

**COMBINED PROJECT INFORMATION DOCUMENTS / INTEGRATED
SAFEGUARDS DATA SHEET (PID/ISDS)
ADDITIONAL FINANCING**

Report No.: PIDISDSA19958

Date Prepared/Updated: 09-Jan-2017

I. BASIC INFORMATION

A. Basic Project Data

Country:	Indonesia	Project ID:	P161514
		Parent Project ID (if any):	P096532
Project Name:	Dam Operational Improvement and Safety Project Phase 2 (P161514)		
Parent Project Name:	Dam Operational Improvement and Safety (P096532)		
Region:	EAST ASIA AND PACIFIC		
Estimated Appraisal Date:	13-Dec-2016	Estimated Board Date:	24-Feb-2017
Practice Area (Lead):	Water	Lending Instrument:	Investment Project Financing
Borrower(s):			
Implementing Agency:	Ministry of Public Works and Housing		
Financing (in USD Million)			
Financing Source			Amount
Borrower			50.00
International Bank for Reconstruction and Development			125.00
Asian Infrastructure Investment Bank			125.00
Total Project Cost			300.00
Environmental Category:			
Appraisal Review Decision (from Decision Note):	The review did authorize the team to appraise and negotiate		
Other Decision:	as needed		
Is this a Repeater project?	No		

B. Introduction and Context

Country Context

Water insecurity has the potential to undermine Indonesia's economic gains and development outcomes. The world's fourth most populous nation has shown solid growth over the past decade to emerge as a confident middle-income country and one of Asia Pacific's most vibrant democracies. Total GDP has almost doubled and Gross National Income per capita has risen steadily from US\$2,200 in the year 2000 to US\$3,524 in 2014 such that Indonesia is the world's 10th largest economy in terms of purchasing power parity. This growth has halved the poverty rate since 1999 to 11.3 percent in 2014. Despite sustained economic growth and impressive gains in reducing poverty, considerable challenges remain in achieving Indonesia's goals. Inequality is increasing, with the income gap between rich and poor as measured by the Gini coefficient increased by almost 12 percentage points between 2000 and 2013, and vulnerability to poverty remains a major concern. Indonesia still has a large poor population, with 30 million people living below the national poverty line (which is just below PPP US\$1.25 a day). An additional 65 million people live above the poverty line but are highly vulnerable to falling back into poverty. Together they make up 38 percent of Indonesia's population. Geographic disparities also exist, with poverty rates higher in rural areas, and in Eastern Indonesia, especially Papua. The pace of poverty reduction is also slowing and many households existing just above the poverty line remain vulnerable to economic and environmental shocks that can send them back into poverty. Going into the next decade, Indonesia aspires to become more prosperous, better positioned to escape a middle-income trap and more equitable and sustainable.

Sectoral and institutional Context

Indonesia's limited storage capacity coupled with the country's unique geographic constraints constrain the country's economic development and contribute to water insecurity. Three-quarters of the country's 131 water basins reportedly exhibit stress conditions, with demand dangerously close or exceeding supply, particularly in those high population density areas. Despite a long history of water resources development, Indonesia still ranks very low in storage capacity per capita when compared with its international peers. The country has developed an extensive network of more than 2,200 dams, with 213 classified as large. The majority of these (183 as of 2016) are owned by the Ministry of Public Works and Housing and used primarily for irrigation, with 30 owned by various corporations, including six tailing dams, six water supply dams and another 18 hydroelectric dams with an installed capacity of 5,545.10 MW. Seven of these are under private operation and another 11 under the national power utility. More than 40% of the countries of dams are located in Java with most used to support some 750,000 hectares of irrigated agriculture, representing 11% of the total irrigated area. These are all governed by Ministerial Regulation Number 27/PRT/M/2015 and required to be certified by the Dam Safety Commission as well as develop a range of instruments such as EAP/EPPs.

To address the nexus of water, food and energy security the Government has launched an ambitious program to increase storage capacity through development of 65 proposed new dams at an estimated cost of IRP 66.4 trillion (roughly US\$5 billion). While these are not financed under the project, the Government is continuing efforts to improve on the operation, maintenance and safety of existing dams and reservoirs. The risks associated with these dams is growing due to increasing population density and economic activity in the service areas, increased flood risks due to higher climate variability and rainfall intensities, rapid catchment degradation, and natural conditions such as volcanic activity. In addition to physical and economic losses, severe soil

erosion is reducing the regulating capacity and available storage through sedimentation. In turn, this erosion reduces the lifetime of storage reservoirs, increases the rate of occurrence of floods and landslides, and reduces the availability of water in the dry season. Rehabilitation and upgrading of dam facilities and improvement of dam operation and safety management are essential to enhance water security, reduce risks and increase the productive use of the limited water resources.

C. Proposed Development Objective(s)

Original Project Development Objective(s) - Parent

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.

Proposed Project Development Objective(s) - Additional Financing

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.

Key Results

Key results of the project are proposed to be as follows:

- (i) Direct Project Beneficiaries (number), of which female (%).
- (ii) Number of dams with reduced risk of failure using an appropriate risk assessment method.
- (iii) Number of dams River Basin Organizations (Balai) with need based O&M budget and plan operationalized within a national asset management system.
- (iv) Number of dams returned to improved operation.
- (v) Issuance of regulation on dam safety (incl. Government/PP, Minister and DG Decree on dam safety assurance).

D. Project Description

The proposed additional loan is intended to help finance the costs associated with scaled-up activities to enhance the impact of a well-performing project. The major changes being proposed include: (i) simplification of the Project Development Objective and streamlining of indicators; (ii) the rehabilitation of an additional 23 dams that were identified at the time of appraisal but not included due to lack of available financing; (iii) introduction of a framework approach for screening and prioritization of the portfolio of dams under the Ministry of Public Works and Housing to create a platform that will allow for potential rehabilitation of additional dams during implementation; (iv) updating of the environmental and social management framework to provide a more comprehensive set of tools to support the portfolio approach, including an Indigenous Peoples Policy Framework, Resettlement Policy Framework, Natural Habitats and Pest Management; and (v) provisions for innovative measures to improve sediment management and land-care practices.

The activities to be supported with additional financing are expected to result in enhanced outcomes that will contribute to improved dam safety. An Implementation Completion and Results Report has been completed for the parent project given that the additional financing and extension will extend beyond 10 years. Given the high relevance of the PDO, the substantial relevance of the design, the moderate efficacy to date and the planned activities throughout the

final year of implementation, the project has been assessed as moderately satisfactory. A number of key lessons related to assessment of dam safety risks, monitoring and evaluation, sedimentation management and the overall quality of supervision have been incorporated into the design and restructuring of the additional financing.

The project introduces new partnership arrangements with the Asia Infrastructure Investment Bank (AIIB) through joint co-financing on an equal basis with IBRD financing. This is to be implemented in accordance with the Co-Financing Framework Agreement signed between AIIB and IBRD/IDA on April 13, 2016.

Component Name

Component 1: Dam Operational Improvement and Safety Works and Studies.

Comments (optional)

The original objective was to restore dam performance and safety. The additional financing will finance the scale up of physical rehabilitation for major dams to restore dam performance and safety in accordance with the agreed design criteria. This includes 23 major dams prioritized and prepared under DOISP, along with priority investments from the remaining 140 dams in the portfolio that are to be prioritized based on the objective criteria for identification and assessment.

Component Name

Component 2: Operations and Maintenance Improvement and Capacity Building.

Comments (optional)

The original objective was to support improved operations and maintenance and to strengthen capacity building of the dam agency. The additional financing will finance scaled up improvements in the operational elements required for securing dam safety and improved utilization.

Component Name

Component 3: Reservoir Sedimentation Mitigation.

Comments (optional)

The original objective was to provide for measures to mitigate the risk of sedimentation of selected reservoirs and for sustained performance and safety. The additional financing will support the scale-up of a comprehensive Sedimentation Management Program, including additional surveys, corrective measures and preventative interventions.

Component Name

Component 4: Dam Safety Institutional Improvement.

Comments (optional)

The objective of the original project was to further strengthen and consolidate the regulatory framework and national dam safety institution and strengthen MPW's capacity for portfolio management and regulation in order to sustain rehabilitation works and reservoir life. The additional financing will continue to support Government's institutional evolution and further innovations in building water resources institutions in Indonesia.

Component Name

Component 5: Project Management.

Comments (optional)

The original objective of this component was to provide for overall Project Management including provision of: (i) the principal Project Management TA Consultant; (ii) the incremental operating costs of the Central Project Management Unit (CPMU) and Project Implementation Units (PIUs) activities for coordinating all project interventions; and (iii) all TA support to prepare for the successor project. The additional financing will support continued implementation and the overall project management.

E. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The additional financing will finance the physical rehabilitation of major dams to restore dam performance and safety in accordance with the original design criteria. This includes 23 major dams prioritized and prepared under DOISP, along with priority investments from the 140 major dams in the portfolio that are to be prioritized based on the objective criteria for identification and assessment. The project will not finance any new dam construction and is focused on the rehabilitation of existing dams and their associated structures, along with improved safety measures. These activities are not intended to exceed the original schemes, change their nature, or so alter or expand the scope and extent as to make them appear as new or different schemes. In the first year, there are 6 (six) sub-projects to be financed. All the 6 dams are located in Java. No indigenous people reside in the area.

i. Ubrug (spillway radial gate) located on Jatiluhur Sub-District, Purwakarta District, West Java Province. The Ubrug Dam is one of three saddle dams at Jatiluhur in BBWS Citarum. The Special Study found that a fully control gate in the exiting auxiliary spillway is needed in accordance with the original design of the dam to reduce the risk of overspill in the morning glory. At the time of construction four outlets in the auxiliary spillway were blocked with solid concrete arches. These would be breached through blasting with dynamite during a high flood event. To improve operational capacity, it is now proposed to go back to the original design to replace the concrete arches with two radial gates.

ii. Ketro Dam located on Tanon Sub-District, Sragen District, Central Java Province. The Ketro Dam in BBWS Bengawan Solo is a 15m high, earthfill dam with a central clay core built in 1984. The Special Study found that piping in the downstream slope needs a permanent solution. The section of main dike at 0+180 has also been found to be unsafe with a safety factor below the minimum of 1.2 and 1.3 with and without earthquake. Based on the findings of the Special Study, the scope of work under the additional financing includes rehabilitation of main dike, minor replacement of hydro-mechanical and dredging of sediment.

iii. Penjalin Dam located on Bumiayu Sub-District, Brebes District, Central Java Province. The Penjalin Dam in BBWS Pemali Juana is a 23m high, homogenous earthfill dam built in 1934. The Special Study found that the safety of the main dike to the earthquake is below the minimum level, piping in the downstream slope has also been observed. Based on the findings of the Special Study, the scope of work under the additional financing includes rehabilitation of the main dike, using a diaphragm wall, minor hydro-mechanical works and dredging of sediment.

iv. Greneng Dam located on Blora Sub-District, Blora District, Central Java Province. The Greneng Dam in BBWS Pemali Juana is a 13m high, homogenous earthfill dam built in 1918. The Special Study found similar works as required in the Penjalin dam. Based on the findings of the Special Study, the scope of work under the additional financing includes replacement of material along the dike, improved compaction and stability along with dredging of sediment.

v. Tempuran Dam located on Blora Sub-District, Blora District, Central Java Province. The

Tempuran Dam in BBWS Pemali Juana is an 18m high, homogenous earthfill dam built in 1916. The Special Study found frequent piping in the dam wall where a large tree was removed. Sliding and crack in the crest level has also been observed. Based on the findings of the Special Study, the scope of work under the additional financing includes replacement of material along the dike, improved compaction and stability along with dredging of sediment.

vi. Mrancang Dam located on Gunung Tabur Sub-District, Berau District, East Kalimantan Province. The Mrancang Dam in BWS Kalimantan III is a 08m high, homogenous earthfill dam built in 1995. The Special Study found that due to consolidation and crack the existing crest level is about 1.8 meter below design level. The existing spillway is not sufficient to cope with large floods, undermining the safety of the dam. Based on the findings of the Special Study, the scope of work under the additional financing includes and leveling of undulating main dike, and repair spillway, minor replacement of hydro-mechanical and dredging of sediment.

F. Environmental and Social Safeguards Specialists

Ninin K. Dewi (GSUID)

Virza S. Sasmitawidjaja (GEN2A)

II. Implementation

Institutional and Implementation Arrangements

The project will be implemented by the Directorate General of Water Resources (DGWR) in the Ministry of Public Works and Housing (MPWH). The DGWR has been responsible for implementation of numerous World Bank funded projects including ongoing DOISP, Water Resource and Irrigation Sector Management Project (now WISMP II) and Jakarta Urgent Flood Mitigation Project (JUFMP). As such, the DGWR is familiar with the Bank's safeguard procedures. For implementation of the project, a Central Project Management Unit (CPMU) has been established under DGWR during the parent project and successfully overseen the implementation of the environmental and social safeguards without any grievances filed. The summary of the Environmental and Social Management and Monitoring Roles and Responsibilities for the DOISP2 AF is as follow:

Overall Environmental Objective of the Project:

➤(ç Project will be implemented in accordance with the Environmental and Social Management Framework (ESMF) and Loan Agreements

Directorate Operation & Maintenance (DGWR, MPWH)

➤(ç Prepare the guidance and supervision of the project's environmental aspects.

➤(ç Ensure close coordination with Kabupaten/Kota/Provincial/Central governments and other national and local government agencies along with the World Bank.

Central Project Management Unit (Consultants under the O&M Directorate, DGWR):

➤(ç Assist in establishing and ensuring compliance with the ESMF requirements, particularly during sub-project planning and assessment.

➤(ç Ensure close coordination with PIUs including annual consultation and coordination workshops; needed training support and information dissemination.

Design and Supervision (Consultants under Project Implementation Units / B(B)WS)

- (ç Lead role during sub-project design reviews, monitoring and reporting on implementation in coordination with the provincial/kabupaten/kota and Central Project Management Unit.
- (ç Provide needed environmental guidance and field support during sub-project implementation.
- (ç Support transport and other funding requirements of CPMU/CPIU ➤(ç s sub-project monitoring visits and local consultation meetings.

DGWR Project Implementation Units (B(B)WS):

- (ç Lead role for project planning and supervision at the provincial level.
- (ç Serve as the official point of project coordination and communication with the respective BLH and other government institutions.

BLH (Environmental Agency; serves under local government at the provincial and/or kabupaten/kota level)

- (ç Monitor the implementation of sub-project ➤(ç s Environmental and Social Management Plan through periodical UKL-UPL Implementation Report.

III. Safeguard Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>Overall environmental impacts are expected to be positive with minor, localized non-permanent negative impacts. The project will support the design and construction of minor and localized rehabilitation and remedial works on each of dam/reservoir sites (➤(ç sub-projects ➤(ç) to restore operational performance and/or safety (including spillway equipment repair and/or minor upgrading) in accordance with the acceptable design criteria. Physical rehabilitation will be carried out in situ and mainly limited to minor rehabilitation, dredging of sediment, and improving safety and operations. No new dam construction will be financed. No cumulative impacts have been experienced under the parent project and are thus not expected under the additional financing.</p> <p>Implementation of the parent project over approximately seven years has shown the ESMF to provide an effective tool to screen environment and social impacts. Implementation of the environmental safeguards had been rated moderately satisfactory, without any grievances reported to the project implementation unit.</p> <p>Considering the number and geographical distribution of the subprojects, the project has prepared an Environmental and Social Management Framework (ESMF) in compliance with the World Bank safeguards policies identified and with the relevant Government of Indonesia laws and regulations to guide the implementation.</p>

		<p>Specific environmental assessments have been carried out for the 6 first phase sub-projects, where stand-alone UKLs-UPLs have been summarized in the EMP and disclosed on the MPWH website (http://sda.pu.go.id) as well as through the Infoshop on December 19, 2016.</p> <p>The project remains a Category B.</p>
Natural Habitats OP/ BP 4.04	Yes	<p>The project will not finance any activities that involve significant conversion or degradation of critical natural habitats, wildlife reserves or protected areas, and is not expected to have any adverse impact on environmentally and or socially sensitive areas. The project is expected to support measures that will enhance and protect the environment as part of the longer-term measures aimed at improving sustainable reservoirs management.</p> <p>The civil works related to rehabilitation of existing dams are all minor, in situ works that may cause potential impacts on natural habitats such as streams and rivers but impacts are not expected to be adverse or significant. The activities are also not expected to cause loss or degradation of natural habitats.</p> <p>Experience from implementation of the parent project shows that the activities are localized in the existing schemes and no significant impacts have been recorded on any natural habitats. Screening of the sub-projects will take place during the preparation of Annual Work Plan with specific provisions included in the legal agreement to exclude financing of any sub-projects that might have negative impacts on critical natural habitats. Activities that may cause potential impacts on non-critical natural habitats will include measures in the subproject EMPs (UKL-UPL).</p>
Forests OP/BP 4.36	No	<p>The project will not fund any activity within declared forest reserves. Activities in the watershed are aimed at preventing erosion in the catchments and sedimentation of the reservoirs and are in no way aimed at affecting forests and their management. Thus, the project is not expected to impact on the health and quality of forests, the rights and welfare of people and their level of dependence upon or interaction with forests, and is not expected to bring about changes in the management, protection, or utilization of natural forests (e.g. from watershed management activities).</p> <p>Experience from implementation of the parent project shows that the activities are localized in the existing schemes and there have been no impacts on forests or the people that depend on them. Safeguard screening of the sub-projects will</p>

		take place during the preparation of Annual Work Plan. Any sub-projects indicate of causing significant impact to forest or the people who have interaction with the forest will not be eligible for financing.
Pest Management OP 4.09	Yes	<p>The project will not finance any procurement of fertilizers and/or pesticides. Although there have been no impacts during the parent project, it is possible that the rehabilitation of some irrigation dams may result in agriculture intensification which could cause increased usage of pesticides, even if not directly procured under the project. The ESMF therefore includes a pest management framework for managing the usage of pesticides. This is based on the safeguards policy and the GOIs initiatives of sustainable agriculture practices employing integrated pest management.</p> <p>The ESMF provides Pest Management Framework that requires preparation of a Pest Management Plan (PMP) for those sub-projects that are identified as potentially creating a significant increase in the use of pesticides as an indirect impact of the dam rehabilitation. Although the Ministry of Public Work and Housing is not mandated with responsibility for managing the usage of pesticide, in such events the PMP will outline measures and mechanisms for coordination with relevant institutions in line with the national framework (for example the Ministry of Agriculture and related agencies in provincial and district levels).</p> <p>Implementation of the parent project has not recorded any significant increase in the use of pesticide as a result of dam rehabilitation. Moreover, the Ministry of Agriculture has a national policy to reduce the use of pesticide through the implementation of Integrated Pest Management (IPM). This informs the framework and will guide the formulation of any PMPs.</p>
Physical Cultural Resources OP/BP 4.11	No	<p>The project will not support the construction of new dams and is focused on minor in situ rehabilitation of existing structures. There will be no excavation outside of the reservoir, hence it is unlikely to affect physical properties of historical, cultural or religious importance. No such impacts have been observed under the parent project to date.</p> <p>Implementation of the parent project shows that the earthworks are all relatively small and limited within the existing dam locations with no chance finds encountered to date. Notwithstanding, the ESMF includes a Chance Find Protocol should such an eventuality arise.</p>
Indigenous Peoples	Yes	An Indigenous Peoples Planning Framework (IPPF) has been

OP/BP 4.10		<p>developed to guide preparation of the appropriate instruments should the presence of indigenous communities be identified in the new sub-project sites. Experience from the parent project shows that no major adverse impacts to the communities in the project area are anticipated.</p> <p>The DOISP2 AF will finance the physical rehabilitation works for 6 dams identified and studied in the parent project. These studies confirm that there are no indigenous peoples in the 6 sites. Other sub-project sites will be subject to similar screening in accordance with the provisions of the ESMF.</p> <p>The IPPF, as integral part of the ESMF, provides guidance to screen the IP presence in the project area and to develop Indigenous Peoples Plan (IPP) for the sub-projects that will affect indigenous peoples. Consultation with relevant stakeholders during the IPPF preparation has been conducted on November 3, 2016 along with public consultation for ESMF and LARPF.</p> <p>The IPPF has been disclosed as an integral part of the ESMF on the MPWH website (http://sda.pu.go.id) as well as through the Infoshop on December 19, 2016.</p>
Involuntary Resettlement OP/BP 4.12	Yes	<p>The project will support the design and construction of minor and localized rehabilitation and remedial works on each of dam/reservoir sites (►(sub-projects►() to restore operational performance and/or safety. The parent project did not trigger the policy as the land acquisition/resettlement was not anticipated to take place for the dam rehabilitation. None of the sub-projects implemented under the parent project have involved land acquisition to date. Since the AF represents a scale-up of the same activities, physical relocation or major, permanent land acquisition is not expected.</p> <p>However, to give more flexibility during project implementation and a more robust framework should some proposed activities require additional land, temporarily or permanently, a Land Acquisition and Resettlement Policy Framework (LARPF) has been developed. The LARPF provides guidance on the development of LARAP (Land Acquisition and Resettlement Action Plan) for any activities that may require land acquisition during project implementation.</p> <p>Under the Community Participation program of the parent project, the communities around the reservoir as well those in the catchment areas of several piloted sites were provided</p>

		<p>partnership fund as an incentive to maintain the reservoir and catchment area. In several sites, some of the funds were used for developing public facilities, such as public toilets, water treatment plants etc., requiring land. These small-scale land areas were donated by those communities who are also beneficiaries of the program.</p> <p>Given the scaling up of the Community Participation Program, there continues to be the possibility of involve voluntary land donation. The LARPF therefore includes a protocol for voluntary land donation to guide the implementation of land donation from the community during implementation.</p> <p>The LARPF has been consulted with relevant stakeholders on November 3, along with the public consultation for ESMF and IPPF, and disclosed on the MPWH website (http://sda.pu.go.id) as well as through the Infoshop on December 19, 2016.</p>
Safety of Dams OP/ BP 4.37	Yes	<p>The project is focused on improving the safety of dams which are identified as being at risk. The project is therefore designed to directly address the requirements of the policy. Each subproject will be assessed and a Dam Safety Report/Special Study prepared to inform the specific risks and identify the necessary rehabilitation works. an international Panel of Experts will be appointed to work with the National Dam Safety Commission in providing overall guidance during implementation.</p> <p>The Dam Safety Assessments for 6 dams of the first year investment have been completed under the parent project. During project implementation, Dam Safety Assessment will be prepared under Component 1 as part of the Dam Safety Assurance intervention activities, with additional provisions under the project to strengthen the Government system, including development of a Dam Surveillance and Monitoring Plan.</p>
Projects on International Waterways OP/BP 7.50	No	All the dams are located within the jurisdiction of the GOI and not on international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The sub-projects are not located in any disputed areas.

IV. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

<p>Overall, the environmental impacts are expected to be positive. Physical rehabilitation will be carried out in situ and mainly limited to minor rehabilitation of existing dams, dredging of sediment, and improving operation and safety. Specific environmental assessments will be carried out for all identified dams during the screening of the sub-projects in accordance with the ESMF. The first phase implementation includes 6 dams, for which stand-alone UKL-UPLs or ESMPs have been prepared. No new dam construction activities are expected to be financed by the project and the application of the ESMF during implementation of the parent project has not identified any issues to date.</p> <p>From the social safeguard side, no land acquisition will be involved for the physical works of the 6 dams and no indigenous peoples reside in the sub-project areas. No new dam construction will be financed so that no major large-scale land acquisition will take place with the impacts on the environmental minor and manageable.</p> <p>Experience from parent project shows that the activities are localized in the existing schemes and that there are no significant and irreversible environmental and social impacts during the implementation.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p>
<p>The physical construction activities focus only on in situ rehabilitation works and the proposed project is not intended to support significant structural modifications or expansions beyond that required to ensure dam safety. The potential environmental impacts will only occur during the construction activities which will be only temporarily. No major in-direct or long-term negative impacts are expected. Cumulative impacts have not been experienced to date and are not expected under the additional financing.</p> <p>Both the structural and non-structural work will result in a reduction of the risk of dam failure. Since the rehabilitation of dam will increase the agricultural command areas, the project may have some indirect implications on the irrigation intensity and application of fertilizers and pesticides. The project will not support the direct procurement of pesticides and no potential large scale, significant and/or irreversible impacts are envisaged - as forecast through the social assessment and environmental assessment of the project activities.</p>
<p>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</p>
<p>No adverse environmental or social impacts have been recorded during implementation of the parent project to date. All sub-projects will consider various construction measures to avoid/minimize the need for land acquisition. Temporary impacts on farming activities downstream the dam due to temporary water cut for rehabilitation purpose are minimized through the timing of the works.</p>
<p>4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.</p>
<p>Since most of the sub-projects will be identified during the project implementation phase, a framework approach has been adopted for the project. The Environmental and Social Management Framework (ESMF), as well as the Land Acquisition and Resettlement Policy Framework (LARPF) and Indigenous Peoples Planning Framework (IPPF) have been prepared to anticipate activities that may involve land acquisition temporarily or permanently or activities that take place in the area where indigenous communities are present.</p>

For the 6 sub-projects to be implemented in the first phase, no land acquisition will be involved for the physical works and no indigenous communities have been identified in the sub-project areas. From the environmental aspect, as required by government regulation, the UKL-UPLs (EMPs) have been prepared to mitigate any environmental impacts during the rehabilitation works. The UKL-UPL documents for the 6 (six) sites have been completed and summarized into a consolidated EMP. The rests of the sub-projects will also prepare the appropriate environmental documents as required and the screening activity will define the needs.

The ESMF provides guidance for environmental and social safeguard screening during project implementation to assess any potential environmental and social impacts. The LARPF provides guidance for the preparation of Land Acquisition and Resettlement Action Plan (LARAP) during Project implementation including the protocol for voluntary land donation that may take place under the Community Participation program. The IPPF provide guidance for the screening of indigenous communities in the project area and the preparation of Indigenous Peoples Plan (IPP) if the subproject proposed during Project implementation will affect indigenous communities.

The project will be implemented by the Directorate General of Water Resources (DGWR), Ministry of Public Works and Housing (MPWH). The DGWR has been responsible for implementation of numerous World Bank funded projects including ongoing DOISP, Water Resource and Irrigation Sector Management Project (now WISMP II) and Jakarta Urgent Flood Mitigation Project (JUFMP). As such, the DGWR is familiar with the Bank's safeguard procedures.

For implementation of the project, a Central Project Management Unit (CPMU) has been established under DGWR. The consultants have been hired by CPMU to assist in preparing and implementing the work, which will include environmental and social safeguard specialist responsible in preparing the safeguard instruments and reporting the safeguard implementations. Based on the volume of the works and the widespread sites of the dams, regional implementation offices will be established to cover 3 areas, west, central and east. Safeguard specialists will be in place in each regional office that expected to handle the safeguard management, in particular in screening and monitoring safeguard implementation in each site, and such that any issues raised in the field can be solved in the timely manner.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The main project beneficiaries are households relying on the dams including those who get benefits from the irrigated agricultural and aquaculture production, water supply and hydropower generation; and those downstream communities and economic activities that are at risk in the event of dam failure. Villagers living around the reservoir as well as those living in the catchment areas who will participate in the Community Participation program and will receive incentives from the program are also the main beneficiaries of the project.

The other stakeholders are Directorate General of Water Resources (DGWR), Ministry of Public Works and Public Housing (MPWH) in the central level and other implementing units in the regions including (B)BWS (river basin) and Regional Office of Water Resources (Dinas PSDA propinsi).

The ESMF/LARPF/IPPF has been consulted with the relevant stakeholders on November 3, 2016.

The ESMF disclosed in the Bahasa Indonesia in the government's website and through the InfoShop.
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B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	18-Oct-2016
Date of submission to InfoShop	19-Dec-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Indonesia	03-Nov-2016
<i>Comments:</i> Series of workshops to consult with relevant stakeholders and disclosed through the Ministry of Public Works and Housing website (http://sda.pu.go.id).	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	18-Oct-2016
Date of submission to InfoShop	19-Dec-2016
"In country" Disclosure	
Indonesia	03-Nov-2016
<i>Comments:</i> Series of workshops to consult with relevant stakeholders and disclosed through the Ministry of Public Works and Housing website (http://sda.pu.go.id).	
Indigenous Peoples Development Plan/Framework	
Date of receipt by the Bank	18-Oct-2016
Date of submission to InfoShop	19-Dec-2016
"In country" Disclosure	
Indonesia	18-Oct-2016
<i>Comments:</i> Series of workshops to consult with relevant stakeholders and disclosed through the Ministry of Public Works and Housing website (http://sda.pu.go.id).	
Pest Management Plan	
Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	12-Dec-2016
Date of submission to InfoShop	19-Dec-2016
"In country" Disclosure	
Indonesia	19-Dec-2016
<i>Comments:</i> The Ministry of Public Works and Housing website (http://sda.pu.go.id).	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	

If in-country disclosure of any of the above documents is not expected, please explain why:
The project will not finance any procurement of fertilizers and/or pesticides. Although there have been no impacts during the parent project, it is possible that the rehabilitation of some irrigation dams may result in agriculture intensification which could cause increased usage of pesticides, even if not directly procured under the project. The ESMF therefore includes a pest management framework for managing the usage of pesticides. This is based on the safeguards policy and the GOIs initiatives of sustainable agriculture practices employing integrated pest management.

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
OP/BP 4.04 - Natural Habitats			
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
OP 4.09 - Pest Management			
Does the EA adequately address the pest management issues?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
Is a separate PMP required?	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
OP/BP 4.10 - Indigenous Peoples			
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?	Yes	<input type="checkbox"/>	No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/> NA <input type="checkbox"/>

Is physical displacement/relocation expected? Provided estimated number of people to be affected	Yes [] No [<input checked="" type="checkbox"/>] TBD []
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods) Provided estimated number of people to be affected	Yes [] No [<input checked="" type="checkbox"/>] TBD []
OP/BP 4.37 - Safety of Dams	
Have dam safety plans been prepared?	Yes [<input checked="" type="checkbox"/>] No [] NA []
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [] No [<input checked="" type="checkbox"/>] NA []
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes [] No [<input checked="" type="checkbox"/>] NA []
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>] No [] NA []
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>] No [] NA []
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [] NA []
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [] NA []
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [] NA []
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [] NA []

V. Contact point

World Bank

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Title: Sr Water Resources Mgmt. Spec.

Contact: Ximing Zhang

Title: Sr Water Resources Spec.

Borrower/Client/Recipient

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VI. For more information contact:

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VII. Approval

Task Team Leader(s):	Name: Marcus J. Wishart, Ximing Zhang	
<i>Approved By</i>		
Safeguards Advisor:	Name: Josefo Tuyor (SA)	Date: 09-Jan-2017
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Country Director:	Name: Rolande Simone Pryce (CD)	Date: 24-Jan-2017