

**DAM REHABILITATION AND IMPROVEMENT PROJECT PHASE II**  
**(Funded by World Bank)**



**ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK**  
**FINAL**

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**CENTRAL WATER COMMISSION**  
**GOVERNMENT OF INDIA**

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## Acronyms

Anganwadi	Frontline worker of the Women and Child Development Department Rural Child Care Centre)
ARAP	Abbreviated Resettlement Action Plan
ASI	Archaeological Survey of India
BPL	Below Poverty Line
CBO	Community Based Organization
CDSO	Central Dam Safety Organization
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
C-ESMP	Contractor's Environmental and Social Management Plan
CoC	Code of Conduct
CPMU	Central Project Management Unit
CSA	Contract Supervision Agency
CWC	Central Water Commission
DC	Divisional/District Commissioner
DRIP	Dam Rehabilitation and Improvement Project
DSO	Dam Safety Organization
DSRP	Dam Safety Review Panel
EAP	Emergency Action Plan
EHSG	Environmental, Health and Safety Guidelines
ESCP	Environmental and Social Commitment Plan
ESDD	Environmental and Social Due Diligence
ESF	Environmental and Social Framework
ESHS	Environmental, Social Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMU	Environmental and Social Management Unit
ESS	Environmental and Social Standards
EMC	Engineering and Management Consultant
FGD	Focus Group Discussion
FPIC	Free Prior and Informed Consent
GBV	Gender -Based Violence
GDI	Gender Development Index
GoI	Government of India
GPN	Good Practice Note by WB
GRC	Grievances Redressal Committee
GRM	Grievance Redress Mechanism
HDI	Human Development Index

HIV AIDS	Human Immunodeficiency Virus - Acquired Immunodeficiency Syndrome
IA	Implementing Agency
ICC	Internal Compliance Committee
IEC	Internal Educational Content
IPF	Investment Project Financing
IPV	Intimate Partner Violence
JRM	Joint Review Meeting
LMP	Labor Management Procedure
MPR	Monthly Progress Report
M&E	Monitoring and Evaluation
MoEF& CC	Ministry of Environment, Forest & Climate Change
MoJS	Ministry of Jal Shakti
NGO	Non-Government Organization
OHS	Occupational Health and Safety
Panchayat	Local elected body
PAP	Project Affected Person
PD	Project Director
PIU	Project Implementation Unit
PM	Project Manager
PMU	Project Management Unit
PPE	Personal Protective Equipment
PWDVA	Protection of Women from Domestic Violence Act
QPRs	Quarterly Progress Reports
RAP	Resettlement Action Plan
RFCTLARRA	Right to Fair Compensation and Transparency in Land Acquisition and Rehabilitation and Resettlement Act 2013
SC	Scheduled Caste
SDO	Social Development Officer
SEAH	Sexual Exploitation Abuse and Harassment
SEB	State Electricity Board
SEF	Stakeholder Engagement Framework
SEP	Stakeholder Engagement Plan
SPMU	State Project Management Unit
ST	Scheduled Tribe
TDF	Tribal Development Framework
TDP	Tribal Development Plan
TORs	Terms of Reference
WB	The World Bank
WRD	Water Resources Department

## EXECUTIVE SUMMARY

### Project Description

1. The proposed Dam Rehabilitation and Improvement Project (DRIP II) would complement the suite of ongoing and pipeline operations supporting India's dam safety program. The project development objective (PDO) is to increase the safety of selected dams in participating States and to strengthen dam safety management in India. Project Components include: Component 1: Rehabilitation and Improvement of Dams and Associated Appurtenances(US\$577.14 million); Component 2: Dam Safety Institutional Strengthening(US\$45.74 million); Component 3: Incidental Revenue Generation for sustainable operation and maintenance of dams(US\$26.84million); Component 4: Project Management (US\$68.13 million); Component 5: Contingent Emergency Response Component (US\$0 million).The project is likely to be implemented across many states in the country. The primary beneficiaries of the project are the communities that live in dam breach flood inundation areas and the communities that depend on water, irrigation and electricity services provided by the dams that could be compromised by poor dam performance or failure there are no types of dam rehabilitation activities which are excluded a priori. Also, at present, there is no exclusion list for the CERC. In addition to saving lives, improved dam safety will avoid potential flood damage to houses, farm areas, infrastructure (roads, bridges, other public and private infrastructure) and industrial and commercial facilities. Improved dam safety will also reduce the likelihood of service interruptions due to dam failure as well as potentially improving dam service provision, overall efficiency and storage capacity, including during drought periods.

### Purpose and Approach of ESMF

2. This ESMF is an update to the DRIP I and DRIP I AF ESMF, prepared as per previous safeguards policies. The methodology, herein, covers the lessons learnt from implementation challenges from earlier ESMF as well as the new requirements governed by the ESF and include the following:
  - a. consideration of the implementation experience of ESMF in DRIP I and AF (ref. para 5, chapter 1)
  - b. review of project components and sub-projects of DRIP II, including the new types of infrastructure proposed towards Additional revenue generation through a review of Project Screening Templates;
  - c. findings from the ESDD including screening and stakeholder consultations that were undertaken for the first set of 10 dams in the two states of Rajasthan and Manipur;
  - d. analysis of overall E&S risks and impacts;
  - e. assessment of current institutional capacity to manage E&S risks and impacts;
  - f. consideration of requirements of the new ESF, particularly: Labor Management Procedure (ESS 2), Stakeholder Engagement Plan (ESS 10), Community health and safety management (ESS4), and Pollution prevention and resources management measures (ESS 3) to meet the requirements of relevant ESS;
  - g. existing national and state level legislations and guidelines – their provisions and requirements vis-à-vis ESF, 2016 and to identify gaps therein and address them;
  - h. interactions and consultations with CPMU and SPMUs on the draft ESMF for soliciting their views, suggestions and feedback and their subsequent incorporation towards finalizing the ESMF
3. This Environmental and Social Management Framework (ESMF) has been developed to serve as an instrument to guide the Implementing Agencies on undertaking necessary E&S due diligence

on each sub-project. Based on the ESDD findings accord a risk category (Low/Medium/Substantial/High) to each sub-project and undertake detailed ESIA, if necessary, including the development of sub-project specific plans to meet the requirements of the relevant Bank Standards. ESMF provides overarching framework to manage environmental, social, health and safety (ESHS) issues associated with the implementation of sub-projects, during construction and operational phases.

4. This ESMF comprises of Framework instruments applicable at the project level, guidance frameworks and suggestive ToRs which shall be used as templates for preparation of sub-project specific instruments. The Project level Frameworks included in ESMF are – ESDD framework including checklists; GBV/SEAH risk mitigation framework (ESS1); b. Resettlement Policy Framework (ESS5); c. Tribal Development Framework (ESS 7). The Project level guidance frameworks include – Guidance Framework for ESMP, Guidance Framework for Occupational Health & Safety Management for Workers and Community (ESS 2 & ESS 4); Guidance Framework for Guidance Framework for Pollution Prevention and Environmental Quality Management Plan (ESS 3); Guidance Framework for Biodiversity Conservation and Management Plan (ESS 6); Guidance Framework for Cultural Heritage Protection Plan (ESS 8). The following guidance frameworks/outlines are included to enable taking up studies as well as prepare sub-project level mitigation plans and include - Outline of ESIA, Guiding Framework for Construction Debris and Solid Waste Management Plan; outline of RAP, Outline of Tribal Development Plan, outline of SEP, outline of LMP, outline of Biodiversity conservation plan.
5. In light of the COVID pandemic induced restrictions<sup>1</sup> towards stakeholder consultations, consultations on draft ESMF were carried out in a limited manner in accordance with the guidance available<sup>2</sup>, with about 90 officials of IAs and 19 WB staff during Apr 16-20, 2020 in a virtual manner.

### **Legal and Regulatory Framework**

6. India has well defined environmental and social regulatory framework. The regulation applicability depends on nature of work and location of work. Broadly legislation can be divided into four categories viz environmental, forests, wildlife conservation and social. The applicability analysis of regulations pertaining to all the above four categories was carried out. The regulatory applicability analysis to the proposed rehabilitation work has been carried out considering nature of improvements, methodology of construction/improvement, material requirement, sourcing and transportation mode, waste generation and the conditions of the receiving environment. Central Water Commission, Ministry of Jal Shakti, Government of India has prepared “Operational Procedures for Assessing and Managing Environmental Impacts in Existing Dam Projects” and is under publication as a guiding document for the dam owners to systematically address in advance the environmental safeguard requirements and have discussed in detail all applicable legal requirement. Reference has been drawn from this document as well, while carrying out applicability analysis. The regulatory applicability analysis is presented in detail in Annexure 1, Table A1.1.
7. While the National regulatory framework is largely consistent and is complying with the ESF, certain gaps exist in - ESS2 relating to community workers, establishing a functional GRM for

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<sup>1</sup>In light of the COVID pandemic, Government of India announced a country wide lockdown between March 25 to April 14, 2020, that constrained holding of consultation meetings

<sup>2</sup> Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, March 2020

different types of workers, ESS 4 relating to community exposure to health, ESS 5 relating to identification of non-title holders as PAPs, R&R entitlements, ESS 7 relating to consent of tribal habitations outside of designated Schedule V and VI areas, ESS 10 relating to identification of vulnerable and disadvantaged for engagement in project consultations, establishment of GRMs. The gaps are being covered by suitable project specific framework instruments and implementation arrangements listed in this ESMF. The present set of structural interventions from PSTs and outcomes of ESDDs indicated that no additional statutory clearances are required for the Sub-projects, other than the operational clearances required to be taken from local authorities by the Contractor.

## **E&S Risks and Impacts**

8. The type of interventions indicate that the interventions are concentrated within dam area and impacts are also localized. There is no direct impact due to construction activities envisaged. Though fishing activities are prevalent in most of the dam areas, the proposed interventions shall not directly or indirectly impact the livelihoods of the fishing communities. The proposed interventions do not alter the u/s storage and d/s flow of water. An assessment of the activities indicated that the proposed interventions are taken up in the areas already owned and possessed free of any encumbrances, by the WRD and do not require any additional land acquisition. The works also do not restrict physical and livelihoods access. Findings of ESDD studies<sup>3</sup> from 10 dams have also been considered in validating the E&S Risks and impacts assessment for the purpose of developing this ESMF.
9. The environmental and social risk rating for the Project as a whole has been rated as High, because the project is expected to cover many existing dams across various States in India with varying geographical conditions and environmental and social sensitivities. Project Components include exploring piloting of alternative sources of revenue generation at few dams as pilot activities, such as tourism, floating solar panels, etc. These pilot activities are currently not known and environmental and social impacts and risks will need to be assessed when they are identified. Additionally, the capacity of implementing agencies, i.e., the Central Water Commission, participating States and other Central dam owning agencies towards management of E&S risks is low and necessitates significant capacity building efforts.
10. Anticipated E&S risks and impacts by each standard include: ESS 1 - The works may lead to interface of migrant labor with communities and this risk would vary by site and depend on the nature of works proposed. Under ESS1, SEA/SH (GBV) risk mitigation guidelines as per overall GBV risk mitigation framework is required; ESS 2&4 – workers stay at site for a period ranging from some months to about 3 years, the works involve risks of accidents on account of working at heights, working on upstream body of dam, underground activities, etc. Specific Occupational health and safety plans conforming to WB ESHS guidelines are proposed to be prepared for ensuring accident/incidence free working at dam site. Plans will include defined OHS instructions including use of PPE, medical checkup, training and awareness of workers. The project is likely to involve direct labor, contract labor and community workers, workers compensations, GBV, GRM issues are some of the potential risks herein; ESS 3 - Use of resources such as water and power during construction, pollution generation from storage and handling of material, generation of waste, use of paints and other chemicals for construction activities, transportation of raw material, etc., Risk is associated on soil quality due to disposal of debris, Air quality, water quality, noise level and resource use – all such risk and impacts are anticipated to be localised and moderate in nature; The piloting of solar power generation projects also contribute, in reduction

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<sup>3</sup> Ref, Annexure 4



of GHG emissions. In addition to ESF, the World Bank Group Environmental Health & Safety Guidelines will also be taken care in the project through ESMP; ESS 4: Dam safety assessments will be undertaken conforming to ESS4 by the DSRP and as per the Guidelines for Safety Inspection of Dams (CWC, January 2018) early in the project preparation as basis for identifying / assessing priority remedial measures. While doing so, Good Practice Note on Dams Safety (The World Bank, 2020) may also be referred. The larger construction activity such as additional spillway construction may have risk to ecosystem services which may have results in adverse health and safety risk to depended community and will be assessed through detailed ESIA studies; ESS 5 – The present set of interventions as per PSTs available do not indicate any land acquisition impacts or livelihood impacts. Where such impacts are identified, RPF provisions will apply; ESS 6 - Dams may be located in the vicinity of conservation areas or national wildlife sanctuaries or parks. Construction of larger structures like spillway may lead to cutting of larger number of fully-grown trees and/or diversion of forest area and changes in water flow may have impacts on aquatic ecosystems. May have high risk to ecosystem service and needs to be adequately addressed through appropriate avoidance, minimization or mitigation and compensatory measures; ESS 7 - Non-structural interventions for dams located in Schedule V areas and/or having tribal population that meet characteristics outlined in ESS7. As part of activities under Component on additional Revenue Generation, Tribal households may also benefit from the work/income generation opportunities relating to tourism works, water recreation activities, motorboats, fishing, solar power/floating solar etc. These activities in no way cause restriction on access to land or use of resources by local communities and there is no economic displacement envisaged due to the sub-project. Proposed activities which possibly lead to adverse impacts on land and natural resources, cause relocation, and/or have significant impacts on their cultural heritage will require obtaining Free Prior and Informed Consent (FPIC) and will be only taken if such FPIC is obtained. Non-structural interventions will involve consultation with variety of stakeholders including tribal groups who need to be consulted and informed in culturally appropriate approach – language, techniques that are familiar to them.; ESS 8 - The project is rehabilitating existing dams thus envisaging low risks and impacts to cultural heritage at this stage. However, possibility of chance find will be included for construction activities.; and ESS 10 – Stakeholder consultation is an overarching requirement in the Project preparation and implementation with respect to engagement of all three categories of stakeholders – affected; other interested and disadvantaged and vulnerable.

11. Cumulative Impacts: The project activities proposed under DRIP-2 are limited to rehabilitation and strengthening of already constructed and existing operational dams resulting in improvement of their operational efficiency and lifespan. The project activities are unlikely to interface or overlap with other developments in the region. The hydrologic changes in the design of the project will improve safety while operating procedures will help smoothen dam operation. Therefore, project activities under DRIP 2 are unlikely to cause any cumulative impacts and thus, cumulative impact assessment is not envisaged for the project. All high and substantial risk activities will undergo detailed ESIA.

### **Application of ESMF to Sub-project development**

12. ESMF will be applied to the overall project through a two-stage process. In first stage, Environmental and Social Due Diligence Assessment of all sub-project Dams using E&S scoping and screening checklists will be conducted to identify E&S risks and impacts and to determine risk category<sup>4</sup> of the overall project (L/M/S/H). In second stage, based on risk category, for L or M risk category projects ESMP will be prepared by updating Standard ESMP, with mitigation

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<sup>4</sup>Qualitative evaluation criteria for risk classification is detailed at Annexure 3.

plans for the relevant ESS triggered by project specific activities. Standard ESMP which will be approved by the World Bank, will serve as reference ESMP which shall be updated by IA, depending on dam specific project activities. In case even one of the 11 parameters in the E&S screening exercises at ESDD stage, results in a rating of either Substantial or High, then the E&S risk category of the sub-project would be categorized as Substantial or High. Following which ESIA would be carried out as per the given Terms of Reference that have been approved by World Bank. The ESIA's would be conducted by the SPMU/IA with the help of professional consultants<sup>5</sup> and ESMP including mitigation instruments as per relevant ESS would be prepared. The ESMP shall also contain Stakeholder Engagement Plan in accordance with SEF. The contractor specific actions shall be annexed in the bid document.

13. The ToRs for ESIA studies require to: define project's 'study area' or project influence area including related to associated facilities and conduct surveys (primary baseline surveys and data collection) on existing environment & socio-economic profile/setting; review of Environmental & Social Legal requirements; carry out analysis of impacts and management measures; provide environmental inputs to engineering feasibility studies; prepare specific management plans for mitigating risk and complying to WB ESS requirements, conduct Social Impact Assessment including qualitative and quantitative surveys to identify potential adverse impacts on land, assets, encroachments, community assets; impacts on disadvantaged and vulnerable; impacts on tribals; develop mitigation plans in accordance with the entitlement policy and assistance package: identify gender concerns/gaps; identify types of project workers/labor and associated risks; possibility of migrant labor leading to GBV risks; undertake stakeholder assessment & consultations, providing modes for citizen engagement and GRM (including for anonymous, vulnerable and disadvantaged). Based on the ESIA findings, the ESMP will be developed and depending upon the relevance of ESS 1,2-8, etc. These plans shall be ready before the sub project bids are issued and relevant plans would be included in the bid document.
14. Implementation process of application of ESMF in sub projects: ESDD studies will be carried out for 100% of all sub projects. The SPMU will review the ESDD report and finalize the recommendation on risk classification. Following this, SPMU will forward these reports to CPMU for review. Once the CPMU reviews, it will send the first 3 ESDD reports from each IA to World Bank for reviewing completeness, correctness, compliance and approval. Additionally, World Bank will select and review 25% of the ESDD reports of dams, annually. In case the risk classification by SPMU is recommended as S or H, 100% of such sub projects would be forwarded to CPMU, which in turn will review and forward it to the World Bank for approval. Similarly, 100% of the pilot works proposed, i.e., tourism, floating solar etc. for augmenting revenue sources will go through ESDD process, after SPMU review, CPMU will review and will share with the World Bank for review and approval. In case of sub-projects with Substantial or High-risk categorization, all ESIA's and subsequent ESMP's shall be reviewed by WB.

### **Institutional arrangements for Implementation, Monitoring and Evaluation**

15. Central Water Commission has the responsibility for project oversight while coordination will rest with the DSO in CWC, that will act as the Central Project Management Unit (CPMU). The Chief Engineer of the DSO will be the Project Director (PD), and will be assisted by the Directors, staff of their respective directorates, Engineering and Management consultants (EMC). CWC will designate Nodal officers to coordinate and carry out day to day E&S activities. These

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<sup>5</sup>Indian regulation mandates that EIAs study for dam has to be undertaken by NABET approved consultant accredited for river valley projects. Independent consultant will be appointed having accreditation with NABET for relevant sector.

Nodal/coordinating officers (full-time engineering staff) to handle environmental and social areas, will be at the level of Deputy Directors report to Project Director and commensurate time will be given by these officials for successful implementation and monitoring of various E&S related activities. These designated officers are department engineers which are recruited at national level through competitive engineering services examination. The Nodal Officers will be supported by the E&S specialists drawn from the EMC team. At the state level, SPMUs, will have overall responsibility for the coordination of the project activities, both technically and qualitatively and will monitor the physical and financial progress including E&S issues. Each IA will appoint a Project Director (PD) and Project Management Unit (PMU) attached to the Chief Engineer / Superintending Engineer in charge of the DSO. SPMU will also have a dedicated nodal officer of the level of Executive Engineer/Deputy Directors to look after environmental and social activities and implementation. The SPMUs will summarize the implementation of the project and submit reports to the CPMU in a format generated for a MIS. The SPMUs will coordinate the work with Chief Engineers of the WRDs and other owners of dams. At the SPMU level, E&S specialists will be hired from competitive open market for the project.

16. SPMU will share on Quarterly basis ESMP implementation status (50% of the sub projects/ dams in case of low to moderate risk ESMPs and 100% sub projects/ dams, in case of substantial to high ESMPs and other pilot works of high impact such as tourism development, solar power development etc.) relevant plans as per Environment Standards and all activities as stated above, with CPMU at CWC. CWC in turn will share these reports (25 % in case of low to moderate and 100% in case of Substantial to High risk sub projects) with The World Bank. In addition, CWC – CPMU through EMC will conduct an Annual Evaluation of implementation of Environmental and Social Management Framework of all IAs, as per TOR agreed with WB, and prepare and submit evaluation report and corrective actions to The World Bank. Evaluation will be undertaken considering ESCP, site specific EMP including OH&S plans. The final monitoring and evaluation reports will be shared with Bank and concerned agencies as per timelines and shall be placed in MIS of DRIP II Project and annual reports.

### **Grievance Redress Mechanism**

17. As the GRM works within existing legal and cultural frameworks, it is recognized that the GRM shall comprise project level and respective State level redress mechanisms. Most project related grievances could be minor and site-specific. A Three tier GRM, i.e. at the sub-project level and SPMU level (State government level) and CPMU (CWC level) will be implemented. The establishment of GRM/GRC will be well publicized. Most grievances are to be received directly on site by the designated site representative of SPMU that shall endeavor to resolve them satisfactorily on site. The designated site representative shall inform the SPMU of these complaints and their outcomes, including those not satisfactorily resolved.
18. The nodal officer shall, on receipt of each complaint, note the date, time, name and contact details of the complainant, and the nature of the complaint in the Complaints Register. The nodal officer shall inform the complainant of when to expect a response. S/he shall then endeavor to address it to the best of his/her abilities, as per stipulated timelines. Should the nodal officer not be able to resolve the complaint to the satisfaction of the affected persons, he/she shall then refer the complaint directly to the DRIP – II Project Director (PD) at the Central level.
19. Complaints referred to the PD will require him/her to take earnest action to resolve them in the earliest time possible. It would be desirable that the aggrieved party is informed of the course of action being taken. Reporting back to the complainant shall be undertaken within time specified for disposal of grievances. If the complaint is not resolved to the satisfaction of the aggrieved

party, the complainant is free to take legal recourse. The decision of the judiciary will be binding on the Project, in case PAPs seek to exercise legal option for grievance redressal. Vulnerable, physically disadvantaged are provided with special focus in GRMs. In addition, a separate GRM channel for the workers will be established in compliance with ESS 2.

### **ESMF budget**

20. The Project Component 4 on Project Management provides budget towards afore-mentioned items/activities covering : (i) CPMU's coordination of E&S activities by the Implementing Agencies (IAs) of the project, supported by an Engineering and Management Consultant (EMC) (ii) hiring of E&S experts on a contractual basis at the IA level; (iii) setting up a monitoring and evaluation (M&E) system that will conduct the Annual Evaluation exercise. CPMU and SPMUs will provide adequate budget for preparation and implementation of all safeguard instruments from the counterpart funding, besides for conducting trainings, exposure visits and capacity building events. ESMF budget has been estimated about 0.5% (USD 2.5 million) of the total project costs and will be used by SPMU from the above components; however, the budget amount may vary based on the need of the project. Costs of ESMP implementation would be included within each dam ESMP and their break-up would depend on the nature of activities, extent of impacts and proposed mitigation measure. World Bank's funding will be available for costs such as works, purchase of goods and services, where required.

### **Linkage to the ESCP**

21. The Environmental and Social Commitment Plan (ESCP) sets out material measures and actions, any specific documents or plans, as well as the timing for each of these. The ESCP which will be part of legal agreement and will be signed by each participating states and Implementing agencies (IAs) will require the IA to comply with the provisions of any other E&S documents required under the ESF and referred to in the ESCP, such as the Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), Bio-diversity Management Plan, Stakeholder Engagement Plan, etc. The ESCP will be prepared considering the findings of the environmental and social assessment based on the ESMF, the Bank's environmental and social due diligence and the results of engagement with stakeholders. It will clearly spell out the plans to be prepared with timeframe and responsibility. Adherence to the aforementioned ESMF processes and provisions will therefore be ensured through the ESCP.

### **Contingency Emergency Response Component**

22. In case of emergency and if GOI through CWC requests the World Bank to activate the CERC, the current ESMF prepared by CWC will be updated within 90 days of activating the CERC and will include a positive list of eligible activities / expenditures at the time of activation. In addition, the ESCP will be accordingly amended to include the provision as per the updated ESMF within 90 days of CERC activation.

### **Updating of ESMF**

23. Revision/Modification of the ESMF: This ESMF will be an "up-to-date" or a "live document" enabling revision, when and where necessary. Unexpected situations and/or changes in the project or subcomponent design would therefore be assessed and appropriate management measures will be incorporated by updating the Framework to meet the requirements of country's legislations and Bank ESF. Such revisions will also cover and update any changes/modifications introduced in the legal/regulatory regime of the country/ state. Also, based on the experience of application

and implementation of this framework, the provisions and procedures would be updated, as appropriate in consultation with the World Bank and the implementing agencies/departments. Finalized version of updated ESMF will be submitted to WB for its review and approval.

### **Information disclosure**

24. A Project level Stakeholder Engagement Framework is prepared and disclosed, which shall guide the information disclosure of various project information and documents on the DRIP website (<https://www.damsafety.in>) operated by Central Water Commission and websites of Project IAs. This document shall also be available in the office of engineer in charge of the respective dam. These documents shall be disclosed/disseminated through other appropriate means like various Project meetings, workshops etc. To date, the 10 ESDDs have been disclosed on the site, which will be followed by this ESMF and other documents. Besides the draft disclosure documents (and the final documents in future), project brochures and updates are /will be disclosed/ disseminated through these channels. In addition, details about the Grievance Redress Mechanism and contact details will also be disseminated. CPMU – DRIP II shall update and maintain the website regularly and oversee the information disclosure/ dissemination activities of SPMUs as well as CPMU. Executive summary of ESMF will be made available in Hindi and other local languages through above referred channels.

# 1. INTRODUCTION

## 1.1 Background

1. India has more than 5400 large dams with a storage capacity of about 300 billion cubic meters which are crucial of water security and India's continued economic growth and poverty reduction. Most of the dams have been constructed and managed by State government. The performance of these dams is steadily declining, largely due factors like: age of dams; damaged structures; inadequate instrumentation and monitoring; outdated reservoir operation practices; inadequate regulatory and operational safety measures. The Government of India (GOI) initiated Dam Rehabilitation and Improvement Project (DRIP-1) to overcome such structural, electro-mechanical and instrumental weaknesses. GOI had undertaken support from World Bank for DRIP-I project for about 223 dam's rehabilitation which is under implementation since 2010. The Project aimed to rehabilitate and improve dams and associated appurtenances, and to strengthen institutions. GOI has proposed to expand the reach of DRIP by bringing in additional States and dams.

## 1.2 Project Description

2. The proposed Dam Rehabilitation and Improvement Project (DRIP-2) would complement the suite of ongoing and pipeline operations supporting India's dam safety program. The project would continue to finance structural improvements but would break with the prevailing build-neglect-rebuild approach by giving greater emphasis to establishing sustainable mechanisms for financing regular O&M and dam rehabilitation, enhancing State capabilities to manage these critical assets through institutional strengthening, and introducing risk-informed dam safety management. The project development objective (PDO) is to increase the safety of selected dams in participating States and to strengthen dam safety management in India. Project Components include:

3. **Component 1: Rehabilitation and Improvement of Dams and Associated Appurtenances (US\$577.14 million, of which IBRD US\$409.10 million):** This component aims to reduce the likelihood and consequences of dam failure by improving dam safety planning, management and rehabilitation in selected dams. This component will support management, monitoring, and structural interventions. Preventative measures to reduce dam safety risk focused on management and monitoring will be prioritized. Structural interventions to improve dam safety will include rehabilitation of dam structures and appurtenances, with attention given to the need to minimize social and environmental impacts.

**Component 2: Dam Safety Institutional Strengthening (US\$45.74 million, of which IBRD US\$29.89 million):** This component will focus on (i) improving the efficiency of public financing, starting with the preparation of Public Expenditure Reviews (PERs) for all participating States/Agencies; and (ii) establishing financing arrangements for dam safety (e.g., dedicated budget lines). A study of potential sources of financing in the sector will be completed during implementation and will inform the activities under this component. This component aims to strengthen the capacities and institutional framework for dam owners, operators, agencies that have oversight of dam safety, and policy makers to identify and address dam safety risks. The component will support various activities to modernize institutions for dam safety. A major focus of activities under this component will be strengthening dam safety by developing dam safety guidelines and by enabling agencies that oversee dam safety to carry out their regulatory functions as per the Dam Safety Bill that has been passed by the Lok Sabha and is expected to be submitted to the Rajya Sabha. This component will – i) focus on strengthening dam safety research and development (R&D) capacity and on national and international knowledge sharing; ii) support a comprehensive

dam safety capacity building program for dam owners, operators, agencies overseeing dam safety, and policy makers based on a detailed institutional needs assessment; iii) address recruitment, retention, and advancement issues for women engineers in dam management by supporting specialized training for women engineers and the development of professional networks; iv) support dam safety institutions to develop education and communication capacity to raise awareness on dam safety issues and communicate dam safety risks to the public.

**Component 3: Incidental Revenue Generation for sustainable operation and maintenance of dams (US\$26.84 million, of which IBRD US\$19.03 million):** This component aims to increase the financing available for periodic dam safety needs and regular O&M. The identification of financing needs for dam safety will be achieved by improving asset management and dam risk assessment. Together, the asset management system and the risk assessment will identify long-term funding needs for the sector and trade-offs related to investment decisions. The component will also support developing more sustainable sources of funding through strengthened financing arrangements and revenue generation to improve the availability of funds for dam safety.

**Component 4: Project Management (US\$68.13 million, of which IBRD US\$40.73 million):** This component will ensure effective implementation of project activities and monitoring and evaluation of project implementation progress, outputs and outcomes. The component will support: (i) operations of the Central Project Management Unit (CPMU), which will oversee and coordinate activities of the Implementing Agencies (IAs) of the project, supported by an Engineering and Management Consultant (EMC), which is required to be in place within one year of project effectiveness;<sup>6</sup> (ii) operations of PMUs within IAs, which can hire experts in various fields on a contractual basis; (iii) setting up of a monitoring and evaluation (M&E) system; and (iv) establishment of a Quality Assurance and Quality Control system that is based on proportionate risk as defined in the Good Practice Note (GPN) / Technical Guidance Notes on Risk-Informed Dam Safety Management under the ESF. This component will also finance consultancies, as well as related material, office equipment and incremental operating costs. The project will provide investment and technical support for the establishment of a Management Information System (MIS) for the project.

**Component 5: Contingent Emergency Response Component (US\$0 million):** This component allows provision of immediate response to an Eligible Crisis or Emergency, as needed. For example, following an adverse natural event that causes a major natural disaster, the government may request the World Bank to re-allocate project funds to support response and reconstruction. This component will draw resources from the unallocated expenditure category and/or allow the government to request the World Bank to re-categorize and reallocate financing from other project components to partially cover emergency response and recovery costs. This component could also be used to channel additional funds should they become available as a result of the emergency.

4. The primary beneficiaries of the project are the communities that live in dam breach flood inundation areas and the communities that depend on water, irrigation and electricity services provided by the dams that could be compromised by poor dam performance or failure. In addition to saving lives, improved dam safety will avoid potential flood damage to houses, farm areas, infrastructure (roads, bridges, other public and private infrastructure) and industrial and commercial facilities. Improved dam safety will also reduce the likelihood of service interruptions due to dam failure as well as potentially improving dam service provision, overall efficiency and storage capacity, including during drought periods.

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<sup>6</sup>A technical consultancy is currently supporting CWC to implement DRIP-1 and AF. This technical consultancy will continue as the EMC for DRIP-2 until the EMC is in place.

### **1.3 Lessons learnt from implementation of ESMF in DRIP I and DRIP AF**

5. In the ongoing DRIP I and in the Additional financing Phase of DRIP-I, an ESMF approach was adopted to assess the environmental and social impacts of the interventions undertaken for each dam. Key learning included:
  - a) Monitoring of the Environmental and Social parameters as stipulated in the ESMF had not been upto the desired level of World Bank
  - b) State level IAs were not having designated nodal officials to manage E&S aspects, besides which periodic reporting on E&S aspects too was absent
  - c) Environmental, Social, Health and Safety (ESHS) monitoring was not upto the desired level;
  - d) Environmental and social monitoring capacity building was not very exhaustive. Very few trainings were conducted to augment capacity of staff with respect to provisions laid down in the ESMF and their application;
6. To ensure adequate attention of environmental and social safeguards on institutional side, during additional financing phase, it was ensured that CPMU and SPMUs were strengthened with dedicated, one or more specialists familiar with environmental and social issues and designated as EE (ESMF) will be appointed. This specialist would review screening forms, ESMPs, and other related documents, and monitor the compliance with the agreed documents. It was also ensured that work is not awarded before ESMP has been included in the bid document and is signed off by environmental and social designated staff at CPMU/SPMU. Reporting requirements were strengthened through standard progress reports about the compliance with the ESMF requirements.

However, despite these, E and S management system improvement remained a challenge.

### **1.4 Purpose of ESMF**

7. At the time of preparation of this ESMF, the details of sub projects and corresponding nature; type and extent of environmental and social impacts are known only for 10 dams in 2 states – Rajasthan and Manipur. However, such details for majority of the dams that are to be taken up under the project, shall be known only during project implementation. Accordingly, this Environmental and Social Management Framework (ESMF) has been developed to serve as an instrument to guide the Implementing Agencies on undertaking necessary E&S due diligence on each sub-project. Based on the ESDD findings accord a risk category (Low/Medium/Substantial/High) to each sub-project and undertake detailed ESIA's, if necessary, including the development of sub-project specific plans to meet the requirements of the relevant Bank Standards. ESMF provides overarching framework to manage environmental, social, health and safety (ESHS) issues associated with the implementation of sub-projects, during construction and operational phases.

### **1.5 Methodology for development of ESMF**

8. Since the World Bank ESF (Environment and Social Framework) requires greater focus on risk management. This ESMF is an update to the DRIP I and DRIP I AF ESMF, prepared as per previous safeguards policies. The methodology, herein, covers the lessons learnt from implementation challenges from earlier ESMF as well as the new requirements governed by the ESF and include the following:
  - a. consideration of the implementation experience of ESMF in DRIP I and AF (ref. para 5)
  - b. review of project components and sub-projects of DRIP II, including the new types of infrastructure proposed towards Additional revenue generation through a review of Project Screening Templates;
  - c. findings from the ESDD including screening and stakeholder consultations that were



- d. undertaken for the first set of 10 dams in the two states of Rajasthan and Manipur;
- d. analysis of overall E&S risks and impacts;
- e. assessment of current institutional capacity to manage E&S risks and impacts;
- f. consideration of requirements of the new ESF, particularly: Labor Management Procedure (ESS 2), Stakeholder Engagement Plan (ESS 10), Community health and safety management (ESS 4), and Pollution prevention and resources management measures (ESS 3) to meet the requirements of relevant ESS;
- g. existing national and state level legislations and guidelines – their provisions and requirements vis-à-vis ESF, 2016 and to identify gaps therein and address them;
- h. interactions and consultations with CPMU and SPMUs on the draft ESMF for soliciting views, suggestions, feedback and their incorporation towards finalizing the ESMF

In light of the COVID pandemic induced restrictions<sup>7</sup>towards stakeholder consultations, consultations on draft ESMF were carried out in a limited manner in accordance with the guidance available<sup>8</sup>.Consultations were held with the representatives of CWC and IAs, details of which are summarized in section 5.3 and Annexure 17.

## 1.6 Structure of the ESMF

9. The ESMF report is presented under the following chapters:

Chapter 1: Introduction that provides a background of the project; project description including components; lessons learnt from application of ESMF under DRIP I and DRIP AF; methodology adopted for preparation of ESMF for DRIP 2

Chapter 2: Policy, Legal and Regulatory Framework: It analyses all relevant legislations, their applicability; compares provisions and requirements with WB’ ESF policy and 10 ESS

Chapter 3: Environmental and Social Assessment of the overall project based on the assessment of risks and impacts of all types of sub-projects and sub-project activities and also based on E&S findings from the first set of 10 dams,

Chapter 4: Environmental and Social Management Framework describes the process that shall be adopted for each dam to identify the risk and impacts; accord a E&S risk category to each sub-project; identify necessary mitigation measures

Chapter 5: Stakeholder Consultations and Disclosure describes the consultations held thus far as towards development of ESMF

Chapter 6: Institutional arrangements describes the implementation, monitoring and grievance redressal arrangements including provisions outlined in the Environment and Social Commitment Plan(ESCP)

Annexures: Annexures comprise of Applicability analysis of National Policy, Legal and Regulations, World Bank Environmental and Social Framework Standards; ESDD and other templates; E&S Screening Process; Terms of Reference for ESIA and other studies; Standard ESMP (Appendix 1); Frameworks to meet the requirements for relevant ESS – GBV/SEAH Risk Mitigation, Occupational Health & Safety Management for Workers and Community, Pollution Prevention and Environment Quality Management, Resettlement Policy Framework, Biodiversity Conservation and Management, Tribal Development Framework Cultural Heritage Protection Plan; and TOCs for various assessments and plans; ESMF Consultations; Consultations at 10 sub project sites; Suggestive ToR for Nodal Officers.

<sup>7</sup>In light of the COVID pandemic, Government of India announced a country wide lockdown between March 25 to May 17, 2020, that constrained conducting face to face consultation meetings

<sup>8</sup> Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, March 2020

## 2. POLICY, LEGAL AND REGULATORY FRAMEWORK

### 2.1 Applicable National Policy, Rules and Regulations

10. India has well defined environmental and social regulatory framework. The regulation applicability depends on nature of work and location of work. Broadly legislation can be divided into four categories viz environmental, forests, wildlife conservation and social. The applicability analysis of regulations pertaining to all the above four categories was carried out. The regulatory applicability analysis to the proposed rehabilitation work has been carried out considering nature of improvements, methodology of construction/improvement, material requirement, sourcing and transportation mode, waste generation and the conditions of the receiving environment. Central Water Commission, Ministry of Jal Shakti, Government of India has prepared “Operational Procedures for Assessing and Managing Environmental Impacts in Existing Dam Projects” and is under publication as a guiding document for the dam owners to systematically address in advance the environmental safeguard requirements and have discussed in detail all applicable legal requirement. Reference has been drawn from this document as well, while carrying out applicability analysis. The regulatory applicability analysis is presented in detail in Annexure 1, Table A1.1
11. Water Act 1974, Air Act 1981, EP Act 1986, EIA Notification 2006, HW Rules 2016, Wild Life Protection Act 1972, Bio Diversity Act 2002, Forest (Conservation) Act 1980, Ancient Sites and Archeological Sites and Remains Act 1958, ST and other Tribes Forest Dwellers (Recognition of Forest Rights) Act, 2006, Fifth Schedule under Article 244 (i) of the Constitution, RFCTLARR Act 2013, Minimum Wages Act 1948, Child Labour (Prohibition & Regulation) Act 1986, Sexual Harassment of Women at the Work Place (Prevention, Prohibition and Redressal) Act 2013, Rights of Persons with Disabilities Act, 2016, Right to Information Act 2005 are some of the key E&S legislations relevant for the Project. Besides, many of the labor related laws that require adherence during construction would be applicable to the project as well as Employees Compensation Act 1923 (for compensation in case of injury, disease or death arising out of and during the course of employment); Payment of Gratuity Act (on satisfaction of certain conditions on separation if an employee has completed 5 years’ service; Maternity Benefit Act 1961 (provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.); Payment of Wages Act 1936 (lays down the mode, manner and by what date the wages are to be paid, what deductions can be made from the wages of the workers); Equal Remuneration Act 1976 (provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.). Child Labour (Prohibition & Regulation) Act 1986 (prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in the Building and Construction Industry. Bonded Labour System (Abolition) Act, 1976 (The Act provides for the abolition of bonded labour system with a view to preventing the economic and physical exploitation of weaker sections of society. Bonded labour covers all forms of forced labour, including that arising out of a loan, debt or advance).
12. The Dam Safety Bill 2019 establishing and empowering the institutional set-up for dam safety practices is currently under the process of enactment by Government of India.

### 2.2 Applicability of WB ESS

13. World Bank’s ESF comprising E&S policy and standards are relevant to identify, avoid and mitigate the potential negative environmental and social risks and enhance the effectiveness

of the positive impacts. Based on the: experience of DRIP 1 activities, the proposed activities under Component 2 on additional revenue generation and the ESDDs undertaken in the first set of 10 dams, ESS 1-8 and 10 are likely to be relevant depending on the proposed activities at each dam site. The extent of relevance of these standards would vary depending on nature of sub-projects and sub-project activities. Applicability analysis is presented at Annexure 1, Table A1.2.

### **2.3 Comparison of National legislation and Bank' ESF**

14. While the National regulatory framework is largely consistent and is complying with the ESF, certain gaps exist in - ESS2 relating to community workers, establishing a functional GRM for different types of workers, ESS 4 relating to community exposure to health, ESS 5 relating to identification of non-title holders as PAPs, R&R entitlements, ESS 7 relating to consent of tribal habitations outside of designated Schedule V and VI areas, ESS 10 relating to identification of vulnerable and disadvantaged for engagement in project consultations, establishment of GRMs. The gaps are being covered by suitable project specific framework instruments and implementation arrangements listed in this ESMF. The present set of structural interventions from PSTs and outcomes of ESDDs indicated that no additional statutory clearances are required for the Sub-projects, other than the operational clearances required to be taken from local authorities by the Contractor. Table 2.1 provides a comparison of the national Policy, Regulations and ESF duly highlighting the policy gaps and gap filling/redressal measures.

**Table 2.1: Comparison of National Policies, Regulations and ESF and Gap Filling Measures/ Redressal**

S. NO	ESS	Equivalent National Environmental Policy and Regulations	Policy Gaps vs ESS and gap filling (redressal) Measures
1	ESS1: Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> <li>• Environment Protection Act/Rules-1986</li> <li>• Environmental Impact Assessment Notification-2006, 14th Sep-2006, as amended in 2009 and 2013</li> </ul>	<p>ESS1 is applicable for all projects, sub-projects and Associated Facilities<sup>9</sup>. Gaps exist regarding assessments, consultations, monitoring and ESCP. The following additional measures are required:</p> <ul style="list-style-type: none"> <li>• Conduct an environmental and social assessment of the proposed project;</li> <li>• Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10;</li> <li>• Develop an ESCP, and implement all measures and actions set out in the legal agreement including the ESCP; and</li> <li>• Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs</li> </ul>
2	ESS2: Labour and Working Conditions	<ul style="list-style-type: none"> <li>• The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and the Building and Other Construction Workers Welfare Cess Act, 1996 (BOCWW Cess Act)</li> <li>• Contract Labour (Regulation &amp; Abolition) Act 1970,</li> <li>• Minimum Wages Act 1948, Payment of Wages Act 1936,</li> <li>• Child Labour (Prohibition &amp; Regulation) Act 1986,</li> <li>• Inter-State Migrant workmen's (Regulation of Employment &amp; Conditions of Service) Act 1979</li> <li>• Employees Compensation Act 1923</li> <li>• Payment of Gratuity Act 1972</li> <li>• Employees P.F. and Miscellaneous Provision Act 1952 (since amended)</li> <li>• Maternity Benefit Act 1961</li> <li>• Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act, 2013</li> <li>• Payment of Wages Act 1936</li> <li>• Equal Remuneration Act 1976</li> <li>• Payment of Bonus Act 1965</li> <li>• Industrial Disputes Act 1947</li> </ul>	<p>The National legal provisions almost cover all requirements in ESS2 except relating to community workers and a functional GRM for different types of workers.</p> <p>Hence, an overall project level Labour Management Procedure will be prepared to cover above requirements. The project specific OHS management plan will use appropriate good international practices/standards (such as WBG EHS guidelines, ILO standards, International Tunnelling Association standards) which will be followed in conjunction with requirements defined under various Indian legislations.</p>

<sup>9</sup>Ref para 11, ESS1, ESF 2016

S. NO	ESS	Equivalent National Environmental Policy and Regulations	Policy Gaps vs ESS and gap filling (redressal) Measures
		<ul style="list-style-type: none"> <li>• Trade Unions Act 1926</li> <li>• Inter-State Migrant workmen’s (Regulation of Employment &amp; Conditions of Service) Act 1979</li> <li>• Factories Act 1948</li> <li>• Bonded Labour System (Abolition) Act, 1976</li> <li>• Employer’s Liability Act, 1938</li> <li>• Employees State Insurance Act 1948</li> <li>• The Personal Injuries (Compensation Insurance) Act, 1963</li> <li>• Industrial Employment (Standing Order) Act 1946</li> </ul>	
3	ESS3: Resource Efficiency, Pollution Prevention and Management	<ul style="list-style-type: none"> <li>• Environmental protection Act, 1986 and Rules with amendments till date</li> <li>• Air (Prevention and Control of Pollution) Act, 1981, 1987;</li> <li>• Water (Prevention and Control of Pollution) Act, 1974, 1988;</li> <li>• Noise Pollution (Regulation and Control Act) 2000 and amendment till date</li> <li>• Notification for use of fly ash, 2003 and MoEF&amp;CC notification dated 25th March 2015</li> <li>• Municipal Solid Waste (Management &amp; Handling) Rules, 2000 (MSW Rules)</li> <li>• Hazardous &amp; Other Waste (Management and Trans-boundary Movement) Rules, 2016</li> <li>• Manufacture Storage, &amp; import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended till date</li> <li>• Batteries (Management and Handling) Rules, 2001</li> <li>• The E-Waste (Management) Rules, 2016,</li> <li>• Plastic waste Management Rules, 2016</li> <li>• Construction &amp; Demolition, Waste Management Rules, 2016</li> <li>• Solid Waste Management Rules, 2016</li> <li>• Motor Vehicle Act 1988 and amendment till date</li> <li>• Rajasthan Minor, Mineral Concession Rules, 2017</li> </ul>	<p>The majority of ESS3 requirements are addressed by existing regulations and indirectly for resource efficiency, pollution prevention and management aspects. Further, provisions need to be made to commensurate mitigation measures as:</p> <ul style="list-style-type: none"> <li>• To assess the resource requirement and implement technically and financially feasible measures for improving efficient consumption of energy, water and raw materials, as well as other resources.</li> <li>• Preparation of Resource Efficiency and Pollution Prevention Plan to assess and minimize/control the concentration of release of pollutants to air, water and land due to routine and non-routine circumstances, and with the potential for local and regional impacts.</li> </ul>
4	ESS 4: Community Health and Safety	<ul style="list-style-type: none"> <li>• Air (Prevention and Control of Pollution) Act, 1981;</li> <li>• Water (Prevention and Control of Pollution) Act, 1974, for Pollution- Prevention-and-Management;</li> <li>• The Noise Pollution (Regulation And Control) Rules, 2000</li> <li>• Guide Lines on Traffic Management in Work Zones IRC:SP:55 – 2014,</li> <li>• Municipal Solid Waste (Management &amp;</li> </ul>	<p>While Acts cover for all of ESS 2 and ESS 4 requirements, gaps exist for community - community exposure to health issues.</p> <p>The gaps need to be addressed through suitable provisions in ESMP. Also, contractor obligation as part of ESMP for Community health and safety to include need for Influx management Plan, , Traffic and road safety management Plan. ESMP shall address Dam</p>

S. NO	ESS	Equivalent National Environmental Policy and Regulations	Policy Gaps vs ESS and gap filling (redressal) Measures
		<p>Handling) Rules, 2000 (MSW Rules)</p> <ul style="list-style-type: none"> <li>• The Gas Cylinder Rules 2016</li> <li>• Manufacture, Storage, Import and handling of Hazardous Chemicals Rules 2000 (MSIHC)</li> <li>• Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008.</li> <li>• Construction &amp; Demolition, Waste Management Rules, 2016</li> </ul>	<p>Safety and Security Personnel issue as per findings of ESDD.</p>
5	ESS 5: Land Acquisition, Restrictions on Land use and Involuntary Resettlement	<ul style="list-style-type: none"> <li>• The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013</li> </ul>	<p>Gap exists specifically related to aspects such as identification of non-titleholders as PAPs; cut off dates for non-titleholders and valuation of structures with depreciation. The gaps are addressed with suitable provisions in RPF (See Annexure 10).</p>
6	ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural resources	<ul style="list-style-type: none"> <li>• Biological Diversity Act, 2002,</li> <li>• Wildlife Protection Act 1972 (WLPA),</li> <li>• The Forest (Conservation) Act, 1980 and amendments and The Forest (conservation) Rules 1981 and amendments</li> <li>• State Forest Acts,</li> </ul>	<p>Provisions from the acts meet the ESS 6 requirements such as maintaining the ecological function of habitats (natural, critical) including forests and biodiversity they support (terrestrial, fresh water and marine biodiversity), sustainable management of forest produce and protection of right of people depended on forests and wildlife areas.</p> <p>Which includes preparation of Biodiversity Conservation Plan and offsetting any loss if at all for protected area @ twice the loss area.</p> <p>Biodiversity Management Plan will be prepared as part of ESMP if conservation reserve/ other applicable sensitive facilities are in vicinity or has an interface. The dos and don'ts shall be prepared as part of this biodiversity plan meeting requirement of WB ESS6 and Indian legislation.</p>
7	ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Tradition Local Communities	<ul style="list-style-type: none"> <li>• Article 366 (25) of the Constitution of India</li> <li>• Article 244(1) of Constitution of India - The Fifth Schedule under Article 244(1) of a subsequent Act of Constitution "Scheduled Areas" as such areas as the President may by order declare to be Scheduled Areas after consultation with Governor of that State.</li> <li>• Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006</li> <li>• Panchayats (Extension to the Scheduled Areas) Act, 1996</li> </ul>	<p>While PESA Act requires clear communities acceptance vide a Gram Sabha resolution on the proposed activity with a pre-defined quorum of participation, ESS 7 requires ascertaining Free Prior and Informed Consent under three circumstances – impacts on land, cultural heritage and if requiring relocation. FPIC does not require unanimity and may be achieved even when individuals or groups within Indigenous Peoples/groups explicitly disagree. Hence, in such cases both Gram Sabha resolution and FPIC under these three circumstances will be required.</p>
8	ESS 8: Cultural Heritage	<ul style="list-style-type: none"> <li>• Ancient Monuments and Archaeological Sites and Remains Act, 1958</li> </ul>	<p>Provisions from the act meets the ESS 8 requirements. However intangible cultural heritage aspects will be addressed under ESMP where applicable</p>

S. NO	ESS	Equivalent National Environmental Policy and Regulations	Policy Gaps vs ESS and gap filling (redressal) Measures
			Applicable only if any of the sub project directly or indirectly impacting any cultural heritage.
9	ESS 9: Financial Intermediaries	Not relevant	
10	ESS 10: Stakeholder Engagement and Information Disclosure	<ul style="list-style-type: none"> <li>• Environmental Impact Assessment Notification-2006, 14th Sep-2006, as amended in 2009 and 2013</li> <li>• Right to information Act 2005</li> </ul>	There is a provision of public hearing in EIA notification and also RFCTLARR Act 2013 mandates consultations with affected persons. However, the statutory process does not require preparation of a SEP or equivalent document as well as conducting meaningful consultations and information disclosure, that is accessible to all stakeholders. Measures to address the gap include – preparation of SEF and SEP wherein process of stakeholder consultations with all stakeholders – affected, other interested and physically disadvantaged and vulnerable groups who will be identified and engaged by the project; information disclosure that will take place on project activities/developments and feedback sought; and GRM mechanism that shall be put in place for the entire project, are described in detail.

### 3. ASSESSMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

15. As per the scope of the DRIP-II project, the project is likely to cover many states and agencies in different states of India, located in mountainous, flat and coastal terrain area of the country. The project areas vary from - mountainous areas which are in seismologically high active zone and are rich in biodiversity; coastal areas which are rich in terrestrial and aquatic ecology; Plain areas having large habitations; forest areas prone to flood and scheduled V & VI areas having dominant tribal population. Most of the potential participating states have tribal population and some of these states namely Andhra Pradesh, Chhattisgarh, Gujarat, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telangana have Fifth Schedule Area, while the state of Meghalaya has Schedule VI areas. Such areas have preponderance of tribal population. Nearly 60% of the population are engaged in primary occupation, while approximately 17% are engaged in secondary and around 23% are engaged in tertiary sectors. States such as Rajasthan, Uttar Pradesh and Chhattisgarh have high levels of poverty. Besides, there are large sections of population in coastal areas in states of Odisha, Andhra Pradesh that have faced extreme climate events in the recent years and are very vulnerable. The Government of India has handled very effectively recently few severe cyclones like Fani (2019) as compared to super cyclone of Odisha (1999) due to risk based decision in disaster management. Since DRIP Phase II is the continuation of ongoing DRIP Phase I, almost all activities are similar to activities implanted in DRIP Phase I except one new Component 3 introduced in new Scheme which is taken as pilot activities, wherein very few dams would be covered under this Component. Also, through DRIP Phase I, introduction of stakeholder consultation meetings to sensitize the concerned habitation about consequences of dam failure is an effort in the same direction to create greater disaster resilience.
16. This ESMF is a framework document covering the whole project and some aspects of this project-level ESMF have been informed by the ESDD studies and outcomes. The presents in this chapter are intended to be used as a guidance by IAs for preparing ESDD/ESIAs for their respective sub projects employing the screening templates. The process of assessment of environmental risks and impacts is prepared based on the sub-project's activities comprising structural and non-structural interventions and also those proposed sub-projects towards additional revenue generation.

#### 3.1 Summary of E&S risks and impacts in the first 10 dams

17. Environment and Social Due Diligence (ESDD) assessments were conducted for the 10 dams in the States of Rajasthan and Manipur that have been accepted for financing under the project. The ESSDs found that this dam investments/sub T projects have low to moderate risks. The proposed structural works largely relate to minor civil works, electro-mechanical work, and instrumentation confined to the existing dams compound. Other activities include rehabilitation of existing approach roads, construction of drains, repair of barrage roads, fencing, etc., for which encumbrance free land is available with the respective IAs. The ESDD assessments found that the type of rehabilitation activities proposed under the dam investments/sub-projects are concentrated within the dam area and impacts are also localized. No direct impact due to rehabilitation and improvement activities, is expected. None of the dams are in protected areas. Two dams (Bisalpur and Jawai Dam) are close to conservation areas. None of the dam rehabilitation activities are expected to impact any significant natural habitation. Impacts expected at the construction stage can be managed appropriately with construction stage guidelines on camp site management, debris disposal management, and monitoring occupational health and safety aspects. Fishing activities are prevalent in some of



the dams, but interventions will not directly or indirectly impact the livelihoods of fisher people. In Rajasthan, two of the eight dams are located within Schedule V areas (areas constitutionally designated for tribal groups).

18. The ESDD assessments indicate that land for these interventions is available with the respective IA and that there will be only construction stage impacts. Skilled migrant labor is likely but expected to be limited (e.g., 30-50 people). Stakeholder consultations found that key vulnerable and disadvantaged groups are marginal farmers and Scheduled Tribe households in downstream areas. Dam safety interventions will provide direct benefits to downstream communities in flood inundation areas through the reduced likelihood of dam breach and consequences of catastrophic flooding events due to dam failure or uncontrolled releases of water. Non-structural interventions, such as flood warning systems and EAPs, will also reduce the vulnerability of downstream communities.
19. The outcome of this assessment exercise was used to further refine risk assessment approach included in Chapter 4.

### **3.2 Overall Project E and S Risks and Impacts Identified by each ESS**

20. The environmental and social risk rating for the Project as a whole has been rated as High, because DRIP-II is expected to cover many existing dams across various States in India with varying geographical conditions and environmental and social sensitivities. The nature of activities known at appraisal stage in the DRIP-II project are similar to the ongoing DRIP-I project and involve structural and/or non-structural measures for ensuring dam rehabilitation. Component 3 will explore piloting of alternative sources of revenue generation, such as tourism, floating solar panels, etc. These pilot activities are currently not known and environmental and social impacts and risks will need to be assessed when they are identified. Additionally, the capacity of implementing agencies, i.e., the Central Water Commission, participating States and other Central dam owning agencies, requires significant capacity building efforts. Anticipated E&S risks and impacts by each standard are presented below:
21. **E&S risks relating to ESS 1:** E&S risks and impacts relating to three categories: i) SEA/SH or GBV risks due to migrant labor; ii) Disadvantaged and vulnerable households and iii) disabled or physically challenged are described below:
  - i) GBV risks assessment has been carried out using the risk assessment tool and the risk rating is low. Even though influx of skilled migrant labor in construction works is likely, these will be few in numbers – around 30 to 50 labor, who will mostly operate within the dam premises which is a restricted access zone and away from habitations.
  - ii) In respect of E&S risks on disadvantaged and vulnerable households the following are defined under the project include: ST, family/household headed by women/female, physically challenged, Below Poverty Line (BPL) and illiterate persons/households, landless and marginal farmers, Scheduled Caste households. While, these groups are likely to experience impacts similar to other general category households but because of physical (e.g. physically challenged) and socio-economic conditions, project would need to provide them with additional assistances, measures and proactively reach out to them to mitigate these impacts and also benefit from the project opportunities.
  - iii) E&S risks on the Disabled or physically challenged is mainly due to access issues to various buildings or offices such as IA offices or tourist spots and this will require to be factored in while designing various sub-project activities e.g. refurbishment or renovation of existing offices.

22. **E&S risks relating to ESS 2 – Labor and Working Conditions:** Based on the proposed execution strategies for all types of proposed sub-projects, the following categories of project workers are identified:
- i) Direct workers – all the existing dam site officials including those sent on deputation from other departments involved in the project activities;
  - ii) Contracted workers - all IAs would engage Contractors to undertake rehabilitation works; agencies/firms to support core service functions such as SCADA systems, etc. These contractors shall bring very limited number of skilled Migrant workers for some of more specialized tasks; and
  - iii) Community workers (or volunteers particularly for EAP).

23. **Influx** of migrant labor will be low as these works require only few e.g. 30-40 but very skilled labor. Also, these workers will mostly operate from labor camps within the dam premises and hence there would be minimal interface with communities and therefore significantly lower SEAH/GBV risks. Labor related risk would include:

- Safety issues while at work like injuries/accidents/ fatalities leading to even death, while at work; Occupational health and safety risks due to exposure of workers to unsafe conditions while working at heights, working using lifts, handling of equipment and machinery, exposure to air and noise pollution etc. will be addressed through OHS guidelines.
- Short terms effects due to exposure to dust and noise levels, while at work
- Long term effects on life due to exposure to chemical /hazardous wastes
- Inadequate accommodation facilities at work force camps, including inadequate sanitation and health facilities
- Non-payment of wages
- Discrimination in Employment (e.g. abrupt termination of the employment, working conditions, wages or benefits etc.)
- Sexual harassment at work
- Absence or inadequate or inaccessible emergency response system for rescue of labour/workforce in situations of natural calamities.
- Health risks of labour relating to HIV/AIDS and other sexually transmitted diseases

In addition, other risks that would be applicable for all types of workers would be as follows:

- Unclear terms and conditions of employment
- Discrimination and denial of equal opportunity in hiring and promotions/incentives/training opportunities
- Denial for workers’ rights to form worker’s organizations, etc.
- Absence of a grievance mechanism for labour to seek redressal of their grievances/issues
- No impacts are envisaged on cultural heritage as works shall not be undertaken in their vicinity or result in any impact.

24. **E&S risks relating to ESS 3 – Resource Efficiency and Pollution Prevention and Management:** Various natural resources such as water, sand, gravels, earth and chemical compounds may be required for different dam rehabilitation activities and access road constructions. Optimal use of these resources will be essential with the use of best construction practices and reuse of construction/demolition waste. Commitment for optimal use of resources and adoption of guidelines for optimal use of required resources following the principle 3R (recycle, recovery, reuse) principle of pollution prevention is to be ensured. In addition to resource efficiency measures, use of technicality and financially feasible and cost-effective options will be promoted as part of mitigation measures to avoid or minimize project related air emissions, and effective management of solid and hazardous waste. Dams have land areas and large water storages. Sustainable use of dam resources shall be explored for renewable energy generation and income generation activities. Thus, potential of solar

power generation shall be assessed, and efforts shall be made to implement such sub projects which will also contribute, indirectly, in reduction of GHG emissions. In addition to ESF, the World Bank Group Environmental Health & Safety Guidelines will also be taken care in the project through ESMP preparations – Standard ESMP, which will be updated by respective IAs depending on project specific activities - for low to moderate and specific ESIA and ESMP for each substantial to High sub projects. The project will ensure cleaner production principles for the proposed activities. Such a Plan document shall be prepared and included as part of the ESDD/ESIA reports. These shall be prepared by the respective IA with support of ESIA consultants; disclosed by the IA on its website and other accessible location. ESMP will be developed prior to issuance of the bids and will also be included in the bid documents of each sub projects. Such requirement is stated as a requirement in the ESCP – which will be signed by all IAs participating in the project

25. **E&S risks relating to ESS 4 – Community Health and Safety:** Dam safety is intrinsic part of the project. Natural hazards, such as earthquake, cyclones / landslides/debris flow, etc. do exist in many sub project areas. Potential risk of accident and incidence do exist during rehabilitation/construction and operation stages of the project as in today. Dam safety assessments will be undertaken conforming to ESS4 by the DSRP and as per the Guidelines for Safety Inspection of Dams (CWC, January 2018) early in the project preparation as basis for identifying / assessing remedial measures. While doing so, Good Practice Note (GPN) on Dams Safety (The World Bank,2020) may also be referred. Assessments will also bear on and will include individual dam inspection by State specific Dam Safety Review Panels by partner agencies early in the project preparation as basis for identifying / assessing remedial measures both in structural and non-structural aspects, and preparing the design / construction plan of dam rehabilitation and safety improvement works as well as dam safety plans. As these dam safety related reports are highly technical ones involving safety and security related information, they will be prepared as separate documents from ESDD/ESIAs. Whilst dams are designed against extreme natural hazards, such as Probable Maximum Flood, Maximum Credible Earthquake, etc., possibility of unforeseeable extreme events occurrence beyond design standards cannot be ruled out. The resilience enhancement measures including consideration of likely effect of climate changes for dam rehabilitation /enhancement works and structural / operational modifications can minimize such probability to a larger extent as elaborated in the aforementioned GPN.
26. Though not envisaged as part of the current known interventions, the larger construction activity such as additional spillway construction may have risk to ecosystem services which may have results in adverse health and safety risk to depended community. ESIA for each such sub project or dam shall be made including effect of climate change and mitigation measures; to eliminate or minimize such impacts and a comprehensive ESMP shall be prepared. Various measures for protection of occupational health and safety are defined under DRIP I. Emphasis will be given in designation of environment and occupational health and safety officers at sub project and strengthening their capacity through workshops and training programmes and exposure visits so that all personnel at worksite (including all managers) have clearly understood their responsibilities and ensure OHS plans are properly implemented. It will also be ensured that dam safety assessments as well as design and construction supervision of rehabilitation / safety enhancement works should be undertaken by qualified experts. A set of required investigation, survey and analyses should be covered for proper safety assessment and design of remedial works. The risk assessment should also be undertaken in a commensurate manner with potential risk of dams (failure likelihood of exiting dams and downstream hazard/consequence in case of failure and/or uncontrolled release of water) and complexity of remedial works. Such assessments should be carried out covering hydrological, geological/geo-technical, seismic, and other operational risks in a comprehensive manner. The results of dam safety /risk assessment as well as adequacy of

proposed remedial works and quality of construction works should be periodically reviewed by independent Dam Safety Review Panels to be established by the participating States and other Implementing agencies. The DSRP TORs and qualification of members have been reviewed and considered adequate (to be done for appraisal). Also, dam safety plans should be prepared including: (i) plan for construction supervision and quality assurance, (ii) instrumentation plan (iii) operation and maintenance plan (iv) emergency preparedness plan. The dam sites will ensure security and safety personnel. The plan for construction supervision and quality assurance, preliminary operation & maintenance plan, and framework plan for emergency preparedness along with the estimated budget have been prepared in a satisfactory manner. The instrumentation plan is to be incorporated into the detailed design and bidding documents. The upgraded O&M plans and EPP will be completed during the early phase of project implementation period. Labour involvement for works and their stay at site is for a period ranging from some months to about 3 years. Labour intensive work always involves risks of accidents such as working at heights, working on upstream body of dam, underground activities, etc. The project is likely to involve direct labor, contract labor and community workers. Labor Management Procedure (LMP) and Community Health Management Plan shall be prepared as part of ESMP and will be included for all sub projects. Template (ToC) of such Plan document shall be prepared and included as part of the ESDD/ESIA reports. These shall be prepared by the respective IA with support of ESIA consultants. This document shall also be available in the office of engineer in charge of the respective dam. These documents shall be disclosed/disseminated through other appropriate means like various Project meetings, workshops etc. ESMP will be developed prior to issuance of the bids and will also be included in the bid documents of each sub projects. Such requirement will be stated as a requirement in the ESCP – that shall be signed by all IAs participating in the project. Commitment shall be taken from borrowers as part of ESCP for protection of health and safety of workers/community, traffic/road safety, safe management of hazardous materials, allocation of adequate resources for implementation of proposed protection measures and all-time emergency preparedness and response.

27. **E&S risks relating to ESS 5 – Land Acquisition, Restrictions on Land Use and Involuntary Resettlement:** The proposed interventions are limited to the existing dam compounds and will take place on the existing dam structure and/or within its premises and therefore none of the proposed activities/interventions, involve acquisition of private land and/or private assets; in no way cause restriction on access to land or use of resources by local communities; and there is no economic displacement. There might be temporary impacts such as disruption to vehicular movement during construction and might result in temporary inconvenience, but do not involve disruption or loss of access to assets by communities. The activities related to solar power generation will be limited to dam compound only with land in government possession. However, rehabilitation proposals involving major construction activities e.g. Additional Spillway creation or permanent structures for tourism, etc., are likely to come up during project implementation, i.e. in as yet un-identified subprojects. Such activities, if taken up, might result in the following adverse impacts:

**Pre-construction stage**

- Loss of fertile agricultural and/or residential land;
- loss of structures used for residential, commercial and other purposes and associated loss of livelihood i.e., loss of livelihood due to impacts on sources of earning;
- impacts on owners/ titleholders, tenants, cultivators, non-titleholders (encroachers, squatters)
- Loss of other properties and assets such as boundary walls, ponds etc.;
- Impacts on common property resources such as religious shrines/structures, school building, health centres, water resources (hand pumps), grazing lands, etc.

- Temporary or permanent disruption to livelihood, particularly to petty shop owners, squatters and encroachers;

**Construction stage**

- Temporary – short duration or prolonged disruption to services such as water supply, power
- Disruption to traffic movement leading to time delays;
- differential impacts on vulnerable and disadvantaged population such as constraining their access, movement;
- Dust emissions during construction leading to impacts on crops and trees resulting in lower yield or growth;

28. **E&S risks relating to ESS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources:** Most of dams has rich biodiversity around it. Some of these dams may be located close to reserve forest areas or protected areas. Construction of larger structures like spillway may lead to cutting of larger number of fully-grown trees and/or diversion of forest area and changes in water flow may have impacts on aquatic ecosystems. Meaning it may have high risk to ecosystem service and needs to be adequately addressed through appropriate avoidance, minimization or mitigation and compensatory measures.
29. The temporary bio-diversity related risks can be mitigated using construction stage Bio-diversity Management guidelines. All the risks and impacts relevant to ESS6 will be assessed as part of the ESDD/ ESIA and as per the procedures laid down in the ESMF of the Project. The mitigation hierarchy will be applied to manage E&S risks and impacts and ESMPs shall be prepared. If required, a separate Biodiversity conservation and Management Plan (BCMP) will be prepared. Template for such a Plan document shall be prepared and included as part of the ESDD/ESIA reports. These shall be prepared by the respective IA with support of ESIA consultants; disclosed by the IA on its website and other accessible locations. Preparation of such a document prior to commencement of construction shall be stated as a requirement in the ESCP – that shall be signed by all IAs participating in the project.
30. **E&S risks relating to ESS 7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities:** Under this ESS, the term “Indigenous Peoples/Sub- Saharan African Historically Underserved Traditional Local Communities” (or Scheduled Tribes) refers exclusively to a distinct social and cultural group possessing the following characteristics in varying degrees:
- a) Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others; and
  - b) Collective attachment to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation, as well as to the natural resources in these areas; and
  - c) Customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture; and
  - d) A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.
31. The project is likely to cover many dams across many states in the country. Of these states, many have significant amount of tribal population such as Odisha, Chhattisgarh, Madhya Pradesh, Meghalaya, West Bengal, etc. Many of these states also have areas that are declared as Schedule V and VI areas as defined by the Constitution.
32. In terms of positive impacts, even though some of the dams are located in Schedule V areas and also many others are likely to be having communities in the vicinity that may be

characterized as **Indigenous** persons<sup>10</sup>. The proposed structural rehabilitation works are being carried out on the existing dam structure and within dam premises and not leading to any new infrastructure. The non-structural interventions such as early flood warning system and EAP, would be taken up in midst of tribal population groups. The tribal households will be indirectly and positively benefited by the dam safety interventions proposed for each sub-project Dam as these will help improve the overall safety of the dams. In addition, under Component 3 – Additional Revenue Generation, Tribal households may also benefit from the work/income generation opportunities relating to tourism works, water recreation activities, motor boats, fishing, solar power/floating solar etc.

33. In terms of potential adverse impacts, the proposed structural interventions under Component 1 of the project largely are rehabilitation works that are being carried out on the dam structure or within the dam premises and on land available with the dam authorities. As per the details available so far, none of the proposed activities/interventions, involve acquisition of private land and/or private assets. These activities in no way cause restriction on access to land or use of resources by local communities and there is no economic displacement envisaged due to the sub-project. However, there are many dams that would be taken up under the project– locations of which and activities proposed therein, are not known at present and will be known only during project implementation. Besides, these dams too would have tourism, water recreation activities proposed and might result in adverse impacts on tribal households and in a few cases, possibly involve adverse impacts on land and natural resources, cause relocation, and/or have significant impacts on their cultural heritage, resulting in the obtain Free Prior and Informed Consent (FPIC). Non-structural interventions such as preparation and implementation of EAP and early flood warning systems will involve consultation with variety of stakeholders including tribal groups, living in the vicinity of the dam and would need to be consulted and informed in culturally appropriate approach – language, techniques that are familiar to them.
34. **E&S risks relating to ESS 8 – Cultural Heritage:** The project is rehabilitating existing dams thus envisaging low risks and impacts to cultural heritage at this stage. However, possibility of chance find will be included for construction activities. Appropriate provision and measures shall be made under Environment and Social Management Plan and contractor’s contract to deal with chance find and its recovery and preservation. If any such cultural heritage is identified, a cultural heritage management plan shall be developed.

### 3.3 Institutional Assessment

35. As part of project preparation, institutional assessment was carried out - aspects examined included: the current institutional structure to deal with rehabilitation of dams and associated E&S issues; current levels and modes of engagement with communities living in the vicinity/downstream on dam related developments, water discharge, flood warning, particularly in light of proposed activities relating to additional revenue generation (e.g. tourism, floating solar, water recreation activities); availability and access to grievance redressal mechanisms for communities to seek redressal, etc. ESDD will present the institutional assessment outcome for each sub project.
36. Assessment indicated that CWC and some of the states (Kerala, Karnataka, Tamil Nadu, Odisha, Madhya Pradesh, Uttarakhand) that participated in DRIP 1 project and hence are familiar with the World Bank’s environmental and social safeguard policies and related requirements. However, within Central Water Commission, (CWC), and IAs, capacity building towards management of E&S issues need to be continuously improved during

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<sup>10</sup> As per the characteristics outlined in ESS 7

implementation. Also, for other agencies similar kind of follow up is would be required. The institutional assessments that is undertaken as part of ESDDs for other agencies which are in very advanced stage could not be completed due to unexpected lock down due to global COVID-19 pandemic, and CWC is taking lead up to Appraisal stage to carry out ESDD for all IAs to meet the preparedness criteria.

37. During project implementation stage, each IA will carry out their activity individually. No in-house staff personnel with requisite skills or experience are available. Presently, Chief Engineer at SPMU and Executive Engineer at dam level look after these aspects. Presently, no formal system is established for dealing with external complaint or a formal GRM. There is no internal complaint committee as per Sexual Harassment Act either at dam level or SPMU level, however, such complaints can be made to the head of the department. However, in case of CWC, an Engineering and Management Consultant firm contracted under DRIP 1 continues to provide support on E&S issues. Preparation and implementation of various plans given the low capacity of implementing agencies remains a challenge and therefore Contracting/hiring of E&S staff at each IA; support on E&S issues by the EMC and continuous capacity building activities would be needed. Such actions will need to be stated as key E&S commitments in the ESCP that will be signed by each IA. At the time of Appraisal, all 17 IAs have designated a Nodal E&S officer.

## 4. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

38. Environmental and Social Management Framework (ESMF) is a tool for use by a project proponent to identify and address the potential environmental and social concerns or impacts of a project across all stages from planning stage to its implementation and post-implementation operations. Keeping this in view, the present ESMF has been developed for use by all IAs while undertaking rehabilitation and strengthening works of dams. A step-by-step methodology has been provided that can be followed along with engineering and institutional interventions required for the sub-project activities. In development of the ESMF, a standard list of activities & E&S Risks and impacts, identified from the Project Screening Templates of the 10 dams in Rajasthan and Manipur were developed<sup>11</sup> which would be generally applicable to all sub-projects under the DRIP. Under the ESF, ESS1 is the overarching ESS, which shall be used to determine the relevance of each of the ESS 2-8 and ESS 10, based on the above identified standard list of activities.

### 4.1 Application of ESMF

39. ESMF will be applied to the overall project through a two-stage process as described below
- ◆ Stage I: Undertaking Environmental and Social Due Diligence Assessment of all sub-project Dams using E&S scoping and screening checklists to identify E&S risks and impacts and determine risk category of the overall project (L/M/S/H)
  - ◆ Stage II: Based on risk category, update Standard ESMP (See Appendix 1) depending on sub project specific activities for L/M risk sub-projects or conduct detailed ESIA for substantial or high risk projects. i.e.,
    - if risk category is L or M prepare ESMP including mitigation plans for the relevant ESS applicable to the dam by duly updating the Standard ESMP.
    - if risk category is S or H<sup>12</sup>, conduct detailed ESIA as per agreed Terms of Reference (TORs) and prepare ESMP including mitigation instruments as per relevant ESS applicable to the dam.

ESMF application by stage is described below. Application of ESMF to Sub-project life cycle is presented in Figure 4.1

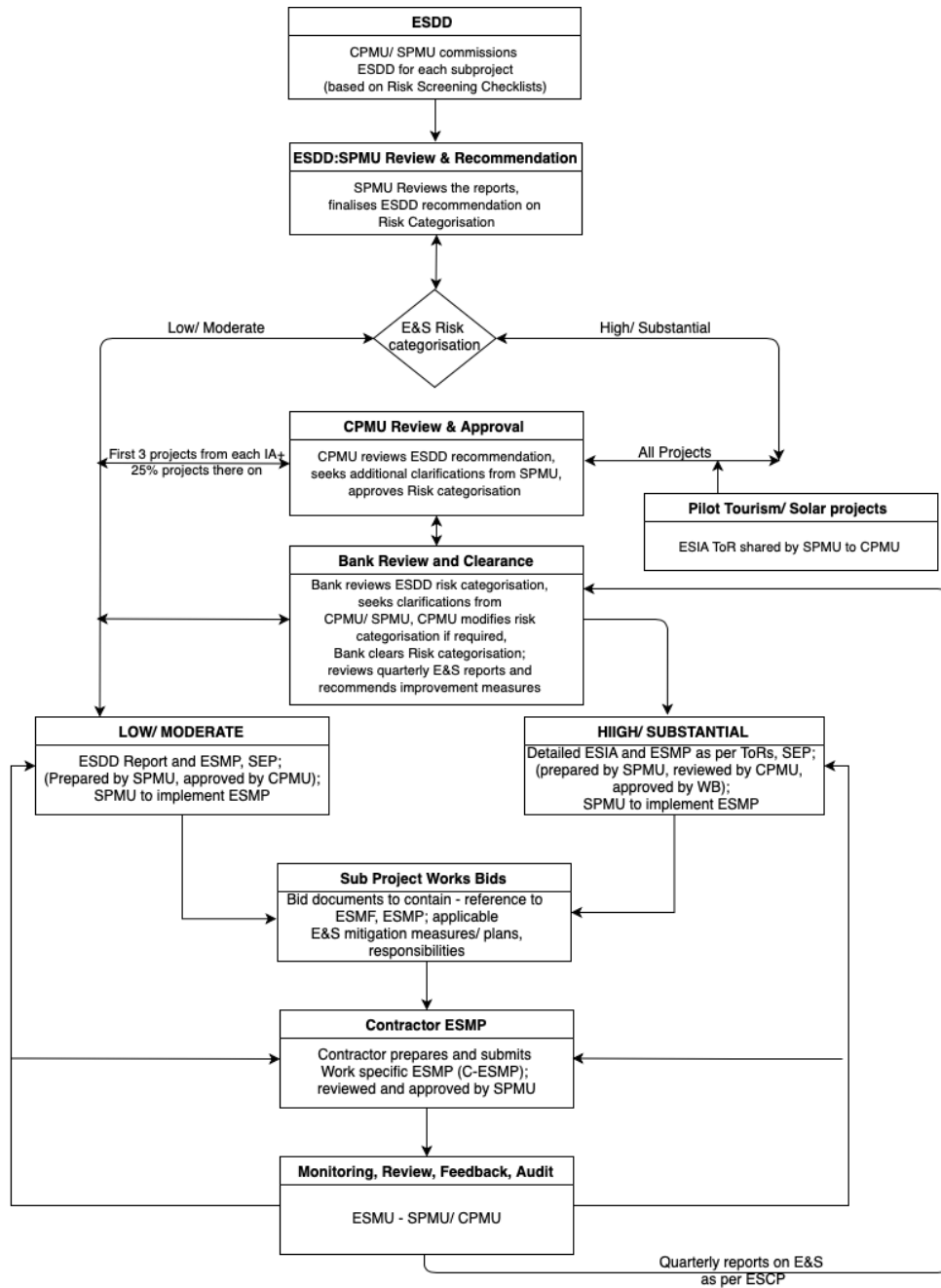
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<sup>11</sup>Outcomes of ESDD of 10 dams is placed at Annexure 4.

<sup>12</sup> Examples where sub projects may get classified as Substantial or High are – interventions include additional spillway construction requiring land acquisition, , interventions triggering a High/substantial GBV risk, consisting of factors outside project control impacting ES performance and outcomes such as complex existing legacy issues (R&R, interim/ final directions issued in interstate disputes) which may trigger High/substantial risks as per ESS, implementation and enforcement arrangements are weak, interventions leading to adverse impacts on IPs, natural habitats etc.



Figure 4.1: Application of ESMF to sub-project cycle (preparation, implementation and monitoring)



ESMF includes Frameworks to meet the requirements for relevant ESS – GBV Risk Mitigation Framework (ESS1), Occupational Health and Safety (ESS2), Resource Management Plan (ESS3), (ESS4), Resettlement Policy Framework (ESS5), Bio-Diversity Conservation and Management Plan (ESS6), Tribal Development framework (ESS7). (Stakeholder Engagement Framework (ESS10) is prepared separately).

ESMP includes Resettlement Action Plan, Tribal Development Plan, Stakeholder Engagement Plan, Labor Management Procedure, Community Health Safety Management Plan, Bio Diversity Conservation and Management Plan, Cultural Heritage Management Plan, Construction Debris and Solid Waste Management Plan, Pollution Prevention and Environmental Quality Management Plan

## 4.2 Stage I: Environmental and Social Due Diligence Assessment

40. The ESDD assessment would be undertaken for each dam sub-project comprising all structural, non-structural interventions and other tourism/water recreation/floating solar interventions.
41. **Approach to ESDD assessment:** ESDD would be prepared by: study of sub-project information, proposed interventions, their magnitude and locations; assessing the relevance and applicability of laws, regulations and procedures for assessment including WB ESS requirements, development and implementation plans of the projects; understanding baseline environment and social settings, institutional assessment to identify existing capacities & relevant gaps to manage E&S risks and impacts; conducting preliminary stakeholder consultations to help identify potential stakeholders and potential concerns and issues; carrying out activity wise environment and social screening and identify risks and impacts and to classify the sub-project based on risk level (low, moderate or substantial and high) and finally, presenting conclusion on risk category, need for the detailed ESIA and recommendations for ESMP.
42. **ESDD Process:** The ESDD would be undertaken using project screening templates given at Annexure 3 to identify nature and extent of E&S risks and impacts for different types of proposed interventions. First three reports from each IA will be reviewed and approved by WB to verify for completeness, compliance and consistency. In addition, for other Low to Moderate risk sub-projects, Bank will review a selection of sub-projects, through desk review /site visits and provide suggestions and guidance for improvements, if required. In the case of substantial and high-risk categories of rehabilitation sub-projects, WB will review and approve all reports.
43. **Scoping exercise** considers the proposed interventions at each dam site as provided in the Project Screening Template<sup>13</sup> (Format SF-1). Applicable interventions are further classified based on the location i.e. within dam area or outside the dam area. Each activity is reviewed for the applicability under-sub project, location of applicable activity as within dam area or beyond dam area and likely risks and impacts. The SF-1 format will be used to scope out or ascertain the types of E&S risks for each of the interventions e.g. Risk/Impact Water Quality, Fisheries, Conservation area, Protected Area, Ecological, Occupational Health, Physical Environment, Cultural, Tribal presence, impact on private land/assets/encroachers/squatters, labor, migrant labor and GBV risks – each of these corresponding to the ESS 2-8. As explained earlier, ESS1 is the overarching ESS and shall govern the applicability of ESS 2-8 and ESS 10, for each of the interventions of the sub project.
44. The second format (SF-2) is used to assess the extent of risk/impact intensity for each of the identified E&S risk and will be used to categorize the risk level as Low/Moderate/Substantial/High.
45. Finally, using a third E&S risk summary format (SF-3), the risk categories for all different types of E&S risk and impacts would be summarized and the highest of the risk categories would be assigned as overall risk category for the given Dam sub-project. Based on the above findings, an “E/S Due Diligence” report for each sub-project would be prepared. The ESDD report will recommend:
- i) Risk category of the Dam sub-project – whether it is Low/Moderate/Substantial/High

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<sup>13</sup> Screening templates (SF1, SF2 and SF3) placed at Annexure 3

- ii) Types of instruments that need to be prepared as part of the ESMP along with the responsibilities and timelines<sup>14</sup>

### 4.3 Stage II: Preparation of ESMP

- 46. At this stage, for dams that are identified into two groups as - (i) Low to Moderate Risk or(ii) Substantial to High risk. This is done based on risk analysis criteria given under Format SF-2 and activity specific risk summary given under SF-3. The sub project will be classified as low to moderate risk project only when all the identified risks are between low to moderate. In case even one of the 11 parameters in the E&S screening exercises at ESDD stage, results in a rating of either Substantial or High, then the E&S risk category of the sub-project would be categorized as Substantial or High. Following which ESIA would be carried out as per the given Terms of Reference that have been approved by World Bank.
- 47. Based on the risk classification of subproject further action shall be taken as below:
  - i. **Low to Moderate risk**, a standard ESMP shall be developed wherein Specific plans e.g. OHS, SEP or LMP will be included. This standard ESMP will be updated by IA depending on project specific activities. The standard ESMP shall comprise set of actions that need to be completed by Implementing Agency and by the contractor. The contractor specific actions shall be annexed in the bid document. All such standard ESMP plans shall be prepared by SPMU through their E & S specialists available in the State PMU.
  - ii. **Substantial to High Risk dams:** For all such sub-projects a detailed ESIA shall be conducted through an independent ESIA agency in accordance with the Terms of Reference (ToR)<sup>15</sup> prepared and agreed with CPMU and SPMUs. The ToRs require to: define project's 'study area' or project influence area and conduct surveys on existing environment & socio-economic profile/setting from authentic secondary sources and primary surveys; review of Environmental & Social Legal requirements; carry out analysis of impacts and management measures (including cumulative such as water assessment, ecological flows, climate change, disasters etc, as applicable); provide environmental inputs to engineering feasibility studies; conduct Social Impact Assessment including qualitative and quantitative surveys to identify potential adverse impacts on land, assets, encroachments, community assets; impacts on disadvantaged and vulnerable; impacts on tribals; develop mitigation plans in accordance with the entitlement policy and assistance package: identify gender concerns/gaps; identify types of project workers/labor and associated risks; possibility of migrant labor leading to GBV<sup>16</sup> risks; undertake stakeholder assessment & consultations, providing modes for citizen engagement and GRM<sup>17</sup> (including for anonymous, vulnerable and disadvantaged).
- 48. Based on the ESIA findings, the ESMP will be developed and depending upon the relevance of ESS 2-8, relevant plans such as Resettlement Action Plan (RAP)<sup>18</sup>, Tribal Development Plan (TDP)<sup>19</sup>, Biodiversity Management Plan, Cultural Heritage Management Plan or Procedures<sup>20</sup> etc. will be prepared and included within ESMP. For all projects, Contractor would be required to prepare Contractor-ESMP (C-ESMP that includes camp management plan, labor influx management plan, OHS measures etc.). This ESMP shall be ready before the sub project bids are issued and relevant plans would be included in the bid document.

<sup>14</sup>Standard ESMP placed at Annexure 5 (Appendix 1)

<sup>15</sup>ToR for hiring agency for conducting ESIA studies placed at Annexure 6

<sup>16</sup> GBV/SEAH action plan placed at Annexure 7

<sup>17</sup> Ref SEF

<sup>18</sup>Template placed at Annexure 9

<sup>19</sup> TDF placed at Annexure 12

<sup>20</sup>ToC for Bio-diversity management placed at Annexure 11

49. The preparation of E/S assessment and management instruments, proportionate to the risks, as specified herein this ESMF is stated as a requirement in the Environment and Social Commitment Plan. All such ESMPs and other relevant Plans will be reviewed by CPMU and shared with the Bank for approval before the same are included in the respective bid documents. First three reports from each IA will be approved by WB to verify for completeness, compliance and consistency. In addition, for other Low to Moderate risk sub-projects, Bank will review a selection of sub-projects, through desk review /site visits and provide suggestions and guidance for improvements, if required. In the case of substantial and high-risk categories of rehabilitation sub-projects, WB will review and approve all reports. In case of sub-projects with Substantial or High-risk categorization, all ESIA and subsequent ESMPs shall be reviewed by WB. Implementation of all such ESMPs will be monitored by SPMU and progress status will be shared with the CPMU and Bank for information on quarterly basis.
50. Application of ESMF to sub-projects under Component 3 aims to explore alternative sources for generating revenue streams such as tourism and water recreational activities, fisheries and other innovative schemes such as floating solar panels. The activities are being considered as a way to help meet maintenance/operational costs of the dams and a small number of such activities at identified sub projects might be piloted under DRIP II. The dams on which such alternative revenue generating sources could be piloted have not yet been selected. The selection of dams will be based on in-depth studies to determine potential, feasibility, social and environmental impacts, etc. While it is not expected that any of these activities will lead to Substantial or High risk (given the nature of the activity and relatively small amount of money that can be allocated for them), if any tourism sub-projects are proposed, they shall undergo E&S screening using the given checklists. Such an assessment would be undertaken by the contracted ESIA agency/PIU. The findings shall be reviewed by CPMU and shared with the Bank for its endorsement on the identified risks before taking up such activities. Those identified as Substantial or High risk through the screening assessment shall be required to carry out detailed ESIA in accordance with the ToRs<sup>21</sup> and approval from the World Bank.
51. Implementation process of application of ESMF in sub projects: ESDD studies will be carried out for 100% of all sub projects by IAs through in-house team/professional consultants. The SPMU will review the ESDD report and finalizes the recommendation on risk classification. Following this, SPMU will forward these reports to CPMU for review. Once the CPMU reviews, it will send the first ESDD report from each IA to World Bank for reviewing completeness, correctness and compliance and approve. In case the risk classification by SPMU is recommended as S or H, 100% of such sub projects would be forwarded to CPMU and World Bank for approval. Similarly, 100% of the pilot works proposed, i.e., tourism, floating solar etc. for augmenting revenue sources will go through ESDD process, SPMU review, CPMU review and World Bank review. In case of sub-projects with Substantial or High-risk categorization, all ESIA and subsequent ESMPs shall be reviewed by WB. Both CPMU and World Bank will seek additional clarifications if needed and approve the risk classification.

#### **4.4 Mitigation instruments to meet requirements of each ESS**

E&S risks and impacts identified in Chapter 3 shall be addressed through following mitigation plans

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<sup>21</sup>Template placed at Annexure 6

ESS	Type of plan/instrument	Brief description of content	Annexure with indicative TOC/guideline
1	ESMP	Includes provisions for addressing risks relating environmental and social aspects in each sub project or dam. This will be a standard ESMP for sub projects identified as low to moderate risk (as per ESDD). High risk sub projects will undergo Detailed ESIA and an ESMP. This will also include recommendations as per SEA or SH/GBV and physically challenged	5
2	Labor Management Procedure	Lay down and spell out the requirements relating to: provision of terms and conditions of employment; promoting of non-discrimination and equal opportunity; worker's organization etc. and finally a mechanism to redress grievances mechanism to the direct and contracted workers.	14.6
3	(a) Construction Debris and Other waste management Plan  (b) Pollution Prevention and Environmental quality management Plan	(a) Dam rehabilitation activities may generate various type of waste depending on nature of rehabilitation work involved such as debris and construction waste, empty paints containers, waste lubricants, electrical waste, and municipal waste from labour camps. Some of these wastes are biodegradable, some are reusable/saleable, and some are non-biodegradable and non-reusable. Many of these wastes attract provision of law for its disposal and require controlled handling and disposal. Constructional Debris and Solid Waste Management Plan(CDSWMP) is aimed to fulfil the requirement of safe handling and controlled disposal of these wastes.  (b) It follows the principal that any waste is a resource misplaced and if a resource is released to environment than it results in affecting the environmental quality depending on nature of waste released to environment viz air, solid or liquid. This Pollution Prevention and Environment Quality Management Plan (PPEQMP) framework is aimed to evolve guidelines which can result in conservation of resources and thus prevention of pollution	14.1  9
4	Community Health and Safety Plan	This plan will include framework for in relation project workers, and any risks of labor influx, such as communicable and non-communicable diseases. CoC for contractors in relation to workers at site will also be included.	8
5	Resettlement Action Plan	In accordance with SIA findings and RPF provisions, RAP will be prepared that enumerates nature and quantum of each type of impact and impacted persons by socio-economic category and entitlement measures, budget	10
6	Biodiversity Conservation and Management Plan (BCMP)	Biodiversity Conservation and Management Plan for the sub projects /Dam sites close to the conservation areas and suggest biodiversity conservation guidelines and Plan for all such dams. Where relevant, should also address ecological/environmental flows and ecosystem services	11
7	Tribal Development Plan	In accordance with ESDD/SIA findings and TDF, the TDP shall be prepared to include: applicable legal and institutional framework and baseline data; framework for meaningful consultation tailored to Indigenous Peoples/Tribals during project implementation; Measures for ensuring Indigenous Peoples/Tribals receive social and economic benefits that are culturally appropriate and gender sensitive and steps for implementing them; measures to avoid, minimize, mitigate, or compensate Indigenous Peoples/Tribals for any potential adverse impacts that were	12

ESS	Type of plan/instrument	Brief description of content	Annexure with indicative TOC/guideline
		identified in the social assessment, and steps for implementing them; the cost estimates, financing plan, schedule, and roles and responsibilities or implementing the Indigenous Peoples/Tribals Plan;	
8	Cultural Heritage Management Plan	A Cultural Heritage Management Guidelines and if required a Plan in sub projects if any such cultural aspects is likely to be affected from any of the dam scheme. This will include chance find procedures as well.	13
9	Stakeholder Engagement Plan GRM	Each ESMP will include a Project specific SEP for meaningful consultations and Accessible, functional and responsive GRM for stakeholders	14.5 (also refer to separate Stakeholder Engagement Framework

#### 4.5 Addressing concerns of disadvantaged or vulnerable individuals or groups

52. Disadvantaged and Vulnerable households defined under the project include: ST, family/household headed by women/female, physically challenged, Below Poverty Line (BPL) and illiterate persons/households. This ESMF takes into consideration the risks and impacts on disadvantaged or vulnerable individuals or groups. It shall be ensured that
- i) terms of reference for undertaking ESDD/ESIAs adequately cover such categories of potentially impacted persons;
  - ii) questionnaires and consultation checklists used for conducting census & socio-economic surveys and focus group discussions covered such groups.
  - iii) ESDDAs/ESIAs that are undertaken:
    - cover such groups in the consultation meetings including the issues and concerns raised by these groups and document them effectively;
    - identify additional measures that could be provided to address these groups
    - present mechanisms and modes by which project will disseminate information to groups and consult with them to elicit their participation in the project interventions and which shall be included in the dam specific SEP.

Additionally, design interventions for universal access for physically challenged, where required will be explored during sub-project preparation.

## 5. STAKEHOLDER CONSULTATIONS AND DISCLOSURE

53. Project is required to engage with multiple and varied set of stakeholders for different activities under the project components. The Project E&S risk category is assessed as ‘High Risk. The Stakeholders risk is categorized as ‘Low’, based on the nature and timing of activities - i) structural works will be taken up on and within the dam site soon, these works will be limited to the presence of a few workers on the dam site; ii) The non-structural measures such as EAP preparation which is a technical document related to disaster management of which engagement with communities will be a smaller component and as such will take at least one year to commence. Stakeholder Consultations mechanism shall describe how two-way communication between the Implementing Agency and the affected communities and stakeholders would be achieved throughout the project cycle. Consultations are used as a tool to inform and educate stakeholders about the proposed actions which are going to impact them both before and after the development decisions were made. The involvement of the various stakeholders ensure that the affected population and other stakeholders are informed, consulted and allowed to participate at various stages of project preparation and implementation.

54. Consistent with the requirements of ESS 10 on Stakeholder Engagement, this chapter describes the applicable legal and regulatory framework besides the requirements under WB’s ESS 10 and the process of consultations on ESMF. The consultation process undertaken for the first set of 10 dams is briefly presented in Annexure 19. The process of consultations is aimed at and mandates that Project components, including the E&S instruments are explained to stakeholders well, setting expectations on the overall project cycle.

### **5.1 National legal& Regulatory and WB ESS 10 requirements**

55. Stakeholder Engagement is mandated within the existing institutional and regulatory framework of the National and State legal instruments as well as the ESS compliance requirements of Environmental and Social Framework (ESF), 2016 of the World Bank and is mentioned below:

- The Environmental Impact Assessment Notification (EIA), 2006 (including all amendments to date), notified by MoEF&CC, GoI
- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013
- The Right to Information Act 2005
- Guidelines for Assessing and Managing Risks Associated with Dams (CWC, February 2019) and the Good Practice Note on Risk-Informed Dam Safety Management (World Bank, March 2020)
- ESS 10: Stakeholder Engagement and Information Disclosure, ESF 2016, World Bank

56. The Environmental Protection Laws mentioned above mandate that the Citizens have the right to environmental information as well as to participate in developing, adopting and implementing decisions related to environmental impacts. The provisions of environmental

law provide the assurances for public hearing during the process of project planning and also ensure the public discussion during implementations. Public representative bodies have an obligation to take into consideration citizens' comments and suggestions. The Land Acquisition Act, 2013 maintains the ethos and culture of public participation through social impact assessment. The Right to Information Act, 2005 provides for setting out the practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority. The ESS-10, Stakeholder engagement and information disclosure mandates stakeholder engagement is an inclusive process conducted throughout the project life cycle.

57. The World Bank's Environmental and Social Framework (ESF)'s Environmental and Social Standard (ESS) 10, "Stakeholder Engagement and Information Disclosure", recognizes "the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice" (World Bank, 2017: 97). Specifically, the requirements set out by ESS10 are the following:

- "Borrowers will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultations with stakeholders on project design. The nature, scope and frequency of stakeholder engagement will be proportionate to the nature and scale of the project and its potential risks and impacts.
- The Borrower will maintain and disclose as part of the environmental and social assessment, a documented record of stakeholder engagement, including a description of the stakeholders consulted, a summary of the feedback received and a brief explanation of how the feedback was taken into account, or the reasons why it was not."

## 5.2 Consultations on ESMF

58. In light of the COVID 19 pandemic induced restrictions<sup>22</sup> towards stakeholder consultations, consultations on draft ESMF were carried out in a limited manner in accordance with the guidance available<sup>23</sup>. The following approach was taken:

- i. The Draft of the ESMF is disclosed on the project website, [www.damsafety.in](http://www.damsafety.in) for stakeholder/beneficiary feedback.
- ii. CWC sent the Draft ESMF by electronic email to officials such as Project Directors, Executive Engineers, SPMU staff of all participating states a week in advance, for their review, feedback and suggestions.
- iii. CWC organized consultation workshop through video-conference during Apr 16-20, 2020. The participants included representatives from all the participating IAs including CWC. About 90 officials from CWC and Implementing agencies and 19 World Bank officials have participated in the consultations. List of participants and photo documentation is presented in Annexure 18. Summary of discussions is presented below:

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<sup>22</sup>In light of the COVID pandemic, Government of India announced a country wide lockdown between March 25 to May 3, 2020 that constrained holding of consultation meetings

<sup>23</sup> Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, March 2020



Date	Category of stakeholder	Venue	Issues discussed	Agreements
April 16-20	Officials from all implementing agencies	Virtual	<ul style="list-style-type: none"> <li>• The participants were informed about five key documents that they need to be aware from the outset i.e. the ESDD, ESMF, ESIA, ESCP and SEP.</li> <li>• It was informed that ESDDs will be undertaken for each Dam to ascertain the risks levels of the various activities along the various E&amp;S parameters e.g. land, biodiversity, tribals, etc. This ESDD would then help arrive at a risk classification for each dam and ESS related requirements to mitigate those risks and impacts.</li> <li>• While in case of L to M risk sub-projects, the standard ESMP would be updated to suitably address the issues identified in the ESDD, in case of H/S risk projects ESIA shall be prepared followed by ESMP that covers each relevant standard.</li> <li>• Following this it was informed that every bid document required to incorporate ESMP before these bids are issued.</li> <li>• ESCP were informed that this document states higher order of E&amp;S actions and measures that the IA commits to undertake and that each IA would sign upon at the time of project negotiations.</li> <li>• SEP – nature of the document and examples of types of stakeholders likely in case of structural and non-structural measures were explained. The need for information disclosure and establishment or operationalizing of a GRM was emphasized</li> <li>• Other aspects such as corporate commitments relating to Gender, GBV and Citizen Engagement too were informed.</li> </ul>	<p>IAs want support from both CWC and Bank in helping them meet these requirements</p> <p>Wanted more clarity on what types of stakeholders since majority of the works were within the dam site. Explanation was given on the range of stakeholders</p>
			<ul style="list-style-type: none"> <li>• The need to strengthen E&amp;S team at IAs in terms of designating nodal officers for E&amp;S issues and also contracting of E&amp;S professionals from the market was emphasized.</li> </ul>	<p>IAs agreed on the hiring from the market and agreed to advertise accordingly</p>
			<ul style="list-style-type: none"> <li>• Agencies sought support from both CPMU and WB on helping them with meeting the project's E&amp;S requirements.</li> </ul>	
			<ul style="list-style-type: none"> <li>• IAs indicated that by the end of appraisal process they shall designate</li> </ul>	<p>IAs indicated that they shall complete</p>

Date	Category of stakeholder	Venue	Issues discussed	Agreements
			nodal E&S officers. They also sought guidance on identifying E&S professionals.	designating a Nodal E&S officer for this purpose
			<ul style="list-style-type: none"> <li>Certain agencies such as TANGEDCO and Kerala WRD (who were part of DRIP 1) highlighted the high proportion of female employees in their organizations.</li> </ul>	

### 5.3 Information Disclosure

59. The ESMF will be made available in a timely manner, in an accessible place and a form and language(s) understandable to stakeholders.
60. Final ESMF incorporating comments given by all participating states will be submitted to World Bank. Once approved by World Bank, it will be disclosed on [www.damsafety.in](http://www.damsafety.in) website and the external website of the World Bank on its portal. Translated executive summary of the ESMF in vernacular language will also be made available.
61. Further information dissemination and disclosure shall be undertaken in accordance with Section 7 and 8 of the Project ‘Stakeholder Engagement Framework’ (SEF). The SEF recommends utilizing other opportunities for information disclosure and dissemination which may include - consultation platforms, working groups, workshops, seminars, conferences, focus groups etc. SEF further mandates that the Executive Summaries of ESMF and SEF shall be made available in local languages. In addition, SEF outlines - the stakeholders, legal and regulatory provisions, identification, approach to stakeholder engagement, approach to information disclosure, timelines for disclosure and feedback, implementation arrangements, GRM, Training requirements, budgets.
62. All the specific assessments and mitigation plans – ESDD/ESIA, ESMP will be placed on the [www.damsafety.in](http://www.damsafety.in) website as well as other accessible locations such as the office of office of Engineer in Charge at Dam site as well at SPMU for reference and record. These documents would be disclosed/disseminated through other appropriate means like various Project meetings, workshops etc. Each IA will translate these documents in their local language and will upload in their respective websites and also make available at other accessible locations.

## 6. IMPLEMENTATION ARRANGEMENTS

### 6.1 Institutional arrangements

63. Implementation arrangements, capacity building actions, monitoring & evaluation aspects are presented in this chapter.

#### Overall institutional arrangements for implementation of ESMF

64. The organizational structure for day-to-day project coordination and management of DRIP II consists of a Central Project Management Unit (CPMU) at the central level in CWC and one State level PMU for each of the implementing agencies. Institutions at national and state level along with roles are presented below:

#### National level:

65. National Level Steering Committee (NLSC): A Committee has been established for oversight on dam safety assurance and rehabilitation, and disaster management. The NLSC is headed by the Secretary Jal-Shakti and includes senior representatives from CWC and participating states. A separate Technical Committee (TC) is also in place providing technical input to NLSC, coordinate with implementing committees of respective state governments, and review progress of development projects.
66. Technical Committee (TC): This is to be headed by Member (D&R) CWC to deal with technical matters of Scheme with all Chief Engineers of SPMUs, Central Water Commission, Ministry of Power, IMD etc. will be its members
67. Central Water Commission: The overall responsibility for project oversight and coordination will rest with the DSO in CWC, which will act as the Central Project Management Unit (CPMU). The Chief Engineer of the DSO will be the Project Director (PD), and will be assisted by the Directors, staff of their respective directorates, individual consultants. CWC will designate nodal/coordinating officers (full-time engineering staff) to handle environmental and social areas. These Nodal/coordinating officers (full-time engineering staff) to handle environmental and social areas, will be at the level of Deputy Directors and will report to Project Director. Commensurate time will be given by these officials for successful implementation and monitoring of various E&S related activities. These designated officers are department engineers which are recruited at national level through competitive engineering services examination. The Nodal Officers will be supported by the E&S specialists drawn from the EMC team. Refer to **Annexure 17** for Terms of Reference for the Nodal E&S officers. As of Appraisal, Nodal officers for E&S activities have been designated by CWC as well as Implementing Agencies.
68. Engineering, Management and Consulting (EMC) firm: This firm will support CWC and provide it with a team of consultants for managerial, technical, fiduciary, environment and social, and M&E support.

### State level:

69. Dam Safety Review Panel (DSRP): A DSRP will be constituted by each implementing agency. The dam safety requirements of the World Bank's Environmental and Social Standard (ESS) 4 of the Environmental and Social Framework (ESF) are fully met by Dam Safety Review Panels (DSRPs), which will perform all responsibilities required under the ESF in accordance with a standardized/generic Terms of Reference (TOR) for DSRPs which is being finalized and will be jointly agreed with the World Bank for assessments of the dams.
70. SPMU: At the state level, SPMUs, will have overall responsibility for the coordination of the project activities at state level, both technically and qualitatively and will monitor the physical and financial progress including safeguards issues. Each IA will appoint a Project Director (PD) and Project Management Unit (PMU) attached to the Chief Engineer / Superintending Engineer in charge of the DSO. The PD and its team of government staff and consultants will have direct responsibility for the coordination and management of the project at the State level and for Central organizations (such as BBMB and DVC). All PMUs will be staffed with qualified government staff, supplemented with consultants so that the needed technical, safeguards, monitoring and evaluation (M&E), and fiduciary (procurement and financial management) capacity is available. The SPMUs will summarize the implementation of the project and submit reports to the CPMU in a format generated for a MIS. The SPMUs will coordinate the work with Chief Engineers of the WRDs and other owners of dams.
71. State Level Steering Committee (SLSC): To be headed by Principal Secretary of WRD or CMD of State EB to review physical and financial progress of Scheme, Chief Engineer SPMU as its Member Secretary, representative of State Finance Deptt., with all Chief Engineers of concerned DRIP dams as its members, representative of CPMU, CWC,
72. Each IA shall designate a Nodal Officer (full time in-house engineering staff with E&S expertise) to coordinate and supervise E&S activities. Each IA will designate nodal/coordinating officers (full-time engineering/social staff) to handle environmental and social areas. They shall be at the level of Executive Engineer/ Deputy Directors and shall provide commensurate time to comply E&S related activities. These designated officers are department engineers. Brief TORs for these Nodal E&S officers are placed at Annexure 17 in this ESMF. The SPMUs in case in-house expertise not available, will hire the qualified staffs on need basis to support management of E&S risks including Environmental Expert, Social Expert for ensuring compliance with the Bank's ESF and ESS's and ensure that these activities shall be implemented as per the procedures.
73. E&S specific Institutional arrangements with responsibilities for: a) national institutions – CWC; b) State level institutions – DSRP, SPMU of IA; c) external agencies – EMC, Civil Works Contractor, RAP implementing agency, Third Party Agency for Annual Evaluation. Institutional Arrangement with Responsibilities are presented in below in **Table 6.1**.

**TABLE 6.1 - Institutional Arrangements with responsibilities**

Institution	Responsibilities
<p><b>Central Water Commission – CPMU</b></p>	<p><b>Overall responsibility for project implementation and coordination with all participating states</b></p>
	<p>CWC will designate Nodal Officials to coordinate and supervise these activities and will take the assistance of Environmental Expert and Social Expert through EMC.</p>
	<p><b>Prepare</b> Environment and Social Management Framework including Resettlement Policy Framework, Tribal Development Framework, Gender Base Violence Risk Mitigation Framework) and submit for World Bank’s review and approval prior to Disclosure</p>
	<p><b>Ensure</b> that State WRD/ IA undertake Environment and Social Due Diligence (ESDD) using the E&amp;S screening checklist to identify risk category (Low/Moderate/Substantial/High) of each sub-project including floating solar sub-projects, as per ESMF</p>
	<p><b>Ensure</b> that all IAs, follow the Standard ESMP prepared by CPMU and suitably modified as per ESDD findings. For High risk sub projects SPMUs will undertake detailed ESIA as per enclosed TORs which will be reviewed by CPMU and WB</p>
	<p><b>Ensure</b> E&amp;S screening of all tourism related activities and share with the Bank for its endorsement on the identified risks, before taking up such activities.</p>
	<p><b>Review</b> all ESMPs of the sub projects under dam activities and tourism and other activities under component -1 of high and substantial risks</p>
	<p>EMC will have Environmental and Social experts during project implementation</p>
	<p>Conduct Third Party Monitoring and Evaluation and its implementation of recommendations by SPMU</p>
	<p>Compile Annual report on SEP implementation prepared by Implementing Agencies for its portfolio of dams and disseminate at an “Annual Experience Sharing Workshop” event with participation of all Implementing Agencies</p>
	<p>Coordinate and ensure that Dam safety / risk assessments recommendations are implemented and duly coordinated with SPMU</p>
<p>The dam sites will ensure security and safety personnel. All above recommendations of each dam be conveyed to the World Bank on annual basis</p>	
<p><b>EMC</b></p>	<p>EMC agency will assist the PD and provide guidance and support in overall E&amp;S management. This shall include</p> <p><b>Preparation stage:</b> Conducting ESDDs to determine the environmental and social impacts, to help assess risk category and inclusion of standard ESMP in the bid documents; conducting review of detailed ESIA and ESMPs for Substantial and High-risk projects and of Tourism, Floating Solar, Water Recreation sub-projects and share with WB for review and approval prior to disclosure</p> <p><b>Implementation stage:</b> Develop formats for regular supervision and monitoring on E&amp;S issues and Undertake regular site visits/ inspections of the dam sites to monitor for compliance. Collate QPRs from different IAs and summarize and provide a QPR to World Bank for its information and set up a monitoring a reporting system on E&amp;S issues; monitor grievance redressal</p> <p><b>Capacity Building:</b> CPMU in consultation with SPMU will develop capacity development programme covering above aspects. While technical support will be drawn from World Bank, SPMU/CPMU E&amp;S experts or professional independent agencies with expertise in respective subject matters will be engaged for training and Capacity Building. Provide orientation/sensitization and training to targeted groups within IAs on relevant topics (such as stakeholder mapping and engagement, Biodiversity guidelines, OHS, ESHS norms, Labor Management Procedures)</p>
<p><b>DSRP</b></p>	<p>Visit and assess all dams that shall be taken up under the project; and provide recommendations for remedial measures based on which detailed structural as well as non-structural rehabilitation plans are prepared for implementation under the Project.</p> <p>Dam safety assessments will be undertaken conforming to ESS4 by the DSRP and as per the Guidelines for Safety Inspection of Dams (CWC, January 2018) early in the project preparation as basis for identifying / assessing priority remedial measures. While doing so, Good Practice Note (GPN) on Dams Safety (The World Bank ,2020) may also be referred to.</p>

Institution	Responsibilities
<b>SPMU of IA</b>	Have overall responsibility for the coordination of the project activities at state level, both technically and qualitatively and will monitor the physical and financial progress including safeguards issues.
	<b>Follow the ESMP prepared by CPMU</b> for low to moderate risk dams and ensure ESIA for Substantial and High-risk projects and also contract agencies for impact evaluation and RAP implementation (if and when required). Include ESMPs in the Standard Bid Documents for contractor's compliance.
	<b>Disclose</b> ESMF and specifically RPF, TDF shall be translated in local language
	<b>Approve and disclose</b> ESMP including standard specific plans as applicable including translation of Executive Summaries of these plans in local language
	<b>Establish</b> a Grievance Redress Mechanism (GRM) to address Project workers workplace concerns
	<b>Ensure</b> that work cannot be awarded before ESMP has been included in the bid document and is signed off by environmental and social designated staff.
	<b>Ensure</b> incorporating relevant aspect of ESMP and ESCP requirements in bidding document for procurement of civil work contractor
	<b>Include</b> in bidding document that contractor will hire on need basis the Environmental Expert and Social Expert to ensure for effective ESHS implementation
	<b>Facilitate</b> preparation of Emergency Action Plan, disclosure workshop and implementation of EAP. For this purpose, liaise with District Administration, State Disaster Management Authority (SDMA), NDMA (National Disaster Management Authority), Police Department, Communities in the dam vicinity
<b>Roles and Responsibilities of SPMU/IA</b>	<b>Undertake</b> Environmental and Social Due Diligence of all the dams proposed under the project and identify risks category (Low/Moderate/Substantial/High) as per procedures laid out in this ESMF
	<b>Refer</b> the generic ESMP prepared by CPMU for low to moderate risk dams, to meet requirements of relevant ESS (Bio-diversity Plan, RAP/ARAP). <b>Prepare dam specific ESMP and Contract ESIA</b> agency to undertake ESIA for Substantial and High risk projects and also contract agencies for impact evaluation and RAP implementation (if and when required).
	<b>Prepare</b> Stakeholder Engagement Plans, in accordance with Stakeholder Engagement Framework for all sub-projects and undertake other measures as per LMP and GBV risk mitigation framework
	<b>Ensure</b> preparation and submission of submit C-ESMP prior to starting of civil work by Contractor and updation every six months
	<b>Designate</b> a special officer from Revenue Department to overlook land acquisition/resettlement aspects depending on the need,
	<b>Hire</b> a GBV officer if the sub project is classified as High on SEA/SH risk using the risks assessment tool while undertaking ESDD.
	<b>Ensure</b> compliance of any legal or statutory clearance/ permission / consent/ permit, if required for any sub project activity.
	<b>Monitor</b> the compliance with the agreed documents and ensure adequate reporting is made in progress reports about the compliance with the ESMF and ESMP
<b>Civil Works Contractor</b>	<b>Ensure inclusion and compliance</b> of ESMP (which will be called C-ESMP) in the bid document and is implemented in letter and spirit during implementation of rehabilitation activities. These C-ESMP should comprise, as applicable: Labor influx management Plan, Traffic Management and Road Safety Plan, Emergency Response Plan, Community Health and Safety Plan, Hazardous and Non-hazardous waste management plan, water use plan
	<b>General Staffing</b> as per ESMP provisions, but can be oriented to meet the requirement of a particular dam keeping in view proposed rehabilitation activities
	<b>Implement</b> Labor Management Plan including establishment and functioning of a GRM to receive and redress laborers workplace concerns
	Ensure actions relating to GBV as per GBV risk mitigation procedure
	Prepare and submit periodic progress reports on all E&S aspects provide in the ESMP that is included in the bid document/contract
	Ensure compliance with national and state levels in obtaining clearances and permits/licenses

Institution	Responsibilities
<b>RAP implementation agency</b>	Provide support to SPMU/IA in implementation of RAP. <ul style="list-style-type: none"> <li>• Verification of PAPs.</li> <li>• Distribution of ID cards.</li> <li>• Preparation of micro plans.</li> <li>• Dissemination of information.</li> <li>• Assist to PAPs to avail R&amp;R assistance and compensation.</li> <li>• Identify resettlement /vendor market sites.</li> <li>• Identify training needs and provide the same.</li> <li>• Facilitate in opening joint accounts.</li> <li>• Enable PAPs to identify alternate sites for house/shop</li> <li>• Assist PAPs to relocate.</li> <li>• Provide monthly progress reports on implementation</li> </ul>
<b>Third Party Agency (CPMU through EMC) for conducting Annual Evaluation</b>	<b>Undertake</b> an Annual Evaluation of Environmental and Social Management Framework implementation by all IAs in a standard format to be finalised jointly by CPMU and World Bank team; Prepare report with recommendations for any corrective actions required by any stakeholders. The Evaluation Report to be shared with World Bank. Evaluation will include': <ol style="list-style-type: none"> <li>1. Compliance with ESIA and ESMPs requirements developed for the project</li> <li>2. Compliance to different subject specific plans if required under ESMP; like Biodiversity Management Plan, Occupational Health and Safety Management Plan, Cultural Heritage Management Plan, Labor management plan, implementation status and compliance level.</li> <li>3. Effectiveness of GRMs</li> <li>4. Implementation of SEP</li> <li>5. Compliance with WB ESS requirements</li> </ol>

## Reporting

74. Quarterly Progress report (QPR) will be prepared capturing details on E&S performance of the project. Details will include implementation status of the following
1. Environmental and Social Commitment Plan (ESMP, GBV plan and LMP)
  2. Compliance to Environmental and Social statutory requirements
  3. Design modification or change in scope brought to Bank notice
  4. Assessment of changes and updating/addendum to ESIA/ESMP
  5. Site observations on Contractor's performance on Environmental Social Health and Safety (ESHS) and other plans in ESMP. This will include details of accidents, incidence with analysis and corrective action taken. The incidence of fatal accident shall also be reported to WB as well as to concerned Govt authorities and CPMU.
  6. Summary of Stakeholder Engagement activities as stated in the SEF
  7. Summary of Grievances received and redressed for each scheme
  8. Status of Environmental and Social staffing within PMU (including PMC) and other implementation partners/agencies
  9. Capacity building /training activities undertaken for different project functionaries
  10. Corrective Actions and planned E&S activities for next quarter

SPMU will share on Quarterly basis ESMP implementation status with CPMU, following which it shall review and forward the same to The World Bank.

## Monitoring and Evaluation

Internal monitoring of E&S aspects in accordance with the ESMF and ESMPs comprising

relevant mitigation plans will be undertaken by the designated officials in SPMUs. It will be a regular on-going feature within the SPMU for all the dams in the respective project state. In addition, CWC – CPMU will undertake an evaluation of the ESMF implementation all IAs and prepare and submit report and corrective actions to The World Bank.

### **Contractor's Quarterly Reports**

75. Quarterly Progress report (QPR) prepared by contractors explaining the compliance status of the Project with the ESMP in their scope. Details will include status on:
1. Contractor's ESMP implementation work plan and PMC reviewed summary of implementation progress
  2. Implementation of Contractor's ESMP (ESMP and related plans such as OHS Management Plan, Waste Management Plan, Workers' Camp Management Plan, Community Health and Safety Plan, Biodiversity management plan, Debris disposal Plan, Cultural Heritage Management Plan etc.)
  3. Status of Compliance with E&S statutory requirements (including Consent to Operate (CTO) & Consent to Establish (CTE), quarry permits if applicable, labor licenses, insurance, etc.),
  4. Status on actions indicated in the Labor Management Procedure
  5. ESHS incidents & supervision. Report must include analysis of incidence and preventive action taken to avoid recurrence. Any fatal accident shall be reported to IA and CPMU immediately with cause of accident and corrective action taken. CPMU shall also report to WB on any fatalities. SPMU/CC shall ensure that ESHS incidents reporting conform to ESF framework of the bank.
  6. Usage (no. required, distributed and ensure used) of Personal Protective Equipment (PPE) such as hard hats, safety shoes and safety vests by workers
  7. Safety at work sites like providing traffic signage, barriers/delineator, management of traffic, drainage and pliable road surface etc.
  8. Training conducted, and workers participation (submit reports with statistics of training and worker's participation)
  9. Functioning of GRM relating to labor aspects, including summary details of Workers grievances
  10. Community grievances
  11. Corrective Actions and planned E&S activities for next month

### **Capacity Building needs at CPMU and SPMUs**

76. In view of new Environmental and Social Framework (ESF), awareness and capacity is required to be built for all implementing agencies and hence, capacity building will be an area of continued focus. In DRIP II, institutional strengthening is required at following levels:

Dam Sites Officials: Select officials at junior levels will be trained in

- understanding of baseline environmental and social conditions,
- understanding the ESDD of sub project activities employing the E&S checklists,
- analysis and assessment of project impacts on environmental and social components;
- segregating of significant impacts;
- identifying mitigation and enhancement measures and development of an environmental and social management plan.

SPMUs: All SPMUs shall have designated environment and social safeguard officials who



will be primarily responsible for the application of ESMF and monitor the compliance with ESF and ESSs.

- understanding of baseline environmental and social conditions,
- understanding the ESDD of sub project activities employing the E&S checklists,
- analysis and assessment of project impacts on environmental and social components;
- segregating of significant impacts;
- identifying mitigation and enhancement measures and development of an environmental and social management plan.
- stakeholder mapping and engagement;
- labor management procedures
- GBV risk mitigation requirements
- ESHS norms as per the bid documents/contract document
- emergency preparedness and response; community health and safety.

CPMU: Environment as well as Social Experts at CPMU, including the Project Director will be trained:

- on ESMF including ESF and ESSs and orientation on various ESS requirements e.g. RPF, ESMP, GBV action plan, LMP, TDP, Stakeholder engagement plan through customized training programs/ workshops and study tours.
- understanding the ESDD of sub project activities employing the E&S checklists,
- analysis and assessment of project impacts on environmental and social components;
- identifying mitigation and enhancement measures and development of an environmental and social management plan

Other Stakeholders

- Contractor, Support Consultants on topics such as Labor Management Procedures; OHS guidelines, emergency preparedness and response; community health and safety
- Communities on topics such as construction stage impacts, safety provisions, OHS guidelines
- Project workers on topics such as OHS guidelines, provisions relating to LMP, GBV Risk mitigation framework

CPMU in consultation with SPMU will develop capacity development programme covering above aspects. While technical support will be drawn from World Bank, SPMU/CPMU E&S experts or professional independent agencies with expertise in respective subject matters will be engaged for training and Capacity Building. Staff from SPMU and CPMU will be taken for exposure visits to showcase best practices of E&S safeguard practices.

## **6.2 Monitoring and evaluation**

77. Monitoring and evaluation are meant to check whether the adverse environmental and social impacts identified are being adequately mitigated and that the proposed mitigation plan is resulting in achieving desired results. Monitoring and evaluation will be done at 2 levels viz., overall Project level monitoring of ESMF implementation and sub-project level monitoring of ESMP implementation. This, essentially, involves cross-checking the implementation of the ESMF and sub-project ESMPs as well as monitoring the environmental quality through suitable indicators in the specific sub-project locations during both the construction and operation stages. As Occupational Health and Safety (OHS) risk is envisaged across the

project interventions / dams, a separate OHS plan conforming to WB ESHS guidelines shall be developed for all such dams where occupational health and safety risk due to identified activities is high and a guidelines in the shape of do's and don'ts where such needs due to activities are low to moderate. A guidance framework for OHS is placed at Annex 8 for reference.

78. A Contractor will follow the dos and don'ts given in the ESMP prepared by SPMU for Low and Moderate Risk categories dams proposed for rehabilitation. Compliance to statutory permit conditions, environmental quality, tree survivability norms as applicable shall be carried out as per predefined frequency. SPMU will ensure all elements indicated in the ESMPs be included in the contractor's ESMP. Wherever, Environmental Standard (ES) related plans are to be developed, SPMU will ensure plans are developed and implemented.

### **Field supervision during sub - project implementation**

79. The EMC hired by CWC will check compliance of sub-projects being implemented as part of the Project with the ESMF from the stage of inception to the stage of completion and commissioning. This would include compliance to Bank's ESF and ESSs, ESMF (including RPF) provisions. SPMU shall carry out the necessary E&S activities using either in-house experts if available or hired for such purpose as individual or agencies. The terms of reference of the consultants will be finalized in consultation with the CPMU and Bank to undertake field supervision works.

### **Independent Annual Evaluation of ESMF implementation**

80. An independent annual evaluation of the ESMF implementation will be commissioned by CPMU through EMC for all IAs. The ToRs of the Evaluation shall be prepared by CPMU in consultation with World Bank. It shall cover :
- Background of all sub-projects by the IA sub project ESDD/ESIA , statutory clearances, E&S requirements, categorization of projects.
  - Need, objective, scope of independent evaluation exercise
  - The methodology adopted, which includes field visits, inspection of construction sites, interaction with contractors, interaction with community, interaction with field engineers, environmental quality monitoring tests, etc.
  - Evaluation findings - compliance with ESMF, ESMP implementation status based on desk review and site visit findings, onsite monitoring of environmental parameters, etc.
  - Action taken report on field supervision consultant findings
  - Identified good practices, identified residual issues and recommendations.
  - Wrap-up consultations, dissemination workshops.

### **6.3 Stakeholder Engagement Framework**

81. As part of Project implementation, it is required to engage with multiple and varied set of stakeholders for different activities under the Project components. As the list of Dams where Project is proposed to be implemented and the type, nature and profile of Stakeholders may vary at each dam site, this document, Stakeholder Engagement Framework (SEF) is prepared to provide the framework for preparation of Stakeholder Engagement Plans (SEPs) by each Implementing Agency. The SEF, outlines the general principles and collaborative strategy to

identify stakeholders for all components under the Project, identify appropriate modes of engagement and prepare plans for engagement and meaningful consultation throughout the project cycle while ensuring transparency. The goal of the SEF is to improve and facilitate decision making and create an atmosphere of understanding that actively involves project-affected people and other stakeholders in a timely manner and that these groups are provided sufficient opportunity to voice their opinions and concerns that may influence Project decisions.

82. The SEF outlines the process of identification of stakeholders duly considering all stakeholders relevant to the overall Project including its components and sub-components. The stakeholders include those currently associated with the Project and those who will be associated with the Project at a later stage during implementation. Stakeholders are identified and categorized into: i) project affected parties, ii) other interested parties and iii) disadvantaged and vulnerable groups. The framework provides for systematic consultation with all those inter-project beneficiaries, project affected people, women, vulnerable and poor members of the community and other stakeholders to understand their interests and influence over the project.
83. The framework provides for SEP to take into account the existing institutional and regulatory framework within the context of GoI and States legal instruments as well as the safeguard compliance requirements of Environmental and Social Framework (ESF), 2016 of the World Bank. SEF and SEP are dynamic documents and shall be updated at various stages of project life cycle. The SEF mandates preparations of SEPs to provide for dissemination of a variety of information, the mechanism for sharing to build relationships with stakeholders, gather information from stakeholders, consult with stakeholders, and disseminate Project information to stakeholders and the rationale for selecting an appropriate process, culturally appropriate mechanism, and the purpose for engaging with a stakeholder group.
84. The “Stakeholder Engagement Plan” (SEP), prepared based on the Stakeholder Engagement Framework forms will form part of ESMP prepared for each sub-project, following the identification of stakeholders at the ESDD stage. During the preparation of SEP, more consultations would be undertaken with these stakeholders, with additional emphasis on the disadvantaged and vulnerable sections.
85. As per the SEF, E&S officer shall be responsible for implementation arrangements, at the SPMU for implementation, updation and record keeping of the stakeholder engagements as per the timeline and process mentioned in SEPs. Monitoring is an essential component for the success and timely implementation of the ongoing stakeholder engagement process to ensure that consultation and disclosure efforts are effective, and that stakeholders have been meaningfully consulted throughout the process. The ESMU team with assistance from NGOs/CBOs will ensure that messages are being conveyed clearly during consultations and debriefing sessions are conducted with the engagement team while in the field and help to assess outcomes and provide the opportunity to amend the process where necessary.
86. The SEF also discusses the process, method and timing of disclosures of different project related documents in entire project life cycle such as SEP and other documents like ESDD/ESIA, ESMF including RPF, ESMP etc. The project website [www.damsafety.in](http://www.damsafety.in) will be used to disclose and disseminate various Project related ES as well as other technical and non-technical information periodically. The site shall provide details about the Grievance Redress Mechanism and contact details as well. CPMU, CWC will update and maintain the website regularly.
87. SEF indicates that SEPs shall include provisions for monthly summaries and internal reports on stakeholder engagement events, and grievance handling will be collated by PMUs. A number of Key Performance Indicators (KPIs) shall also be included in SEPs and shall be

monitored by the PMUs on a regular basis. Information on public engagement activities undertaken by the Project during the year shall be conveyed to the stakeholders through online publication of a SEP Implementation report annually. This shall be informed to all stakeholders including World Bank.

GRM details that are elaborated in the Stakeholder Engagement Framework are summarized in the next section.

#### **6.4 Grievance Redressal Mechanism**

88. A grievance redress mechanism shall be developed for potential use by external stakeholders to address the matters related to E&S issues. A grievance redress mechanism (GRM) to uphold the Project's social and environmental safeguards performance is designed to address concerns and complaints promptly and transparently with no impacts (cost, discrimination) for any issue raised by project affected people (PAPs). The grievance redress mechanisms described hereunder include both complaints and grievances (hereinafter referred to only as 'grievances'). The GRM works within existing legal and cultural frameworks, providing an additional opportunity to resolve grievances at the local, project level. The key objectives of the GRM are:

- Record, categorize and prioritize the grievances;
- Settle the grievances (and inform those stakeholders of the solutions)
- Forward any unresolved cases to the relevant authority.

The types of grievances stakeholders may raise include, but are not limited to:

- Non-payment, or inadequate compensation and/or due R&R assistances; wrong measurement of parcel
- Construction related impacts – cracks, damages to structures; dust damaging crops/trees
- Health and safety risks;
- Negative impacts on the environment;
- Negative impacts on communities, which may include, but not be limited to financial loss, physical harm and nuisance from construction or operational activities;
- Impacts arising from migrant labor on local communities

89. As the GRM works within existing legal and cultural frameworks, it is recognized that the GRM shall comprise project level and respective State level redress mechanisms. Most Project related grievances could be minor and site-specific. A Three tier GRM, i.e. at the sub-project level and SPMU level (State government level) and CPMU will be implemented. The establishment of GRM/GRC will be well publicized. Most grievances are to be received directly on site by the designated site representative of SPMU that shall endeavor to resolve them satisfactorily on site. The designated site representative shall inform the SPMU of these complaints and their outcomes, and of others not satisfactorily resolved that the SPMU GRM nodal officer should take over.

90. The nodal officer shall, on receipt of each complaint, note the date, time, name and contact details of the complainant, and the nature of the complaint in the Complaints Register. The nodal officer shall inform the complainant of when to expect a response. S/he shall then endeavor to address it to the best of his/her abilities, as per stipulated timelines.

91. The Complaints Register shall be maintained by the SPMU, who will log the: i) details and

nature of the complaint; ii) the complainant name and their contact details; iii) date; iv) corrective actions taken in response to the complaint. This information shall be shared with the World Bank. The project level process can only act within its appropriate level of authority and where appropriate, complaints shall be referred on to the relevant authority such as those indicated.

92. State Grievance Redress Committee (SGRC) shall be formed for high/substantial risk category projects at each implementing agency level comprising of competent members, who can effectively contribute in grievance redressal. In case at this level the dispute is also not resolved, the aggrieved person may take recourse to representation to CPMU followed to World Bank. If dispute is not resolved at this stage also, complainant is free to opt for any kind of legal recourse. An indicative list includes:

- State level Social Welfare Officer
- Executive Engineer, SPMU
- NGO representative
- PAP representative (one male and one female), and
- Representative from Revenue Department (for cases related to land)
- Details on contact information for grievances, inquiries, and further feedback shall be made available in the following format:

Description	Contact details
Agency	
To:	
Address:	
E-mail:	
Website:	
Telephone:	

93. Notifications regarding constitution of SGRC by SPMU shall be done at appropriate stage arises. Prior to commencement of construction, these details shall be notified by pasting notices at the prominent community locations in the downstream.

94. Should the nodal officer not be able to resolve the complaint to the satisfaction of the affected persons, he/she shall then refer the complaint directly to the DRIP - II Project Director (PD) at the Central level. Complaints referred to the PD will require him/her to take earnest action to resolve them in the earliest time possible. It would be desirable that the aggrieved party is informed of the course of action being taken. Reporting back to the complainant shall be undertaken within time specified for disposal of grievances. If the complaint is not resolved to the satisfaction of the aggrieved party, the complainant is free to take legal recourse. The decision of the judiciary will be binding on the Project, in case PAPs seek to exercise legal option for grievance redressal. Vulnerable, physically disadvantaged are provided with special focus in GRMs.

95. This framework encourages the Borrower/ implementation agency to take advantage of the existing GRMs, where available. Many States have been implementing State level, single sign-on electronic platforms<sup>24</sup> for receiving, forwarding the grievances to relevant agencies and addressing grievances. The Project GRM shall be made connected to such existing GRMs to benefit from the accessibility and knowledge about such systems by the stakeholders who

<sup>24</sup>Spandana in Andhra Pradesh, Sampark in Rajasthan etc.

desire to approach them. The framework shall take in to account the existing system's ability to identify duplicate complaints received through more than one channel; and lack of connectivity between the common platform and the project level GRM. The IAs shall strive to propose a GRM platform that is functioning, and accessible to beneficiaries through a variety of channels.

## **6.5 ESMF implementation budget**

96. The budget for implementation of the ESMF primarily comprises of the following items:
- E&S specialists including GBV officer (where required) within the SPMUs
  - E&S Specialists including GBV officer within the PMC supporting the CPMU
  - Trainings/capacity building events and exposure visits/thematic studies that required to be conducted periodically,
  - Preparation of safeguard instruments – ESDD/ESIA, ESMP (including OHS, GBV, TDP, GRM, consultations), RAP for specific sub-projects, as applicable
  - Awareness programmes for community stakeholders
  - External agencies that might be contracted for monitoring the implementation of ESMP, RAP
  - Third party independent evaluation
97. The ESMF budget does not include Resettlement costs of any nature. These costs shall be borne from the counterpart funding. The Project Director is the designated officer for approving the documents, with recommendations from E&S specialists.
98. The Project Component 4 on Project Management provides budget towards afore-mentioned items/activities covers: (i) CPMU's coordination of E&S activities by the Implementing Agencies (IAs) of the project, supported by an Engineering and Management Consultant (EMC) (ii) hiring of E&S experts on a contractual basis at the IA level; (iii) setting up a monitoring and evaluation (M&E) system that will conducting of the Annual Evaluation exercise. CPMU and SPMUs will provide adequate budget for preparation and implementation of all safeguard instruments from the counterpart funding, besides for conducting any trainings, exposure visits and capacity building events. ESMF budget has been estimated about 0.5% (USD 2.5 million) of the total project costs and will be used by SPMU from the above components; however, the budget amount may vary based on the need of the project. Costs of ESMP implementation would be included within each dam ESMP and their break-up would depend on the nature of activities, extent of impacts and proposed mitigation measure. World Bank's funding will be available for costs such as works, purchase of goods and services, where required. The implementation would be at SPMU/ State / IA level, so over and above if required for any exigency or developing a technical report counterpart funding will be arranged from budget kept under component for studies. It is reflected well in the Project Management component of the project as well, which states – “establishment of a Quality Assurance and Quality Control system” that is based on proportionate risk as defined in the Good Practice Note (GPN) / Technical Guidance Notes on Risk-Informed Dam Safety Management under the ESF. This component will also finance consultancies, as well as related material, office equipment and incremental operating costs. The project will provide investment and technical support for the establishment of a Management Information System (MIS) for the project.

## **6.6 Linkage to the ESCP**

99. The Environmental and Social Commitment Plan (ESCP) sets out material measures and actions, any specific documents or plans, as well as the timing for each of these. The ESCP which will be part of legal agreement and will be signed by each participating states and

Implementing agencies (IAs) will require to comply with the provisions of any other E&S documents required under the ESF and referred to in the ESCP, such as the Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), Bio-diversity Management Plan, Stakeholder Engagement Plan, etc. The ESCP will be prepared considering the findings of the environmental and social assessment based on the ESMF, the Bank's environmental and social due diligence and the results of engagement with stakeholders. It will clearly spell out the plans to be prepared with timeframe and responsibility. Adherence to the aforementioned ESMF processes and provisions will therefore be ensured through the ESCP.

#### **6.7 Contingency Emergency Response Component**

100. In case of emergency and if GOI through CWC requests the World Bank to activate the CERC, the current ESMF prepared by CWC will be updated within 90 days of activating the CERC and will include a positive list of eligible activities / expenditures at the time of activation. In addition, the ESCP will be accordingly amended to include the provision as per the updated ESMF within 90 days of CERC activation.

#### **6.8 Updating of ESMF**

101. Revision/Modification of the ESMF: This ESMF will be an "up-to-date" or a "live document" enabling revision, when and where necessary. Unexpected situations and/or changes in the project or subcomponent design would therefore be assessed and appropriate management measures will be incorporated by updating the Framework to meet the requirements of country's legislations and Bank ESF. Such revisions will also cover and update any changes/modifications introduced in the legal/regulatory regime of the country/ state. Also, based on the experience of application and implementation of this framework, the provisions and procedures would be updated, as appropriate in consultation with the World Bank and the implementing agencies/departments. Finalized version of updated ESMF will be submitted to WB for its review and approval.