender-based violence (GVB)ESMPAwareness of transmissible diseases Social and cultural values.  | PIU;CSC; selected contractors’ crew | CSC | Prior to the start of the field activities.(To be repeated as needed.) |
| EMP; Waste disposal; OHS | Construction crew | Contractors  | Prior to the start of the construction activities.(To be repeated as needed.) |
| Road safety;Defensive driving/; Waste disposal;Cultural values and social sensitivity. | Drivers;  | Contractors  | Before and during the field operations.(To be repeated as needed.) |
| Camp operation; Waste disposal; OHSNatural resource conservation; Housekeeping. | Camp staff | Contractors  | Before and during the field operations.(To be repeated as needed.) |
| Restoration requirements; Waste disposal. | Restoration teams | Contractors | Before the start of the restoration activities.  |

## Documentation

The PIU with assistance from CSC and contractors will produce the following environmental reporting documentation:

**Quarterly Progress Reports on Environment**: The environmental monitoring reports will include environmental mitigation measures undertaken, environmental monitoring activities undertaken, details of monitoring data collected, analysis of monitoring results particularly the non-compliances, recommended mitigation and corrective measures, environmental training conducted, and environmental regulatory violations observed. The environmental monitoring reports will be submitted quarterly during the construction period and annually for three years after completion of construction.

**Quarterly Progress Reports on Social**: The quarterly social progress reports will cover the progress on implementation of RAP and community development assistance programs.

**Project Completion Environmental Monitoring Report**: One year after completion of construction, the PIU will submit a Project Completion Environmental Monitoring Report which will summarize the overall environmental impacts from the project.

# ESMP Implementation Cost

Detailed cost estimates for implementation of mitigation measures given in ESMP are given in **Table 4.1** and implementation of ARAP are given in **Table 4.2**. Total cost of ESMP implementation is USD 66,000 million and the ARAP budget is USD \*\*\*\*\* million.

Table ‎4.1: Budget for Implementation of ESMP

|  | **Description** | **Cost(USD)** | **Comments** |
| --- | --- | --- | --- |
| 1 | Environmental and Social Consultants in the PIU |  | Included in PIU cost |
| 2 | Environmental Specialist and Social Specialists in the Construction Supervision Consultant | - | Included in CSC Cost |
| 3 | Environmental and Social Specialists in M&E Consultants |  | Included in M&E Consultants’ cost |
| 4 | Environmental Monitoring during Construction for air and noise quality | 30,000 | Five rounds of monitoring; USD 6,000 per round. |
| 5 | Training programs  | 30,000 | Ten training events; USD 3,000 per event |
| 6 | Contingency  | 6,000 | 10 % of above |
|  | **Total** | **66,000** |  |

Table 4.2: Budget for Implementation of RAP

|  | **Resettlement Impacts** | **Quantity** | **Unit Rate(AFN)** | **Amount (AFN)** |
| --- | --- | --- | --- | --- |
| A. | Land under KTL Towers |   |  |  |
| 1 | Cultivated irrigated land (ha) | 0.15 | 2,250,000 | 337,500 |
| 2 | Cultivable rain-fed land (ha) | 0.28 | 750,000 | 210,000 |
| 3 | Barren land (ha) | 0.46 | 550,000 | 253,000 |
|  | Total (ha) | 0.89 |  | 800,500 |
| B | Land under Conductors (but not under towers, temporary disrupted and restricted) |  |  |  |
|  |
| 1 | Cultivated irrigated land (ha) | 0.27 | 125,000 | 33,750 |
| 2 | Cultivable rain-fed land (ha) | 4.95 | 125,000 | 618,750 |
|  | Total (ha) | 7.65 |  | 652,500 |
| C. | Affected area under crops  |  |  |  |
| 1 | Total area of agriculture land to be impacted by tower installation and conductor stringing. (hectares) | 8.08 |  | (covered under B) |
| 2 | Area under access tracks (hectares) | 7.65 | 125,000 | 956,250 |
|  | Total | 15.73 |  | 956,250 |
| **D** | **Affected trees**  |  |  |  |
| 1 | Privately owned Fruit Trees | 9 | 1,000 | 9,000 |
| **E** | **Project Affected Households**  |  |  |  |
|  | Households losing land for tower erection  | 21 |  |  |
| 1 | Households losing crops | 23 |  | - |
| 2 | Households losing trees | 1 |  | - |
|  | Grand Total |  |  | 2,418,250 |

The method used for calculation of compensation cost is based on market price, as well as the value of land are discussed with affected families during focus group discussion.

**Annex 1: Grievance Redress Mechanism**

The Grievance redress mechanism (GRM) is a system of procedures to receive and facilitate resolution of concerns and grievances of project-affected parties arising in connection with a project. The GRM ensures that project-related complaints and concerns received are promptly reviewed and addressed/resolved in an efficient and timely manner, and the complainant informed accordingly. For contractor workforce relevant complaints there should be a separate GRM which will be dealt with grievances of workers on the project site.

The primary objective of this Grievance Redress Mechanism is to ensure that the views and concerns of those affected by project activities are heard and acted upon in a timely, effective and transparent manner. It will also facilitate people who might have objections or concerns regarding the project activities to raise their objections and through conflict resolution so that these can be addressed adequately. The Grievance Redress Mechanism will be transparent, accessible to all, inclusive, participative and unbiased. PAPs will be made fully aware of their rights and the procedures for making a grievance. All grievances need to be recorded in the project level grievance logbook and a central database or excel-sheet along with outcome of grievance redress – and closely monitored and analyzed in terms of category of grievances of speed of resolution.

The main functions of the Grievance Redress Communities will be as follows:

* Provide a mechanism to all stakeholders including PAPs to address the concerns arising as a result of project activities, ESMP implementation, eligibility entitlements provided in ARAP and compensation paid,
* Record the grievance of relevant stakeholders include of PAPs, to enable tracking and review categorize and prioritize the grievances,
* Determine and implement the mitigation actions to address the grievances,
* Report to the aggrieved parties about the developments regarding their grievances and the decision of the project authorities
* Monitoring and analysis of grievances, tracking response time
* Inform communities within the project area of influence to utilize GRM services

**The GRC Structure**

The GRC procedure for WB-DABS supported projects has the following levels:

a- Local level GRC (local level GRC has already established and in place for receiving and handling of the grievance **– these are members of local level- or sub-project Level (GRC):** Relevant CDC members, Representative of PAFs, Contractor & Project Staff – social & technical (PIU).

).

b- Project level GRC- members include District/Provincial Governors, Provincial Director of DABS, Safeguards officer from PIU/DABS and Community Representatives.

c- DABS level GRC- member include; Deputy Minister (DABS), PIU Director and PIU Social team.

Grievance Redress Committees (GRCs) have already been formed across all projects based on World Bank policy which includes members from the relevant project beneficiaries, local governments, Representatives from Project Affected Families (PAF), civil society representative, community representatives.

**Functions of GRC**

* Ensure that handling of grievances is in accordance with Afghan law and World Bank procedures.
* Ensure that follow-up actions in response to grievances are taken within an agreed time-frame. Maintain record of all registered grievances in a database, along with details on the nature of the issues raised the case history, and actions taken.
* Report on resolved/unresolved grievances a weekly basis to the PIU.
* Coordinate with Government departments, at district, provincial and national level and civil society organizations for resolving the grievances of the local communities.
* Coordinate with community representatives on the efficacy and usefulness of grievance redress procedures and recommend changes if any.
* Assign member(s) to undertake site visits to assess issues raised as and when needed.

**The DABS- GRM Procedures**

The GRM covers grievances related to both environmental and social concerns. The three elements of the project’s GRM conducted or accessed at three different levels are:

1. Efforts made to resolve issues at local level.
2. A Grievance Redress Committee at district/project level.
3. Appeal mechanism at DABS management level.

DABS and the Project local staffs will be responsible to publicize the complaints procedures to the affected families and will also be responsible for the proper management of the grievance redress. In initial meetings WB-DABS supported projects Environment and Social Safeguards (ESS) staff, together with local government representatives, must inform community representatives about the GRM and explain the various ways of accessing it. ESS staff should explain that a range of mitigation measures to reduce potential negative environmental and social impacts of project activities on communities will be discussed and agreed with community representatives as an integral part of project development.

**Awareness generation**-The PIU will ensure awareness generation campaigns about the project related activities to the extent so as to make the citizens aware to claim their rights and entitlements as described under the resettlement plan.

**Submitting grievances and recording procedures-**Grievances can be submitted to the district governor’s office, PIU representative or to the implementing agency-contractor office. Grievances can also be submitted through email, SMS and phone calling. In case the issue is not resolve at the community and project levels, it will be brought to the GRC at HQ level in the next meeting.

**GRC meetings, proceedings and recommendations-** In case an issue raised is not resolved at the local level, a copy of the registered complaint will be forwarded to next level for consideration. The GRC’s meetings are to be held every second week to assess grievances, identify action to be taken and assign responsibility for follow-up. Cases put before the GRC will be assessed according to their urgency, priority, and the social environmental, technical or operational issues that they may raise. Along with the details of each case, recommendations for referral or action will be entered into a grievance excel-sheet to enable tracking and review. After the GRC meetings, its’ minutes and recommendations will be sent to the PIU within a week of the GRC meeting. The same information will also be sent to the relevant applicants. All efforts will be made by PMT to implement the recommendations of GRC as soon as possible. PIU will report to inter-ministerial- DABS- committee about the disposal of complaints and pending status regularly.

**Appeals and legal recourse-** Issues not resolved at GRC level will be escalated at the DABS level, if considers necessary will attempt a hearing on the matter in order to resolve it. In case of no resolution, such issues will be referred to the court of law with the approval of H.E. CEO DABS. The diagram below presents various level of GRM committees for trans-Hindukush road connectivity project.

**GRM Information**

The Grievance Redress Mechanism (GRM) manual, brochure will be accessible to local community after translation into local languages. A communication campaign will ensure that beneficiaries, CDC and communities, staff and other stakeholders know where and how to submit grievances, with an indication of the process and expected time to reach a resolution.

**Grievance Uptake and Response**

The DABS/PIU related Grievances should be received from different channels including:

* **Complaint Box:** will be used where available;
* **Hotline and SMS:** A mobile number will be introduced DABS has created a separated mobile number (0798856850) for receiving of grievances from beneficiaries. This channel should be applied in all DABS/PIU covered area;
* **Grievance Registration Form**: This form will be made available in the relevant subproject area to be used by the complainants and can be filled by the help of our staff available in each sub-project;
* **Email**: Stakeholders having access to internet can send their grievances, comments, and
* Suggestions through emails to Complaints.wbp@dabs.af,
* **Personal Visits**: Grievances can be recorded by personal visits of community members filling in the standard form at the field level as well as HQ’s related office;
* **Project Staff**: Grievances can also be filed through project staff

All submitted complaints and grievances will be registered at sub project level and added to a database in the DABS/PIU which will be updated regularly by designated PIU safeguard staff.

DABS/ PIU has established clear policy to make the GRM process transparent to beneficiaries and ensure that it proceeds effectively and efficiently. The project requires the public to submit grievances about the quality of a specific work or services in writing. A complaint handling responsible safeguard staff and relevant project manager reviews each grievance and deals with it according to the following guidelines:

It is one of the most important steps of the DABS/PIU to provide clear feedback of outcome to the complainants. One of the important activities of the GRC will be to provide an acknowledgement to the complainants through email, phone call or personal visits. The complainants must know that their complaints were recorded by the Committee and are investigating the issue. This can only happen when the complainant has identified himself/herself. In case of anonymous complain/grievance, acknowledgement will not be possible. The means through which the complainant has been acknowledged shall also be recorded in the database.

After the grievance/complain is resolved, the Committees must provide a feedback to the complainant. The solutions must also be recorded in the database for reporting to the appropriate authorities.

* Where an individual has a grievance she or he should, first of all, be encouraged to be solved on site between contractor and/or DABS relevant staff and complainant.
* The complaint handling responsible (Safeguard staff) shall record all grievances whether they are referred from GRC members or other recipients.
* The complaint handling responsible safeguard staff shall, within 5-7 working days from receipt of complaint, acknowledge receipt in writing to the complainant indicating that he is considering the issues raised and will discuss them within the local GRC meeting.
* The complaint handling responsible (safeguard staff) shall then consult and hold meeting with the relevant project manager and local GRC members, after a thorough review of the facts, shall make a judgment as to the validity of the complaint.
* The complaint handling responsible safeguard staff shall inform the complainant within 2 weeks of the receipt of the complaint as to the final decision of the investigation.
* If there is no decision after two weeks the complainant can refer the complaint to the project level GRC. The project level GRC chairman or his designated person will chair the committee, which will then examine and address the complaint within 10 days. It is recognized that some complaints may take longer to resolve due to their complexity.
* Project management as well as staff in the DABS/PIU, project level GRC and local GRC will be trained on the development and effective implementation of GRMs.
* If intermediation at local level is unsuccessful, the individual or Affected Person (AP) can take his or her complaint to a formal Grievance Redress Committee (GRC)at District level which will record the grievance and try and resolve issues relating specifically to the implementation of the WB-DABS supported projects. A GRC will consist of the Affected Person (AP), *DABS* manager of WB-DABS supported projects, DABS Environment and Social Safeguards staff, a representative from local government, a representative from the AP’s community CDC/*shura* which may be a representative from a women’s CDC, a local NGO representative and the contractor(s).
* The PAP (or his/her representative) may submit his/her complaint in a number of ways e.g. by written letter, phone, SMS messages and email to the GRC or, alternatively, raise his/her voice in a public or individual meeting with project staff. The GRC will meet to try and resolve the matter at local level and make their recommendation to DABS project managers and other project relevant personnel within 7-10 working days from receipt of complaint. If there is no decision after ten days the AP can refer the complaint to the Chief Operating Officer (COO) of DABS in Kabul. DABS/COO will then examine the complaint and address the complaint within 20 days.

Complainants will receive the final feedback within **five working days** after the issue is resolved. The resolution will be communicated through one of the following channels:

* Message: Either an automatic or manual reply will be sent to the complainants confirming the receipt of their complaints and getting back to them after analyzing it.
* Grievance Feedback Form: An offline either printed or soft Grievance Feedback Form will used to report back to complainant through:
* Email: The complainant, who has sent his /her grievance through email, will receive the final feedback through email.
* Call: The complainant, who has shared his/her grievance through mobile, will also receive feedback through a call by relevant personnel.
* ESS staff should include regular updates and analysis of the GRM with respects to analysis of categories complaints, their resolution and so forth in their quarterly reports and also provides regular feedback to communities and other relevant stakeholders.
* All submitted complaints and grievances will be added to a database/project files which will be updated regularly. Each complaint and grievance should be ranked, analyzed and monitored according to type and degree of priority. The status of grievances submitted and grievance redress will be reported to DABS management through the monthly report.

**Public information sessions and training**

* DABS- PMU will inform the affected communities/labors/workers of the grievance mechanism and make it easily accessible to them. The mechanism should involve an appropriate level of management (grievance redress committees or GRCs) and address concerns promptly, using an understandable and transparent process that provides feedback to those concerned.
* PMU will conduct public information sessions to inform the affected communities and other stakeholder about the grievance process and report regularly to the public on its implementation, protecting the privacy of individuals.
* Information on ways to make complaints will be readily available to the affected communities and workers- workplace conditions. Leaflets, website links, posters in public places (i.e. Masjids, schools, CDCs center etc.), or complaint boxes at local level are all good ways to make sure that potential complainants can submit their grievances.
* Women and men should have equal access to grievance information.

**local Level (GRC)**

Relevant CDC members, labor representatives, Social Safeguards Officer, Contractor & Project Staff

**Project Level (GRC)**

PIU, District/Provincial Governors, contractor and Community Representatives

**Head Quarter Level (GRC)**

Deputy Minister (DABS) ,PMT Director & social team

If still unresolved, the affected person(s) may choose to exercise their rights under Afghanistan Law to refer the matter to a court of law

**World Bank’s Grievance Redress**

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. The process to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS) is provided at <http://www.worldbank.org/GRS>. The process on how to submit complaints to the World Bank Inspection Panel is provided at <http://www.inspectionpanel.org>.

**Train and Support GRCs**

The social safeguards officer/Safeguards team is responsible to provide training for the following members:

* GRC members (local GRC, Project level GRCs and HQ level GRC) must receive training in conflict resolution and grievance management.
* Those who register complaints must receive training about the receipt and registration process, and the procedure for forwarding complaints to the relevant parties.
* The special GRC who should be responsible to address serious cases, particularly the cases with regards to [harassment](http://www.complyright.com/employment-law/employee-rights/fair-and-diverse-workplace)/discrimination or [workplace injuries](http://www.complyright.com/workplace-safety/osha-recordkeeping-requirements/injury-and-illness-reporting), etc will also receive training.
* The contractor will also be responsible to assign their representatives to participate in the GRC meetings. They will also responsible to conduct training and awareness raising sessions for their labors.

# Grievance Redress Committee (GRC)

Table 1.1 show the Grievance Redress Committees of Karokh district TL project

Table 1.1 a: Karokh district Community level Grievance Redress Committee members

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/No | Name | Father Name | Village  | Position  | Phone No | Remarks |
| 1 | Fazal bari Gamshidi  | Abdul Baqi | Qala Bala | Chairman | 0799033667 |  |
| 2 | Movlavi Mehrodin | Moh.Sarwar | Taherian | Assistant | 0797032718 |  |
| 3 | Gulam Sakhi | Khair moha. | Toqchi | Clerk | 0786255709 |  |
| 4 | Moh.Zamankhan | Moh.Qasam | Dahan ghar | member | 0798481686 |  |
| 5 | Haji Moh. Omer | Haji M..rahim | Majqandaq | member | 0796784141 |  |
| 6 | Haji Ab.Rahman | Sofi nikmoha. | Mahalhaji Khalil | member | 0797706580 |  |
| 7 | Abdul Samad | Abdullah | Payan Mahala | member | 0798105253 |  |
| 8 | Arbab Ab.Zahir | Abdul Samad | Payan Malok | member | 0796151588 |  |
| 9 | Abdul Awal | Ghulam Moh. | Bala Mahala | member | 0795604828 |  |
| 10 | Arban Ghulam faroq | Bostan | Zenal ha | member | 0774694930 |  |
| 11 | Haji Jalil Ahmad | Haji Abdullah | Maloma | member | 079958867 |  |
| 12 | Besmillah | Shir Aqa | Qala sharbat | member | 0794848410 |  |
| 13 | Arbab ghulam faroq | Gh.mahbob | Payan Mahala | member | 0797613794 |  |
| 14 | Bakhshi | Ab.Rahim | Tajeck ha | member | 0799650059 |  |
| 15 | Mowlavi Kashmir | Amir Moh. | Shaikhzada | member | 0776005771 |  |
| 16 | Social & Environmental safeguard Officer of Contractor |  |  |
| 17 | Representatives and Safeguard officers of HEP |  |  |  |

Table 1.1b Karokh district project level Grievance Redress Committee members

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/n | Name | Father name | Relevant organization  | Position in GRC  | Phone No | Remarks |
| 1 | Wahidullah Azadani | Haji Faiz Mohammad | District governor | Chairman | 0796900682 |  |
| 2 | Haji Farid Ahmad | Haji Shah Alam | DDC member | Assistant | 0799796569 |  |
| 3 | M.Jawad Faroqi | Ghulam farooq | Villages manager | Clerk | 0798284003 |  |
| 4 | Wais Ahmad | Amir mohammad | DDC member | Member | 0780137777 |  |
| 5 | Said Abd.Qadir | Said Abdul rahim | DDC chairman | Member | 0798150912 |  |
| 6 | Gulam Mohammad | Abdul Rasol | Representative of ARAZI | Member | 0747240279 |  |
| 7 | Nematullah | Mohammad yosaf | Representative of public health  | Member | 0795902053 |  |
| 8 | Basir Ahmad | Mohammad Alim | Service Manager | Member | 0799095445 |  |
| 9 | M.Mosa | M.Guma | Mayor | Member | 0795203325 |  |
| 10 | Zia Ahmad  | M.Zaman | Agriculture Manager | Member | 0798595912 |  |
| 11 | Nasir Ahmad | Haji Ab.Rahmad | Head of Security  | Member | 0799667623 |  |
| 12 | Wazir Ahmad | Mohammad Afzal | PHQ commander  | Member | 0798400505 |  |
| 13 | Social& Environmental safeguard officer of contractor |  |  |  |
| 14 | Representatives and Safeguard Officers of HEP |  |  |  |



**Annex 2: Employees’ Code of Conduct**

The Code of Conduct is based on International Labor Organization (ILO) and Afghanistan Labor Law standards, and seeks to protect the workers who manufacture the clothing, footwear, electronics, agricultural products and other items enjoyed by consumers around the world and enforce the employees to implement.

Workplace Code of Conduct

Preamble: The Project Workplace Code of Conduct defines labor standards that aim to achieve decent and humane working conditions. The Code’s standards are based on International Labor Organization standards and internationally accepted good labor practices.

Companies affiliated with the Project are expected to comply with all relevant and applicable laws and regulations of the country in which workers are employed and to implement the Workplace Code in their applicable facilities. When differences or conflicts in standards arise, affiliated companies are expected to apply the highest standard.

The PROJECT monitors compliance with the Workplace Code by carefully examining adherence to the Compliance Benchmarks and the Principles of Monitoring. The Compliance Benchmarks identify specific requirements for meeting each Code standard, while the Principles of Monitoring guide the assessment of compliance. The PROJECT expects affiliated companies to make improvements when Code standards are not met and to develop sustainable mechanisms to ensure on-going compliance.

Contractor will be responsible to provide orientation to employees and labors on the project workplace code of conduct. DABS HEP will make sure that all members of the project are well informed about the project workplace CoC.

Employment Relationship: Employers shall adopt and adhere to rules and conditions of employment that respect workers and, at a minimum, safeguard their rights under national and international labor and social security laws and regulations.

Non-discrimination: No person shall be subject to any discrimination in employment, including hiring, compensation, advancement, discipline, termination or retirement, on the basis of gender, race, religion, age, disability, nationality, political opinion, social group or ethnic origin.

Harassment or Abuse: Every employee shall be treated with respect and dignity. No employee shall be subject to any physical, sexual, psychological or verbal harassment or abuse.

 Forced Labor: There shall be no use of forced labor, including prison labor, indentured labor, bonded labor or other forms of forced labor.

Child Labor: No person shall be employed under the age of 15 or under the age for completion of compulsory education, whichever is higher.

Freedom of Association and Collective Bargaining: Employers shall recognize and respect the right of employees to freedom of association and collective bargaining.

Health, Safety and Environment

Employers shall provide a safe and healthy workplace setting to prevent accidents and injury to health arising out of, linked with, or occurring in the course of work or as a result of the operation of employers’ facilities. Employers shall adopt responsible measures to mitigate negative impacts that the workplace has on the environment.

Hours of Work: Employers shall not require workers to work more than the regular and overtime hours allowed by the law of the country where the workers are employed. The regular work week shall not exceed 48 hours per week. Employers shall allow workers at least 24 consecutive hours of rest in every seven-day period. All overtime work shall be consensual. Employers shall not request overtime on a regular basis and shall compensate all overtime work at a premium rate. Other than in exceptional circumstances, the sum of regular and overtime hours in a week shall not exceed 60 hours?

Compensation: Every worker has a right to compensation for a regular work week that is sufficient to meet the worker’s basic needs and provide some discretionary income. Employers shall pay at least the minimum wage or the appropriate prevailing wage, whichever is higher, comply with all legal requirements on wages, and provide any fringe benefits required by law or contract. Where compensation does not meet workers’ basic needs and provide some discretionary income, each employer shall work with the PROJECT to take appropriate actions that seek to progressively realize a level of compensation that does.

**Annex 3: Labor Influx Management Plan**

1. **Objective of Labour Influx Management Plan**

The main objective of this document is to identify, describe, and analyze impacts on labor influx due to construction of TL on local communities and surrounding environment along the KTL corridor. The document, further, provides mitigation measures to be considered in order to lessen adverse environmental and social impacts of labor influx.

The influx of workers in KTL project will have adverse social and environmental impacts on local communities and surrounding environment. Adverse impacts might be:

* Surge burden on/ rise in demand and competition for local social and health services, as well as for goods and services, which finally results in price inflation;
* increment in traffic volume and increment in chance of vehicle accidents;
* escalation of demand for natural resources;
* social tension within workers/ between communities;
* higher rates of illegal acts and crimes;
* hazard of spread of communicable diseases and burden on local health services;
* gender-based violence;
* child labor and education dropout;
* ecosystem degradation and species loss;
* solid waste disposal;
* discharge of wastewater;
* increment in use of freshwater resources;
* And social conflict on use of freshwater.

The overall objective of this document is to propose measures in order to mitigate such adverse impacts. However, many of these potential impacts are identified in an Environmental and Social Impact Assessment (ESIA), and Environmental and Social Management Plan (ESMP), this document is developed to specifically focus on lessening adverse impacts of labor influx. This document is aimed to:

* Identify, describe and analyse impacts of labor influx to avoid, minimize, mitigate, and monitor them.
* Emphasize and put pressure on Contractor to prefer local force resources while hiring employees.
* Establishment of an approach to identify risks and impacts on local communities associated with the influx of labor, and providing measure to Contractor on best management and mitigation of those risks.
* Ensure provision of potential benefits to project surrounding communities through appropriate management of labor influx, such as; economic opportunities via employment and skill building training, and via purchasing goods and services
1. Potential Impacts of Labor Influx

The influx of workers for construction of Karokh Transmission Line (KTL) can lead to social and environmental impacts on local communities. However, most impacts will be negative, some are considered positive. The adverse impacts, if not thoroughly mitigated, can be twofold as the communities are remote and dwellers are living in poor condition. Their access to health and other public infrastructures are limited.

1.
2.
3.
4.

## Positive socio-economic impacts

Influx of a relatively large number of workers and labor into KTL project sites can have a number of positive impacts on dwellers and residents. Some positive impacts are:

* + - Improved links to mainstream economy
		- Increased local skills base: Labors bring new skill sets into a project area. By employing and working with the local population, they can contribute to building the capacity, skills and knowledge of local people.
		- Business development opportunities and employment creation: Both the arrival and the activities of labor into the site would have the potential to stimulate employment creation business development for local by introducing or increasing demand for goods and services in the area. Labors’ need for transportation, accommodation, and food stimulates the local economy, and additional development of new businesses may create further demand for goods and services, fuelling more local business and infrastructure development.
		- Opening of new markets for local products and services
		- Demand for goods and services: demand for goods and services increase local employment, which it provides the local population with increased income.
		- Alternate livelihood opportunities
		- Improved local wage and income levels (including opportunities for local sourcing and higher prices obtainable for local products)
		- Increased local tax revenue levels
		- Increased individual, household, and community empowerment stemming from increased income and wealth
		- Improved local training and skills development opportunities
		- Opportunities to build community organizational structures
		- Improved access through development of road systems
		- Improved information and communication
		- Improved access to and expansion of infrastructure, public services and utilities (health, education, waste management, electricity, water supplies, telecommunications)

## Adverse socio-economic impacts

Labor influx may have a variety of adverse environmental and social impacts during construction of KTL project. The negative social, and economic impacts associated with labor influx often lead to deterioration in the social context in communities along the TL project. Influx of a large number of labor may cause an overall decline in the wellbeing and welfare of the resident population by threatening their way of life and the basis of existing livelihoods and placing additional burden on what often already may be inadequate public infrastructure, services, and utilities.

Problems such as increased indebtedness, disease epidemics, increased occurrence and practice of social vices, increased domestic violence and rape, increased intra- and intergroup jealousy, rising crime and violence, ethnic tensions, a general breakdown of law and order, and the increased probability of public security force intervention can signiﬁcantly affect the local population and Contractor’s workforce during project implementation.

Due to deteriorating social context, the project may face increased risks of disruption as the adverse impacts outside the project gate lead to social unrest, disruption of activities and even work stoppages. Hence, it requires an increased investment in security, and increases reputational risks associated with the increased intervention of national security forces in project matters. Finally, it draws an unpleasant portray of project at the national and international levels.

Adverse impacts of labor influx are, but not limited to; higher demand and competition for local social and health services, as well as for goods and services, which can lead to price inflation, increased volume of traffic and higher risk of accidents, higher demands on the ecosystem and natural resources, social conflicts within and between communities, increment in risk of spread of communicable diseases, and accretion in rate crimes.

Undoubtedly, adverse impacts are usually doubled by mismanagement of incoming labor force, and specifically when civil works are carried out in, or near, vulnerable communities and in other high-risk situations. However, potential impacts are identified in this Labor Influx Management Plan, they may only become fully known once contractor is appointed and decides on sourcing the required labor force. Thus, implementation bodies, mainly the Contractor and PMT, should strictly follow instructions and guidance provided herein.

### Placing/ accommodating workers in project site

KTL is laid in a rural area. On the other hand, its construction requires relatively large number of skilled and non-skilled workers. The influx of relatively large number of labors and workers requires lodging and accommodation. So, the contractor is expected to establish camps and accommodate workers in it. Placing workers in camps can have positive and negative effects, for the workers, the community, and the environment.

### Risk of social conflict

Conflicts and disputes that may arise between the local community and the workers are of a great concern. These conflicts and disputes may be related to religious, cultural or ethnic differences, or based on competition for local resources. Even these conflicts are expected if workers are from adjacent areas. Disputes may also arise between different groups within the labor force, and pre-existing conflicts in the local community may be exacerbated.

Population and ratio of man and woman is an important data to analyze the impacts of labor influx on people in the AOI (Area of influence) of the project.

Social conflict may arise due to negative impact of labor influx on economy and livelihood. The impacts can be:

* + - Increased poverty
		- Increased cost of living (inﬂation)
		- Competition for economic resources and employment
		- Reduced availability and increased cost of land, food, fuel and housing
		- Reduced reliance on local subsistence production systems
		- Increased dependence on broader cash-based economy to meet needs
		- Increased economic vulnerability for marginal groups (women, elderly, minorities, etc.)

### Increased risk of illicit behavior and crime

As stated previously, the KTL project site suffers lack of professional workers and service providers. Thus, it is of normal practice that rate of labor influx will be relatively high. The influx of workers and service providers into KTL project area may increase the rate of crimes and/or a perception of insecurity by the local community. Such behavior or crimes can include theft, physical assaults, substance abuse, prostitution and human trafficking. Normally, local law enforcement may not be sufficiently equipped to deal with the temporary increase in population.

### Communicable diseases transmission and burden on local health services

Access to adequate and safe water and sanitation facilities is limited for dwellers residing along KTL Project. It is estimated that 46 percent of the population has access to safe water. Many provincial and secondary towns have no networked services. Water borne diseases are a major cause of the prevailing high infant and mortality rates.

Within the villages along the KTL access to health care is patchy, only the district center has a functioning hospital with nurse and midwife and a good stock of medical supplies. However, other smaller villages have no clinics and as such residents must travel long distances, sometimes by foot, to reach the clinics which may or may not be able to treat them depend upon their illness. Additionally, some health clinics often do not have adequate staff numbers and also suffer from a lack of available drugs.

A very devastating impact of labor influx in KTL construction might be transition of communicable diseases to the project area, such as: sexually transmitted diseases, respiratory diseases and skin disorders. This can have twofold severe impacts. First, it brings epidemics to relevant communities, hence health precautions should be taken accordingly. Second, it results in an additional burden on local health resources. Workers with health concerns relating to substance abuse, mental issues may not wish to visit the Contractor’s Medical Clinic and instead go anonymously to local medical providers, thereby placing further stress on local resources. Local health and rescue facilities may also be overwhelmed and/or ill-equipped to address the industrial accidents that can occur in a large construction site. Major adverse impacts on public health are:

* + - Increased incidence of accidents and fatalities associated with project trafﬁc
		- Increased pollution (air, water, dust, noise, trafﬁc)
		- Proliferation of communicable diseases (including sexually transmitted infections, respiratory infections, waterborne diseases)
		- Insufﬁcient number of health centres, staff and medical supplies
		- Inadequate public hygiene facilities

### Gender-based violence

Karokh Transmission Line (KTL) Project is located along conservative societies. The people living along the TL route are strict with respect to gender issues. On the other hand, construction workers in Afghanistan typically are predominantly younger males. Those who are away from home on the construction job are typically separated from their family and act outside their normal sphere of social control. This can lead to inappropriate and criminal behavior, such as sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors, who are less than 18 years old, from the local community. A large influx of male labor may also lead to an increase in exploitative sexual relationships and human trafficking whereby women and girls are forced into sex work.

### Child labor and education dropout

Mostly, roads cross a large number of villages and communities, KTL Project is not an exception as well. The KTL, crosses 9 villages, dwellers of most are poor and illiterate. Therefore, a very devastating impact of project can be increased opportunities for the host community to sell goods and services to the incoming workers. It can lead to child labor to produce and deliver these goods and services, which in turn can lead to school dropouts. Most families will drop their children from school and instead have them produce, and deliver services and products for use of workers or for construction purposes.

### Social conflict on use of freshwater

Along KTL, Karokh River is flowing. Besides, there are some water fountains as well. People mostly use river water for hygienic purposes and fountain sources for drinking purposes. In terms of river water, no chance of conflict can be forecasted as river water is full enough to fulfill local needs and labors’ needs. But, conflict between local people and labors may arise on fountain water because they are limited. The contractor is obliged to take preventative measures to avoid any adverse impacts.

## Adverse Environmental Impacts

### Increment in use of freshwater resources

Karokh River and fountains are sources of freshwater along the TL corridor. An adverse impact of labor influx on environment could be disturbance of water resources. The contractor is obliged to take preventative measures to avoid any adverse impacts.

### Discharge of wastewater

Discharge of wastewater from Workers’/ Contractor Camp may pollute nearby water resources. Major health risks can occur if latrine pits spill over into local streams that are used for drinking water by the host community. The Contractor is responsible to take preventative measures as stated below.

### Solid waste disposal

Workers, labors and Contractor staff generate increased amounts of waste, for which no sufficient local waste management capacities may exist, which would likely lead to improper disposal practices. The Contractor is obliged to consider below mitigation measure to avoid any adverse impact of labor influx due to waste disposal on environment.

### Ecosystem degradation and species loss

A relatively large number of labors deployed to KTL project construction site may degrade ecosystem by illegal hunting as well as wood cutting for cooking and heating purposes. It can result in loss of species, hence, degrading environment. Contractor is responsible to take practicable measure to avoid degradation of environment and species loss.

1. Labor Influx Mitigation Plan

Adverse impacts of labor influx for construction of Karokh Transmission Line (KTL) can be easily mitigated through incorporating mitigation measures as an instrument in project implementation and pre-implementation phase. As labors are brought by Construction Contractor into the project area, the Contractor is responsible for mitigating the adverse impact of labor influx. The Safeguard team will regularly, and if required randomly, monitor the indicators and ensure that adverse impacts of labor influx on nearby communities and environment is mitigated by Contractor.

A detained and site-specific description of adverse impacts along with their mitigation measures, schedule of implementation of mitigation measure, monitoring indicator and authority responsible for incorporating mitigation measures is provided in table below. Whilst the table provides general and specific guidance on reducing adverse impacts of labor influx, three main measures are necessary in general to be considered in order to better reduce its adverse impacts on local community as well as surrounding environment.

1.

## Using internal workforce

The most effective mitigation measure against labor influx is to avoid or reduce the number of labors imported from outside the community. Based on the number and skill level of the local workforce, a share of the workers required for the project implementation should be hired from local human sources. Although applying this mitigation measure in case of skilled labors may be though, it is usually applicable for unskilled workers. The Contractor can hire specialized labor/staff, mostly very few in number in proportion to unskilled labor, from elsewhere. Depending on the requirements of the project and their skill level, it may be possible to train local workers within a reasonable timeframe to meet project requirements. It is very useful as the trained workers are needed afterwards for the maintenance of KTL project.

## Incorporation of mitigation measures in work contract of labor

Labors should have contract, in written, with the Contractor. The mitigation measures sat herein, shall be part of the agreement. Each labor shall have full knowledge of mitigation measure and obey them during work. It is therefore paramount that the responsibilities for obeying these mitigation measures are clearly reflected as a contractual obligation, with appropriate mechanisms for addressing non-

The following matrix describes the potential impacts and mitigation measures related to labor influx under the HEP Karokh TL project activities:

|  |
| --- |
| **CROSS-CUTTING ISSUES** |
| **Elements** | **Measures**  |
| **Assess the magnitude of labor influx, relevant contextual factors, and related legal & institutional framework**  | * There will be two or three labor camps along the KTL project area. An average 10 workers would reside in each labor camp during construction period .Unskilled workers are expected to be largely recruited locally in the project area. All these locally recruited will continue living in their homes, except where work sites are far away from their villages, in which case they would reside in the labor camps, as would workers from outside the immediate labor camp.
* Consultations with GRC member and local communities were conducted for each site and the results of these were used for preparing the site specific ESMP.
 |
| **Ensure the capacity of the implementing agency to manage environmental and social impacts** | * The PIUs at DABS have Environmental and Social, with sufficient, experienced and qualified staff.
* The PIUs’ environmental and social team capacity will be periodically reassessed to ascertain that appropriate staffing is maintained throughout the life of the project activities.
 |
| **Contractually bind the Contractor to carry out environmental and social impact mitigation** | * The Contractor is explicitly required under its contract to abide by the provisions of the site-specific ESMP.
* Before works may begin, the Contractor is required to obtain approval for its Contractor’s camp, including plan for implementation of social and environmental risks, including labor influx.
* The works contract specifies the sanctions that the Contractor will face if the contractor-related provisions of the site-specific ESMP is not adhered to, including by sub-contractors.
* The Contractor is required to have specific and qualified key staff (Environmental and Social expert) to manage environmental and social mitigation and implement the project’s safeguard instruments. The contractor safeguards expert will be responsible to verify compliance with and implementation of all mitigation measures. Physical works can only commence once these key staff are engaged.
 |
| **Establish a mandatory Code of Conduct for workers** | * The site specific ESMP explicitly calls for the Contractor to establish and enforce the employees’ Code of Conduct (CoC), including prevention of HIV/AIDS/STCs, prohibition of gender-related violence, treatment of minors, and other behaviours affecting community residents. PIUs will review and approve the CoC before physical works commence.
* The Contractor is required to implement the CoC.
* The Contractor’s social team is required to provide training to all workers on the CoC. The training will be applied to 100% of the workers. DABS-PIU will monitor compliance.
* The Bank will advise on good practice models of CoCs, including sanctions if breached.
 |
| **Reporting and auditing** | * The PIU will prepare regular reports on the Contractor’s compliance with all environmental and social impact mitigation plans.
 |
| **SOCIAL IMPACTS** |
| **Potential Adverse Impacts** | **Mitigation Measures** |
| **Aggravation or exploitation of social conflicts** | The Social Assessment (SA) & site-specific ESMPs have carefully analyzed and taken into account pre-existing cultural or ethnic differences among groups in the project area. |
| **Increased burden on public service provision, increasing costs to or crowding out the local population** | Labor camps will provide their own water supply, electricity, wastewater treatment, solid waste disposal, medical services and transportation services, with no negative impacts on the supply of such services to local residents. |
| **Resettlement, compensation related to labor camps** | * Sites for labor camps in project areas are most often on land leased for the duration of project execution, thereby avoiding any land acquisition.
 |
| **Increased risk of communicable diseases** | * The Contractor’s social team is required to provide training to all workers on HIV/AIDS/STD prevention, in coordination with the local health service and with additional support of specialized entities in the project area. The training will be applied to 100% of the workers. PIUs safeguard team will monitor compliance.
 |
| **Gender-based violence and misconduct****Illicit behavior and crime affecting the local population** | * The Contractor is required to fully enforce compliance by its workers with the Code of Conduct, including application of sanctions.
* The Contractor is required to monitor the entry and exit of all personnel and visitors in and out of the labor camp.
* PIU and the Contractor will maintain outreach to law enforcement and legal services for women, children and teenagers, to facilitate prompt and effective responses when needed.
* The Grievance Redress Mechanism includes a specific mandate to address any kinds of gender-based violence.
 |
| **Child labor and school dropout** | * The works contract includes a clause prohibiting the economic exploitation of minors and employment that is deemed dangerous, which interferes with education and/or risks their health or physical mental, spiritual moral or social development.
 |
| **Camp-related traffic and road safety** | * The site-specific ESMP provides detailed guidelines for the Contractor on road safety in and around the camps, using signage, traffic control personnel, barriers, lighting, reflectors, proper pedestrian access, proper detours and access roads, and public information.
* In reviewing the road design, the Supervision Consultant will undertake a road safety audit.
* Contractor will prepare a Traffic Management Plan which will require approval by the PIU.
 |
| **Labor conditions** | * The Contractor will be required to prepare and obtain approval of an Occupational Safety and Health (OHS) plan for its workers at the work site and in the labor camps.
* The site-specific ESMP provides detailed guidelines on labor health and safety.
* The site-specific ESMP calls for the Contractor to abide by the norms for design, construction and management of labor camps per “Labor Accommodation: Processes and Standards”, a Guidance Note by IFC and the EBRD, found at the following link:
* <http://www.ebrd.com/downloads/about/sustainability/Workers_accomodation.pdf>
 |
| **Camp-related land use, access roads, noise** **and lights** | * The site-specific ESMP provides relevant guidelines.
 |
| **Closure and site restoration** | The site specific ESMP includes detailed provisions for work camps’ closure and site restoration, including removal of buildings and ancillary facilities, rehabilitation of access ways, removal of all materials and equipment, restoration of the topography to its original state, and replanting of trees and other vegetation.  |

# Annex 4: Procedures for Mine Risk Management

**Background**

1. The following procedures are designed to respond to the risks caused by the presence of mines in Afghanistan, in the context of:
* *Community rehabilitation/construction works* to be identified and implemented by the communities themselves (for small projects of up to $100,000 each);
* *Small and medium-size works* to be identified by local authorities and implemented by local contractors (for projects up to $5m each);
* *Works to be implemented directly by Government departments/agencies*, without use of contractors;
* *Large works* to be implemented by contractors (for projects above $5m);
1. General comment applying to all following procedures: All risk assessment and clearance tasks shall be implemented in coordination with the Mine Action Centre for Afghanistan (MACA). These procedures may need to be amended in the future depending on evolving circumstances.

Procedure for Community-Managed Works

 ***Applicability:*** This procedure applies to community rehabilitation / construction works to be identified and implemented by the communities themselves (for small projects of up to $100,000 each).

***Overall approach:*** The communities should be responsible for making sure that the projects they propose are not in mine-contaminated areas, or have been cleared by MACA (or a mine action organization accredited by MACA).

***Rationale:*** Communities are best placed to know about mined areas in their vicinity, and have a strong incentive to report them accurately as they will carry out the works themselves.

1. Communities are required to submit a reply to a questionnaire regarding the suspected presence of mines in the area where Bank-funded community-managed projects will be implemented. This questionnaire should be formally endorsed by the Mine Action Program for Afghanistan (MAPA). It will be a mandatory attachment to the project submission by the communities and should be signed by community representatives and the external project facilitator. External project facilitators will receive training from MAPA. Financing agreements with the communities should make clear that communities are solely liable in case of a mine-related accident.
2. If the community certifies that there is no *known* mine contamination in the area, the ministry responsible for the selection of projects should check with MACA whether any different observation is reported on MACA’s data base.
* If MACA’s information is the same, the project can go ahead for selection. The community takes the full responsibility for the assessment, and external organizations cannot be made liable in case of an accident.
* If MACA’s information is different, the project should not go ahead for selection as long as MACA’s and community’s statements have not been reconciled.

1. If the community suspects mine contamination in the area.
* If the community has included an assessment/clearance task in the project agreed to be implemented by MACA (or by a mine action organization accredited by MACA), the project can go ahead for selection.
* If the community has not included an assessment / clearance task in the project, the project should not go ahead for selection as long as this has not been corrected.
* Mine clearance tasks must be implemented by MACA or by a mine action organization accredited by MACA. Communities will be penalized (subsequent funding by World-Bank funded projects shall be reduced or cancelled) if they elect to clear mines on their own.

Procedure for Small and Medium-size Works Contracted Out

***Applicability:*** This procedure applies to small- and medium-size works to be identified by local authorities and implemented by local contractors (for projects up to $5m each).

***Overall approach:*** MACA (or a mine action organization accredited by MACA) should provide detailed information on the mine-related risks (either based on previously done and updated general survey or on a new general survey) before projects are considered for selection. Only project sites assessed to have a nil-to-low risk would be eligible for selection, unless they have been defined by MACA or by a mine action organization accredited by MACA.

***Rationale:*** Neither local authorities nor local contractors have the capacity to assess the mine-related risks in a systematic way, while they may have incentives to underestimate them.

1. Prior to putting up a project for selection, a general survey should be carried out by MACA (or a mine action organization accredited by MACA) to assess mine-related risks in the area of the project (this should include checking information available in the MACA data base).
2. If MACA provides information suggesting a nil-to-low risk in the proposed project area, the project can go ahead for selection.
The contract between the responsible ministry and the contractor will include a clause stating that in case of an accident, legal liability would be fully and solely borne by the contractor.
3. If MACA assesses a potentially high risk in the area (whether due to the presence of mines or uncertainty.
* If the project includes an assessment/clearance task agreed to be implemented by MACA (or by a mine action organization accredited by MACA), it can go ahead for selection based on agreed funding modalities (clearance may be funded either under a contract with a Bank-funded project or under existing donor agreements with the mine action organization);
* If the project does not include an assessment / clearance task, it should not go ahead for selection as long as this has not been corrected.

Procedure for Works to be Implemented Directly by Government Departments/Agencies, Without the Use of Contractors

***Applicability:*** This procedure applies to works to be implemented directly by Government departments/agencies, without use of contractors.

***Overall approach:*** MACA (or a mine action organization accredited by MACA) should provide detailed information on the mine-related risks (either based on previously done and updated general survey or on a new general survey) before works or installation of goods/materials are carried out in any given area. Work would only be allowed to proceed in areas assessed to have a nil-to-low risk, unless they have been defined by a mine action organization accredited by MACA.

***Rationale:*** Government departments and agencies responsible for providing services currently do not have the capacity to assess the mine-related risks in a systematic way, and currently follow a process of consulting with MACA prior to carrying out activities.

1. Prior to carrying out work, the Government department/agency will consult with MACA to assess mine-related risks in the area (this should include checking information available in the MACA data base). If not already done, a general survey should be carried out by MACA (or by a mine action organization accredited by MACA) to assess mine-related risks in the area.
2. If MACA provides detailed information on mine-related risks which suggest a nil-to-low risk in the proposed area, the work can proceed. The Government would be solely liable in case of a mine-related accident.
3. If information provided by MACA cannot support the assessment of a nil-to-low risk in the proposed area (whether due to the presence of mines or uncertainty), works should not go ahead before MACA (or a mine action organization accredited by MACA) carries out the necessary further assessment and/or clearance for risks to be downgraded to nil-to-low, based on agreed funding modalities (clearance may be funded either under a contract with a Bank-funded project or under existing donor agreements with the mine action organization).

Procedure for Large Works Using Contractors

***Applicability:*** This procedure applies to large works to be implemented by large contractors (projects above $5m).

***Overall approach:*** The main contractor should be responsible for dealing with mine-related risks, in coordination with the UN Mine Action Center.

1. As part of the preparation of the bidding documents, a general survey should be carried out by MACA (or a mine action organization accredited by MACA) on all the areas where contractors may have to work (broadly defined). This survey should provide detailed information on mine-related risks in the various areas allowing for an un-ambiguous identification of areas that have a nil-to-low risk of mine/UXO contamination and areas where the risk is either higher or unknown. The survey should be financed out of the preparation costs of the bidding documents.
2. All survey information should be communicated to the bidders (with sufficient legal caveats so that it does not entail any liability), as information for the planning of their activities (e.g., location of campsites, access roads to quarries).
3. Depending on the nature and location of the project and on the available risk assessment, two different options can be used.

Option 1 – Mine clearance activities are part of the general contract

1. Based on the general survey results, a specific budget provision for mine action during construction is set aside as a separate provisional sum in the tender documents for the general contract.
2. As a separately identified item in their bid, the bidders include a provision for a further detailed mine assessment and clearance during construction.
3. On the instruction of the Supervision Engineer and drawing on the specific provisional sum for mine action in the contract, the contractor uses one of several nominated sub-contractors (or a mine action organization accredited by MACA) to be rapidly available on call, to carry out assessment prior to initiation of physical works in potentially contaminated areas, and to conduct clearance tasks as he finds may be needed. The Contractor may also hire an international specialist to assist him in preparing and supervising these tasks. The Contractor is free to choose which of the accredited sub-contractors to use, and he is fully responsible for the quality of the works and is solely liable in case of accident after an area has been demined.

To avoid an “over-use” of the budget provision, the Contractor is required to inform the Supervision Engineer in writing (with a clear justification of the works to be carried out) well in advance of mobilizing the mine-clearing team. The Supervision Engineer has the capacity to object to such works.

Option 2 – Mine clearance activities are carried out under a separate contract

 a. Specific, separately-awarded contracts are issued for further surveying and/or clearing of areas with a not-nil-to-low risk (under the supervision of the Engineer) by specialized contractors (or a mine action organization accredited by MACA). The definition of the areas to be further surveyed/cleared should be limited to those areas where any contractor would have to work, and should not include areas such as camp sites and quarries/material sites which are to be identified by the Contractor during and after bidding of the works. As a result of these further surveys and possibly clearance works, mine-related risk in the entire contract area is downgraded to nil-to-low.

b. The contract with the general Contractor specifies the extent of the portion of the construction site of which the Contractor is to be given possession from time to time, clearly indicating restrictions of access to areas where the mine risk is not nil-to-low. It also indicates the target dates at which these areas will be accessible. Following receipt of the notice to commence works from the Engineer, the Contractor can start work in all other areas.

c. The general Contractor is invited to include in its bid an amount for mine-security, to cover any additional survey / clearance he may feel necessary to undertake the works.

In case of an accident, a Board of Inquiry is assembled by MACA to investigate on the causes of the accident and determine liabilities. Large penalties should be applied on the Contractor if the Board determines that the accident resulted from a breach of safety rules.

All parties involved in this process are required to closely coordinate with MACA and to provide the Government, local communities, MACA, as well as any interested party the full available information on mine-related risks that may reasonably be required (e.g., maps of identified minefields, assessments for specific areas)

# Annex 5: Provisions of Necessary Safety Signage

“Rooms and spaces in which electric supply conductors or equipment are installed shall be so arranged with fences, screens, partitions, or walls to form an enclosure as to limit the likelihood of entrance by unauthorized persons or interference by them with equipment inside. To ensure safety it requires posting of a safety sign at each entrance and one on each side of fenced enclosures. Installing one safety sign per side can be an effective deterrent for a 30-foot by 30-foot substation. One safety sign per side is not enough for a 500-foot by 500-foot substation. How many are enough? There should be enough signs so that it is obvious to anyone approaching a substation fence from any avenue of approach, that there are WARNING signs on the fence. The legibility of the sign influences the number of signs necessary to meet this goal. The legibility of the signal word WARNING on a safety sign is a function of letter height, letter font, the colors of the letters and background, the angle of the sign relative to the line of sight of the viewer and the general illumination level.

**Letter Height**

When a sign orientation is 90° to the line of sight of the viewer, well illuminated, and the letter color is in high contrast to the background colour, the letter height determines the minimum distance at which the word is legible. By definition, a person with visual acuity of 20/20 is capable of reading letters 0.4 inches tall at a distance of twenty feet. Only about twenty percent of the general population has a visual acuity of 20/20. The minimum visual acuity for driving a motor vehicle in most states is 20/40. If the viewing distance is 50 feet, then the signal word letter height should be at least 50 divided by 150 or 1/3 foot (4 inches).

**Letter Font**



Photo 1. Letter font also has an effect on legibility. Examples of four letter fonts, Arial, C G Omega, Arial Black, and Haettenschweiler, are shown in photo 1.

Letter font also has an effect on legibility. Examples of four letter fonts, Arial, C G Omega, Arial Black, and Haettenschweiler, are shown in photo 1.



Photo 2. The viewing distance is 87.5 feet. The letters are 3.5 inches in height. The letter font also affects the legibility of a sign when the sign is viewed at an angle. The same sign viewed at a 20° angle and distance of 36 feet is shown in photo 2.

The viewing distance is 87.5 feet. The letters are 3.5 inches in height. The letter font also affects the legibility of a sign when the sign is viewed at an angle. The same sign viewed at a 20° angle and distance of 36 feet is shown in photo 2.

Note that the letters of the ***Haettenschweiler font*** smear together making them more difficult to read. Because of the narrow line width, the C G Omega font fades away at angles. Even with fonts like Arial and Arial Black, I recommend the angle between the sign and the line of sight should not be less than 30°. The maximum distance signs should be spaced is a function of minimum viewing angle and clear visibility distance.

**Clear Visibility Distance**

The significant factor that limits sign spacing is what I call clear visibility distance. Clear visibility distance is the distance at which a person approaching a substation has an unobstructed view of the entire fence he is approaching. If a 50-foot wide strip outside the fence is regularly mowed and kept clear of brush and trees, the clear visibility distance is fifty feet. If that clear area outside area outside the fence is only ten feet wide, the clear visibility distance is 10 feet.

**Maximum Sign Spacing**



The sign spacing is determined by assuming the worst-case scenario; the viewer approaches the fence halfway between two signs. The relationship between the maximum sign spacing, the minimum viewing angle and the clear visibility distance is show.

The sign spacing is determined by assuming the worst-case scenario; the viewer approaches the fence halfway between two signs. The relationship between the maximum sign spacing, the minimum viewing angle and the clear visibility distance is shown in the figure.

If the clear visibility distance is 50 feet and the viewing angle to 30°, the maximum sign spacing becomes 2 x 50 / 0.577 = 173 feet. That assumes that we will install signs that are visible at a distance of 50 / 0.5 = 100 feet. That would require the signal word “WARNING” letter height to be 100 / 150 = 0.66 foot (8 inches). The size of each sign would be about 4 foot by 4 foot. If the clear visibility distance is only 10 feet and the viewing angle to 30°, the maximum sign spacing becomes 2 x 10 / 0.577 = 34.6 feet. The viewing distance becomes 10 / 0.5 = 20 feet. The WARNING letters only have to be 20 / 150 = 0.133 feet (1.6 inches) in height and the size of the sign would be about 1 foot by 1 foot. The signs would be a lot cheaper but you would have to install five times more signs. When the clear visibility distance is only ten feet, the goal can only be met with a lot of signs. When the clear visibility distance is 50 feet, you have a choice of a few large signs, a lot of small signs, or some economical balance between them.

**Other Necessary Safety Signage**

|  |  |  |  |
| --- | --- | --- | --- |
| S/no | Description  | symbol | Remarks |
|  | [DANGER - TWO WAY FEED](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/danger-two-way-feed-0) | Description: Substation Signs |  |
| 6 | [DANGER TWO WAY FEED](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/danger-two-way-feed) | Description: Substation Signs |  |
| 7 | [DE-ENERGIZED CAUTION TRANSFORMER LABEL](https://www.safetycal.com/store/safety-signs-and-labels/caution-signs-and-labels/de-energized-caution-transformer-label) | Description: Substation Signs |  |
| 8 | [DO NOT FIELD OPERATE - CAUTION](https://www.safetycal.com/store/safety-signs-and-labels/caution-signs-and-labels/do-not-field-operate-caution) | Description: Substation Signs |  |
| 10 |  |  |  |
| 11 | [HARD HATS REQUIRED - DANGER](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/hard-hats-required-danger) | Description: Substation Signs |  |
| 12 | [HAZARDOUS VOLTAGE - BI-LINGUAL DANGER SIGN](https://www.safetycal.com/store/safety-signs-and-labels/bilingual-signs-and-tags/hazardous-voltage-bi-lingual-danger-sign-0) | Description: Substation Signs |  |
| 13 | [HAZARDOUS VOLTAGE - DANGER ANSI SIGN](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/hazardous-voltage-danger-ansi-sign) | Description: Substation Signs |  |
| 14 | [HAZARDOUS VOLTAGE - WARNING/ADVERTENCIA](https://www.safetycal.com/store/safety-signs-and-labels/bilingual-signs-and-tags/hazardous-voltage-warningadvertencia) | Description: Substation Signs |  |
| 15 | [HAZARDOUS VOLTAGE INSIDE - WARNING](https://www.safetycal.com/store/safety-signs-and-labels/pictogram-signs-and-labels/hazardous-voltage-inside-warning) | Description: Substation Signs |  |
| 16 | [HIGH VOLTAGE - DANGER - ANSI](https://www.safetycal.com/store/safety-signs-and-labels/arc-flash-labels/high-voltage-danger-ansi) | Description: Substation Signs |  |
| 18 | [HIGH VOLTAGE - DANGER - OSHA](https://www.safetycal.com/store/safety-signs-and-labels/arc-flash-labels/high-voltage-danger-osha-2) | Description: Substation Signs |  |
| 19 | [HIGH VOLTAGE - DANGER - OSHA](https://www.safetycal.com/store/safety-signs-and-labels/arc-flash-labels/high-voltage-danger-osha) | Description: Substation Signs |  |
| 20 | [HIGH VOLTAGE - DANGER- ANSI](https://www.safetycal.com/store/safety-signs-and-labels/arc-flash-labels/high-voltage-danger-ansi-1) | Description: Substation Signs |  |
| 22 | [HIGH VOLTAGE -DANGER - OSHA](https://www.safetycal.com/store/safety-signs-and-labels/arc-flash-labels/high-voltage-danger-osha-1) | Description: Substation Signs |  |
| 23 | [HIGH VOLTAGE AUTHORIZED PERSONNEL ONLY - DANGER](https://www.safetycal.com/store/electrical-and-utility-signs/arc-flash/high-voltage-authorized-personnel-only-danger) | Description: Substation Signs |  |
| 24 | [HIGH VOLTAGE KEEP OUT-DANGER - ANSI](https://www.safetycal.com/store/electrical-and-utility-signs/arc-flash/high-voltage-keep-out-danger-ansi) | Description: Substation Signs |  |
| 25 | [KEEP AWAY! HAZARDOUS VOLTAGE ABOVE - DANGER](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/keep-away-hazardous-voltage-above-danger) | Description: Substation Signs |  |
| 28 | [POWER LINES MAY BE OVERHEAD - DANGER](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/power-lines-may-be-overhead-danger) | Description: Substation Signs |  |
| 29 | [POLE WRAP™ SIGNS - HIGH VOLTAGE](https://www.safetycal.com/store/electrical-and-utility-signs/pole-markers/pole-wrap-signs-high-voltage) | Description: Substation Signs |  |
| 30 | [THIS SOCKET MAY BE ENERGIZED - DANGER](https://www.safetycal.com/store/safety-signs-and-labels/arc-flash-labels/socket-may-be-energized-danger) | Description: Substation Signs |  |
| 32 | [VISIBILITY STRIP](https://www.safetycal.com/store/electrical-and-utility-signs/pole-markers/visibility-strip) | Description: Substation Signs |  |
| 33 | [WARNING HAZARDOUS VOLTAGE - NO ADMITTANCE](https://www.safetycal.com/store/electrical-and-utility-signs/substation-signs/warning-hazardous-voltage-no-admittance) | Description: Substation Signs |  |
| 34 | [WARNING SUB STATION SIGN](https://www.safetycal.com/store/electrical-and-utility-signs/substation-signs/warning-sub-station-sign) | Description: Substation Signs |  |
| 35 | [WATCH OVERHEAD CLEARANCE - DANGER](https://www.safetycal.com/store/safety-signs-and-labels/danger-signs-and-labels/watch-overhead-clearance-danger) | Description: Substation Signs |  |

# Annex 6: Environmental and Social Guidelines for Contractors

The following guidelines will be part of the contractual agreements for each sub-project:

Construction Company (contractor) should install the Construction Camp on areas far enough from water points, houses and sensitive areas in consultation with the community and NCS. He/she should select the good quality sanitary equipment and install it in Construction Camp.

The contractor should manage all activities in compliance with laws, rules and other permits in vigor based on site regulations (what is allowed and not allowed on work sites).

Contractor has the responsibility of hygiene and security on work sites, and should protect neighboring properties, inform the client if land is found to be contaminated.

Contractor should ensure the permanence of the traffic and access of neighboring populations during the works to avoid hindrance to traffic, they also have the responsibility to protect and provide health and safety measures to staff working on work sites. In order to protect soil, surface and ground water the contractor should

Avoid any wastewater discharge, oil spi1l and discharge of any type of pollutants on soils, in surface or ground waters, in sewers and drainage ditches.

The Contractor should protect the environment against exhaust fuels and oils, dust and other solid residues. The Contractor should dispose oil and solid waste materials appropriately and provide adequate waste disposal and sanitation services at the construction site.

Contractor for the purpose of proper waste management should install containers to collect the wastes generated next to the areas of activity. Contractor should avoid degradation and demolition of private properties; therefore, he/she should inform and raise the awareness of the populations before any activity causing degradation of natural vegetation and resources and if there was any damage to private/public property compensates beneficiaries before any work.

The Contractor should use a quarry of materials according to the mining code requirements and compensate planting in case of deforestation or tree felling.

The Contractor should manage waste properly and do not burn them on site and also should provide a proper storage for materials, organize parking and displacements of machines in the site.

The Contractor should care about speed limitation of work site vehicles and cars and allow the access of public and emergency services to the worksite.

The contractor should install signaling of works, ensure no blockage of access to households during construction and/or provide alternative access, provide footbridges and access of neighbors and endure construction of proper drainage on the site.

The Contractor should respect the cultural sites, ensure security and privacy of women and households in close proximity to the camps and safely dispose asbestos.

The Contractor should consider impacts such as noise, dust, and safety concerns on the surrounding population and schedule construction activities accordingly.

The Contractor should develop maintenance and reclamation plans, protect soil surfaces during construction and re-vegetate or physically stabilize eligible surfaces, preserve existing fauna and flora and preserve natural habitats along streams, steep slopes, and ecologically sensitive areas.

The Contractor has to prevent standing water in open construction pits, quarries or fill areas to avoid potential contamination of the water table and the development of a habitat for disease-carrying vectors and insects.

The Contractor should select sustainable construction materials and construction method, during construction, control dust by using water or through other means and control and clean the construction site daily.

# Annex 7: Environmental and Social screening analysis Checklists

* 1. **Environmental checklist**

|  |  |
| --- | --- |
| Project Name |  |
| Type of Project |  |
| Location (District/Region  |  |
| Ownership | Government |
| Surrounding present land use  | ( ) Agriculture ( ) Residential ( ) Tourism ( ) Industrial ( ) Forest land ( ) Institutional ( ) Commercial ( Ѵ ) Open space ( ) Other please specify  |
| Installed capacity ( KW) |  |
| Project cost ( USD) |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Issue** | **Yes/No** | **If yes, suggest mitigation measures** | **Responsibility** |
| **General** |  |  |  |
| Will there be loss of natural areas/important habitats/biodiversity due to implementation of the project? |  |  |  |
| Will there be damage of valuable historic,Religious, cultural and archaeological resources due to this project? |  |  |  |
| Is the selected site in a wetland or flood plain? |  |  |  |
| Will there be loss of vegetative cover,Decrease in soil fertility? |  |  |  |
| Will there be reduction in soil & ground waterQuality, declines in plant growth and reduced harvests? |  |  |  |
| Will there be degradation of ground water, streams, and rivers from solid and liquidWastes? |  |  |  |
| Will hazardous materials such as asbestos, mercury light bulbs or switches, tanks with chemical or fuel residue, CFC (Chlorofluorocarbons) refrigerant coolants, lead-based paint, PCBs ( Polychlorinated Biphenyls) , radioactive, etc. be disposed of due to demolition of existing facilities? |  |  |  |
| Is there a possibility of landmines or unexploded devices near the proposed site? |  |  |  |
| Has all the topsoil been backfilled or levelled onSite? |  |  |  |
| Is the subproject prohibited by the negative list of sub-projects as per HEP, ESMF list? |  |  |  |
| **Vegetation Management** |  |  |  |
| Have construction activities remained within theDesignated working areas? |  |  |  |
| Has one access route been used? |  |  |  |
| **Hydro Power Systems** |  |  |  |
| Does the project expose people or structures to a significant risk of loss, injury or death due to flooding or landslide caused by failure of hydraulic components such as canal, penstock, forebay etc.? |  |  |  |
| Is there enough water available all year around for running the hydropower system? |  |  |  |
| In case of diversion of water towards the head race canal, will there be any significant reduction in flow downstream adversely affecting the environment? |  |  |  |
| Is the subproject going to change the stream morphology and regime? |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Is the subproject diverting water from the stream that could decrease the water share of the downstream communities? |  |  |  |
| **Diesel Generators** |  |  |  |
| Does the facility contain a waterproof basin to collect diesel due to a leakage or over spilled tank? |  |  |  |
| Will the diesel generator be installed in sound-proof housing so that it does not create any significant noise pollution in the locality? |  |  |  |
| **Solar Sub-projects** |  |  |  |
| Are the batteries or accumulators secured against polluting the soil or groundwater? |  |  |  |
| **Electric Lines** |  |  |  |
| Are electric lines designed to be at safe height from the ground? |  |  |  |
| Is enough protection available against high voltage transmission lines which pass through inhabited areas? |  |  |  |

# Social Checklist

|  |  |
| --- | --- |
| Project ID/title: | Villages: |
| Type of project: | District:  |
| Involved CDC name: | Province: Herat |
| Population: | Male: | Female: | Total: |
| Start date of project: | End date of project: |
|  |
| General | Yes/No | If yes suggestion mitigation measures  | Responsibility | Remarks |
| 1 | Does the activity have human health and safety risks, during construction or later?  |  |  | Contractor  |  |
| 2 | Will the activity create the conflict among the people? |  |  |  |  |
| 3 | Will the activity cause loss of livelihood?  |  |  |  |  |
| 4 | Are there unexploded mines being in the area? |  |  |  |  |
| 5 | Are there any Important cultural or archeological nearby? |  |  |  |  |
| 6 | Will the project require the acquisition of land (public or private, temporarily or permanently) for its development? |  |  |  |  |
| 7 | Will anyone be prevented from using power resources to which they have had regular access? |  |  |  |  |
| 8 | Will the project result in the involuntary resettlement of individuals or families?  |  |  |  |  |
| 9 | Might the project adversely affectCommunities or vulnerable people living in the area? |  |  |  |  |
| 10 | Will the project negatively affect moreThan 200 PAPs? |  |  |  |  |
| 11 | Are there members of community/PAPs?Located along/ close to project that could benefit from this project? |  |  |  |  |

**Name of the DABS WB Funded Projects Social & Environmental Safeguard Officer filled the checklist:**

# Annex 8: Stakeholder Consultations

This Chapter presents process and outcome of the consultations carried out with various stakeholders while conducting the ESIA.

## Public Consultation Framework Adopted

The NEPA and World Bank policies call for effective stakeholder participation during the ESIA process. Stakeholder engagement is a key part of this ESIA study process. One of the key aims of the stakeholder engagement exercise is to ensure that all relevant stakeholders are provided with the opportunity to express their concerns and opinions, which are incorporated as early as possible in the project development: at planning, implementation and operation phase and in the effect minimize the potential unexpected opposition of the proposed project and potential adverse effects to the environment. It is also very beneficial in incorporating the views of the public into the design process for the adoption of the best workable models and systems. The stakeholder engagement exercise also provides DABS with the necessary information to assist it in making an informed decision about the Project.

## Public Consultation and Participation/Stakeholder Engagement Objectives

The main objective of the exercise was to inform stakeholders about the project and its likely effects, which in turn would incorporate their inputs, views and concerns, and thus enable their views to be taken into account during the decision-making. The specific objectives of the consultations were geared towards:

* Informing the stakeholders about the project and its potential impacts.
* Obtaining local and traditional knowledge that may be useful to decision making
* Facilitating consideration of alternatives, mitigation measures and trade-offs (if any)
* Ensuring that important impacts are not overlooked and benefits are maximized
* Reducing chances of conflict through early identification of contentious issues
* Providing an opportunity for stakeholders to influence the Project design and operational plan in a positive manner
* Improving transparency and accountability of decision making
* Increasing public confidence in the ESIA process

## Stakeholder Consultations

The stakeholder engagement exercise was undertaken in the following steps:

* Stakeholder identification and analysis to establish the level and mode of engagement per stakeholder group
* Stakeholder engagement through the use of appropriate tools and methods

### Stakeholder Identification and Analysis

The first step in the process of public participation process was stakeholder identification. The main aim was to determine all organizations and individuals who may be directly or indirectly (positively or negatively) affected by the proposed project. In the end, the stakeholders were grouped into two main categories depending on their various needs, interest, and potential influence to the project. These included:

**Primary Stakeholders** – The directly affected by the project. These included the local leaders and Local Communities along where the power line will pass through

**Secondary Stakeholders** – The indirectly affected by the project but may influence development through project implementation. These included: -

* National Government
* District Government

### Stakeholder Consultations during ESMF Preparation

DABS conducted consultations on the ESMF during March 2017 with wider stakeholders including communities in order to share the updated ESMF and to get their comments and feedback. Please see **Annex D** (Volume II of present ESIA) for a summary of proceedings of public consultation on ESMF.

### Stakeholder Engagement during ESIA

The one-on- one interviews were applied in all the official meetings. Interviews were conducted in participants’ language of choice, depending on the language they were comfortable with. During consultation meeting on draft ESIA on 16 September 2018 stakeholders were given a brief of the project and the objectives as well as ESIA findings and envisaged impacts before they gave their opinions.

Key stakeholders who were interviewed with this project comprised individuals from all levels (local community levels, national government). These stakeholders included:

* Local community members administered with the household Socio-economic questionnaires.
* National Government
* District Government

The meetings were held separately with both male by male safeguard team and female by female employee of Herat Breshna with community members around the project area. The community meetings targeted the local residents from locations within the project area. These meetings were held in the following villages:

* Saghari ha
* Qala e Safid
* Machghandak
* Qala e Dasht
* Banafshak
* Ehsan Abad
* Qasab
* Pashtan
* Robat sorkh

## Outcome of Stakeholders Engagement

From the field work, it was apparent that the majority of the stakeholders were not aware of the proposed project, therefore the safeguard team explained to the public and relevant stakeholders that the proposed development would involve construction of a 110kV transmission line from Salma- Herat existing transmission line to Karokh substation and also responded to the queries that the public sought to know about the project. The proposed project was nevertheless received with mixed reactions by the community as they anticipated numerous impacts (both negative and positive). The local communities and major stakeholders independently gave their views, opinions, and suggestions in their best interest, bringing out the factors that affected the circumstances, influences, and conditions under which their organizations exist. However, all the environmental and social issues which were raised can be adequately mitigated exhaustively as explained in chapter eight of this report. Other issues surrounding the project were successfully settled during the public meetings since ESIA team responded to the issues which were unclear to the public. The consultant particularly gave close attention to persons within the proposed way leave corridor. The views of these stakeholders were considered and their names, address were taken for future references.

### Issues Raised

Interviews with the key stakeholders were carried out on 12th to 20th May 2018 through questionnaires. Comprehensive public participation meetings were held on 19th May 2018 with various administrative leaders, community leaders and the residents who are likely to be affected by the project along the way leaves trace.

The views of these stakeholders were captured. The views/ concerns of the stakeholders were noted. The meetings minutes and lists of attendance are attached in **Annexes E** and **F** (Volume II of the present ESIA), respectively.

The following is a summary of the views of the stakeholders interviewed:

* The project is good for the development of the Karokh district since it will boost power supply and improve on industrial development and should therefore be undertaken.
* The project will improve businesses in the area and also create job opportunities to the local youth during construction phase.
* The project will enhance security due to lighting in the neighborhood at night. Attraction of innovation and invention leading to new investments due to adequate power access which will promote the local and national economy.
* There would be increased pollution from transport vehicles during construction.
* There would be electromagnetic radiations and risk of electrocution that may affect those residing near the way leave.
* There would be possibility of insecurity in the areas due to the influx of other people during construction phase.
* Some community members were wary of the presence of the high-voltage wires in their immediate environment.
* Hiring of unskilled labor from effected villages.
* Electrification at first phase to those villages which are affecting by the TL project.
* Requesting for starting physical work as soon as possible.
* Special attention to those families who are poor.
* Residents of the Karokh district have very limited resources of irrigation water therefore, they suggested DABS to not double charge them for utilizing/spending extra electricity (example; when it exceeds from 200 or 300 kw something like this) so that they will be able to provide irrigation water for their lands by digging of wells.
* Residents of Payeen Bolook (10 CDCs) requested that they have prepared electrical equipment from NSP program and they have erected poles, boxes etc. at residential area of (10 CDCs) therefore they requested from project and Herat Breshna to pay attention to them and cover their villages at the first phase of electrification because they have already done some job in this regard.
* Residents of Pashtan village expressed that they are excluded from more development projects therefore requesting from the project to include this village in the project first priority.
* More participants of the meetings requested for starting of project work physically and complained from delay in project implementation.
* The meeting participants requested to do the project activities in consultation to the community representatives.
* The contractor should do their activities in coordination to the local representatives
* The Proponent should ensure proper environmental management practices are put in place.
* Noise pollution should be controlled.

During the survey findings, a minority of the community members indicated that they had prior information about the project while the majority did not have any information. However, all the community members supported the implementation of the project and promised to support the TL project and reassured us from smooth implementation.

The concerns of the communities and responses to their concerns in each village are tabulated in the following table.

Table 1: Community Consultation Meetings along KTL Corridor

| Village | Number of Participants | Community Concerns | Responses/Action Points |
| --- | --- | --- | --- |
| Saghari Ha | 18 | * Jobs availability to the locals.
* Delay in starting of physical work in the site.
* Electricity supply to village residents at first phase.
* Avoid or minimize the TL negative impacts.
 | -The Social specialist assured the locals of temporary employment such as unskilled labor and he added that local manpower will be deployed. The project safeguard team updated participants from TL project progress and mentioned that the physical work will be start soon. The project safeguard team explained that, the electricity is high voltage, it will be taken to a substation for standardization then be made available to all villages surrounding the district. There are mitigation measures to all the negative Impacts well stated in the ESIA report which will be put to place. |
| Qala e Safid  | 15 | * Hiring of locals as unskilled labor.
* Requesting for starting physical work as soon as possible.
* Requested to do the project activities in consultation to the community representatives.
 | Jobs will be availed to the locals in time of operation phase. The project safeguard team updated participants from TL project progress and mentioned that the physical work will start soon. The social specialist assured that all activities will be done in consultation to the GRC members and community representatives. |
| Machghandak | 22 | * Electricity supply to Machghandak village residents.
* -Employment of local residences not outsiders.
* Right of way size and possibility of use of land after installation of towers and completion of project
 | The social specialist explained that, the electricity is high voltage, it will be taken to a substation for standardization then be made available to all villages surrounding the district include of Machghandak village.He assured the locals of temporary employment such as unskilled labor and added that local manpower will be deployed.The Social specialist reported that the RoW size is 15 by 15 meters thus 30 meters. He also insisted that building under the transmission line is illegal or planting trees under the same line. He explained that only short plants such as wheat, barley, maize and Vegetables can be planted on that land.  |
| Qala e Dasht | 11 | * Jobs availability to the locals.
* Transparency during project implementation.
* Requested information about project negative impacts.

  | The Social specialist assured the locals of temporary employment such as unskilled labor and he added that local manpower will be deployed.The ESIA consulting team promised transparency all through the project There are mitigation measures to all the negative impacts well stated in the ESIA report which will be put to place. |
| Banafshak | 34 | * Distribution of electrification at first phase to those villages which are affected by the TL route.
* Hiring of locals as unskilled labor.
* Complaint from delay in starting of physical work.
 |  The social specialist explained that, the electricity is high voltage, it will be taken to a substation for standardization then be made available to all villages surrounding the district include of effected villages.All unskilled labor will be hired from local in coordination of GRC members.The project safeguard team updated participants from TL project progress and mentioned that the physical work will be start soon. |
| Ehsan Abad/ Zaman Abad | 17 | * How will the negative impacts of the project be handled?
* Risks of power line failure

Causing disaster.* Transparency during the project implementation.
* Jobs availability to the locals.
* Right of way size and possibility use of land after installation of towers and completion of project

  | There are mitigation measures to all the negative Impacts well stated in the ESIA report which will be put to place.The transmission will be done by experts Professionally to avoid such disaster. The ESIA consulting team promised transparency all through the project. Jobs will be availed to the locals in time of operation phase. The Social specialist reported that the RoW size is 15 by 15 meters thus 30 meters. He also insisted that building under the transmission line is illegal or planting trees under the same line. He explained that only short plants such as wheat, barley, maize and Vegetables can be planted on that land. |
| Qasab | 15 | * The contractor should do their activities in coordination to the local representatives.
* The residents have requested some changes in the location of three towers; they want the TL to be shifted away from the current surveyed route.
* How will the negative impacts of the project be handled?

  |  The Project ESIA team assured that all activities will be done in consultation to the GRC members and community representatives.The safeguard team mentioned that the contractor will hold a meeting with the villagers and select proper place for erection of towers which have less impacts.There are mitigation measures to all the negative impacts well stated in the ESIA report which will be put to place. |
| Pashtan/Painblok villages | 17 | * The villagers requested to include this village in the first priority.
* Transparency during implementation.
* Jobs availability to the locals
 | The project ESIA team explained that, the electricity is high voltage, it will be taken to a substation for standardization then be made available to all villages surrounding the district.The ESIA consulting team promised transparency all through the project Jobs will be availed to the locals in time of implementation phase |
| Robat e Sorkh | 9 | * Jobs availability to the locals.
* Requested to do the project activities in consultation to the community representatives.
 | All unskilled labor will be hired from local in consultation to the community elders and GRC members.The Project ESIA team assured that all activities will be done in consultation to the GRC members and community representatives. |

In all the meetings, there was a brief of the project given by the DABS safeguard team to aid in the understanding of the project and enable community members to raise their concerns and comments. Those with concerns commented and contributed issues of concern in-person. This feedback was recorded and reflected back in the minutes to ensure accuracy