

DAM REHABILITATION AND IMPROVEMENT PROJECT (DRIP)
Phase II
(Funded by World Bank)

PILLUR DAM
(PIC: TN 12 HH0043)

ENVIRONMENT AND SOCIAL DUE DILIGENCE REPORT



OCTOBER 2023

**Tamil Nadu Generation and Distribution Corporation
(TANGEDCO), Tamil Nadu**

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ABBREVIATIONS AND ACRONYMS

AIDS	:	Acquired Immunodeficiency Syndrome
CA	:	Conservation Area
CCA	:	Culturable Command Area
COVID	:	Coronavirus Disease
CWC	:	Central Water Commission
DRIP	:	Dam Rehabilitation and Improvement Project
DSRP	:	Dam Safety Review Panel
E&S	:	Environment & Social
EAP	:	Emergency Action Plan
ESDD	:	Environmental and Social Due Diligence
ESF	:	Environmental and Social Framework
ESIA	:	Environmental and Social Impact Assessment
ESMF	:	Environment and Social Management Framework
ESMP	:	Environment and Social Management Plan
ESS	:	Environmental and Social Standard
GBV	:	Gender Based Violence
GIS	:	Geographic Information System
GRM	:	Grievance Redressal Mechanism
HIV	:	Human Immunodeficiency Virus
IA	:	Implementation Agency
IPF	:	Investment Project Financing
MCM	:	Million Cubic Meters
OHS	:	Occupational Health & Safety
PA	:	Protected Area
PDO	:	Project Development Objective
PICC	:	Poly Ironite Ceramic Cementitious Coating
PMF	:	Probable Maximum Flood
PPE	:	Personal Protective Equipment
PST	:	Project Screening Template
RET	:	Rare Endangered and Threatened
SC	:	Scheduled Castes
SCADA	:	Supervisory Control and Data Acquisition
SEA	:	Sexual Exploitation and Abuse
SEAH	:	Sexual Exploitation Abuse and Harassment
SEP	:	Stakeholder Engagement Plan
SF	:	Screening Format
SH	:	Sexual Harassment
SPMU	:	State Project Management Unit
ST	:	Scheduled Tribes
WB	:	World Bank
WQ	:	Water Quality

EXECUTIVE SUMMARY

The Pillur dam was constructed during 1961-1967 with Canadian assistance under Colombo Plan across river Bhavani with 87.78 m high and 357.20 m long masonry gravity dam. It is 78 km away from Ooty and 49 Km away from Karamadai in the Coimbatore District. The Latitude of the dam is 11 ° 15' N, Longitude 76° 41' E. The dam is provided with spillway having 4 Nos of vertical lift type gates of size 12.20 m x 9.14 m each with a discharging capacity of 2830 Cumecs. Kundah Power House No.4 with an installed capacity of 100 MW (2 x 50 MW) is located at the toe of the Dam on the downstream side of the left flank. The tail race water after power generation discharges directly into Bhavani River. This dam has been constructed as storage cum forebay for Kundah Power House - 4. The Pillur Dam is the tail end component of Kundah Hydro Electric Complex in Nilgiris Hills. This Dam picks up the tail waters of Kundah Power House - 3. In addition to the Power Generation, it supplies drinking water to the Coimbatore City Corporation and the nearby rural areas by pumping 250 MLD of water throughout the year.

It has been proposed to undertake rehabilitation measures (structural, non-structural, instrumentation and basic facility enhancement) under the proposed Dam Rehabilitation and Improvement Project (DRIP II) with a view to increase the safety and to strengthen dam safety management.

The Environment and Social Due Diligence has been conducted for decision-making on the sub-project with a view to identify, evaluate and manage the environment and social risks and impacts in a manner consistent with the World Bank ESF. ESDD has been carried out by studying the sub-project information and proposed interventions, assessing the magnitude of E&S risk and impacts with respect to key baseline data in immediate vicinity area. Stakeholder consultations were conducted on 14/12/2022.

Activity wise environment and social screening has been carried out to identify risks and impacts to classify the sub-project based on risk level (low, moderate or substantial and high) and recommend commensurate plans/measures to meet identified risks and impacts.

As per the ESDD exercise, risk/impacts that have been identified relate to Water Quality, Physical Environment, labour and SEA/SH/GBV. Environment risks of air, water, noise, land use, soil and resource use for repairs to masonry portion of dam like u/s face treatment are Moderate. Similarly, environment and social risk of labour camp and disposal of debris has been identified as moderate. Risk of all other activities has been identified as Low. These risks are low to moderate and localized, short term and temporary in nature which can be managed with generic ESMP and guidelines. OHS is a substantial risk activity and is being treated separately through OHS plan in accordance with WB ESHS guidelines.

Since risks and impacts are low to moderate category, a standard ESMP customized to sub-project will be prepared in accordance with the ESMF. The customized ESMP will address the following:

- Gender Based Violence or SEA/SH related actions(ESS1)
- Labour Management Procedure(ESS2)

- Resource Efficiency and Pollution Prevention(ESS3)
- Community Health and Safety(ESS4)
- Stakeholders Engagement Plan(ESS10)

Overall, the proposed activities within this dam sub-project have low to moderate risks resulting in the overall sub-project to be categorized as Moderate risk category. These risks and impacts can be effectively mitigated with effective implementation of mitigation plans by SPMU/IA, Contractors and monitoring by EMC, SPMU and CWC.

1.1 PROJECT OVERVIEW

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\$ 26.84 million);

Component 4: Project Management (US\$ 68.13 million).

Component 5: Contingency Emergency Response Component (US\$ 0 million).

The project is likely to be implemented for 300 dams in 18 states across 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. 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.

1.2 SUB-PROJECT DESCRIPTION – PILLUR DAM

The Pillur dam was constructed during 1961-1967 with Canadian assistance under Colombo Plan across river Bhavani with 87.78 m high and 357.20 m long masonry gravity dam. It is 78 km away from Ooty and 49 Km away from Karamadai in the Coimbatore District. The Latitude of the dam is 11 ° 15' N, Longitude 76° 41' E. The dam is provided with spillway having 4 Nos of vertical lift type gates of size 12.20 m x 9.14 m each with a discharging capacity of 2830 Cumecs. Kundah Power House No.4 with an installed capacity of 100 MW (2 x 50 MW) is located at the toe of the Dam on the downstream side of the left flank. The tail race water after power generation discharges directly into Bhavani River. This dam has been constructed as storage cum forebay for Kundah Power House - 4. The Pillur Dam is the tail end component of Kundah Hydro Electric Complex in Nilgiris Hills. This Dam picks up the tail waters of Kundah Power House - 3. In addition to the Power Generation, it supplies drinking water to the Coimbatore City Corporation and the nearby rural areas by pumping 250 MLD of water throughout the year.

Salient features of the project area are reported below:

1.	River	Bhavani River.
2.	Location of the Dam	The Pillur dam was constructed across Bhavani River at Pillur. This dam is located at 49 km away from Karamadai in Coimbatore District, Tamil Nadu.
3.	Latitude	11° 15' 00" N
4.	Longitude	76° 41' 00" E
5.	Total Catchment area	1191.40 SqKm
6.	Maximum Flood discharge	2830 Cumecs
7.	Revised Maximum discharge as per ewe recommendation	7009.10 Cumecs
8.	Type of dam	Masonry Gravity
9.	Height of dam	87.78 m
10.	Dam work commenced in	1961
11.	Dam work completed in	1967
12.	Reservoir capacity	Gross capacity: 44.40 Mcum Effective capacity: 34.97 Mcum
13.	Water spread area at FRL	2.60 Sq km
14.	Length of masonry dam	357.20 m
15.	Length of spillway	62.50 m
16.	Crest level of spillway	+ 417.58 m
17.	Maximum water level	+ 426.72 m
18.	FRL	+ 426.72 m
19.	Deepest Bed level	+ 345.33 m
20.	Deepest Foundation level	+ 341.38 m
21.	Top width of dam	6.40 m
22.	Free Board	2.44 m
23.	Spillway	4 Vents
24.	Spillway gate	Vertical Lift Type 12.20 m X 9.14 m - 4 Nos.
25.	Top level of Dam	+ 429.16 m
26.	Scour vent sill level	+ 358.14 m
27.	Size of Scour vent	2.44 m x 3.66 m
28.	Scour vent gate	1 No each Service and Emergency Gate
29.	Size of Scour vent gate	3.66 x 3.64 (Radial - Service Gate) 4.32 x 3.34 (Vertical lift - Emergency Gate)
30.	Minimum draw down level	+ 396.25 m

Date of Starting the Construction	1961
Date of Completion	1967
Date of first full impoundment	1967
Original Inflow Design Peak Flood	2830 Cumecs
Maximum observed flood peak and date	
Revised Inflow Design Peak Flood	7009.10 Cumecs

1.3 PROPOSED INTERVENTIONS/ACTIVITIES AND INTENDED OUTCOMES

The Dam Safety Review Panel (DSRP), constituted for the purpose of inspection of the projects that the TANGEDCO plans to undertake for the repair, rehabilitation and modernization work under World Bank aided DRIP-II & III schemes, made a visit to Pillur Dam on 22/01/2021 for inspection purpose and recommended measure to improve the safety and performance of dam and associated appurtenances in a sustainable manner, and also to strengthen the dam safety institutional set-up.

The objectives of the project are to be achieved through investments for physical and technological improvement activities, managerial upgrading of dam operations, management and maintenance, with accompanying institutional reforms. The project will improve the safety and operational performance of dam and mitigate risks to ensure safety of downstream population and property. The following rehabilitation proposals as described in the PST have been formulated based on DSRP recommendations and these proposals form the basis for preparation of present ESDD report.

BASIC FACILITIES

- Special repairs to Approach Road to Dam entrance,
- Special repairs/constructions/improvements to buildings including electrification,
- Special Repairs to Quarters

REMEDIAL WORKS

Special repairs to masonry portion of Dam

- Upstream face and Downstream face treatment,
- Reaming the vertical & drainage shaft,
- Removal of calcination deposit,
- Approach Steps,
- Colour washing to dam,
- Remedial measures to contraction joint.

Repairs to shutters

- Cleaning and painting work for all gates,
- Dismantling and overhauling the spillway gate & Scour vent gates,
- Supplying and fixing of Seal for gates.
- Repair / Renewal for hoisting arrangements.
- UG cable for hoisting Motor and other equipment's,

Providing electrification to dam

- Electrification and lighting on the top of the Dam, gallery
- UG Distribution cable,
- Lighting protection system,
- Boat.

Figures 1.1 and **1.2** provide photographs of key infrastructure proposed for rehabilitation works and also major intervention's locations.



DSRP team's inspection of Pillur dam



Slit deposition inside Pillur reservoir photographed during 1991



Calcination through Vertical shaft inside Drainage gallery



Right Flank slops near the dam to be rectified



Left Flank slops near the dam to be rectified



Police Guard room requires renovation



Damaged Approach Road leading to dam



Downstream steps require improvements



2E Block to be renovated



4F Block to be renovated



Rusted and Jammed Main Guide rollers of Scour Vent Emergency Gate



Rusted Operating Mechanism covers and air dampers of scour vent gate



Outdated and deteriorated hydraulic seal arrangements of radial Scour Vent Gate



Worn out steel wire rope of Scour Vent Gate



Rusted intake gate structure



Rusted / corroded hoisting platform of intake gates



Worn out steel wire ropes of Intake Gate



Outdated / Worn out control panels of Intake Gates



Rusted skin plate (upstream side) of Spill Way Gate



Rusted Spill Way Gate structure and its platform



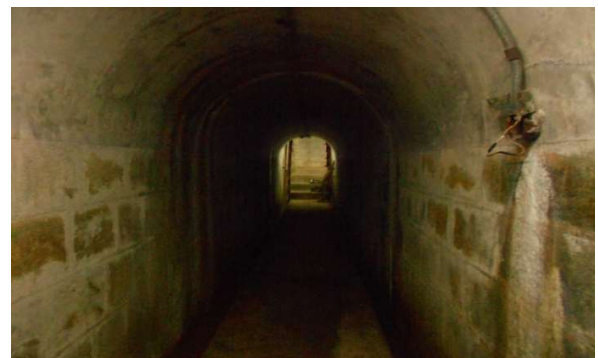
Worn out steel wire ropes of Spill Way gate



Dam top without lighting arrangements



Worn out wiring system at Dam top



Damaged / Worn out lighting arrangements at drainage gallery

Figure 1.1: Selected Photographs of Improvement/Intervention area



Figure 1.2: Project Area showing major intervention locations

1.4 IMPLEMENTATION ARRANGEMENT AND SCHEDULE

As can be seen from the list of activities proposed under dam rehabilitation project; these activities can be divided into civil works main package, other package and instrumentation. Civil work will be carried out by contractor(s) as these are labour intensive activities and would be completed over a period of 24 months (Minimum two summer period required). Dam Authority will hire contractor(s) based on national open competitive procurement using a Request for Bids (RFB) as specified in the World Bank's – Procurement Regulations for IPF Borrowers, July 2016, Revised August 2018 Procurement Regulations), and is open to all Bidders as defined in the Procurement Regulations. Following is the overall implementation and procurement schedule:

a) Overall Phasing of Project Implementation:

Proposed Starting of implementation (MM/DD/YYYY) : 03/2024
Proposed Ending of implementation (MM/DD/YYYY) : 09/2025
Implementation Duration(months)(MM) : 18months

b) Timeline phasing of implementation:

Sl. No.	Description	From (month/year)	To (month/year)	Status of Procurement Process
1	Main package C M E works	02/2024	09/2025	Approval obtained estimate sanctioned in III Packages.
2	Other Packages			
	Package – III (Bathymetric Survey)	02/2023	08/2023	Work completed
	Package – IV (Open Excavation & Pilot Dredging.)	09/2023	06/2024	
	Package – V (preparation of DPR)	01/2024	12/2024	
	Package – VI (Dam stability study.)	01/2024	06/2024	
	Package – VII (Dam Seismic review study.)	01/2024	06/2024	
	Package – VIII (Detailed EIA study and EMP)	01/2024	09/2024	
	Package – IX (Catchment area treatment works.)	09/2024	12/2025	
3	Procurement – instrumentation, goods, inspection vehicles			
	Instrumentation	01/2024	06/2025	

1.5 PURPOSE OF ESDD

The overall project (DRIP II) was categorized as **High Risk** as per the internal Environment and Social Risk Classification of the Bank. The Environment and Social Due Diligence has been conducted to use it as a tool for decision-making on the sub-project with the following specific objectives:

- To identify, evaluate and manage the environment and social risks and impacts of the sub-project in a manner consistent with the ESS's;

- ii. To adopt a mitigation hierarchy approach to the project's E&S risks i.e., a) anticipate and avoid risks and impacts; b) minimize or reduce risks and impacts to acceptable levels, if not avoidable; c) once risks and impacts have been minimized or reduced, mitigate; and (d) where significant residual impacts remain, compensate for or offset them, where technically and financially feasible;
- iii. To help identify differentiated impacts on the disadvantaged or vulnerable, if any, and to identify differentiated measures to mitigate such impacts, wherever applicable;
- iv. To assess the relevance and applicability of environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate; identify gaps, if any exist, and
- v. To assess borrower's existing capacity, gaps therein, and identify areas for enhanced capacity towards management of E&S risks.
- vi. Based on the categorization of Environment and Social risks and impacts of the Dam sub-project, to determine whether ESIA is to be carried out using independent third-party agency or a generic ESMP customized to mitigate E&S risks and impacts will suffice.

1.6 APPROACH AND METHODOLOGY OFESDD

The following approach has been adopted for ESDD:

- i. Study sub-project information, proposed interventions, their magnitude and locations and carry out assessment of each proposed intervention to identify the magnitude of E&S risk and impacts;
- ii. Review relevance and applicability of national and state legal requirements and Bank's ESF policy, standards and directives and preliminary assessment of applicability of legal requirement and ESS framework(2-8)
- iii. Conduct site visit to understand baseline environment and social settings, proposed activities under the sub-project, their location and sensitivity, if any.
- iv. present key baseline data essential for impact assessment in immediate vicinity area of proposed interventions from secondary sources, such as land-use, protected areas in vicinity, ascertain presence of indigenous (schedule tribe)/vulnerable people, etc.
- v. Undertake institutional assessment to identify existing capacities & relevant gaps to manage E&S risks and impacts
- vi. Conduct preliminary stakeholder consultations to help identify potential stakeholders; to provide information on the proposed interventions; to identify issues and concerns; and ascertain appropriate mechanisms for continued engagement.
- vii. Carry out activity wise environment and social screening and identify risks and impacts. Classify the sub-project based on risk level (low, moderate or substantial and high) and recommend commensurate plans/measures to meet identified risks and impacts.

2.1 POLICY AND LEGAL FRAMEWORK

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 applicability of World Bank ESF comprising, 10 ESS 's (ESS1 to ESS10) to the proposed rehabilitation proposals and Standard specific requirements were analyzed. Further, a comparison of national environmental and social regulations versus World Bank's ESS has been carried out along with the gap analysis. Applicability of Indian regulations, World Bank's ESS along with comparison and gap analysis is discussed in ESMF.

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.

Indian environmental regulations requiring environment clearance is for new dam projects specifically for the purpose of hydropower generation and/or irrigation projects and vary with generation capacity for hydropower projects and culturable command area served by irrigation projects. Forest related clearances become applicable, if new or any modification in any existing project requires diversion of forest land for non-forestry purposes. Wildlife Clearance process gets triggered if the project is in proximity to protected area or activities are proposed within protected or conservation areas (CA).

Therefore, for the proposed dam rehabilitation activities at Pillur dam, regulatory clearances will not be applicable as per Indian regulation. Another applicable regulatory requirement is discussed in ESMF.

2.2 DESCRIPTION OF INSTITUTIONAL FRAMEWORK

The sub-project will be implemented by Tamil Nadu Generation and Distribution Corporation, Government of Tamil Nadu. TANGEDCO being responsible for power generation, transmission and distribution; have a well-established customer complaint system for power consumer; where they can register their complaints 24x7 on dedicated line (1912). It also has a 24x7 Chairman's complaint cell with phone number and WhatsApp numbers. In addition, it has established a Consumer Grievance Redressal Forum, where consumers can register complaints online/manually, directly or through a representative to

be resolved within a period of 60 days; with a provision of filing appeal in next 30 days if the complainant is not satisfied with the redressal.

Tamil Nadu Generation and Distribution Corporation Limited do not have in-house expertise to address E&S issues. As per the suggestions of CPMU/CWC, it is proposed to outsource consultancy services of Environmental and Social experts to assist TANGEDCO in resolving E& S issues.

SPMU will designate Nodal Officer(s) (full time in-house engineering staff with E&S expertise) to coordinate and supervise E&S activities. They shall be at the level of Executive Engineer/ Deputy Directors and shall provide commensurate time to comply with E&S related activities. Brief TOR 's for these Nodal E&S officers are included in ESMF. The SPMU, in case in-house expertise not available, will hire the qualified staffs on need basis to support management of E&S risks including Environmental and Social Experts for ensuring compliance with the Bank's ESF and ESS's and ensuring that these activities shall be implemented as per the procedures.

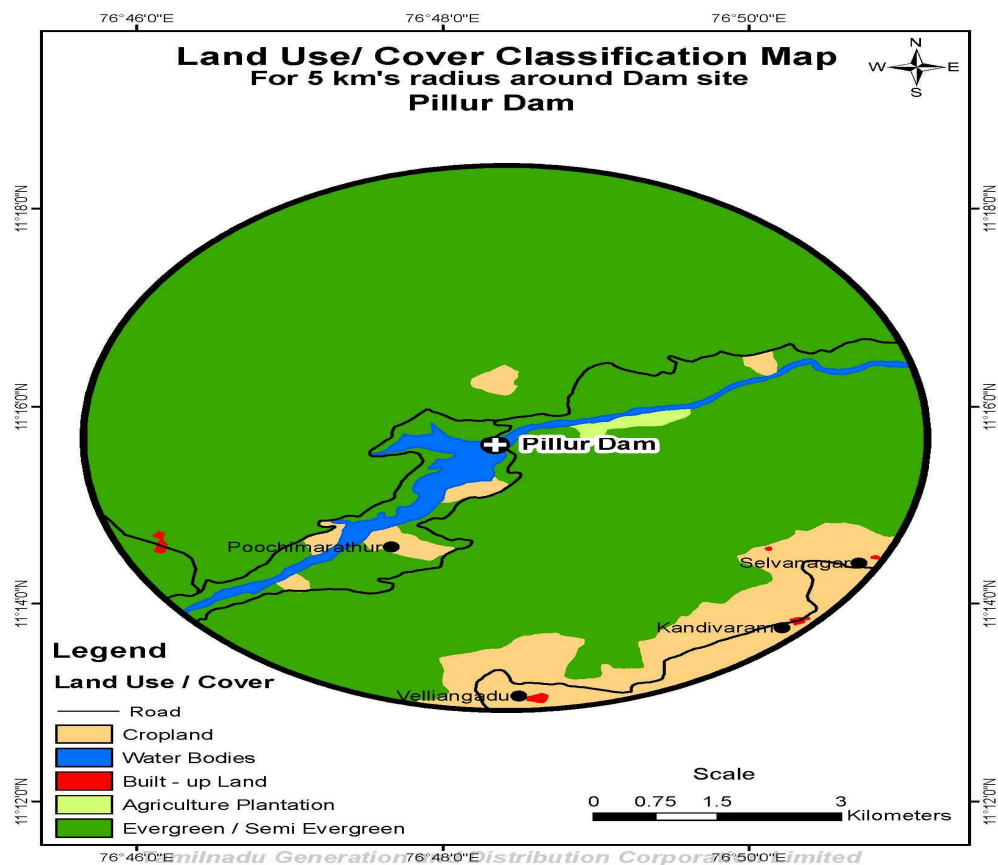
Presently, Grievance Redressal Mechanism has been established with two nodal officers, one at SPMU level and another at Field level. Sexual Harassment complaints can be made to either at dam level or SPMU level. As committed in ESCP, a Grievance Redress Mechanism (GRM) will be established and operated by the contracted agencies to address Project workers workplace concerns. SPMU will have oversight responsibility on the functioning of the GRM.

Assessment of physical, ecological and socio-economic conditions at dam site and immediate surrounding has been carried out based on secondary information and site observations; as discussed below.

3.1 PHYSICAL ENVIRONMENT

Land Use/Land Cover

The project surrounding area's land use and environmental sensitivity was analyzed using GIS techniques. Land use/ land cover map within 5 km radius of dam is presented at **Figure 3.1**. Present land use is mainly agricultural land, evergreen/semi-evergreen forest, deciduous forest, plantation, fallow land and water-bodies. There is no habitation or village falling in 5 km of radius of the Pillur Dam location.



[[Source: Digital data on land use/land cover maps using bhuvan prepared by National Remote Sensing Centre (NRSC) with Institute of Remote Sensing College of Engineering Anna University along with further refinement using Google Earth]

Figure 3.1: Land Use and Land Cover Map of 5 km radius around Dam site

Natural Hazards

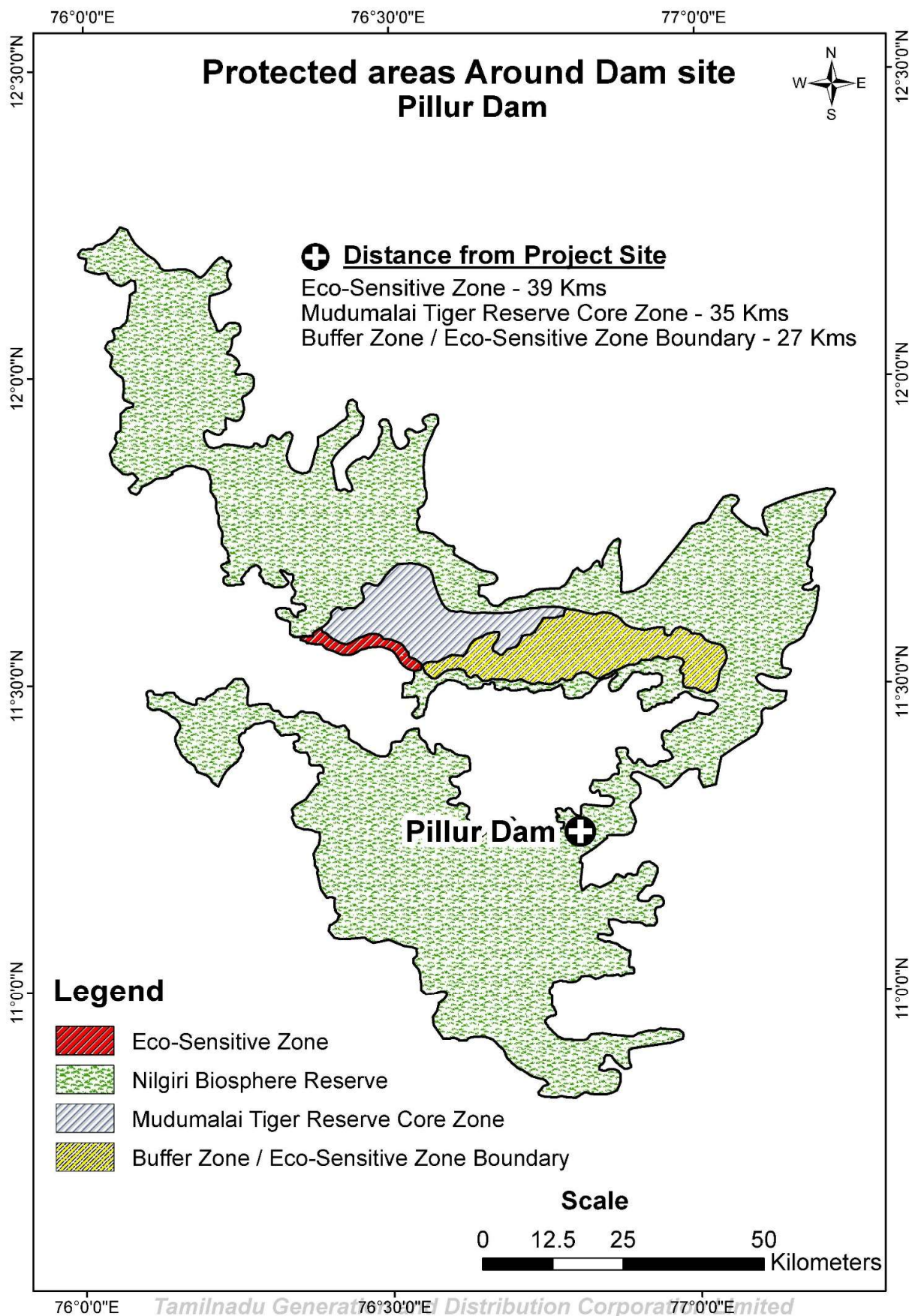
Potential of natural hazards such as flooding and earthquake has been assessed.

In terms of Indian Standard IS 11223-1985 criteria, Pillur Dam is classified as a 'Large Dam' and, accordingly, qualifies for PMF (Probable Maximum Flood) as the design flood. This office has assessed critically of various storms occurred in the vicinity of the catchment. The rainstorm of 15th November, 1992 centered at Runny mode (Maximum observed 1-day peak rainfall of 470 mm) it found to be critical and transposable to the catchment of Pillur Dam. The design storm value for catchment has been critically placed on the catchment for assessing the 1-day SPS. The 1-day maximum storm value transposed at catchment works out as 37.42 cm. The MAF for the event is being 1.21 has been adopted to assess the 1-day PMP value for the project. Thus, the 1-day PMP value works out as 45.28 cm for the catchment of Pillur Dam and same may be adopted as design storm for the project. The peak of PMF works out as 7009.10 Cum/Sec and the same may adopted as design flood in dam safety review of the project.

Project falls in earthquake zone III, and same was considered at the time of design and there is no need for seismic design review. The Bureau of Indian Standards [IS 1893 (Part I):2002], has grouped the country into four seismic zones, viz. Zone II, III, IV and V. Zone II is the least active and Zone V is the most active.

3.2 PROTECTED AREA

Dam is not in proximity to any protected area (National Park, Wildlife Sanctuary or Conservation Reserve) as declared under Wildlife Protection Act, 1972. Nearest protected areas are Eco-Sensitive Zone 39 Kms away, Mudumalai Tiger Reserve Core Zone Wildlife Sanctuary which is 35 km away and Buffer Zone / Eco-Sensitive Zone Boundary - 27 Kms away.



Tamilnadu Generation Distribution Corporation Limited

Figure 3.2: Protected Area around Dam site – Pillur Dam.

3.3 SOCIALENVIRONMENT

Pillur Dam is located in district Coimbatore in Tamil Nadu. There are no settlements in the proximity areas of the project. There are no Schedule V¹ areas in Tamil Nadu.

As per G.O. Ms. No. 617, 618 (Revenue), dated 24.10.2008, Government of Tamil Nadu, four taluks from Coimbatore district (i.e., Tiruppur, Udumalpet, Palladam and Avinashi (Part)) and three taluks from Erode districts (i.e., Dharapuram, Kangayam and Perundurai (Part)) were bifurcated and formed another new district as Tiruppur district. This bifurcation considerably reduced the size of the Coimbatore district. Presently there are 6 taluks in Coimbatore district.

There are 12 Community Development Blocks and 237 Revenue Villages (219 inhabited) in the district. The district consists of 1 Municipal Corporation, 6 Municipalities, 44 Town Panchayats and 18 Census Towns. The table given below shows the number of taluks with number of towns and Community Development Blocks with the number of villages in Coimbatore district.

The economy of the district is dependent on agricultural activities & resources. The climate of the district is favorable for cultivation of paddy, sugarcane, cotton, vegetables and spices. Major horticulture crops cultivated in the district area mango, banana, grapes, guava and aonla, tropical vegetables like ladies' finger, tomato, brinjal, onion, temperate vegetables like cauliflower, beetroot and knol-khol, spices and condiments like pepper and cardamom and plantation crops like coffee and tea.

Apart from agricultural activities, people of the district are involved in various business or industrial activities like cotton ginning, extraction of oil from various oil seeds, cotton and chilly trading etc. Handloom weaving is also a major household industry in the district.

¹**Scheduled Areas** are areas in India with a preponderance of tribal population subject to a special governance mechanism wherein the central government plays a direct role in safeguarding cultural and economic interests of **scheduled** tribes in the **area**.

The brief demographic characteristic of the district is given in the table below:

No. of Households	9,58,035	Household Size	4
Total Population	34,58,045	Population (0-6 age)	3,19,332
Male	17,29,297	Boys (0-6 age)	1,63,230
Female	17,28,748	Girls (0-6 age)	1,56,102
Sex Ratio	1000	Sex Ratio (0-6)	1000
Population (SC)	5,35,911 (15.50%)	Population (ST)	28,342 (0.82%)
Male	2,66,960	Male	14,245
Female	2,68,951	Female	14,097
Literates	26,35,907 (83.98%)	Literacy Rate	84,608
Male	13,94,790	Male	38,995
Female	12,41,117	Female	45,613
No. of Workers	15,67,950 (45.34%)	Cultivators	80,217 (5.12%)
Male	10,83,125 (62.63%)	Agricultural Labour	2,30,026 (14.67%)
Female	4,84,825 (28.04%)	Household Industrial Workers	50,085 (3.19%)
No. of Main Workers	14,43,252 (41.74%)	Other Workers	12,07,622 (77.02%)
No. of Marginal Workers	1,24,698 (3.61%)		
<i>Source: Census of India, 2011 (District Handbook)</i>			

According to Census of India 2011, the district has total population of 34,58,045 out of which 50.01% are male and 49.99% are female with sex ratio of 1000 which is lower than the state sex ratio (996). The population density in the district is 731 persons per sqkm.

The district has literacy rate of 83.98% which is higher than that of the state average of 80.09%. The male literacy rate is 89.06% and female literacy rate is 78.92%, creating a gender gap in literacy rate of 10.14% in the district. In the district, the Scheduled Caste and Scheduled Tribe population is 15.50% and 0.82% respectively of the total population. There are very low number of Scheduled Tribe households in the project area and there are no physical interventions planned in the downstream areas. These areas and the ST households will be taken into account during the preparation and implementation of Emergency Action Plan for Pillur Dam.

Work participation rate of the district is about 45.34% and gender gap in work participation rate is 34.59%. About 5.12% of the workers are cultivators and 14.67% are agricultural laborers. About 77.02% of work force is engaged in other than agricultural activities including 3.19% household industrial workers.

3.4 CULTURAL ENVIRONMENT

List of National Monuments in Tamil Nadu and list of State Protected monuments in Tamil Nadu have been reviewed. There are protected monuments identified by Archaeological Survey of India however none of them are in the vicinity of the project

4.1 SUB-PROJECT SCREENING

The subproject screening is undertaken following a three-step screening methodology as described in ESMF. Process of risk /impacts identification is done using screening process considering the proposed interventions at each dam as provided in the Project Screening Template using first screening format (SF-1). Applicable interventions are further classified based on their 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 and likely risks and impacts. The SF-1 format is used to ascertain the types of E&S risks for each of the proposed rehabilitation activity e.g., Risk/Impact on Water Quality, Fisheries, Conservation Area, Protected Area, Ecology, Physical Environment, Cultural Environment, Tribal Presence, Private Land/Assets/Encroachers/Squatters, Labor, Migrant Labor and GBV risks – each of these corresponding to the ESS 2-8.

The second format (SF-2) is used to assess the extent of risk/impact intensity for each of the identified E&S risk and is used to categorize the risk level as Low/Moderate/Substantial/ High. Finally, using a third E&S risk summary format (SF-3), the risk categories for all different types of E&S risk and impacts is summarized and the highest of the risk categories is assigned as overall risk category for the given Dam sub-project. Based on the above findings, the ESDD report recommends Risk category of the Dam sub-project – whether it is Low/Moderate/Substantial/High and types of instruments that need to be prepared as part of the ESMP along with the responsibilities and time lines.

Outcome of three stage screening exercise is discussed below.

Step I Screening (using Form SF-1): Sub-Project Component, Construction Support Preparatory Intervention related vs Nature of Risk/Impact

Screening indicated that all project components related activities are limited to within the dam area/premises. Due to nature of these activities, likely impacts will be on physical environment in terms of air pollution, noise pollution and waste generation. None of the proposed structural 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. Activities interfacing with water bodies – river/reservoir will have risk of spillage of chemicals, construction material, and debris leading to water pollution and impacts on fishes.

Pre-construction and construction stage major auxiliary or preparatory intervention are

within dam area as well as beyond dam area. Deployment and haulage of heavy machinery, setting up of workshop, operation of concrete mixture and heavy pumps will be within dam area. Other activities such as labour camp and debris disposal will be beyond dam area. Activities involving machinery and equipment will have impacts on physical environment. Transportation of material, debris disposal and labour camp are likely to generate pollution and impact on physical environment.

Project will involve project managers and supervisors, contracted workers – these would also include migrant workers as all the required labour will not be fully supplied locally for a number of reasons, such as worker's unavailability and lack of technical skills and capacity. There is no habitation in surrounding areas. Construction contractors are expected to stay at/near dam, set up construction equipment and machinery near work location at pre-determined/approved sites. Influx of skilled migrant labour, albeit few in numbers, for construction works is likely. The labour will stay outside the dam premises; hence risk of SEA/SH is likely.

During preparation and implementation of EAP, population in vulnerable areas under different release scenario will be identified and contacted through public consultation meetings. Communities will be made aware about the warning systems and dos and don'ts during such scenarios.

Output of this screening is enclosed as **Annexure I**.

Step II Screening (using Form SF-2): All applicable activities identified as having potential risks/impacts that were identified through Step I screening, are further screened for associated sub-activity and evaluated for the extent of risk. Sub-activity's Risk/Impact intensity is further categorized as Low (L), Moderate (M), Substantial (S) or High (H) based on following criteria:

Low	:	Localized, Temporary and Negligible
Moderate	:	Temporary, or short term and reversible under control
Substantial	:	Medium term, covering larger impact zone, partially reversible
High	:	Significant, non-reversible, long term and can only be contained/compensated

Occupational Health and safety: OHS is a substantial risk activity in almost all cases and is not being considered under screening criteria. Occupational health and safety is considered an important requirement of every project irrespective of size and type of the projects. It will be part of Contractor's ESMP.

Analysis of extent of risk/impact for sub-activities resulted in identification of following activities as having Moderate Risks/impacts.

- Special repairs to masonry portion of dam: u/s face treatment
- Labour Camps involved (location within dam premises or outside)

- Major Debris Disposal involved

All other activities are categorized as low risk activities. E&S risks of none of the sub-activities for this sub-project is categorized as either Substantial or High risk. **The outcome of Screening is enclosed as Annexure II.** In case of GBV/SEAH, this site was assessed as Low risk. Based on consideration of all the above, summary of Risk/Impact (as per outcome of SF-2) is summarized for major sub-project activities under **Table 4.1below.**

Table 4.1: Summary of Identified Risks/Impacts in Form SF-3

Project Activity	Environment Risks						Social Risks				
	Air, water, noise, land use, Soil, Resource use	Pollution downstream and upstream	General Ecology	Protected Area (Wild Life Sanctuaries, National Park and other natural habitat even if not protected)	Other RET species (flora and fauna) outside protected areas	Fish and Aquatic life within dam water body	Land	Tribal	Labour	Cultural heritage	GBV/SEAH
Civil (within Dam Boundary)	M	L	L	None	None	L	L	L	M	None	L
Hydro Mechanical	L	L	L	None	None	L	L	L	M	None	L
Instrumental SCADA, surveillance	L	L	L	None	None	L	L	L	L	None	L
Painting	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Road work	L	L	L	None	None	L	L	L	L	None	L
Safety measures (Siren, Lighting)	L	L	L	None	None	L	L	L	L	None	L
Major Civil Work like Additional Spill Way	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Major Hydraulic Structure (tunnelling)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Major Civil Work extending beyond Dam Area Like training Structure	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Additional activities for Tourism /Solar/Fisheries/ Water recreation enhancement	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Criteria for Risk Evaluation:

Low: Localized, temporary and Negligible

Moderate: temporary, or short term and reversible under control

Substantial: medium term, covering larger impact zone, partially reversible

High: significant, non-reversible, long term and can only be contained/compensated

Occupational Health and safety: OHS is a substantial risk activity in almost all cases and is being treated separately through OHS plan in accordance with WB ESHS guidelines and shall be applicable to all sub-projects. Hence is not being considered under screening criteria.

4.2 STAKEHOLDERCONSULTATION

Stakeholder consultation was made at dam on 14.12.2022; taking all required pre auction under Covid-19 advisory. It was attended by permanent staff of the generation staff, Dam staffs and local people. In addition, questionnaires were prepared and shared with stakeholders for submission of written response. List of participants is enclosed as **Annexure III** and filled up questionnaires as submitted by stakeholders are added at **Annexure IV**.

Following is the outcome of the stakeholder consultation:

1. All the participants welcomed the proposed interventions relating to dam safety and ensured that our DRIP work will not affect the villages during execution.
2. Agriculture is the main occupation of people in downstream of the dam.
3. There are no pending issues regarding dam construction related resettlement.
4. The participants explicitly mentioned that the dam is their lifeline and strengthening works will help their long-term livelihood and therefore welcomed such information.
5. Participants have expressed that they do not have any grievances and as such no grievances were ever reported from their communities/ neighborhood's.
6. Water from Pillur Dam is passes through Kundah Hydro Power House 4, Pillur Reserve Forest and Pillur Dam water finally reach with Bhavanisagar reservoir. There are no stakeholders on downstream of the dam within 5Km.
7. Participants have requested necessary action to develop Tourism and fisheries in the dam area.
8. Participants also requested to take necessary action to rehabilitate the Un-occupied TNEB quarters which are now at damaged condition and rented. The income generated through tourism, fisheries and rent may be utilized for dam maintenance.
9. ParticipantswantedrenovationoftheapproachroadtoPillurdamfrommainroadwhich at present in very bad condition.



Based on these findings relating to both structural and non-structural interventions, potential stakeholders were categorized as Affected stakeholders, Other interested stakeholders and disadvantaged & vulnerable stakeholders.

Affected Stakeholders: There are no affected persons who shall be directly or indirectly adversely affected by the proposed interventions.

Other interested stakeholders: In relation to structural interventions, these would be contractors, project management consultants, regulatory bodies/ institutional stakeholders such as revenue, environmental Authorities, etc. In relation to non-structural interventions, these would be communities living downstream including farmers; village heads, community leaders; district administration, police, state disaster management authority, revenue department, electronic and print media, etc. These communities would be key stakeholders requiring to be involved in the preparation and implementation of Emergency Action Plan (EAP).

Disadvantaged and vulnerable persons and groups: Illiterate persons, physically challenged, women, children and elderly would be key stakeholders – requiring special focus and outreach to ensure that they are well informed about the provisions of the EAP.

Communities welcomed such interactions and indicated that they would prefer Dam authorities conduct one such face-to-face meeting, once a month at a convenient location to inform of developments/interventions relevant to them. They welcomed other means of information such as advertisements in the local papers etc., but preferred to have face to face interactions at least once a month.

4.3 DESCRIPTIVE SUMMARY OF RISKS AND IMPACTS FROM ACTIVITIES BASED ON SCREENING

Based on the above screening analysis, potential impacts and risks from the sub-project are summarized below:

Environmental Impacts and Risks

1. Environment risks and impacts, as assessed above, for various project activities under this sub-project are categorized as Low and Moderate due to localized nature of proposed activities i.e., activities remain limited to dam area except for labour camp and muck/debris disposal.
2. Execution of civil and hydro-mechanical work within dam body will generate localized impacts on physical environment and resource use; pose risk of exposure of workers requiring personal protective equipment (PPE) use.
3. Civil work interfaced with water body pose risk of water pollution and impact on fish fauna.
4. Construction waste and muck from repairs to masonry portion of dam like u/s face treatment, approach road etc., require careful disposal at pre-identified and approved site to minimize the risk of pollution on this count.

5. Rehabilitation work would require labour to work on various sections of dam involving working at height, working in confined spaces, working on reservoir side, etc., Further, workers will also be exposed to dust and noise and will have to handle chemicals/gases for some of the works; these will lead to occupational health and safety risks.

Social Impacts and Risks

1. As the interventions are within the dam premises and on the dam structure, there shall be no adverse impacts on land and assets due to any sub-component or sub-activities.
2. The dam is not located in the Schedule V area. Though there are Scheduled Tribes households in the vicinity, these are mainstreamed into the overall society and do not meet the characteristics outlined in ESS 7. There will be no physical interventions.
3. Influx of migrant labour will be low as these works require only few but very skilled labour. Also, these workers will mostly operate from labour camps within the dam premises/proximity and hence there would be minimal interface with communities and therefore significantly lower SEAH/GBV risks.
4. Waste generation from labour colony can pollute drinking water sources of community, risk is low and can be mitigated by providing adequate sanitation facilities.
5. No impacts are envisaged on cultural heritage as no such sites are identified in project vicinity.
6. Labour 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 term 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 camp, including inadequate sanitation and health facilities
 - 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
 - Non-payment of wages
 - Discrimination in Employment (e.g., abrupt termination of the employment, working conditions, wages or benefits etc.)
 - 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

5.1 CONCLUSIONS

5.1.1 Risk Classification

As per the ESDD exercise, risk/impacts that have been identified relate to Water Quality, Physical Environment, labour and SEAH/GBV. The summarized environmental and social risks of identified activities with level of risk is presented in previous chapter. Environment risks of air, water, noise, land use, soil and resource use for special repairs to masonry portion of dam like u/s face treatment are Moderate. Similarly, environment and social risk of labour camp and disposal of debris has been identified as moderate. Risk of all other activities has been identified as Low. These risks are low to moderate and localized, short term and temporary in nature which can be managed with generic ESMP and guidelines.

Hence the overall risk of this sub-project Dam is categorized as Moderate. OHS is a substantial risk activity and is being treated separately through OHS plan in accordance with WB ESHS guidelines.

5.1.2 National Legislation and WB ESS Applicability Screening

The applicability analysis of GOI legal and regulatory framework indicates that while, there are various legislation which will have to be followed by the contractor for the protection of environment, occupational health and safety of workers and protection of workers and employment terms. None of Indian legislation is applicable warranting obtaining clearance prior to start of construction/improvement work.

In addition to overarching ESS1, four ESS standards are found relevant to this sub-project as per reasons given in **Table 5.1** below:

Table 5.1: WB ESF Standards applicable to the sub-project

Relevant ESS	Reasons for Applicability of the standard
ESS2: Labour and Working Conditions	Due to engagement of Direct worker, Contracted workers and Community workers (likely for EAP and other non-structural interventions) for rehabilitation work
ESS3: Resource Efficiency, Pollution Prevention and Management	Civil and hydro-mechanical work including resource consumption; requiring protection of physical environment and conservation of resources
ESS 4: Community Health and Safety	Rehabilitation work, although limited to dam complex, can increase community exposure to risk and impacts; directly or indirectly.
ESS 10: Stakeholder Engagement Plan	For engagement of stakeholders in all structural and non-structural measures e.g., implementation of Early flood Warning system, siren systems, broadcasting facilities, Emergency Action Plan etc.

5.2 RECOMMENDATIONS

5.2.1 Mitigation and Management of Risks and Impacts

Since risks and impacts are low to moderate category, a standard ESMP customised to sub-project will be prepared in accordance with the ESMF. It shall cover the following aspects:

- a. SPMU shall customize the standard Environmental and Social Management plan (ESMP) that has been provided in the Environmental and Social Management Framework (ESMF) and make it part of bid document for effective adherence by contractors.
- b. ESMP will provide due measures for labour management and protection of environment quality and resource conservation (during handling of resources) in line with ESF standard ESS2 and ESS3 respectively. Likewise, due attention will be given to Occupational Health and Safety of workers and community in line with the requirements of ESS4 and World Bank Group guidelines on Occupational Health and Safety (OHS). SPMU/IA shall customize the standard ESMP in line with outline provided in the ESMF and ensure its adherence by contractor. The customised ESMP will address the following:
 - Gender Based Violence or SEA/SH related actions(ESS1)
 - Labour Management Procedure(ESS2)
 - Resource Efficiency and Pollution Prevention(ESS3)
 - Community Health and Safety(ESS4)
 - Stakeholders Engagement Plan (ESS10)
- c. Contractor shall submit BOQ as per ESMP of the subproject.

Mitigation plans to meet requirements for relevant Standards with responsibility and stages are given in **Table 5.2** below:

Table 5.2: List of Mitigation Plans with responsibility and timelines

WB-ESS Triggered	Mitigation Instrument	Responsibility	Timelines
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none">Gender Based Violence or SEA/SH related actions	SPMU/IA	Before mobilization of contractor
ESS2: Labour and Working Conditions	<ul style="list-style-type: none">Labour Management Procedure (LMP) including OHS management plan	SPMU/IA	Before mobilization of contractor
ESS3: Resource Efficiency, Pollution Prevention and Management	<ul style="list-style-type: none">Pollution Prevention and Environment Quality Management Plan (PPEQMP)	SPMU/IA	Before mobilization of contractor
ESS 4: Community Health and Safety	<ul style="list-style-type: none">Community Health and Safety Management Plan (CHSMP)	SPMU/IA	Before mobilization of contractor
ESS 10: Stakeholder	<ul style="list-style-type: none">SEP in accordance	SPMU/IA	By negotiation

WB-ESS Triggered	Mitigation Instrument	Responsibility	Timelines
Engagement Plan	with project SEF		

ESDD and ESMP will be placed on the www.damsafety.in website as well as other accessible locations such as the 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 project meetings, workshops etc. Each IA will translate these documents in their local language, if required, and will upload in their respective websites and also make available at other accessible locations.

5.2.2 Institutional Management, Monitoring and Reporting

ESMP will be customized for the sub project by SPMU/IA from standard ESMP included in ESMF and shall be shared with CWC by SPMU for their review/endorsement and approval before including in the bid document.

SPMU/IA will designate Nodal Officer(s) (full time in-house engineering staff with E&S expertise) to coordinate and supervise E&S activities. They shall be at the level of Executive Engineer/ Deputy Directors and shall provide commensurate time to comply with E&S related activities. Brief TOR 's for these Nodal E&S officers are included in ESMF. The SPMU, in case in-house expertise not available, will hire the qualified staffs on need basis to support management of E&S risks including Environmental and Social Experts for ensuring compliance with the Bank's ESF and ESS's and ensuring that these activities shall be implemented as per the procedures.

SPMU/IA shall advise contractors about applicable legislative requirements and ensure that contractors prepare its own ESMP (C-ESMP) as outlined in ESMP for this sub-project and submit compliance reports to SPMU/IA on quarterly basis. SPMUs will share regular implementation status of ESMPs to CWC and The World Bank in line with ESMF on quarterly basis.

SPMU/IA shall establish and operationalize a grievance mechanism to receive and facilitate resolution of complaints and grievances, from the communities and other stakeholders including implementation partners. GRM works within existing legal and cultural frameworks and shall comprise project level and respective State level redressal mechanisms. Most Project related grievances could be minor and site-specific.

EMC (Engineering and Management Consultant) for the project will have sufficient staff with skills on Environment and Social aspects. Awareness raising and capacity building on the new Environmental and Social Framework (ESF) need to be carried out for the environment and social staff engaged and this will be an area of continued focus, with a view to generate awareness at to dam level. EMC will develop formats for regular supervision and monitoring on E&S issues and undertake site visits/ inspections of the dam sites to monitor for compliance; collate and review QPRs and set up a monitoring and reporting system on E&S issues.

Overall, the proposed activities within this dam sub-project have low to moderate risks resulting in the overall sub-project to be categorized as Moderate risk category. These risks and impacts can be effectively mitigated with effective implementation of mitigation plans by SPMU/IA, Contractors and monitoring by EMC, SPMU and CWC.

Annexure I: Form SF1

Sl. No	Project Component	Applicable (A), Not Applicable (NA)	Environment and Social Risk Associated within dam area (DI), Beyond Dam Area (DE)	Likely Nature of Risk/Impact Water Quality (WQ), Fisheries (F), Conservation Area (CA), Protected Area (PA), Ecological (E), Physical Environment (PE), Cultural (C), Tribal Presence (T), Impact on private land/assets/encroachers/squatters (LA), Labor (L), GBV risks (G), (Write whichever is applicable)
1	2	3	4	5
A	Nature of Project Component and related sub activity Related			
1	Reservoir Desiltation	NA		
2	Major structural changes – Spillway construction (Improving ability to withstand higher floods including additional flood handling facilities as needed.)	NA		
3	Structural strengthening of dams to withstand higher earthquake loads	NA		
4	Structural Improvement/Repair work - upstream of Dam site (interfacing dam reservoir) (like u/s face treatment etc.)	A	DI	WQ, F, E, PE, L, G
5	Structural Improvement/Repair work -Downstream of Dam site(with no interfacing with dam reservoir)	A	DI	PE, L, G
6	Re-sectioning earth dams to safe, stable cross sections	NA		
7	Hydro-mechanical activities with interface with dam reservoir	A	DI	WQ, PE, L, G
8	Hydro-mechanical activities Downstream of Dam site (with no interfacing with dam reservoir)	A	DI	PE, L, G
9	Instrumentation, General lighting and SCADA systems	A	DI	PE, L, G
10	Basic Facilities (like access road improvement, renovation of office, Etc.,)	A	DE	PE, L, G
11	Utility installation like standby generator, or setting up solar power systems	A	DI	PE, L
12	Painting of dam u/s or d/s or both faces	NA		
13	Water recreation activities	NA		
14	Tourism Development	NA		
15	Installation of Solar power/floating solar	NA		
16	List any other component not listed above			
B	Pre-construction and construction stage major auxiliary or preparatory			

Sl. No	Project Component	Applicable (A), Not Applicable (NA)	Environment and Social Risk Associated within dam area (DI), Beyond Dam Area (DE)	Likely Nature of Risk/Impact Water Quality (WQ), Fisheries (F), Conservation Area (CA), Protected Area (PA), Ecological (E), Physical Environment (PE), Cultural (C), Tribal Presence (T), Impact on private land/assets/encroachers/squatters (LA), Labor (L), GBV risks (G), (Write whichever is applicable)
1	2	3	4	5
	intervention			
1	Acquisition (diversion of forests land for non-forest purposes) of forest land	NA		
2	Acquisition of private land Resettlement and Rehabilitation (including physical or economic displacement/impact on livelihood;	NA		
3	Temporary loss of business or Damages to crops or trees or structures outside the ROW during Construction activities by Contractor	NA		
4	Borrowing earth to meet Borrow materials requirement	NA		
5	Sourcing of Quarry materials	NA		
6	Blasting	NA		
7	Setting up Labour Camps (location within dam premises or outside)	A	DE	WQ, PE, L, G
8	Heavy machinery deployment and setting up maintenance workshop	A	DI	PE, L, G
9	Setting up Hot mix plant	NA		
10	Deployment of Concrete mixture and heavy pumps	A	DI	PE, L, G
11	Temporary land acquisition	NA		
12	Need of Tree felling/ vegetation clearance	NA		
13	Disposal of large amount of Debris	A	DE	PE, L, G
14	Transport of large construction material	A	DE	PE, L, G
15	Utility shifting	NA		
16	Discharge of reservoir water (lowering of reservoir water involved)	NA		

Note: Occupational Health and Safety aspects / impacts/ risks are considered important part of any dam project and this risk is separately classified. It shall be managed as per defined OH&S plans in every project irrespective of size and type of project.

Annexure II: Form SF2

Sl. No	Applicable Sub-Project Component/ Construction preparatory Work-related Sub activity (As per SF-1)	Nature of Risk (Conforming to Column 5 of SF-1) and nature of sub activity	Elaborate cause (risk) and its effect (Impact) on environment /social	Risk/Impact intensity for each type of risk/impact Low (L), Moderate (M), Substantial (S), High(H)
1	2	3	4	5
A	Project Component Related			
1.	Structural Strengthening/Improvement/ Repair work -upstream of Dam site			
a	Special repairs to masonry portion of dam: U/s face treatment	WQ, F, PE, L, G	Air pollution, noise pollution, risk of spillage of wastewater, risk of reservoir water contamination and impact on fishes, generation of construction debris, Labour and GBV risk	M
b	Repair to Revetment / Pitching.	WQ, F, PE, L, G	Air pollution, noise pollution, risk of spillage of wastewater, risk of reservoir water contamination and impact on fishes, generation of construction debris, Labour and GBV risk	M
C				
2.	Structural Improvement/Repair work – Downstream of Dam site (with no interfacing with dam reservoir) (like repair of parapet walls, damage spillway crest, downstream retaining walls, etc.)			
a	Reaming the vertical & drainage shaft	WQ, L, G	Impacts on water quality, Labour and GBV risk	L
b	Approach Steps	WQ, L, G	Impacts on water quality, Labour and GBV risk	L
c	Colour washing	WQ, L, G	Air pollution, noise pollution, risk of spillage of wastewater, risk of reservoir water contamination and impact on fishes, generation of construction debris, Labour and GBV risk	L
d	Remedial measures to contraction joint	WQ, L, G	Air pollution, noise pollution, risk of spillage of wastewater, risk of reservoir water	L

			contamination and impact on fishes, generation of construction debris, Labour and GBV risk	
e	Energy dissipation arrangement	WQ, L, G	Impacts on water quality, Labour and GBV risk	L
3.	Hydro-Mechanical activities Down - stream of Dam Site (with no interfacing with dam reservoir)			
a	Dismantling and overhauling the spillway gate & Scour vent gate, fixing of Seal for gates, Repair / Renewal for hoisting arrangements, UG cable for hoisting Motor and other equipment's and Power Boat.	PE, L, G	Air pollution, noise pollution, risk of spillage of wastewater, risk of reservoir water contamination and impact on fishes, generation of construction debris, Labour and GBV risk.	L
4.	Instrumentation, General lighting and SCADA systems			
a	Electrification and lighting on the top of the Dam,gallery	PE, L, G	Generation of waste material from packaging etc., Labour and GBV risk	L
5	Basic Facilities Improvement			
a	Special repairs/constructions/improvements to buildings including electrification and fencing	PE, L, G	Air and noise pollution, Labour and GBV risk	L
B	Special repairs to Approach Road to Dam entrance	PE, L, G	Air and noise pollution, Generation of muck and construction debris, Labour and GBV risk	L
c	Special Repairs to Quarters	PE, L, G	Air and noise pollution, Labour and GBV risk	L
B.	Pre-construction and construction stage major auxiliary or preparatory intervention			
1	Setting up Labour Camps (location within dam premises or outside)	WQ, PE, G	Wastewater generation from domestic activities, waste generation, GBV risk within labour and involving community.	M

Sl. No	Applicable Sub-Project Component/ Construction preparatory Work-related Sub activity (As per SF-1)	Nature of Risk (Conforming to Column 5 of SF-1) and nature of sub activity	Elaborate cause (risk) and its effect (Impact) on environment /social	Risk/Impact intensityfor each type of risk/impact Low (L), Moderate (M), Substantial (S), High(H)
1	2	3	4	5
2	Heavy machinery deployment and setting up maintenance workshop	PE, L, G	Heavy machinery will be deployed for repair and maintenance of hoists and for other activities - risk due to machine handling, waste, wastewater and air emissions from machines operations, hazardous waste generation from oil waste	L
3	Deployment of concrete mixture and heavy pumps	PE, L, G	Concrete mixture and pumps will be deployed for road repair and other civil works and dewatering - risk due to machine handling, waste generation, wastewater and air emissions from operations, hazardous waste generation from oil waste, Labour and GBV	L

Sl. No	Applicable Sub-Project Component/ Construction preparatory Work-related Sub activity (As per SF-1)	Nature of Risk (Conforming to Column 5 of SF-1) and nature of sub activity	Elaborate cause (risk) and its effect (Impact) on environment /social	Risk/Impact intensityfor each type of risk/impact Low (L), Moderate (M), Substantial (S), High(H)
1	2	3	4	5
			risks	
4	Disposal of large amount of Debris	PE, L, G	Debris will be generated from various repair activities, risk during debris handling, air and noise emissions from debris handling and transportation, water pollution risk due to debris finding its way to water body, and GBV risk due to labour involvement	M
5	Transport of large construction material	PE, L, G	Material will be transported from various vendors and suppliers to site for civil, hydro-mechanical work and instrumentation, air and noise emissions from transportation, Labour and GBV risk	L

Criteria for Risk Evaluation:

Low: Localized, temporary and Negligible

Moderate: temporary, or short term and reversible under control

Substantial: medium term, covering larger impact zone, partially reversible

High: significant, non- reversible, long term and can only be contained/compensated

Occupational Health and safety: OHS is a substantial risk activity in almost all cases and is being treated separately through OHS plan in accordance with WB ESHS guidelines and shall be applicable to all sub-projects. Hence is not being considered under screening criteria.

Annexure III: Stakeholder's consultation: List of Participants

Sl. No.	Name	Relation with Dam – Staff, contractor, worker, full time/part time, local, NGO.	Mobile Number	Address (at least village name)
1.	Er. P.Vadivelu	Assistant Executive Engineer/ Civil/ DRIP/ Kundah.	9443106287	Pillur Dam
2.	Er. T. Krishnakumar	Junior Engineer/ Mechanical/ Power House 4/ Pillur Dam.	9487384280	Pillur Dam
3.	S. Selvarajan	Foreman/ Electrical/ Power House 4/ Pillur Dam.	9487360724	Pillur Dam
4.	P. Sarasu	Time Keeper/ Civil Section/ Pillur Camp.	9486192617	Pillur Camp
5.	K. Ajithkumar	Public from Mattu patty, Pillur Dam Post.	9488621692	Mattu patty, Pillur Dam Post.
6.	P. Velliyangiri	Public from Geddai Kadu, Pillur Dam.	9445988240	Geddai Kadu, Pillur Dam.
7.	B. Vijayakumar	Public from Mattu patty, Pillur Dam Post.	8903378224	Mattu patty, Pillur Dam Post.
8.	M. Manikandan	Police Guard, Pillur Dam.	-	Pillur Dam

Annexure IV: Filled up Questionnaires by Stakeholders

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,


NAME : T. KRISHNAKUMAR
ADDRESS : JE/MECHANICAL/PH4
PILLUR DAM.
COIMBATORE DT. 641104
MOBILE NO. : 94873 84280

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area (village)</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- NO -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- NO -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- NO -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- NO -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- NO -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- no -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	Power Generation to power House - IV
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- no - consultation meeting to be conducted - YES - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- no -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	Proposed DRIP works as per DSRP recommendation shall be carried out as a safety measure.

Date: 14.12.2022
Place: PILLUR DAM


Signature

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,

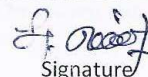
NAME : S.SELVARAJAN
 ADDRESS : FOREMAN/ELECT./PH4
PILLUR DAM
COIMBATORE DT-64104
 MOBILE NO. : 94875 07402 94873 60724

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area. (villages).</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- no -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- no -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- no -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- no -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- no -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- NO -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, Mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	Power Generation to Power House - IV
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- NO - consultation meeting to be conducted. - YES - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- NO -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	Proposed DRIP works, as per DSRP recommendation shall be carried out as a safety measure.

Date: 14.12.2022
Place: PILLUR DAM


Signature

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,

NAME : P.SARASU
 ADDRESS : TIME KEEPER/CIVIL SECTION
4F 2/4, PILLUR CAMP
COIMBATORE DT.-641104
 MOBILE NO. : 9486192617

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area (village)</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- NO -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- NO -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- NO -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- NO -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- NO -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- no -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	power Generation to power House - IV
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- no - Consultation meeting to be conducted. - Yes - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- no -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	proposed DRIP works, as per DSRP recommendation, shall be carried out as a safety measure.

Date: 14.12.2022
Place: PILLUR DAM


Signature

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,

NAME : K. AJITHKUMAR
 ADDRESS : 5/164, MATTUPATTY
PILLUR DAM POST,
COIMBATORE-DT-641104
 MOBILE NO. : 94886 21692

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area (village).</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- no -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully Covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- no -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- no -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- no -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- no -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- NO -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, Mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such Situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	Power Generation is Power House - <u>IV</u>
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- NO - Consultation meeting to be conducted. - YES - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- NO -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	Proposed DRIP works as per DSRP recommendation, shall be carried out as a safety measure.

Date: 14.12.2022
Place: PILLUR DAM

K. ARTH KUMAR.
Signature

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,

NAME : P. VELLIYANGIRI
 ADDRESS : D.NO. 3/417, GEDDAIKADU,
PILLUR DAM,
COIMBATORE DT. 641104
 MOBILE NO. : 94459 88240

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area. (village).</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- NO -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- NO -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- NO -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- NO -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- NO -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- no -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, Mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	Power Generation to power House - <u>IV</u>
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- no - consultation meeting to be conducted. - YES - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- no -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	Proposed DRIP work, as per DSRP recommendation shall be carried out as a safety measure.

Date: 14.12.2022
Place: PILLUR DAM

D. Vellingiri
Signature

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,

NAME : B.VIJAYAKUMAR
 ADDRESS : MATTUPATTY, PILLUR,
PILLUR DAM POST,
COIMBATORE DT-641104
 MOBILE NO. : 8903378224

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area (village).</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- no -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- no -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- no -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- no -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- no -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- no -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, Mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such Situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	power Generation to power House - <u>IV</u>
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- no - Consultation meeting to be conducted. - YES - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- no -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	proposed DRIP works, as per DSRP recommendation, shall be carried out as a safety measure.

Date: 14.12.2022
Place: PILLUR DAM

B. Vijay Kumar.
Signature

PILLUR DAM

STAKEHOLDER CONSULTATION

Stakeholder consultation has been conducted as part of environmental and social impact assessments. The purpose is to assess their responses in understanding the potential risks and prepare mitigation plan to address their concerns.

Stakeholders

Stakeholders for the project include:

IA stakeholders-CWC, Dam engineers, District Administration, Forest Department, PWD, Tourism and Rural Development Departments, Labour department and TWAD etc.,

NAME : M. MANIKANDAN
 ADDRESS : POLICE GUARD
PILLUR DAM
COIMBATORE DT. 641104
 MOBILE NO. : _____

COMMUNITIES

Questions	Responses provided / Observations
1. How many villages are in immediate downstream vicinity?	<i>The Dam is in Reserved Forest Area. (Village).</i>
2. Are they dependent on dam in any way for their livelihood?	<i>- NO -</i>
3. Does any of these villages were displaced and rehabilitated during the construction of Pillur Dam. Is there any pending compensation issues?	<i>Dam area is fully covered in Reserved Forest Area. Displacement and rehabilitation does not arise.</i>
4. Is there any R&R affected person known to you who is currently working with the dam authorities? If so, in what capacity (employee/direct worker/contractor)	<i>- NO -</i>
5. Are you aware of any fishing communities living immediately downstream of dam whose livelihood are directly linked with the fishing activities of this dam?	<i>- NO -</i>
6. Are you aware of fishing working seasons, revenue earning, any access to general public for fishing, any suggestion etc.	<i>- NO -</i>
7. Are you aware of local women affected in any way by dam operations?	<i>- NO -</i>
8. Are you aware of any early flood warning system for this dam, or any other system wherein downstream communities getting regular update during flood season for any uncontrolled release of water?	<i>- YES -</i>

9. Are you aware of any dam related incident happened in the past wherein some loss of life encountered? If yes, brief summary may be given	- no -
10. If you have to contact the dam authorities; how will you contact, through telephone/mobile/e mail/personally?	Telephone, Mobile & In person.
11. In the past, on any occasion, did you contact dam authorities for any specific reason affecting public in general? If so, how did you contact and how was the response of dam authority?	Such situation does not arise.
12. Give your views about Pillur Dam, how this dam is helping Country, State, district or local communities in meeting its objectives, any specific concern can also be given?	Power Generation to Power House - IV.
13. (a) Are you aware of any document named Emergency Action Plan (EAP) of the dam? (b) If yes, do dam authorities conduct any annual mock drill or consultation meeting on dam site and invite all stakeholders to inform about various protocols in place and consequences in case dam fails? (c) In future, during stakeholder's consultation meeting, would you like to be a part of these consultation and mock drill activities to be conducted by dam authorities? (d) If yes, how to contact you, please give the corresponding address along with all details to receive the official communication.	- no - Consultation meeting to be conducted. - YES - Address mentioned in above.
14. Are you a regular follower of official website of dam authorities as a general public, in case you are a contractor, do you follow various tenders notices being invited for various maintenance of this dam?	- no -
15. Any suggestion to improve overall system by dam authorities in any way, please give in brief?	Proposed DRIP works, as per DSRP recommendation, shall be carried out as a safety measures.

Date: 14.12.2022
Place: PILLUR DAM


Signature