



RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF
DAM OPERATIONAL IMPROVEMENT AND SAFETY
APPROVED ON MARCH 19, 2009
TO THE
REPUBLIC OF INDONESIA

WATER

EAST ASIA AND PACIFIC

Regional Vice President:	Manuela V. Ferro
Country Director:	Satu Kristiina Jyrintytar Kahkonen
Regional Director:	Benoit Bosquet
Practice Manager/Manager:	Sudipto Sarkar
Task Team Leader(s):	IJsbrand Harko de Jong, Tarasinta Perwitasari



ABBREVIATIONS AND ACRONYMS

Abbreviations	Definition
AIIB	Asian Infrastructure Investment Bank
BAPPENAS	Badan Perencanaan Pembangunan Nasional / Ministry of National Development Planning
C-ESMP	Contractors - Environmental and Social Management Plan
CPIU	Central Project Implementation Unit
CPMU	Central Project Management Unit
DED	Detailed Engineering Designs
DG	Director General
DOISP2	Dam Operational Improvement and Safety Project Phase 2
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GOI	Government of Indonesia
IBRD	International Bank for Reconstruction and Development
IFR	Interim Financial Report
IMEU	Independent Monitoring and Evaluation Unit
IP	Implementation Progress
MS	Moderately Satisfactory
MTR	Mid-Term Review
MU	Moderately Unsatisfactory
OP	Operational Policy
PDO	Project Development Objective
PIU	Project Implementation Unit
PPSIP	Program Pengembangan dan Pengelolaan Sistem Irigasi Partisipatif / Participatory Irrigation Development and Management
RBO	River Basin Organization
TA	Technical Assistance



BASIC DATA

Product Information

Project ID P096532	Financing Instrument Investment Project Financing
Original EA Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
Approval Date 19-Mar-2009	Current Closing Date 30-Jun-2023

Organizations

Borrower Ministry of Finance	Responsible Agency Ministry of Public Works and Housing
---------------------------------	--

Project Development Objective (PDO)

Original PDO

The objectives of the Project are to (i) increase the safety and the functionality with respect to bulk water supply of large Ministry of Public Works-owned reservoirs; and (ii) strengthen the safety and operational management policies, regulations and administrative capacity of Ministry of Public Works.

Current PDO

The Project Development Objective is to increase the safety and functionality of dams in selected locations and strengthen the operation and management capacity for dam safety.

Summary Status of Financing (US\$, Millions)

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net		
					Commitment	Disbursed	Undisbursed
COFN-C1460	27-Feb-2017	29-May-2017	04-Aug-2017	30-Jun-2023	125.00	71.38	53.62
IBRD-87110	27-Feb-2017	09-May-2017	04-Aug-2017	30-Jun-2023	125.00	71.38	53.62
IBRD-76690	19-Mar-2009	27-Mar-2009	08-Jun-2009	30-Jun-2017	47.20	47.20	0



Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No

I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

A. Introduction

1. This Project Paper seeks the approval of the Country Director to make changes to the Dam Operational Improvement and Safety Phase II (DOISP2, P096532, Loan Number 8711-ID). The restructuring will: (i) modify the PDO target of indicator 1: “Overall risk reduction of all dams under the Project” and indicator 2: “Number of dams with individual hazard reduced by more than 20% of risk score”; (ii) adjustments in the unit of measurement of the PDO indicators and (iii) change the definition in the Intermediate Indicator 3.3. On February 27, 2017, the Bank approved an Additional Financing of the Project in the amount of USD 250 million. This is the project’s first restructuring.

B. Background

2. The Dam Operational Improvement and Safety Phase II (DOISP2, P096532, Loan Number 8711-ID) was approved on February 27, 2017 and became effective on May 09, 2017. The total Project cost is US\$ 300 million consisting of US\$ 125 million IBRD loan, US\$ 125 million AIIB loan and US\$ 50 million Government funding. The request for restructuring has been submitted by the Directorate General of Water Resources of the Ministry of Public Works and Housing (DGWR MPWH) to the World Bank and AIIB. The restructuring proposes changes in the PDO targets and change of the definition of one of the Intermediate Indicators of the Results Framework. The restructuring will not involve an extension of the Project closing date, nor will it require additional funding. The activities will remain the same as in the original Project.

C. Project Status

3. **Status of Implementation.** With more than half of all contracts completed and 75 percent of all activities under contract, progress in the implementation of the Project is rated moderately satisfactory (MS). The May 2021 progress review mission noted that the Project was no longer able to achieve the PDO and rated the progress towards achieving the PDO moderately unsatisfactory (MU). To upgrade the PDO rating to MS, the mission agreed to restructure the Project and adjust the PDO targets, adjust the unit of measurement of the PDO indicators and change the definition of one of the intermediate indicators so that the Project would realistically be able to achieve the PDO by Project closing. The status of the PDO indicators per March 31, 2022, is presented in Table 1.



Table 1. PDO Status per March 31, 2022

No	PDO	Target		Status	
		Value	Unit	Value	Unit
1	Overall risk reduction of all dams under the Project	20	%	10.7	%
2	Number of dams with individual hazard reduced by > 20% risk score	98	Dams	33	Dams
3	Dams returned to improved operation	74	%	47.9	%
4	River Basin Organizations (RBOs) with need-based O&M budget and plan operationalized within a national dam asset management system	13	RBOs	5	RBOs
5	Issuance of regulation on dam safety	3	Regulations	2	Regulations

4. **Disbursement status.** As of June 20, 2022, the disbursements have reached USD 172.75 million (69.1 percent of the total loan) and the total commitments have reached USD 250 million (100 percent of the total loan). In total, 209 contracts have been completed (USD 78 million), 121 contracts are under implementation (USD 166 million), and 6 contracts are being tendered (USD 6 million).

5. **Safeguards Status.** The overall safeguards rating is Moderately Unsatisfactory because of the slow implementation of actions to meet the ESMF requirements that were agreed during supervision missions. The team will work closely with the CPMU and CPIUs to improve the safeguards performance of the project.

6. **Fiduciary status.** The current rating of the Project’s financial management is MS. The Interim Financial Reports (IFR) and audit reports have been consistently submitted in a timely manner, in compliance with the Loan Agreement. Audit reports of the Project consistently gave an unqualified opinion of the Project’s financial statements. The Project is following up on the findings of audits in a timely manner, including full refunds of ineligible expenditures noted in the audit report. Currently, there are no pending audit reports and IFRs for the Project.

D. Rationale for Restructuring

7. **Changes in the Results Framework.** The rationale for the restructuring is to reduce several target values of the PDO indicators in the Results Framework. The La Nina phenomenon, in combination with the Seroja cyclone, caused a series of floods across Indonesia resulting into damages to the DOISP2 dams. In addition, there have been a series of earthquakes that have caused damage to DOISP2 dams, including cracks, seepages, leakages and instability. In addition, the Government proposed to include several critical dams that would increase the number of DOISP2 dams from 140 to 163. As a result of the additional costs associated with the additional repair works and additional dams, the Project is no longer able to achieve the original PDO targets with the available financial resources. Thus, the Government has proposed to reduce the PDO1 and PDO2 targets to align the PDO with the available financing resources. The restructuring also



proposes to correct mistakes in the unit of measurement of PDO indicators. Finally, the Government proposed to simplify the definition of Intermediate Indicator 3.3. More details on the proposed changes are provided in Section II.

II. DESCRIPTION OF PROPOSED CHANGES

8. **Proposed Changes.** The proposed restructuring will help the Project increase the likelihood of meeting the PDO. The proposed changes to the Results Framework are described below and provided in the Tables below.

a) Reduction of the Target of PDO indicator 1

PDO indicator 1 “Overall risk reduction of all dams under the Project” will be reduced from 20% to 18%.

b) Reduction of the Target of PDO indicator 2

PDO indicator 2 “Number of dams with individual hazard reduced by > 20% of risk score” will be reduced from 98 dams to 75 dams.

c) Changes in the unit of measurement of PDO indicator 1 and 2

The unit of measurement of the following PDO indicators will be changed:

1. PDO indicator 1 will be changed from cubic meter/year to percentage (%).
2. PDO indicator 2 will be changed from percentage (%) to number.

d) Simplification of the definition of intermediate indicator 3.3.

The definition of Intermediate Indicator 3.3 “Dams implementing at least 70% of catchment management activities” will be changed from “70% of budgeted catchment management activities both civil works and soft training are implemented in 60 dams” into two types of definition proposed below. If one of these two definitions is fulfilled, the Intermediate Indicator 3.3. is considered to have been achieved. These definitions are slightly different from the ones proposed in the Government request for restructuring and have been agreed with MWPH.

“To be implemented in 60 dams:

- (i) 70% of the allocated budget for catchment management activities is disbursed for both civil works and training or technical guidance, or
- (ii) Achieved 70% physical progress in the activities that are funded for catchment management.”

Table 2. Proposed reduction of target indicator of PDO1 and PDO2

Indicator (PDO)	Original Target Value	Revised Target Value	Original unit of measure	Revised unit of measure
PDO1: Overall risk reduction of all dams under Project.	20%	18%	Cubic meter/year	Percentage (%)
PDO2: Number of dams with individual hazard reduced by > 20% of risk score.	98 dams	75 dams	Percentage (%)	Number



Table 3. Proposed revision to Intermediate Indicator 3.3. of Results Framework

Indicator	Original Definition	Revised Definition
Intermediate Indicator 3.3: Dams implementing at least 70% of catchment management activities	70% of budgeted catchment management activities both civil works and soft training are implemented in 60 dams.	To be implemented in 60 dams: 1. 70% of the allocated budget for catchment management activities is disbursed for both civil works and training or technical guidance, or 2. Achieved 70% physical progress in the activities that are funded for catchment management.

9. The Project is making satisfactory progress in its implementation. The revisions in the PDO targets are consistent with the available financial resources and the project in on track to achieve these revised targets.

10. **ESMF.** The restructuring does not introduce new environment and social risks and impacts, as the activities remain the same as in the original Project. The restructuring does not trigger new World Bank Safeguards Policies, and the Project remains Category B. The assessment of relevant Environmental and Social risks and impacts during Project appraisal continues to be valid. The environmental and social risks classification remains moderate for both environmental and social risk ratings. The existing Project’s Environmental and Social Management Framework (ESMF) remains valid and is up to date.

11. **Revision of the Economic Analysis.** Changes in the targets of the PDO indicators may affect the economic viability of the Project. The economic analysis that has been adopted for this project is based on the risk of dam failure and the expected consequences of a dam failure event. While no quantitative analysis has been undertaken to assess the impact of the restructuring on the economic viability of the project, this impact is not expected to be significant. The additional costs are expected to be offset by the additional dams that have benefitted from the investments and that have seen their risk score increase. In addition, as a result of higher hydrological volatility and population growth, some of the benefits of the Project will have increased significantly since appraisal, including the avoided irrigation benefit losses, hydropower benefits, avoided household property losses, dam replacement or rehabilitation costs, and emergency response costs. Finally, it is noted that the IRR at appraisal was calculated at 60.3 percent. A sensitivity analysis concluded that this result is robust. It is therefore unlikely that the restructuring will undermine the Project’s viability.

III. SUMMARY OF CHANGES

	Changed	Not Changed
Results Framework	✓	
Implementing Agency		✓



DDO Status		✓
Project's Development Objectives		✓
PBCs		✓
Components and Cost		✓
Loan Closing Date(s)		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Disbursement Estimates		✓
Overall Risk Rating		✓
Safeguard Policies Triggered		✓
EA category		✓
Legal Covenants		✓
Institutional Arrangements		✓
Financial Management		✓
Procurement		✓
Implementation Schedule		✓
Other Change(s)		✓
Economic and Financial Analysis		✓
Technical Analysis		✓
Social Analysis		✓
Environmental Analysis		✓

IV. DETAILED CHANGE(S)



Results framework

COUNTRY: Indonesia

Dam Operational Improvement and Safety

Project Development Objectives(s)

The new Project Development Objective is proposed to increase the safety and functionality of dams in selected locations and strengthen the operation and management capacity for dam safety.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	End Target
Increase safety and functionality of dams and strengthen the op and mgmt capacity for dam safety			
Overall risk reduction of all dams under project (Cubic meters/year)		4.00	18.00
<i>Action: This indicator has been Revised</i>			
Number of dams with individual hazard reduced by > 20% of risk score. (Percentage)		16.00	75.00
<i>Action: This indicator has been Revised</i>			
River Basin Organizations (Balai) with need based O&M budget and plan operationalized within a national dam asset management system (Number)		0.00	13.00
Dams returned to improved operation (Percentage)		0.00	74.00
Issuance of regulation on dam safety (incl. Government/PP, Minister and/or DG Decree on dam safety assurance) (Text)		2.00	3.00
Direct project beneficiaries (millions) (Number)		2.30	11.20
Female beneficiaries (Percentage)		0.00	50.00



Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Component 1			
Number of dams rehabilitated (Number)		35.00	140.00
Number of dams with BDSF operational (Number)		10.00	140.00
Dams with emergency action plans updated and disseminated (Number)		56.00	140.00
Component 2			
Dam operational staff receiving annual training (Percentage)		0.00	90.00
O&M Manuals (including related training) for Dams completed. (Number)		0.00	140.00
Community-Dam Operator MOUs signed on Greenbelt Management (Number)		0.00	30.00
Component 3			
Land area under sustainable landscape management practices (Hectare(Ha))		10.00	300.00
Communities joining catchment management activities (% of which female)** (Percentage)		37.00	50.00
Dams implementing at least 70% of catchment management activities (Number)		0.00	60.00
Component 4			
Dams providing real time data (Number)		30.00	80.00
Dam Technology Center established and operationalized (Number)		0.00	1.00



The World Bank

Dam Operational Improvement and Safety (P096532)

Indicator Name	PBC	Baseline	End Target
CDMU staff trained annually (Number)		0.00	5.00
DSU staff trained (Number)		0.00	15.00
INACOLD certification of dam professionals (Number)		40.00	240.00



The World Bank

Dam Operational Improvement and Safety (P096532)
