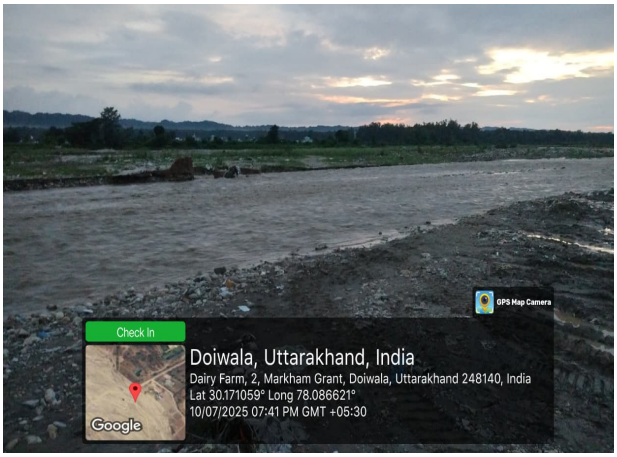
Uttarakhand State Disaster Management Authority (USDMA)
Government of Uttarakhand

Uttarakhand Disaster Preparedness and Resilience Project (U-PREPARE)

Environmental and Social Management Instrument for the Project in the State of Uttarakhand



ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT

For

CONSTRUCTION OF 240 m SPAN PSC GIRDER MOTORABLE BRIDGE AT BULLAWALA TO SATTIWALA OVER SUSWA RIVER AT DOIWALA IN THE DISTRICT OF DEHRADUN

JULY-2025

ENVIRONMENTAL & SOCIAL MANAGEMENT PLAN

Project: Consulting services for Environmental and Social Management Instruments for the Project in the State of Uttarakhand

Sub Project: Construction of 240m span PSC girder motorable bridge at bullawala to sattiwala over suswa river at doiwala in the district of dehradun.

Client: Program Manager. PIU PWD U-PREPARE Dehradun

FPIU: PD-PWD, Haridwar

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ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ASI	Archaeological Survey of India
BOCW	Building and Other Construction Workers
CoI	Corridor of Impact
CPCB	Central Pollution Control Board
C&D	Construction and Demolition
EAP	Expert Appraisal Committee
EHS	Environment Health and Safety
EIA	Environment Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EPA	Environment (Protection) Act
FGD	Focus Group Discussion
GoI	Government of India
GBV	Gender Based Violence
HFL	Highest Flood Level
HIV	Human Immunodeficiency Virus
ICC	Internal Complaints Committee
IFC	International Finance Corporation
LBL	Lowest Bed Level
NBWL	National Board for Wild Life
NOC	No Objection Certificate
MoEF & CC	Ministry of Environment, Forest & Climate Change
OHS	Occupational Health and Safety
PIU	Project Implementing Unit
PMU	Project Management Plan
PPE	Personnel Protective Equipment
PWD	Public Works Department
RBM	River Bed Materials
RoW	Right of Way
SBWL	State Board of Wild Life
SEA	Sexual Exploitation and Abuse
SEIAA	State Environmental Impact Assessment Authority
SH	Sexual Harassment
STD	Sexually Transmitted Disease
UKPCB	Uttarakhand Pollution Control Board
U-PREPARE	Uttarakhand Disaster Preparedness & Resilience Project
USDMA	Uttarakhand State Disaster Management Authority

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1.1 Description of the Project road

The proposed new two lane 240 m span PSC Girder Bridge at Bullawala to Sattiwala over Suswa River at Doiwala in the district of Dehradun of Uttarakhand State, which is taken up under the priority investment sub-projects of U-PREPARE. The carriageway width of the bridge is 7.5 m. The topography of project area is plain terrain. In addition to the proposed bridge, it is also proposed to construct 7m width approach road of 300 m length towards Bullawala side of the bridge and 100 m length towards Sattiwala. The total construction period is 18 months. The salient feature of the project is as below:

The salient features of sub-project have been presented in **Table 1.1**. The key plan of the proposed sub-project location is presented in **Figure 1.1**and **Figure 1.2**

Table 1-1: Salient Features of the Sub-Project

S. No.	Particulars	Proposed (Design)
A. General Features of Sub Project Location		
1.	Village	Bullawala and Sattiwala
2.	Tehsil	Doiwala
3.	District	Dehradun
4.	State	Uttarakhand
5.	Geographical extent (Lat & Long)	30°10'16"N 78°05'11"E 30°10'11.77"N 78°05'02.88"E
6.	River/Stream	Suswa River. The river drains the Eastern part of Dehradun city and flows into river Ganga after merging with river Song.
7.	Other Nearby connectivity on River	Kukdawala Bridge across Suswa river is located at an approx. distance of 1.5 km towards downstream of the proposed location.
8.	Type of Terrain	Plain
9.	Seismic Zone	Zone IV
10.	Nearest Railway station and its nearest distance (in Km)	Nearest Railway Station is Doiwala which is 5 km away from project site.
11.	Nearest Airport and its nearest distance (in Km)	Jolly Grant Airport, Dehradun (approx. 9.5 Km)
12.	Distance from nearest Town/ City/District head quarter (in Km)	District HQ- Dehradun (approx. 15 Km)
B. Technical Information of Sub-Project		
13.	Type of Bridge	Motorable Bridge
14.	Total Span Arrangement	1 x 240 m
15.	Carriageway Width (m)	7.5 m
16.	Type of Superstructure	PSC Girder Bridge
17.	Abutments	Reinforced Cement Concrete (RCC) Abutments
18.	Type of Foundation	Pile Foundation
19.	Proposed Deck level at Abutment	RL 472.515 m

S. No.	Particulars	Proposed (Design)
20.	Highest Flood Level (HFL)	468.500 m
21.	Lowest Bed Level (LBL)	464.500 m
22.	HFL – LBL (in m)	4 m
23.	Vertical Clearance of Bridge from HFL (Free Board)	1.20 m
24.	Approach Road	As per DPR, the sub-project also includes construction of approach road having 7.5m with 300 m length towards Bullawala side of the bridge and 100 m length towards Sattiwala to maintain the connectivity with this road.
25.	Project Cost	Rs. 17.58 Crore
26.	Project Duration	18 Months

Source: DPR

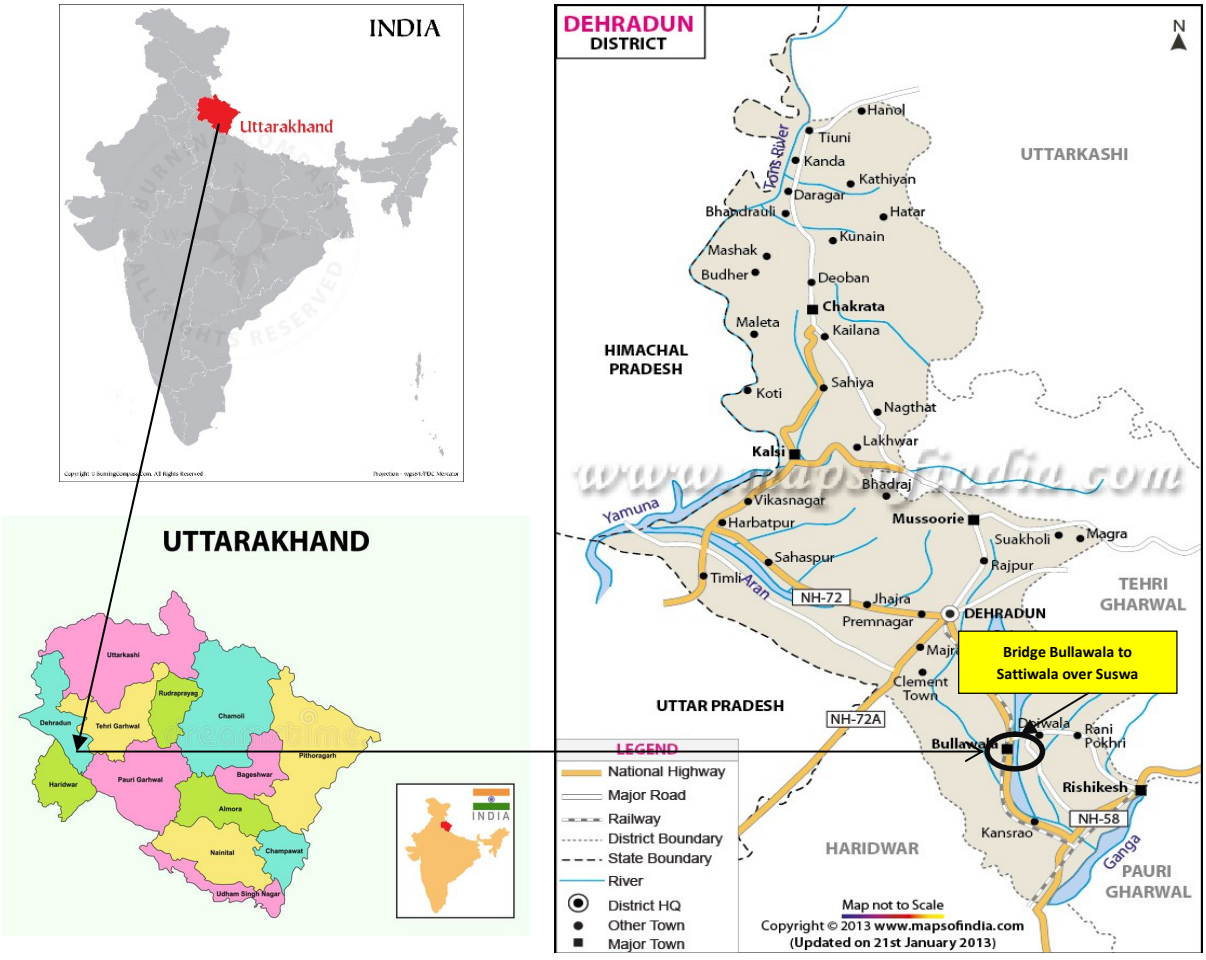


Figure 1-1: Index Map of Proposed Motorable Bridge across Bullawala-Sattiwala road across Suswa River

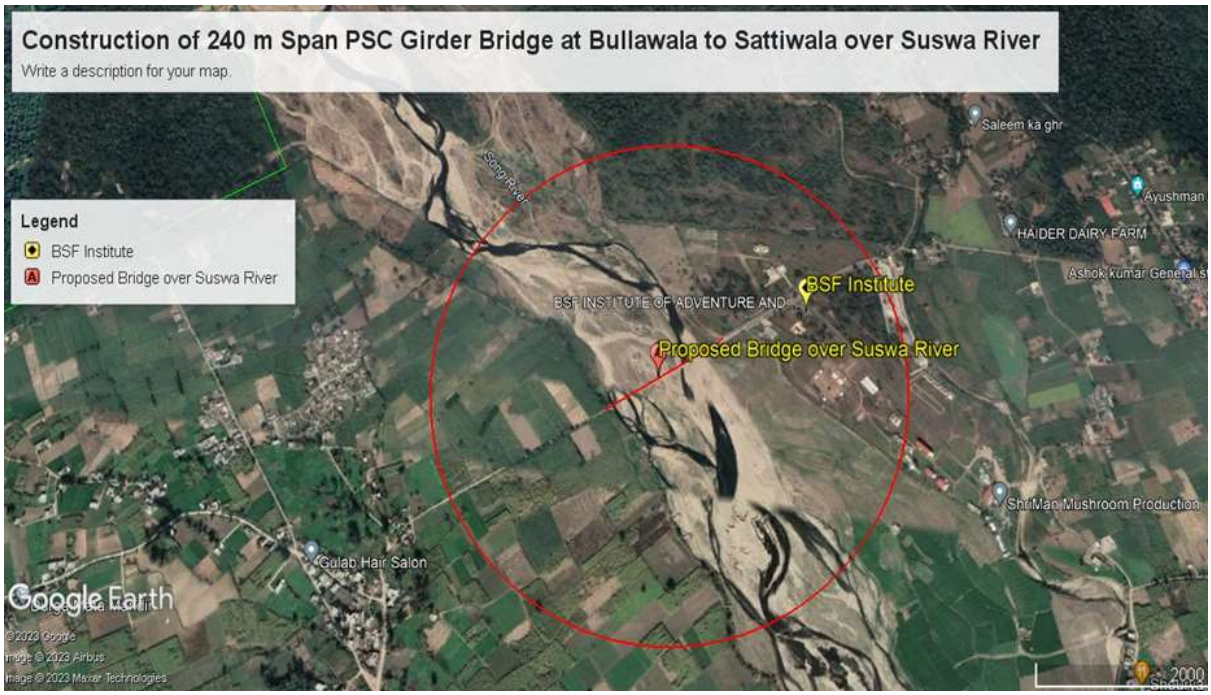


Figure 1.2: Motorable Bridge across Bullawala-Sattiwala road across Suswa River

1.2 Objectives of ESMP

The Environmental and Social Management Plan (ESMP) consists of the set of mitigation, monitoring and institutional measures to be taken during the different stages of the project to eliminate adverse environmental and social impacts, to offset them, or to reduce them to acceptable levels. The plan also includes the actions needed for the implementation of these measures.

The broad objective of the Environmental and Social Management Plan (ESMP) is to ensure that Environmental and Social risks and impacts identified during the Environmental screening and ESIA process, are effectively addressed for the pre-construction, construction and operation phases of the sub- project. The ESMP specifies the mitigation and management measures to be implemented in the project along with institutional arrangement for the implementation and monitoring and reporting including the budget.

1.3 Key Statutory Clearances/ Permits and Licences requirements

Based on the proposed activities of the project, the contractor has to comply with all the relevant regulations on Environmental and Social Safeguards. The project requires a number of licenses/permits under different acts and rules. The type of permits and licenses required for the sub-project is listed under **Table 1.2**

Table 1-2: Applicability of National and State Statutes and Regulations

S. No.	Type of Permits and Licenses	Relevant Acts and rules	Competent Authority	Responsibility	Timeline
1.	Pollution Under Control Certificate for both owned vehicles and hired vehicles.	Central Motor and Vehicle Act, 2019	Applicable	Contractor	1 Week
2.	NOC for Quarries Material (stone) and Sand NB: In case the contractor is open their own stone quarry	Uttarakhand Minor Mineral Concession Rules, 2023	District Authority	Contractor	2-3 months

3.	Labour License and insurance	The Building and Other Construction Workers (Regulation of Employment &Conditions of Service) Act, 1996 Uttarakhand Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Rules, 2005	Labour Commissioner	Contractor	1-2 month
4.	Labour License (In Case engagement of Interstate Migrant Labour)	Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979	Labour Commissioner	Contractor	1-2 month

2 OVERVIEW OF ENVIRONMENTAL AND SOCIAL RISKS

Construction of new two lane 240 m span PSC Girder Bridge at Bullawala to Sattiwala over Suswa River at Doiwala has been included as priority investment sub-project under the U-PREPARE. Based on baseline environmental and social settings of the project area, project location and proposed improvement, the potential environmental and social risks and impacts have been identified during ESIA study for the proposed sub-project. The locals face lots of problem in crossing the river to reach opposite side of settlement as the alternate access route to another side of the river is very long and time consuming. People have to travel around 4 Km via Kukdawala bridge Road to reach opposite side of the river. So, after construction of new pedestrian bridge the connectivity will be restored with better services and safe facility.

Despite of the above positive impacts, mainly constructions related negative impacts have also been identified. Based on the analysis of anticipated impacts on various environmental and social components, it can have been inferred that most of the anticipated environmental and social impacts will be localized and of low to moderate risks.Majority of impacts will be due to construction related activities but would be localised and short term except a few impacts like community exposure to fugitive dust and accident hazard due to different construction activities in the built-up sections will have moderate impacts.All the anticipated impacts are reversible in nature and can be manageable through application of good construction practices. Based on the analysis of environmental and social risks and impacts during ESIA study the key issues identified in the project along with their risk category, as described in section 5.4 of ESIA report, is presented in **Table 2-1.**

Table 2-1: Summary of Environmental and Social Risks and Impacts

Issues/ Components	Anticipates Risks & impacts	Risk Category
Design & Pre-Construction Phase		
Forest Area	• No diversion of forest land is envisaged due to the project.	Low
Acquisition of Land & Properties	• The project does not involve acquisition of land	Nil
Construction Phase		
Soil	• Loss of top soil & loss of vegetative cover along the road due to excavation and back filling which will lead to enhanced soil erosion.	Low
Impact on Land	• Generation of debris waste in the form of excavated material/ construction spoils from construction sites.	Low
Water Use	• Impact on the local water sources due to its usage as construction water. • Chances of disruption/damage to the community water supply sources	Low
Water Quality	• Contamination of water bodies from construction and allied activities • Increase of sediment load in the runoff from construction sites and increase in turbidity in receiving streams/water bodies. • Water pollution due to sewage from construction camps.	Moderate
Air Quality	• Deterioration of air quality due to fugitive dust emission from construction activities like excavation, backfilling & concreting, hauling & dumping of earth materials & construction spoils, and vehicular movement.	Moderate

Issues/ Components	Anticipates Risks & impacts	Risk Category
	• Deterioration of air quality due to gaseous emissions from construction activities.	
Noise Pollution	• Increase in noise level due to construction activities like operation of construction equipment and vehicular traffic.	Low
Flora	• Risk of forest damage	Low
Wildlife Fauna	• No Risk of Loss, damage or disruption to fauna is anticipated	Low
Construction Camp	• Influx of construction work force and supplier who are likely to construct temporary sheds in the vicinity. • Likely sanitation and health hazards & other impacts on the surrounding environment and social setups due to inflow of construction labourers. • Health risks due to lack of health and sanitation conditions through disposal of sewage on open land which may cause mosquito nuisance, water borne diseases etc. Chances of spread of sexually transmitted diseases like AIDS.	Moderate
Occupational Health & Safety	• Health & safety related problems to construction workers due to inadequate health & safety measures.	Moderate
Community Health and Safety	• Increase on incidence of road accidents due to disruptions caused in existing traffic movements. • Inconvenience to the local residents and road users due to interference/ blockage of accessibility to houses, shops market, religious, cultural sites. • Accident risks for school children due to construction activities close to the school building • Health hazards due to dust generation and gaseous emissions during construction in built-up area and unhygienic conditions created at camp sites/borrow areas	Moderate
Hydro metrological risk	• The area is prone to natural disasters such as flood, erosion and landslides. • The risk of structural failure and accident for the workers due to such incidents.	Moderate
SEA/SH and GBV risks	• Generally, male labours are engaged by the contractor in the area for construction of bridges and roads and likelihood of women's participation for such work is very low. However, keeping in view the construction activities closed to habitation area may create moderate risk of SEA/SH and GBV due to labour influx and labour activities around such type of social sensitive site.	Moderate
Operational Stage		
Noise Level	• Noise pollution	Low

3 PROPOSED ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

This chapter describes the Environmental and Social Management Plan for the proposed project during different stages of project. An Environment and Social Management Plan has been developed following the delineation of impacts and mitigation measures. These measures will be adopted by the project proponent and imposed as conditions of contract. The Management Plan has been formulated for implementation of environmental and social mitigation measures to be carried out by the Contractor and to ensure that the provisions of the ESMP are strictly followed and implemented by strengthening implementation arrangements to prevent and minimize the adverse impacts during Construction phase of the project. ESMP has also addressed certain measures to be taken to prevent further deterioration of environment and social components for various stages of the project.

The mitigation measures identified for different phases during the EIA study, described in Chapter 5 of EIA report, are tabulated in **Tables 3-1.** The table describes the nature of the potential environmental, occupational health & safety as well as Social impacts, the mitigation measures required to be implemented and the implementing agency and responsible organization.

Table 3-1: Environmental and Social Management Plan (ESMP)

Part-A: Environment Management Plan

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
PC- DESIGN AND PRE-CONSTRUCTION PHASE						
PC-1Arrangements for temporary land for Establishing Camps/Plants/ Temporary diversions, etc.	• Local Conflicts, • Land Restrictions • Enhanced accident hazards and risks	• The Contractor as per prevalent rules will carry out negotiations with the landowners for obtaining their consent for temporary use of lands for worker's camp, construction sites/hot mix plants/traffic detours etc. • The Contractor will submit the legal agreement/ written Consent letter from the owner of the land for using for specific purpose along with its rehabilitation plan as agreed by the owner. • The Contractor will provide proper safety arrangements along such sites, such as proper barricading, installation of safety and caution signboards, proper lighting arrangements, deployment of safety personnel at site, maintenance of proper hygienic conditions, etc. • The Contractor will ensure that the site is properly restored to the satisfaction of the land owner prior to handling over to the owner and shall submit satisfactory certificate from the Land Owner.	At temporary camp site, temporary diversion and plant sites	Pre-Construction Stage and Post utilization of the land	Contractor	PIU, PWD
PC-3 Contractor's Environmental Health and Safety (EHS) Officer	Non-compliance to the Environmental & OHS Management Plan in absence of Contractor's designated staff	• The Contractor has to appoint one Environment and Safety Officer having requisite qualification and sufficient experience in implementation of Environmental safeguards in road projects. • He will be overall responsible for implementation of ESMP and OH&S measures at different site. • He will be responsible for conducting environmental and safety awareness training for workers • He will be responsible for record keeping and reporting on various environmental	Contractor's Site Office	Before Start of Construction	Contractor	PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		and OHS issue of the project during construction and defect liability period				
PC-4 Contractor's C-ESMP	In absence, Non-compliance to the Environmental & Social Management Plan	• The Contractor will develop site specific Contractor's Environmental & Social Management Plan (C-ESMP) to cover all the environmental safeguard measures as per Contract's specifications, statutory requirements and environmental safeguard measures set-forth in the EMP of EIA report. The C-ESMP should contain but not limited to the following aspects: – Statutory clearances and permits – Institutional arrangements for implementation of environmental and social mitigation measures and safety measures – Pollution Control Measures (Air, water, noise and soil) at different activity areas – Environmental Management at Borrow areas and Quarry sites, if any – Environmental Management at Plant site (Stone Crusher, Batching Plant, Hot mix plant etc.) – Environmental & Social Management at Camp Site – Waste Management Plan (Solid Waste, Waste water C&D waste including disposal plan) – Construction water management – Traffic Management Plan including diversion plan – Inspection checklists on various aspects of ESMPs – Environmental Monitoring Schedule – Training schedule on ESHS, HIV/AIDS awareness and COVID-19, Labour Laws, SEA/SH and GBV sensitisation among contractor's workforce • Any other aspects as directed by the Engineer	Contractor's Site Office	Before Start of Construction	Contractor	PIU, PWD
C - CONSTRUCTION PHASE						
C-1 RESOURCE EFFICIENCY AND POLLUTION PREVENTION						

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
C-1.1Land Resource	Loss of vegetation and disturbance to natural drainage	• The earth material generated due to excavation will be used to as per suitability and requirement to reduce impact on land resources. • The Construction camps (if required) will be located preferably on barren land and sufficiently away from settlements and water bodies.	Project Site, Construction Zone,	Construction stage	Contractor	PMC/PIU, PWD
C-1.2Soil Environment	C-1.2.1 Loss of Top soil	• Top soil, if any, shall be stripped and stored at corners of the area before thestart of excavation for material collection • No construction materials should be stacked in the agriculture field	Entire Alignment	Construction Phase	Contractor	PMC/PIU, PWD
	C-1.2.2 Soil Erosion	• Designated storage site for fill materials and adequate stockpiling to prevent erosion and runoff related problem. • The disturbed areas and soil stock piles will be kept moist to avoid wind erosion of soil	Along the approaches	Construction Phase	Contractor	PMC/PIU, PWD
C-1.3Water Environment	C-1.3.1 Impact on Supply of Water due to requirement for Construction	• The Contractor shall ensure that he makes separate arrangement with PIU, PWD for his water requirement for construction so that supply for the public is unaffected. • Requisite permissions need to be obtained before using water from the Competent Authority	Along the approaches	Construction Phase	Contractor	PMC/PIU, PWD
	C-1-3.2 Contamination of surface water and degradation of water quality	• Excavation will not be scheduled during rains, so that there is no impact on drainage and surface water quality. • Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets • Provide temporary bunds for stockpiles and materials • Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies • All liquid wastes arising from construction activities will be properly disposed off and will not be discharged into any water body/ stream course without adequate treatment	Water Body, Local Stream, Drain	Throughout the Construction Period	Contractor	PMC/PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		• Littering or unauthorized discharge will not be permitted. • Permission of the engineer and the concerned regulatory authorities will be obtained for disposal of the waste as the designated disposal point. • The stream course and drain will be kept free from dumping of solid wastes and earth materials. • The construction materials and debris will be stored away from water bodies or water ways and only at the designated sites along the construction zones. • Conduct surface quality inspection and monitoring				
C-1.4Air Environment	1.4.1 Deterioration of air quality due to generation of dust	• Dust suppression measures like water sprinkling, shall be applied in all dust prone locations such as Excavation area, earth/cement handling site earthworks, stockpiles, etc. • Vehicles delivering loose and fine materials like sand and aggregates shall be covered. • Dust emission from stock piles of excavated material will be controlled either by covering the stockpiled materials or water spraying over it. • As soon as construction is over all the debris and surplus earth will be removed from the site. • DG set will be provided a chimney with vertical opening having adequate height as per CPCB guidelines (Height of stack in meter = Height of the building + 0.2 √KVA). • Construction materials storage areas shall also be located downwind of the habitation area. • The Contractor shall ensure that all the vehicles used during the construction stage shall have valid PUC certificate. • Dust emission from stock piles of excavated material will be controlled either	Within the Alignment and campsites	Throughout the Construction Period	Contractor	PMC/PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		by covering the stockpiled materials or water spraying over it. • As soon as construction is over all the surplus earth will be utilized properly all loose earth will be removed from the site. • The batch mix/concrete mix plants (if any) will be fitted with appropriate dust suppression system • Wind breaking walls of GI Sheets will be provided along periphery construction area and the area within the construction zone shall be regular cleaned and wetted to control dust.				
	C-1.4.2 Gaseous pollution	• All the Construction vehicles and machineries will be regularly maintained to conform to the emission standards stipulated under Environment (Protection) Rules, 1986. • All the DG sets will conform to the emission standards as stipulated under Environment (Protection) Rules, 1986. • The workers working at Batch mix plants will be provided with masks for working near the emission source. • Engine of construction vehicles and equipment's will be switched-off when not in use to save fuel, prevent accidents and air pollution • All the construction vehicles used during the construction stage including those of main contractor and subcontractors will have valid PUC certificate • The Contractor will carry out air quality monitoring in terms of PM10, PM2.5, Sox & NOx as per monitoring plan	Within the Alignment and campsites	Throughout the Construction Period	Contractor	PMC/PIU, PWD
C-1.5Noise Environment	Increase in noise level due to earthmovingandexcavationequipment, and thetransportation ofequipment, materials,and people	• All construction activities shall be restricted to day time hours only. • The plants and equipment used in construction (including those of sub-Contractors) shall strictly conform to the MoEF&CC/CPCB noise standards and shall have latest noise suppression mountings.	Construction Area	Throughout the Construction Period	Contractor	PMC/PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		• Only low noise DG set fitted with acoustic enclosures will be allowed at the construction site and camp site. • All vehicles and equipment used in construction work will be fitted with muffles or silencers • Servicing of construction vehicles and machinery will be done regularly and during routine servicing operations, the effectiveness of • exhaust silencers will be checked and if found defective, these shall be replaced, • All the workers working very close to the noise generating machinery shall be provided with earplugs to avoid any ill impacts on their health.				
C-1.6 Sources of Materials	Unregulated quarrying and instability may cause erosion and water pollution	• Use quarry sites and sources permitted by Mines and Geology Department only; • No new quarry sites shall be developed for the project; • All material to be obtained from authorized vendor and Verify suitability of all material sources and obtain approval of implementing agency • Submit on a monthly basis documentation of sources of materials to PIU, U-PREPARE	Material sites	During Construction period	Contractor	PMC/PIU, PWD
C-2 BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES						
C-2.1Biological Environment	C-2.1.1 Adverse impact on forest and other ecological resources due toconstruction in nearby area	• Construction materials as well as debris will not be stacked around trees and forest area. • No Campsite or any other allied site will be established within 500 m of the forest area. • Contractor will take all precautions to avoid damage to the forest during transportation of material through forest area • The Contractor shall ensure that there is no disruption or damage to the wild animals due to his activities or by his persons. • It will be responsibility of the Contractor to ensure that there is no illegal poaching of	Construction Area	Throughout the Construction Period	Contractor	PMC/PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		wild animals around the area of activities by his staff, labours or sub-contractor's personnel. • Construction vehicles will run along specified access to avoid accidents to cattle or wild animal				
	C-2.1.3 Disturbance to aesthetics and land contamination	• The site will be cleaned immediately after the construction activity is over. • The debris materials will be disposed off only at identified area for disposal and the disposal site to be levelled properly after completion of the debris disposal activities and the area will be covered with top soil.	Project Site	Construction Phase	Contractor	PMC/PIU, PWD
C-3 OTHER ENVIRONMENTAL CONCERNS						
C-3.1 Post Construction Compliance	Damage due to debris, spoils, excess construction materials	• Construction and Demolition waste shall be re-used by the Contractor depending upon suitability of the excavated materials. However, Contractor shall dispose unused C&D waste at designated disposal site as per construction and demolition waste management rules 2016. • The site will be cleaned immediately after the construction activity is over. • The debris materials will be disposed off in environmentally acceptable manner only at identified area for disposal and the disposal site to be levelled properly after completion of the debris disposal activities • The municipal solid waste will be stacked in the bins and will be cleared on daily basis to the municipality. • No scare will be left at construction site as well as other allied sites used for different activities • The borrow areas rehabilitation will be ensured as per the agreed plan with the landowner. • All the vents of cross water drainage and water way to be cleared from debris materials. • All the waste materials will be stacked separately away from riverside and periodically clear the site and disposed off	Along the excavation area and working sites	After Completion of Construction (Post Construction)	Contractor in consultation with PMC	PMC/PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		at the designated disposal sites. • The contractor will not, in any circumstances, dispose off debris/ waste into the river • Completion Certificate will be issued only after completing the post construction environmental and social compliances				
C-3.2 Debris Disposal	Impact on Aesthetics of area and creation of unhygienic conditions	• The disposal site shall be selected preferably from barren, infertile lands. In case agricultural land needs to be selected, top-soil stripping, stacking and preservation should be undertaken prior to initiation of any activities; • Debris disposal site shall be at least 200 m away from surface water bodies; • No residential areas shall be located within 100 m downwind side of the site; • The site is minimum 250 m away from sensitive locations like settlements, ponds/lakes or other water bodies; and • The local governing body and community shall be consulted while selecting the site.	Identified Disposal Site	After Completion of Construction (Post Construction)	Contractor in consultation with PIU, PWD	PMC/PIU, PWD
C.3.3 Site Restoration	Damage to local aesthetics and creation of safety risks and unhygienic conditions	• The contractor will prepare plan for post construction site restoration and submit it to Engineer. • After completion of the construction, the contractor will dismantle all the temporary sites and diversions and restore them to the original or better condition before handing over the site back to the owner. • All the dismantled and waste material will be cleared from the site and disposed off to the designated disposal site prior to the issuance of completion certificate.	At Camp site and all allied sites used temporarily for different construction related activities	Immediately after completion of construction activities	Contractor	PIU, PWD
O – OPERATION PHASE						
O-1 Repair works during O&M	Local disturbance during maintenance works	• The PIU, PWD shall inform the road users in the affected area well in advance prior repair works in advance through proper communication/media. • If any major maintenance work is to be taken up, the PIU shall ensure that the O&M contractor complies with health and safety plan to protect workers and public.	At damaged location	Operation phase	PIU, PWD	PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
O-2Emergency Response Plan	Constraint on road system due to emergency situation/natural calamities in absence of appropriate Emergency Response system	• An Emergency Response Plan for emergencies such as Major disasters such as earthquakes, fires, flood, or explosion and Catastrophic incidents that leave extraordinary levels of mass casualties, damage, and disruption severely affecting the population, infrastructure, environment, economy, etc. • Emergency Response Plan shall be prepared to address the eight core elements such as System Specific Information; • Property protection and Water sampling and Monitoring • Appropriate safety measures like fencing, notice boards to prevent entry of unauthorized persons shall be provided	Project Site and Camp Site	Operation Phase	PIU, PWD	PIU, PWD

Part-B- Occupational Health & Safety (OHS) Management Plan

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
C-1 LABOUR AND WORKING CONDITIONS						
C-1.1Contractor's OHS Plan and Emergency Response System		• The Contractor will Develop and implement site-specific and job-specific Occupational Health and Safety (H&S) Plan which will cover the following aspects but not limited to: - Site and Activity specific Hazard identification - Identification of PPE requirements - Work zone safety Plan including Safety during excavation, concreting, etc., operation of Heavy Plant & Machinery;safety during Material handling, safety plan for lifting devices, fire, electrical and mechanical safety, vehicular safety - Medical facilities including first aid - Institutional arrangement for implementation of safety measures including safety committee - H&S safety training programme including training schedule - Incidence reporting system and Safety Checklists A general guideline as provided in Annexure-1 on Occupational Health and Safety will be followed by the contractor in developing	Contractor's Document at Contractor's Camp	Pre-Construction	Contractor	PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		the OHS Plan. • The Contractor will also prepare Disaster Management Plan and Emergency Response system in line with Standard Operating Procedures (SOPs), for PWD Works developed by the USDMA for addressing the occurrence of natural disaster such as flash flood, cloud burst, landslide, etc • In addition to OHS Plan the Contractor will conduct Awareness training on Emergency Response system for disaster including mock drills on Disaster Management Plan and Emergency Response System to deal with emergency situations, such as accidents, natural calamities, construction failure.				
C-1.2Occupational Health and Safety at Work Site	Occupational health hazards and accidents at working sites	• The Contractor will comply with the requirements of the Environmental, Health, and Safety (EHS), Guidelines of the World Bank Group, 20071 and all national, state and local core labor laws on working conditions and safety during construction. • The Contractor will provide adequate good quality Personal Protective Equipment (PPE) to all the workers working at construction zones and Plant sites and will ensure that these PPEs are used by workers including those of sub-contractor's workforce at all time during works. • The Contractor will provide and maintain safe access and safe working conditions to the work site throughout the working period • Safety net will be provided around the girders/ under construction superstructure for protection against falling of objects • Safe working platform and lifting devices will be provided • All the machineries and equipment will be kept on rigid and flat platform and should be regularly checked for stability. No materials and equipment's will be staked on the edge of river bank and excavated area to avoid accidental fall of materials and equipment. • The emergency contact details of concern officer and medical officers/officers require to be made available at working sites. • The Contractor will provide hard barricading around the Work Zone • The Contractor will secure all installations from unauthorized intrusion and accident risks; • The Contractor will arrange of potable drinking water at work site as well as at camps;	Camp Site and Working areas	Throughout the Construction Period	Contractor	PIU, PWD

[1] *Reference: http://www.ifc.org/wps/wcm/connect/554e8d80488658e4b76af76a6515bb18/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES and http://www.ifc.org/wps/wcm/connect/7e4c7f80488554d5b45cf66a6515bb18/Final%2B-%2BToll%2BRoads.pdf?MOD=AJPERES&id=1323162564158]*

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		• Provide clean eating areas where workers are not exposed to hazardous or noxious substances; • Mobile toilet on wheels to be provided at worksite with minimum 2 units each of Toilet and Bathroom with proper water supply and drainage system, electric supply and safe access at work site locations • One permanent helper to be engaged at worksite to maintain good hygienic condition by daily cleaning of mobile toilet and the mobile toilet will be maintained properly by repairing and Painting at least every six months • The Contractor will provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; • Ensure moving equipment is outfitted with audible back-up alarms; • Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; • The construction site will be lighted adequately for visibility of constriction area during dark period • Bridge construction will be carried out only during day time • Bridge construction will be carried out only during lean period and no construction activity will be carried out during monsoon period. • During the alter from the Metrological Department/ USDMA, the river side construction work should be suspended till the situation normalize.				
	Safety risks during construction of Bank Protection Wall, such as falling from height, drowning risks	• It is proposed to provide 60 m long Gabion Wall as bank protection on either side of the river bank along the bridge side. • Prior to construction of gabion wall, the Contractor will prepare site specific comprehensive Action Plan for safety of the structure, workforce involved in construction of gabion wall and equipment and machineries from falling into the river and drowning risksalong with the work plan. • The Contractor will develop site specific Emergency Action Plan for dealing with accidents due to fall from height and quickly responding to the incidences. • A proper protection measures will be erected first before commencement of the work • No construction of protection wall will be taken up during rains/monsoon period or during the alter period from the	Works along the river bank	During construction of bank protection wall	Contractor	PIU, PMC

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		Metrological Department • All the workers working close to the river on blank slope to be provided with appropriate safety jackets (Life Jacket), helmets, safety boots, safety belts, tracking kits, etc. • The Contractor will provide proper measures for protection of rock falling on the workers working below for construction of bank protection wall. • Only those workers having proper experience in working close to river on sloppy area will be engaged for construction of Bank protection wall. • The Contractor will check all the safety arrangements on daily basis prior to start of the work for the day and the same will be verified and approved by the Engineer.				
C-1.3 Personal Protective Equipment (PPEs)	Physical accidents risk due to non-use of PPEs at site	• The Contractor will supply appropriate PPEs to all their workers working at site including those of sub-contractors, depending upon the type of construction activity and risk. • The Contractor will ensure that all the required PPEs are in use by the workers at site at all the time during works. • In general, following PPEs to be ensured by the Contractor: - Full body protection clothing, protective footwear, hand gloves and goggles to workers employed handling cement concrete, - Construction workers will be provided high visibility vests, Ear plugs to workers exposed to high noise levels, Hard hat or helmets to workers, where there is danger of falling objects from height, - Hand gloves, helmets, protective footwear/safety shoes, protective goggles, nose masks, high visibility vests etc. (as required) will be provided to the workers employed in construction works, - Safety belts will be used by workers while working at height	At all Work site	Throughout the Construction Period	Contractor	PIU. PWD
C.-1.4 Medical Facilities	Occupational Health issues for workers without proper medical attention. health issues	• The medical insurance coverage for the workers should be provided by the Contractor. • Readily available First Aid kit bearing all necessary first aid items will be proved at all the work sites and should be regularly maintained throughout the construction period. • The contractor will tie up with local health centre/doctor and ambulance for dealing with first aid issue, health check-up of workers and epidemic conditions. • The Contractor will maintain first-aid register at site • The emergency contact details of concern officer and medical officers/officers require to be made available at working sites and camp site. • The Contractor will organize health check-up camp for workers on periodic basis (Quarterly).	Camp and Work Site	Throughout the Construction Period	Contractor	PIU, PWD

Environmental component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		• Designated vehicles, which can be used as ambulance during emergency, which will be available at construction sites as perrequirement.				
C-1.5OHS Awareness Trainings	Occupational health hazards and accidents at working sites	• The Contractor will develop training programme along with training schedule on OHS aspects including HIV/AIDS and other STD as well as COVID-19 for their Work force including those of Sub-contractor's workers • The Contractor will provide H&S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; • The Contractor will organize awareness program on occupational health and safety aspects on quarterly basis as per the training schedule. The training must be attended by 100% workforce of the Contractor. • The Contractor will maintain training register indicating the training details, number of workers working, attendance sheet of the participants, photographs, etc. • The Contractors EHS Expert will provide regular pep talks and tool box talk to the labourers on the type of risk specific to the planned activities for the day and safety requirements before start of work on day to day basis.	Work site and Camp site	Throughout the Construction Period	Contractor	PIU/PWD
C-1.6 OHS Committee and OHS Meetings	Effective implementation of OHS requirements	• The Contractor will form OHS Committee for dealing with OHS aspects of the projects during construction and maintenance period. • The Committee will conduct monthly meetings of OHS and will discuss and analyse the type of safety incidences reported/recorded, safety instructions from the Engineer's representative/PIU/PMU and prepare necessary corrective measures for ensuring the effectiveness of the implementation of OHS measured. • The Contractor will maintain register & Record of OHS Committee Meetings and submit to the PIU for review.	Camp Site	During entire Construction Period	Contractor	PIU, PWD
O – OPERATION PHASE						
O-1Occupational Health & Safety	Occupational hazards at Operational site	• Personnel protective equipment will be provided to workers. Regular training will also be conducted to ensure that workers are aware of construction hazards and risks of chemicals.	Project Site and Camp Site	-	PIU, PWD	PIU, PWD

Part-C : Social Management Plan

Social component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
PC- DESIGN AND PRE-CONSTRUCTION PHASE						
PC-1 Joint Inspection of Site and Awareness Creation among local public	-	• The contractor will carry out site inspection along with PIU Representative for construction site, establishment of camp and other allied sites and assessment of any public inconvenience due to anticipated hindrance due to project activities. • Contractor will conduct consultation with the local public to make them aware about the construction related risks and hazards, their schedule of work, blockage of access route, if any and alternative access arrangements.	At project site	Pre-Construction Stage	Contractor	PIU, PWD
PC-2 Public Consultation	• Risk of Public Conflict • Expectations with the sub-project	• During Stakeholder Consultation, public demanded incorporation of street light at the bridge for ensuring safety during nighttime movement • Proper barricading/ railing to be provided at both end of bridge for restricting entry of stray animals on the bridge • Railing height on both side of the deck in such a manner to prevent falling from the deck into the river • Safety arrangement to be provided during construction works	At Proposed Bridge	Preconstruction stage	PIU, PWD	PIU, PWD & PMU, USDMA
PC-3 Establishment of Construction / Workers Camp	• Conflicts with Local population • Increased Accident Risk	• The location of construction camp to be identified by the Contractor. • No construction camp, labour camp, plant sites, stock yards will be established within the forest area. • The camp and other allied sites must be sited sufficiently away from features like settlement, forest area and surface water bodies to avoid conflicts and stress over such type of features and the infrastructure facilities with the local community. • Fencing of construction camp needs to be provided prior to commencement of work • The Contractor will submit the legal agreement/ written Consent letter from the owner of the land or houses for using for specific purpose along with its rehabilitation plan as agreed by the owner. • The Camp site will be provided with all the necessary facilities as per norms.	At temporary camp site, temporary diversion and plant sites	Pre-Construction Stage and Post utilization of the land	Contractor	PIU, PWD
C-2 LABOUR AND WORKING CONDITIONS						
C-2.1 Engagement of Labours: Employment Conditions	Unclear Employment Conditions	• The Contractor will implement the Labour Management Procedures for the hiring of project workers including contractor's workers. • The Contractor will conform to national law in relation to hiring and employment; and will comply with the principle of equal opportunity, fair treatment, and non-discrimination with respect to the employment relationship, gender, cast, races, etc. • The Contractor has to obtain necessary Labour license and insurance prior to engaging laboures and commencement of work and comply all	At Project Site	Pre-Construction stage during team mobilisation	Contractor	PIU, PWD

Social component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		the conditions stipulated in the license. • The contractor has to obtain labour insurance/Workmen Insurance to ensure the safety of his workers and the copy of insurance will be submitted to the employer. • The copy of labour license will be submitted to the Engineer/Employer. • The Primary Contractor will be responsible for compliance of all the labour regulations including those of sub-contractor's labours. • Use of child labour will be strictly prohibited. • The contractor has to ensure minimum wages, weekly off, quarterly fitness certificate and daily attendance of the labor and staff. • The contractor will organize quarterly training for the labor and staff to ensure their capacity building on their rights and labor laws, health and safety, SEA/SH and on gender sensitization. List of Labor Law is attached as **Annexure-3** • The Contractor will adopt the ICT tool for monitoring compliance of labour laws and to maintain the proper database of labors to be engaged in the construction period. •				
C-2.2Labour Camp Management &Labour Welfare	Labour Camp • Influx of migrant labour • additional pressure on the local resources and social infrastructures • Risk of social conflict	• For migrant labourers the contractor will establish labour camps with all basic facilities sufficiently away from local habitation preferably located on lands, which are not productive (barren/waste lands presently) • Contractor will follow all relevant provisions of the Building and the other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 as well as the guidelines of IFC and EBRD2 for construction and maintenance of labour camp throughout the construction period. • The Contractor will provide all the basic facilities at campsite including proper beds for workers, lighting, potable drinking water, toilet and bathing facilities separately for male and female workers, washing facilities, Sanitation and sewerage system, cooking facilities, l security, waste collection and disposal facilities, medical facilities including first aid facilities etc. as per norms and always maintain these facilities functional and hygienic manner. • The Contractor will Ensure proper health-check-ups of all labours employed at the project site; • Adequate First-Aid box shall be provided at work sites Facilitating healthcare services and medical care in case of sickness. • Mobile toilet on wheels to be provided at worksite with minimum 2 units each of Toilet and Bathroom with proper water supply and	Labour Camp	Throughout the Construction Period	Contractor	PIU, PWD

[2] http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/learning+and+adapting/knowledge+products/publications/publications_gpn_workersaccommodation

Social component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		drainage system, electric supply and safe access at work site locations • One permanent helper to be engaged at worksite to maintain hygienicity by daily cleaning of mobile toilet and the mobile toilet will be maintained properly by repairing and Painting at least every six month • No Child Labour below 18 years of age and forced labour will be engaged for any kind of construction works in the project. Contractor will maintain a labour register with name, age and sex with supporting document (preferably copy of Aadhaar card or voter's ID card). This will be monitored by Environmental and Social office of contractor and PIU, PWD. • No open discharge of waste water generated from kitchen, bathroom and washing areas will be allowed. The contractor will provide proper drainage network at camp site to regulate the waste water discharge from kitchen, bathroom and washing areas. The drain carrying the waste water from kitchen and bathroom will be connected with soak pits with sufficient capacity. The waste water from washing areas, kitchen and bathroom may be utilized for use in irrigation and watering for dust control measures after primary treatment. • The waste water generated from flushing will be managed through septic tank with soak pits and waste water generated from domestic demand (excluding flushing water) will disposed through soak pits without violating the environmental and social norms and design for the soak pits and septic tank will be approved by the Engineer. • Municipal solid waste generated shall be segregated as biodegradable and non-biodegradable at source. Contractor is encouraged to utilize biodegradable waste into bio-compost. The Contractor will identify the disposal site for disposal of non-biodegradable waste generated at camp site and construction areas in consultation with local municipality and tie up with then for regular disposal of such wastes. In case the disposal facility is not available in the area, then the Contractor will make a provision of disposal pits at camp site away from dwelling units and carefully disposed off such waste in secured manner. For that the Contractor will develop its own waste management plan and along with disposal plan for approval from the Engineer. • After completion of construction, the contractor will dismantle the camp and restore it to the original condition of the area before handing over the site to the land owner.				
	Issues of SEA/SH and GBV	• Contractor will prepare and implement measures to address the risk of gender-based violence that include (i) mandatory and repeated training and awareness raising for the workforce about refraining	Construction Camp& Work Site	Throughout the Construction Period	Contractor	PIU, PWD

Social component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
		from unacceptable conduct toward local community members, specifically women; (ii) informing workers about national and state laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted; (iii) introducing a Workers' Code of Conduct as part of the employment contract, and including sanctions for non-compliance (e.g., termination), and (iv) cooperating with law enforcement agencies in investigating complaints about SEA/SH and gender-based violence. • Code of Conduct will be signed by all the labourers working on the project. Do's and Don'ts related to SEA/SH is part of daily tool box talk and displayed at sites so as to avoid any risk of SEA/SH. • The Contractor will establish and build awareness among workers on Internal Complaints Committee (ICC) as mandated by the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 • Identify GBV service providers in the vicinity to establish referral mechanism. • The Contractor will follow the sub-project specific SEA/SH Prevention and Response Plan developed for the Devprayag Bridge sub-project in developing their plan and comply with all the preventive measures as set for the in the above document.				
C-3 COMMUNITY HEALTH & SAFETY						
C-3.1 Community Health & Safety	C-3.1.1 Accident Risks due to construction induced impact.	• The project will comply with the requirements of the EHS Guidelines of the World Bank Group, 2007[3]. • Good Industry Practice Guideline of IFC shall be followed and all the workers will be trained accordingly • Proper caution signage, barricading, delineators etc. will be installed at Construction zone and temporary diversions • An Emergency Response system in case of any incidence will be developed and implemented • A public grievance system shall be followed in order to record the public complaints regarding to Health & Safety and Addressal of the same within agreed timeline.	Project Site	Throughout the Construction Period	Contractor	PIU, PWD
	C-3.1.2 Obstructing the access of residents and customers to nearby shops due to construction	• The contractor at all time will provide safe access to the public for to and from movement till the original condition get restored. • Leave spaces for access between mounds of soil; • Consult businesses and institutions regarding operating hours and factoring this in work schedules; and • Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Working sites	Throughout the Construction Period	Contractor	PMC/PIU, PWD

[3] *https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=jOWim3p*

Social component / Issues	Potential Impact	Mitigation Measures	Location	Time Frame	Institutional Responsibility	
					Implementation	Supervision
	induced impact.	• No material should be stocked close to these areas; material shall be brought to the site as and when required;				
C-3.2 STAKEHOLDER CONSULTATION	Impact on local stakeholders due to construction activities	• Contractor will conduct consultation with the local public to make them aware about the construction related risks and hazards, their schedule of work, blockage of access route, if any and alternative access arrangements. • The process of grievance redressal mechanism due to any problem related to project along with contact details of concerned person will be provided during consultation. • Informatory sign board, about the project and GRM will be displayed at start and end of project site.	Along the Project alignment	Before commencement of project site activities.	Jointly by Contractor and PIU	PIU/PMU, PWD
C-4 CULTURAL HERITAGE						
C-4.2 Chance Find of Archaeological Assets and artefacts	Risk of archaeological Chance finding	• All the archaeological assets and artefacts such as ancient coins, ruins, archaeological deposits etc. are the property of government and immediately to be reported to the concerned authority in case of finding of such features to the competent authority. • Create awareness among the workers and supervisors about the chance finds during excavation work; • Stop work immediately if any finds are suspected to allow further investigation; • Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in site; and • Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.	Along the excavation area	Throughout the Construction Period	Contractor in consultation with PMC/PIU PWD and Archaeological Department	PMC/PIU

4 E&S MONITORING AND EVALUATION FRAMEWORK

Environmental and Social safeguards monitoring provide an essential tool to ensure smooth progress of all project interventions and activities in accordance with the plans. Monitoring also provides the necessary feedback for programme management to ascertain whether activities are going according to the plan and take remedial measures if required the key objectives of monitoring are:

- To see what impacts have occurred;
- To evaluate the performance of mitigation measures;
- To ensure that the conditions of approval are adhered to;
- To suggest improvements in management plan, if required;
- To see that benefits expected from the implementation of safeguard measures are achieved as the project proceeds; and
- To satisfy the legal and community obligations

Monitoring and evaluation is primarily required to ensure proper and timely implementation of environmental and social mitigation measures. Monitoring at regular intervals during implementation and for a specified period in the post implementation stages is necessary to assess any change / improvement needed in the execution of the activity or in the mitigation measures. A monitoring and evaluation cell may be created at UT level under the supervision of an official familiar with environmental and social issues of the sub-projects. He may be given suitable training if needed. In specific situations, one may consider appointing external agencies to carry out the monitoring and evaluation activities and report to the supervising official.

4.1 Environmental and Social Monitoring Programme

The objective of environmental monitoring during implementation and operation phases are to compare the monitored data against the baseline condition collected during the study period to assess the effectiveness of the mitigation measures and the protection of the ambient environment based on national standards. The objectives of the monitoring programme are:

- Provides information for documentation of monitoring of mitigation measures and impacts
- Tool for the statutory authority of unanticipated adverse impacts or sudden changes in the environmental condition due to the proposed project
- Provides information that could be used for evaluating the effectiveness of implemented mitigation measures
- Provides information that could be used to verify predicted impacts and thus validate impact prediction techniques
- The effectiveness of the mitigation measures being followed during construction and operational phases can be assessed and the measures can be revised, made more stringent and reinforced based on the monitoring results Environmental Monitoring can also serve a basic component of a periodic environmental regulatory auditing program for the proposed project

4.2 Environmental and Social Performance Indicators

The physical, biological and social components, which are significant in affecting the environment as well as society, have been suggested as Performance Indicators. The following specific environmental parameters can be qualitatively measured and compared over a period of time and therefore selected as Performance Indicators for monitoring due to

their regulatory importance and the availability of standardized procedures and relevant expertise.

A. Environmental Performance Indicators

- Statutory Compliances
- Air Quality Parameters
- Noise generation
- Surface water Quality
- Erosion control measures
- Debris clearance and disposal
- Site Restoration

B. Occupational Health and Safety

- Usage of PPE
- Working Conditions
- Awareness Training on OHS
- Health Check-up
- Incidence Register

B. Socio-economic Performance Indicators:

- Employment of local population
- Labour standards at camp
- Gender Issues:
  - Women employment (%)
  - Wages
  - Gender Participation
- Awareness Training on HIV/AIDS
- Awareness Training on SEA/SH and GBV
- Grievance Redressal
- Community Health and Safety

4.2.1 Monitoring of Environmental Performance Indicator

4.2.1.1 Monitoring of Statutory compliance: The status of necessary permits and licenses including their renewals will be monitoring for each project to assess the statutory compliances. These statutory compliances are mainly labour license/insurance, permits/ clearance for stone quarry and borrow areas, batch mix plant/ hot mix plant, etc.

4.2.1.2 Air Quality (AAQ) Monitoring: Ambient air quality parameters which are recommended for monitoring of are PM10 (Particulate Matter having less than 10-micron size) or PM2.5 (Particulate Matter having less than 2.5-micron size), Sulphur Dioxide (SO_2), Oxides of Nitrogen (NOx) and Carbon Monoxide (CO) These parameters are to be monitored at sub project site, before commencement of project activities as baseline. Data should be generated prior to commencement of project activities, transportation and disposal of materials of work to compare the data in with baseline as well as National Ambient Air Quality (NAAQ) Standards 2009.

4.2.1.3 Water Quality: Surface Water quality of the Bhilangana river towards upstream and downstream of the proposed bridge site as baseline and subsequently upstream and downstream of the construction activity once in quarter of project schedule (except monsoon). The physical and chemical parameters recommended for monitoring are pH, Temperature, DO, BOD, COD, Oil & Grease, Total Suspended Solid, turbidity, Total Hardness, Chlorine, Iron, Total Coliform. The Monitoring parameters will be compared with the baseline data as well as CPCB Guidelines for used based surface water classification.

4.2.1.4 Erosion Control Measures: Visual inspection of vulnerable locations such as embankment slopes, borrow areas, etc. will be carried out before and after monsoon and immediately after occurrence of rain.

4.2.1.5 Debris clearance and disposal: The contractor has to clear the debris material from all the site of activities on regular basis and the same will required to be disposed of at approved disposal sites and no debris disposal to be allowed directly into the river. To ensure regular clearance and disposal of debris the monitoring will be required for the same. Visual monitoring of the site will be carried out on periodical basis at all the activity area.

4.2.1.6 Site Restoration: The restoration of all the temporary sites utilized for construction such as borrow areas, stock yards, camp site, etc. will be monitored after completion of works to monitor restoration works to the satisfactory level before issuing completion certificate.

4.2.1.7 Safety Aspects: Visual inspection of safety at site is required to be checked on day to day basis by the site supervisor/ Engineer. The parameters to be checked on daily basis are:

- Number of labourers working at site
- Number of PPEs used by the llabourers
- Safe access to worksite and safe working platform
- First Aid Kit

Apart from monitoring of above safety parameters the Record safety training for workers, Safety register, First Aid Register, incidence report are required to be checked on fortnightly basis by Environmental Expert of PIU.

4.2.2 Monitoring of Socio-economic Performance Indicators:

4.2.2.1 Employment of local population: Percentage of local and migrant labour engaged for different works will be assessed by checklist method on monthly basis to indicate total employment generated verses local employment of labourers.

4.2.2.2 Labour standards at campsite: Labour camps are provided by the contractors for their migrant labours including operators. The labour standards at campsite with respect to basic facilities provided to the labour at the labour camp and their maintenance will be checked visually on fortnightly basis through checklist method by social expert of PIU.

4.2.3 Environment and Social Monitoring Action Plan

The monitoring action plan covering various performance indicators, frequency and institutional arrangements of the project in the pre-construction, construction and operation stages is given in the following Table **Table 8-3.**

Table 4-1: Environmental and Social Monitoring Programme

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
A. MONITORING OF ENVIRONMENTAL PERFORMANCE INDICATORS								
Statutory Compliance	• CTE/CTO • Valid PUC • Validity and renewal of Labour License and insurance. • Authorization for Disposal of C&D Waste	Date of Issue, Validity and Status of renewal	Contractor's document at project site	Quarterly	-	Non-conformity to be raised and subsequent follow ups for ensuring validity of all permits and licenses at all time.	Contractor	PIU, PWD
Air Quality	PM_{10} $\mu g/m^3$, $PM_{2.5}$ $\mu g/m^3$, SO_2, NOx, CO	National Ambient Air Quality Standard (CPCB, 18th Nov, 2009)	Along the project road at 1 location at proposed bridge abutment towards school side	Once before start of project construction activity and subsequently once in a quarter during construction except monsoon season	Continuous 24 hours	Dust control measures such as water sprinkling	Contractor through approved NABL monitoring agency	PIU, PWD

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
Surface Water Quality	pH, Temperature, DO, BOD, COD, Oil & Grease, Total Suspended Solid, turbidity, Total Hardness, Chlorine, Iron, Total Coliform	Surface Water Quality Standard	Surface Water quality of the Suswa river at 2 location i.e. towards upstream and downstream of the proposed bridge site as baseline and subsequently u/s and d/s of the construction activity	Once before start of project construction activity and subsequently once in a quarter during construction except monsoon season	Grab Sampling	Check and modify Oil interceptors, silt fencing devices	Contractor through approved NABL monitoring agency	PIU, PWD
Noise Level	Leq dB (A) (Day and Night) Average and Peak values	Ambient Noise Standard (CPCB, 2000)	On both side of river i.e. 2 location viz. Hanuman Mandir (Temple) on Ghansali Side and school on the other side of Bhilangana river	Once before start of project construction activity and subsequently once in a quarter during construction except monsoon season	24 hourly recording of Leq	Check and modify equipment and devices used to protect noise level	Contractor through approved NABL monitoring agency	PIU, PWD
Erosion Control Measures	Bank Erosion	-	Visual inspection of vulnerable locations such as bridge abutment site and surrounding area etc.	Before and after monsoon and whenever there is occurrence of rain.	Onsite observation	Immediate measures for controlling the erosion	Contractor	PIU, PWD
Debris clearance and disposal	Construction Debris	-	Visual inspection of Construction Site	Fortnightly	Onsite observation	To ensure disposal of debris to the designated site and no debris disposal to be allowed directly into the river	Contractor	PIU, PWD

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
Site Restoration	Site Restoration to the original or better condition	Photograph of original site before start of project works and after completion of restoration	All Temporary sites used for allied activities such as borrow areas, stock yards, camp site, etc.	After Completion of Project activities	Once after completion	Restoration works to the satisfactory level of the Engineer-in-charge before issuing completion certificate. A satisfactory letter including No Objection from the land owner to submitted by the contractor	Contractor	PIU, PWD
B. MONITORING OF OHS PERFORMANCE INDICATORS								

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
Occupational Health and Safety	• **Usage of PPE** - Number of Labours working at site - Appropriate PPE based on specific risk related to specific activity at work site. - % of workers using PPE during works at site • **Working condition** - Safe access to worksite and safe working platform - Availability of First Aid Kit & Register - Tie-up with nearby Doctor/Health Centers - Barricading of construction zone - No. of Incidences/ accidents and Action taken reports. - Safety Committee Meetings • **Training on Environment**	EHS of IFC Group, 2007 and BOCW Rules	Construction site	Daily basis	Before start of work	Supply of adequate no. of PPEs and their use to be ensured matching with the total no. of labours deployed at site. Safe access to the working zone to be checked and ensured daily. All the essential items of first aid kit to be available all the time	Contractor	PIU, PWD

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
	Health Check up	Record of worker's Health general check-up	Construction Camp	Check up before mobilization of labour for construction and subsequently at six months	-	Proper treatment to be ensured.	Contractor	PIU, PWD
C. MONITORING OF SOCIAL PERFORMANCE INDICATORS								
Preparation of Contactor	Contractor's SMP	Acceptable SMP in specifications Written confirmation of Contractor'sSMP acceptance by Safeguard team.	At project Site	Once			Contractor	PIU, Social Expert
Employment of local popula	Percentage of local and migrant labour engaged for different works	-	At project site	Once in a month	Once in a month	-	Contractor	PIU, PWD
Gender Issues	Percentage engagement of Male and Female Workers Record of SEA/SH response Plan and Grievance Facilities for female workers No. of Awareness Training on Gender Issues	World Bank's Good Practices Note on Gender BOCW Rules	Camp Site and project site	Once in a month	Once in a month	Checking the response and action taken on complaints against SEA/SH. Ensuring the separate facilities for male and female workers such as toilets, bathrooms etc.	Contractor	PIU, PWD, PM, U-PREPARE

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
Camp site facilities	Hygienicity, drainage system, toilet conditions and water supply system, safe drinking water, housekeeping, waste management, medical facilities, etc.	As per Statutory norms and ESMP	Camp site	Monthly basis	Till Completion of the project	Cleaning of the camp site including drainage system, toilet, spraying of pesticides, maintenance of proper hygienicity, first aid facility etc.	Contractor	PIU, PWD
Community Health and Safety	Report on Public Accidents Public Complaint received related to safety and its resolution Status of Safety Barricades Informatory Caution and warning sign boards Night visibility at site	As per Statutory norms and ESMP	Project Site	Once in a week or immediately in case of any incidence		Corrective measures to be taken to ensure the replacement of all damaged safety arrangement	Contractor	PIU, PWD

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
Awareness Trainings	Awareness Training on HIV/AIDS Awareness Training on SEA/SH and GBV, Labour Law and Rights, Gender Sensitization.	No. of Training organised and no. of participants including all category of workforce	Camp Site	Quarterly	1 day	-	Contractor through approved agency	PIU, PWD

E&S Components	Regular Monitoring Parameters				Institutional Responsibilities			
	Parameters	**Standards**	**Locations**	**Frequency**	**Duration**	**Action Plan in case criteria exceeds**	**Implementation**	**Supervision**
Grievance redressal	No of public grievance receive related to Environmental and Social issues Grievance redressal Committee meeting Resolution of the Grievances Time taken for the resolution	At Per Project's Grievance Redressal Mechanism	At different activity areas of the sub-project and PIU, PMU Office	Monthly basis	Till Completion of the project	Installation of Information sign board regarding at construction site and camp site regarding the concerned person to whom complaint can raised. The contractor will set up a system for GRM for the particular site with the help of PIU. Disclosure of Ensuring monthly meeting of GRC. Maintenance of Grievance Register of all the complaints received in different modes including verbal complaints Resolution as per GRM	Contractor	PIU, PWD, PMU, U-PREPARE

5 INSTITUTIONAL ARRANGEMENT AND CAPACITY BUILDING

The core requirement of any organization is to make its human resource productive and efficient. Capacity building process makes organizations economically more productive, efficient and quick in responses. Through Capacity Building Process enhances proficiency to bring organization to level of expectations of project and stakeholders.

5.1 Institutional Arrangement

For successful implementation of Environmental safeguards Institutional setup plays a vital role. The Government of Uttarakhand has setup Project Management Unit (PMU) for U-PREPAREto streamline decision-making and provide more autonomy for project execution and delivery. The PMU is headed by Project Director supported by Associate Project Director (APD), U-PREPARE at Project Office. The Project Director will have overall responsibility for implementation of projects.

OneEnvironmental Specialist and one Social, Community Development & Gender Specialist have been appointed at PMU, U-PREPARE. PMU, U-PREPARE is overall responsible for ESA preparation and ESMP Implementation, coordinating and liasoning with government organization as well as the World Bank with respect to different environmental and social issues of the sub-project covered under U-PREPARE.The Environmental Specialist is responsible for progress monitoring of Environmental safeguards during project execution and submission of periodical reports on EMP compliance to the funding Agency.Similarly, Social, Community Development & Gender Specialistis responsible for progress monitoring of Social safeguards during preparation of the project, monitoring of land acquisition and RAP Implementation as well as implementation of Social Mitigation plan as per ESMP and submission of periodical report on social safeguard compliance to the World Bank.

In the field, Project Implementation Units (PIUs) is functional at PWD's Division level. The Executive Engineers in each Division are responsible to oversee the project progress at site in their respective area. There is a provision of One Environmental Officer and Social & Gender Expert to support the PIUs in monitoring of implementation of environmental and social safeguards compliances, liasoning with local authorities in connection with different permits and licenses, redressing the public complaints on environmental issues, etc.

The Contractor team will include Environment and Safety Officers who will be responsible for day-to-day activities that pertain to the works. S/He will ensure compliance of the instructions given by the PIU. S/He will maintain close interaction with PIU and his field representative and seek instructions and guidance from PIU's Environmental Officer and Social & Gender Expert on any issue related to implementation of environment, social and safety measures. The Environmental and safety officer shall be responsible for record keeping, and reporting to the PIU on actions taken. He will also give in-house training to the workers on environment and safety. The roles and responsibility of implementation and Supervision Agencies at different levels have been defined in **Table 5.1**. The proposed Institutional structure for EMP implementation is presented in **Figure 5.1**.

Table 5.1: Roles and Responsibility of Implementing Agency/Organisations

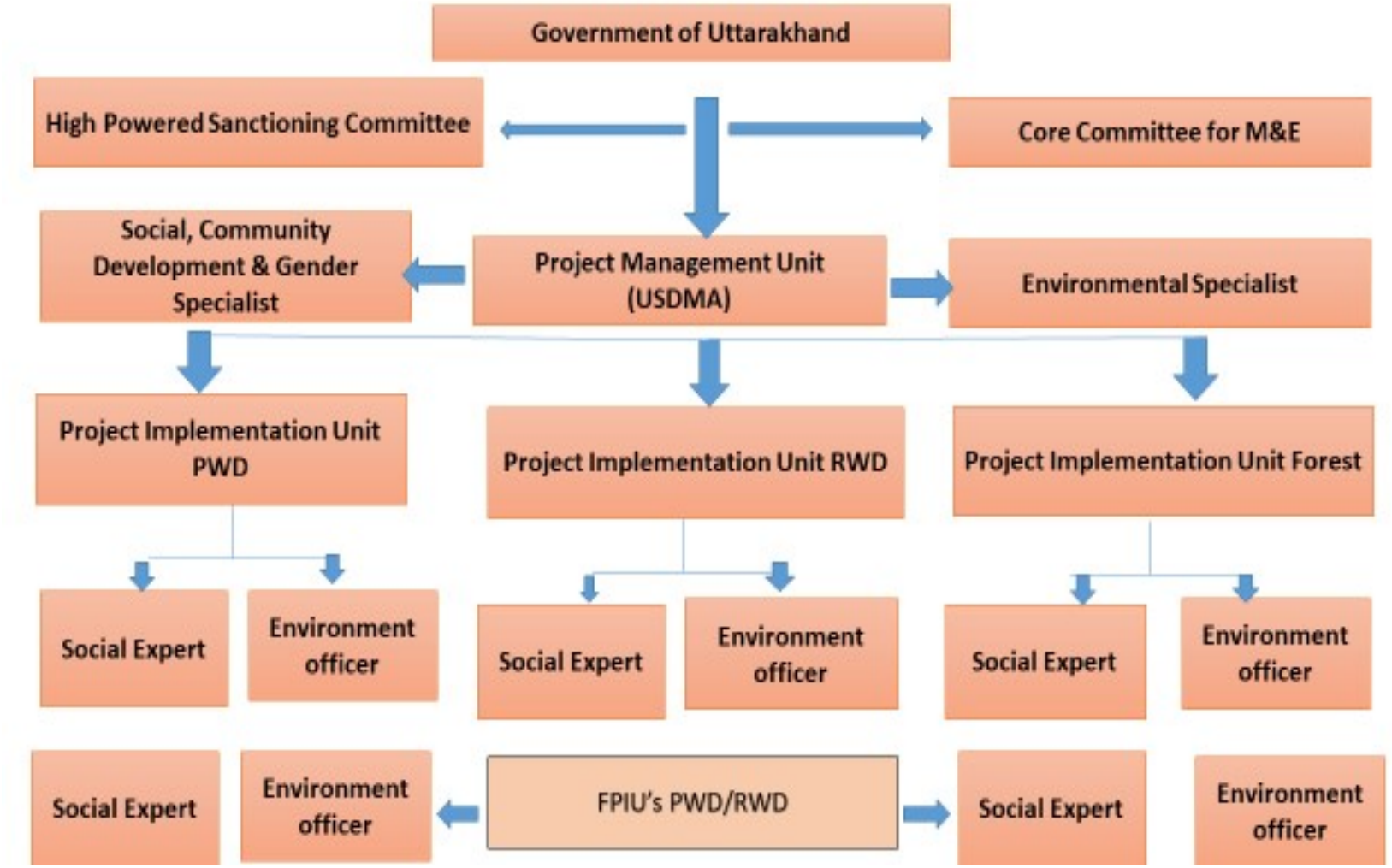
PMU, U-PREPARE	PIU, Site Office	Contractor
• Obtain statutory clearances. • overall project coordination and management through PIU • Interaction and Reporting to World Bank • Effective implementation of ESMP and Monitoring of ESMP • Compilation of Data relating to implementation of Environment Management Plan. • Advising and suggesting corrective measures to adhere to time schedule for implementation of ESMP. • Carry out verification Exercise for implementation of ESMP with respect to modification (if required) for enhancement measures. • Preparation of periodical reports for onward submission to World Bank. • Conducting trainings environmental and social safeguards including SEA/SH, HIV/AIDS awareness for PIU and Contractors. • Maintaining MIS and Periodical reporting	• Joint verification to be carried out by PIU, Contractor Env. Officer and Social Expert • Overall Supervision of implementation of ESMP • Environmental monitoring through approved Laboratory. • Consent for opening of Borrow areas, Quarry areas, and Labour camps and supervising its monitoring. • Keeping records of all consents obtained by contractor. • Compilation of Data relating to implementation of ESMP. • Filling of Summary Sheets and reporting to PMU. • Approval of plans prepared by contractor • Issue of Non-Compliances and follow ups • Maintaining MIS and Periodical reporting	• Preparation of Contractors-ESMP Joint Verification Exercise including, PMU/PIU for review of ESMP • Interaction with PIU and PMU • Contractor's will hire Environment and Safety Officer and Social cum Labour Specialist. • The Env. & Safety officer will be primarily responsible for implementation ESMP and the Social cum Labour Specialist will be responsible for implementation of social safeguard measures including labour management, camp site management, labour grievance redressal and SEA/SH etc. • Record maintenance at Site. (Attendance, Wages, Trainings, Grievances). • Filling of Reporting Format and submitting to PIU. • The social cum labour specialist will conduct trainings and public consultations and will attend grievance at the site and will assist complaint to give proper information on GRM. • He will identify the issue and learnings in respect to social safeguards and will inform/report about the same to PIU. • Environmental Monitoring through approved agency. • Preparation of various plans for effective implementation of ESMP as detailed out in ESMP and submitting it for approval to PIU • Identification of Sites for Labour camps, Hot mix Plant, Batch Mix Plant, debris disposal etc. • Day to day monitoring of implementation of Environmental and Social Safeguards • Addressal of Non-compliance report and action taken report for corrective measures.

The role and responsibilities of Environmental & Social personnel at different levels will be as follows:

Position	Roles & Responsibilities
PMU's Environmental Specialist	• Finalize the ESA and ESMP for individual sub-project • Confirm integration of ESMP provision related to works in the contract documents • Provide guidance on environmental issues to PIUs Environmental Officer as requested • Coordinate with regulatory agencies like Forest Departments, and/or Contractor, UKPCB • Prepare regular reports on progress on ESMP implementation across the project • Document experiences of developing and implementing environmental mitigation measures and convert it into training material for internal and external capacity building • Facilitate interaction between environmental teams of different sub-projects to allow cross-fertilization of ideas, successes and learnings
PMU's Social, Community Development & Gender Specialist	• Finalize the SA and SMP for individual sub-project for social issues/risks • Finalization of Social Management Instrument as per ESS including ESMF, RPF, ESA/ESIA, ESMP, RAP/A-RAP etc. • Provide guidance on social issues to PIUs Social & Gender officers as requested • Confirm integration of social safeguard provisions as set forth in ESMP with the contract documents • Conducting trainings social safeguards including SEA/SH, HIV/AIDS awareness for PIU and Contractors. Preparation of periodical reports for

Position	Roles & Responsibilities
	onward submission to World Bank. •
Environmental Official and Social & Gender Expert at PIU (Division Office)	• Coordinate with PMU environmental specialist and Social Specialist to monitor and report on progress on EMP, SMP implementation as part of works contracts • Participate in and facilitate consultations with stakeholders • Participate in project meetings and report on the issues related to environmental and social management to provide for any mid-course corrections that may be required based on situation on the ground • Coordinate on the training and capacity building initiatives
Contractors' Environmental and Safety Officer	• Lead the implementation of Environmental safeguards and monitoring of performance indicatorsof Environmental and OHS safeguards measures included in the Contract • Maintenance of records on implementation of environmental and OHS management plan • Report on progress and shortcomings of the measures implemented to the project manager and environmental officer of PIU/PMU
Contractor's Social cum Labour Specialist	• Lead the implementation of Social safeguards and monitoring of performance indicatorsof social safeguards measures included in the Contract • Maintenance of records on implementation of social management plan • Report on progress and shortcomings of the measures implemented to the project manager and social officer of PIU/PMU

Figure 5.1: Flow Chart of Environment and Social Institutional Arrangement under UPREPARE



5.2 Training on E&S Safeguards

To enhance the capacity of officials for effective implementation of proposed mitigation measures and monitoring the resultant effect, as well as create awareness amongst workers and supervision staff trainings and awareness programmes have been planned and is given in **Table 5.2.** Independent subject's experts/consultants can also be the resource persons to impart trainings. These experts/agencies shall be appointed based on specific need for the training. PIU will assist respective Contractor for organising such training. A budgetary provision of Rs. 14.90 Lakhs in round have been made for imparting Environmental Training.

Table 5.2: Details of Proposed Training Program on Environmental & Social Issues Module

S. No	Type of Training	Objectives	Time of Training	Duration (Day)	Level	Participants	Responsibility	Remarks
1.	ESMP and OHS Training at site	To understand the requirement of ESMP and its implementation during construction and generation of awareness about OHS	After Mobilization of Contractor's work force and during construction	Once in 3 months	Project Site	PIU's supervisory staff, Contractor and their staffs	PMU, U-PREPARE	Budgetary provision added in ESMP cost
2.	Training on Labour rights and responsibility including relevant labour laws, Community Health and Safety	To aware the labour about their roles and responsibilities, their rights and code of conduct, minimize the adverse impact on community health and safety due to construction work and labour influx.	After Mobilization of Contractor's work force and during construction	Once in a Quarter	Project Site	PIU's supervisory staff, Contractor and their staffs	PMU, U-PREPARE	Budgetary provision added in ESMP cost
2	Training on HIV/AIDS and Other STDs	To increase the level of awareness about prevention and control of HIV/AIDS and other STDS among the different communities' particularly the workers and surrounding communities	During construction	1 day once in 3 months	Project Site	PIU, Contractors team including labours	Contractor through approved Agency (district hospital or NGO)	Budgetary provision added in ESMP cost
3.	Training on Gender issues including SEA/SH Provisions	Sensitization of contractor's and PIUs workforce	During construction	once in 3 months	Project Site	PIU, Contractors incl. labours	PMU, U-PREPARE through NGO	Budgetary provision added in ESMP cost
4	Training on Emergency Response System for Disaster including mock drills	Sensitization of PIUs contractor's and workforce	During construction \7[p	once in 3 months	Project Site	PIU, Contractors incl. labours	PMU, U-PREPARE through authorized agency	Budgetary provision added in ESMP cost

5.3 Monitoring and Reporting System

Monitoring and evaluation are important activities in implementation of all projects. Monitoring involves periodic checking to ascertain whether activities are going according to the plans. It provides the necessary feedback for project management to keep the programme on schedule.

The reporting system will operate linearly with the Contractor, who will in turn report to the Project Implementation Unit (PIU)/PMU. All reporting by the Contractor shall be on monthly/quarterly/annual basis.

The compliance monitoring and the progress reports on environmental and social components may be clubbed together and submitted to the PIU regularly during the implementation period. The operation stage monitoring reports may be annual or biannual. The operation stage monitoring reports will have to be prepared as specified in the said project Environmental & Social Completion Report. Few of the sample formats for monitoring of implementation of environmental, social and OHS safeguards are provided in Annexure-2

5.4 Grievance Redressal Mechanism

Effective environmental and social grievance redressal mechanism gives an opportunity to the organization to implement a set of specific measures to ensure good governance, accountability and transparency in managing and mitigation of environmental and social issue of a particular project. This consists of defining the process for recording/receiving complaints and their redressal in respect of environmental and social matters.

A grievance mechanism has already been established in U-PREPARE that allows individual or community to raise their grievances related to construction activities and any risks and impacts on them arisen due to the project activities. In U-PREPARE the same shall be followed.

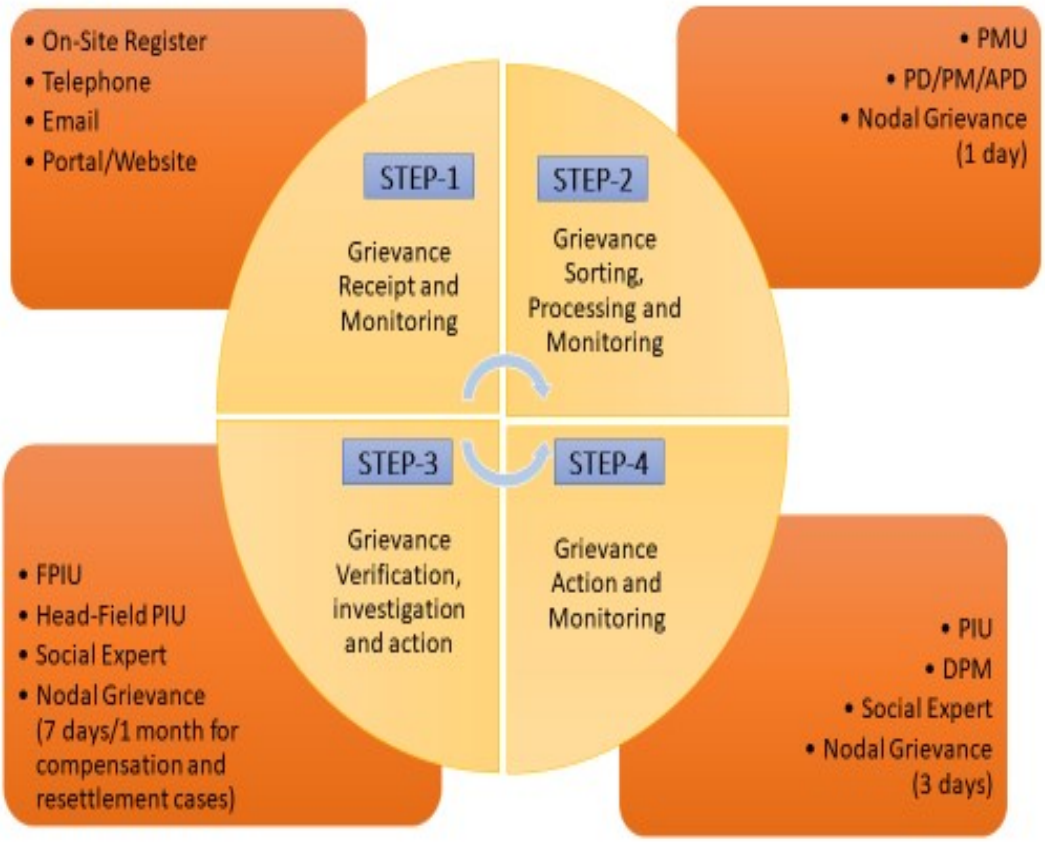
The GRC includes members of PMU and PIU- PWD staff, community leaders or representatives of PAPs, women and representatives of vulnerable communities as relevant to reflect the composition of PAPs and beneficiaries.

5.4.1 Structure and Functions of GRC

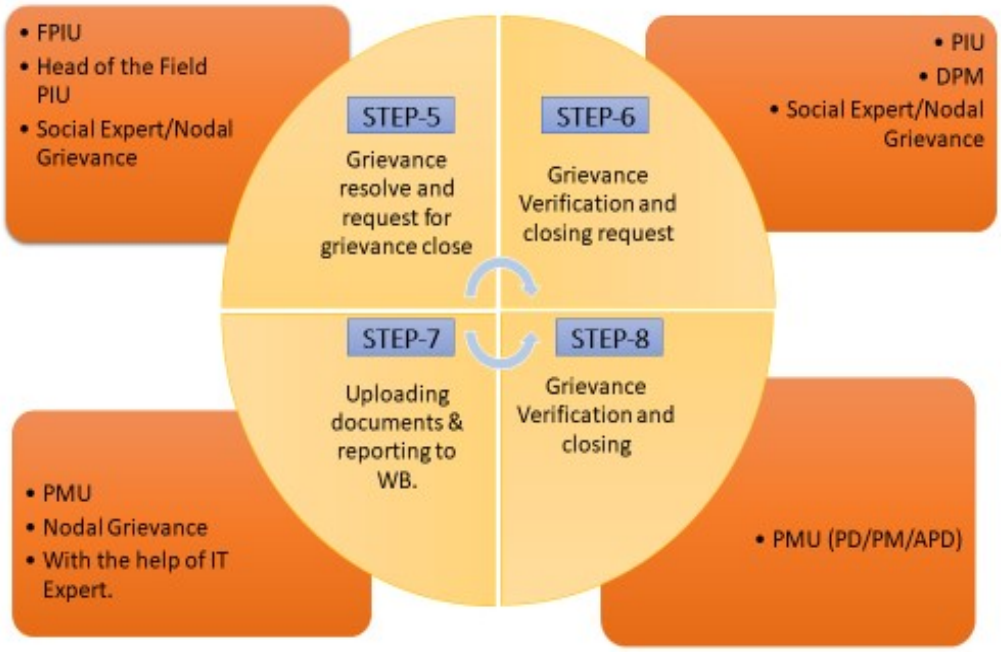
The PMU has prepared the grievance redress mechanism for general public and affected parties for registering their grievances and redress any grievance issues put up by public concerning the project. The contractor is required to set up a system for GRM with the help of PIU. As the project construction work starts, grievance redress mechanism structure will be developed connecting it with the existing PMU GRM. In addition, the structure will have contractor or his representatives & staff of implementing agencies in the structure. If issues are not resolved at the site level, it will come to the PMU. Following flow chart provides an overview of the process of GRM structure and has been elaborated and discussed below

The easy-to-use GRM flow is as follow

Grievance Receipt



Grievance Redressed



5.4.2 Registration of Grievances

An individual/community can register grievances in following ways:

1. By entering the grievances in register available at site
2. By ordinary/registered/speed post/Email addressed to concerned Executive Engineer FPIU or office of the program manager (PIU) Project Director (PMU)
3. By calling Grievance Helpline number (8272020703)
4. Online through the portal www.ukdisasterrecovery.in by filling in the following details (I) Name of Complainant (2) Name of Father/ Husband (3) Full Address of the Complainant with Pin Code (4) Mobile no. (5) Email Id. (6) District (7) Block (8) Sector of grievance related to (9) Description of grievance (10) List of documents attached (l l) History of Previous grievances/grievance, if any (12) Date of receipt of grievance (13) Date of acknowledgement of grievance (14) security code.

Names offices addresses, contact numbers and email ids of each FPIU, PIU, PMU shall also be displayed on the website under 'Grievance' section, so that complainants can contact them easily and find out the status of their grievance.

To facilitate the complainants, two information boards in Hindi and English should be installed at respective sites giving grievance helpline number (8272020703) and website (www.ukdisasterrecovery.in).

As soon as a grievance is registered on Website, an SMS will be sent to the Complainant's registered mobile number informing them the automatically generated Registration ID or Identity Reference number which can be used by the complainant to track progress of their grievances and for all future communications.

5.4.3 Grievance Register

A Grievance Register shall be maintained at CSC/DSC/FPIU (ifCSC/DSC is not there) site office to register the day to day grievances of community/ Individual/ Workman at site. The standard format of register shall be maintained in consultation with FPIU. The CSC/DSC/FPIU shall be responsible to register the. grievance in the Grievance Register. The Grievance Number of the grievance shall be shared with complainant so that they could make themselves aware of the progress of grievance by using the Grievance Number. The time to redress the issue would be one day to three months depending upon the nature of grievance. The DSC/CSC/FPIU shall monitor the progress on daily basis. If the grievance is redressed, the same shall be communicated to complainant with information to the CSC/DSC/FPIU for maintaining the record. In case the grievance is not redressed at CSC/DSC/FPIU Level, then the same shall be forwarded to GRC at FPIU (Level-I) for further resolution as described at para 4.0, below. Monthly and Quarterly progress reports of the grievances shall be prepared by DSC/ CSC and submitted to FPIU for information/review. It shall further be submitted to PIU for documentation and reporting.

5.4.4 Processing and Redressing Grievance received at Web portal

As soon as the grievance is registered, the process to redress the grievance shall start. In normal cases it would be redress within 7days However, in difficult cases the grievance will be forwarded to the Grievance Redressal Committees (GRCs) at different Levels for redressal where it might take a maximum of 1month. The redressal of grievances shall be processed as under:

GRM through standard system- A three tier grievance redressal structure has been formed which will function as under:

At PMU Level (Level-3)- It is a Level at which the grievances are received on web portal/email and disseminated to lower Levels through Email/hard copy for resolution of grievances. However, if grievance is to be redressed at PIU Level itself, the same shall be done accordingly & intimated to the complainant The time taken at PMU (Level-3) would be 1day for receiving the grievance and dissemination to the concerned proper scrutiny/review at its own end. Similarly, it would take 7days for receiving the resolution of grievance from concerned PIU, its review and dissemination to the complainant.

At PIU Level (Level-2)- It is a Level at which grievance are received from Level-3 and shall be forwarded to FPIU (Level-I) for redressal. The time taken at PIU (Level-2) would be 1day after receiving the grievance and disseminate it to concerned FPIU after proper scrutiny/review at its own end. Once the grievance is duly redressed and received from FPIU (Level-I), the same after scrutiny/review shall be forwarded to the PMU (Level-3) for further intimation to the complainant. The total time taken in incoming and outgoing process would be 7days each. However, in case the grievance is to be redress d/redressed at the PIU (Level-2) itself, then the time period earmarked for redressal at FPIU Level (Level-I), which is normally 14 days, will also be utilized at PIU Level.

At FPIU Level (Level-I)- It is the Level at which grievances are received from Level-2 and redress with the help of CSC/DSC and/or Contractor within 1_4 days. After disposal of grievances at different Levels, the resolution of grievances is routed accordingly to PMU (LeVel-3) for uploading on the Website as per the defined structure given above.

5.4.5 Grievance Redressal through Committee (GRC)

A three-tier Grievance Redressal committee has been constituted for redressal of the grievances that are not redress within the prescribed period at the respective Levels as described under GRM at para 3.0, above. The GRC structure is described as under-.

GRC Level I (At FPIU): The GRC at Level I will be constituted at Field PIU Level which will be headed by the Executive Engineer/ Senior Resident Engineer who will also be the nodal person for all grievances or complainants covered under their ambit. Level 1 Committee will comprise of the following members:

1. Executive Engineer / Senior Resident Engineer - Chairman,
2. Social Expert (CSC) or Assistant Engineer (if social expert not deployed) - Member Secretary
3. AE/RE of PIU.
4. RE, CSC/DSC or their representative (if required).

GRC Level 2 (At PIU): The GRC at Level 2 will be at PIU Level that will be headed by the Program Manager (PM)/DPM and will handle all un redressed grievances of Level 1. Level 2 Committee will comprise of the following members:

1. Program Manager or Deputy Program Manager (if nominated by the PM) — Chairman.
2. Contract Management Expert/Officer.
3. Social Expert of PIU - Member Secretary,
4. Representative of FPIU (if required).
5. Representative of CSC/DSC (if required).

GRC Level 3 (At PMU): The GRC at 3 will be at PMU Level that will be headed by the Project Director (PD) and will handle all un redressed grievances of Level 2. Level 3 Committee will comprise of the following members:

1. Project Director - Chairman.
2. Project Manager/DPM of the concerned PIU
3. Social arid Environmental Experts at PMU Level Member Secretary
4. Social and Environmental Experts of concerned PIU
5. Executive Engineer/SRE of FPIU (if required)

5.4.6 Scope and Functions of GRCs

The GRC will receive and redress all the grievances that relate to U-PREPARE project, that are not redressed within the standard period of 30 days at the respective levels. The procedure for redressal by GRCs is described below:

1. In case a grievance received at FPIU Level is not redressed within the designated period, the same shall be formally sent to GRC Level I (FPIU Level) in writing.
2. In case a grievance has been redressed by the GRC Level l, then the resolution of the GRC Level I shall be forwarded to the PIU for review and further action. After review, if the resolution is found correct, the same shall be forwarded to the PIU for documentation & updating on website and intimation to the complainant. In case it is required to be corrected at the PIU level, necessary action shall be taken by the PICJ to redress it. The GRC Level I shall meet at least once in a fortnight to review and take necessary action on the pending grievances.
3. In case GRC Level I is unable to redress the grievance, then it will refer the same to GRC Level 2 (PIU level) with its specific comments/ recommendations. GRC Level 2 will review and redress of the grievance and if redressed, will forward the same to the PMU for documentation & updating on website and intimation to the complainant. In case the same is not redressed at GRC Level 2, the same shall be forwarded to GRC Level 3 for their review and further action. The GRC Level 2 shall meet at least once in a month to review and take necessary action on the pending grievances
4. The unsolved grievances received from GRC Level -2 shall be reviewed and redressed at GRC Level-3. The final decision of GRC Level-3, whether grievances redressed or not redressed (With reasons), shall be forwarded to the PMU for documentation & updating on website and intimation to the complainant. The GRC Level 3 shall meet at least once in a quarter to review and take final decision on the pending grievances.
5. The maximum period to redress a grievance shall be three months depending upon the nature of the grievance.

5.4.7 Documentation and Record keeping

All the documents including registers regarding grievances received through different modes of registration shall be documented at the respective levels. The redressals shall also be properly maintained at the respective Levels. The GRMs & GRCs at each level shall maintain the documents of each grievance and its redressal that have been received through different levels. PMU shall ensure that the redressals made at different levels are uploaded on Website regularly.Social expert, PMU shall monitor the Website periodically. If any grievanceregistered on Website is found pending, they will issue directions to PIU/ FPIU for necessary action.

5.4.8 Grievance Mechanism for Labor Engaged in Construction Work

The main objective of a Grievance Redress Mechanism (GRM) is to resolve complaints and grievances in a timely, effective, and efficient manner that satisfies all parties involved. A construction-site specific Grievance Mechanism will be setup by the contractor/ sub-contractor. It shall include site-specific grievance focal person assigned by the contractor who will file the grievances and appeals on behalf of the contracted workers. If the issue cannot be resolved at the contractor's level within 7 working days, then it will be escalated to the Principal Employer. The work of the grievance focal person will be closely monitored by the PWD or RWD engineers/implementing agencies at the field level and periodically reviewed by the E&S focal persons in the PIUs and social development specialists in the PMU.

The grievance focal person will register the grievances in a formal manner in a register or in electronic format to be easily tracked for its resolution. The GRM will include the process of screening, investigation, resolution of grievances, documentation, and reporting of grievances as the steps mentioned below.

Step 0: Raising and registering the grievances using various mechanism including through written or verbal complaints and registered in grievance logbook at the construction site.
Step 1: Grievance raised is screened by the grievance focal person and based on its severity/ jurisdiction forwarded to respective contractor/ sub-contractor for redressing
Step 2: Grievance discussed at the grievance focal person / respective contractor/ sub-contractor level, and addressed
Step 3: If not addressed in stipulated period it is escalated to the Principal Employer.
Step 4: Once addressed, feedback is given/ sent to the complainant and complaint closed upon verification from the complainant
Step 5: If not satisfied, appeal to the other public authorities.

Once all possible redress has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse. Monthly report on the grievances received at each of the sub-project will be submitted to the PMU.

All contractors (employing more than 10 employees) are mandated under the POSH Act to set up an Internal Complaints Committee (ICC) in their organization to address complaints of sexual harassment. A complainant facing sexual harassment working in an organization that has less than 10 employees, can file a complaint to the Local Complaints Committee (LCC) setup in each district by the district administration.

ANNEXURES

Annexure-1

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PLAN

The Contractor will develop their Occupational Health and Safety Plan for the sub-project for safety of all personnel working under the project and will be in line with the General Rules and Regulations on Occupational Health and Safety (OHS) in Building and Other Construction Workers (Regulation of Employment and Condition of Service) Act, 1996 and World Bank Group's EHS guidelines[4] on health and safety and EMP.

1. SAFETY OF WORKERS

The Occupational Health and Safety program will aim to ensure that the workplace is safe and healthy by addressing the hazards and risks at the workplace; outlining the procedures and responsibilities for preventing, eliminating and minimizing the effects of those hazards and risks; identifying the emergency management plans for the workplace or workplaces; and, specifying how consultation, training and information are to be provided to employees at various workplaces.

Some of the risks/hazards associated with the project construction phase include risk of increase of vector borne and other different diseases. Few of the major Occupational health and Safety risks due to different activities at different sites areas below:

Table 1: Occupational Health and Safety Risks During Construction

S.No.	Activities	Type of Risk	Health & Safety Issues
1.	Operation of Batching Plant, material stockyards, gen set and other machineries	• Exposure to dust and gaseous emissions • Accident Risks	• Health Hazards, Respiratory Problems • Injury/ fatalities
2.	Operation of vehicles	• Accident Risks	• Injury/ fatalities
3.	Excavation and Earth works	• Dust generation	• Health Hazards, Respiratory Problems
4.	Concreting and masonry works & Abutment construction	• Exposure to concrete and cement	• Skin Problem, Respiratory Problems
5.	Paving works	• Gaseous emission Heat generation	• Health hazards, Respiratory problems, Burning injury
6.	Bridge works	• Falling from height Accident risks	• Physical Injury due to fall from height • Injury due to fall of material from height
7.	Electrical works	• Electrocution	• Electric shock and injury
8.	Welding	• Eye injury	• Eye injury
10.	Operation of Camp site	• Unhygienic condition	• Water borne diseases, vector diseases, snake bites
11.	Waste generation	• Health hazards	• Health problems
12.	Working close to the river for Construction of Bank Protection	• Accident Risks • Falling in river and drowning risk • Accident risks due to rock fall from slope height	• Physical Injury due to fall from height • Injury due to fall of material from height/ fatality

[4] Reference: *http://www.ifc.org/wps/wcm/connect/554e8d80488658e4b76af76a6515bb18/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES*

1. PPEs Requirement:

Risks to the health and safety of workers can be prevented by provision of Personal Protective Equipment (PPEs) to all workers. This will be included in the construction cost for the Contractor. Depending on the nature of work and the risks involved, contractors must provide without any cost to the workers, the following protective equipment:

i. Helmets hall be provided to all workers, or visitors visiting the site, for protection of the head against impact or penetration of falling or flying objects.
ii. Safety belt shall be provided to workers working at heights (more than 20ft) such as roofing, painting, and plastering.
iii. Safety boots shall be provided to all workers for protection of feet from impactor penetration off all objects on feet.
iv. Ear protecting devices shall be provided to all workers and will be used during the occurrence of extensive noise.
v. Eye and face protection equipment shall be provided to all welders to protect against sparks.
vi. Respiratory protection devices shall be provided to all workers during occurrence of fumes, dusts, or toxic gas/vapor.
vii. Safety jackets (Life Jacket),helmets, safety boots, safety belts, tracking kits, to be provided to the workers working for construction of protection wall on both side river bank close to the water. Safety net to be provided on the slope above working area to prevent rock fall from height.
viii. Safety nets shall be provided when workplaces are more than 25 feet (7.5 m) above the ground or other surfaces where the use of ladders, scaffolds, catch platforms, temporary floors or safety belts is impractical.
ix. Well-equipped First Aid Box with all essential first aid items will be kept and maintained at the work site.
x. The Contractor will have arrangement with nearby doctor/ health centre for attending injured person due to accident.

The specific PPE requirements for each type of work are summarized below.

Table 2: PPE Requirement List

S.No.	Activities	Type of Risk	PPE Requirements
A. Bridges & Approaches			
1.	Operation of Batching Plant, material stockyards, gen set and other machineries	• Exposure to dust and gaseous emissions • Accident Risks	• Safety helmets, High visibility reflective safety jackets, Safety boot and Masks
2.	Operation of vehicles	• Accident Risks	• Safety Helmet and High visibility reflective safety jackets
3.	Excavation and Earth works	• Dust generation	• High visibility reflective safety jackets, Masks
4.	Concreting and masonry works and Abutment construction	• Exposure to concrete and cement	• High visibility reflective safety jackets, Safety Boots, Mask
5.	Paving works	• Gaseous emission Heat generation	• High visibility reflective safety jackets, Safety Boots, Mask
6.	Bridge works	• Falling from height Accident risks	• High visibility reflective safety jackets, Safety helmet, safety belt (height greater than 6 ft.), safety boots
7.	Construction of Gabion wall as Slope Protection		• High visibility reflective safety jackets, safety jackets (Life Jacket), helmets, safety boots, safety belts, tracking kits,
8.	Electrical works	• Electrocution	• High visibility reflective safety jackets, Insulated Gloves
9.	Welding	• Eye injury	• High visibility reflective safety jackets, Insulated Gloves, Eye protector
10.	Waste Handling	• Health hazards	• Gloves and Masks

1.1 Safety Committee

The Contractor will form Safety Committee who will regularly monitor the EHS issues and incidences, analyse the incidences and act for corrective measures for avoiding such incidences in future.

1.2 EHS Training:

The Contractor will organize proper training on environment, health and safety issues related to different activities involve in the road construction activities. The Contractor will conduct induction raining of EHS to all the workers prior to engagement in the construction activities. The Contractor will do pep talk sand tool box talk son day today basis prior to start of the work briefing about the safety and environmental risks involve in particular activities and measures to be taken during works.

1.3 HIV/AIDS Awareness Training

The Contractor will organize training programme on HIV/AIDS and STDs for migrant labour and surrounding community on quarterly basis through approved agency. The Contractor will Co ordinate with State AIDS control society to collect dissemination material. In general training should include:

(i) Talk on the HIV/AIDS and STDs by the approved Agency briefing about the se diseases, myths about that, preventive measures and treatment.
(ii) Poster display, distribution of leaflets, banners etc.
(iii) Distribution of condoms, establishment of Condoms
(iv) Assistance in getting tested for HIV/AIDS and STDs.

The Contractor will ensure that the training is attended by not less than 90% of all workers including migrant and local labours employed by the main contractor or sub-contractors as well as willing persons from local community.

1.4 OHS Register:

The Contractor will maintain the OHS register maintaining the record of first-Aid, incidence report, near miss recordings, Safety Committee meeting, corrective action taken, Medical reports, records of training, etc.

2. PROPOSEDHEALTHMANAGEMENTPLAN

Health management plan for people in the adjoining area of the project and workmen engaged in the project is prepared based on the information collected on the existing health status, prevailing disease and other information on the health and hygiene. The information was collected from the existing PHCS and District hospital and the health workers of the area.
There are adequate health facilities in the project affected area with primary health centres in each block and Community health centre.

2.1 Likely impacts on health due to the project

Possible impacts on health of the local resident and impacts on the workmen engaged in construction site place are detailed below.

2.1.1 Health Impacts due to deterioration of the Work Place Ambient Air and Mitigation Measures

Due to the running of Construction Machineries and Heavy Vehicles, emissions like SO_2, No_2 and dust emission due to movement of heavy vehicles and Earth Moving equipment will take place. The emissions may cause respiratory problems like asthma and other dieses.

Mitigation Measure:

- Wet excavation of exposed surfaces shall be adopted. Frequent water sprinkling shall be carried out in the project activity area.
- The heavy vehicles like trucks, excavators, diggers, scrappers, dozers etc. shall comply to specified BS standard likeBS VI
- The vehicles are to be maintained routinely to avoid un toward emission
- Idle running vehicles and construction equipment should be avoided.
- All the construction vehicles will have valid PUC Certificate

2.1.2 Anticipated Health impacts due to Water Pollution

- To accommodate the influx of labour force during construction make-shift arrangements shall be provided. The sanitation of the labor camp area is normally not kept hygienic and tidy. This may cause water born dieses like Typhoid, Cholera & Gastroenteritis etc.
- The localized stagnation of water in borrow pit areas is expected during construction which may spread bacteria related dieses if suitable preventive action is not taken

Mitigation Measures:

- Proper sanitation and hygiene facilities will be provided at camp site to avoid disease related to sewage pollutants.
- Antibacterialinsecticidesneedbesprayedonaccumulatedwaterinborrowpitsduringrainyseason
- The project proponent shall under take various awareness program by organizing different camps where awareness on prevention and control of various diseases such as Malaria,
  Dengue, Cholera, Gastroenteritis, STD, AIDS, and Canceretc. Shall be focused.
- Temporary labor camps shall be provided with sewage facilities and the hygiene of the camp shall be looked onto.
- The labourers shall be providing with fuel gas for cooking gas
- Construction site will have health/first aid facility including adequate supply of sterilized dressing materials and appliances and suitable transport to take the injured person to the nearest hospital.
- Drinking Water used by the construction workers in the project or the people in the adjoining area whether form groundwater

Controlling Water borne diseases

- Development of sanitation facilities in the project area
- Disposal of solid waste and sewage from various source sat appropriate sites located at suit able distance from drinking water sources. The sites can be selected in consultation with the local administration
- Provision of onsite chlorination facilities at appropriate locations in the area.
- Regular monitoring and surveillance of drinking water.

2.1.3 Health Impacts due to improper Solid Waste Disposal:

Solid Wastes if not disposed off or dumped properly may cause air or water pollution which will affect health and hygiene of the residents in the area**.**

Waste Management Plan

- People or labor staying during construction and operation phase of the project site may generate wastes from different sources. Wastes are the Primary problems during the construction phase of the project which may affect the human life as well as the

construction process and the environment.

- After completion of the project, the site will be covered with vegetation. Landscaping will be done in open areas with gentle gradient in the land surfaces so as to avoid soil erosion.
- Water drainage system for draining the surface runoff will be provided. Proper storage of the construction materials will be ensured.
- Waste collection site to be maintained for the collection of the construction waste. Construction waste will be dumped in the designated area.
- Paint brushes, roller, excess paints and containers of paints will be disposed off as per Hazardous waste management Rule 2016. Similarly, solid waste generated in the site due to human activities will collect and disposed properly.
- Construction and Demolition Waste shall be done as per Construction and demolition Waste Rules 2016.

3. Health Check-up Facilities:

A health care system will be maintained by the Contractor at construction camp for routine check-up of workers and avoidance of spread of any communicable disease. Periodical medical check-up will been sured for all the workers. The Contractor will tie up with local health centre for first-aid, medical check-ups and treatment of workers and dealing with Epidemic conditions. However, the frequency of medical check-ups may vary under some epidemic situation like COVID-19, malaria, dengue or any other as per directions and guidance issued by the Health Department/District Administration.

The Contractor will always be maintained readily available First Aid kit bearing all necessary first aid items at all the work sites including camp, plant site and other activity areas. The Contractor will engage trained first aider who will be always available at their site to response any injury or cases requiring first aid.

The Contractor will strictly follow the Standard Operational Procedures (SOPs) issues by the Government of India and State Government from time to time for prevention of spread of COVID-19 epidemic. Contractor shall arrange periodic testing of his work force against COVID 19 virus and create awareness among workers on minimizing chances of infection due to this virus.

Contractor shall also coordinate with the concerned officials of the district healthcare services responsible for COVID19 Control and other epidemic diseases such as malaria, dengue, etc.

Anneuxre-2

RECORD KEEPING AND REPORTING FORMATS

REPORTING FORMAT-1: MONTHLY STATEMENT OF LABOURS ENGAGED

Month	Contractor/ Sub-Contractor	Local Labour Employed (Man Days)			Migrated Labours (Man Days)			Total Local and Migrated Labours (C)	Percentage of Local Labours (A/C*100)
		Male Labours	Female labours	Total Labours (A)	Male Labours	Female labours	Total Labours (B)		

REPORTING FORMAT-2: CAMPSITE MANAGMENT

Name of the Project:
Name of the Contractor:
Location of Construction/Labour Camp:

Reporting Month:

S.N.	Items	Details	Maintenance of the facilities	Remarks
1.	Number of dwelling Units Provided			
2.	Number of Labours Residing			
3.	Number of female labourers and children living in camp			
5.	Facilities provided in the camp			
	(a) Drinking water			
	(b) Cooking facility			
	(c) Toilets separately for Male and Female workers			
	(d) Separate Bathrooms for Male and Female workers			
	(e) First Aid Facility			
	(f) Lighting			
	(g) Drainage and Sanitation facilities			
	(h) Garbage collection and disposal			
	(i) Other welfare facilities as per norms			
	(j) Provision of application of Insecticides & pesticides			
	(k) Periodical Health Check-ups			

Please fill the checklist separately for each camp site.
Mention Status as "Very Good", "Good", "Satisfactory" "Poor". Please give specific area requiring attention in Remarks Column.

REPORTING FORMAT-3: Awareness Training on Environmental & Social Safeguards

Sl. No.	Type of Training	Date of Training Workshop	Venue of Training	Conducted by	Number of Participants	%age of total Labours attended the Training	Due Date of Next Training
1.							
2.							
3.							
4.							
..							

REPORTING FORMAT-4: RECORD OF GRIEVANCE REPORTING AND REDRESSAL MECHANISM

Sl. No.	Name and address of the Person who lodged Complaint (written or verbal)	Date of Compliant	Issues Raised	Redressal Measures Taken (Details of preventive measures taken to avoid such complaints in future)

REPORTING FORMAT-5 : NON COMPLIANCES ON ENVIRONNEMENTAL, OHS AND SOCIAL SAFEGUARDS MESURES

S.No.	Type of Non-Compliance Recorded	Corrective Action	Agreed Time Frame for Corrective measures	Status	Follow up Action/Remarks

REPORTING FORMAT-6: USAGE OF PPES

S.No.	Type of Required PPEs	No. required based of activities	No. of Workers at Site	No. of workers using Appropriate PPEs	Remarks
1	Helmets				All the labours to use Helmets
2	Reflective Jackets				All the labours to use Jacket
3	Safety Boots				All the labours to use Safety Boots
4	Gloves				For Concreting Activity and fabrication
5	Goggles				For welding activity and rock cutting works
6	Nose mask				Workers near dust source
7	Ear buds				Workers working near DG set or any noise generating source
8	Safety belts				For working at height

Annexure-3

	Labor Laws Applicable to Establishments Engaged in Building and Other Construction Work			
1.	Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996	It regulates the employment and conditions of service of building and other construction workers and provides for their safety, health and welfare.	This will be applicable for all building or other constructions works under the project that employ 10 or more workers.	Chief labor Commissioner
2.	Workmen Compensation Act, 1923	It provides for payment of compensation by employers to their employees for injury by accident i.e. personal injury or occupational disease.	Construction workers will be involved in the sub-projects	Commissioner for Workmen's Compensation
3.	Inter-state Migrant Workers Act, 1979	It protects workers whose services are requisitioned outside their native states in India. A contractor who employs or who employed five or more Inter-State migrant workmen need to obtain registration under this act.	Construction workers will be involved in the sub-projects	Chief labor Commissioner
4.	The Child Labour (Prohibition & Regulation) Amendment Act, 2016	It prohibits employment of children in specified hazardous occupations and processes and regulates the working conditions in others.	There should not be any child labor (less than 14 years) in any project activity and adolescents (above 14 and less than 18 years) in any hazardous activity.	Chief labor Commissioner
5.	Building and Other Construction Workers Welfare Cess Act, 1996	An Act to provide for the levy and collection of a Cess on the cost of construction incurred by employers.	Sub-projects will involve construction workers	Chief labor Commissioner
6.	Sexual Harassment of Women at the Workplace (Prevention, Prohibition and	It mandates every organization having more than ten employees to constitute an Internal Committee (IC) in the prescribed manner to receive and address the complaints of any	Applicable to all implementing agencies and contractors	District Officer (District Collector) PMU, PIUs

	Redressal) Act, 2013 (POSH Act)	sort of sexual harassment from women in a time-bound and extremely confidential manner		
7.	Contract Labour (Regulation & Abolition) Act 1970	To provide proper and habitable working conditions. To regulate the functioning of the advisory boards. To lay down the rules and regulations regarding the registration procedure of the establishments employing contract labour.	Applicable to all implementing agencies and contractors	Chief labour Commissioner
8.	Payment of Wages Act, 1936	Lays down as to by what date, wages are to be paid, when it will be paid and what deductions be made from the wages of the workers, if any.	Applicable to all implementing agencies and contractors	Chief labour Commissioner
9.	Payment of Gratuity Act, 1972	Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation, if an employee has completed 5 years of service with employer.	Applicable to all implementing agencies and contractors	Chief labour Commissioner
10.	Employees Provident Fund and Miscellaneous Provision Act, 1952	Provides for monthly contributions by the employer and as well as by workers with a provision as return of pension of a lump sum (principal and interest accrued) at the end of his/her service term).	Applicable to all implementing agencies and contractors	Chief labour Commissioner
11.	Maternity Benefit Act, 1951	Provides for maternity leave for women, during pregnancy and after giving birth and some other benefits to women employees, in case of medical recommendation of bed rest or miscarriage etc.	Applicable to all implementing agencies and contractors	Chief labour Commissioner
12.	Payment of Bonus Act, 1965	Provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages.	Applicable to all implementing agencies and contractors	Chief labour Commissioner
13.	The Bonded Labour (Abolition) Act 1976	An Act to provide for the abolition of bonded labour system, with a view to prevent economic and physical exploitation of the weaker sections of the people and for all matters connected there with or incidental thereto	Applicable to all implementing agencies	Chief labour Commissioner
14.	The Trade Union Act, 1926	Lays down the procedure for registration of trade union of	Applicable to all	Chief labour

		workers and employers. The trade unions registered under the Act have been given certain immunities for civil and criminal liabilities.	implementing agencies and contractors	Commissioner

.....End of Reports.....