



## IN Dam Rehabilitation and Improvement Project (P089985)

SOUTH ASIA | India | Water Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2010 | Seq No: 21 | ARCHIVED on 30-Mar-2021 | ISR46050 |

Implementing Agencies: Central Water Commission under the Ministry of Water Resources, India, Uttarakhand Jal Vidyut Nigam Limited, Odisha Water Resource Department, Tamil Nadu Water Resources Department, Kerala State Electricity Board, Karnataka Water Resources Development Organisation, TANGEDCO Tamil Nadu, Kerala Water Resources Department

**Key Dates****Key Project Dates**

Bank Approval Date: 29-Jun-2010

Effectiveness Date: 18-Apr-2012

Planned Mid Term Review Date: 13-Oct-2014

Actual Mid-Term Review Date: 17-Oct-2014

Original Closing Date: 31-Dec-2016

Revised Closing Date: 31-Mar-2021

**Project Development Objectives**

Project Development Objective (from Project Appraisal Document)

To improve the safety and operational performance of selected existing dams in the territory of the participating states. The PDO will be achieved through rehabilitation and improvement of dams and improvement in central and state-level institutional capacity to sustainably manage dam safety administration and operation and maintenance.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

**Components Table**

Name

Rehabilitation and Improvement of Dams and Associated Appurtenances:(Cost \$377.86 M)  
Dam Safety Institutional Strengthening:(Cost \$32.40 M)  
Project Management:(Cost \$39.80 M)

**Overall Ratings**

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

**Implementation Status and Key Decisions**

Project activities have been substantially completed. Achievements relate to successfully completed dam rehabilitation to address dam safety issues. Emergency Action Plans (EAP) and O&M manuals have been prepared for project dams. The capacity of implementing agencies to deal with dam safety issues and O&M of dams has increased as a result of the large number of capacity building and training activities carried out under the project. The few contracts that cannot be fully completed by the loan closing date (March 31, 2021) due to COVID-19 related slowdown, will be transferred to DRIP-2 which was approved by the World Bank Board of Executive Directors on December 15, 2020.



**Risks**

**Systematic Operations Risk-rating Tool**

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	Low	Low
Macroeconomic	--	Low	Low
Sector Strategies and Policies	--	Low	Low
Technical Design of Project or Program	--	High	High
Institutional Capacity for Implementation and Sustainability	--	Substantial	Substantial
Fiduciary	--	Substantial	Substantial
Environment and Social	--	High	High
Stakeholders	--	Low	Low
Other	--	Low	--
Overall	--	Substantial	Substantial

**Results**

**PDO Indicators by Objectives / Outcomes**

To improve the safety and operational performance of selected existing dams in participating states.

► Number of project dams with the improved ability (structural or non-structural) to safely cater for the design floods. (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	27.00	155.00	183.00	197.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021

► Number of project dams with acceptable stability and seepage. (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	14.00	180.00	179.00	198.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021

► Number of project dams with basic dam safety facilities in place. (Number, Custom)



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	19.00	206.00	195.00	198.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Number of project dams with need-based O&amp;M plans operationalized. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	198.00	191.00	150.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Required budget per state for adequate O&amp;M. (Percentage, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	30.00	50.00	55.00	80.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Number of project dams where emergency response plans have been prepared and disseminated to the population. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1.00	85.00	198.00	150.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021

### Overall Comments

CWC refers to project dams that comprise a single dam or more than one dams that form one reservoir. Although the project has implemented activities on 223 dam bodies, the number of project dams is 198. O&M manuals and Emergency Action Plans were prepared for each project dam, i.e. for one or more dams combined that form one reservoir. The ICR team will assess this definition and determine how best to reflect the target number of dams in the results framework.

### Intermediate Results Indicators by Components

Component 1 : Rehabilitation and Improvement of Dams and Associated Appurtenances				
<b>► Project dams with revised dam flood hydrology assessed and actions agreed to address changes in design parameters. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	210.00	220.00	198.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021



<b>► Number of project dams for which necessary remedial measures have been reviewed and addressed. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	206.00	221.00	198.00
Date	02-Jun-2010	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Project dams registered and uploaded data in Dam Assest Management System. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	206.00	198.00	198.00
Date	02-Jun-2010	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Project dams with updated and approved dam operational manuals. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	198.00	192.00	150.00
Date	02-Jun-2010	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Number of emergency response plans prepared and approved by the responsible authorities. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	191.00	192.00	150.00
Date	02-Jun-2010	29-Jan-2021	22-Mar-2021	31-Mar-2021

<b>Component 2: Dam Safety Institutional Stregthening</b>				
<b>► DSO offices strengthened to carry out mandated functions adequately. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	3.00	8.00	8.00	9.00
Date	01-Jan-2018	29-Jan-2021	22-Mar-2021	31-Mar-2021
<b>► Project dams with adequately trained staff that can implement the approved operation manuals. (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	46.00	123.00	198.00	150.00
Date	01-Jan-2021	29-Jan-2021	22-Mar-2021	31-Mar-2021



► Percentage of grievances satisfactorily resolved by the project level GRC (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	50.00	63.00	75.00
Date	30-Aug-2018	29-Jan-2021	22-Mar-2021	31-Mar-2021
Comments:	Grievances that could be resolved without court cases have been resolved. CWC counts complaints from contractors as grievances, which accounts to about 35 percent of all grievances that are being resolved by the courts. Contractual disputes between employers and contractors are not uncommon. There are standard contractual and legal remedies to address these.			
► % of skilled women professionals in dam operations and management - Kerala -WRD (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	22.00	57.00	25.00
Date	29-Jun-2018	29-Jan-2021	22-Mar-2021	31-Mar-2021
► Number of skilled women professionals in dam operations and management under DRIP - Uttarkhand (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	5.00	10.00
Date	29-Jun-2018	29-Jan-2021	22-Mar-2021	31-Mar-2021

## Performance-Based Conditions

### Data on Financial Performance

#### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P089985	IBRD-79430	Closed	USD	175.00	139.65	35.35	139.65	0.00	100%
P089985	IBRD-89090	Effective	USD	137.00	36.00	101.00	14.12	21.88	39%
P089985	IDA-47870	Closed	USD	175.00	139.65	35.35	130.17	0.00	100%

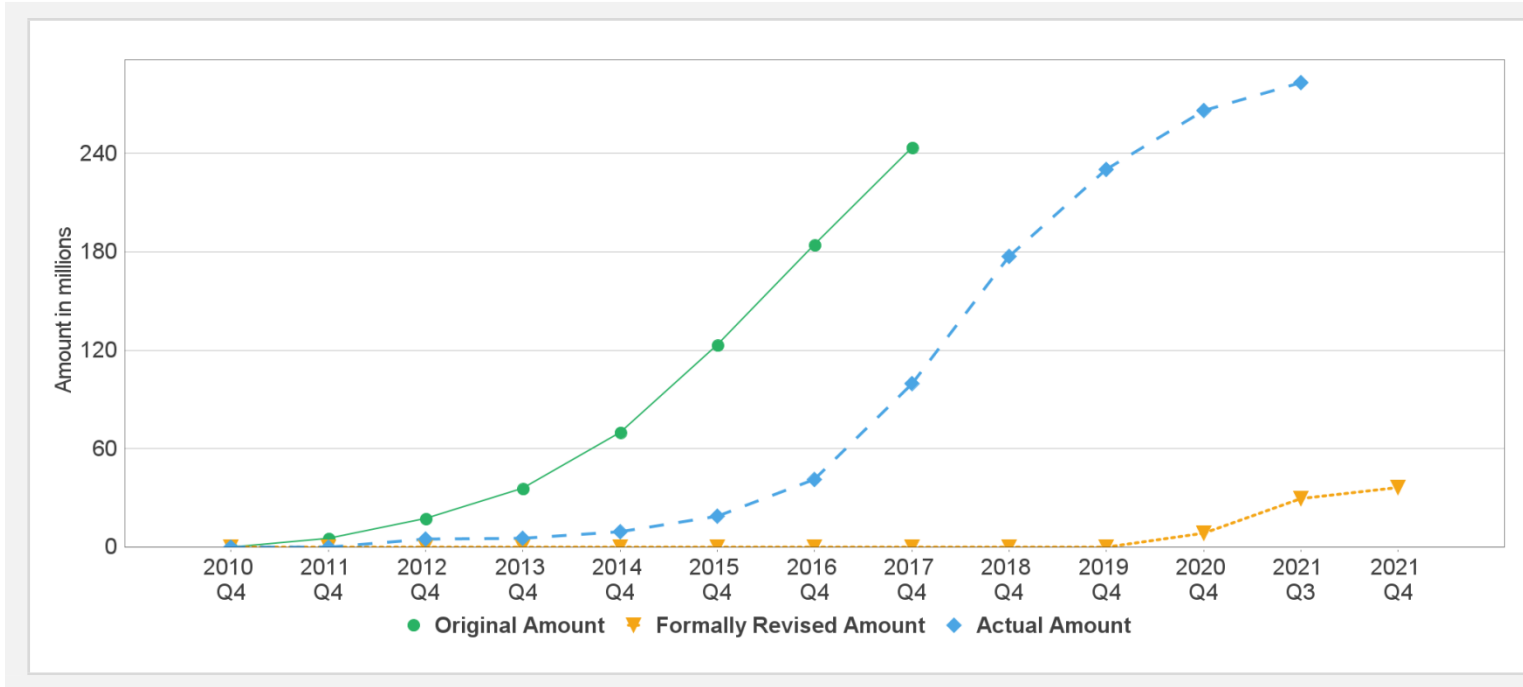
#### Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P089985	IBRD-79430	Closed	29-Jun-2010	21-Dec-2011	18-Apr-2012	31-Dec-2016	29-Jun-2020



P089985	IBRD-89090	Effective	28-Feb-2019	08-Mar-2019	28-Nov-2019	29-Jun-2020	31-Mar-2021
P089985	IDA-47870	Closed	29-Jun-2010	21-Dec-2011	18-Apr-2012	31-Dec-2016	29-Jun-2020

**Cumulative Disbursements**



**PBC Disbursement**

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC
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**Restructuring History**

Level 1 Approved on 20-Dec-2011 ,Level 2 Approved on 28-Feb-2013 ,Level 2 Approved on 07-Apr-2014 ,Level 2 Approved on 26-Sep-2014 ,Level 2 Approved on 14-Jul-2015 ,Level 2 Approved on 25-May-2017 ,Level 2 Approved on 19-Jun-2020 ,Level 2 Approved on 23-Jun-2020 ,Level 2 Approved on 03-Dec-2020 ,Level 2 Approved on 18-Mar-2021

**Related Project(s)**

P166977-Dam Rehabilitation & Improvement Project - Restructuring and Additional Financing