



# Concept Environmental and Social Review Summary

## Concept Stage

### **(ESRS Concept Stage)**

Date Prepared/Updated: 08/27/2019 | Report No: ESRSC00769



**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
India	SOUTH ASIA	P170873	
Project Name	Dam Rehabilitation and Improvement Project - 2		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Water	Investment Project Financing	4/10/2020	8/14/2020
Borrower(s)	Implementing Agency(ies)		
Department of Economic Affairs, Ministry of Finance	Government of Andhra Pradesh, Irrigation Department, Central Water Commission (CWC), Bhakra Beas Management Board (BBMB), Government of Chhatisgarh, Water Resources Department, Government of Goa, Water Resources Department, Government of Madhya Pradesh, Water Resources Department, Government of Telangana, Water Resources Department, Government of Kerala, Water Resource Department, Government of Meghalaya, Water Resources Department, Government of Odisha, Water Resources Department, Government of Bihar, Water Resources Department, Government of Gujarat, Water Resources Department, Government of Maharashtra, Water		

Public Disclosure



Resources Department, Government of Manipur, Water Resources Department, Government of Tamil Nadu, Water Resources Department, Ministry of Jal Shakti, Government of Uttar Pradesh, Water Resources Department, Government of Punjab, Water Resources Department, Government of Rajasthan, Water Resources Department, Government of West Bengal, Irrigation & Waterways Department		
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Proposed Development Objective(s)

The project development objective (PDO) is to improve dam safety and strengthen institutional capacity for enhanced operational performance of selected existing dams in participating states.

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Financing (in USD Million)	Amount
Total Project Cost	700.00

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

The proposed Dam Rehabilitation and Improvement Project – 2 (DRIP – 2) will build on the lessons and successes of the first DRIP. The project would 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 periodic dam rehabilitation, enhancing State capabilities to manage these critical assets through institutional reform and strengthening, and introducing risk-based dam management. The project would comprehensively address dam safety concerns in the participating States (including institutional reforms and modernization, instrumentation, etc.),



although dam rehabilitation per se will focus on a selection of dams within the States. Approximately 300 dams will be taken up for rehabilitation under the project.

#### D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]  
The project shall cover 18 states and around 300 dams, located in mountainous, flat and coastal terrain area of India. Most of mountainous areas of the country are located in seismologically high active zone and are rich in biodiversity. Similarly, coastal areas are also rich in terrestrial and aquatic ecology. Plain areas have large habitation, forests areas and are prone to floods in many areas. Impacts from project activities are anticipated on water resources, air quality, terrestrial ecology, natural resources, occupational health and safety of workers/ public and land resources from disposal of muck and other wastes which will vary depending on extent of dam rehabilitation activities proposed. Recent events of dam failures resulting in heavy floods and siltation in the state of Maharashtra and earlier in Kerala has brought in aspects of dam safety, sediment management in the current project and will also be included as part of risk analysis under ESA. The project involves minor to major civil works for rehabilitation of dams and appurtenance structures and institutional strengthening for long term stability of the dams. The minor work may involve repair of gates valves, spillways and bottom outlet and electric and electronics components while major work may involve construction of hydrological structures like additional spillways.

The populations in participating states are: Andhra Pradesh and Telangana (84,580,777), Bihar (104,099,452), Chhattisgarh (25,545,198), Goa(1,458,545), Gujarat (60,439,692), Karnataka(61,095,297), Kerala(33,406,061), Madhya Pradesh (72,626,809), Maharashtra (112,374,333), Manipur (2,855,794), Meghalaya (2,966,889), Odisha (41,974,218), Punjab (27,743,338), Rajasthan (68,548,437), Tamil Nadu (72,147,030), Uttar Pradesh (199,812,341), and West Bengal (91,276,115). Most of the participating states have tribal population -- Andhra Pradesh (5.3%), Bihar (1.3%), Chhattisgarh (30.6%), Goa (10.2%), Gujarat (14.8%), Karnataka (7%), Kerala (1.4%), Madhya Pradesh (21.1%), Maharashtra (9.4%), Manipur (40.9%), Meghalaya (86.1%), Odisha (22.8%), Rajasthan (13.8%), Tamil Nadu (1.1%), Telangana (9.3%), Uttarakhand (3.2%), Uttar Pradesh (0.6%), and West Bengal (5.6%). 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. 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 Bihar, 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. Once the exact locations are identified, community consultations will be carried out, including the implementation of an FPIC process in tribal areas as needed. Exact dam locations where works are proposed will be finalized during project preparation. Impacts on land and assets are envisaged in a few dams wherein major civil works are likely. Also considering the specialized nature of rehabilitation works, usage of skilled migrant labour leading to potential GBV risks, are some relevant aspects that would be considered as part of ESA.

#### D. 2. Borrower's Institutional Capacity

The nodal agency for project implementation will be the Central Water Commission (CWC) under the Ministry of Jal Shakti at the Central level and project agencies at the State levels. The project will be implemented in 18 states through their respective departments responsible for dam rehabilitation work. The Implementing Agency at the central level, i.e. CWC and some of the participating states who are continuing from the on-going DRIP project are



familiar with the World Bank’s environmental and social safeguard policies However, in view of new Environmental and Social Framework (ESF), awareness and capacity needs to be built up for all the implementing agencies.

In the ongoing DRIP project, an ESMF approach was adopted to assess the environmental and social impacts of the interventions undertaken for each dam. Various corrective actions were taken during implementation from the learning and analysis of issue emerged during implementation process. However, despite of corrective measures, improvement in systems to manage E&S issues remained a challenge in the participating States. Hence, institutional capacity and skill will be an area of more and continued focus under this project for both existing states and new states and in light of additional requirements under new ESF. An institutional assessment from environmental, social and safety point of view would be part of the ESA, to strengthen skills in CWC and also in participating states.

In the ongoing dam rehabilitation project, it was observed that the Implementing Agencies have weak capacity and coordination across them is also limited. Some of the risks related to technical design primarily arise from the counterpart’s limited experience with dam safety. The primary risk related to stakeholders is the potential opposition to the project from a diverse set of stakeholders, including community-based groups. Although, the project’s design incorporates many risk mitigation measures, viz. a) Multi-disciplinary Dam Safety Review Panel (DSRP) will be constituted by each implementing agency and based on these recommendations, detailed structural and non-structural rehabilitation plans will be prepared for implementation under the project; b) National Level Steering Committee (NLSC) has been established for oversight on dam safety assurance and rehabilitation, as well as and disaster management; c) Implementation capacities, including environmental and social safeguards, financial management and procurement will be assessed during preparation through an institutional audit, and measures identified to strengthen capacities and mitigate risks. It is also envisaged that at the CWC level, the institutional reforms will include a change in approach from a single sector operation to multi sectoral teams of different skills in the areas of technical , environmental , social and safety.

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**II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS**

**A. Environmental and Social Risk Classification (ESRC) High**

**Environmental Risk Rating High**

The environmental risk rating at the PCN stage is “High”. All sub-projects tentatively known at this stage are likely to involve structural and/or non-structural measures for ensuring dam safety. Structural measures could include measures for seepage reduction (grouting, geomembranes, etc.), hydrological and structural safety measures (e.g., additional spillways, fuse plugs), strengthening of dam structures (e.g., gates), repairing foundation damages, strengthening dam sections, and improving basic dam facilities (e.g., access roads). Since rehabilitation activities are focused on existing dams, most of the structural interventions are expected to be confined within the dam premises and will be carried out in areas with restricted access, and therefore will not have direct interface with the population around dam sites except impact on the community health and safety from the vehicles and equipment that transport construction materials and workers to the project sites . Also, accidental risks are high on downstream populations due to design weakness, dam stability or natural calamities like earthquakes, cloud burst or very heavy rains. The key environmental risk identified are related to siltation in the dam without effective sediment management resulting into issue of dam safety, flooding and thus impacts at the downstream population. The other risks are occupational



Health and safety of workers, disposal of construction wastes, air, noise and water quality in case of most of the sub projects. There are also likely chances that few of the sub projects may be located in reserved forests area or close to protected areas like Hirakud dam and may involve new construction of large structures such as spillway which will involve cutting of large trees and diversion of forest areas , water flow downstream, aquatic ecosystems and communities downstream, etc. It is also expected that some of the dams may be explored for renewable energy generation like solar and wind which will not only lead to reduction in GHG emissions with positive impacts, which may bring in risk of solar panel and wind mast installation and disposal of solar panels after completing its useful life.

Every sub project and activities under the project could have social and environmental risks and impacts that need to be assessed and managed. A environmental and social assessment (ESA) will be carried out for planned activities under each sub project or dam and appropriate measures following the mitigation hierarchy will be designed- to avoid, minimize, mitigate or offset any potential risks and impacts. Dam safety assessment required per ESS4 will also be undertaken early in the project preparation as basis for the dam rehabilitation plans in addition to other technical studies. Based on the findings of the ESA for each dam, risk and impacts will be identified and depending upon the risk from (low to high) an Environmental and Social Management Plan (ESMP) will be prepared and implemented for each sub project / dam. In addition, environmental skills and capacity assessment will be undertaken for CWC (central implementing agency) and individually for all participating agencies and states to understand challenges of implementation and recommend improvements. An Environment and Social Commitment Plan (ESCP) will be agreed with the each state and central agency.

**Social Risk Rating**

High

In the proposed project, large scale construction activities are envisaged only in a few specific sub-projects. Involuntary land acquisition is likely in these cases, e.g. Right Bank Additional Spillway of Hirakud Dam, etc. In these sub-projects large scale construction work could lead to impacts and risks on both general and vulnerable and disadvantaged individuals and groups. Social impacts likely include those on land, private and community owned assets including structures, trees and crops within existing land and those areas identified for land taking. Physical and economic displacement, too, is very likely. Management of these risks would be undertaken through the principle of the ‘mitigation hierarchy’. Further activities undertaken in dams in tribal dominated areas, depending upon the nature and type of intervention, could have adverse impacts on tribal population. Such dam sites and proposed interventions shall be identified during project preparation. FPIC would be undertaken in sub-projects involving impacts on land, livelihood, cultural heritage and in cases requiring relocation and in case FPIC cannot be ascertained, the project will not proceed with those sub-projects/activities. Besides impacts on general population, vulnerable and disadvantage individuals could also be impacted and these aspects shall be brought by the sub-project or Dam specific ESAs.

At this preliminary stage, social risks identified include inadequate coordination between concerned agencies on land acquisition and resettlement; lack of dedicated personnel in dealing with social aspects within IAs and their limited capacity to address E&S issues . As migration of skilled labor required for many of the specialized dam works will be a common feature, labor influx and resultant Gender Based Violence (GBV) issues would be assessed as part of ESA and mitigation measures prepared in accordance with the recently issued World Bank’s Guidance note “Managing the risks of adverse impacts on communities from temporary project induced labor influx”. Overall sub-project specific mitigation tools such as RAP, IPDP (TDP), Labor Management Procedure (LMP), etc. would be developed to address design and implementation stage social risks and impacts.

**B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

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## B.1. General Assessment

### ESS1 Assessment and Management of Environmental and Social Risks and Impacts

#### **Overview of the relevance of the Standard for the Project:**

The client will carry out ESIA for first set of 100 dams by appraisal and prepare a dam- wise risk classification and impacts. The ESMPs for all dams identified as "High" will be shared with the Bank for review and clearance and for those with Low and Moderate risk will be managed at state level by E&S specialists at the state or IA level or Project Management Consultant with specific guidance from the Bank team. The ESA for the remaining 200 dams will be undertaken during the remaining period of the project and ESMP shall be prepared for all the dams which will be taken up for implementation Based on the findings of the ESA, an environmental and social management plan will be prepared and implemented. Environment and Social Commitment Plan (ESCP) will be agreed with the client

The project envisages structural and non-structural measures for dams. Structural measures could include measures for seepage reduction (grouting, geomembranes, etc.), hydrological and structural safety measures (e.g., additional spillways, fuse plugs), strengthening of dam structures (e.g., gates), repairing foundation damages, strengthening dam sections, and improving basic dam facilities (e.g., access roads). Non-structural measures could include standardized dam safety instrumentation, monitoring, assessment and reporting protocols for dam health / audit; flood forecasting and early warning systems; integrated reservoir operations including streamflow forecasting for climate resilient dam management; preparation and implementation of Emergency Preparation Plans (EPPs); and preparation and implementation of sediment management plans. Structural and non-structural measures will be identified in dam rehabilitation plans that are prepared after conducting thorough investigative studies and dam safety assessments to ensure appropriateness of interventions for dam rehabilitation and improvements. It is important to mention here that Dam safety assessment is required per ESS4 and would come early in the project preparation as basis for the dam rehabilitation plans.

The environmental risks anticipated under the project arise from the fact that the project is spread across in the 18 states across India with fragile and climate vulnerable terrain but is clearly focusing dam rehabilitation activities as mentioned in the above paragraph . Addressing environmental and social risks and impacts from dams through various rehabilitation measures is required because unmanaged and unmitigated environmental impacts could have far reaching negative consequences. Under land and water resource management risks may arise from structural measures like; grouting, geomembranes, additional spillways, fuse plugs, strengthening of dam structures , gates), repairing foundation damages, strengthening dam sections, and improving basic dam facilities (e.g., access roads)structures;. In addition The key environmental risk identified are related to siltation in the dam without effective sediment management resulting into issue of dam safety, flooding and thus impacts at the downstream population. The other risks such as occupational Health and safety of workers, disposal of construction wastes, air, noise and water quality in case of most of the sub projects to be anticipated. There are also likely chances in few of the sub projects may be located in reserved forests area or close to protected areas like Hirakud dam and may involve new construction of large structures such as spillway which will involve cutting of large trees and diversion of forest areas etc. and will pose high risk to biodiversity. Thus, in the project ESA for each sub project has been proposed and depending upon the impacts and risks from low, moderate to high environmental and social management plan will be developed for each dam under the project.

At this stage, social impacts likely include those on land, private and community owned assets including structures, trees and crops within existing land and those areas identified for land taking. Physical and economic displacement too is very likely. Management of these risks would be undertaken through principle of 'mitigation hierarchy'. . At





this preliminary stage, social risks identified include inadequate coordination between concerned agencies on land acquisition and resettlement; lack of dedicated personnel in dealing with social aspects within IAs and their limited capacity to address E&S issues . As migration of skilled labor required for many of the specialized dam works will be a common feature, labor influx and resultant Gender Based Violence (GBV) issues would be assessed as part of ESA and mitigation measures prepared in accordance with the recently issued World Bank’s Guidance note “Managing the risks of adverse impacts on communities from temporary project induced labor influx”.

**Areas where “Use of Borrower Framework” is being considered:**

This project will adopt the Bank’s new Environmental and Social Framework and its Environmental and Social Standards, rather than the borrower’s E&S framework. The required steps will be detailed out in ESCP. The Project, however, is subject to the national, state and local permits and clearances as per the existing legal-institutional framework. These permits and clearances will be obtained prior to approval, and the exact requirements to obtain such permits and clearances will be recorded in the ESCP.

**ESS10 Stakeholder Engagement and Information Disclosure**

Though no new dams will be constructed, and the majority of the structural interventions will have minor impacts and also nil or negligible interface with, and impacts on, communities, there would be a few sub-projects with potential adverse impacts on communities. In addition, there would be a few dams wherein activities towards revenue generation would be undertaken, such as development of tourism and water recreational activities, fisheries, etc. Also, keeping in with project’s aim to increase the safety of existing dams and create understanding / awareness of the project amongst various stakeholders, one of the key non-structural interventions under the project is the preparation of an Emergency Preparedness Plan (EPP) for every dam – a document that needs to be both disseminated and consulted upon to elicit feedback from communities and all key stakeholders involved in implementation of the EPPs.

Consultation on and disclosure of information with stakeholders will be core during both planning and implementation stages of the project, in addition to the development and implementation of a communications and outreach strategy, and the operation of a comprehensive Grievance Management System during project implementation. Single Stakeholder Engagement Framework (SEF) will be prepared at project level to lay down principles, process and protocol to be followed for consultations, identification of stakeholders, etc. at each dam level. Nature and scope of stakeholder engagement would be proportionate to the nature and scale of the project and its potential risks and impacts. Such a plan would also include actions stated in the GBV mitigation plan that will be prepared by each state using the GBV Risk Assessment Tool. At this stage the identified stakeholders include: district administrations of areas with dams, departments of forests, horticulture, agriculture, revenue and tourism; local communities living upstream and downstream; civil society organizations, media agencies – both print and audio/visual; police authorities, district administration, State Disaster Management Authority (SDMAs) and National Disaster Response Force (NDRF), and people likely to be affected due to pre-construction and construction stage impacts; and response providers i.e. NGOs/CSO involved as part of the GBV risk mitigation plan. The exact composition of stakeholders may change as a result of changes to the project design or shifting circumstances during project implementation, prompting updates to the SEP , which will be a living document and will be updated accordingly if needed during implementation and this shall be a condition in ESCP.





## **B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

### **ESS2 Labor and Working Conditions**

Project will involve: a) Direct workers (Central Water Commission and all IAs); b) contracted workers engaged in construction works including migrant skilled workers, consultancy services firms (for preparing DPRs, RAP & IPDPs where required, SEPs and EPPs); c) primary supply workers could include suppliers of equipment necessary towards the many structural and non-structural interventions. At present due to the nature of the project, involvement of community workers is not envisaged, however there could be community volunteers involved particularly in the operationalization of the EPPs. Preparation of ESA will assess the following aspects towards preparation of Labor Management Procedure: applicability of labour laws and, non-discrimination and equal opportunity, potential risks of child labor and forced labor, including the workers to be brought to the project by brokers (sub-contractors); grievance mechanism to all workers, occupation health and safety aspects, etc.

### **ESS3 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 will be taken from borrower as part of ESCP. 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 waste 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. Notwithstanding that cleaner alternatives would be sought for energy generation, the project will likely require the estimation of the GHG emission, also, the project could have an impact on the water availability during construction and/or operation, and for that a water management plan will also be prepared. The project will ensure cleaner production principles for the proposed activities.

### **ESS4 Community Health and Safety**

Dam safety is intrinsic part of the project. Natural disaster like earthquake, cloud burst/ heavy rains do exist in the many sub project areas. Risk of accident and incidence do exist during construction and operation stages of the project. Dam safety assessments of all dams are required per ESS4 and would come early in the project preparation as basis for the dam rehabilitation plans. Dam safety reports will be technical reports and will be a separate assessments from ESA. Though, dams are designed considering natural hazard and possibility of disaster though



cannot be ruled out. The design measures including consideration of likely effect of climate changes for dam rehabilitation and structural changes can minimize such probability to a larger extent. The larger construction activity like Spillway construction may have risk to ecosystem services which may have results in adverse health and safety risk to depended community. Environmental and Social Assessment (ESA) for each such sub project or dam shall be made including effect of climate change and mitigation measures; to eliminate or minimize such impacts. Various measures for protection of occupational health and safety are defined under DRIP I. However, these measures will be further strengthened based on lesson learned out of DRIP I. Emphasis will be given in designation of environment and occupational health and safety officers at each sub project and strengthening their capacity through workshops and training programmes and exposure visits. 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. Emphasis will also be made to prepare a dam safety reports which shall have components (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.

#### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

In the proposed project, large scale construction activities are envisaged only in a few specific sub-projects. Involuntary land acquisition is likely in these cases, e.g. Right Bank Additional Spillway of Hirakud Dam, etc. . These In addition, in certain other projects, it is anticipated that impacts, if any, will be temporary in nature and reversible as these do not involve disruption or loss of access to assets by communities. The other category of non-structural interventions involves dam safety instrumentation, monitoring, assessment and reporting protocols for dam health / audit; flood forecasting and early warning systems; integrated reservoir operations including streamflow forecasting for climate resilient dam management; preparation and implementation of Emergency Preparedness Plans (EPPs); and preparation and implementation of sediment management plans. At present none of these non structural interventions are envisaged to require any land taking.

During preparation, the approach to land taking proposed for each state would be further assessed to better understand the processes and also whether the proposed methods meets the requirements of ESS 5. Also, the gap analysis between this method and ESS5 requirements will allow for the coverage of non-title holders, such as squatters and encroachers. In addition, construction works may cause temporary impacts on access and disruption to livelihoods and services. Commensurate mitigation instruments RAP, ESMPs will be prepared and these will be listed in the ESCP.

The Resettlement Policy Framework (RPF) shall be prepared to cover the sites not known before appraisal and document so prepared shall be consulted and publicly disclosed prior to appraisal.

#### **ESS6 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 address through appropriate avoidance,



minimization or mitigation and compensatory measures. All the risks and impacts relevant to ESS6 will be assessed as part of the ESA and mitigation hierarchy will be applied to manage E&S risks and impacts. If required, a separate Biodiversity Management Plan (BMP) will be prepared.

**ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

The project shall cover 18 states, of which many have significant amount of tribal population such as Odisha, Chhattisgarh, Madhya Pradesh, Meghalaya, West Bengal, Manipur, etc. Many of these same states also have areas that are declared as Schedule V and VI areas as defined in the Constitution. Commensurate instruments, such as Tribal Development Plans (TDPs), will be developed for sub-projects identified before appraisal. In case of sub-projects identified post -appraisal, the ESCP shall list the requirements of sub-project specific TDPs, where required.. FPIC would be undertaken in sub-projects involving impacts on land, livelihood, cultural heritage and in cases requiring relocation and in case FPIC cannot be ascertained, the project will not proceed with those activities. The same shall be stated in the ESCP.

**ESS8 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.

**ESS9 Financial Intermediaries**

The modality of FI operation is yet to be ascertained and hence considered not relevant at this stage. If FIs will be involved, the environmental/social instrument to be prepared/reviewed will be “Environmental and Social Management System (ESMS)” in compliance with ESS9. The same shall be stated in the ESCP. Therefore, the ESS requirement will be revisited during project preparation. The E&S instrument will set out the procedures to assess and manage environmental and social risks and impacts associated with the sub-project it will finance.

**B.3 Other Relevant Project Risks**

Considering the project covers many states including those which are susceptible to seismic activities, earth quakes will be another risk worth considering under the project.

**C. Legal Operational Policies that Apply**

<b>OP 7.50 Projects on International Waterways</b>	Yes
<b>OP 7.60 Projects in Disputed Areas</b>	No

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III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?

No

Financing Partners

There is no such financing partners.

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

The following E&S instruments listed will have to be available in acceptable form :

- (i) Environmental and Social Commitment Plan (ESCP) as per new ESF will be agreed with each implementing agency in the project. ESCP will outline the process for conducting ESA for each sub-project identified under DRIP-2, EMP , RAP, TDP etc. required during preparing and implementation , along with monitoring protocols. It will also have provisions to manage unanticipated risks and impacts and the ESCP will indicate plans and schedules of the future sub-projects to be financed by the project.
- (ii) The Dam Safety Assessment Report with recommendations of each dam, at least 30% of dam safety reports of the dams ( say 100 dams) which will be considered for implementation in first 18 months should be available before appraisal.
- (iii) The client will carry out ESIA for first set of 100 dams by appraisal and prepare a dam- wise risk classification and impacts. The ESMPs for all dams identified as "High" will be shared with the Bank for review and clearance and for those with Low and Moderate risk will be managed at state level by E&S specialists at the state or IA level or Project Management Consultant with specific guidance from the Bank team. The ESIA for the remaining 200 dams will be undertaken during the remaining period of the project and ESMP shall be prepared for all the dams which will be taken up for implementation. Assessment study to assess capacity and skill from environmental and social perspective and to develop institutional strengthening and Capacity building plan for central agency CWC where national PMU will be housed and all participating states and agencies. Recommendations of assessment will be included in the ESCP and agreement to implement recommendations on institutional strengthening and capacity building plan developed for environmental and social staff in CWC(CPMU) and participating states as per skill, institutional and capacity building assessment indicated above.
- (iv) The Resettlement Policy Framework (RPF) shall be prepared to cover the sites not known before appraisal and document so prepared shall be consulted and publicly disclosed prior to appraisal.
- (v) ESA/ ESMP ,including Resettlement Action Plan and Tribal Development Plan (if required) for the remaining 200 dams to be identified and prepared during implementation;
- (viii) Labor Management Procedure for all IAs will be Prepared.
- (vi) Separate document to manage labor influx and GBV issues , for those dams/sub-projects to be prepared.
- (vii) A single Stakeholder Engagement Framework (SEF) will be prepared for the overall project that would lay down principles, process and protocol to be followed for consultations, identification of stakeholders, etc. at each dam level. Accordingly, stakeholders will be engaged at dam level, once the dams are identified for support under the project. There will be a periodical reporting on how SEF is being applied and implemented at dam level. There will be a report on how SEF has been applied for first set of 100 dams.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

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- (a) Processes and timelines for obtaining of requisite various environmental clearances at local, state and national levels for all sub-project activities, and specific timelines for obtaining clearances for civil works, not obtained by Appraisal;
- (b) Preparation of ESA and ESMP as per new ESF including RAPs, IPDPs/Tribal Development Plans ( if required), GBV plans and LMPs for all sub-projects;
- (c) Implementation of SEPs, LMPs, etc. for all the proposed dams.
- (d) Dam Safety Assessments and Dam Safety Reports for the remaining 200 dams.
- (e) Establishment of GRM (Project GRM and Labor GRM)

**C. Timing**

**Tentative target date for preparing the Appraisal Stage ESRS**

16-Mar-2020

**IV. CONTACT POINTS**

**World Bank**

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**Borrower/Client/Recipient**

Borrower: Department of Economic Affairs, Ministry of Finance

**Implementing Agency(ies)**

Implementing Agency: Government of Andhra Pradesh, Irrigation Department

Implementing Agency: Central Water Commision (CWC)

Implementing Agency: Bhakra Beas Management Board (BBMB)

Implementing Agency: Government of Chhatisgarh, Water Resources Department

Implementing Agency: Government of Goa, Water Resources Department

Implementing Agency: Government of Madhya Pradesh, Water Resources Department

Implementing Agency: Government of Telangana, Water Resources Department

Implementing Agency: Government of Kerala, Water Resource Department

Public Disclosure



Implementing Agency: Government of Meghalaya, Water Resources Department

Implementing Agency: Government of Odisha, Water Resources Department

Implementing Agency: Government of Bihar, Water Resources Department

Implementing Agency: Government of Gujarat, Water Resources Department

Implementing Agency: Government of Maharashtra, Water Resources Department

Implementing Agency: Government of Manipur, Water Resources Department

Implementing Agency: Government of Tamil Nadu, Water Resources Department

Implementing Agency: Ministry of Jal Shakti

Implementing Agency: Government of Uttar Pradesh, Water Resources Department

Implementing Agency: Government of Punjab, Water Resources Department

Implementing Agency: Government of Rajasthan, Water Resources Department

Implementing Agency: Government of West Bengal, Irrigation & Waterways Department

Public Disclosure

## V. FOR MORE INFORMATION CONTACT

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## VI. APPROVAL

Task Team Leader(s):	Chabungbam Rajagopal Singh, Halla Maher Qaddumi
Practice Manager (ENR/Social)	David Seth Warren Recommended on 15-Aug-2019 at 08:41:33 EDT
Safeguards Advisor ESSA	Maged Mahmoud Hamed (SAESSA) Cleared on 27-Aug-2019 at 08:46:13 EDT